

**APPENDIX C  
COST ANALYSIS  
EMERGENCY BANK STABILIZATION  
DILLINGHAM, ALASKA**



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

THIS ESTIMATE IS BASED ON THE SCOPE CONTAINED IN THE FEASIBILITY REPORT, DATED: 25 APR 2008

PROJECT: BANK STABILIZATION - WEST BANK, ALT W2

DISTRICT: ALASKA

LOCATION: DILLINGHAM, ALASKA

"WEST BANK, ALT W2"

P.O.C.: ALBERT ARRUDA,

CURRENT MCACES ESTIMATE PREPARED: 30 APR 2008  
EFFECTIVE PRICING LEVEL: 30 APR 2008

AUTHORIZ./BUDGET YEAR: 2009  
EFFECT. PRICING LEVEL: 1 OCT 08

ACCOUNT NUMBER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE MID PT	OMB (%)
C-02-01	RELOCATIONS									Jun 2010	
C-10-01	MOB DEMOB & PREWORK	\$973	\$195	20%	\$1,168	1.1%	\$984	\$197	\$1,180	Jun 2010	3.0
C-10-02	BREAKWATERS - WEST	\$3,044	\$609	20%	\$3,653	1.1%	\$3,077	\$615	\$3,693	Jun 2010	3.0
C-16-01	ROCK REVETMENTS - WEST	\$5,153	\$1,031	20%	\$6,184	1.1%	\$5,210	\$1,042	\$6,252	Jun 2010	3.0
C-16-02	ROCK REVETMENTS - EAST									Jun 2010	
C-16-03	SHEETPILE REVETMENTS									Jun 2010	
	TOTAL CONSTRUCTION COSTS ==>	\$9,170	\$1,834	20%	\$11,004		\$9,271	\$1,854	\$11,125	-	
P-01-23	LANDS AND DAMAGES	\$91			\$91	1.1%	\$92		\$92	Jun 2010	3.0
P-30-02	PLANNING, ENG & DESIGN - 10%	\$225	\$45	20%	\$270	1.1%	\$227	\$45	\$273	Jun 2010	3.0
P-31-02	CONSTRUCTION MANAGEMENT - 8%	\$734	\$147	20%	\$880	1.1%	\$742	\$148	\$890	Jun 2010	3.0
	TOTAL PROJECT COSTS =====>	\$10,220	\$2,026		\$12,245		\$10,332	\$2,048	\$12,380	-	

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

THIS ESTIMATE IS BASED ON THE SCOPE CONTAINED IN THE FEASIBILITY REPORT, DATED: 25 APR 2008

PROJECT: BANK STABILIZATION - CITY BANK, ALT C1

DISTRICT: ALASKA

LOCATION: DILLINGHAM, ALASKA

"CITY BANK, ALT C1"

P.O.C.: ALBERT ARRUDA,

CURRENT MCACES ESTIMATE PREPARED: 30 APR 2008  
EFFECTIVE PRICING LEVEL: 30 APR 2008

AUTHORIZ./BUDGET YEAR: 2009  
EFFECT. PRICING LEVEL: 1 OCT 08

ACCOUNT NUMBER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE MID PT	OMB (%)
C-02-01	RELOCATIONS										
C-16-01	MOB DEMOB & PREWORK	\$964	\$193	20%	\$1,157	1.1%	\$975	\$195	\$1,170	Jun 2010	3.0
C-16-02	CLEAR & GRUBBING	\$36	\$7	20%	\$43	1.1%	\$36	\$7	\$44	Jun 2010	3.0
C-16-03	ACCESS/STAGING AREA	\$152	\$30	20%	\$182	1.1%	\$154	\$31	\$184	Jun 2010	3.0
C-16-04	ROCK REVETMENT	\$3,028	\$606	20%	\$3,634	1.1%	\$3,061	\$612	\$3,674	Jun 2010	3.0
C-16-05	EMBANKMENT REHABILITATION	\$1,812	\$362	20%	\$2,174	1.1%	\$1,832	\$366	\$2,198	Jun 2010	3.0
	TOTAL CONSTRUCTION COSTS ==>	\$5,992	\$1,198	20%	\$7,190		\$6,058	\$1,212	\$7,269		
P-01-23	LANDS AND DAMAGES	\$86			\$86	1.1%	\$87		\$87	Jun 2010	3.0
P-30-02	PLANNING, ENG & DESIGN	\$200	\$40	20%	\$240	1.1%	\$202	\$40	\$243	Jun 2010	3.0
P-31-02	CONSTRUCTION MANAGEMENT - 8%	\$479	\$96	20%	\$575	1.1%	\$485	\$97	\$582	Jun 2010	3.0
	TOTAL PROJECT COSTS =====>	\$6,757	\$1,334		\$8,091		\$6,831	\$1,349	\$8,180		

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

THIS ESTIMATE IS BASED ON THE SCOPE CONTAINED IN THE FEASIBILITY REPORT, DATED: 25 APR 2008

PROJECT: BANK STABILIZATION - CITY BANK, ALT W2+C1

DISTRICT: ALASKA

LOCATION: DILLINGHAM, ALASKA

"WEST BANK,ALT W2 + CITY BANK, ALT C1"

