NAVIGATION IMPROVEMENTS
SITKA HARBOR, ALASKA
CHANNEL ROCK BREAKWATERS

DEFICIENCY CORRECTION EVALUATION REPORT

APPENDIX C

COST ESTIMATES

January 2011
PROVIDED BY TETRA TECH

February 2012
ADDENDUM BY ALASKA DISTRICT

NAVIGATION IMPROVEMENTS

SITKA HARBOR, ALASKA

CHANNEL ROCK BREAKWATERS

DEFICIENCY CORRECTION EVALUATION REPORT

COST ESTIMATE ADDENDUM

(FEBRUARY 2012)

The Total Project Cost Summaries (TPCS) for the Channel Rock Breakwaters recommended deficiency correction plan and alternative analysis were developed for the Alaska District by Tetra Tech. These are found, respectively, on page iii (recommended plan) and page 9 (alternatives) of Appendix C. The TPCS for the recommended plan and each of the alternative cost estimates identified a base construction cost estimate (December 2010), a program year price level estimate (1 October 2011), and a fully funded cost estimate (without a "sunk cost" identified) escalated to the estimated mid-point of construction (August 2014). The "sunk cost" portion of the fully funded cost estimates was not identified because of uncertainty over the extent of the project authority for project modifications provided by Congress and questions over which past expenditures should or should not be included in "sunk costs."

The cost estimates were reviewed during the Agency Technical Review of the draft Deficiency Correction Evaluation Report by personnel of the Buffalo District of the Corps of Engineers and the Cost Engineering Directory of Expertise (DX) located in the Walla Walla District. As discussed in section 1.2, page 3 of the DCER, all ATR comments, concerns, and questions were fully resolved with the exception of three related questions posed by the Cost Engineering Directory of Expertise (DX). These were not resolved and the District, the ATR team, and the DX agreed to elevate the questions for resolution by Headquarters. The unresolved questions were:

- What is the basis for the complete authorization of the project deficiency correction measure?
- Is there a 902 limit on the project, or does the wording provided in Section 3005 of WRDA 2007 that the Sitka project "…is modified to direct the Secretary to take such action as necessary to correct design deficiencies in the Sitka Harbor Breakwater at Federal expense…" provide all the necessary authority without a monetary limit?
- What is the proper "sunk cost" that should be included in the fully funded portion of the total project summary sheet for the recommended plan?

The Cost Engineering DX provided a Cost Engineering DX TPCS ATR Certification for the project modification cost at the 1 October 2011 price level. This certification was included in the February 2011 Agency Technical Review Report, which noted, "The calculation of the Total Project Cost requires policy coordination with the MSC and Headquarters in order to determine what costs should be included in sunk costs as well as the basis of authorization for the project's 902 limit."

The report documents were provided to HQUSACE for general policy review, including resolution of the questions raised by the DX. HQUSACE provided the District guidance in their draft Policy Compliance Review Memorandum on 7 October 2011. The guidance confirmed that full authority for the DCER project was provided by the 2005 and the 2007 legislation, but that a formal project cost for use in determining a Section 902 project cost limit had not been set by Congress. The 2005 and 2007 enactments were not considered to be increases of the project's total authorized cost set in 1992 for Section 902 determinations, but rather separate directive authority without a specified project cost to correct a design deficiency. Based on the HQUSACE determinations on project modification authority and the lack of a 902 limit, the "sunk costs" to be included in the fully funded TPCS for the recommended plan (and alternative analysis) will be the total cost to develop and gain approval of the DCER/EA/FONSI. This includes funds expended to prepare a 905(b) report and the DCER totaling $2,430,528. The total project cost estimates in the DCER based on the 1 October 2011 price level do not need to be changed, only the fully funded cost estimates.

Thus, since no additional questions were raised by HQUSACE regarding the cost estimate, since the escalated project and alternative costs only show up on two tables in Appendix, and since the change in the escalated project cost does not affect anything else in the cost estimate produced by Tetra Tech, there is no need to reopen the contract with Tetra Tech to have them revise the two tables only to update the escalated project costs. Rather, the Alaska District Cost Engineering Branch has added in Appendix C this Addendum placed in front of the January 2011 Tetra Tech cost estimate report to provide the two TPCS tables with the "sunk cost" column filled in and a revised total escalated fully funded project estimate provided. As shown on page iv of the DCER, the actual (2000 thru 2011) and estimated (2012) expenditures to produce and obtain approval of the DCER by HQUSACE is $2,431,000 (rounded). This value has been added to the "sunk costs" column of the TPCSs. Addendum-Table 1 provides the fully funded total project cost estimate for the recommended deficiency correction plan. Addendum-Table 2 provides the fully funded total project cost estimates for each of the alternative deficiency correction measures considered in the deficiency correction analysis

****** TOTAL PROJECT COST SUMMARY ******
Recommended Plan (Alternative 4)

PROJECT: Sitka Harbor Cost Estimate
LOCATION: Sitka, AK

DISTRICT: Alaska PREPARED: 1/25/2011
POC: CHIEF, COST ENGINEERING, Karl Harvey

This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Spent Thru[1]: 1-Oct-10 ($K)	L	COST ($K)	CNTG ($K)	FULL ($K)
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
10	BREAKWATER & SEAWALLS	5,417	1,511	28%	6,928	1.4%	5,495	1,533	7027.6			5,754	1,605	7359.0
	CONSTRUCTION ESTIMATE TOTALS:	5,417	1,511		**6,928**	1.4%	5494.6	1533.0	7027.6			5753.8	1605.3	7359.0
01	LANDS AND DAMAGES	3	1	27.9%	4	1.4%	3	1	3.9			3	1	4.0
30	PLANNING, ENGINEERING & DESIGN	600	167	27.9%	767	3.2%	619	173	791.6	2431		675	188	3294.8
31	CONSTRUCTION MANAGEMENT	240	67	27.9%	307	3.2%	248	69	316.6			275	77	352.1
	PROJECT COST TOTALS:	6,260	1,746	27.9%	**8,006**	1.7%	6364.1	1775.6	8139.7	2,431		6707.6	1871.4	11010.1

ESTIMATED FEDERAL COST: **11010**
ESTIMATED NON-FEDERAL COST:
ESTIMATED TOTAL PROJECT COST: 11010

CHIEF, COST ENGINEERING, Karl Harvey

PROJECT MANAGER, Dave Martinson

CHIEF, REAL ESTATE, Tom Kretzschmar

CHIEF, PLANNING, Bruce Sexauer

CHIEF, ENGINEERING, Dave Frenier

CHIEF, OPERATIONS, Alan Churchill

CHIEF, CONSTRUCTION, Pat Coulihan

CHIEF, CONTRACTING, Chris Tew

CHIEF, PM-PB, xxxx

CHIEF, DPM, Larry McCallister

NOTE 1. THE NECESSARY AMOUNT TO BE INCLUDED IN THE SUNK COST PART OF THE FULLY FUNDED PORTION OF THE ESTIMATE HAS BEEN COORDINATED WITH THE MSC AND HEADQUARTERS INCLUDES FUNCTIONAL COSTS ASSOCIATED WITH LANDS AND DAMAGES, PLANNING ENGINEERING & DESIGN, AND CONSTRUCTION MANAGEMENT.

****** TOTAL PROJECT COST SUMMARY ******
Recommended Plan (Alternative 4)
****** CONTRACT COST SUMMARY ******

RECOMMENDED PLAN (Alternative 4)

PROJECT: Sitka Harbor Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska PREPARED: 1/25/2011
POC: CHIEF, COST ENGINEERING, Karl Harvey

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE: Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 5,417	$ 1,511	27.9%	$ 6,928	1.4%	5494.6	1533.0	7027.6	2014Q4	4.7%	5753.8	1605.3	7359.0
	CONSTRUCTION ESTIMATE TOTALS:	5,417	1,511	27.9%	**6,928**		5494.6	1533.0	7027.6			5753.8	1605.3	7359.0
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	240	$ 67	27.9%	307	3.2%	247.6	69.1	316.6	2014Q4	11.2%	275.3	76.8	352.1
	CONTRACT COST TOTALS:	6,260	1,746		**8,006**		6364.1	1775.6	8139.7			6707.6	1871.4	**8579.1**

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

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx

PREPARED: 1/25/2011

This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

							Program Year (Budget EC):		2012					
							Effective Price Level Date:		1 OCT 11	FULLY FUNDED PROJECT ESTIMATE				
										Spent Thru[1]:				
WBS	Civil Works	COST[1]	CNTG	CNTG	TOTAL		COST	CNTG	TOTAL	1-Oct-10		COST[1,2]	CNTG[2]	FULL
NUMBER	Feature & Sub-Feature Description	($K)	($K)	(%)	($K)		($K)	($K)	($K)	($K)		($K)	($K)	($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*K*	*L*	*M*	*N*	*O*
1	ALTERNATIVE 1	5,367	1,497	27.9%	6,864		5,458	1,523	6,981	2,431		5,759	1,607	9,797.0
2	ALTERNATIVE 2	7,993	2,230	27.9%	10,223		8,124	2,267	10,390	2,431		8,554	2,387	13,372.0
3	ALTERNATIVE 3	8,356	2,331	27.9%	10,687		8,491	2,369	10,861	2,431		8,939	2,494	13,864.4
4	ALTERNATIVE 4	6,260	1,746	27.9%	8,006		6,364	1,776	8,140	2,431		6,708	1,871	11,010.1
7	ALTERNATIVE 7	7,854	2,191	27.9%	10,045		7,984	2,227	10,211	2,431		8,411	2,347	13,189.3
14	ALTERNATIVE 14	19,651	5,483	27.9%	25,134		19,955	5,567	25,522	2,431		21,050	5,873	29,354.2
15	ALTERNATIVE 15	11,084	3,092	27.9%	14,176		11,260	3,141	14,401	2,431		11,842	3,304	17,577.3
16	ALTERNATIVE 16	9,589	2,675	27.9%	12,264		9,743	2,718	12,461	2,431		10,254	2,861	15,545.8
17	ALTERNATIVE 17	5,346	1,492	27.9%	6,838		5,437	1,517	6,954	2,431		5,737	1,601	9,768.8
18	ALTERNATIVE 18	9,609	2,681	27.9%	12,290		9,764	2,724	12,488	2,431		10,276	2,867	15,574.1
19	ALTERNATIVE 19	19,630	5,477	27.9%	25,107		19,934	5,561	25,495	2,431		21,028	5,867	29,326.0

NOTES:
1. INCLUDES FUNCTIONAL COSTS ASSOCIATED WITH LANDS AND DAMAGES, PLANNING ENGINEERING & DESIGN, AND CONSTRUCTION MANAGEMENT.
THE NECESSARY AMOUNT TO BE INCLUDED IN THE SUNK COST PART OF THE FULLY FUNDED PORTION OF THE ESTIMATE HAS BEEN COORDINATED WITH THE MSC AND HEADQUARTERS

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

ALTERNATIVE 1

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/25/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 4,517	$ 1,260	27.9%	$ 5,777	1.4%	4581.8	1278.3	5860.2	2014Q4	4.7%	4797.9	1338.6	6136.6
	CONSTRUCTION ESTIMATE TOTALS:	4,517	1,260	27.9%	**5,777**		4581.8	1278.3	5860.2			4797.9	1338.6	6136.6
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	240	$ 67	27.9%	307	3.2%	247.6	69.1	316.6	2014Q4	11.2%	275.3	76.8	352.1
	CONTRACT COST TOTALS:	5,367	1,497		**6,864**		5458.5	1522.9	6981.4			5759.2	1606.8	**7366.0**

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

ALTERNATIVE 2

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/25/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 7,090	$ 1,978	27.9%	$ 9,068	1.4%	7192.4	2006.7	9199.1	2014Q4	4.7%	7531.6	2101.3	9633.0
	CONSTRUCTION ESTIMATE TOTALS:	7,090	1,978	27.9%	**9,068**		7192.4	2006.7	9199.1			7531.6	2101.3	9633.0
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	300	$ 84	27.9%	384	3.2%	309.5	86.3	395.8	2014Q4	11.2%	344.2	96.0	440.2
	CONTRACT COST TOTALS:	7,993	2,230		**10,223**		8123.8	2266.5	10390.4			8554.3	2386.7	**10941.0**

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

ALTERNATIVE 3

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/25/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
10	BREAKWATER & SEAWALLS	$ 7,453	$ 2,079	27.9%	$ 9,532	1.4%	7560.0	2109.2	9669.2	2014Q4	4.7%	7916.6	2208.7	10125.3
	CONSTRUCTION ESTIMATE TOTALS:	7,453	2,079	27.9%	**9,532**		7560.0	2109.2	9669.2			7916.6	2208.7	10125.3
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	300	$ 84	27.9%	384	3.2%	309.5	86.3	395.8	2014Q4	11.2%	344.2	96.0	440.2
	CONTRACT COST TOTALS:	8,356	2,331		**10,687**		8491.4	2369.1	10860.5			8939.3	2494.1	**11433.4**

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

ALTERNATIVE 4

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/25/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 5,417	$ 1,511	27.9%	$ 6,928	1.4%	5494.6	1533.0	7027.6	2014Q4	4.7%	5753.8	1605.3	7359.0
	CONSTRUCTION ESTIMATE TOTALS:	5,417	1,511	27.9%	**6,928**		5494.6	1533.0	7027.6			5753.8	1605.3	7359.0
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	240	$ 67	27.9%	307	3.2%	247.6	69.1	316.6	2014Q4	11.2%	275.3	76.8	352.1
	CONTRACT COST TOTALS:	6,260	1,746		**8,006**		6364.1	1775.6	8139.7			6707.6	1871.4	**8579.1**

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

ALTERNATIVE 7

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/25/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 6,891	$ 1,923	27.9%	$ 8,814	1.4%	6990.2	1950.3	8940.5	2014Q4	4.7%	7319.9	2042.3	9362.2
	CONSTRUCTION ESTIMATE TOTALS:	6,891	1,923	27.9%	**8,814**		6990.2	1950.3	8940.5			7319.9	2042.3	9362.2
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	360	$ 100	27.9%	460	3.2%	371.4	103.6	475.0	2014Q4	11.2%	413.0	115.2	528.2
	CONTRACT COST TOTALS:	7,854	2,191		**10,045**		7983.5	2227.4	10210.9			8411.5	2346.8	**10758.3**

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

ALTERNATIVE 14

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/25/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE: Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 18,441	$ 5,145	27.9%	$ 23,586	1.4%	18706.5	5219.1	23925.6	2015Q1	5.1%	19669.5	5487.8	25157.3
	CONSTRUCTION ESTIMATE TOTALS:	18,441	5,145	27.9%	**23,586**		18706.5	5219.1	23925.6			19669.5	5487.8	25157.3
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2015Q1	12.3%	694.8	193.8	888.6
	CONTRACT COST TOTALS:	19,651	5,483		**25,134**		19954.5	5567.3	25521.8			21050.2	5873.0	**26923.2**

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

ALTERNATIVE 15

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/25/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 10,121	$ 2,824	27.9%	$ 12,945	1.4%	10266.5	2864.4	13130.9	2014Q4	4.7%	10750.8	2999.5	13750.2
	CONSTRUCTION ESTIMATE TOTALS:	10,121	2,824	27.9%	**12,945**		10266.5	2864.4	13130.9			10750.8	2999.5	13750.2
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	360	$ 100	27.9%	460	3.2%	371.4	103.6	475.0	2014Q4	11.2%	413.0	115.2	528.2
	CONTRACT COST TOTALS:	11,084	3,092		**14,176**		11259.8	3141.5	14401.3			11842.3	3304.0	**15146.3**

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

ALTERNATIVE 16

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/25/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 8,619	$ 2,405	27.9%	$ 11,023	1.4%	8742.7	2439.2	11181.9	2014Q4	4.7%	9155.1	2554.3	11709.3
	CONSTRUCTION ESTIMATE TOTALS:	8,619	2,405	27.9%	**11,023**		8742.7	2439.2	11181.9			9155.1	2554.3	11709.3
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	360	$ 100	27.9%	460	3.2%	371.4	103.6	475.0	2014Q4	11.2%	413.0	115.2	528.2
	CONTRACT COST TOTALS:	9,589	2,675		**12,264**		9743.1	2718.3	12461.4			10254.0	2860.9	**13114.8**

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

ALTERNATIVE 17

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/25/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 4,496	$ 1,254	27.9%	$ 5,750	1.4%	4560.7	1272.4	5833.2	2014Q4	4.7%	4775.8	1332.5	6108.3
	CONSTRUCTION ESTIMATE TOTALS:	4,496	1,254	27.9%	**5,750**		4560.7	1272.4	5833.2			4775.8	1332.5	6108.3
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	240	$ 67	27.9%	307	3.2%	247.6	69.1	316.6	2014Q4	11.2%	275.3	76.8	352.1
	CONTRACT COST TOTALS:	5,346	1,492		**6,838**		5437.4	1517.0	6954.4			5737.1	1600.7	**7337.8**

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

ALTERNATIVE 18

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/25/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE: Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
10	BREAKWATER & SEAWALLS	$ 8,639	$ 2,410	27.9%	$ 11,050	1.4%	8763.8	2445.1	11208.9	2014Q4	4.7%	9177.2	2560.4	11737.6
	CONSTRUCTION ESTIMATE TOTALS:	8,639	2,410	27.9%	**11,050**		8763.8	2445.1	11208.9			9177.2	2560.4	11737.6
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	360	$ 100	27.9%	460	3.2%	371.4	103.6	475.0	2014Q4	11.2%	413.0	115.2	528.2
	CONTRACT COST TOTALS:	9,609	2,681		**12,290**		9764.2	2724.2	12488.4			10276.1	2867.0	**13143.1**

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

ALTERNATIVE 19

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/25/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 11

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 18,420	$ 5,139	27.9%	$ 23,560	1.4%	18685.5	5213.3	23898.8	2015Q1	5.1%	19647.4	5481.6	25129.0
	CONSTRUCTION ESTIMATE TOTALS:	18,420	5,139	27.9%	**23,560**		18685.5	5213.3	23898.8			19647.4	5481.6	25129.0
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2015Q1	12.3%	694.8	193.8	888.6
	CONTRACT COST TOTALS:	19,630	5,477		**25,107**		19933.5	5561.4	25495.0			21028.1	5866.8	**26895.0**

US Army Corps of Engineers

Alaska District

Deficiency Correction Evaluation Report
Sitka Harbor, Alaska
Channel Rock Breakwaters

Appendix C – Cost Estimate

January 2011

TETRA TECH

TABLE OF CONTENTS

Exhibits

****** TOTAL PROJECT COST SUMMARY ******
Recommended Plan (Alternative 4)

PROJECT: Sitka Harbor Cost Estimate
LOCATION: Sitka, AK

DISTRICT: Alaska PREPARED: 1/31/2011
POC: CHIEF, COST ENGINEERING, xxx

This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Spent Thru[1]: 1-Oct-10 ($K)	L	COST ($K)	CNTG ($K)	FULL ($K)
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
10	BREAKWATER & SEAWALLS	5,417	1,511	28%	6,928	1.4%	5,495	1,533	7027.6			5,754	1,605	7359.0
	CONSTRUCTION ESTIMATE TOTALS:	5,417	1,511		**6,928**	1.4%	5494.6	1533.0	7027.6			5753.8	1605.3	7359.0
01	LANDS AND DAMAGES	3	1	27.9%	4	1.4%	3	1	3.9			3	1	4.0
30	PLANNING, ENGINEERING & DESIGN	600	167	27.9%	767	3.2%	619	173	791.6			675	188	863.8
31	CONSTRUCTION MANAGEMENT	240	67	27.9%	307	3.2%	248	69	316.6			275	77	352.1
	PROJECT COST TOTALS:	6,260	1,746	27.9%	**8,006**	1.7%	6364.1	1775.6	8139.7			6707.6	1871.4	8579.1

ESTIMATED FEDERAL COST: **8579**
ESTIMATED NON-FEDERAL COST:
ESTIMATED TOTAL PROJECT COST: **8579**

CHIEF, COST ENGINEERING, xxx
PROJECT MANAGER, xxx
CHIEF, REAL ESTATE, xxx
CHIEF, PLANNING,xxx
CHIEF, ENGINEERING, xxx
CHIEF, OPERATIONS, xxx
CHIEF, CONSTRUCTION, xxx
CHIEF, CONTRACTING,xxx
CHIEF, PM-PB, xxxx
CHIEF, DPM, xxx

1. THE NECESSARY AMOUNT TO BE INCLUDED IN THE SUNK COST PART OF THE FULLY FUNDED PORTION OF THE ESTIMATE REQUIRES POLICY COORDINATION WITH THE MSC AND HEADQUARTERS

****** TOTAL PROJECT COST SUMMARY ******
Recommended Plan (Alternative 4)
****** CONTRACT COST SUMMARY ******

RECOMMENDED PLAN (Alternative 4)

PROJECT: Sitka Harbor Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska PREPARED: 1/31/2011
POC: CHIEF, COST ENGINEERING, xxx

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 5,417	$ 1,511	27.9%	$ 6,928	1.4%	5494.6	1533.0	7027.6	2014Q4	4.7%	5753.8	1605.3	7359.0
	CONSTRUCTION ESTIMATE TOTALS:	5,417	1,511	27.9%	**6,928**		5494.6	1533.0	7027.6			5753.8	1605.3	7359.0
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	240	$ 67	27.9%	307	3.2%	247.6	69.1	316.6	2014Q4	11.2%	275.3	76.8	352.1
	CONTRACT COST TOTALS:	6,260	1,746		**8,006**		6364.1	1775.6	8139.7			6707.6	1871.4	**8579.1**

Deficiency Correction Evaluation Report Cost Narrative
Sitka Harbor, Alaska
Channel Rock Breakwaters

1. Project Description

a. General: This is a Section 3005 of the Water Resources Development Act of 2007 project where action is to be taken necessary to correct design deficiencies in the Sitka Harbor Breakwater. Eleven design alternatives have been analyzed and preliminary cost estimates have been developed. A cost analysis of these eleven alternatives is presented in Exhibit 1, as Cost Methodology for Breakwater Modification Options. From this analysis Alternative 4 has been selected as the preferred alternative for Sitka Harbor.

b. Purpose: The purpose of the project is to modify the Sitka channel breakwater to decrease the wave energy entering the harbor area, which in turn will lessen damages incurred by the harbor and the ships docked there.

c. Design Features: Design features include the construction of several different types of breakwaters. Core Rock, B Rock and Armor rock are to be used in the construction of these breakwaters.

2. Basis of Estimate

a. Basis of Design: This estimate is based on the, *"Draft Deficiency Correction Evaluation Report"* dated November 2010. A site plan of the project is presented in Exhibit 2.

b. Basis of Quantities: The estimate is based on the overall quantities provided by the designer. The overall quantities are presented in Exhibit 3.

The detailed quantity estimates include loss factors (swell/shrink) for the project materials as listed below:

Armor Rock	10%
B Rock	15%
Core Rock	20%

3. Construction Schedule

Initiate Construction	June	2014
Complete Construction	October	2014

a. Overtime: Breakwater construction, crew (1 shift) working 12 hrs/day, and 6 days/weeks.

b. Mob/Demob Overtime: Mobilization and demobilization, crew (2 shifts) working 12 hrs/day each, 7 days a week.

It is estimated that the Alternative 4 will take approximately 4-months to construct. A tentative project schedule is presented in Exhibit 4.

4. Contracting Plan

It is assumed that the project will be contracted to one prime construction contractor.

5. Project Construction

a. Site Access: The land based construction laborers, equipment, and other personnel will be staged on Japonski Island. In-water based construction laborers, equipment, and other personnel will be launched from Sitka Harbor.

b. Construction Methodology:

1) Mobilization/Demobilization: It is assumed that the Prime Contractor will be from the Seattle area. The Contractor will mob/demob the barge equipment and highly skilled staff from the Seattle area and the floating crane from Anchorage. Other construction equipment and skilled labor are assumed to be available in the Sitka area.

2) Breakwater: Breakwater will be constructed to protect the harbor. The Core Rock, B Rock and Armor Rock materials are assumed to come from S & S General Contractors quarry located 2-miles by boat north of the breakwaters on Kasiana Island. There are eleven different alternatives for where the breakwaters will be placed, and details of each can be found in Exhibit 1. Alternative 4 has been selected as the recommended plan. All construction is assumed to be performed with in-water equipment.

Alternative 4 – Alternative 4 is a single measure that is designed to close the gap between the existing southern and central breakwaters. The gap between the two breakwaters is approximately 315-FT long.

The construction of Alternative 4 would consist of building a 315 foot long breakwater extending from the southern point of the central breakwater to the northern point of the southernmost breakwater. The proposed breakwater would connect the two breakwaters and close off the existing gap. For this part of the construction 30,000-cubic yards (CY) of Core Rock, 13,000-CY of B Rock, and 9,000-CY of Armor Rock would be placed to connect the two breakwaters. Approximately 3,000-CY of armor stone and 1,100-CY of B rock would be removed from the existing central breakwater. All rocks removed would be used to offset the rock quantities required during construction of the new connection.

c. Unusual Conditions:
Extreme cold weather and turbulent seas are likely to be encountered at the project site during winter construction.

d. Unique Construction Techniques:
Mostly in water work with specialty equipment.

6. Environmental Concerns

Construction activities will likely increase turbidity in the water. There is also potential for construction equipment to leak or spill contaminates into the water. Costs associated with the development of a spill prevention plan have been included in the estimate.

7. Effective Dates for Labor, Equipment, and Material Pricing

The labor, equipment, and material pricing were developed using the MCACES 2008 English Unit Cost Library, 2009 National Labor Library, and the 2007 Equipment Library (Region IX) for the base estimate. The index pricing data has been prepared in December 2010 dollars.

The labor rates from the MCACES 2009 National Labor Library were compared with current Davis-Bacon Wage rates (General Decision Sitka County Index AK20100001), see Exhibit 5. The Davis-Bacon Wage rates and fringes were used in the estimate for each labor category. A per diem value is also included in the labor rate comparison sheet. The per diem value was calculated to a cost per hour based on Department of Defense rates for lodging and meals for the Sitka area.

The base estimate has been updated with current quoted fuel prices of $3.41/gal for off-road diesel $3.68/gal for on-road diesel and $3.39/gal for gasoline in the Sitka area.

8. Estimated Production Rates

The construction of this project will require many types of specialty equipment and crews due to the in-river work. See Exhibit 6 for the Estimated Production Rates.

9. Project Markups

Escalation: Escalation has been calculated within the Total Project Cost Summary (TPCS). Price levels have been escalated from effective price levels of the construction cost estimate for December 2010 to the mid-point of construction, which is estimated to be August 2014. The appropriate escalation cost factors for 1Q10 and 4Q14 for each feature account have been calculated within the TPCS.

Contingency: Contingencies represent allowances to cover unknowns, uncertainties, and/or unanticipated conditions that are not possible to adequately evaluate from the data on hand at the time the cost estimate is prepared but must be represented by a sufficient cost to cover the

identified risks. A risk based contingency has been calculated and used within the estimate. This contingency was calculated from a risk based contingency spreadsheet provided by the USACE. The risk based contingency information can be found in Exhibit 8.

10. Functional Costs

Functional costs associated with this work were provided by the Project Manager, as follows:

a. 01 Account - Lands and Damages: Costs for this item have been provided by the Alaska District. For Alternative 4, lands and damages has been estimated to be $3,000.

b. 30 Account - Planning, Engineering and Design: Costs for this account were provided at $600,000. This account covers the preparation of Plans, Specifications, and Engineering Cost Estimate for construction.

c. 31 Account - Construction Management: Costs for this account were provided at $60,000 per month for the entire duration of construction. This account covers construction management during the construction contract.

11. MCACES Construction Cost Estimate

The construction cost estimate was developed using MCACES 2nd Generation (MII) estimating software in accordance with guidance contained in ER 1110-2-1302, Civil Works Cost Engineering. See Exhibit 9 for the MCACES output report.

12. Total Project Cost Summary

The Total Project Cost Summary (TPCS) was prepared to calculate the total project cost. The TPCS contains the total construction costs, functional costs, escalation, and contingency as referenced above. The TPCS for Alternative 4 is included in the front of this report.

Exhibit 1
Cost Methodology for Breakwater Modification Alternatives

SITKA HARBOR CHANNEL
COST METHODOLOGY FOR BREAKWATER MODIFICATION ALTERNATIVES

OBJECTIVE AND SUMMARY: Section 3005 of the Water Resources Development Act of 2007 states action is to be taken, necessary to correct design deficiencies in the Sitka Harbor Breakwater. This report describes the methodology used in estimating the six single measure breakwater alternatives for modification of the Sitka Harbor Channel breakwater. These seven alternatives look at modifying the Sitka channel breakwater to decrease the wave energy entering the harbor area. Two of the alternatives include adding new breakwaters. Five of the alternatives include extending the existing breakwaters, and an additional four alternatives were created by combining two or three of the basic measures.

The estimate is based on quantities provided by the designer. A summary of these quantities is presented in Exhibit 3. The quantity summary includes waste/loss factors for the project materials as listed below:

Armor Rock Overplace/Loss Factor	10%
B Rock Overplace/Loss Factor	15%
Core Rock Overplace/Loss Factor	20%

The breakwater material will be supplied by a quarry located approximately 2-miles from the site at Kasiana Island. The quarry is owned and operated by S & S General Contractors. According to S & S, their quarry meets Corps specifications.

METHOD: The purpose of this section is to define variables, assumptions, and obtain time and cost estimates.

Breakwater will be constructed to protect the harbor. The Core Rock, B Rock and Armor Rock materials are assumed to come from S & S General Contractors quarry located 2-miles north of the breakwaters by boat on Kasiana Island. There are six different alternatives for where the breakwaters will be placed. A cost estimate was created for each of the seven single measure alternatives and for four combination measures. All construction was assumed to be performed with in-water equipment. See Exhibit 6 for estimated production rate calculations.

Alternative 1:

Alternative 1 consists of building a 500-foot long breakwater extending from Japonski Island. The proposed breakwater would block the southern-most gap in the existing breakwater and overlap the southern most existing breakwater by 100-feet.

Placement Quantities:

- Armor Rock (2000-lbs): 7,000-CY
- B Rock (200-lbs): 10,000-CY
- Core Rock (10-lbs): 21,000-CY

Productivity:

- Armor Rock Loading: One skip box x 15-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 182-CY/hr.
- B Rock Loading: One skip box x 15-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 263-CY/hr.
- Core Rock Loading One skip box x 15-CY x 85% fill x 45-min/hr x 0.75-cycle/min = 430-CY/hr.
- Rock Transport: (One barge x 1150-CY/barge x 4-mi roundtrip x 5-knots/hr) + 7.25-hr. coordination = 145-CY/hr.
- Armor Rock Placement: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.
- B Rock Placement: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.
- Core Rock Placement: One clam shell bucket x 5-CY x 85% fill x 45-min/hr x 0.75- cycle/min = 143-CY/hr.

Assumptions:

The first barge will be loaded with rock at the quarry by a land based crane with skip box. Once loaded, a 1000 HP tug will transport it to the project site. When the first barge arrives at the project site, it will be positioned close to the crane and placement will commence. A second barge will remain at the quarry to allow loading operations to continue. Placement of breakwaters will be limited to approximately one barge load per day.

Alternative 2:

Alternative 2 consists of extending the existing southern breakwater northward approximately 330-feet to cover the opening between the southern and central existing breakwaters. The proposed breakwater would overlap the existing central breakwater by approximately 100-feet.

Placement Quantities:

- Armor Rock (2000-lbs): 9,500-CY
- B Rock (200-lbs): 19,000-CY
- Core Rock (10-lbs): 45,000-CY

Removal Quantities:

- Armor Rock: 1,150-CY
- B Rock: 450-CY

Productivity:

- Armor Rock Loading: One skip box x 15-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 182-CY/hr.

- B Rock Loading: One skip box x 15-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 263-CY/hr.
- Core Rock Loading One skip box x 15-CY x 85% fill x 45-min/hr x 0.75-cycle/min = 430-CY/hr.
- Rock Transport: (One barge x 1150-CY/barge x 4-mi roundtrip x 5-knots/hr) + 7.25-hr. coordination = 145-CY/hr.
- Armor Rock Removal: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.
- B Rock Removal: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.
- Armor Rock Placement: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.
- B Rock Placement: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.
- Core Rock Placement: One clam shell bucket x 5-CY x 85% fill x 45-min/hr x 0.75- cycle/min = 143-CY/hr.

Assumptions:

The first barge will be loaded with rock at the quarry by a land based crane with skip box. Once loaded, a 1000 HP tug will transport it to the project site. When the first barge arrives at the project site, it will be positioned close to the crane and placement will commence. A second barge will remain at the quarry to allow loading operations to continue. Placement of breakwaters will be limited to approximately one barge load per day.

Alternative 3:

Alternative 3 consists of extending the existing central breakwater southward by about 330-feet to cover the opening between the southern and central existing breakwaters. The proposed breakwater would overlap the existing southern breakwater by approximately 100-feet.

Placement Quantities:

- Armor Rock (2000-lbs): 9,500-CY
- B Rock (200-lbs): 16,000-CY
- Core Rock (10-lbs): 54,000-CY

Removal Quantities:

- Armor Rock: 1,100-CY
- B Rock: 400-CY

Productivity:

- Armor Rock Loading: One skip box x 15-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 182-CY/hr.
- B Rock Loading: One skip box x 15-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 263-CY/hr.
- Core Rock Loading One skip box x 15-CY x 85% fill x 45-min/hr x 0.75-cycle/min = 430-CY/hr.

- Rock Transport: (One barge x 1150-CY/barge x 4-mi roundtrip x 5-knots/hr) + 7.25-hr. coordination = 145-CY/hr.
- Armor Rock Removal: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.
- B Rock Removal: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.
- Armor Rock Placement: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.
- B Rock Placement: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.
- Core Rock Placement: One clam shell bucket x 5-CY x 85% fill x 45-min/hr x 0.75- cycle/min = 143-CY/hr.

Assumptions:

The first barge will be loaded with rock at the quarry by a land based crane with skip box. Once loaded, a 1000 HP tug will transport it to the project site. When the first barge arrives at the project site, it will be positioned close to the crane and placement will commence. A second barge will remain at the quarry to allow loading operations to continue. Placement of breakwaters will be limited to approximately one barge load per day.

Alternative 4:

Alternative 4 is to close the gap between the southern and central breakwaters. This closure will be approximately 315-feet long.

Placement Quantities:

- Armor Rock (2000-lbs): 9,000-CY
- B Rock (200-lbs): 13,000-CY
- Core Rock (10-lbs): 30,000-CY

Removal Quantities:

- Armor Rock: 3,000-CY
- B Rock: 1,100-CY

Productivity:

- Armor Rock Loading: One skip box x 15-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 182-CY/hr.
- B Rock Loading: One skip box x 15-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 263-CY/hr.
- Core Rock Loading One skip box x 15-CY x 85% fill x 45-min/hr x 0.75-cycle/min = 430-CY/hr.
- Rock Transport: (One barge x 1150-CY/barge x 4-mi roundtrip x 5-knots/hr) + 7.25-hr. coordination = 145-CY/hr.
- Armor Rock Removal: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.

- B Rock Removal: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.
- Armor Rock Placement: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.
- B Rock Placement: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.
- Core Rock Placement: One clam shell bucket x 5-CY x 85% fill x 45-min/hr x 0.75- cycle/min = 143-CY/hr.

Assumptions:

The first barge will be loaded with rock at the quarry by a land based crane with skip box. Once loaded, a 1000 HP tug will transport it to the project site. When the first barge arrives at the project site, it will be positioned close to the crane and placement will commence. A second barge will remain at the quarry to allow loading operations to continue. Placement of breakwaters will be limited to approximately one barge load per day.

Alternative 7:

Alternative 7 consists of extending the northeast end of the existing main breakwater northward approximately 300-feet. The proposed breakwater would overlap the existing main breakwater by approximately 100-feet.

Placement Quantities:

- Armor Rock (2000-lbs): 15,000-CY
- B Rock (200-lbs): 17,000-CY
- Core Rock (10-lbs): 37,000-CY

Removal Quantities:

- Armor Rock: 2,500-CY
- B Rock: 800-CY

Productivity:

- Armor Rock Loading: One skip box x 15-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 182-CY/hr.
- B Rock Loading: One skip box x 15-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 263-CY/hr.
- Core Rock Loading One skip box x 15-CY x 85% fill x 45-min/hr x 0.75-cycle/min = 430-CY/hr.
- Rock Transport: (One barge x 1150-CY/barge x 4-mi roundtrip x 5-knots/hr) + 7.25-hr. coordination = 145-CY/hr.
- Armor Rock Removal: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.
- B Rock Removal: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.

- Armor Rock Placement: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.
- B Rock Placement: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.
- Core Rock Placement: One clam shell bucket x 5-CY x 85% fill x 45-min/hr x 0.75- cycle/min = 143-CY/hr.

Assumptions:

The first barge will be loaded with rock at the quarry by a land based crane with skip box. Once loaded, a 1000 HP tug will transport it to the project site. When the first barge arrives at the project site, it will be positioned close to the crane and placement will commence. A second barge will remain at the quarry to allow loading operations to continue. Placement of breakwaters will be limited to approximately one barge load per day.

Alternative 14:

Alternative 14 is combination of Alternatives 1, 4, and 15.

Alternative 15:

Alternative 15 involves constructing a dog leg extension at the northern end of the central breakwater, and a bulbous head breakwater at the southern end of the northern breakwater.

Placement Quantities:

Angled Extension

- Armor Rock (4800-lbs): 21,000-CY
- B Rock (480-lbs): 16,000-CY
- Core Rock (24-lbs): 48,000-CY

Stub Extension

- Armor Rock (2000-lbs): 5,000-CY
- B Rock (200-lbs): 5,000-CY
- Core Rock (10-lbs): 7,000-CY

Removal Quantities:

- Armor Rock: 3,500-CY
- B Rock: 1,000-CY

Productivity:

- Armor Rock Loading: One skip box x 15-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 182-CY/hr.
- B Rock Loading: One skip box x 15-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 263-CY/hr.
- Core Rock Loading One skip box x 15-CY x 85% fill x 45-min/hr x 0.75-cycle/min = 430-CY/hr.
- Rock Transport: (One barge x 1150-CY/barge x 4-mi roundtrip x 5-knots/hr) + 7.25-hr. coordination = 145-CY/hr.

- Armor Rock Removal: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.
- B Rock Removal: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.
- Armor Rock Placement: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.
- B Rock Placement: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.
- Core Rock Placement: One clam shell bucket x 5-CY x 85% fill x 45-min/hr x 0.75- cycle/min = 143-CY/hr.

Assumptions:

The first barge will be loaded with rock at the quarry by a land based crane with skip box. Once loaded, a 1000 HP tug will transport it to the project site. When the first barge arrives at the project site, it will be positioned close to the crane and placement will commence. A second barge will remain at the quarry to allow loading operations to continue. Placement of breakwaters will be limited to approximately one barge load per day.

Alternative 16:

Alternative 16 is combination of Alternatives 4, and 17.

Alternative 17:

Alternative 17, also called the Spending Beach, is a beach fill feature on the north side of Japonski Island extending towards the existing southern breakwater. The spending beach is to be constructed to +13 elevation.

Placement Quantities:

- Armor Rock (260-lbs): 13,500-CY
- Core Rock (13-lbs): 20,500-CY

Productivity:

- Armor Rock Loading: One skip box x 15-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 182-CY/hr.
- B Rock Loading: One skip box x 15-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 263-CY/hr.
- Core Rock Loading One skip box x 15-CY x 85% fill x 45-min/hr x 0.75-cycle/min = 430-CY/hr.
- Rock Transport: (One barge x 1150-CY/barge x 4-mi roundtrip x 5-knots/hr) + 7.25-hr. coordination = 145-CY/hr.
- Armor Rock Placement: One clam shell bucket x 5-CY x 45% fill x 45-min/hr x 0.6-cycle/min = 61-CY/hr.
- B Rock Placement: One clam shell bucket x 5-CY x 60% fill x 45-min/hr x 0.65-cycle/min = 88-CY/hr.
- Core Rock Placement: One clam shell bucket x 5-CY x 85% fill x 45-min/hr x 0.75- cycle/min = 143-CY/hr.

Assumptions:

The first barge will be loaded with rock at the quarry by a land based crane with skip box. Once loaded, a 1000 HP tug will transport it to the project site. When the first barge arrives at the project site, it will be positioned close to the crane and placement will commence. A second barge will remain at the quarry to allow loading operations to continue. Placement of breakwaters will be limited to approximately one barge load per day.

Alternative 18:

Alternative 18 is combination of Alternatives 1, and 4.

Alternative 19:

Alternative 19 is combination of Alternatives 4, 15, and 17.

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

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx

PREPARED: 1/31/2011

This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

							Program Year (Budget EC): 2012							
							Effective Price Level Date: 1 OCT 11			FULLY FUNDED PROJECT ESTIMATE				
										Spent Thru[3]:				
WBS	Civil Works	COST[1]	CNTG	CNTG	TOTAL		COST[1,2]	CNTG[2]	TOTAL	1-Oct-10		COST[1,2]	CNTG[2]	FULL
NUMBER	Feature & Sub-Feature Description	($K)	($K)	(%)	($K)		($K)	($K)	($K)	($K)		($K)	($K)	($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*K*	*L*	*M*	*N*	*O*
1	ALTERNATIVE 1	5,367	1,497	27.9%	6,864		5,458	1,523	6,981			5,759	1,607	7,366.0
2	ALTERNATIVE 2	7,993	2,230	27.9%	10,223		8,124	2,267	10,390			8,554	2,387	10,941.0
3	ALTERNATIVE 3	8,356	2,331	27.9%	10,687		8,491	2,369	10,861			8,939	2,494	11,433.4
4	ALTERNATIVE 4	6,260	1,746	27.9%	8,006		6,364	1,776	8,140			6,708	1,871	8,579.1
7	ALTERNATIVE 7	7,854	2,191	27.9%	10,045		7,984	2,227	10,211			8,411	2,347	10,758.3
14	ALTERNATIVE 14	19,651	5,483	27.9%	25,134		19,955	5,567	25,522			21,050	5,873	26,923.2
15	ALTERNATIVE 15	11,084	3,092	27.9%	14,176		11,260	3,141	14,401			11,842	3,304	15,146.3
16	ALTERNATIVE 16	9,589	2,675	27.9%	12,264		9,743	2,718	12,461			10,254	2,861	13,114.8
17	ALTERNATIVE 17	5,346	1,492	27.9%	6,838		5,437	1,517	6,954			5,737	1,601	7,337.8
18	ALTERNATIVE 18	9,609	2,681	27.9%	12,290		9,764	2,724	12,488			10,276	2,867	13,143.1
19	ALTERNATIVE 19	19,630	5,477	27.9%	25,107		19,934	5,561	25,495			21,028	5,867	26,895.0

NOTES:
1. INCLUDES FUNTIONAL COSTS ASSOCIATED WITH LANDS AND DAMAGES, PLANNING ENGINEERING & DESIGN AND CONSTRUCTION MANAGEMENT
2. INCLUDES ESCALATION RATES, SEE INDIVIDUAL ALTERNATIVES FOR THE CALCULATED ESCALATION RATES
3. THE NECESSARY AMOUNT TO BE INCLUDED IN THE SUNK COST PART OF THE FULLY FUNDED PORTION OF THE ESTIMATE REQUIRES POLICY COORDINATION WITH THE MSC AND HEADQUARTERS

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

ALTERNATIVE 1

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/31/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 4,517	$ 1,260	27.9%	$ 5,777	1.4%	4581.8	1278.3	5860.2	2014Q4	4.7%	4797.9	1338.6	6136.6
	CONSTRUCTION ESTIMATE TOTALS:	4,517	1,260	27.9%	**5,777**		4581.8	1278.3	5860.2			4797.9	1338.6	6136.6
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	240	$ 67	27.9%	307	3.2%	247.6	69.1	316.6	2014Q4	11.2%	275.3	76.8	352.1
	CONTRACT COST TOTALS:	5,367	1,497		**6,864**		5458.5	1522.9	6981.4			5759.2	1606.8	**7366.0**

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

ALTERNATIVE 2

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/31/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 7,090	$ 1,978	27.9%	$ 9,068	1.4%	7192.4	2006.7	9199.1	2014Q4	4.7%	7531.6	2101.3	9633.0
	CONSTRUCTION ESTIMATE TOTALS:	7,090	1,978	27.9%	**9,068**		7192.4	2006.7	9199.1			7531.6	2101.3	9633.0
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	300	$ 84	27.9%	384	3.2%	309.5	86.3	395.8	2014Q4	11.2%	344.2	96.0	440.2
	CONTRACT COST TOTALS:	7,993	2,230		**10,223**		8123.8	2266.5	10390.4			8554.3	2386.7	**10941.0**

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

ALTERNATIVE 3

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/31/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 7,453	$ 2,079	27.9%	$ 9,532	1.4%	7560.0	2109.2	9669.2	2014Q4	4.7%	7916.6	2208.7	10125.3
	CONSTRUCTION ESTIMATE TOTALS:	7,453	2,079	27.9%	**9,532**		7560.0	2109.2	9669.2			7916.6	2208.7	10125.3
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	300	$ 84	27.9%	384	3.2%	309.5	86.3	395.8	2014Q4	11.2%	344.2	96.0	440.2
	CONTRACT COST TOTALS:	8,356	2,331		**10,687**		8491.4	2369.1	10860.5			8939.3	2494.1	**11433.4**

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

ALTERNATIVE 4

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/31/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 5,417	$ 1,511	27.9%	$ 6,928	1.4%	5494.6	1533.0	7027.6	2014Q4	4.7%	5753.8	1605.3	7359.0
	CONSTRUCTION ESTIMATE TOTALS:	5,417	1,511	27.9%	**6,928**		5494.6	1533.0	7027.6			5753.8	1605.3	7359.0
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	240	$ 67	27.9%	307	3.2%	247.6	69.1	316.6	2014Q4	11.2%	275.3	76.8	352.1
	CONTRACT COST TOTALS:	6,260	1,746		**8,006**		6364.1	1775.6	8139.7			6707.6	1871.4	**8579.1**

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

ALTERNATIVE 7

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/31/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 6,891	$ 1,923	27.9%	$ 8,814	1.4%	6990.2	1950.3	8940.5	2014Q4	4.7%	7319.9	2042.3	9362.2
	CONSTRUCTION ESTIMATE TOTALS:	6,891	1,923	27.9%	**8,814**		6990.2	1950.3	8940.5			7319.9	2042.3	9362.2
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	360	$ 100	27.9%	460	3.2%	371.4	103.6	475.0	2014Q4	11.2%	413.0	115.2	528.2
	CONTRACT COST TOTALS:	7,854	2,191		**10,045**		7983.5	2227.4	10210.9			8411.5	2346.8	**10758.3**

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

ALTERNATIVE 14

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/31/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 18,441	$ 5,145	27.9%	$ 23,586	1.4%	18706.5	5219.1	23925.6	2015Q1	5.1%	19669.5	5487.8	25157.3
	CONSTRUCTION ESTIMATE TOTALS:	18,441	5,145	27.9%	**23,586**		18706.5	5219.1	23925.6			19669.5	5487.8	25157.3
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2015Q1	12.3%	694.8	193.8	888.6
	CONTRACT COST TOTALS:	19,651	5,483		**25,134**		19954.5	5567.3	25521.8			21050.2	5873.0	**26923.2**

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

ALTERNATIVE 15

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/31/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 10,121	$ 2,824	27.9%	$ 12,945	1.4%	10266.5	2864.4	13130.9	2014Q4	4.7%	10750.8	2999.5	13750.2
	CONSTRUCTION ESTIMATE TOTALS:	10,121	2,824	27.9%	**12,945**		10266.5	2864.4	13130.9			10750.8	2999.5	13750.2
01	LANDS AND DAMAGES	$ 3	$ 1	27.9%	$ 4	1.4%	3.0	0.8	3.9	2014Q2	3.8%	3.2	0.9	4.0
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	360	$ 100	27.9%	460	3.2%	371.4	103.6	475.0	2014Q4	11.2%	413.0	115.2	528.2
	CONTRACT COST TOTALS:	11,084	3,092		**14,176**		11259.8	3141.5	14401.3			11842.3	3304.0	**15146.3**

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

ALTERNATIVE 16

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/31/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 8,619	$ 2,405	27.9%	$ 11,023	1.4%	8742.7	2439.2	11181.9	2014Q4	4.7%	9155.1	2554.3	11709.3
	CONSTRUCTION ESTIMATE TOTALS:	8,619	2,405	27.9%	**11,023**		8742.7	2439.2	11181.9			9155.1	2554.3	11709.3
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	360	$ 100	27.9%	460	3.2%	371.4	103.6	475.0	2014Q4	11.2%	413.0	115.2	528.2
	CONTRACT COST TOTALS:	9,589	2,675		**12,264**		9743.1	2718.3	12461.4			10254.0	2860.9	**13114.8**

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

ALTERNATIVE 17

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/31/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE: Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
10	BREAKWATER & SEAWALLS	$ 4,496	$ 1,254	27.9%	$ 5,750	1.4%	4560.7	1272.4	5833.2	2014Q4	4.7%	4775.8	1332.5	6108.3
	CONSTRUCTION ESTIMATE TOTALS:	4,496	1,254	27.9%	**5,750**		4560.7	1272.4	5833.2			4775.8	1332.5	6108.3
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	240	$ 67	27.9%	307	3.2%	247.6	69.1	316.6	2014Q4	11.2%	275.3	76.8	352.1
	CONTRACT COST TOTALS:	5,346	1,492		**6,838**		5437.4	1517.0	6954.4			5737.1	1600.7	**7337.8**

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

ALTERNATIVE 18

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/31/2011

Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 8,639	$ 2,410	27.9%	$ 11,050	1.4%	8763.8	2445.1	11208.9	2014Q4	4.7%	9177.2	2560.4	11737.6
	CONSTRUCTION ESTIMATE TOTALS:	8,639	2,410	27.9%	**11,050**		8763.8	2445.1	11208.9			9177.2	2560.4	11737.6
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	360	$ 100	27.9%	460	3.2%	371.4	103.6	475.0	2014Q4	11.2%	413.0	115.2	528.2
	CONTRACT COST TOTALS:	9,609	2,681		**12,290**		9764.2	2724.2	12488.4			10276.1	2867.0	**13143.1**

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

ALTERNATIVE 19

**** CONTRACT COST SUMMARY ****

PROJECT: Sitka Harbor Breakwaters Cost Estimate
LOCATION: Sitka, AK
This Estimate reflects the scope and schedule in report; Sitka Harbor Deficiency Correction Evaluation Report

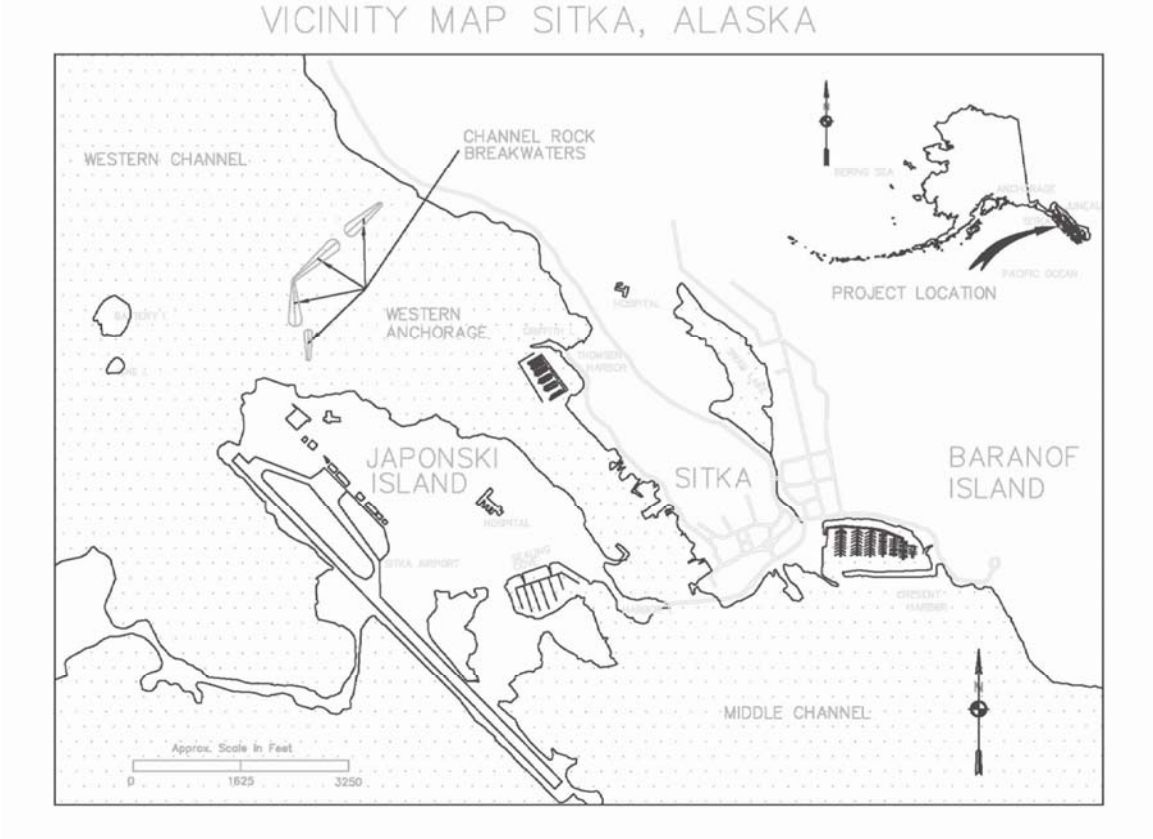
DISTRICT: Alaska
POC: CHIEF, COST ENGINEERING, xxx
PREPARED: 1/31/2011

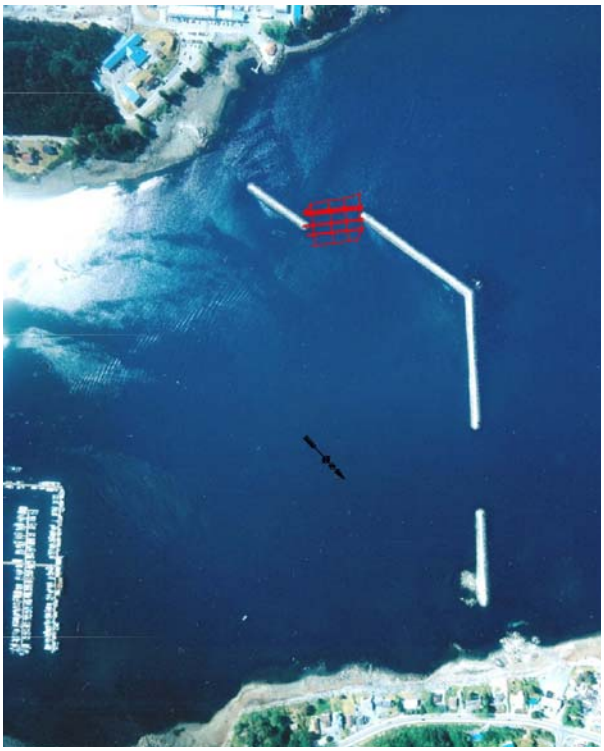
Estimate Prepared: 16-Dec-10
Effective Price Level: 1 OCT 10

Program Year (Budget EC): 2012
Effective Price Level Date: 1 OCT 11

WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST ($K)	CNTG ($K)	CNTG (%)	TOTAL ($K)	ESC (%)	COST ($K)	CNTG ($K)	TOTAL ($K)	FULLY FUNDED PROJECT ESTIMATE Mid-Point Date	ESC (%)	COST ($K)	CNTG ($K)	FULL ($K)
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*P*	*L*	*M*	*N*	*O*
10	BREAKWATER & SEAWALLS	$ 18,420	$ 5,139	27.9%	$ 23,560	1.4%	18685.5	5213.3	23898.8	2015Q1	5.1%	19647.4	5481.6	25129.0
	CONSTRUCTION ESTIMATE TOTALS:	18,420	5,139	27.9%	**23,560**		18685.5	5213.3	23898.8			19647.4	5481.6	25129.0
01	LANDS AND DAMAGES	$ 10	$ 3	27.9%	$ 13	1.4%	10.1	2.8	13.0	2014Q2	3.8%	10.5	2.9	13.5
30	PLANNING, ENGINEERING & DESIGN													
	Project Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2014Q2	9.1%	675.4	188.4	863.8
31	CONSTRUCTION MANAGEMENT													
	Construction Management	600	$ 167	27.9%	767	3.2%	618.9	172.7	791.6	2015Q1	12.3%	694.8	193.8	888.6
	CONTRACT COST TOTALS:	19,630	5,477		**25,107**		19933.5	5561.4	25495.0			21028.1	5866.8	**26895.0**

Exhibit 2
Sitka Channel Breakwater Modification Site Plan





Location Map – Option 4

Exhibit 3
Overall Quantity Estimates & Detailed Quantity Take-Offs

Sitka Harbor Quantity Summary
Work Breakdown Structure
Alternative 4

Work Breakdown Structure	Item	Unit of Measure	Quantity
[10]	**BREAKWATER AND SEAWALLS**	**LS**	**1**
[04]	**ALTERNATIVE 4**	**EA**	**1**
[04.00]	**Mob, Demob and Prep Work**	**LS**	**1**
[04.00.01]	**Mobilization**	**EA**	**1**
	Mob from Anchorage	MI	820
	Mob from Seattle	MI	950
	Spill Prevention Plan Preparation	LS	1
[04.00.02]	**Demobilization**	**EA**	**1**
	Demob from Anchorage	MI	820
	Demob from Seattle	MI	950
[04.01]	**Alternative 4**	**LS**	**1**
[04.01.01]	**Breakwater Load and Transport**	**LS**	**1**
	Breakwater Loading (Armor Rock)	CY	6,600
	Breakwater Loading (B Rock)	CY	13,685
	Breakwater Loading (Core Rock)	CY	36,000
	Breakwater Transport	CY	56,285
[04.01.02]	**Breakwater Removal**	**LS**	**1**
	Breakwater Loading (Armor Rock)	CY	3,300
	Breakwater Loading (B Rock)	CY	1,265
[04.01.03]	**Breakwater Placement**	**LS**	**1**
	Breakwater Placement (Armor Rock)	CY	6,600
	Breakwater Placement (B Rock)	CY	13,685
	Breakwater Placement (Core Rock)	CY	36,000