P.O.C.: ALBERT ARRUDA,

CURRENT MCACES ESTIMATE PREPARED: 30 APR 2008  
EFFECTIVE PRICING LEVEL: 30 APR 2008

AUTHORIZ./BUDGET YEAR: 2009  
EFFECT. PRICING LEVEL: 1 OCT 08

ACCOUNT NUMBER	FEATURE DESCRIPTION	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	OMB (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	FEATURE MID PT	OMB (%)
C-02-01	RELOCATIONS										
C-10-01	MOB DEMOB & PREWORK	\$973	\$195	20%	\$1,168	1.1%	\$984	\$197	\$1,180	Jun 2010	3.0
C-10-02	BREAKWATERS - WEST	\$3,044	\$609	20%	\$3,653	1.1%	\$3,077	\$615	\$3,693	Jun 2010	3.0
C-16-01	ROCK REVETMENTS - WEST	\$5,153	\$1,031	20%	\$6,184	1.1%	\$5,210	\$1,042	\$6,252	Jun 2010	3.0
C-16-01	MOB DEMOB & PREWORK	\$964	\$193	20%	\$1,157	1.1%	\$975	\$195	\$1,170	Jun 2010	3.0
C-16-02	CLEAR & GRUBBING	\$36	\$7	20%	\$43	1.1%	\$36	\$7	\$44	Jun 2010	3.0
C-16-03	ACCESS/STAGING AREA	\$152	\$30	20%	\$182	1.1%	\$154	\$31	\$184	Jun 2010	3.0
C-16-04	ROCK REVETMENT	\$3,028	\$606	20%	\$3,634	1.1%	\$3,061	\$612	\$3,674	Jun 2010	3.0
C-16-05	EMBANKMENT REHABILITATION	\$1,812	\$362	20%	\$2,174	1.1%	\$1,832	\$366	\$2,198	Jun 2010	3.0
	TOTAL CONSTRUCTION COSTS ==>	\$15,162	\$3,032	20%	\$18,194		\$15,329	\$3,066	\$18,395		
P-01-23	LANDS AND DAMAGES	\$177			\$177	1.1%	\$179		\$179	Jun 2010	3.0
P-30-02	PLANNING, ENG & DESIGN	\$425	\$85	20%	\$510	1.1%	\$430	\$86	\$516	Jun 2010	3.0
P-31-02	CONSTRUCTION MANAGEMENT - 8%	\$1,213	\$243	20%	\$1,456	1.1%	\$1,226	\$245	\$1,472	Jun 2010	3.0
	TOTAL PROJECT COSTS =====>	\$16,977	\$3,360		\$20,337		\$17,164	\$3,397	\$20,561		

DILLINGHAM EMERG. STREAMBANK STABILIZATION, FDR Alternate W2-20080425  
Breakwater at Harbor Dillingham, AK UPC=DHA008 Y:\CIV\EROCTL\DHA008\Alt\

Estimated by CEPOA-EN-ES-CE  
Designed by CEPOA-EN-CW-HH  
Prepared by Lloyd Foster/Darrell Cullins

Preparation Date 4/25/2008  
Effective Date of Pricing 4/30/2008  
Estimated Construction Time 180 Days

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<b>Date</b>	<b>Author</b>	<b>Note</b>
CEPOA-EN-ES-CE		This CWE is for the alternative W2 produced in a report provide to cost engineering by Mary Azelton on March 30, 2007. The quantities were also updated to reflect updated design solutions. No utilities installation or relocation was assumed. The unit costs of rock for the rubble mound construction were based upon material from Snake Lake quarry per the price quote by BC Contractors, Inc on 25 April 2008. It is assumed that this project will receive competitive bids and the contract will have to comply with the Alaska Fish and Game requirements. It is further assumed that Notice to Proceed will be issued approximately March 2010; the contract will run for 180 calendar days; and the construction midpoint is Jul 2010.

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>ContractCost</u>	<u>Escalation</u>	<u>Contingency</u>	<u>SIOH</u>	<u>MiscOwner</u>	<u>ProjectCost</u>
<b>Project Cost Summary Report</b>			<b>9,169,751</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,169,751</b>
<b>B Alternative W2</b>	<b>1.00</b>	<b>LS</b>	<b>9,169,751</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,169,751</b>
<b>(Note: 1,100 feet of West Revetment &amp; a 371' of breakwaterthe west side. Quantities are based on data provided by Mary Azelton viae-mail on March 30, 2007.)</b>								
<b>B 1 MOBILIZATION/DEMOBILIZATION</b>	<b>1.00</b>	<b>LS</b>	<b>973,006</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>973,006</b>
<b>B 2 West Revetment</b>	<b>1,100.00</b>	<b>LF</b>	<b>5,152,578</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,152,578</b>
<b>(Note: Erosion Control, Assume 1300' silt fencing downslope of construction site)</b>								
<b>(Note: Clearing and grubbing is for the entire footprint of project site. Assume D2 or D4 Cat to push up organics and debris from area to be cleared. Stockpiled organic and debris material to be loaded with frontend wheeled loader into 10 cu yd truck for hauling off-site. Assume 2 mile round trip haul to area just north of City Shop building. Disposal material will be accepted by the City in this location for an area that they are filling according to Ramon Roque, City of Dillingham Public Works, phone#907-842-4598. No disposal fee, however a dozer will need to push and level out the disposal material as it is dumped.)</b>								
<b>(Note: Excavation is for the revetment protection. Assumed 25,600 cy plus a swell factor of 20% = 30,720 bcy . Assume a hydraulic excavator w/ 3.5 cu yd bucket to excavate and stockpile, and a wheeled frontend loader (988) with a 5 cu yd bucket to be load into 10 cu yd truck for hauling off-site. Assume 2 mile round trip haul to area just north of City Shop building. Disposal material will be accepted by the City in this location for an area that they are filling according to Ramon Roque, City of Dillingham Public Works, phone #907-842-4598. No disposal fee, however a dozer will need to push and level out the disposal material as it is dumped.)</b>								
<b>(Note: Non-woven geotextile filter fabric, placed between the excavated soil and the porous material of the maintenance access road embankment.)</b>								
<b>(Note: Porous Fill delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for Core Rock \$43.08/ton (\$77.54/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)</b>								
<b>(Note: Core Rock (1-20#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for Core Rock \$43.08/ton (\$77.54/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)</b>								
<b>(Note: "B" Rock (20-200#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for "B" Rock \$43.38/ton (\$78.08/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)</b>								
<b>(Note: Armor Rock (200-350#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for "B" Rock \$43.84/ton (\$78.91/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)</b>								
<b>B 3 Breakwater West Entrance #1</b>	<b>371.00</b>	<b>LF</b>	<b>3,044,167</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,044,167</b>