Total Breakwater Placement Volume Required

		Alternative 1		Alternative 2		Alternative 3		Alternative 4		Alternative 7		Alternative 14		Alternative 15		Alternative 16		Alternative 17		Alternative 18		Alternative 19	
	Overplace/ Loss Factor	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]
Armor	10%	7,000	7,700	9,500	10,450	9,500	10,450	9,000	9,900	15,000	16,500	42,000	46,200	26,000	28,600	22,500	24,750	13,500	14,850	16,000	17,600	48,500	53,350
B rock	15%	10,000	11,500	19,000	21,850	16,000	18,400	13,000	14,950	17000	19,550	44,000	50,600	21,000	24,150	13,000	14,950	---	---	23,000	26,450	34,000	39,100
Core	20%	21,000	25,200	45,000	54,000	54,000	64,800	30,000	36,000	37,000	44,400	106,000	127,200	55,000	66,000	50,500	60,600	20,500	24,600	51,000	61,200	105,500	126,600

Breakwater Removal Volume to be Re-used

	Overplace/	Alternative 1		Alternative 2		Alternative 3		Alternative 4		Alternative 7		Alternative 14		Alternative 15		Alternative 16		Alternative 17		Alternative 18		Alternative 19	
		Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]
Armor	10%	---	---	1,150	1,265	1,100	1,210	3,000	3,300	2,500	2,750	6,500	7,150	3,500	3,850	3,000	3,300	---	---	3,000	3,300	6,500	7,150
B rock	15%	---	---	450	518	400	460	1,100	1,265	800	920	2,100	2,415	1000	1,150	1,100	1,265	---	---	1,100	1,265	2,100	2,415

Total Breakwater Material Volume to be Transported In

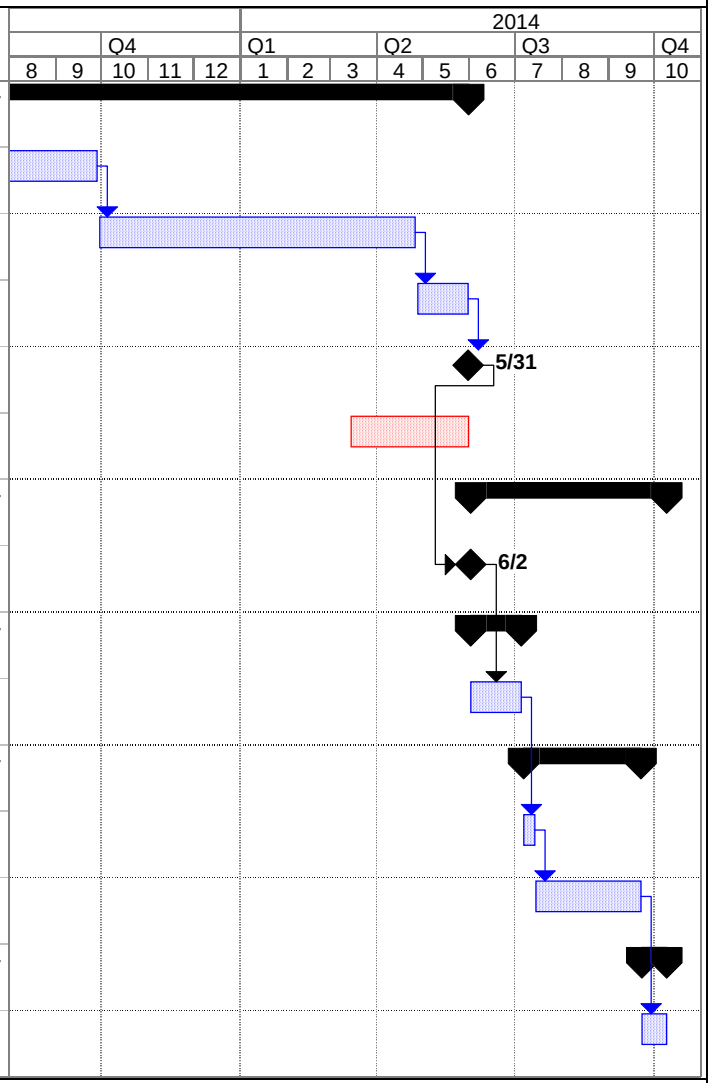
		Alternative 1		Alternative 2		Alternative 3		Alternative 4		Alternative 7		Alternative 14		Alternative 15		Alternative 16		Alternative 17		Alternative 18		Alternative 19	
	Overplace/ Loss Factor	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]	Bank Volume [CY]	Total Volume [CY]
Armor	10%	7,000	7,700	8,350	9,185	8,400	9,240	6,000	6,600	12,500	13,750	35,500	39,050	22,500	24,750	19,500	21,450	13,500	14,850	13,000	14,300	42,000	46,200
B rock	15%	10,000	11,500	18,550	21,333	15,600	17,940	11,900	13,685	16,200	18,630	41,900	48,185	20,000	23,000	11,900	13,685	---	---	21,900	25,185	31,900	36,685
Core	20%	21,000	25,200	45,000	54,000	54,000	64,800	30,000	36,000	30,000	36,000	106,000	127,200	55,000	66,000	50,500	60,600	20,500	24,600	51,000	61,200	105,500	126,600

Exhibit 4
Tentative Project Schedule

Sitka Harbor Breakwater Modification
Tentative Project Schedule - Alternative 4

Thu 12/16/10

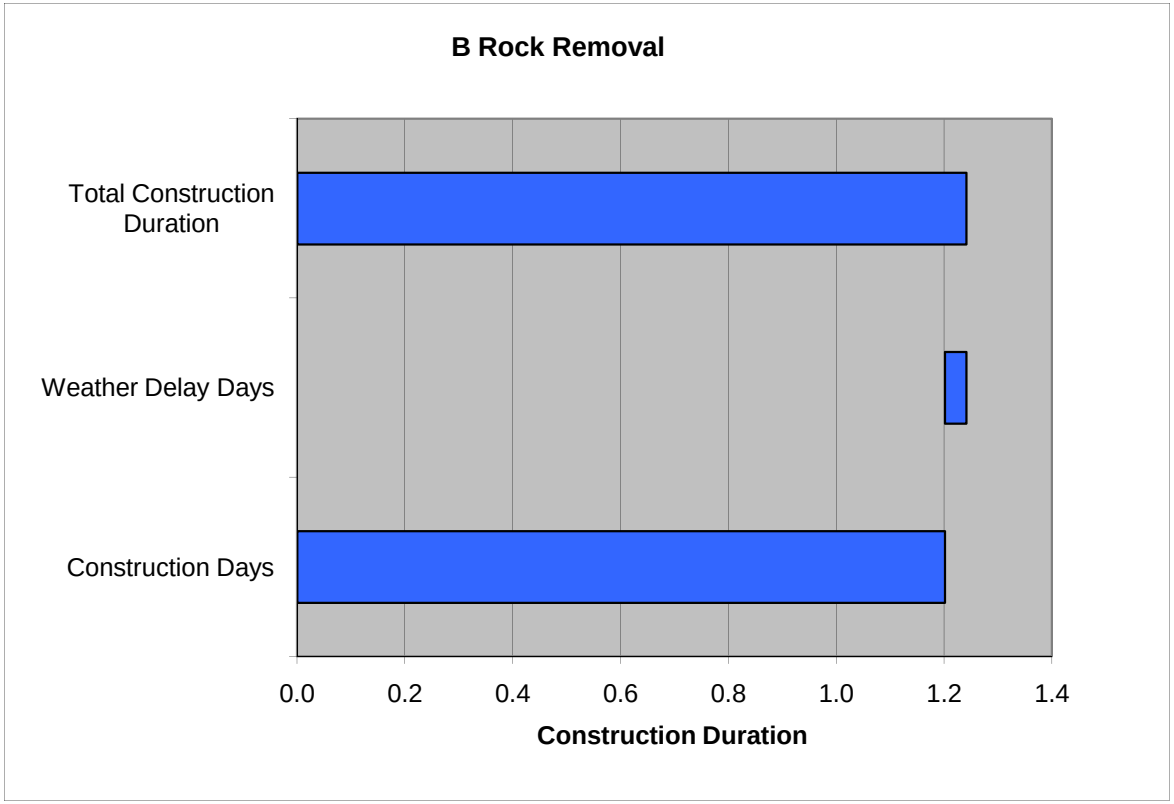
ID	Task Name	Duration	Start	Finish
1	**Pre Construction Award**	**1080 days**	**Wed 12/15/10**	**Sat 5/31/14**
2	Approved Report	870 days	Wed 12/15/10	Sat 9/28/13
3	Plans, Specifications and Estimate	180 days	Mon 9/30/13	Sat 4/26/14
4	Contract Advertising	30 days	Mon 4/28/14	Sat 5/31/14
5	Construction Contract Award	0 days	Sat 5/31/14	Sat 5/31/14
6	Fish Window	67 days	Sat 3/15/14	Sat 5/31/14
7	**Post Construction Award**	**112 days**	**Mon 6/2/14**	**Thu 10/9/14**
8	**Notice-to-Proceed**	0 days	Mon 6/2/14	Mon 6/2/14
9	**Mobilization**	**30 days**	**Mon 6/2/14**	**Sat 7/5/14**
10	Equipment/Personnel Transport	30 days	Mon 6/2/14	Sat 7/5/14
11	**Breakwater Construction**	**67 days**	**Mon 7/7/14**	**Mon 9/22/14**
12	Breakwater Removal	7 days	Mon 7/7/14	Mon 7/14/14
13	Breakwater Transport and Placement	60 days	Tue 7/15/14	Mon 9/22/14
14	**Demobilization**	**15 days**	**Tue 9/23/14**	**Thu 10/9/14**
15	Equipment/Personnel Transport	15 days	Tue 9/23/14	Thu 10/9/14



Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External MileTask
Split

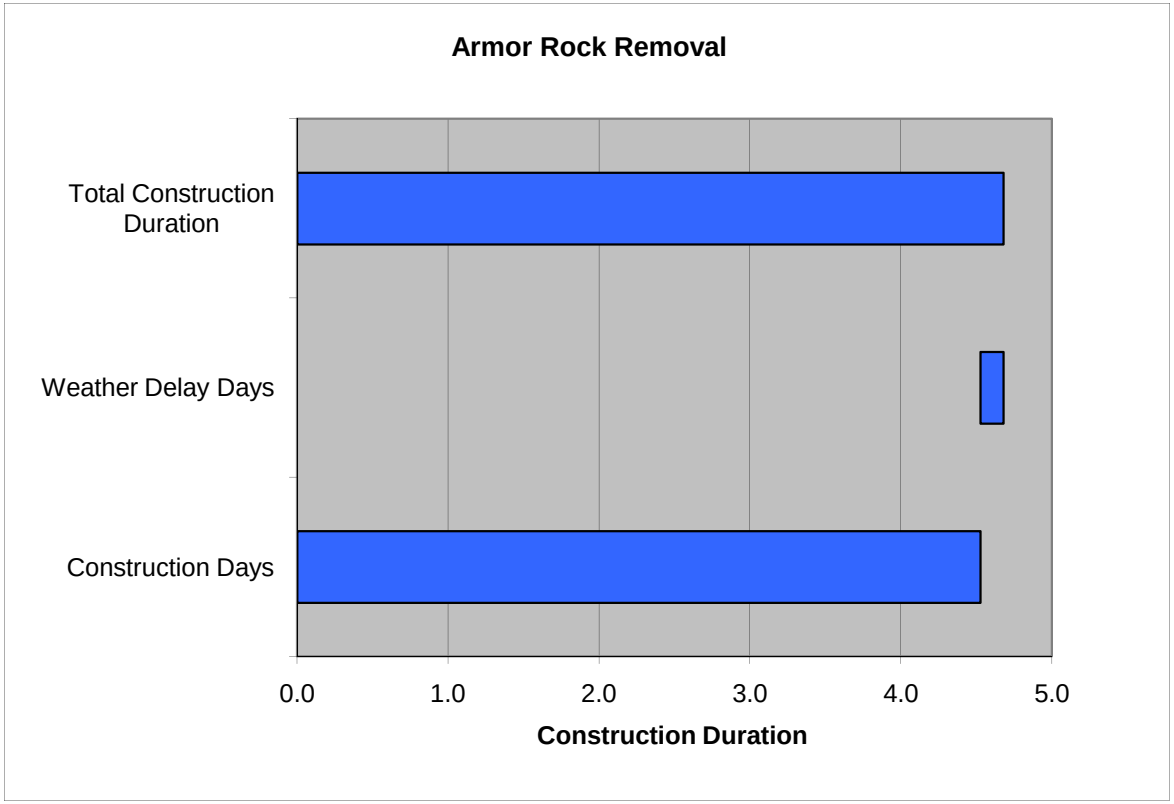
Construction Item Duration Based on Production Rate

Structure:	**Sitka Harbor Breakwaters**	
Item:	B Rock Removal	
Notes:		
Production Rate:	88	cy/hr
Number of Crews:	1	
Overall Production Rate:	88	cy/hr
Productivity Index:	100%	
Run Hours per Day:	12	hrs.
Run Days per Week	6	days
Net Productivity:	1,053	cy/day
Net Productivity:	6,318	cy/week
Quantity Required:	1,265	cy
Days Required:	1	days
Weeks Required:	0.20	weeks
Weather Delays:	0.8	day/month
Weather Delays:	0.20	day/week
Weather Delays Total:	0	days
Total Construction Time:	1.2	days



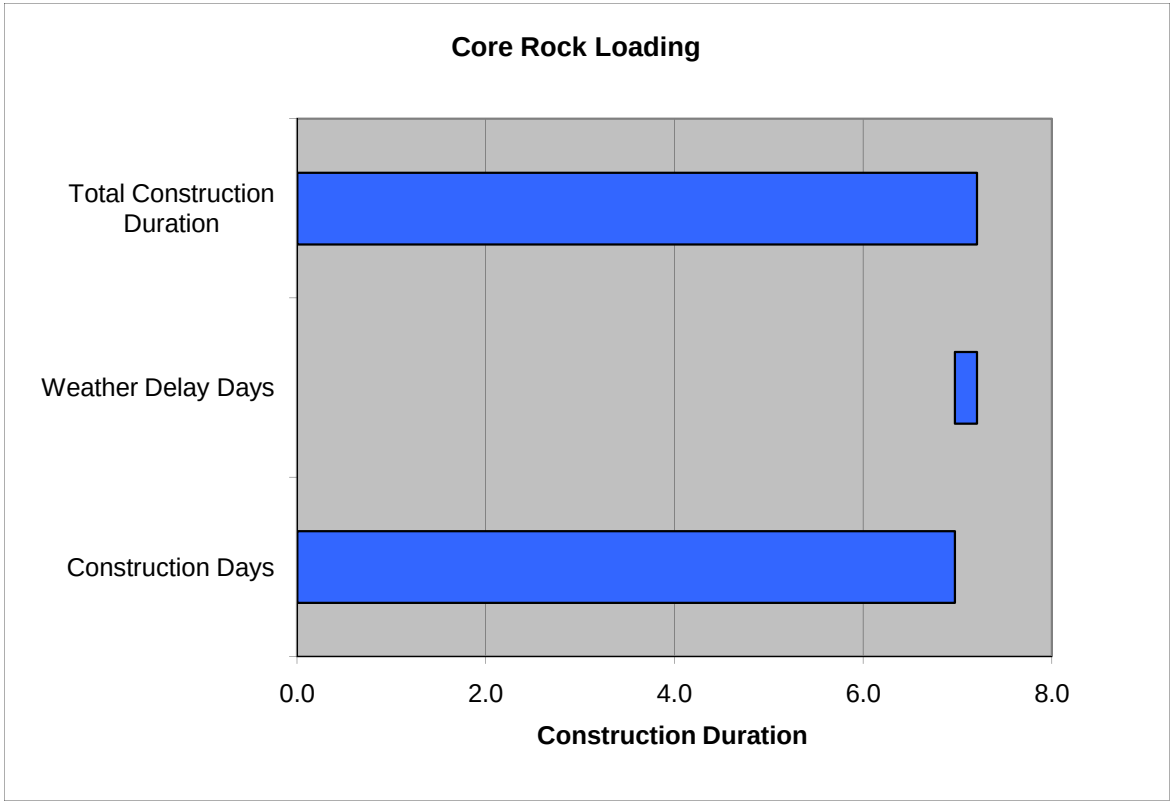
Construction Item Duration Based on Production Rate

Structure:	**Sitka Harbor Breakwaters**	
Item:	Armor Rock Removal	
Notes:		
Production Rate:	61	cy/hr
Number of Crews:	1	
Overall Production Rate:	61	cy/hr
Productivity Index:	100%	
Run Hours per Day:	12	hrs.
Run Days per Week	6	days
Net Productivity:	729	cy/day
Net Productivity:	4,374	cy/week
Quantity Required:	3,300	cy
Days Required:	5	days
Weeks Required:	0.75	weeks
Weather Delays:	0.8	day/month
Weather Delays:	0.20	day/week
Weather Delays Total:	0	days
Total Construction Time:	4.7	days



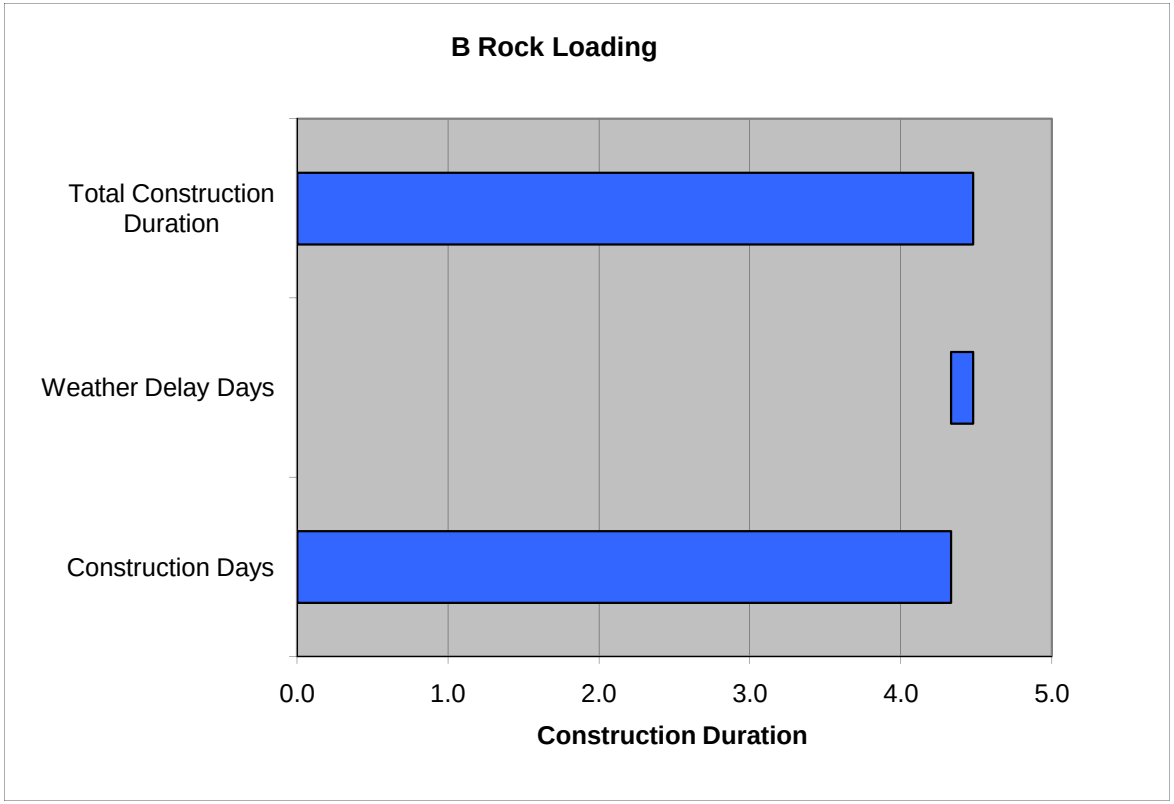
Construction Item Duration Based on Production Rate

Structure:	**Sitka Harbor Breakwaters**	
Item:	Core Rock Loading	
Notes:		
Production Rate:	430	cy/hr
Number of Crews:	1	
Overall Production Rate:	430	cy/hr
Productivity Index:	100%	
Run Hours per Day:	12	hrs.
Run Days per Week	6	days
Net Productivity:	5,164	cy/day
Net Productivity:	30,983	cy/week
Quantity Required:	36,000	cy
Days Required:	7	days
Weeks Required:	1.16	weeks
Weather Delays:	0.8	day/month
Weather Delays:	0.20	day/week
Weather Delays Total:	0	days
Total Construction Time:	7.2	days



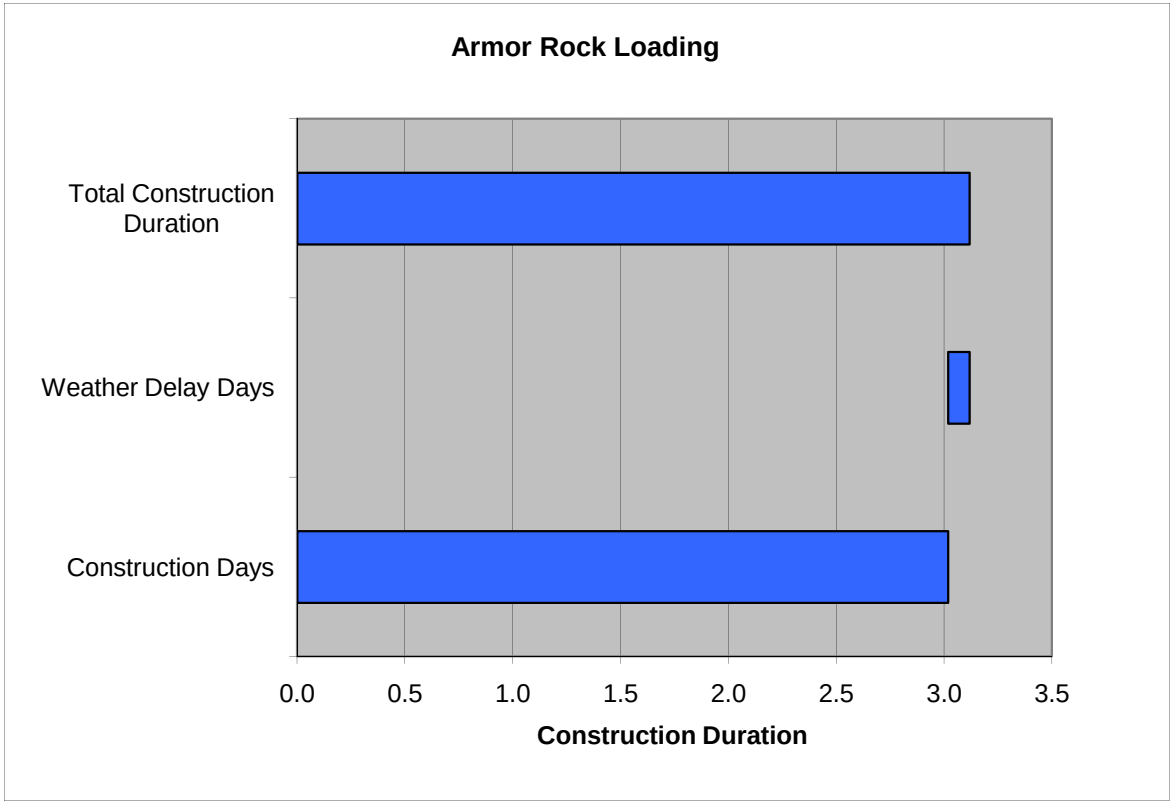
Construction Item Duration Based on Production Rate

Structure:	**Sitka Harbor Breakwaters**	
Item:	B Rock Loading	
Notes:		
Production Rate:	263	cy/hr
Number of Crews:	1	
Overall Production Rate:	263	cy/hr
Productivity Index:	100%	
Run Hours per Day:	12	hrs.
Run Days per Week	6	days
Net Productivity:	3,159	cy/day
Net Productivity:	18,954	cy/week
Quantity Required:	13,685	cy
Days Required:	4	days
Weeks Required:	0.72	weeks
Weather Delays:	0.8	day/month
Weather Delays:	0.20	day/week
Weather Delays Total:	0	days
Total Construction Time:	4.5	days



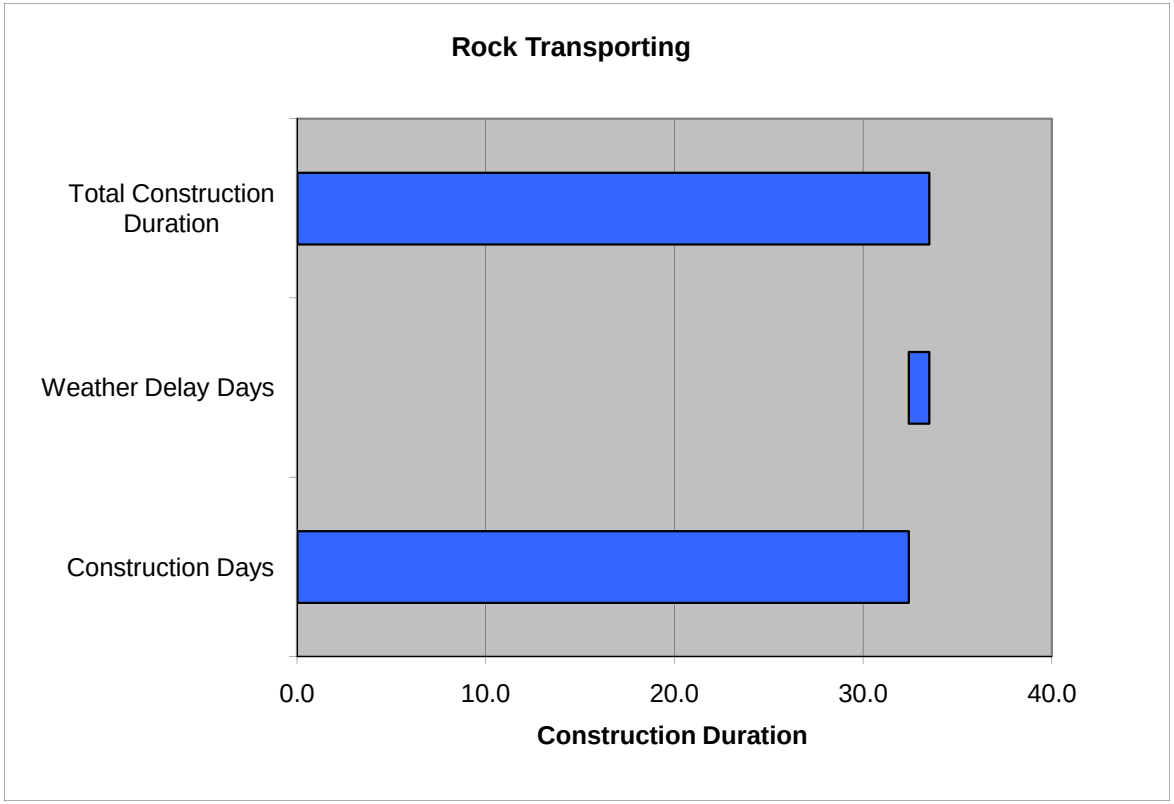
Construction Item Duration Based on Production Rate

Structure:	**Sitka Harbor Breakwaters**	
Item:	Armor Rock Loading	
Notes:		
Production Rate:	182	cy/hr
Number of Crews:	1	
Overall Production Rate:	182	cy/hr
Productivity Index:	100%	
Run Hours per Day:	12	hrs.
Run Days per Week	6	days
Net Productivity:	2,187	cy/day
Net Productivity:	13,122	cy/week
Quantity Required:	6,600	cy
Days Required:	3	days
Weeks Required:	0.50	weeks
Weather Delays:	0.8	day/month
Weather Delays:	0.20	day/week
Weather Delays Total:	0	days
Total Construction Time:	3.1	days



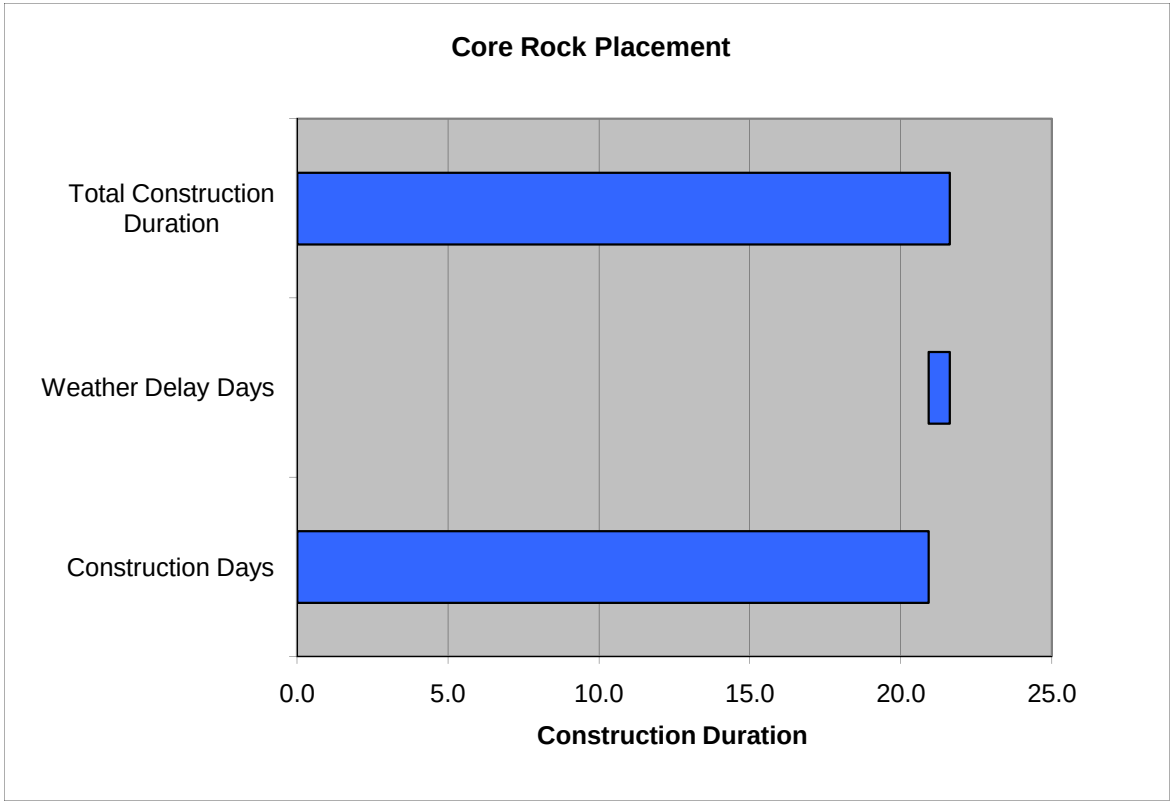
Construction Item Duration Based on Production Rate

Structure:	**Sitka Harbor Breakwaters**	
Item:	Rock Transporting	
Notes:		
Production Rate:	145	cy/hr
Number of Crews:	1	
Overall Production Rate:	145	cy/hr
Productivity Index:	100%	
Run Hours per Day:	12	hrs.
Run Days per Week	6	days
Net Productivity:	1,737	cy/day
Net Productivity:	10,421	cy/week
Quantity Required:	56,285	cy
Days Required:	32	days
Weeks Required:	5.40	weeks
Weather Delays:	0.8	day/month
Weather Delays:	0.20	day/week
Weather Delays Total:	1	days
Total Construction Time:	33.5	days



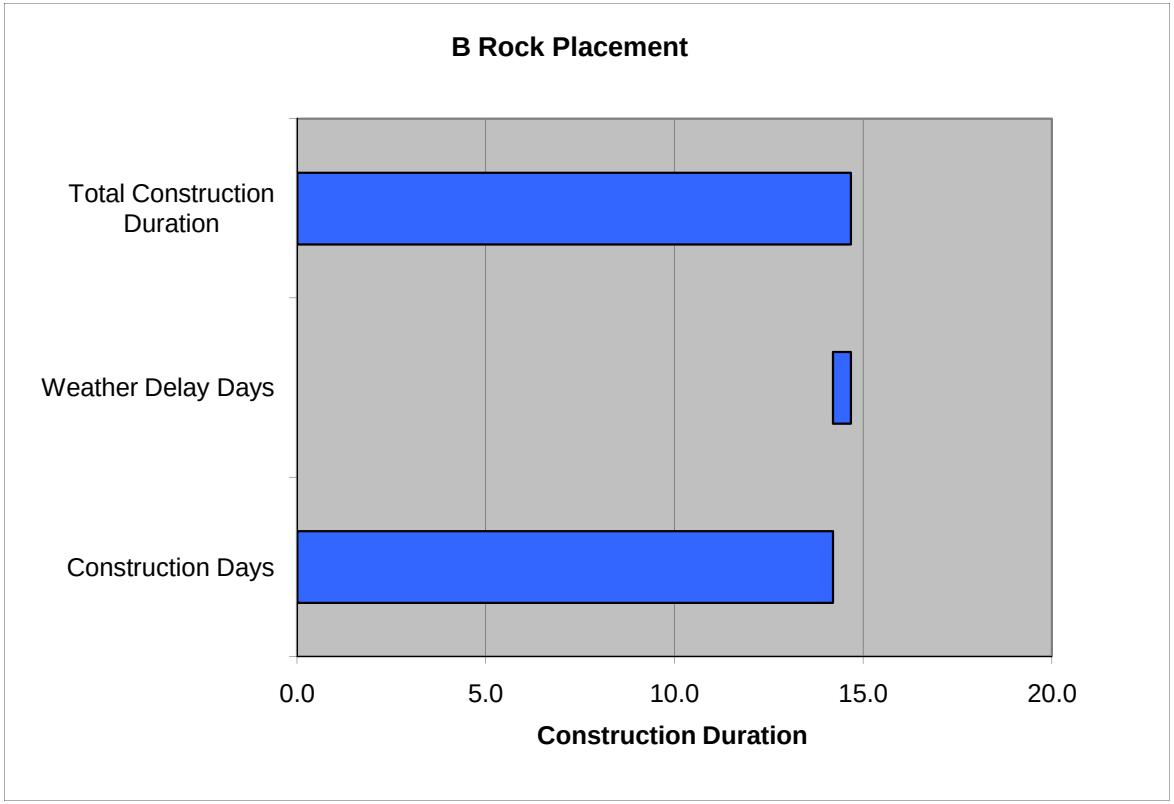
Construction Item Duration Based on Production Rate

Structure:	**Sitka Harbor Breakwaters**	
Item:	Core Rock Placement	
Notes:		
Production Rate:	143	cy/hr
Number of Crews:	1	
Overall Production Rate:	143	cy/hr
Productivity Index:	100%	
Run Hours per Day:	12	hrs.
Run Days per Week	6	days
Net Productivity:	1,721	cy/day
Net Productivity:	10,328	cy/week
Quantity Required:	36,000	cy
Days Required:	21	days
Weeks Required:	3.49	weeks
Weather Delays:	0.8	day/month
Weather Delays:	0.20	day/week
Weather Delays Total:	1	days
Total Construction Time:	21.6	days



Construction Item Duration Based on Production Rate

Structure:	**Sitka Harbor Breakwaters**	
Item:	B Rock Placement	
Notes:		
Production Rate:	88	cy/hr
Number of Crews:	1	
Overall Production Rate:	88	cy/hr
Productivity Index:	100%	
Run Hours per Day:	12	hrs.
Run Days per Week	6	days
Net Productivity:	1,053	cy/day
Net Productivity:	6,318	cy/week
Quantity Required:	14,950	cy
Days Required:	14	days
Weeks Required:	2.37	weeks
Weather Delays:	0.8	day/month
Weather Delays:	0.20	day/week
Weather Delays Total:	0	days
Total Construction Time:	14.7	days



Construction Item Duration Based on Production Rate

Structure:	**Sitka Harbor Breakwaters**	
Item:	Armor Rock Placement	
Notes:		
Production Rate:	61	cy/hr
Number of Crews:	1	
Overall Production Rate:	61	cy/hr
Productivity Index:	100%	
Run Hours per Day:	12	hrs.
Run Days per Week	6	days
Net Productivity:	729	cy/day
Net Productivity:	4,374	cy/week
Quantity Required:	9,900	cy
Days Required:	14	days
Weeks Required:	2.26	weeks
Weather Delays:	0.8	day/month
Weather Delays:	0.20	day/week
Weather Delays Total:	0.5	days
Total Construction Time:	14.0	days

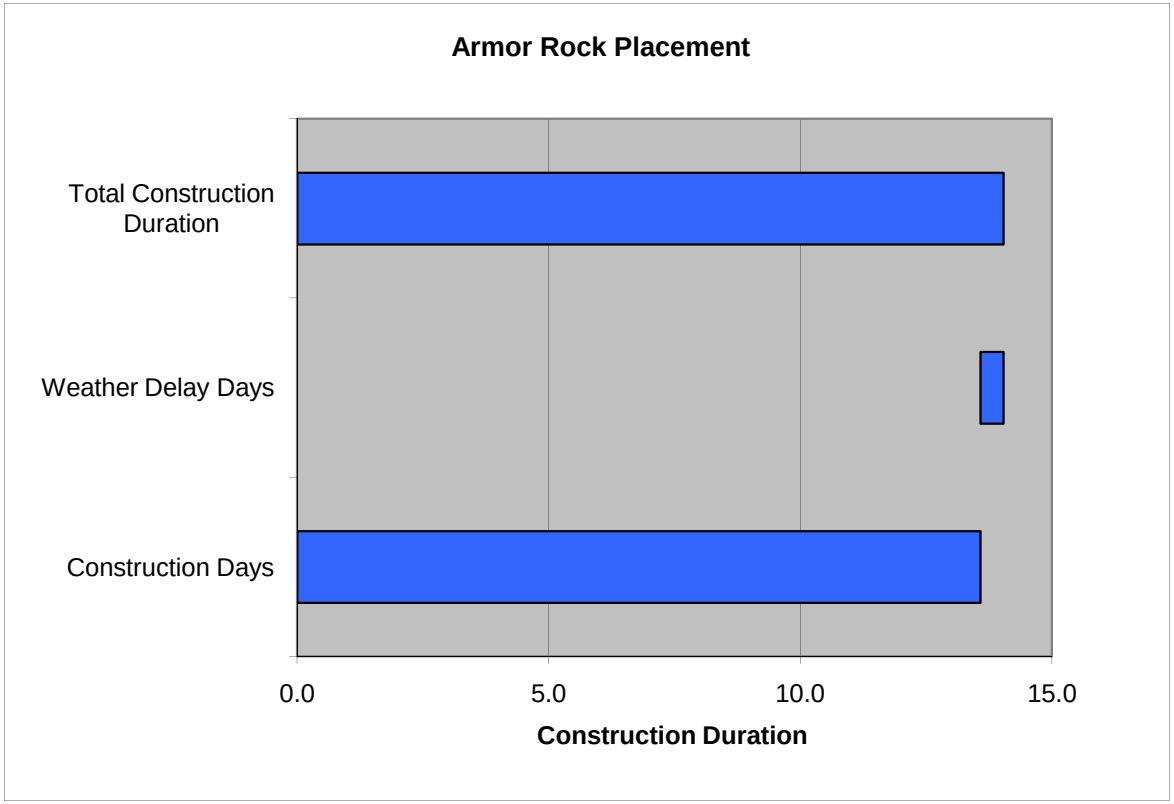


Exhibit 5
Local Market Labor Rates

General Decision AK20100001 Alaska Statewide (dated 11/19/2010) vs.
MCACES 2009 National Labor Rate Comparison.

	AK, Statewide Labor Rate	AK, Statewide Fringe	MCACES 2009 Labor Rate	MCACES 2009 Fringe	Used in Estimate Labor Rate	Used in Estimate Fringe	Sitka, AK Per Diem*
Carpenter	$34.33	$18.23	$32.49	$10.26	**$34.33**	**$18.23**	**$13.58**
Electrician	$37.30	$19.57	$36.93	$13.40	**$37.30**	**$19.57**	**$13.58**
Piledriver	$33.33	$18.23	$32.69	$10.26	**$33.33**	**$18.23**	**$13.58**
Power Equipment Operator							
Group 1	$37.99	$16.95	$33.96	$12.95	**$37.99**	**$16.95**	**$13.58**
			$33.47	$12.95	**$33.47**	**$12.95**	**$13.58**
Group 2	$35.46	$16.95	$33.05	$12.95	**$35.46**	**$16.95**	**$13.58**
Group 4	$28.53	$16.95	$30.69	$12.95	**$28.53**	**$16.95**	**$13.58**
Ironworker	$33.25	$21.31	$34.40	$16.87	**$33.25**	**$21.31**	**$13.58**
Laborer							
Laborer	$29.96	$17.85	$29.66	$7.46	**$29.96**	**$17.85**	**$13.58**
Painter							
Painter	$28.02	$17.18	$31.85	$15.29	**$28.02**	**$17.18**	**$13.58**
Cement Mason/Concrete Finisher	$34.04	$16.40	$34.68	$11.13	**$34.04**	**$16.40**	**$13.58**
Plumbers	$36.38	$16.82	$42.78	$16.51	**$36.38**	**$16.82**	**$13.58**
Truck Driver							
Group 1	$38.02	$14.30	$31.37	$11.88	**$38.02**	**$14.30**	**$13.58**
Group 2	$35.56	$14.30	$30.57	$11.88	**$35.56**	**$14.30**	**$13.58**

* Per diem rates have been calculated from the Department of Defense lodging and meals per diem rates for the Sitka area. The given per diem rate for Sitka is $163/day. This project assumes an 12-hr work day, therefore the hourly per diem rate is $13.58.

GENERAL DECISION: AK20100001 11/19/2010 AK1

Date: November 19, 2010
General Decision Number: AK20100001 11/19/2010

Superseded General Decision Number: AK20080001

State: Alaska

Construction Types: Building and Heavy

Counties: Alaska Statewide.

BUILDING AND HEAVY CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and apartments up to and including 4 stories)

Modification Number	Publication Date
0	03/12/2010
1	03/19/2010
2	04/09/2010
3	04/16/2010
4	05/07/2010
5	05/21/2010
6	06/04/2010
7	06/18/2010
8	07/09/2010
9	08/06/2010
10	09/03/2010
11	09/10/2010
12	09/24/2010
13	10/08/2010
14	10/29/2010
15	11/19/2010

ASBE0097-001 01/01/2010

	Rates	Fringes
Asbestos Workers/Insulator (includes application of all insulating materials protective coverings, coatings and finishings to all types of mechanical systems)	$ 35.64	13.98

ASBE0097-002 01/01/2010

	Rates	Fringes
HAZARDOUS MATERIAL HANDLER (includes preparation, wetting, stripping, removal scrapping, vacuming, bagging, and disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems)	$ 27.35	14.10

BOIL0502-002 10/01/2008

	Rates	Fringes
BOILERMAKER	$ 43.94	19.68

BRAK0001-002 07/01/2010

	Rates	Fringes
Bricklayer, Blocklayer, Stonemason, Marble Mason, Tile Setter, Terrazzo Worker	$ 37.39	15.40
Tile & Terrazzo Finisher	$ 31.78	15.40

CARP1243-003 07/01/2009

North of the 63rd Parallel

	Rates	Fringes
Carpenter/Lather/Drywall Applicator	$ 34.33	18.55
Carpenter: Fire or Flood Repair Work	$ 34.33	18.55
MILLWRIGHT	$ 33.39	16.08

CARP1281-004 07/01/2009

SOUTH OF 63RD PARALLEL

	Rates	Fringes
Acoustical Applicator and Lather	$ 34.33	18.23
Carpenters & Drywallers	$ 34.33	18.23
MILLWRIGHT	$ 33.39	16.08

CARP2520-003 07/01/2009

	Rates	Fringes
Diver		
Stand-by	$ 38.50	18.23
Tender	$ 37.50	18.23
Working	$ 77.00	18.23
Piledriver		
Carpenter	$ 34.33	18.23
Piledriver; Skiff Operator and Rigger	$ 33.33	18.23
Sheet Stabber	$ 34.33	18.23
Welder	$ 35.33	18.23

DEPTH PAY PREMIUM FOR DIVERS BELOW WATER SURFACE:

50-100 feet	$1.00 per foot
101 feet and deeper	$2.00 per foot

ENCLOSURE PAY PREMIUM WITH NO VERTICAL ASCENT:

5-50 FEET	$1.00 PER FOOT/DAY

51-100 FEET $2.00 PER FOOT/DAY
101 FEET AND ABOVE $3.00 PER FOOT/DAY

SATURATION DIVING:
The standby rate applies until saturation starts. The saturation diving rate applies when divers are under pressure continuously until work task and decompression are complete. the diver rate shall be paid for all saturation hours.

WORK IN COMBINATION OF CLASSIFICATIONS:
Employees working in any combination of classifications within the diving crew (except dive supervisor) in a shift are paid in the classification with the highest rate for that shift.

---

* ELEC1547-004 04/01/2010

	Rates	Fringes
CABLE SPLICER	$ 39.05	3%+$19.57
Electrician;Technician	$ 37.30	3%+$19.57

---

* ELEC1547-005 04/01/2010

Line Construction

	Rates	Fringes
CABLE SPLICER	$ 47.43	3%+22.57
Linemen (Including Equipment Operators, Technician)	$ 45.68	3%+22.57
Powderman	$ 44.10	3%+22.57
TREE TRIMMER	$ 31.83	3%+$17.57

ELEV0019-002 01/01/2010

	Rates	Fringes
ELEVATOR MECHANIC	$ 46.635	20.24

FOOTNOTE: a. Employer contributes 8% of the basic hourly rate for over 5 year's service and 6% of the basic hourly rate for 6 months to 5 years' of service as vacation paid credit. b. Eight paid holidays: New Year's Day; Memorial Day; Independence Day; Labor Day; Veteran's Day; Thanksgiving Day; Friday after Thanksgiving and Christmas Day

---

ENGI0302-002 01/01/2010

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 36.23	16.95
GROUP 1A	$ 37.99	16.95
GROUP 2	$ 35.46	16.95
GROUP 3	$ 34.74	16.95
GROUP 4	$ 28.53	16.95
TUNNEL WORK		

GROUP 1	$ 39.85	16.95
GROUP 1A	$ 41.79	16.95
GROUP 2	$ 39.01	16.95
GROUP 3	$ 38.21	16.95
GROUP 4	$ 31.83	16.95

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Asphalt Roller; Back Filler; Barrier Machine (Zipper); Batch Plant Operator: Batch and Mixer over 200 yds.; Beltcrete with power pack and similar conveyors; Bending Machine; Boat Coxwains; Bulldozers; Cableways, Highlines and Cablecars; Cleaning Machine; Coating Machine; Concrete Hydro Blaster; Cranes-45 tons and under or 150 foot boom and under (including jib and attachments): (a) Shovels, Backhoes, excavators with all attachments, Draglines, Clamshells; Gradalls-3 yards and under; (b) Hydralifts or Transporters, all track or truck type,(c) Derricks; Crushers; Deck Winches-Double Drum; Ditching or Trenching Machine (16 inch or over); Drilling Machines, core, cable, rotary and exploration; Finishing Machine Operator, concrete paving, Laser Screed, sidewalk, curb and gutter machine; Helicopters; Hover Craft, Flex Craft, Loadmaster, Air Cushion, All Terrain Vehicle, Rollagon, Bargecable, Nodwell Sno Cat; Hydro Ax: Feller Buncher and similar; Loaders: Forklifts with power boom and swing attachment, Overhead and front end, 2 1/2 yards through 5 yards, Loaders with forks or pipe clamps, Loaders, elevating belt type, Euclid and similar types; Mechanics, Bodyman; Micro Tunneling Machine; Mixers: Mobile type w/hoist combination; Motor Patrol Grader; Mucking Machines: Mole, Tunnel Drill, Horizontal/Directional Drill Operator, and/or Shield; Operator on Dredges; Piledriver Engineers, L. B. Foster, Puller or similar Paving Breaker; Power Plant, Turbine Operator, 200 k.w. and over (power plants or combination of power units over 300 k.w.); Sauerman-Bagley; Scrapers-through 40 yards; Service Oiler/Service Engineer; Sidebooms-under 45 tons; Shot Blast Machine; Spreaders, Blaw Knox, Cedarapids, Barber Greene, Slurry Machine; Sub-grader (Gurries, C.M.I. and C.M.I. Roto Mills and similar types); Tack tractor; Truck mounted Concrete Pumps, Conveyor, Creter; Water Kote Machine; Unlicensed off road hauler; Welder; Electrical Mechanic, Camp Maintenance Engineer

GROUP 1A: Cranes-over 45 tons or 150 foot (including jib and attachments): (a) Shovels, backhoes,excavators with all attachments, draglines, clamshells-over 3 yards, (b) Tower cranes;Licensed Water/Waste Water Treatment Operator; Loaders over 5 yds.;Certified Welder, Electrical Mechanic, Camp Maintenance Engineer, Mechanic (over 10,000 hours); Motor Patrol Grader, Dozer, Grade Tractor (finish: when finishing to final grade and/or to hubs, or for asphalt); Power Plants: 1000 k.w. and over; Quad; Screed; Sidebooms over 45 tons; Slip Form Paver C.M.I. and similar types; Scrapers over 40 yards; Camera/Tool/Video Operator (Slipline).

GROUP 2: Batch Plant Operators: Batch and Mixer 200 yds. per hour and under; Boiler-fireman; Cement Hog and Concrete

Pump Operator; Conveyors (except as listed in group 1); Hoist on steel erection; Towermobiles and Air Tuggers; Horizontal/Directional Drill Locator;Licensed Grade Technician; Loaders, Elevating Grader, Dumor and similar; Locomotives: rod and geared engines; Mixers; Screening, Washing Plant; Sideboom (cradling rock drill regardless of size); Skidder; Trencing Machine under 16 inches; Waste/ Waste Water Treatment Operator.

GROUP 3: "A" Frame Trucks, Deck Winches: single power drum; Bombardier (tack or tow rig); Boring Machine; Brooms-power; Bump Cutter; Compressor; Farm tractor; Forklift, industrial type; Gin Truck or Winch Truck with poles when used for hoisting; Grade Checker and Stake Hopper; Hoist, Air Tuggers, Elevators; Loaders: (a) Elevating-Athey, Barber Green and similar types (b) Forklifts or Lumber Carrier (on construction job site) (c) Forklifts with Tower (d) Overhead and Front-end, under 2 1/2 yds. Locomotives:Dinkey (air, steam, gas and electric) Speeders; Mechanics (light duty); Mixers: Concrete Mixers and Batch 200 yds. per hour and under; Oil, Blower Distribution; Post Hole Diggers, mechanical; Pot Fireman (power agitated); Power Plant, Turbine Operator, under 300 k.w.; Pumps-water; Roller-other than Plantmix; Saws, concrete; Skid Steer with all attachments; Straightening Machine; Tow Tractor

GROUP 4: Rig Oiler/Assistant Engineer (if over 85 tons or 100 ft. boom);Parts and Equipment Coordinator; Swamper (on trenching machines or shovel type equipment); Spotter; Steam Cleaner; Drill Helper.

FOOTNOTE: Groups 1-4 receive 10% premium while performing tunnel or underground work. Rig Oiler/Assistant Engineer shall be required on cranes over 85 tons or over 100 feet of boom.

IRON0751-003 08/01/2010

	Rates	Fringes
Ironworkers:		
BRIDGE, STRUCTURAL, ORNAMENTAL, REINFORCING MACHINERY MOVER, RIGGER, SHEETER, STAGE RIGGER, BENDER OPERATOR	$ 33.25	21.31
FENCE, BARRIER AND GUARDRAIL INSTALLERS	$ 29.75	21.31
GUARDRAIL LAYOUT MAN	$ 30.49	21.31
HELICOPTER, TOWER	$ 34.25	21.31

LABO0341-005 07/01/2010

	Rates	Fringes
Laborers: North of the 63rd Parallel & East of Longitude 138 Degrees		
GROUP 1	$ 29.00	17.96
GROUP 2	$ 29.96	17.96

GROUP 3	$ 30.83	17.96
GROUP 3A	$ 33.97	17.96
GROUP 3B	$ 34.77	17.96
GROUP 4	$ 19.00	17.96
TUNNELS, SHAFTS, AND RAISES		
GROUP 1	$ 31.90	17.96
GROUP 2	$ 32.96	17.96
GROUP 3	$ 33.91	17.96
GROUP 3A	$ 37.37	17.96
GROUP 3B	$ 38.25	17.96
Laborers: South of the 63rd Parallel & West of Longitude 138 Degrees		
GROUP 1	$ 29.00	17.85
GROUP 2	$ 29.96	17.85
GROUP 3	$ 30.83	17.85
GROUP 3A	$ 33.97	17.85
GROUP 3B	$ 34.77	17.85
GROUP 4	$ 19.00	17.85
TUNNELS, SHAFTS, AND RAISES		
GROUP 1	$ 31.90	17.85
GROUP 2	$ 32.96	17.85
GROUP 3	$ 33.91	17.85
GROUP 3A	$ 37.37	17.85
GROUP 3B	$ 38.25	17.85

LABORERS CLASSIFICATIONS

GROUP 1: Asphalt Workers (shovelman, plant crew); Brush Cutters; Camp Maintenance Laborer; Carpenter Tenders; Choke Setters, Hook Tender, Rigger, Signalman; Concrete Laborer(curb and gutter, chute handler, grouting, curing, screeding); Crusher Plant Laborer; Demolition Laborer; Ditch Diggers; Dump Man; Environmental Laborer (asbestos (limited to nonmechanical systems), hazardous and toxic waste, oil spill); Fence Installer; Fire Watch Laborer; Flagman; Form Strippers; General Laborer; Guardrail Laborer, Bridge Rail Installers; Hydro-Seeder Nozzleman; Laborers (building); Landscape or Planter; Laying of Decorative Block (retaining walls, flowered decorative block 4 feet and below); Material Handlers; Pneumatic or Power Tools; Portable or Chemical Toilet Serviceman; Pump Man or Mixer Man; Railroad Track Laborer; Sandblast, Pot Tender; Saw Tenders; Scaffold Building and Erecting; Slurry Work; Stake Hopper; Steam Point or Water Jet Operator; Steam Cleaner Operator; Tank Cleaning; Utiliwalk, Utilidor Laborer and Conduit Installer; Watchman (construction projects); Window Cleaner

GROUP 2: Burning and Cutting Torch; Cement or Lime Dumper or Handler (sack or bulk); Choker Splicer; Chucktender (wagon, airtrack and hydraulic drills); Concrete Laborers (power buggy, concrete saws, pumpcrete nozzleman, vibratorman); Culvert Pipe Laborer; Cured in place Pipelayer; Environmental Laborer (marine work, oil spill skimmer operator, small boat operator); Foam Gun or Foam Machine Operator; Green Cutter (dam work); Gunnite Operator; Hod Carriers; Jackhammer or Pavement Breakers (more than 45 pounds);Laying of Decorative Block (retaining walls, flowered decorative block above 4 feet); Mason Tender and

Mud Mixer (sewer work); Pilot Car; Plasterer, Bricklayer and Cement Finisher Tenders; Power Saw Operator; Railroad Switch Layout Laborer; Sandblaster; Sewer Caulkers; Sewer Plant Maintenance Man; Thermal Plastic Applicator; Timber Faller, chain saw operator, filer; Timberman

GROUP 3: Alarm Installer; Bit Grinder; Guardrail Machine Operator; High Rigger and tree topper; High Scaler; Multiplate; Slurry Seal Squeegee Man

GROUP 3A: Asphalt Raker, Asphalt Belly dump lay down; Drill Doctor (in the field); Drillers (including, but not limited to, wagon drills, air track drills; hydraulic drills); Powderman; Pioneer Drilling and Drilling Off Tugger (all type drills); Pipelayers

GROUP 3B: Grade checker (setting or transfering of grade marks, line and grade)

GROUP 4: Final Building Cleanup

TUNNELS, SHAFTS, AND RAISES CLASSIFICATIONS

GROUP 1: Brakeman; Muckers; Nippers; Topman and Bull Gang; Tunnel Track Laborer

GROUP 2: Burning and Cutting Torch; Concrete Laborers; Jackhammers; Nozzleman, Pumpcrete or Shotcrete.

GROUP 3: Miner; Retimberman

GROUP 3A: Asphalt Raker, Asphalt Belly dump lay down; Drill Doctor (in the field); Drillers (including, but not limited to, wagon drills, air track drills; hydraulic drills); Powderman; Pioneer Drilling and Drilling Off Tugger (all type drills); Pipelayers.

GROUP 3B: Grade checker (setting or transfering of grade marks, line and grade)

Tunnel shaft and raise rates only apply to workers regularly employed inside a tunnel portal or shaft collar.