<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>ContractCost</u>	<u>Escalation</u>	<u>Contingency</u>	<u>SIOH</u>	<u>MiscOwner</u>	<u>ProjectCost</u>
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(Note: Core Rock (21-230#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for Core Rock \$43.38/ton (\$78.08/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)

(Note: "B" Rock (230-2295#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for "B" Rock \$47.96/ton (\$86.33/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)

(Note: Armor Rock (2295-3826#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for Armor Rock \$51.74/ton (\$93.13/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectCost</u>	<u>SubCMU</u>	<u>CostToPrime</u>	<u>PrimeCMU</u>	<u>ContractCost</u>	<u>C/O</u>
<b>Contract Cost Summary Report</b>				<b>6,611,403</b>	<b>22,269</b>	<b>6,633,672</b>	<b>2,536,079</b>	<b>9,169,751</b>	
<b>B Alternative W2</b>	<b>1.00</b>	<b>LS</b>	<b>PC Prime Contractor</b>	<b>6,611,403</b>	<b>22,269</b>	<b>6,633,672</b>	<b>2,536,079</b>	<b>9,169,751</b>	
<b>B 1 MOBILIZATION/DEMOBILIZATION</b>	<b>1.00</b>	<b>LS</b>	<b>PC Prime Contractor</b>	<b>703,902</b>	<b>0</b>	<b>703,902</b>	<b>269,104</b>	<b>973,006</b>	
				<i>703,901.62</i>		<i>703,901.62</i>		<i>973,006.02</i>	
<b>B 1 5 Mob, Demob &amp; Preparatory Work</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	<b>703,902</b>	<b>0</b>	<b>703,902</b>	<b>269,104</b>	<b>973,006</b>	
<b>B 2 West Revetment</b>	<b>1,100.00</b>	<b>LF</b>	<b>PC Prime Contractor</b>	<b>3,710,847</b>	<b>16,682</b>	<b>3,727,529</b>	<b>1,425,049</b>	<b>5,152,578</b>	
				<i>3,373.50</i>		<i>3,388.66</i>		<i>4,684.16</i>	
<b>10 1525 Erosion Control</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	<b>11,350</b>	<b>0</b>	<b>11,350</b>	<b>4,339</b>	<b>15,689</b>	
				<i>11,349.79</i>		<i>11,349.79</i>		<i>15,688.86</i>	
<b>10 10 Clearing &amp; Grubbing</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	<b>40,665</b>	<b>0</b>	<b>40,665</b>	<b>15,546</b>	<b>56,212</b>	
				<i>40,665.24</i>		<i>40,665.24</i>		<i>56,211.73</i>	
<b>10 3035 Excavation &amp; Hauling</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	<b>344,338</b>	<b>0</b>	<b>344,338</b>	<b>131,642</b>	<b>475,980</b>	
				<i>344,338.21</i>		<i>344,338.21</i>		<i>475,980.08</i>	
<b>10 3040 Geotextile</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	<b>77,797</b>	<b>0</b>	<b>77,797</b>	<b>29,742</b>	<b>107,539</b>	
				<i>77,797.08</i>		<i>77,797.08</i>		<i>107,539.21</i>	
<b>B 210 Porous Fill</b>	<b>3,600.00</b>	<b>CY</b>	<b>PC Prime Contractor</b>	<b>302,466</b>	<b>0</b>	<b>302,466</b>	<b>115,634</b>	<b>418,099</b>	
				<i>84.02</i>		<i>84.02</i>		<i>116.14</i>	
<b>B 2 Core rock</b>	<b>3,800.00</b>	<b>CY</b>	<b>PC Prime Contractor</b>	<b>443,536</b>	<b>0</b>	<b>443,536</b>	<b>169,566</b>	<b>613,101</b>	
				<i>116.72</i>		<i>116.72</i>		<i>161.34</i>	
<b>B 2 3 "B" Rock</b>	<b>7,200.00</b>	<b>BCY</b>	<b>PC Prime Contractor</b>	<b>859,450</b>	<b>0</b>	<b>859,450</b>	<b>328,571</b>	<b>1,188,022</b>	
				<i>119.37</i>		<i>119.37</i>		<i>165.00</i>	

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectCost</u>	<u>SubCMU</u>	<u>CostToPrime</u>	<u>PrimeCMU</u>	<u>ContractCost</u>	<u>C/O</u>
B 205 Armor Rock	11,000.00	CY	PC Prime Contractor	<sup>144.05</sup> 1,584,597	0	<sup>144.05</sup> 1,584,597	605,798	<sup>199.13</sup> 2,190,394	
Control Surveying	1.00	EA	Survey sub	<sup>46,647.79</sup> 46,648	16,682	<sup>63,329.97</sup> 63,330	24,211	<sup>87,541.27</sup> 87,541	
B 3 Breakwater West Entrance #1	371.00	LF	PC Prime Contractor	<sup>5,920.90</sup> 2,196,655	5,587	<sup>5,935.96</sup> 2,202,241	841,926	<sup>8,205.30</sup> 3,044,167	
Silt Turbidity Curtain	1.00	EA	PC Prime Contractor	<sup>144,984.19</sup> 144,984	0	<sup>144,984.19</sup> 144,984	55,428	<sup>200,412.23</sup> 200,412	
B 301 Core rock	4,300.00	CY	PC Prime Contractor	<sup>127.47</sup> 548,133	0	<sup>127.47</sup> 548,133	209,553	<sup>176.21</sup> 757,686	
B 303 "B" Rock	3,250.00	BCY	PC Prime Contractor	<sup>150.84</sup> 490,243	0	<sup>150.84</sup> 490,243	187,422	<sup>208.51</sup> 677,665	
B 305 Armor Rock	5,500.00	CY	PC Prime Contractor	<sup>181.02</sup> 995,609	0	<sup>181.02</sup> 995,609	380,625	<sup>250.22</sup> 1,376,234	
Construct Navigation Aid Base	1.00	EA	PC Prime Contractor	<sup>2,063.74</sup> 2,064	0	<sup>2,063.74</sup> 2,064	789	<sup>2,852.71</sup> 2,853	
Hydrographic Survey	1.00	EA	Survey sub	<sup>15,622.09</sup> 15,622	5,587	<sup>21,208.86</sup> 21,209	8,108	<sup>29,317.09</sup> 29,317	