PAIN1959-001 07/01/2010

NORTH OF THE 63RD PARALLEL

	Rates	Fringes
PAINTER		
BRUSH/ROLLER PAINT OR WALL COVERER	$ 31.69	15.96
TAPING, TEXTURING, STRUCTURAL PAINTING, SANDBLASTING, POT TENDER, FINISH METAL, SPRAY, BUFFER OPERATOR, RADON MITIGATION, LEAD BASED PAINT ABATEMENT, HAZARDOUS MATERIAL HANDLER	$ 32.19	15.96

PAIN1959-002 07/01/2010

SOUTH OF THE 63RD PARALLEL

	Rates	Fringes
Painters:		
Brush, Roller, Sign, Paper and Vinyl, Swing Stage, Hand Taper/Drywall, Structural Steel, and Commercial Spray	$ 28.02	17.18
Machine Taper/Drywall	$ 29.22	17.18
Spray-Sand/Blast, Epoxy and Tar Applicator	$ 29.48	16.22

PAIN1959-003 04/01/2010

NORTH OF THE 63RD PARALLEL

	Rates	Fringes
GLAZIER	$ 35.41	13.91

PAIN1959-004 07/01/2010

	Rates	Fringes
FLOOR LAYER: Carpet	$ 30.83	12.13

PLAS0867-001 02/10/2010

	Rates	Fringes
PLASTERER		
North of the 63rd parallel	$ 34.54	16.40
South of the 63rd parallel	$ 34.29	16.40

PLAS0867-004 02/01/2010

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
North of the 63rd parallel	$ 34.29	16.40
South of the 63rd parallel	$ 34.04	16.40

PLUM0262-002 07/01/2010

East of the 141st Meridian

	Rates	Fringes
Plumber; Steamfitter	$ 35.27	18.17

PLUM0367-002 07/01/2010

South of the 63rd Parallel

	Rates	Fringes

Plumber; Steamfitter.....$ 36.38 16.82

PLUM0375-002 07/01/2010

North of the 63rd Parallel

	Rates	Fringes
Plumber; Steamfitter.....	$ 38.66	16.25

---

* PLUM0669-002 04/01/2010

	Rates	Fringes
SPRINKLER FITTER.....	$ 41.55	19.65

ROOF0190-002 06/01/2010

	Rates	Fringes
ROOFER, Including Built Up, Composition and Single Ply Roofs		
NORTH OF THE 63RD PARALLEL..	$ 35.70	11.67
SOUTH OF THE 63RD PARALLEL..	$ 35.70	11.67

SHEE0023-003 07/01/2009

South of the 63rd Parallel

	Rates	Fringes
Sheet Metal Worker.....	$ 38.34	17.70

SHEE0023-004 07/01/2009

North of the 63rd Parallel

	Rates	Fringes
Sheet Metal Worker.....	$ 41.98	17.31

TEAM0959-003 09/01/2009

	Rates	Fringes
TRUCK DRIVER		
GROUP 1.....	$ 36.78	14.30
GROUP 1A.....	$ 38.02	14.30
GROUP 2.....	$ 35.56	14.30
GROUP 3.....	$ 34.76	14.30
GROUP 4.....	$ 34.21	14.30
GROUP 5.....	$ 33.46	14.30

GROUP 1: Semi with Double Box Mixer; Dump Trucks (including rockbuggy and trucks with pups) over 40 yards up to and including 60 yards; Deltas, Commanders, Rollogans and similar equipment when pulling sleds, trailers or similar equipment; Boat Coxswain; Lowboys including attached

trailers and jeeps, up to and including 12 axles; Ready-mix over 12 yards up to and including 15 yards); Water Wagon (250 Bbls and above); Tireman, Heavy Duty/Fueler

GROUP 1A: Dump Trucks (including Rockbuggy and Trucks with pups) over 60 yards up to and including 100 yards; Jeeps (driver under load)

GROUP 2: Turn-O-Wagon or DW-10 not self-loading; All Deltas, Commanders, Rollogans, and similar equipment; Mechanics; Dump Trucks (including Rockbuggy and Trucks with pups) over 20 yards up to and including 40 yards; Lowboys including attached trailers and jeeps up to and including 8 axles; Super vac truck/cacasco truck/heat stress truck; Ready-mix over 7 yards up to and including 12 yards;

GROUP 3: Dump Trucks (including Rockbuggy and Trucks with pups) over 10 yards up to and including 20 yards; batch trucks 8 yards and up; Oil distributor drivers; Partsman; Oil Distributor Drivers; Trucks/Jeeps (push or pull); Traffic Control Technician

GROUP 4: Buggymobile; Semi or Truck and trailer; Dumpster; Tireman (light duty); Dump Trucks (including Rockbuggy and Truck with pups) up to and including 10 yards; Track Truck Equipment; Stringing Truck; Grease Truck; Flat Beds, dual rear axle; Hyster Operators (handling bulk aggregate); Lumber Carrier; Water Wagon, semi; Water Truck, dual axle; Gin Pole Truck, Winch Truck, Wrecker, Truck Mounted "A" Frame manufactured rating over 5 tons; Bull Lifts and Fork Lifts with Power Boom and Swing attachments, over 5 tons; Front End Loader with Forks; Bus Operator over 30 passengers; All Terrain Vehicles; Boom Truck/Knuckle Truck over 5 tons; Foam Distributor Truck/dual axle; Hydro-seeders, dual axle; Vacuum Trucks, Truck Vacuum Sweepers; Loadmaster (air and water); Air Cushion or similar type vehicle; Fire Truck/Ambulance Driver; Combination Truck-fuel and grease; Compactor (when pulled by rubber tired equipment); Rigger (air/water/oilfield); Ready Mix, up to and including 7 yards;

GROUP 5: Gravel Spreader Box Operator on Truck; Flat Beds, single rear axle; Boom Truck/Knuckle Truck up to and including 5 tons; Pickups (Pilot Cars and all light duty vehicles); Water Wagon (Below 250 Bbls); Gin Pole Truck, Winch Truck, Wrecker, Truck Mounted "A" Frame, manufactured rating 5 tons and under; Bull Lifts and Fork Lifts (fork lifts with power broom and swing attachments up to and including 5 tons); Buffer Truck; Tack Truck; Farm type Rubber Tired Tractor (when material handling or pulling wagons on a construction project); Foam Distributor, single axle; Hydro-Seeders, single axle; Team Drivers (horses, mules and similar equipment); Fuel Handler (station/bulk attendant); Batch Truck, up to and including 7 yards; Gear/Supply Truck; Bus Operator, Up to 30 Passengers; Rigger/Swamper

---

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

==========

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

==========

END OF GENERAL DECISION

Alaska Per Diem Rates

Locality	Seasons (Beg-End)	Maximum Lodging	Local Meals + Incidentals	Maximum Per Diem	Effective Date
ADAK	01/01-12/31	120	44	**164**	7/1/2003
ANCHORAGE	05/01-09/15	181	44	**225**	4/1/2007
ANCHORAGE	09/16-04/30	99	44	**143**	4/1/2007
BARROW	01/01-12/31	159	44	**203**	5/1/2002
BETHEL	01/01-12/31	139	44	**183**	1/1/2009
BETTLES	01/01-12/31	135	44	**179**	10/1/2004
COLDFOOT	01/01-12/31	165	44	**208**	10/1/2006
COPPER CENTER	05/01-09/30	125	44	**169**	1/1/2009
COPPER CENTER	10/01-04/30	95	44	**139**	1/1/2009
CORDOVA	05/01-09/30	95	44	**139**	6/1/2007
CORDOVA	10/01-04/30	85	44	**129**	6/1/2007
CRAIG	05/16-09/30	236	44	**280**	7/1/2008
CRAIG	10/01-05/15	151	44	**195**	7/1/2008
DELTA JUNCTION	01/01-12/31	135	44	**179**	7/1/2008
DENALI NATIONAL PARK	06/01-08/31	135	44	**179**	1/1/2009
DENALI NATIONAL PARK	09/01-05/31	79	44	**123**	1/1/2009
DILLINGHAM	04/15-10/15	185	44	**229**	1/1/2009
DILLINGHAM	10/16-04/14	169	44	**213**	1/1/2009
DUTCH HARBOR-UNALASKA	01/01-12/31	121	44	**165**	1/1/2009
FAIRBANKS	05/01-09/15	169	44	**213**	2/1/2007
FAIRBANKS	09/16-04/30	75	44	**119**	2/1/2007
FOOTLOOSE	01/01-12/31	175	44	**219**	6/1/2002
GLENNALLEN	05/01-09/30	125	44	**169**	1/1/2009
GLENNALLEN	10/01-04/30	95	44	**139**	1/1/2009
HAINES	01/01-12/31	109	44	**153**	1/1/2009
HEALY	06/01-08/31	135	44	**179**	1/1/2009
HEALY	09/01-05/31	79	44	**123**	1/1/2009
HOMER	05/15-09/15	167	44	**211**	1/1/2009
HOMER	09/16-05/14	79	44	**123**	1/1/2009
JUNEAU	05/01-09/30	149	44	**193**	1/1/2009
JUNEAU	10/01-04/30	109	44	**153**	1/1/2009
KAKTOVIK	01/01-12/31	165	44	**209**	5/1/2002
KAVIK CAMP	01/01-12/31	150	44	**194**	5/1/2002
KENAI-SOLDOTNA	05/01-08/31	129	44	**173**	4/1/2006
KENAI-SOLDOTNA	09/01-04/30	79	44	**123**	4/1/2006
KENNICOTT	01/01-12/31	259	44	**303**	1/1/2009
KETCHIKAN	05/01-09/30	140	44	**184**	1/1/2009
KETCHIKAN	10/01-04/30	98	44	**142**	1/1/2009
KING SALMON	05/01-10/01	225	44	**269**	5/1/2002
KING SALMON	10/02-04/30	125	44	**169**	5/1/2002
KLAWOCK	05/16-09/30	236	44	**280**	7/1/2008
KLAWOCK	10/01-05/15	151	44	**195**	7/1/2008
KODIAK	05/01-09/30	136	44	**180**	1/1/2009

Use the OTHER rate if city is not listed (REV. 1/1/09)

KODIAK	10/01-04/30	99	44	**143**	1/1/2009
KOTZEBUE	01/01-12/31	179	44	**223**	7/1/2008
MCCARTHY	01/01-12/31	259	44	**303**	1/1/2009
MCGRATH	01/01-12/31	165	44	**209**	10/1/2006
MURPHY DOME	05/01-09/15	169	44	**213**	2/1/2007
MURPHY DOME	09/16-04/30	75	44	**119**	2/1/2007
NOME	01/01-12/31	130	44	**174**	4/1/2008
NUIQSUT	01/01-12/31	180	44	**224**	5/1/2002
PETERSBURG	01/01-12/31	100	44	**144**	7/1/2008
PORT ALSWORTH	01/01-12/31	135	44	**179**	5/1/2002
SELDOVIA	05/15-09/15	167	44	**211**	1/1/2009
SELDOVIA	09/16-05/14	79	44	**123**	1/1/2009
SEWARD	05/01-09/30	174	44	**218**	1/1/2009
SEWARD	10/01-04/30	99	44	**143**	1/1/2009
SITKA-MT. EDGECUMBE	05/01-09/30	119	44	**163**	1/1/2009
SITKA-MT. EDGECUMBE	10/01-04/30	99	44	**143**	1/1/2009
SKAGWAY	05/01-09/30	140	44	**184**	1/1/2009
SKAGWAY	10/01-04/30	98	44	**142**	1/1/2009
SLANA	05/01-09/30	139	44	**183**	2/1/2005
SLANA	10/01-04/30	99	44	**143**	2/1/2005
SPRUCE CAPE	05/01-09/30	136	44	**180**	1/1/2009
SPRUCE CAPE	10/01-04/30	99	44	**143**	1/1/2009
ST. GEORGE	01/01-12/31	129	44	**173**	6/1/2004
TALKEETNA	01/01-12/31	100	44	**144**	7/1/2002
TANANA	01/01-12/31	130	44	**174**	4/1/2008
TOGIAK	01/01-12/31	100	44	**144**	7/1/2002
TOK	05/01-09/30	109	44	**153**	1/1/2009
TOK	10/01-04/30	99	44	**143**	1/1/2009
UMIAT	01/01-12/31	350	44	**394**	10/1/2006
VALDEZ	05/01-09/30	159	44	**203**	1/1/2009
VALDEZ	10/01-04/30	115	44	**159**	1/1/2009
WASILLA	05/01-09/30	151	44	**195**	1/1/2009
WASILLA	10/01-04/30	96	44	**140**	1/1/2009
WRANGELL	05/01-09/30	140	44	**184**	1/1/2009
WRANGELL	10/01-04/30	98	44	**142**	1/1/2009
YAKUTAT	01/01-12/31	105	44	**149**	1/1/2009
[OTHER]	01/01-12/31	100	44	**144**	1/1/2009

Exhibit 6
Estimated Production Rates

TITLE: SITKA HARBOR BREAKWATER MODIFICATION
SUBJECT: BREAKWATER LOADING OUTPUT RATE

MADE BY:	SKV	JOB NO.:	T23894
CHECKED BY:	IGP	DATE:	12/16/2010

CORE ROCK LOADING

CREW: Z-01 Loading Crew (B-57 Modified)

PRODUCTION:

15	CY skip box
0.85	% fill
45	min/hr
0.75	cycle/min

Output: 430 CY/hr — **OVERTIME** 5,164 CY/ 12 hr shift

B ROCK LOADING

CREW: Z-01 Loading Crew (B-57 Modified)

PRODUCTION:

15	CY skip box
0.6	% fill
45	min/hr
0.65	cycle/min

Output: 263 CY/hr — **OVERTIME** 3,159 CY/ 12 hr shift

ARMOR ROCK LOADING

CREW: Z-01 Loading Crew (B-57 Modified)

PRODUCTION:

15	CY skip box
0.45	% fill
45	min/hr
0.6	cycle/min

Output: 182 CY/hr — **OVERTIME** 2,187 CY/ 12 hr shift

TITLE: SITKA HARBOR BREAKWATER MODIFICATION
SUBJECT: BREAKWATER TRANSPORT OUTPUT RATE

MADE BY:	SKV	JOB NO.:	T23894
CHECKED BY:	IGP	DATE:	12/16/2010

ROCK TRANSPORT

CREW: Z-02 Transport Crew (B-83 Modified)

PRODUCTION:

4	mi round trip from quarry to breakwater
1	dump scow/trip to quarry
1150	CY/dump scow
5	knots
7.25	hr loading and coordination at quarry & breakwater

Output:			**OVERTIME**
	145	CY/hr	1,158 CY/ 12 hr shift

TITLE: SITKA HARBOR BREAKWATER MODIFICATION
SUBJECT: BREAKWATER REMOVAL OUTPUT RATE

MADE BY:	SKV	JOB NO.:	T23894
CHECKED BY:	IGP	DATE:	12/16/2010

B ROCK REMOVAL

CREW: Z-03 Removal/Placement Crew (B-57 Modified)

PRODUCTION:

5	CY bucket
0.6	% fill
45	min/hr
0.65	cycle/min

Output: 88 CY/hr — **OVERTIME** 1,053 CY/ 12 hr shift

ARMOR ROCK REMOVAL

CREW: Z-03 Removal/Placement Crew (B-57 Modified)

PRODUCTION:

5	CY bucket
0.45	% fill
45	min/hr
0.6	cycle/min

Output: 61 CY/hr — **OVERTIME** 729 CY/ 12 hr shift

TITLE: SITKA HARBOR BREAKWATER MODIFICATION
SUBJECT: BREAKWATER PLACEMENT OUTPUT RATE

MADE BY:	SKV	JOB NO.:	T23894
CHECKED BY:	IGP	DATE:	12/16/2010

CORE ROCK PLACEMENT

CREW: Z-03 Removal/Placement Crew (B-57 Modified)

PRODUCTION:

5	CY bucket
0.85	% fill
45	min/hr
0.75	cycle/min

Output: 143 CY/hr → 1,721 CY/ 12 hr shift **OVERTIME**

B ROCK PLACEMENT

CREW: Z-03 Removal/Placement Crew (B-57 Modified)

PRODUCTION:

5	CY bucket
0.6	% fill
45	min/hr
0.65	cycle/min

Output: 88 CY/hr → 1,053 CY/ 12 hr shift **OVERTIME**

ARMOR ROCK PLACEMENT

CREW: Z-03 Removal/Placement Crew (B-57 Modified)

PRODUCTION:

5	CY bucket
0.45	% fill
45	min/hr
0.6	cycle/min

Output: 61 CY/hr → 729 CY/ 12 hr shift **OVERTIME**

Exhibit 7
Phone Logs

TETRA TECH, INC.

PHONE LOG

CLIENT:	Alaska District, U.S. Army Corps of Engineers
JOB TITLE:	Sitka Channel Breakwater Modification Project
PROJECT NO.:	T23894
SUBJECT:	Armor, B, and Core Rock Quotes
CONVERSATION DATE:	December 8, 2010
PREPARED BY:	Scott Vose
CONVERSATIONALISTS:	Tim Eddy of S & S General Contractors and Scott Vose of Tetra Tech

This phone log summarizes the items discussed or issues resolved during the phone and email conversations to the best of the writer's ability.

Tim Eddy with S & S was spoken to. The S & S office is located in Sitka, AK. Tim's phone number is (907) 747-8725. S & S supplied the rock the existing breakwater is made of. Their quarry meets the Corps specs. S & S owns and operates a quarry in Sitka and one on Kasiana Island approximately 2-miles northwest of the Sitka Harbor. Most of the rock for the proposed breakwater would come from Kasiana Island, although both quarries could be used. There is a barge landing near the pit on the island. Tim gave the following quotes on material, loading, hauling, and dumping the rock on a barge or skip box over the phone:

- Barge Landing Usage Fees = $0.75/cy.
- Loading, Hauling, and Dumping Rock on a barge or skip box = $2.50/cy.
- 7,000-CY of Armor Rock (2000-lb rock) would cost $52/cy stockpiled at the Kasiana Island quarry. This price does not include FOB.
- 10,000-CY of B Rock (200-lb rock) would cost $22/cy stockpiled at the Kasiana Island quarry. This price does not include FOB.
- 21,000-CY of Core Rock (10-lb rock) would cost $16/cy stockpiled at the Kasiana Island quarry. This price does not include FOB.

Exhibit 8
Risk Based Contingency Calculation

"Sitka Harbor Deficiency Correction Evaluation Report" - PROJECT < $40M

Project Development Stage: Draft Interim Design
Informal Risk Analysis

Project Manger:	Dave Martinson	CEPOA-PM-CW
Meeting Date:	6-Dec-10	
Start Time of Meeting:	10:00 AST	
End Time of Meeting:	12:00 AST	

PDT Members

Project Formulation:	Forest Brooks	CEPOA-EN-CW-PF
Cost Engineering:	Ike Pace	Tetra Tech
Coastal Engineering:	Dee Ginter	CEPOA-EN-CW-HH
Environmental:	Mike Salyer for Wayne Crayton	CEPOA-EN-CW-ER
Geotechnical:	Inocencio Roman	CEPOA-EN-ES-SG
Real Estate:	Pat Riley	CEPOA-RE-RS
Value Engineer:	Don Tybus	CEPOA-EN-CE

Signature

Signature

Signature

Signature

Signature

Signature

Signature

"Sitka Harbor Deficiency Correction Evaluation Report - ALTERNATIVE 4" - PROJECT < $40M

Project Development Stage: Draft Interim Design

Informal Risk Analysis

Test Methods of Calculations

WBS	Item	Contract Cost	% Contng.	Wght % Contg.	Wght Avr Contng.	Contingency	Contingency	Contingency	Total	Total	Total
01	Lands and Damages	$ 3,000	0.00%	0.00%	0.0%	$ -	$ -	$ -	$ 3,000.00	$ 3,000.00	$ 3,000.00
10	Mob, Demob and Prep Work	$ 1,037,383	15.00%	12.50%	18.8%	$ 155,607.45	$ 129,672.88	$ 194,509.31	$ 1,192,990.45	$ 1,167,055.88	$ 1,231,892.31
10	Breakwater Material, Load and Transport	$ 2,691,263	32.50%	27.08%	40.6%	$ 874,660.48	$ 728,883.73	$ 1,093,325.59	$ 3,565,923.48	$ 3,420,146.73	$ 3,784,588.59
10	Breakwater Removal	$ 177,164	32.50%	27.08%	40.6%	$ 57,578.30	$ 47,981.92	$ 71,972.88	$ 177,164	$ 225,145.92	$ 249,136.88
10	Breakwater Placement	$ 1,510,827	32.50%	40.63%	40.6%	$ 491,018.78	$ 613,773.47	$ 613,773.47	$ 2,001,845.78	$ 2,124,600.47	$ 2,124,600.47
30	Planning, Engineering, and Design	$ 600,000	5.00%	6.25%	6.3%	$ 30,000.00	$ 37,500.00	$ 37,500.00	$ 630,000.00	$ 637,500.00	$ 637,500.00
31	Construction Management	$ 240,000	7.50%	6.25%	9.4%	$ 18,000.00	$ 15,000.00	$ 22,500.00	$ 258,000.00	$ 255,000.00	$ 262,500.00
			0.00%	0.00%	0.0%	$ -	$ -	$ -	$ -	$ -	$ -
			0.00%	0.00%	0.0%	$ -	$ -	$ -	$ -	$ -	$ -
			0.00%	0.00%	0.0%	$ -	$ -	$ -	$ -	$ -	$ -
			0.00%	0.00%	0.0%	$ -	$ -	$ -	$ -	$ -	$ -
			0.00%	0.00%	0.0%	$ -	$ -	$ -	$ -	$ -	$ -
			0.00%	0.00%	0.0%	$ -	$ -	$ -	$ -	$ -	$ -
	0%	$ -	0.00%	0.00%	0.0%	$ -	$ -	$ -	$ -	$ -	$ -
	Total Construction Estimate	$ 6,259,637				Total: $ 1,626,865	$ 1,572,812	$ 2,033,581	Total: $ 7,828,924	$ 7,832,449	$ 8,293,218

Weighted Contingency	=	**26.0%**
Weighted Contingency	=	**25.1%**
Weighted Contingency	=	**32.5%**
Average Weighted Contingency	=	**27.9%**

"Sitka Harbor Deficiency Correction Evaluation Report - ALTERNATIVE 4" - PROJECT < $40M

Project Development Stage: Draft Interim Design

Informal Risk Analysis

Meeting Date: 6-Dec-10

	Negligible	Marginal	Significant	Critical	Crisis
Very Likely	2	3	4	5	5
Likely	1	2	4	5	5
Unlikely	0	1	3	3	4
Very Unlikely	0	0	1	2	4

Risk Element	Concerns	Affected WBS Item	PDT Discussions	Likelihood	Impact	Risk Level
Project Scope						
PS-1	None	Lands and Damages		Very Unlikely	Negligible	0
PS-2	None	Mob, Demob and Prep Work		Very Unlikely	Negligible	0
PS-3	None	Breakwater Material, Load and Transport		Very Unlikely	Negligible	0
PS-4	None	Breakwater Removal		Very Unlikely	Negligible	0
PS-5	None	Breakwater Placement		Very Unlikely	Negligible	0
PS-6	Additional plan analysis; Perform underwater survey	Planning, Engineering, and Design	There could be the chance that additional plans would need to be analyzed prior to construction. A more current underwater survey is to be performed.	Likely	Marginal	2
PS-7	None	Construction Management		Very Unlikely	Negligible	0
PS-8		0		Very Unlikely	Negligible	0
PS-9		0		Very Unlikely	Negligible	0
PS-10		0		Very Unlikely	Negligible	0
PS-11		0		Very Unlikely	Negligible	0
PS-12		0		Very Unlikely	Negligible	0
PS-13		0		Very Unlikely	Negligible	0
PS-14		0		Very Unlikely	Negligible	0

"Sitka Harbor Deficiency Correction Evaluation Report - ALTERNATIVE 4" - PROJECT < $40M

Project Development Stage: Draft Interim Design

Informal Risk Analysis

Meeting Date: 6-Dec-10

	Negligible	Marginal	Significant	Critical	Crisis
Very Likely	2	3	4	5	5
Likely	1	2	4	5	5
Unlikely	0	1	3	3	4
Very Unlikely	0	0	1	2	4

Risk Element	Concerns	Affected WBS Item	PDT Discussions	Likelihood	Impact	Risk Level
Acquisition Strategy						
AS-1	None	Lands and Damages		Very Unlikely	Negligible	0
AS-2	Bidding competition; Harsh weather a deterrent for bidding	Mob, Demob and Prep Work	Limited contractors willing to bid on the work could result in higher costs than expected	Likely	Marginal	2
AS-3	Bidding competition; Harsh weather a deterrent for bidding	Breakwater Material, Load and Transport	Limited contractors willing to bid on the work could result in higher costs than expected	Likely	Marginal	2
AS-4	Bidding competition; Harsh weather a deterrent for bidding	Breakwater Removal	Limited contractors willing to bid on the work could result in higher costs than expected	Likely	Marginal	2
AS-5	Bidding competition; Harsh weather a deterrent for bidding	Breakwater Placement	Limited contractors willing to bid on the work could result in higher costs than expected	Likely	Marginal	2
AS-6	None	Planning, Engineering, and Design		Unlikely	Negligible	0
AS-7	None	Construction Management		Unlikely	Negligible	0
AS-8		0		Very Unlikely	Negligible	0
AS-9		0		Very Unlikely	Negligible	0
AS-10		0		Very Unlikely	Negligible	0
AS-11		0		Very Unlikely	Negligible	0
AS-12		0		Very Unlikely	Marginal	0
AS-13		0		Very Unlikely	Negligible	0
AS-14		0		Very Unlikely	Negligible	0

"Sitka Harbor Deficiency Correction Evaluation Report - ALTERNATIVE 4" - PROJECT < $40M

Project Development Stage: Draft Interim Design

Informal Risk Analysis

Meeting Date: 6-Dec-10

Very Likely	2	3	4	5	5
Likely	1	2	4	5	5
Unlikely	0	1	3	3	4
Very Unlikely	0	0	1	2	4
	Negligible	Marginal	Significant	Critical	Crisis

Risk Element	Concerns	Affected WBS Item	PDT Discussions	Likelihood	Impact	Risk Level
Construction Complexity						
CC-1	None	Lands and Damages		Very Unlikely	Negligible	0
CC-2	None	Mob, Demob and Prep Work		Very Unlikely	Negligible	0
CC-3	Specialty equipment required	Breakwater Material, Load and Transport	Barge mounted crane, tugs and barge equipment will be required to construct rock breakwater.	Very Likely	Negligible	2
CC-4	Specialty equipment required	Breakwater Removal	Barge mounted crane, tugs and barge equipment will be required to construct rock breakwater.	Very Likely	Negligible	2
CC-5	Specialty equipment required	Breakwater Placement	Barge mounted crane, tugs and barge equipment will be required to construct rock breakwater.	Very Likely	Negligible	2
CC-6	None	Planning, Engineering, and Design		Very Unlikely	Negligible	0
CC-7	None	Construction Management		Very Unlikely	Negligible	0
CC-8		0		Very Unlikely	Negligible	0
CC-9		0		Very Unlikely	Negligible	0
CC-10		0		Very Unlikely	Marginal	0
CC-11		0		Very Unlikely	Negligible	0
CC-12		0		Very Unlikely	Negligible	0
CC-13		0		Very Unlikely	Marginal	0
CC-14		0		Very Unlikely	Negligible	0

"Sitka Harbor Deficiency Correction Evaluation Report - ALTERNATIVE 4" - PROJECT < $40M

Project Development Stage: Draft Interim Design

Informal Risk Analysis

Meeting Date: 6-Dec-10

	Negligible	Marginal	Significant	Critical	Crisis
Very Likely	2	3	4	5	5
Likely	1	2	4	5	5
Unlikely	0	1	3	3	4
Very Unlikely	0	0	1	2	4

Risk Element	Concerns	Affected WBS Item	PDT Discussions	Likelihood	Impact	Risk Level
Volatile Commodities						
VC-1	None	Lands and Damages		Very Unlikely	Negligible	0
VC-2	Fuel prices	Mob, Demob and Prep Work	Fuel prices could fluxuate greatly between now and when construction occurs.	Likely	Significant	4
VC-3	Rock prices; Fuel prices	Breakwater Material, Load and Transport	Rock prices could have a significant impact on costs depending on what the price is at the time of construction. Fuel prices could fluxuate greatly between now and when construction occurs.	Likely	Significant	4
VC-4	Fuel prices	Breakwater Removal	Fuel prices could fluxuate greatly between now and when construction occurs.	Likely	Significant	4
VC-5	Fuel prices	Breakwater Placement	Fuel prices could fluxuate greatly between now and when construction occurs.	Likely	Significant	4
VC-6	None	Planning, Engineering, and Design		Very Unlikely	Negligible	0
VC-7	None	Construction Management		Very Unlikely	Negligible	0
VC-8		0		Very Unlikely	Negligible	0
VC-9		0		Very Unlikely	Negligible	0
VC-10		0		Very Unlikely	Negligible	0
VC-11		0		Very Unlikely	Negligible	0
VC-12		0		Very Unlikely	Negligible	0
VC-13		0		Very Unlikely	Marginal	0
VC-14		0		Very Unlikely	Negligible	0

"Sitka Harbor Deficiency Correction Evaluation Report - ALTERNATIVE 4" - PROJECT < $40M

Project Development Stage: Draft Interim Design

Informal Risk Analysis

Meeting Date: 6-Dec-10

	Negligible	Marginal	Significant	Critical	Crisis
Very Likely	2	3	4	5	5
Likely	1	2	4	5	5
Unlikely	0	1	3	3	4
Very Unlikely	0	0	1	2	4

Risk Element	Concerns	Affected WBS Item	PDT Discussions	Likelihood	Impact	Risk Level
Quantities						
Q-1	None	Lands and Damages		Very Unlikely	Negligible	0
Q-2	None	Mob, Demob and Prep Work		Very Unlikely	Negligible	0
Q-3	Accuracy of surveys; Quantity calculations; Overbuild and loss factors	Breakwater Material, Load and Transport	Depending on the accuracy of the surveys and the current conditions of the breakwaters, the amount of rock required could change.	Unlikely	Marginal	1
Q-4	Accuracy of surveys; Quantity calculations; Overbuild and loss factors	Breakwater Removal	Depending on the accuracy of the surveys and the current conditions of the breakwaters, the amount of rock required could change.	Unlikely	Marginal	1
Q-5	Accuracy of surveys; Quantity calculations; Overbuild and loss factors	Breakwater Placement	Depending on the accuracy of the surveys and the current conditions of the breakwaters, the amount of rock required could change.	Unlikely	Marginal	1
Q-6	None	Planning, Engineering, and Design		Very Unlikely	Negligible	0
Q-7	None	Construction Management		Very Unlikely	Negligible	0
Q-8		0		Very Unlikely	Marginal	0
Q-9		0		Very Unlikely	Marginal	0
Q-10		0		Very Unlikely	Negligible	0
Q-11		0		Very Unlikely	Marginal	0
Q-12		0		Very Unlikely	Negligible	0
Q-13		0		Very Unlikely	Negligible	0
Q-14		0		Very Unlikely	Negligible	0

"Sitka Harbor Deficiency Correction Evaluation Report - ALTERNATIVE 4" - PROJECT < $40M

Project Development Stage: Draft Interim Design

Informal Risk Analysis

Meeting Date: 6-Dec-10

Very Likely	2	3	4	5	5
Likely	1	2	4	5	5
Unlikely	0	1	3	3	4
Very Unlikely	0	0	1	2	4
	Negligible	Marginal	Significant	Critical	Crisis

Risk Element	Concerns	Affected WBS Item	PDT Discussions	Likelihood	Impact	Risk Level
Fabrication & Project Installed Equipment						
FI-1	None	Lands and Damages		Very Unlikely	Negligible	0
FI-2	None	Mob, Demob and Prep Work		Very Unlikely	Negligible	0
FI-3	None	Breakwater Material, Load and Transport		Very Unlikely	Negligible	0
FI-4	None	Breakwater Removal		Very Unlikely	Negligible	0
FI-5	None	Breakwater Placement		Very Unlikely	Negligible	0
FI-6	None	Planning, Engineering, and Design		Very Unlikely	Negligible	0
FI-7	None	Construction Management		Very Unlikely	Negligible	0
FI-8		0		Very Unlikely	Negligible	0
FI-9		0		Very Unlikely	Negligible	0
FI-10		0		Very Unlikely	Negligible	0
FI-11		0		Very Unlikely	Negligible	0
FI-12		0		Very Unlikely	Negligible	0
FI-13		0		Very Unlikely	Negligible	0
FI-14		0		Very Unlikely	Negligible	0

"Sitka Harbor Deficiency Correction Evaluation Report - ALTERNATIVE 4" - PROJECT < $40M

Project Development Stage: Draft Interim Design
Informal Risk Analysis

Meeting Date: 6-Dec-10

	Negligible	Marginal	Significant	Critical	Crisis
Very Likely	2	3	4	5	5
Likely	1	2	4	5	5
Unlikely	0	1	3	3	4
Very Unlikely	0	0	1	2	4

Risk Element	Concerns	Affected WBS Item	PDT Discussions	Likelihood	Impact	Risk Level
Cost Estimating Method						
CE-1	None	Lands and Damages		Very Unlikely	Negligible	0
CE-2	None	Mob, Demob and Prep Work		Very Unlikely	Negligible	0
CE-3	Crews and production rates; Reliability of quotes	Breakwater Material, Load and Transport	Production rates have been estimated to reflect the construction for this particular project. Current rock cost quotes were recently obtainted.	Unlikely	Marginal	1
CE-4	Crews and production rates	Breakwater Removal	Production rates have been estimated to reflect the construction for this particular project.	Unlikely	Marginal	1
CE-5	Crews and production rates	Breakwater Placement	Production rates have been estimated to reflect the construction for this particular project.	Unlikely	Marginal	1
CE-6	None	Planning, Engineering, and Design		Very Unlikely	Negligible	0
CE-7	None	Construction Management		Very Unlikely	Negligible	0
CE-8		0		Very Unlikely	Negligible	0
CE-9		0		Very Unlikely	Negligible	0
CE-10		0		Very Unlikely	Negligible	0
CE-11		0		Very Unlikely	Negligible	0
CE-12		0		Very Unlikely	Negligible	0
CE-13		0		Very Unlikely	Negligible	0
CE-14		0		Very Unlikely	Negligible	0

"Sitka Harbor Deficiency Correction Evaluation Report - ALTERNATIVE 4" - PROJECT < $40M

Project Development Stage: Draft Interim Design

Informal Risk Analysis

Meeting Date: 6-Dec-10

Very Likely	2	3	4	5	5
Likely	1	2	4	5	5
Unlikely	0	1	3	3	4
Very Unlikely	0	0	1	2	4
	Negligible	Marginal	Significant	Critical	Crisis

Risk Element	Concerns	Affected WBS Item	PDT Discussions	Likelihood	Impact	Risk Level
External Project Risks						
EX-1	None	Lands and Damages		Very Unlikely	Negligible	0
EX-2	None	Mob, Demob and Prep Work		Very Unlikely	Negligible	0
EX-3	Equipment failure/Environmental window; Weather	Breakwater Material, Load and Transport	Little concern about meeting environmental window however, failure of specialized construction equipment may cause work to extend beyond Agency determined environmental window. Agencies may permit limited extensions of window or require work to resume the following construction season. Weather delays not expected to be more than current contract weather days.	Unlikely	Critical	3
EX-4	Equipment failure/Environmental window; Weather	Breakwater Removal	Little concern about meeting environmental window however, failure of specialized construction equipment may cause work to extend beyond Agency determined environmental window. Agencies may permit limited extensions of window or require work to resume the following construction season. Weather delays not expected to be more than current contract weather days.	Unlikely	Critical	3
EX-5	Equipment failure/Environmental window; Weather	Breakwater Placement	Little concern about meeting environmental window however, failure of specialized construction equipment may cause work to extend beyond Agency determined environmental window. Agencies may permit limited extensions of window or require work to resume the following construction season. Weather delays not expected to be more than current contract weather days.	Unlikely	Critical	3
EX-6	None	Planning, Engineering, and Design		Very Unlikely	Negligible	0
EX-7	Equipment failure/Environmental window; Weather	Construction Management	Little concern about meeting environmental window however, failure of specialized construction equipment may cause work to extend beyond Agency determined environmental window. Agencies may permit limited extensions of window or require work to resume the following construction season. Weather delays not expected to be more than current contract weather days.	Unlikely	Critical	3
EX-8		0		Very Unlikely	Negligible	0

"Sitka Harbor Deficiency Correction Evaluation Report - ALTERNATIVE 4" - PROJECT < $40M

Project Development Stage: Draft Interim Design

Informal Risk Analysis

Selected Work Breakdown Structure Items

Typical Risk Elements	Lands and Damages	Mob, Demob and Prep Work	Breakwater Material, Load and Trans...	Breakwater Removal	Breakwater Placement	Planning, Engineering, and Design	Construction Management	0	0	0	0	0	0	0
Project Scope	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Acquisition Strategy	-	2	2	2	2	-	-	-	-	-	-	-	-	-
Construction Complexity	-	-	2	2	2	-	-	-	-	-	-	-	-	-
Volatile Commodities	-	4	4	4	4	-	-	-	-	-	-	-	-	-
Quantities	-	-	1	1	1	-	-	-	-	-	-	-	-	-
Fabrication & Project Installed Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cost Estimating Method	-	-	1	1	1	-	-	-	-	-	-	-	-	-
External Project Risks	-	-	3	3	3	-	3	-	-	-	-	-	-	-

	Summation	0	6	13	13	13	2	3	0	0	0	0	0	0	0
= pts/40 possible points	%	0.00%	15.00%	32.50%	32.50%	32.50%	5.00%	7.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Weighted Summation	0	15	32.5	32.5	32.5	5	7.5	0	0	0	0	0	0	0
Based on graph to 100%	Weighted %	0.0%	12.5%	27.1%	27.1%	27.1%	4.2%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Weighted Average	0.00	1.88	4.06	4.06	4.06	0.63	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average wt to 100%	Weighted Average	0.0%	18.8%	40.6%	40.6%	40.6%	6.3%	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Maximum Allowable Contingency	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% Contingency	0.0%	15.0%	32.5%	32.5%	32.5%	5.0%	7.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Weighted % Contingency	0.0%	12.5%	27.1%	27.1%	27.1%	4.2%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Weighted Average Contingency	0.0%	18.8%	40.6%	40.6%	40.6%	6.3%	9.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Ranking	Correlating Factor
0	0
1	2.5
2	5
3	7.5
4	10
5	15

Exhibit 9
MCACES Construction Cost Estimate - Alternative 4

Sitka Channel Breakwater Modification Cost Estimate

ALTERNATIVE 4

Estimated by	US Army Corps of Engineers, Alaska District
Designed by	US Army Corps of Engineers, Alaska District
Prepared by	Tetra Tech, Inc
Preparation Date	12/31/2010
Effective Date of Pricing	12/31/2010
Estimated Construction Time	119 Days

Description **Page**

Designed by

US Army Corps of Engineers, Alaska District

Estimated by

US Army Corps of Engineers, Alaska District

Prepared by

Tetra Tech, Inc

Design Document	Sitka Habor Deficiency Correction Eval Report
Document Date	11/15/2010
District	Alaska
Contact	Forest Brooks
Budget Year	2012
UOM System	Original

Direct Costs

LaborCost
EQCost
MatlCost
SubBidCost
Travel/PerDiem
Shipping
Fees

Timeline/Currency

Preparation Date	12/31/2010
Escalation Date	12/31/2010
Eff. Pricing Date	12/31/2010
Estimated Duration	119 Day(s)
Currency	US dollars
Exchange Rate	1.000000

Costbook CB08EB: MII English Cost Book 2008

Labor LNS2009: Labor National - Seattle 2009

con & Service (FOOH) Labor Rates!!!!! Fringes paid to the laborers are taxable. In a non-union job the whole fringes are taxable. In union job, the vacation pay fringes is taxable.

Labor Rates

LaborCost1
LaborCost2
LaborCost3
LaborCost4

Equipment EP07R09: MII Equipment Region 9r 2007

09 ALASKA

Sales Tax	0.00
Working Hours per Year	1,040
Labor Adjustment Factor	1.21
Cost of Money	5.25
Cost of Money Discount	25.00
Tire Recap Cost Factor	1.50
Tire Recap Wear Factor	1.80
Tire Repair Factor	0.15
Equipment Cost Factor	1.10
Standby Depreciation Factor	0.50

Fuel

Electricity	0.148
Gas	3.390
Diesel Off-Road	3.410
Diesel On-Road	3.680

Shipping Rates

Over 0 CWT	37.93
Over 240 CWT	37.12
Over 300 CWT	33.03
Over 400 CWT	29.12
Over 500 CWT	20.50
Over 700 CWT	18.63
Over 800 CWT	15.34

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Direct Cost Markups	Category	Method
Productivity	Productivity	Productivity
Overtime	Overtime	Overtime

	Days/Week	Hours/Shift	Shifts/Day	1st Shift	2nd Shift	3rd Shift
Standard	*5.00*	*8.00*	*1.00*	*8.00*	*0.00*	*0.00*
Actual	*6.00*	*8.00*	*1.00*	*12.00*	*0.00*	*0.00*

Day	OT Factor	Working	OT Percent	FCCM Percent
Monday	*1.50*	*Yes*	*22.22*	*(44.44)*
Tuesday	*1.50*	*Yes*		
Wednesday	*1.50*	*Yes*		
Thursday	*1.50*	*Yes*		
Friday	*1.50*	*Yes*		
Saturday	*1.50*	*Yes*		
Sunday	*2.00*	*No*		

Sales Tax	TaxAdj	Running % on Selected Costs
MatlCost		

Overtime Mob/Demob	Overtime	Overtime

	Days/Week	Hours/Shift	Shifts/Day	1st Shift	2nd Shift	3rd Shift
Standard	*5.00*	*8.00*	*2.00*	*8.00*	*8.00*	*0.00*
Actual	*7.00*	*8.00*	*2.00*	*12.00*	*12.00*	*0.00*

Day	OT Factor	Working	OT Percent	FCCM Percent
Monday	*1.50*	*Yes*	*33.33*	*(76.19)*
Tuesday	*1.50*	*Yes*		
Wednesday	*1.50*	*Yes*		
Thursday	*1.50*	*Yes*		
Friday	*1.50*	*Yes*		
Saturday	*1.50*	*Yes*		
Sunday	*2.00*	*Yes*		

Contractor Markups	Category	Method
JOOH Prime (Small Tools)	Allowance	% of Labor
JOOH Prime	JOOH	JOOH (Calculated)
JOOH Sub	JOOH	Running %
HOOH	HOOH	Running %
Profit Prime	Profit	Profit Weighted Guidelines

Guideline	Value	Weight	Percentage
Risk	*0.100*	*20*	*2.00*
Difficulty	*0.100*	*15*	*1.50*
Size	*0.030*	*15*	*0.45*
Period	*0.120*	*15*	*1.80*
Invest (Contractor's)	*0.100*	*5*	*0.50*
Assist (Assistance by)	*0.070*	*5*	*0.35*
SubContracting	*0.092*	*25*	*2.30*
Total		*100*	*8.90*

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Profit Sub	Profit	Direct %
Bond	Bond	Bond Table

Class B, Tiered, 24 months, 1.00% Surcharge

Contract Price	*Bond Rate*
500,000	*15.84*
2,000,000	*9.57*
2,500,000	*7.59*
2,500,000	*6.93*
100,000,000,000	*6.34*

Insurance	MiscContract	Direct %
Excise Tax	Excise	Running %

Owner Markups	**Category**	**Method**
Contingency	Contingency	Running %
SIOH	SIOH	Running %

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	ContractCost	ProjectCost	C/O
Project Cost Summary Report			**5,416,637**	**5,416,637**	
10 BREAKWATER AND SEAWALLS	**1.00**	**LS**	**5,416,637**	**5,416,637**	
04 ALTERNATIVE 4	**1.00**	**LS**	**5,416,637**	**5,416,637**	
04.00 Mob, Demob, and Prep Work	**1.00**	**LS**	**1,037,383**	**1,037,383**	
04.00.01 Mobilization	**1.00**	**LS**	**539,198**	**539,198**	
04.00.02 Demobilization	**1.00**	**LS**	**498,185**	**498,185**	
04.01 Alternative 4	**1.00**	**LS**	**4,379,254**	**4,379,254**	
04.01.01 Breakwater Load and Transport	**1.00**	**LS**	**2,691,263**	**2,691,263**	
04.01.02 Breakwater Removal	**1.00**	**LS**	**177,164**	**177,164**	
04.01.03 Breakwater Placement	**1.00**	**LS**	**1,510,827**	**1,510,827**	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	Contractor	DirectCost	SubCMU	CostToPrime	PrimeCMU	ContractCost	C/O
Contract Cost Summary Report				**3,962,090**	**0**	**3,962,090**	**1,454,546**	**5,416,637**	
10 BREAKWATER AND SEAWALLS	**1.00**	**LS**		**3,962,090**	**0**	**3,962,090**	**1,454,546**	**5,416,637**	
04 ALTERNATIVE 4	**1.00**	**LS**		**3,962,090**	**0**	**3,962,090**	**1,454,546**	**5,416,637**	
04.00 Mob, Demob, and Prep Work	**1.00**	**LS**	**AA PRIME CONTRACTOR (4)**	**758,811**	**0**	**758,811**	**278,572**	**1,037,383**	
04.01 Alternative 4	**1.00**	**LS**	**AA PRIME CONTRACTOR (4)**	**3,203,279**	**0**	**3,203,279**	**1,175,975**	**4,379,254**	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	Contractor	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
Project Direct Costs Report				**815,501**	**1,713,393**	**1,403,196**	**30,000**	**0**	**3,962,090**	
10 BREAKWATER AND SEAWALLS	**1.00**	**LS**		**815,501**	**1,713,393**	**1,403,196**	**30,000**	**0**	**3,962,090**	
04 ALTERNATIVE 4	**1.00**	**LS**		**815,501**	**1,713,393**	**1,403,196**	**30,000**	**0**	**3,962,090**	
04.00 Mob, Demob, and Prep Work	**1.00**	**LS**	**AA PRIME CONTRACTOR (4)**	**152,440**	**576,371**	**0**	**30,000**	**0**	**758,811**	
04.00.01 Mobilization	**1.00**	**LS**	**AA PRIME CONTRACTOR (4)**	**76,220**	**288,186**	**0**	**30,000**	**0**	**394,406**	
				43.44	*188.92*	*0.00*	*0.00*		*232.37*	
USR ANC Mob/Demob ANC Mobilization/Demobilization	820.00	MI	AA PRIME CONTRACTOR (4)	35,623	154,916	0	0	0	190,540	
(Note: The Contractor will mob/demob the floating crane from the Anchorage area which is a distance of approximately 820-mi.)										
				42.73	*140.28*	*0.00*	*0.00*		*183.02*	
USR SEA Mob/Demob SEA Mobilization/Demobilization	950.00	MI	AA PRIME CONTRACTOR (4)	40,597	133,269	0	0	0	173,866	
(Note: The Contractor will mob/demob the barge equipment from the Seattle area to Sitka which is a distance of approximately 950-mi.)										
USR Spill Prevention Plan Preparation	1.00	LS	AA PRIME CONTRACTOR (4)	0	0	0	30,000	0	30,000	
04.00.02 Demobilization	**1.00**	**LS**	**AA PRIME CONTRACTOR (4)**	**76,220**	**288,186**	**0**	**0**	**0**	**364,406**	
				43.44	*188.92*	*0.00*	*0.00*		*232.37*	
USR ANC Mob/Demob ANC Mobilization/Demobilization	820.00	MI	AA PRIME CONTRACTOR (4)	35,623	154,916	0	0	0	190,540	
(Note: The Contractor will mob/demob the floating crane from the Anchorage area which is a distance of approximately 820-mi.)										
				42.73	*140.28*	*0.00*	*0.00*		*183.02*	
USR SEA Mob/Demob SEA Mobilization/Demobilization	950.00	MI	AA PRIME CONTRACTOR (4)	40,597	133,269	0	0	0	173,866	

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	Quantity	UOM	Contractor	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
(Note: The Contractor will mob/demob the barge equipment from the Seattle area to Sitka which is a distance of approximately 950-mi.)										
04.01 Alternative 4	**1.00**	**LS**	**AA PRIME CONTRACTOR (4)**	**663,060**	**1,137,022**	**1,403,196**	**0**	**0**	**3,203,279**	
04.01.01 Breakwater Load and Transport	**1.00**	**LS**	**AA PRIME CONTRACTOR (4)**	**271,753**	**293,621**	**1,403,196**	**0**	**0**	**1,968,570**	
				3.40	*1.50*	*55.25*	*0.00*		*60.16*	
USR Z01 Breakwater Loading (Armor Rock)	6,600.00	LCY	AA PRIME CONTRACTOR (4)	22,451	9,933	364,650	0	0	397,034	
(Note: Material Cost: Quote from S & S General Contractors, Sitka, AK (907) 747-8725 (Tim Eddy); Quantity: based on designer provided quantities for Armor Rock; Productivity: 182-cy/hr is based on calculations provided in the cost engineering report for armor rock loading.)										
				2.35	*1.04*	*25.25*	*0.00*		*28.65*	
USR Z01 Breakwater Loading (B Rock)	13,685.00	LCY	AA PRIME CONTRACTOR (4)	32,215	14,252	345,546	0	0	392,013	
(Note: Material Cost: Quote from S & S General Contractors, Sitka, AK (907) 747-8725 (Tim Eddy); Quantity: based on designer provided quantities for B Rock; Productivity: 263-cy/hr is based on calculations provided in the cost engineering report for armor rock loading.)										
				1.44	*0.64*	*19.25*	*0.00*		*21.33*	
USR Z01 Breakwater Loading (Core Rock)	36,000.00	LCY	AA PRIME CONTRACTOR (4)	51,832	22,931	693,000	0	0	767,763	
(Note: Material Cost: Quote from S & S General Contractors, Sitka, AK (907) 747-8725 (Tim Eddy); Quantity: based on designer provided quantities for Core Rock; Productivity: 430-cy/hr is based on calculations provided in the cost engineering report for armor rock loading.)										
				2.94	*4.38*	*0.00*	*0.00*		*7.32*	
USR Z02 Breakwater Transport	56,285.00	LCY	AA PRIME CONTRACTOR (4)	165,254	246,505	0	0	0	411,759	
(Note: Quantity: Armor Rock 6,600cy + B Rock 13,685cy + Core Rock 36,000cy = 56,285cy)										
04.01.02 Breakwater Removal	**1.00**	**LS**	**AA PRIME CONTRACTOR (4)**	**41,070**	**88,520**	**0**	**0**	**0**	**129,590**	
				9.83	*21.19*	*0.00*	*0.00*		*31.03*	
USR Z03 Breakwater Removal (Armor Rock)	3,300.00	LCY	AA PRIME CONTRACTOR (4)	32,448	69,936	0	0	0	102,384	

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	Quantity	UOM	Contractor	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
(Note: Quantity: 3,000cy x 10% for overplace and loss = 3,300cy)										
				6.82	*14.69*	*0.00*	*0.00*		*21.51*	
USR Z03 Breakwater Removal (B Rock)	1,265.00	LCY	AA PRIME CONTRACTOR (4)	8,622	18,583	0	0	0	27,205	
(Note: Quantity: 1,100cy x 15% for overplace and loss = 1,265cy)										
04.01.03 Breakwater Placement	**1.00**	**LS**	**AA PRIME CONTRACTOR (4)**	**350,238**	**754,882**	**0**	**0**	**0**	**1,105,120**	
				9.83	*21.19*	*0.00*	*0.00*		*31.03*	
USR Z03 Breakwater Placement (Armor Rock)	9,900.00	LCY	AA PRIME CONTRACTOR (4)	97,344	209,809	0	0	0	307,153	
(Note: Quantity: 9,000cy x 10% for overplace and loss = 9,900cy)										
				6.82	*14.69*	*0.00*	*0.00*		*21.51*	
USR Z03 Breakwater Placement (B Rock)	14,950.00	LCY	AA PRIME CONTRACTOR (4)	101,897	219,623	0	0	0	321,520	
(Note: Quantity: 13,000cy x 15% for overplace and loss = 14,950cy)										
				4.19	*9.04*	*0.00*	*0.00*		*13.23*	
USR Z03 Breakwater Placement (Core Rock)	36,000.00	LCY	AA PRIME CONTRACTOR (4)	150,997	325,451	0	0	0	476,448	
(Note: Quantity: 30,000cy x 20% for overplace and loss = 36,000cy)										

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	BareCost	Productivity	Overtime	TaxAdj	MiscDirect	Payroll	WCI	DirectCost	C/O
Project Bare to Direct Report			**3,752,120**	**0**	**69,735**	**0**	**0**	**64,947**	**75,289**	**3,962,090**	
10 BREAKWATER AND SEAWALLS	**1.00**	**LS**	**3,752,120**	**0**	**69,735**	**0**	**0**	**64,947**	**75,289**	**3,962,090**	
04 ALTERNATIVE 4	**1.00**	**LS**	**3,752,120**	**0**	**69,735**	**0**	**0**	**64,947**	**75,289**	**3,962,090**	
04.00 Mob, Demob, and Prep Work	**1.00**	**LS**	**715,301**	**0**	**17,725**	**0**	**0**	**12,284**	**13,501**	**758,811**	
04.00.01 Mobilization	**1.00**	**LS**	**372,651**	**0**	**8,863**	**0**	**0**	**6,142**	**6,751**	**394,406**	
			220.02	*0.00%*	*33.33%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*232.37*	
USR ANC Mob/Demob ANC Mobilization/Demobilization	820.00	MI	180,418	0	4,075	0	0	2,874	3,172	190,540	
(Note: The Contractor will mob/demob the floating crane from the Anchorage area which is a distance of approximately 820-mi.)											
			170.77	*0.00%*	*33.33%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*183.02*	
USR SEA Mob/Demob SEA Mobilization/Demobilization	950.00	MI	162,232	0	4,787	0	0	3,268	3,579	173,866	
(Note: The Contractor will mob/demob the barge equipment from the Seattle area to Sitka which is a distance of approximately 950-mi.)											
USR Spill Prevention Plan Preparation	1.00	LS	30,000	0	0	0	0	0	0	30,000	
04.00.02 Demobilization	**1.00**	**LS**	**342,651**	**0**	**8,863**	**0**	**0**	**6,142**	**6,751**	**364,406**	
			220.02	*0.00%*	*33.33%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*232.37*	
USR ANC Mob/Demob ANC Mobilization/Demobilization	820.00	MI	180,418	0	4,075	0	0	2,874	3,172	190,540	
(Note: The Contractor will mob/demob the floating crane from the Anchorage area which is a distance of approximately 820-mi.)											
			170.77	*0.00%*	*33.33%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*183.02*	
USR SEA Mob/Demob SEA Mobilization/Demobilization	950.00	MI	162,232	0	4,787	0	0	3,268	3,579	173,866	
(Note: The Contractor will mob/demob the barge equipment from the Seattle area to Sitka which is a distance of approximately 950-mi.)											
04.01 Alternative 4	**1.00**	**LS**	**3,036,818**	**0**	**52,010**	**0**	**0**	**52,663**	**61,788**	**3,203,279**	
04.01.01 Breakwater Load and Transport	**1.00**	**LS**	**1,901,222**	**0**	**20,194**	**0**	**0**	**21,582**	**25,571**	**1,968,570**	
			59.34	*0.00%*	*22.22%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*60.16*	
USR Z01 Breakwater Loading (Armor Rock)	6,600.00	LCY	391,672	0	1,395	0	0	1,785	2,182	397,034	
(Note: Material Cost: Quote from S & S General Contractors, Sitka, AK (907) 747-8725 (Tim Eddy); Quantity: based on designer provided quantities for Armor Rock; Productivity: 182-cy/hr is based on calculations provided in the cost engineering report for armor rock loading.)											
			28.08	*0.00%*	*22.22%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*28.65*	
USR Z01 Breakwater Loading (B Rock)	13,685.00	LCY	384,319	0	2,002	0	0	2,561	3,131	392,013	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	BareCost	Productivity	Overtime	TaxAdj	MiscDirect	Payroll	WCI	DirectCost	C/O
(Note: Material Cost: Quote from S & S General Contractors, Sitka, AK (907) 747-8725 (Tim Eddy); Quantity: based on designer provided quantities for B Rock; Productivity: 263-cy/hr is based on calculations provided in the cost engineering report for armor rock loading.)											
			20.98	*0.00%*	*22.22%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*21.33*	
USR Z01 Breakwater Loading (Core Rock)	36,000.00	LCY	755,384	0	3,221	0	0	4,121	5,037	767,763	
(Note: Material Cost: Quote from S & S General Contractors, Sitka, AK (907) 747-8725 (Tim Eddy); Quantity: based on designer provided quantities for Core Rock; Productivity: 430-cy/hr is based on calculations provided in the cost engineering report for armor rock loading.)											
			6.57	*0.00%*	*22.22%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*7.32*	
USR Z02 Breakwater Transport	56,285.00	LCY	369,847	0	13,576	0	0	13,115	15,222	411,759	
(Note: Quantity: Armor Rock 6,600cy + B Rock 13,685cy + Core Rock 36,000cy = 56,285cy)											
04.01.02 Breakwater Removal	**1.00**	**LS**	**119,187**	**0**	**3,339**	**0**	**0**	**3,262**	**3,801**	**129,590**	
			28.54	*0.00%*	*22.22%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*31.03*	
USR Z03 Breakwater Removal (Armor Rock)	3,300.00	LCY	94,166	0	2,638	0	0	2,577	3,003	102,384	
(Note: Quantity: 3,000cy x 10% for overplace and loss = 3,300cy)											
			19.78	*0.00%*	*22.22%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*21.51*	
USR Z03 Breakwater Removal (B Rock)	1,265.00	LCY	25,022	0	701	0	0	685	798	27,205	
(Note: Quantity: 1,100cy x 15% for overplace and loss = 1,265cy)											
04.01.03 Breakwater Placement	**1.00**	**LS**	**1,016,409**	**0**	**28,476**	**0**	**0**	**27,819**	**32,415**	**1,105,120**	
			28.54	*0.00%*	*22.22%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*31.03*	
USR Z03 Breakwater Placement (Armor Rock)	9,900.00	LCY	282,497	0	7,915	0	0	7,732	9,009	307,153	
(Note: Quantity: 9,000cy x 10% for overplace and loss = 9,900cy)											
			19.78	*0.00%*	*22.22%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*21.51*	
USR Z03 Breakwater Placement (B Rock)	14,950.00	LCY	295,710	0	8,285	0	0	8,094	9,431	321,520	
(Note: Quantity: 13,000cy x 15% for overplace and loss = 14,950cy)											
			12.17	*0.00%*	*22.22%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*13.23*	
USR Z03 Breakwater Placement (Core Rock)	36,000.00	LCY	438,202	0	12,277	0	0	11,994	13,975	476,448	
(Note: Quantity: 30,000cy x 20% for overplace and loss = 36,000cy)											