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
<b>Project Direct Costs Report</b>				<b>1,416,893</b>	<b>2,013,726</b>	<b>3,035,296</b>	<b>105,489</b>	<b>40,000</b>	<b>6,611,403</b>	
<b>B Alternative W2</b>	<b>1.00</b>	<b>LS</b>	<b>PC Prime Contractor</b>	<b>1,416,893</b>	<b>2,013,726</b>	<b>3,035,296</b>	<b>105,489</b>	<b>40,000</b>	<b>6,611,403</b>	
<b>(Note: 1,100 feet of West Revetment &amp; a 371' of breakwaterthe west side. Quantities are based on data provided by Mary Azelton viae-mail on March 30, 2007.)</b>										
<b>B 1 MOBILIZATION/D EMOBILIZATION</b>	<b>1.00</b>	<b>LS</b>	<b>PC Prime Contractor</b>	<b>192,265</b>	<b>434,286</b>	<b>50,850</b>	<b>0</b>	<b>26,500</b>	<b>703,902</b>	
				<i>192,265.20</i>	<i>434,286.42</i>	<i>50,850.00</i>	<i>0.00</i>		<i>703,901.62</i>	
<b>B 1 5 Mob, Demob &amp; Preparatory Work</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	<b>192,265</b>	<b>434,286</b>	<b>50,850</b>	<b>0</b>	<b>26,500</b>	<b>703,902</b>	
USR Mob, Demob Site Crew assuming prime contractor is (Note: from Seattle area)	15.00	EA	PC Prime Contractor	<i>0.00</i> 0	<i>0.00</i> 0	<i>1,500.00</i> 22,500	<i>0.00</i> 0	1,500	<i>1,600.00</i> 24,000	LEM
USR Cleanup Project Site After Const Allowance	1.00	LS	PC Prime Contractor	0	0	0	0	15,000	15,000	LEM
USR Mob Equipment Allowance	480.00	EA	PC Prime Contractor	<i>0.00</i> 0	<i>42.00</i> 20,160	<i>0.00</i> 0	<i>0.00</i> 0	0	<i>42.00</i> 20,160	LEM
USR Demob equipment (Standby)	480.00	EA	PC Prime Contractor	<i>0.00</i> 0	<i>35.00</i> 16,800	<i>0.00</i> 0	<i>0.00</i> 0	0	<i>35.00</i> 16,800	LEM
USR Global Positioning System Will locate the dump scow to (Note: the desired location)	160.00	EA	PC Prime Contractor	<i>40.00</i> 6,400	<i>30.00</i> 4,800	<i>0.00</i> 0	<i>0.00</i> 0	0	<i>70.00</i> 11,200	LEM
				<i>40.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>		<i>40.00</i>	

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
USR Travel Time for Personnel say, 12 management persons, (Note: skilled and semi-skilled 10)	352.00	EA	PC Prime Contractor	14,080	0	0	0	0	14,080	LEM
USR Temp Building set-up and removal	400.00	EA	PC Prime Contractor	18,400	10,000	0	0	0	28,400	LEM
USR MOB Worker Daily Subsistence (Per Man Day)	210.00	DAY	PC Prime Contractor	0	0	28,350	0	0	28,350	LEM
USR Marine Insurance	1.00	LS	PC Prime Contractor	0	0	0	0	10,000	10,000	LEM
USR Barge Mobilization/Demobilization To Dillingham (Note: 2,500 Miles Each Way from Seattle, WA @ 8 mph assuming 1 round trips, 2500*2/10 = 625 Hours)	625.00	HR	PC Prime Contractor	153,385	382,526	0	0	0	535,912	N
<b>B 2 West Revetment</b>	<b>1,100.00</b>	<b>LF</b>	<b>PC Prime Contractor</b>	<b>792,218</b>	<b>974,856</b>	<b>1,930,272</b>	<b>0</b>	<b>13,500</b>	<b>3,710,847</b>	
<b>10 1525 Erosion Control</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	<b>9,621</b>	<b>0</b>	<b>1,729</b>	<b>0</b>	<b>0</b>	<b>11,350</b>	
<b>(Note: Erosion Control, Assume 1300' silt fencing downslope of construction site)</b>										
USR 022661120 Erosion control, w/7.5' posts, silt fence, 3' high, polypropylene (Note: 1300' lg downslope of construction)	1,300.00	LF	PC Prime Contractor	4,810	0	1,729	0	0	6,539	OM
USR 022661120 Remove silt fence polypropylene	1,300.00	LF	PC Prime Contractor	4,810	0	0	0	0	4,810	OM