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
Job Office Overhead Direct Cost Report									
AA PRIME CONTRACTOR (4)									
OVERHEAD ITEMS	**1.00**	**LS**	**200,174**	**34,886**	**84,018**	**84,354**	**50,000**	**453,432**	
			0.00	*8,320.37*	*0.00*	*0.00*		*8,320.37*	
USR AAST Small Tools	1.00	EA	0	8,320	0	0	0	8,320	
			50,043.56	*6,641.44*	*21,004.50*	*21,088.50*		*111,278.00*	
JOB OFFICE OVERHEAD	**4.00**	**MO**	**200,174**	**26,566**	**84,018**	**84,354**	**50,000**	**445,112**	
			15,954.85	*3,272.61*	*0.00*	*10,500.00*		*31,477.46*	
SUPERVISION AND MANAGEMENT	**4.00**	**MO**	**63,819**	**13,090**	**0**	**42,000**	**7,000**	**125,910**	
			15,954.85	*0.00*	*0.00*	*0.00*		*15,954.85*	
Supervision Personnel	**4.00**	**MO**	**63,819**	**0**	**0**	**0**	**0**	**63,819**	
			10,636.56	*0.00*	*0.00*	*0.00*		*10,636.56*	
HNC FA-AGENS General Superintendents (P.M.)	4.00	MO	42,546	0	0	0	0	42,546	
(Note: Assumed a Carpenter / Millwright Wages plus $3.00 / hour)									
			10,636.56	*0.00*	*0.00*	*0.00*		*10,636.56*	
HNC FA-AGENS General Labor Foreman	2.00	MO	21,273	0	0	0	0	21,273	
(Note: Assumed a Carpenter / Millwright Wages plus $3.00 / hour)									
			0.00	*3,272.61*	*0.00*	*0.00*		*3,272.61*	
Management Vehicles	**4.00**	**MO**	**0**	**13,090**	**0**	**0**	**0**	**13,090**	
			0.00	*2,181.74*	*0.00*	*0.00*		*2,181.74*	
MAP T50XX005 TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	4.00	MO	0	8,727	0	0	0	8,727	
			0.00	*2,181.74*	*0.00*	*0.00*		*2,181.74*	
MAP T50XX005 TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	2.00	MO	0	4,363	0	0	0	4,363	
			0.00	*0.00*	*0.00*	*10,500.00*		*12,250.00*	
Management Subsistance and Travel	**4.00**	**MO**	**0**	**0**	**0**	**42,000**	**7,000**	**49,000**	
			0.00	*0.00*	*0.00*	*0.00*		*500.00*	
USR Home Office Execs Travel to Job	1.00	EA	0	0	0	0	500	500	
			0.00	*0.00*	*0.00*	*0.00*		*500.00*	
USR Supervision Travel to Job Site Mob/Demob Supvrs to remote sites	1.00	EA	0	0	0	0	500	500	
			0.00	*0.00*	*0.00*	*350.00*		*400.00*	
USR Daily Subsistence (Per Man Day)	120.00	DAY	0	0	0	42,000	6,000	48,000	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
(Note: It is assumed that per diem in Sitka will be $200 per supervisor person. Cost: 2 persons x $200 = $400 per day.)									
			13,709.18	*2,152.96*	*10,590.00*	*10,500.00*		*40,627.14*	
ADMINISTRATION JOB OFFICE	**4.00**	**MO**	**54,837**	**8,612**	**42,360**	**42,000**	**14,700**	**162,509**	
			6,651.10	*0.00*	*0.00*	*0.00*		*6,651.10*	
Field Office Administration Personnel	**4.00**	**MO**	**26,604**	**0**	**0**	**0**	**0**	**26,604**	
			5,675.11	*0.00*	*0.00*	*0.00*		*5,675.11*	
HNC FB-OMANGR Office Managers	2.00	MO	11,350	0	0	0	0	11,350	
(Note: Assumed a Occupation Code of #01400 Supply Technician +3.00 w/ nonething better)									
			3,813.54	*0.00*	*0.00*	*0.00*		*3,813.54*	
HNC FB-CLTYP Clerks, Typists, Bookkeepers & Receptionist	4.00	MO	15,254	0	0	0	0	15,254	
(Note: Assumed a Occupation Code of #01116 General Clerk)									
			0.00	*1,928.90*	*0.00*	*0.00*		*1,928.90*	
Field Office Vehicles	**3.33**	**MO**	**0**	**6,430**	**0**	**0**	**0**	**6,430**	
			0.00	*1,928.90*	*0.00*	*0.00*		*1,928.90*	
MAP T50XX001 TRUCK, HIGHWAY, CONVENTIONAL, 1/2 TON PICKUP, 4X2	3.33	MO	0	6,430	0	0	0	6,430	
			1,046.51	*100.00*	*1,830.00*	*0.00*		*3,126.51*	
Field Office Building & Supplies	**4.00**	**MO**	**4,186**	**400**	**7,320**	**0**	**600**	**12,506**	
			0.00	*0.00*	*330.00*	*0.00*		*330.00*	
RSM 015213200450 Office Trailer, furnished, rent per month, 50' x 10', excl. hookups	4.00	MO	0	0	1,320	0	0	1,320	
			0.00	*100.00*	*0.00*	*0.00*		*100.00*	
USR Office Equipment & Furniture	4.00	MO	0	400	0	0	0	400	
			0.00	*0.00*	*1,500.00*	*0.00*		*1,500.00*	
USR Office - Supplies Assume 5% of Office Labor costs.	4.00	MO	0	0	6,000	0	0	6,000	
			0.00	*0.00*	*0.00*	*0.00*		*150.00*	
USR Mailing, Shipping Cost	4.00	MO	0	0	0	0	600	600	
			1,046.51	*0.00*	*0.00*	*0.00*		*1,046.51*	
USR 22 Hired Janitors, for 2 hr/night * 22 day / month = 44 hr/month	4.00	MO	4,186	0	0	0	0	4,186	
(Note: = 44 hr/month)									
			5,923.96	*445.54*	*8,625.00*	*0.00*		*14,994.50*	
Field Office Security Personnel	**4.00**	**MO**	**23,696**	**1,782**	**34,500**	**0**	**0**	**59,978**	

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	Quantity	UOM	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
			4,055.74	*0.00*	*0.00*	*0.00*		*4,055.74*	
HNC FD-SECWT Security, Watchmen/Guards (Lock 22 Site)	3.00	MO	12,167	0	0	0	0	12,167	
(Note: Assumed a Occupation Code of #27101 Guard I)									
			7.69	*1.19*	*23.00*	*0.00*		*31.87*	
RSM 323113200500 Fence, chain link industrial, galvanized steel, 6 ga. wire, 2" posts @ 10' OC,, 6' high, includes excavation, & concrete	1,500.00	LF	11,529	1,782	34,500	0	0	47,811	
			0.00	*0.00*	*0.00*	*10,500.00*		*12,000.00*	
Field Office Subsistance and Travel	**4.00**	**MO**	**0**	**0**	**0**	**42,000**	**6,000**	**48,000**	
			0.00	*0.00*	*0.00*	*350.00*		*400.00*	
USR Daily Subsistence (Per Man Day)	120.00	DAY	0	0	0	42,000	6,000	48,000	
(Note: Assume 260 days per year for 2 years for 4 persons = 720 days)									
			350.44	*0.00*	*540.00*	*0.00*		*5,390.44*	
Field Office Utility Installation	**1.00**	**EA**	**350**	**0**	**540**	**0**	**4,500**	**5,390**	
			350.44	*0.00*	*540.00*	*0.00*		*890.44*	
RSM 015113500890 Temporary electrical power equipment (pro-rated per job), connections, office trailer, 200 amp	1.00	EA	350	0	540	0	0	890	
			0.00	*0.00*	*0.00*	*0.00*		*500.00*	
USR Install Telephone	1.00	EA	0	0	0	0	500	500	
			0.00	*0.00*	*0.00*	*0.00*		*1,500.00*	
USR Install Water Supply	1.00	EA	0	0	0	0	1,500	1,500	
			0.00	*0.00*	*0.00*	*0.00*		*2,500.00*	
USR Install Sewer Connection	1.00	EA	0	0	0	0	2,500	2,500	
			0.00	*0.00*	*0.00*	*0.00*		*900.00*	
Field Office Utility Usage Fees	**4.00**	**MO**	**0**	**0**	**0**	**0**	**3,600**	**3,600**	
			0.00	*0.00*	*0.00*	*0.00*		*200.00*	
USR Office Temporary Power / Lighting	4.00	MO	0	0	0	0	800	800	
			0.00	*0.00*	*0.00*	*0.00*		*500.00*	
USR Office Telephone including Long Distance	4.00	MO	0	0	0	0	2,000	2,000	
			0.00	*0.00*	*0.00*	*0.00*		*75.00*	
USR Garbage Service	4.00	MO	0	0	0	0	300	300	
			0.00	*0.00*	*0.00*	*0.00*		*75.00*	
USR Water Usage Fees	4.00	MO	0	0	0	0	300	300	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
			0.00	*0.00*	*0.00*	*0.00*		*50.00*	
USR Sewer Usage Fees	4.00	MO	0	0	0	0	200	200	
			9,495.07	*1,215.87*	*437.50*	*0.00*		*11,673.44*	
ENGINEERING AND SURVEYING	**4.00**	**MO**	**37,980**	**4,863**	**1,750**	**0**	**2,100**	**46,694**	
			23,784.01	*500.00*	*750.00*	*0.00*		*25,134.01*	
Field Engineering Personnel	**1.00**	**MO**	**23,784**	**500**	**750**	**0**	**100**	**25,134**	
			8,096.59	*0.00*	*0.00*	*0.00*		*8,096.59*	
HNC FC-ENGPE Engineers, Project	1.00	MO	8,097	0	0	0	0	8,097	
(Note: Assumed a Occupation Code of #29086 Engineer Technician IV)									
			8,096.59	*0.00*	*0.00*	*0.00*		*8,096.59*	
HNC FC-FLDER Field Engineers	1.00	MO	8,097	0	0	0	0	8,097	
(Note: Assumed a Occupation Code of #29086 Engineer Technician III)									
			7,590.83	*0.00*	*0.00*	*0.00*		*7,590.83*	
HNC FC-FLDRT Field Draftsmen	1.00	MO	7,591	0	0	0	0	7,591	
(Note: Assumed a Occupation Code of #29063 Drafter III)									
			0.00	*500.00*	*0.00*	*0.00*		*500.00*	
USR Engineering - Equipment	1.00	MO	0	500	0	0	0	500	
			0.00	*0.00*	*750.00*	*0.00*		*750.00*	
USR Engineering - Plans & Supplies Assume 5% of Labor cost.	1.00	MO	0	0	750	0	0	750	
			0.00	*0.00*	*0.00*	*0.00*		*100.00*	
USR Mailing, Shipping Drawing and Submittal cost	1.00	MO	0	0	0	0	100	100	
			3,549.07	*0.00*	*250.00*	*0.00*		*3,799.07*	
Field Surveying	**4.00**	**MO**	**14,196**	**0**	**1,000**	**0**	**0**	**15,196**	
			7,787.91	*0.00*	*0.00*	*0.00*		*7,787.91*	
HNC FC-SURYC Surveyors, Chief	1.00	MO	7,788	0	0	0	0	7,788	
			6,408.35	*0.00*	*0.00*	*0.00*		*6,408.35*	
HNC FC-SURYR Surveyors	1.00	MO	6,408	0	0	0	0	6,408	
(Note: Assumed a Occupation Code of #99659 Survey Technician)									
			0.00	*0.00*	*1,000.00*	*0.00*		*1,000.00*	
USR Survey Equipment & Supplies Assume 10% of Labor cost.	1.00	MO	0	0	1,000	0	0	1,000	
			0.00	*1,090.87*	*0.00*	*0.00*		*1,090.87*	
Field Eng & Survey Vehicles	**4.00**	**MO**	**0**	**4,363**	**0**	**0**	**0**	**4,363**	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
			0.00	*2,181.74*	*0.00*	*0.00*		*2,181.74*	
MAP T50XX005 TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	1.00	MO	0	2,182	0	0	0	2,182	
			0.00	*2,181.74*	*0.00*	*0.00*		*2,181.74*	
MAP T50XX005 TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	1.00	MO	0	2,182	0	0	0	2,182	
			0.00	*0.00*	*0.00*	*0.00*		*500.00*	
Field Eng & Survey Subsistance and Travel	**4.00**	**MO**	**0**	**0**	**0**	**0**	**2,000**	**2,000**	
			0.00	*0.00*	*0.00*	*0.00*		*500.00*	
USR Field Eng Travel to Job Site Mob/Demob Supvrs to remote sites	1.00	EA	0	0	0	0	500	500	
(Note: Assume once per month.)									
			0.00	*0.00*	*0.00*	*0.00*		*50.00*	
USR Daily Subsistence (Per Man Day)	30.00	DAY	0	0	0	0	1,500	1,500	
(Note: Assume 260 days per year for 9 mos for 4 persons = 780 days)									
			6,895.71	*0.00*	*0.00*	*0.00*		*7,645.71*	
QUALITY CONTROL AND TESTING	**4.00**	**MO**	**27,583**	**0**	**0**	**0**	**3,000**	**30,583**	
			6,895.71	*0.00*	*0.00*	*0.00*		*6,895.71*	
Quality Control Management	**4.00**	**MO**	**27,583**	**0**	**0**	**0**	**0**	**27,583**	
			6,793.01	*0.00*	*0.00*	*0.00*		*6,793.01*	
HNC FC-ENGQC Engineers, Quality Control	0.50	MO	3,397	0	0	0	0	3,397	
(Note: Assumed a Occupation Code of #29086 Engineer Technician III)									
			6,793.01	*0.00*	*0.00*	*0.00*		*6,793.01*	
HNC FC-INSPE Inspectors	3.00	MO	20,379	0	0	0	0	20,379	
(Note: Assumed a Occupation Code of #29063 Drafter II)									
			7,614.57	*0.00*	*0.00*	*0.00*		*7,614.57*	
HNC FC-FLABT Field Constr. QC./Lab Technician	0.50	MO	3,807	0	0	0	0	3,807	
(Note: Assumed a Occupation Code of #29210 Laboratory Technician)									
			0.00	*0.00*	*0.00*	*0.00*		*750.00*	
QC Subsistence and Travel	**4.00**	**MO**	**0**	**0**	**0**	**0**	**3,000**	**3,000**	
			0.00	*0.00*	*0.00*	*0.00*		*500.00*	
USR Field Eng Travel to Job Site Mob/Demob Supvrs to remote sites	3.00	EA	0	0	0	0	1,500	1,500	
(Note: Assume once per month.)									

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	Quantity	UOM	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
			0.00	*0.00*	*0.00*	*0.00*		*50.00*	
USR Daily Subsistence (Per Man Day)	30.00	DAY	0	0	0	0	1,500	1,500	
(Note: Assume 260 days per year for 9 mos for 4 persons = 780 days)									
			0.00	*0.00*	*515.00*	*0.00*		*1,265.00*	
SAFETY, TRAFFIC CONTROL, FIRST AID, FIRE	**4.00**	**MO**	**0**	**0**	**2,060**	**0**	**3,000**	**5,060**	
			0.00	*0.00*	*125.00*	*0.00*		*125.00*	
Safety Mangement	**4.00**	**MO**	**0**	**0**	**500**	**0**	**0**	**500**	
(Note: Assume prepare 1 safety plan per year.)									
			0.00	*0.00*	*500.00*	*0.00*		*500.00*	
USR Prepare Safety Plan	1.00	EA	0	0	500	0	0	500	
			0.00	*0.00*	*60.00*	*0.00*		*60.00*	
Field First Aid	**1.00**	**EA**	**0**	**0**	**60**	**0**	**0**	**60**	
			0.00	*0.00*	*60.00*	*0.00*		*60.00*	
USR First Aid Kits per 25 employees N.Safety Council Data Sheet #202	1.00	EA	0	0	60	0	0	60	
			0.00	*0.00*	*375.00*	*0.00*		*375.00*	
Safety Training	**4.00**	**MO**	**0**	**0**	**1,500**	**0**	**0**	**1,500**	
			0.00	*0.00*	*500.00*	*0.00*		*500.00*	
RAD Safety, training, 40 hr, RW, on-site, site sp, basic	3.00	EA	0	0	1,500	0	0	1,500	
(Note: Assume training once per month.)									
			0.00	*0.00*	*0.00*	*0.00*		*750.00*	
Safety Subsistence and Travel	**4.00**	**MO**	**0**	**0**	**0**	**0**	**3,000**	**3,000**	
			0.00	*0.00*	*0.00*	*0.00*		*500.00*	
USR Safety Travel to Job Site Mob/Demob Supvrs to remote sites	3.00	EA	0	0	0	0	1,500	1,500	
			0.00	*0.00*	*0.00*	*0.00*		*50.00*	
USR Daily Subsistence (Per Man Day)	30.00	DAY	0	0	0	0	1,500	1,500	
			92.57	*0.00*	*1,110.00*	*88.50*		*1,291.07*	
SANITATION FAC & TEMP BLDGS	**4.00**	**MO**	**370**	**0**	**4,440**	**354**	**0**	**5,164**	
			0.00	*0.00*	*0.00*	*88.50*		*88.50*	
Sanitation Facilities	**4.00**	**MO**	**0**	**0**	**0**	**354**	**0**	**354**	
			0.00	*0.00*	*0.00*	*88.50*		*88.50*	
HNC 015213201400 Toilet, portable, chemical, rent per month	4.00	MO	0	0	0	354	0	354	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
			92.57	*0.00*	*1,110.00*	*0.00*		*1,202.57*	
Temporary Buildings	**4.00**	**MO**	**370**	**0**	**4,440**	**0**	**0**	**4,810**	
			0.00	*0.00*	*97.50*	*0.00*		*97.50*	
RSM 015213201350 Storage Boxes, rent per month, 40' x 8'	4.00	MO	0	0	390	0	0	390	
			370.27	*0.00*	*4,050.00*	*0.00*		*4,420.27*	
USR 015901161 8'X 8'X 8'H(64 SF) Job Shack on skids. Site made.	1.00	EA	370	0	4,050	0	0	4,420	
			3,525.92	*0.00*	*7,160.00*	*0.00*		*10,735.92*	
PROJECT UTILITIES SITE & CLEANUP	**4.00**	**MO**	**14,104**	**0**	**28,640**	**0**	**200**	**42,944**	
			3,525.92	*0.00*	*0.00*	*0.00*		*3,575.92*	
Site Cleanup	**4.00**	**MO**	**14,104**	**0**	**0**	**0**	**200**	**14,304**	
			3,525.92	*0.00*	*0.00*	*0.00*		*3,525.92*	
USR 84 Daily Site Cleanup, 1 laborer * 2 hrs/day * 22 day/mo = 44mhrs	4.00	MO	14,104	0	0	0	0	14,104	
			0.00	*0.00*	*0.00*	*0.00*		*50.00*	
USR Rental, Dumpster 20CY Trash Bin,	4.00	MO	0	0	0	0	200	200	
			0.00	*0.00*	*28,640.00*	*0.00*		*28,640.00*	
Misc Project Expenses	**1.00**	**EA**	**0**	**0**	**28,640**	**0**	**0**	**28,640**	
			0.00	*0.00*	*17.90*	*0.00*		*17.90*	
RSM 015813500020 Project Signs, sign, high intensity reflectorized, buy, excl. posts	1,600.00	SF	0	0	28,640	0	0	28,640	
			370.27	*0.00*	*1,192.00*	*0.00*		*1,562.27*	
WINTERIZE PROJECT	**4.00**	**MO**	**1,481**	**0**	**4,768**	**0**	**0**	**6,249**	
			370.27	*0.00*	*1,192.00*	*0.00*		*1,562.27*	
Winterize Project	**4.00**	**MO**	**1,481**	**0**	**4,768**	**0**	**0**	**6,249**	
			0.00	*0.00*	*192.00*	*0.00*		*192.00*	
USR Rental, Heaters to 50 K-BTU/hr (Space) Oil, Gas or Lp Gas fired	4.00	MO	0	0	768	0	0	768	
(Note: Uses approx. 1.8 Lbs/hr. Lp Gas.)									
			185.14	*0.00*	*500.00*	*0.00*		*685.14*	
USR 85 Winterize - Buildings	4.00	MO	741	0	2,000	0	0	2,741	
			185.14	*0.00*	*500.00*	*0.00*		*685.14*	
USR 86 Winterize - Equipment	4.00	MO	741	0	2,000	0	0	2,741	
			0.00	*0.00*	*0.00*	*0.00*		*20,000.00*	
INSURANCE, INTEREST, PERMITS & FEE	**1.00**	**EA**	**0**	**0**	**0**	**0**	**20,000**	**20,000**	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
			0.00	*0.00*	*0.00*	*0.00*		*20,000.00*	
Insurance Costs	**1.00**	**EA**	**0**	**0**	**0**	**0**	**20,000**	**20,000**	
USR Pollution Liability Insurance	1.00	LS	0	0	0	0	10,000	10,000	
USR Marine Insurance Premiums	1.00	LS	0	0	0	0	10,000	10,000	
USR Highway Protective Insurance	0.00	LS	0	0	0	0	0	0	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	Quantity	UOM	BareCost	Productivity	Overtime	TaxAdj	MiscDirect	Payroll	WCI	DirectCost	C/O
Job Office Overhead Bare to Direct Report											
AA PRIME CONTRACTOR (4)											
OVERHEAD ITEMS	**1.00**	**LS**	**407,602**	**0**	**0**	**0**	**0**	**17,475**	**28,356**	**453,432**	
			8,320.37	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*8,320.37*	
USR AAST Small Tools	1.00	EA	8,320	0	0	0	0	0	0	8,320	
			99,820.40	*0.00%*	*0.00%*					*111,278.00*	
JOB OFFICE OVERHEAD	**4.00**	**MO**	**399,282**	**0**	**0**	**0**	**0**	**17,475**	**28,356**	**445,112**	
			27,677.61	*0.00%*	*0.00%*					*31,477.46*	
SUPERVISION AND MANAGEMENT	**4.00**	**MO**	**110,710**	**0**	**0**	**0**	**0**	**5,745**	**9,455**	**125,910**	
			12,155.00	*0.00%*	*0.00%*					*15,954.85*	
Supervision Personnel	**4.00**	**MO**	**48,620**	**0**	**0**	**0**	**0**	**5,745**	**9,455**	**63,819**	
			8,103.33	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*10,636.56*	
HNC FA-AGENS General Superintendents (P.M.)	4.00	MO	32,413	0	0	0	0	3,830	6,303	42,546	
(Note: Assumed a Carpenter / Millwright Wages plus $3.00 / hour)											
			8,103.33	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*10,636.56*	
HNC FA-AGENS General Labor Foreman	2.00	MO	16,207	0	0	0	0	1,915	3,152	21,273	
(Note: Assumed a Carpenter / Millwright Wages plus $3.00 / hour)											
			3,272.61	*0.00%*	*0.00%*					*3,272.61*	
Management Vehicles	**4.00**	**MO**	**13,090**	**0**	**0**	**0**	**0**	**0**	**0**	**13,090**	
			2,181.74	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2,181.74*	
MAP T50XX005 TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	4.00	MO	8,727	0	0	0	0	0	0	8,727	
			2,181.74	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2,181.74*	
MAP T50XX005 TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	2.00	MO	4,363	0	0	0	0	0	0	4,363	
			12,250.00	*0.00%*	*0.00%*					*12,250.00*	
Management Subsistance and Travel	**4.00**	**MO**	**49,000**	**0**	**0**	**0**	**0**	**0**	**0**	**49,000**	
			500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*500.00*	
USR Home Office Execs Travel to Job	1.00	EA	500	0	0	0	0	0	0	500	
			500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*500.00*	
USR Supervision Travel to Job Site Mob/Demob Supvrs to remote sites	1.00	EA	500	0	0	0	0	0	0	500	
			400.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*400.00*	
USR Daily Subsistence (Per Man Day)	120.00	DAY	48,000	0	0	0	0	0	0	48,000	

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	Quantity	UOM	BareCost	Productivity	Overtime	TaxAdj	MiscDirect	Payroll	WCI	DirectCost	C/O
(Note: It is assumed that per diem in Sitka will be $200 per supervisor person. Cost: 2 persons x $200 = $400 per day.)											
			37,566.83	*0.00%*	*0.00%*					*40,627.14*	
ADMINISTRATION JOB OFFICE	**4.00**	**MO**	**150,267**	**0**	**0**	**0**	**0**	**4,663**	**7,579**	**162,509**	
			5,078.67	*0.00%*	*0.00%*					*6,651.10*	
Field Office Administration Personnel	**4.00**	**MO**	**20,315**	**0**	**0**	**0**	**0**	**2,327**	**3,963**	**26,604**	
			4,291.73	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*5,675.11*	
HNC FB-OMANGR Office Managers	2.00	MO	8,583	0	0	0	0	995	1,772	11,350	
(Note: Assumed a Occupation Code of #01400 Supply Technician +3.00 w/ nonething better)											
			2,932.80	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*3,813.54*	
HNC FB-CLTYP Clerks, Typists, Bookkeepers & Receptionist	4.00	MO	11,731	0	0	0	0	1,333	2,190	15,254	
(Note: Assumed a Occupation Code of #01116 General Clerk)											
			1,928.90	*0.00%*	*0.00%*					*1,928.90*	
Field Office Vehicles	**3.33**	**MO**	**6,430**	**0**	**0**	**0**	**0**	**0**	**0**	**6,430**	
			1,928.90	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*1,928.90*	
MAP T50XX001 TRUCK, HIGHWAY, CONVENTIONAL, 1/2 TON PICKUP, 4X2	3.33	MO	6,430	0	0	0	0	0	0	6,430	
			2,881.30	*0.00%*	*0.00%*					*3,126.51*	
Field Office Building & Supplies	**4.00**	**MO**	**11,525**	**0**	**0**	**0**	**0**	**366**	**615**	**12,506**	
			330.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*330.00*	
RSM 015213200450 Office Trailer, furnished, rent per month, 50' x 10', excl. hookups	4.00	MO	1,320	0	0	0	0	0	0	1,320	
			100.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*100.00*	
USR Office Equipment & Furniture	4.00	MO	400	0	0	0	0	0	0	400	
			1,500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*1,500.00*	
USR Office - Supplies Assume 5% of Office Labor costs.	4.00	MO	6,000	0	0	0	0	0	0	6,000	
			150.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*150.00*	
USR Mailing, Shipping Cost	4.00	MO	600	0	0	0	0	0	0	600	
			801.30	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*1,046.51*	
USR 22 Hired Janitors, for 2 hr/night * 22 day / month = 44 hr/month	4.00	MO	3,205	0	0	0	0	366	615	4,186	
(Note: = 44 hr/month)											
			13,767.99	*0.00%*	*0.00%*					*14,994.50*	
Field Office Security Personnel	**4.00**	**MO**	**55,072**	**0**	**0**	**0**	**0**	**1,942**	**2,964**	**59,978**	

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	Quantity	UOM	BareCost	Productivity	Overtime	TaxAdj	MiscDirect	Payroll	WCI	DirectCost	C/O
			3,109.60	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*4,055.74*	
HNC FD-SECWT Security, Watchmen/Guards (Lock 22 Site)	3.00	MO	9,329	0	0	0	0	1,064	1,775	12,167	
(Note: Assumed a Occupation Code of #27101 Guard I)											
			30.50	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*31.87*	
RSM 323113200500 Fence, chain link industrial, galvanized steel, 6 ga. wire, 2" posts @ 10' OC,, 6' high, includes excavation, & concrete	1,500.00	LF	45,743	0	0	0	0	878	1,189	47,811	
			12,000.00	*0.00%*	*0.00%*					*12,000.00*	
Field Office Subsistance and Travel	**4.00**	**MO**	**48,000**	**0**	**0**	**0**	**0**	**0**	**0**	**48,000**	
			400.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*400.00*	
USR Daily Subsistence (Per Man Day)	120.00	DAY	48,000	0	0	0	0	0	0	48,000	
(Note: Assume 260 days per year for 2 years for 4 persons = 720 days)											
			5,325.80	*0.00%*	*0.00%*					*5,390.44*	
Field Office Utility Installation	**1.00**	**EA**	**5,326**	**0**	**0**	**0**	**0**	**27**	**37**	**5,390**	
			825.80	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*890.44*	
RSM 015113500890 Temporary electrical power equipment (pro-rated per job), connections, office trailer, 200 amp	1.00	EA	826	0	0	0	0	27	37	890	
			500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*500.00*	
USR Install Telephone	1.00	EA	500	0	0	0	0	0	0	500	
			1,500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*1,500.00*	
USR Install Water Supply	1.00	EA	1,500	0	0	0	0	0	0	1,500	
			2,500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2,500.00*	
USR Install Sewer Connection	1.00	EA	2,500	0	0	0	0	0	0	2,500	
			900.00	*0.00%*	*0.00%*					*900.00*	
Field Office Utility Usage Fees	**4.00**	**MO**	**3,600**	**0**	**0**	**0**	**0**	**0**	**0**	**3,600**	
			200.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*200.00*	
USR Office Temporary Power / Lighting	4.00	MO	800	0	0	0	0	0	0	800	
			500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*500.00*	
USR Office Telephone including Long Distance	4.00	MO	2,000	0	0	0	0	0	0	2,000	
			75.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*75.00*	
USR Garbage Service	4.00	MO	300	0	0	0	0	0	0	300	
			75.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*75.00*	
USR Water Usage Fees	4.00	MO	300	0	0	0	0	0	0	300	

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	Quantity	UOM	BareCost	Productivity	Overtime	TaxAdj	MiscDirect	Payroll	WCI	DirectCost	C/O
			50.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*50.00*	
USR Sewer Usage Fees	4.00	MO	200	0	0	0	0	0	0	200	
			9,404.64	*0.00%*	*0.00%*					*11,673.44*	
ENGINEERING AND SURVEYING	**4.00**	**MO**	**37,619**	**0**	**0**	**0**	**0**	**3,385**	**5,690**	**46,694**	
			19,420.00	*0.00%*	*0.00%*					*25,134.01*	
Field Engineering Personnel	**1.00**	**MO**	**19,420**	**0**	**0**	**0**	**0**	**2,119**	**3,595**	**25,134**	
			6,146.40	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*8,096.59*	
HNC FC-ENGPE Engineers, Project	1.00	MO	6,146	0	0	0	0	721	1,229	8,097	
(Note: Assumed a Occupation Code of #29086 Engineer Technician IV)											
			6,146.40	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*8,096.59*	
HNC FC-FLDER Field Engineers	1.00	MO	6,146	0	0	0	0	721	1,229	8,097	
(Note: Assumed a Occupation Code of #29086 Engineer Technician III)											
			5,777.20	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*7,590.83*	
HNC FC-FLDRT Field Draftsmen	1.00	MO	5,777	0	0	0	0	677	1,137	7,591	
(Note: Assumed a Occupation Code of #29063 Drafter III)											
			500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*500.00*	
USR Engineering - Equipment	1.00	MO	500	0	0	0	0	0	0	500	
			750.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*750.00*	
USR Engineering - Plans & Supplies Assume 5% of Labor cost.	1.00	MO	750	0	0	0	0	0	0	750	
			100.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*100.00*	
USR Mailing, Shipping Drawing and Submittal cost	1.00	MO	100	0	0	0	0	0	0	100	
			2,958.77	*0.00%*	*0.00%*					*3,799.07*	
Field Surveying	**4.00**	**MO**	**11,835**	**0**	**0**	**0**	**0**	**1,266**	**2,095**	**15,196**	
			5,921.07	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*7,787.91*	
HNC FC-SURYC Surveyors, Chief	1.00	MO	5,921	0	0	0	0	694	1,173	7,788	
			4,914.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*6,408.35*	
HNC FC-SURYR Surveyors	1.00	MO	4,914	0	0	0	0	572	922	6,408	
(Note: Assumed a Occupation Code of #99659 Survey Technician)											
			1,000.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*1,000.00*	
USR Survey Equipment & Supplies Assume 10% of Labor cost.	1.00	MO	1,000	0	0	0	0	0	0	1,000	
			1,090.87	*0.00%*	*0.00%*					*1,090.87*	
Field Eng & Survey Vehicles	**4.00**	**MO**	**4,363**	**0**	**0**	**0**	**0**	**0**	**0**	**4,363**	

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	Quantity	UOM	BareCost	Productivity	Overtime	TaxAdj	MiscDirect	Payroll	WCI	DirectCost	C/O
			2,181.74	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2,181.74*	
MAP T50XX005 TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	1.00	MO	2,182	0	0	0	0	0	0	2,182	
			2,181.74	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2,181.74*	
MAP T50XX005 TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	1.00	MO	2,182	0	0	0	0	0	0	2,182	
			500.00	*0.00%*	*0.00%*					*500.00*	
Field Eng & Survey Subsistance and Travel	**4.00**	**MO**	**2,000**	**0**	**0**	**0**	**0**	**0**	**0**	**2,000**	
			500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*500.00*	
USR Field Eng Travel to Job Site Mob/Demob Supvrs to remote sites	1.00	EA	500	0	0	0	0	0	0	500	
(Note: Assume once per month.)											
			50.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*50.00*	
USR Daily Subsistence (Per Man Day)	30.00	DAY	1,500	0	0	0	0	0	0	1,500	
(Note: Assume 260 days per year for 9 mos for 4 persons = 780 days)											
			6,019.77	*0.00%*	*0.00%*					*7,645.71*	
QUALITY CONTROL AND TESTING	**4.00**	**MO**	**24,079**	**0**	**0**	**0**	**0**	**2,461**	**4,042**	**30,583**	
			5,269.77	*0.00%*	*0.00%*					*6,895.71*	
Quality Control Management	**4.00**	**MO**	**21,079**	**0**	**0**	**0**	**0**	**2,461**	**4,042**	**27,583**	
			5,194.80	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*6,793.01*	
HNC FC-ENGQC Engineers, Quality Control	0.50	MO	2,597	0	0	0	0	303	496	3,397	
(Note: Assumed a Occupation Code of #29086 Engineer Technician III)											
			5,194.80	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*6,793.01*	
HNC FC-INSPE Inspectors	3.00	MO	15,584	0	0	0	0	1,819	2,976	20,379	
(Note: Assumed a Occupation Code of #29063 Drafter II)											
			5,794.53	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*7,614.57*	
HNC FC-FLABT Field Constr. QC./Lab Technician	0.50	MO	2,897	0	0	0	0	339	571	3,807	
(Note: Assumed a Occupation Code of #29210 Laboratory Technician)											
			750.00	*0.00%*	*0.00%*					*750.00*	
QC Subsistence and Travel	**4.00**	**MO**	**3,000**	**0**	**0**	**0**	**0**	**0**	**0**	**3,000**	
			500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*500.00*	
USR Field Eng Travel to Job Site Mob/Demob Supvrs to remote sites	3.00	EA	1,500	0	0	0	0	0	0	1,500	
(Note: Assume once per month.)											