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
<b>10 10 Clearing &amp; Grubbing</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	26,806.99 <b>26,807</b>	13,858.25 <b>13,858</b>	0.00 <b>0</b>	0.00 <b>0</b>	0	40,665.24 <b>40,665</b>	
<b>10 1010 Clearing &amp; Grubbing</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	26,806.99 <b>26,807</b>	13,858.25 <b>13,858</b>	0.00 <b>0</b>	0.00 <b>0</b>	0	40,665.24 <b>40,665</b>	
<p><b>(Note: Clearing and grubbing is for the entire footprint of project site. Assume D2 or D4 Cat to push up organics and debris from area to be cleared. Stockpiled organic and debris material to be loaded with frontend wheeled loader into 10 cu yd truck for hauling off-site. Assume 2 mile round trip haul to area just north of City Shop building. Disposal material will be accepted by the City in this location for an area that they are filling according to Ramon Roque, City of Dillingham Public Works, phone#907-842-4598. No disposal fee, however a dozer will need to push and level out the disposal material as it is dumped.)</b></p>										
RSM 022302000550 Selective clearing, brush, medium clearing, with dozer and brush rake, excludes removal offsite	3.00	ACR	PC Prime Contractor	0.00 0	0.00 0	0.00 0	0.00 0	0	0.00 0	N
<p>(Note: 120' wide x 1100' long = 132000 SF = 14667 SY = 3.03 Acres)</p>										
MIL 021102000 Clearing, machine load spoils, 2 mi haul to dump	2,500.00	CY	PC Prime Contractor	8.75 21,865	2.69 6,715	0.00 0	0.00 0	0	11.43 28,580	N
<p>(Note: 14667 SY x 0.5' deep = 2444.5 CY, say 2500 CY)</p>										
USR 022320270 Load, wheeled loader, 5 CY, wet material	2,500.00	CY	PC Prime Contractor	0.88 2,196	1.20 3,012	0.00 0	0.00 0	0	2.08 5,208	N
AF 022400030 Fill, spread disposal material w/dozer	2,500.00	CY	PC Prime Contractor	1.10 2,745	1.65 4,131	0.00 0	0.00 0	0	2.75 6,877	N
<b>10 3035 Excavation &amp; Hauling</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	160,440.06 <b>160,440</b>	183,898.15 <b>183,898</b>	0.00 <b>0</b>	0.00 <b>0</b>	0	344,338.21 <b>344,338</b>	

Description	Quantity	UOM	Contractor	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
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(Note: Excavation is for the revetment protection. Assumed 25,600 cy plus a swell factor of 20% = 30,720 bcy . Assume a hydraulic excavator w/ 3.5 cu yd bucket to excavate and stockpile, and a wheeled frontend loader (988) with a 5 cu yd bucket to be load into 10 cu yd truck for hauling off-site. Assume 2 mile round trip haul to area just north of City Shop building. Disposal material will be accepted by the City in this location for an area that they are filling according to Ramon Roque, City of Dillingham Public Works, phone #907-842-4598. No disposal fee, however a dozer will need to push and level out the disposal material as it is dumped.)

CIV 022320165	30,720.00	CY	PC Prime Contractor	34,675	51,728	0	0	0	86,404	N
Excavate, hydr excavator, 3.5 CY, wet material				1.13	1.68	0.00	0.00		2.81	
USR 022320270	7,700.00	CY	PC Prime Contractor	6,764	9,277	0	0	0	16,042	O
Load, wheeled loader, 5 CY, wet material				0.88	1.20	0.00	0.00		2.08	
AF 022400030	30,720.00	CY	PC Prime Contractor	33,734	50,767	0	0	0	84,501	N
Fill, spread disposal material w/dozer				1.10	1.65	0.00	0.00		2.75	
AF 022340245	30,720.00	CY	PC Prime Contractor	85,266	72,125	0	0	0	157,392	N
Hauling, hwy haulers, 10 CY, 2 mi round trip @ 20 MPH (2.6 cyc/hr)				2.78	2.35	0.00	0.00		5.12	
<b>10 3040 Geotextile</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	<b>24,671</b>	<b>6,326</b>	<b>46,800.00</b>	<b>0</b>	<b>0</b>	<b>77,797</b>	
				24,671.49	6,325.58	46,800.00	0.00		77,797.08	

(Note: Non-woven geotextile filter fabric, placed between the excavated soil and the porous material of the maintenance access road embankment.)

USR 022502140	15,000.00	SY	PC Prime Contractor	24,671	6,326	46,800	0	0	77,797	M
Geotextile fabric, non-woven polypropylene				1.64	0.42	3.12	0.00		5.19	
(Note: Assume 120' up slope x 1100' long = 132000 sf = 14667sy (say 15000sy))										
<b>B 210 Porous Fill</b>	<b>3,600.00</b>	<b>CY</b>	<b>PC Prime Contractor</b>	<b>15,568</b>	<b>7,754</b>	<b>279,144</b>	<b>0</b>	<b>0</b>	<b>302,466</b>	
				4.32	2.15	77.54	0.00		84.02	

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
<b>(Note: Porous Fill delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for Core Rock \$43.08/ton (\$77.54/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)</b>										
USR B 210 Porous Fill	3,600.00	CY	PC Prime Contractor	4.32 15,568	2.15 7,754	77.54 279,144	0.00 0	0	84.02 302,466	M
<b>B 2 Core rock</b>	<b>3,800.00</b>	<b>CY</b>	<b>PC Prime Contractor</b>	<b>16.72 63,554</b>	<b>24.17 91,863</b>	<b>75.82 288,119</b>	<b>0.00 0</b>	<b>0</b>	<b>116.72 443,536</b>	
<b>(Note: Core Rock (1-20#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for Core Rock \$43.08/ton (\$77.54/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)</b>										
USR 23 Place Core Rock 1-20#	6,688.00	TON	PC Prime Contractor	9.50 63,554	13.74 91,863	43.08 288,119	0.00 0	0	66.32 443,536	LM
<b>B 2 3 "B" Rock</b>	<b>7,200.00</b>	<b>BCY</b>	<b>PC Prime Contractor</b>	<b>19.58 140,953</b>	<b>28.30 203,736</b>	<b>71.49 514,761</b>	<b>0.00 0</b>	<b>0</b>	<b>119.37 859,450</b>	
<b>(Note: "B" Rock (20-200#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for "B" Rock \$43.38/ton (\$78.08/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)</b>										
USR 24 Place "B" Rock 20-200#	11,866.32	TON	PC Prime Contractor	11.88 140,953	17.17 203,736	43.38 514,761	0.00 0	0	72.43 859,450	LM
<b>B 205 Armor Rock</b>	<b>11,000.00</b>	<b>CY</b>	<b>PC Prime Contractor</b>	<b>29.36 322,998</b>	<b>42.44 466,867</b>	<b>72.25 794,732</b>	<b>0.00 0</b>	<b>0</b>	<b>144.05 1,584,597</b>	
<b>(Note: Armor Rock (200-350#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for "B" Rock \$43.84/ton (\$78.91/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)</b>										
USR 25 Place Armor Rock 200-350#	18,128.00	TON	PC Prime Contractor	17.82 322,998	25.75 466,867	43.84 794,732	0.00 0	0	87.41 1,584,597	LM
<b>Control Surveying</b>	<b>1.00</b>	<b>EA</b>	<b>Survey sub</b>	<b>27,606.53 27,607</b>	<b>553.60 554</b>	<b>4,987.65 4,988</b>	<b>0.00 0</b>	<b>13,500</b>	<b>46,647.79 46,648</b>	
				86.27	1.73	15.59	0.00		103.59	



<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
RSM 011077000100 Conventional Surveying, topographical, maximum w/ 2-person crew  (Note: 2 months , say 320 hrs)	320.00	HR	Survey sub	27,607	554	4,988	0	0	33,148	N
USR Peridium, 2 Man Survey Crew	90.00	DAY	Survey sub	0	0	0	0	13,500	13,500	N
<b>B 3 Breakwater West Entrance #1</b>	<b>371.00</b>	<b>LF</b>	<b>PC Prime Contractor</b>	<b>432,409</b>	<b>604,583</b>	<b>1,054,173</b>	<b>105,489</b>	<b>0</b>	<b>2,196,655</b>	
<b>Silt Turbidity Curtain</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	<b>15,167</b>	<b>24,328</b>	<b>0</b>	<b>105,489</b>	<b>0</b>	<b>144,984</b>	
USR Silt Turbidity Curtains  (Note: Assume placing 900 LF of silt curtains around breakwater and 40' deep = 36000 SF. Barriers only good for one season.)	36,000.00	SF	PC Prime Contractor	0	0	0	105,480	0	105,480	Sb
USR Placing & Removing Turbidity Curtains  (Note: Assume 2 day to setup and 2 day to tear down = 4 Days)	4.00	DAY	PC Prime Contractor	15,167	24,328	0	9	0	39,504	Sb
<b>B 301 Core rock</b>	<b>4,300.00</b>	<b>CY</b>	<b>PC Prime Contractor</b>	<b>89,896</b>	<b>129,937</b>	<b>328,300</b>	<b>0</b>	<b>0</b>	<b>548,133</b>	
<b>(Note: Core Rock (21-230#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for Core Rock \$43.38/ton (\$78.08/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)</b>										
USR 26 Place Core Rock 21-230#	7,568.00	TON	PC Prime Contractor	89,896	129,937	328,300	0	0	548,133	LM
<b>B 303 "B" Rock</b>	<b>3,250.00</b>	<b>BCY</b>	<b>PC Prime Contractor</b>	<b>95,431</b>	<b>137,938</b>	<b>256,874</b>	<b>0</b>	<b>0</b>	<b>490,243</b>	

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
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(Note: "B" Rock (230-2295#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for "B" Rock \$47.96/ton (\$86.33/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)

USR 27 Place "B" Rock 230-2295#	5,356.00	TON	PC Prime Contractor	17.82 95,431	25.75 137,938	47.96 256,874	0.00 0	0	91.53 490,243	LM
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<b>B 305 Armor Rock</b>	<b>5,500.00</b>	<b>CY</b>	<b>PC Prime Contractor</b>	<b>39.15 215,345</b>	<b>56.59 311,264</b>	<b>85.27 469,000</b>	<b>0.00 0</b>	<b>0</b>	<b>181.02 995,609</b>	
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(Note: Armor Rock (2295-3826#) delivered to the Dillingham Harbor from the Snake Lake Quarry. Quote for Armor Rock \$51.74/ton (\$93.13/cy using ton factor of 1.8T/cy) from Dave Smith of BC Contractors Inc, phone #907-222-6256.)

USR 28 Place Armor Rock 2295-3826#	9,064.55	TON	PC Prime Contractor	23.76 215,345	34.34 311,264	51.74 469,000	0.00 0	0	109.84 995,609	LM
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<b>Construct Navigation Aid Base</b>	<b>1.00</b>	<b>EA</b>	<b>PC Prime Contractor</b>	<b>947.94 948</b>	<b>1,115.79 1,116</b>	<b>0.00 0</b>	<b>0.00 0</b>	<b>0</b>	<b>2,063.74 2,064</b>	
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USR Construct Navigation Aid	1.00	EA	PC Prime Contractor	947.94 948	1,115.79 1,116	0.00 0	0.00 0	0	2,063.74 2,064	N
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(Note: 7' x 7' x 2' Reinforced Concrete Base)

<b>Hydrographic Survey</b>	<b>1.00</b>	<b>EA</b>	<b>Survey sub</b>	<b>15,622.09 15,622</b>	<b>0.00 0</b>	<b>0.00 0</b>	<b>0.00 0</b>	<b>0</b>	<b>15,622.09 15,622</b>	
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RSM 011077001200 Breakwater Surveying, crew for building layout, 2 person crew	1.00	MO	Survey sub	15,622.09 15,622	0.00 0	0.00 0	0.00 0	0	15,622.09 15,622	N
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(Note: assume 3 months survey for project, divided 2 months surveying west revetment and 1 month surveying breakwater.)