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	Quantity	UOM	BareCost	Productivity	Overtime	TaxAdj	MiscDirect	Payroll	WCI	DirectCost	C/O
			50.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*50.00*	
USR Daily Subsistence (Per Man Day)	30.00	DAY	1,500	0	0	0	0	0	0	1,500	
(Note: Assume 260 days per year for 9 mos for 4 persons = 780 days)											
			1,265.00	*0.00%*	*0.00%*					*1,265.00*	
SAFETY, TRAFFIC CONTROL, FIRST AID, FIRE	**4.00**	**MO**	**5,060**	**0**	**0**	**0**	**0**	**0**	**0**	**5,060**	
			125.00	*0.00%*	*0.00%*					*125.00*	
Safety Mangement	**4.00**	**MO**	**500**	**0**	**0**	**0**	**0**	**0**	**0**	**500**	
(Note: Assume prepare 1 safety plan per year.)											
			500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*500.00*	
USR Prepare Safety Plan	1.00	EA	500	0	0	0	0	0	0	500	
			60.00	*0.00%*	*0.00%*					*60.00*	
Field First Aid	**1.00**	**EA**	**60**	**0**	**0**	**0**	**0**	**0**	**0**	**60**	
			60.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*60.00*	
USR First Aid Kits per 25 employees N.Safety Council Data Sheet #202	1.00	EA	60	0	0	0	0	0	0	60	
			375.00	*0.00%*	*0.00%*					*375.00*	
Safety Training	**4.00**	**MO**	**1,500**	**0**	**0**	**0**	**0**	**0**	**0**	**1,500**	
			500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*500.00*	
RAD Safety, training, 40 hr, RW, on-site, site sp, basic	3.00	EA	1,500	0	0	0	0	0	0	1,500	
(Note: Assume training once per month.)											
			750.00	*0.00%*	*0.00%*					*750.00*	
Safety Subsistence and Travel	**4.00**	**MO**	**3,000**	**0**	**0**	**0**	**0**	**0**	**0**	**3,000**	
			500.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*500.00*	
USR Safety Travel to Job Site Mob/Demob Supvrs to remote sites	3.00	EA	1,500	0	0	0	0	0	0	1,500	
			50.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*50.00*	
USR Daily Subsistence (Per Man Day)	30.00	DAY	1,500	0	0	0	0	0	0	1,500	
			1,274.23	*0.00%*	*0.00%*					*1,291.07*	
SANITATION FAC & TEMP BLDGS	**4.00**	**MO**	**5,097**	**0**	**0**	**0**	**0**	**29**	**39**	**5,164**	
			88.50	*0.00%*	*0.00%*					*88.50*	
Sanitation Facilities	**4.00**	**MO**	**354**	**0**	**0**	**0**	**0**	**0**	**0**	**354**	
			88.50	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*88.50*	

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	Quantity	UOM	BareCost	Productivity	Overtime	TaxAdj	MiscDirect	Payroll	WCI	DirectCost	C/O
HNC 015213201400 Toilet, portable, chemical, rent per month	4.00	MO	354	0	0	0	0	0	0	354	
			1,185.73	*0.00%*	*0.00%*					*1,202.57*	
Temporary Buildings	**4.00**	**MO**	**4,743**	**0**	**0**	**0**	**0**	**29**	**39**	**4,810**	
			97.50	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*97.50*	
RSM 015213201350 Storage Boxes, rent per month, 40' x 8'	4.00	MO	390	0	0	0	0	0	0	390	
			4,352.93	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*4,420.27*	
USR 015901161 8'X 8'X 8'H(64 SF) Job Shack on skids. Site made.	1.00	EA	4,353	0	0	0	0	29	39	4,420	
			10,117.39	*0.00%*	*0.00%*					*10,735.92*	
PROJECT UTILITIES SITE & CLEANUP	**4.00**	**MO**	**40,470**	**0**	**0**	**0**	**0**	**1,077**	**1,397**	**42,944**	
			2,957.39	*0.00%*	*0.00%*					*3,575.92*	
Site Cleanup	**4.00**	**MO**	**11,830**	**0**	**0**	**0**	**0**	**1,077**	**1,397**	**14,304**	
			2,907.39	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*3,525.92*	
USR 84 Daily Site Cleanup, 1 laborer * 2 hrs/day * 22 day/mo = 44mhrs	4.00	MO	11,630	0	0	0	0	1,077	1,397	14,104	
			50.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*50.00*	
USR Rental, Dumpster 20CY Trash Bin,	4.00	MO	200	0	0	0	0	0	0	200	
			28,640.00	*0.00%*	*0.00%*					*28,640.00*	
Misc Project Expenses	**1.00**	**EA**	**28,640**	**0**	**0**	**0**	**0**	**0**	**0**	**28,640**	
			17.90	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*17.90*	
RSM 015813500020 Project Signs, sign, high intensity reflectorized, buy, excl. posts	1,600.00	SF	28,640	0	0	0	0	0	0	28,640	
			1,494.93	*0.00%*	*0.00%*					*1,562.27*	
WINTERIZE PROJECT	**4.00**	**MO**	**5,980**	**0**	**0**	**0**	**0**	**115**	**155**	**6,249**	
			1,494.93	*0.00%*	*0.00%*					*1,562.27*	
Winterize Project	**4.00**	**MO**	**5,980**	**0**	**0**	**0**	**0**	**115**	**155**	**6,249**	
			192.00	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*192.00*	
USR Rental, Heaters to 50 K-BTU/hr (Space) Oil, Gas or Lp Gas fired	4.00	MO	768	0	0	0	0	0	0	768	
(Note: Uses approx. 1.8 Lbs/hr. Lp Gas.)											
			651.47	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*685.14*	
USR 85 Winterize - Buildings	4.00	MO	2,606	0	0	0	0	57	77	2,741	
			651.47	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*12.07%*	*24.91%*	*685.14*	
USR 86 Winterize - Equipment	4.00	MO	2,606	0	0	0	0	57	77	2,741	

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	Quantity	UOM	BareCost	Productivity	Overtime	TaxAdj	MiscDirect	Payroll	WCI	DirectCost	C/O
			20,000.00	*0.00%*	*0.00%*					*20,000.00*	
INSURANCE, INTEREST, PERMITS & FEE	**1.00**	**EA**	**20,000**	**0**	**0**	**0**	**0**	**0**	**0**	**20,000**	
			20,000.00	*0.00%*	*0.00%*					*20,000.00*	
Insurance Costs	**1.00**	**EA**	**20,000**	**0**	**0**	**0**	**0**	**0**	**0**	**20,000**	
USR Pollution Liability Insurance	1.00	LS	10,000	0	0	0	0	0	0	10,000	
USR Marine Insurance Premiums	1.00	LS	10,000	0	0	0	0	0	0	10,000	
USR Highway Protective Insurance	0.00	LS	0	0	0	0	0	0	0	0	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	LaborRate	CrewHours	MemberType	MemberRate	ManHours	LaborCost	EQHours	EQCost	CrewCost
Crews (Bare Costs) by Contractor, Report		**2,163.07**			**9,957.07**	**628,191.13**	**7,621.32**	**1,718,610.59**	**2,346,801.72**
AA PRIME CONTRACTOR (4)	**LaborCost1**	**2,163.07**		**0.00**	**9,957.07**	**628,191.13**	**7,621.32**	**1,718,610.59**	**2,346,801.72**
					1.00	*18.43*	*0.00*	*0.00*	*18.43*
CIV UFLDB 1 janitor	LaborCost1	173.91			173.91	3,205.22	0.00	0.00	3,205.22
FOP FB-JANTR Janitors			*Journeyman*	*18.43*	*1.00*	*18.43*			
					2.25	*151.47*	*0.00*	*0.00*	*151.47*
GOV ACARD 2 carpnters	LaborCost1	10.00			22.50	1,514.65	0.00	0.00	1,514.65
MIL B-CARPNTER Carpenters			*Foreman*	*68.74*	*0.25*	*17.19*			
MIL B-CARPNTER Carpenters			*Journeyman*	*67.14*	*2.00*	*134.28*			
					1.30	*81.41*	*0.00*	*0.00*	*81.41*
MIL ULABA 1 laborer	LaborCost1	142.86			185.71	11,629.57	0.00	0.00	11,629.57
MIL B-LABORER Laborers, (Semi-Skilled)			*Journeyman*	*62.39*	*1.00*	*62.39*			
MIL B-LABORER Laborers, (Semi-Skilled)			*Foreman*	*63.39*	*0.30*	*19.02*			
					1.00	*71.45*	*0.00*	*0.00*	*71.45*
RSM 1ELEC 1 Electricians	LaborCost1	4.00			4.00	285.80	0.00	0.00	285.80
MIL B-ELECTRN Electricians			*Journeyman*	*71.45*	*1.00*	*71.45*			
					3.00	*189.22*	*2.00*	*35.64*	*224.86*
RSM B80C B80C	LaborCost1	50.00			150.00	9,461.00	100.00	1,782.17	11,243.17
MIL B-LABORER Laborers, (Semi-Skilled)			*Journeyman*	*62.39*	*2.00*	*124.78*			
MIL B-TRKDVRLT Truck Drivers, Light			*Journeyman*	*64.44*	*1.00*	*64.44*			
MAP T50XX023 TRUCK, HIGHWAY, 20,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)			*EP / Average*	*34.29*			*1.00*	*34.29*	
MAP L15HZ001 POST HOLE DRILL, UP TO 8" DIA, 30" DEEP, ONE MAN OPERATION			*EP / Average*	*1.36*			*1.00*	*1.36*	
					3.00	*191.97*	*4.00*	*1,175.19*	*1,367.16*
USR ANC Mob/Demob ANC Mob/Demob	LaborCost1	263.93			791.80	50,667.11	1,055.73	310,169.76	360,836.86
MIL B-EQOPRCRN Equip. Operators, Heavy			*Journeyman*	*69.52*	*1.00*	*69.52*			
MIL B-EQOPROIL Equip. Operators, Oilers / Grade Checker			*Journeyman*	*60.06*	*1.00*	*60.06*			
MIL B-LABORER Laborers, (Semi-Skilled)			*Journeyman*	*62.39*	*1.00*	*62.39*			
EP B25HB013 BUCKET, CLAMSHELL, 5.0 CY, HEAVY DUTY/DIGGING			*EP / Average*	*17.54*			*1.00*	*17.54*	
USR XX0XX730 WORK BARGE, FLAT DECK , 3000 TON APPROX. 200'x 60'x 15',WOOD DECK			*Non-EP / Average*	*73.88*			*1.00*	*73.88*	
USR XX0XX610 WORK TUG, 1000 HP 0			*Non-EP / Average*	*516.72*			*1.00*	*516.72*	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	LaborRate	CrewHours	MemberType	MemberRate	ManHours	LaborCost	EQHours	EQCost	CrewCost
NON XX0XX430 BARGE MTD CLAMSHELL, 54CY NON DREDGE,350T,200'B,250'X75X15			*Non-EP / Average*	*567.05*			*1.00*	*567.05*	
					3.00	*189.44*	*4.00*	*871.68*	*1,061.12*
USR SEA Mob/Demob SEA Mob/Demob	LaborCost1	305.78			917.33	57,926.08	1,223.10	266,538.27	324,464.35
MIL B-EQOPRMED Equip. Operators, Medium			*Journeyman*	*66.99*	*1.00*	*66.99*			
MIL B-EQOPROIL Equip. Operators, Oilers / Grade Checker			*Journeyman*	*60.06*	*1.00*	*60.06*			
MIL B-LABORER Laborers, (Semi-Skilled)			*Journeyman*	*62.39*	*1.00*	*62.39*			
USR XX0XX610 WORK TUG, 1000 HP 0			*Non-EP / Average*	*516.72*			*1.00*	*516.72*	
USR XX0XX800 DUMP SCOW BARGE, 1,500 CY APPROX. 200'x 50' x 15'			*Non-EP / Average*	*118.32*			*3.00*	*354.96*	
					7.00	*456.06*	*7.00*	*289.08*	*745.14*
USR Z01 Loading Crew	LaborCost1	172.02			1,204.13	78,450.93	1,204.13	49,727.93	128,178.87
MIL B-EQOPRCRN Equip. Operators, Heavy			*Journeyman*	*69.52*	*1.00*	*69.52*			
MIL B-EQOPROIL Equip. Operators, Oilers / Grade Checker			*Journeyman*	*60.06*	*1.00*	*60.06*			
MIL B-LABORER Laborers, (Semi-Skilled)			*Journeyman*	*62.39*	*1.00*	*62.39*			
MIL B-LABORER Laborers, (Semi-Skilled)			*Foreman*	*63.39*	*1.00*	*63.39*			
MIL B-TRKDVRHV Truck Drivers, Heavy			*Journeyman*	*66.90*	*3.00*	*200.70*			
EP C85KC003 CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 100 TON, 200' BOOM, LIFTING			*EP / Average*	*140.95*			*1.00*	*140.95*	
GEN T45Z7080 TRUCK TRAILER, END DUMP, 17 CY (13 CM), 22 TON (20.0 MT) (ADD TOWING TRUCK)			*EP / Average*	*7.83*			*3.00*	*23.50*	
GEN T50Z7580 TRUCK, HIGHWAY, 45,000 LB (20,412 KG) GVW, 6X4, 3 AXLE (ADD ACCESSORIES)			*EP / Average*	*41.54*			*3.00*	*124.63*	
					5.00	*317.75*	*2.00*	*635.04*	*952.79*
USR Z02 Transport Crew	LaborCost1	388.17			1,940.86	123,341.78	776.34	246,505.01	369,846.79
MIL B-EQOPRCRN Equip. Operators, Heavy			*Journeyman*	*69.52*	*1.00*	*69.52*			
MIL B-EQOPROIL Equip. Operators, Oilers / Grade Checker			*Journeyman*	*60.06*	*1.00*	*60.06*			
MIL B-LABORER Laborers, (Semi-Skilled)			*Foreman*	*63.39*	*1.00*	*63.39*			
MIL B-LABORER Laborers, (Semi-Skilled)			*Journeyman*	*62.39*	*2.00*	*124.78*			
USR XX0XX610 WORK TUG, 1000 HP 0			*Non-EP / Average*	*516.72*			*1.00*	*516.72*	
USR XX0XX800 DUMP SCOW BARGE, 1,500 CY APPROX. 200'x 50' x 15'			*Non-EP / Average*	*118.32*			*1.00*	*118.32*	
					7.00	*447.13*	*5.00*	*1,293.51*	*1,740.64*
USR Z03 Removal/Placement Crew	LaborCost1	652.40			4,566.82	291,708.98	3,262.02	843,887.46	1,135,596.44

Labor ID: LNS2009 EQ ID: EP07R09 | Currency in US dollars | TRACES MII Version 4.0

Description	LaborRate	CrewHours	MemberType	MemberRate	ManHours	LaborCost	EQHours	EQCost	CrewCost
MIL B-EQOPRCRN Equip. Operators, Heavy			*Journeyman*	*69.52*	*1.00*	*69.52*			
MIL B-EQOPRLT Equip. Operators, Light			*Journeyman*	*66.99*	*1.00*	*66.99*			
MIL B-EQOPROIL Equip. Operators, Oilers / Grade Checker			*Journeyman*	*60.06*	*1.00*	*60.06*			
MIL B-LABORER Laborers, (Semi-Skilled)			*Journeyman*	*62.39*	*3.00*	*187.17*			
MIL B-LABORER Laborers, (Semi-Skilled)			*Foreman*	*63.39*	*1.00*	*63.39*			
EP B25HB013 BUCKET, CLAMSHELL, 5.0 CY, HEAVY DUTY/DIGGING			*EP / Average*	*17.54*			*1.00*	*17.54*	
USR XX0XX730 WORK BARGE, FLAT DECK , 3000 TON APPROX. 200'x 60'x 15',WOOD DECK			*Non-EP / Average*	*73.88*			*1.00*	*73.88*	
USR XX0XX610 WORK TUG, 1000 HP 0			*Non-EP / Average*	*516.72*			*1.00*	*516.72*	
USR XX0XX800 DUMP SCOW BARGE, 1,500 CY APPROX. 200'x 50' x 15'			*Non-EP / Average*	*118.32*			*1.00*	*118.32*	
NON XX0XX430 BARGE MTD CLAMSHELL, 54CY NON DREDGE,350T,200'B,250'X75X15			*Non-EP / Average*	*567.05*			*1.00*	*567.05*	

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	SUIExperience	SUIRate	FICA	FUIRate	PayrollTax	State	ContractorClas	WCIBaseRate	WCIExperience	WCIRate
Contractors Labor Payroll Markup Report										
1 AA PRIME CONTRACTOR (4)	**80.00**	**3.62**	**7.65**	**0.80**	**12.07**	**AK**	**Excavation -- rock/earth NOC**	**19.54**	**85.00**	**24.91**

Description	LaborRate	LaborType	ManHours	BaseWage	Travel	TaxableFringe	NonTaxFringe	Subsistence	Payroll	WCI	Overtime	Total
Labor by Contractor, Report												
PRIME CONTRACTOR (4)												
				35.93	*0.00*	*18.23*	*1.00*	*13.58*				*84.23*
Carpenters	LaborCost1	Foreman	3	90	0	46	3	34	16	22	0	211
				34.33	*0.00*	*18.23*	*1.00*	*13.58*				*82.04*
Carpenters	LaborCost1	Journeyman	20	687	0	365	20	272	127	171	0	1,641
				12.68	*0.00*	*3.24*	*1.00*	*0.00*				*22.00*
Clerks, Typists, Bookkeepers & Receptionist	LaborCost1	Journeyman	693	8,791	0	2,246	693	0	1,333	2,190	0	15,254
				37.30	*0.00*	*19.57*	*1.00*	*13.58*				*87.61*
Electricians	LaborCost1	Journeyman	4	149	0	78	4	54	27	37	0	350
				28.46	*0.00*	*6.00*	*1.00*	*0.00*				*46.71*
Engineers, Project	LaborCost1	Journeyman	173	4,933	0	1,040	173	0	721	1,229	0	8,097
				22.97	*0.00*	*6.00*	*1.00*	*0.00*				*39.19*
Engineers, Quality Control	LaborCost1	Journeyman	87	1,991	0	520	87	0	303	496	0	3,397
				37.99	*0.00*	*16.95*	*1.00*	*13.58*				*100.51*
Equip. Operators, Heavy	LaborCost1	Journeyman	1,477	56,093	0	25,027	1,477	20,051	18,212	13,975	13,578	148,413
				35.46	*0.00*	*16.95*	*1.00*	*13.58*				*92.30*
Equip. Operators, Light	LaborCost1	Journeyman	652	23,134	0	11,058	652	8,860	5,607	5,764	5,140	60,216
				35.46	*0.00*	*16.95*	*1.00*	*13.58*				*96.11*
Equip. Operators, Medium	LaborCost1	Journeyman	306	10,843	0	5,183	306	4,152	2,589	2,701	3,614	29,389
				28.53	*0.00*	*16.95*	*1.00*	*13.58*				*85.59*
Equip. Operators, Oilers / Grade Checker	LaborCost1	Journeyman	1,782	50,849	0	30,210	1,782	24,204	19,734	12,668	13,104	152,552
				26.43	*0.00*	*6.00*	*1.00*	*0.00*				*43.93*
Field Constr. QC./Lab Technician	LaborCost1	Journeyman	87	2,291	0	520	87	0	339	571	0	3,807

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	LaborRate	LaborType	ManHours	BaseWage	Travel	TaxableFringe	NonTaxFringe	Subsistence	Payroll	WCI	Overtime	Total
				26.33	*0.00*	*6.00*	*1.00*	*0.00*				*43.79*
Field Draftsmen	LaborCost1	Journeyman	173	4,564	0	1,040	173	0	677	1,137	0	7,591
				28.46	*0.00*	*6.00*	*1.00*	*0.00*				*46.71*
Field Engineers	LaborCost1	Journeyman	173	4,933	0	1,040	173	0	721	1,229	0	8,097
				36.49	*0.00*	*9.26*	*1.00*	*0.00*				*61.36*
General Superintendents (P.M.)	LaborCost1	Journeyman	1,040	37,950	0	9,630	1,040	0	5,745	9,455	0	63,819
				22.97	*0.00*	*6.00*	*1.00*	*0.00*				*39.19*
Inspectors	LaborCost1	Journeyman	520	11,944	0	3,120	520	0	1,819	2,976	0	20,379
				14.19	*0.00*	*3.24*	*1.00*	*0.00*				*24.07*
Janitors	LaborCost1	Journeyman	174	2,468	0	563	174	0	366	615	0	4,186
				29.96	*0.00*	*17.85*	*1.00*	*13.58*				*87.36*
Laborers, (Semi-Skilled)	LaborCost1	Journeyman	3,718	111,395	0	66,369	3,718	50,492	40,049	27,752	25,032	324,808
				30.96	*0.00*	*17.85*	*1.00*	*13.58*				*86.52*
Laborers, (Semi-Skilled)	LaborCost1	Foreman	1,255	38,869	0	22,410	1,255	17,049	11,016	9,684	8,342	108,624
				20.52	*0.00*	*3.24*	*1.00*	*0.00*				*32.74*
Office Managers	LaborCost1	Journeyman	347	7,114	0	1,123	347	0	995	1,772	0	11,350
				13.70	*0.00*	*3.24*	*1.00*	*0.00*				*23.40*
Security, Watchmen/Guards	LaborCost1	Journeyman	520	7,124	0	1,685	520	0	1,064	1,775	0	12,167
				21.35	*0.00*	*6.00*	*1.00*	*0.00*				*36.97*
Surveyors	LaborCost1	Journeyman	173	3,701	0	1,040	173	0	572	922	0	6,408
				27.16	*0.00*	*6.00*	*1.00*	*0.00*				*44.93*
Surveyors, Chief	LaborCost1	Journeyman	173	4,708	0	1,040	173	0	694	1,173	0	7,788
				38.02	*0.00*	*14.30*	*1.00*	*13.58*				*92.90*
Truck Drivers, Heavy	LaborCost1	Journeyman	516	19,620	0	7,380	516	7,008	4,168	4,888	4,360	47,940
				35.56	*0.00*	*14.30*	*1.00*	*13.58*				*79.32*
Truck Drivers, Light	LaborCost1	Journeyman	50	1,778	0	715	50	679	301	443	0	3,966

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	CostType	ConditionType	Manufacturer	EQHours	Ownership	Operating	Total
Equipment by Contractor, Report				**9,586**	**304,784**	**1,379,313**	**1,684,097**
AA PRIME CONTRACTOR (4)				**9,586**	**304,784**	**1,379,313**	**1,684,097**
					8.45	*8.19*	*16.64*
EP B25HB013 BUCKET, CLAMSHELL, 5.0 CY, HEAVY DUTY/DIGGING	EP	Average	HB HAWCO MANUFACTURING COMPANY, LLC	916	7,740	7,506	15,247
					54.50	*76.01*	*130.51*
EP C85KC003 CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 100 TON, 200' BOOM, LIFTING	EP	Average	KC KOBELCO AMERICA INC.	172	9,375	13,075	22,449
					2.98	*4.49*	*7.47*
GEN T45Z7080 TRUCK TRAILER, END DUMP, 17 CY (13 CM), 22 TON (20.0 MT) (ADD TOWING TRUCK)	EP	Average	ZZ GENERIC EQUIPMENT	516	1,538	2,319	3,857
					8.35	*31.97*	*40.32*
GEN T50Z7580 TRUCK, HIGHWAY, 45,000 LB (20,412 KG) GVW, 6X4, 3 AXLE (ADD ACCESSORIES)	EP	Average	ZZ GENERIC EQUIPMENT	516	4,309	16,501	20,809
					0.27	*1.09*	*1.36*
MAP L15HZ001 POST HOLE DRILL, UP TO 8" DIA, 30" DEEP, ONE MAN OPERATION	EP	Average	HZ HOFFCO-COMET	50	13	54	68
					1.91	*9.22*	*11.13*
MAP T50XX001 TRUCK, HIGHWAY, CONVENTIONAL, 1/2 TON PICKUP, 4X2	EP	Average	XX NO SPECIFIC MANUFACTURER	578	1,103	5,326	6,430
					2.73	*9.86*	*12.59*
MAP T50XX005 TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	EP	Average	XX NO SPECIFIC MANUFACTURER	1,387	3,781	13,673	17,454
					4.09	*30.20*	*34.29*
MAP T50XX023 TRUCK, HIGHWAY, 20,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)	EP	Average	XX NO SPECIFIC MANUFACTURER	50	204	1,510	1,714
					85.89	*459.52*	*545.41*
NON XX0XX430 BARGE MTD CLAMSHELL, 54CY NON DREDGE,350T,200'B,250'X75X15	Non-EP	Average	ZZ GENERIC EQUIPMENT	916	78,706	421,074	499,781
					64.63	*441.78*	*506.41*
USR XX0XX610 WORK TUG, 1000 HP 0	Non-EP	Average	ZZ GENERIC EQUIPMENT	1,610	104,072	711,391	815,463
					17.60	*53.14*	*70.74*
USR XX0XX730 WORK BARGE, FLAT DECK , 3000 TON APPROX. 200'x 60'x 15',WOOD DECK	Non-EP	Average	ZZ GENERIC EQUIPMENT	916	16,127	48,694	64,821
					39.74	*70.58*	*110.32*

Labor ID: LNS2009 EQ ID: EP07R09 Currency in US dollars TRACES MII Version 4.0

Description	CostType	ConditionType	Manufacturer	EQHours	Ownership	Operating	Total
USR XX0XX800 DUMP SCOW BARGE, 1,500 CY APPROX. 200'x 50' x 15'	Non-EP	Average	ZZ GENERIC EQUIPMENT	1,958	77,815	138,189	216,004