Dillingham NED Bank Protection, FDR Alternative C1-20080425  
Dillingham NED Combined Plan Emergency Bank Protection Dillingham, Alaska - Feasibility Design Report

Estimated by CEPOA-EN-ES-CE  
Designed by CEPOA-EN-CW-HH  
Prepared by Lloyd Foster & Darrell Cullins

Preparation Date 4/30/2000  
Effective Date of Pricing 4/25/2008  
Estimated Construction Time 90 Days

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<b>Date</b>	<b>Author</b>	<b>Note</b>
CEPOA-EN-ES-CE		This CWE is for the alternatives produced in a report provide to cost engineering by Mary Azelton on March 30, 2007. The quantities were also updated to reflect updated design soulutions. No utilities installation or relocation was assumed for any alignment. The unit costs of rock for the rubble mound construction were based upon the recent price quotes from Dave Smith of BC Contractors, Inc on 25 April 2008 for rock at the Snake Lake Road quarry near Dillingham . This estimate is based on quantities produced March 30, 2007 prepared by POA-EN-CW-HH. This is an estimate of probable construction cost only and actual bids may vary from this estimate. The estimate excludes design fees, administrative costs, fittings and equipment, except that specifically stated in the estimate. Prices are based on current Davis Bacon labor rates and current prices for materials, freight and equipment. It is assumed that this project will receive competitive bids and the contract will have to comply with the Alaska Fish and Game requirements. It is further assumed that Notice to Proceed will be issued approximately March 2010; the contract will run for 180 calendar days; and the construction midpoint is Jul 2010.

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>ContractCost</u>	<u>Escalation</u>	<u>Contingency</u>	<u>SIOH</u>	<u>MiscOwner</u>	<u>ProjectCost</u>
<b>Project Cost Summary Report</b>			<b>5,991,284</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,991,284</b>
			<i>5,991,284.24</i>					<i>5,991,284.24</i>
<b>10 Alternative C1</b>	<b>1.00</b>	<b>EA</b>	<b>5,991,284</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,991,284</b>
<b>(Note: A 850 linear foot Rock Revetment extending from eastern terminus of the existing harbor sheet-pile bulkhead, wrapping around the existing dredged material containment berm and extending approximately 100 feet landward and parallel to the shoreline where it keys into the east side of the existing containment berm. The top level of the berm is set at +32 feet MLLW. A beach access ramp and disposal area drainage features are included.)</b>								
<b>10 5 MOBILIZATION/DEMOBILIZATION</b>	<b>1.00</b>	<b>LS</b>	<b>964,492</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>964,492</b>
			<i>151,507.88</i>					<i>151,507.88</i>
<b>10 15 Access/Staging Area</b>	<b>1.00</b>	<b>EA</b>	<b>151,508</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>151,508</b>
<b>(Note: Traffic Control, assume only signage would be required during transporting of materials from the local quarries to the project site.)</b>								
<b>(Note: Erosion Control, Assume 1600' silt fencing downslope of construction site)</b>								
<b>(Note: Non-woven geotextile filter fabric, placed between the excavated soil and the porous material of the access road.)</b>								
<b>(Note: Crushed Rock Road Surface Material delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Cost for Crushed Rock Road Surface Material is based on the quote for Porous Fill (free-draining) \$43.08/ton (\$77.54/cy using ton factor 1.8T/cy) delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Assume material will be dumped on access road and staging area and spread with D2or D4 dozer and compacted to finished grade.)</b>								
<b>(Note: Finished grading, Production has been adjusted to account for grading of small area.)</b>								
<b>10 10 Clearing &amp; Grubbing</b>	<b>1.00</b>	<b>EA</b>	<b>36,185</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36,185</b>
			<i>36,185.36</i>					<i>36,185.36</i>
<b>(Note: Clearing and grubbing is for the entire footprint of project site. Assume D2 or D4 Cat to push up organics and debris from area to be cleared. Stockpiled organic and debris material to be loaded with frontend wheeled loader into 10 cu yd truck for hauling off-site. Assume 2 mile round trip haul to area just north of City Shop building. Disposal material will be accepted by the City in this location for an area that they are filling according to Ramon Roque, City of Dillingham Public Works, phone #907-842-4598. No disposal fee, however a dozer will need to push and level out the disposal material as it is dumped.)</b>								
<b>10 30 Embankment Rehabilitation</b>	<b>1.00</b>	<b>EA</b>	<b>1,811,720</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,811,720</b>
			<i>1,811,719.85</i>					<i>1,811,719.85</i>

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>ContractCost</u>	<u>Escalation</u>	<u>Contingency</u>	<u>SIOH</u>	<u>MiscOwner</u>	<u>ProjectCost</u>
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(Note: Excavation is for the revetment toe protection. Assume a hydraulic excavator w/ 3.5 cu yd bucket to excavate and stockpile, and a wheeled frontend loader (988) with a 5 cu yd bucket to be load into 10 cu yd truck for hauling off-site. Assume 2 mile round trip haul to area just north of City Shop building. Disposal material will be accepted by the City in this location for an area that they are filling according to Ramon Roque, City of Dillingham Public Works, phone #907-842-4598. No disposal fee, however adozer will need to push and level out the disposal material as it is dumped.)

(Note: Non-woven geotextile filter fabric, placed between the excavated soil and the porous material of the maintenance access road embankment.)

(Note: Porous Material delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Quote for Porous Fill \$43.08/ton (\$77.54/cy using ton factor 1.8T/cy) delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Assume material will be dumped along maintenance access road embankment and spread with D2 or D4 dozer and compacted to finished grade.)

(Note: Finished grading, Production has been adjusted to account for grading of small area.)

(Note: Cut existing 24" culvert flush with embankment and fill remaining section with concrete.)

			2,963,483.35					2,963,483.35
<b>10 25 Revetment</b>	<b>1.00</b>	<b>EA</b>	<b>2,963,483</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,963,483</b>

(Note: Core Rock (12-260#) delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Quote for Core Rock \$43.38/ton delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Use Ton factor 1.8T/cy. Assume maintenance access road loop will be constructed so that the 10 cy end dump trucks will be able to dump at embankment. Place Core Rock with clamshell crawler & 3cy skip bucket- Production = (1cycle/1.5min) x (1.8T/cy) x (50min/hr) x(85% fill factor) = 153 Ton/hr.)

(Note: "B" Rock (260-2590#) delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Quote for "B" Rock \$47.96/ton delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Use Ton factor 1.8T/cy. Assume maintenance access road loop will be constructed so that the 10 cy end dump trucks will be able to dump at embankment. Place "B" Rock with clamshell crawler & 3 cy skip bucket- Production = (1cycle/1.8min) x (1.8T/cy) x (50min/hr) x (75%fill factor) = 112 Ton/hr.)

(Note: Armor Rock (2590-4315#) delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Quote for Armour Rock \$51.74/ton delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Use Ton factor 1.8T/cy. Assume maintenance access road loop will be constructed so that the 10 cy end dump trucks will be able to dump at embankment. Place Armor Rock with clamshell crawler & 3cy skip bucket- Production = (1cycle/2min) x (1.8T/cy) x (50min/hr) x (60%fill factor) = 81 Ton/hr.)

(Note: Weighted Toe Riprap (140-4500#) delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Quote for Riprap \$43.48/ton delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Use Ton factor 1.8T/cy. Assume maintenance access road loop will be constructed so that the 10 cy end dump trucks will be able to dump at embankment. Place Riprap with clamshell crawler & 3 cy skip bucket-Production = (1cycle/1.8min) x (1.8T/cy) x (50min/hr) x (75% fill factor) =112 Ton/hr.)

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>ContractCost</u>	<u>Escalation</u>	<u>Contingency</u>	<u>SIOH</u>	<u>MiscOwner</u>	<u>ProjectCost</u>
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**(Note: Ramp underlayer and Rock Drain Secondary Riprap (8-240#) delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Cost for Secondary Riprap is based on the quote for Core Rock \$43.08/Ton delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Use Ton factor 1.8T/cy. Assume maintenance access road loop will be constructed so that the 10 cy end dump trucks will be able to dump at ramp and rock drain location. Place Secondary Riprap with clamshell crawler & 3 cy skip bucket- Production = (1cycle/1.5min) x (1.8T/cy) x (50min/hr) x (85% fill factor) = 153 Ton/hr.)**

<b>Control Surveying</b>	<b>1.00</b>	<b>EA</b>	<i>63,895.56</i> <b>63,896</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<i>63,895.56</i> <b>63,896</b>
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<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectCost</u>	<u>SubCMU</u>	<u>CostToPrime</u>	<u>PrimeCMU</u>	<u>ContractCost</u>	<u>C/O</u>
<b>Contract Cost Summary Report</b>				<b>4,322,098</b>	<b>12,176</b>	<b>4,334,274</b>	<b>1,657,010</b>	<b>5,991,284</b>	
				<i>4,322,097.80</i>		<i>4,334,273.97</i>		<i>5,991,284.24</i>	
<b>10 Alternative C1</b>	<b>1.00</b>	<b>EA</b>		<b>4,322,098</b>	<b>12,176</b>	<b>4,334,274</b>	<b>1,657,010</b>	<b>5,991,284</b>	
<b>10 5 MOBILIZATION/DEMObILIZATION</b>	<b>1.00</b>	<b>LS</b>	<b>AA PRIME CONTRACTOR</b>	<b>697,742</b>	<b>0</b>	<b>697,742</b>	<b>266,750</b>	<b>964,492</b>	
				<i>697,742.50</i>		<i>697,742.50</i>		<i>964,492.25</i>	
<b>10 5 5 Mob, Demob &amp; Preparatory Work</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>697,742</b>	<b>0</b>	<b>697,742</b>	<b>266,750</b>	<b>964,492</b>	
				<i>109,605.32</i>		<i>109,605.32</i>		<i>151,507.88</i>	
<b>10 15 Access/Staging Area</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>109,605</b>	<b>0</b>	<b>109,605</b>	<b>41,903</b>	<b>151,508</b>	
				<i>2,134.00</i>		<i>2,134.00</i>		<i>2,949.84</i>	
<b>10 1510 Traffic Control</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>2,134</b>	<b>0</b>	<b>2,134</b>	<b>816</b>	<b>2,950</b>	
				<i>13,968.97</i>		<i>13,968.97</i>		<i>19,309.36</i>	
<b>10 1525 Erosion Control</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>13,969</b>	<b>0</b>	<b>13,969</b>	<b>5,340</b>	<b>19,309</b>	
				<i>16,560.56</i>		<i>16,560.56</i>		<i>22,891.73</i>	
<b>10 1540 Geotextile</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>16,561</b>	<b>0</b>	<b>16,561</b>	<b>6,331</b>	<b>22,892</b>	
				<i>58,477.14</i>		<i>58,477.14</i>		<i>80,833.19</i>	
<b>10 1550 Crushed Rock Road Surface</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>58,477</b>	<b>0</b>	<b>58,477</b>	<b>22,356</b>	<b>80,833</b>	
				<i>2,347.18</i>		<i>2,347.18</i>		<i>3,244.52</i>	
<b>10 1560 Finished Grading</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>2,347</b>	<b>0</b>	<b>2,347</b>	<b>897</b>	<b>3,245</b>	



<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectCost</u>	<u>SubCMU</u>	<u>CostToPrime</u>	<u>PrimeCMU</u>	<u>ContractCost</u>	<u>C/O</u>
10 1570 Fencing and Gates	1.00	EA	AA PRIME CONTRACTO R	16,117.47 <b>16,117</b>	0	16,117.47 <b>16,117</b>	6,162	22,279.24 <b>22,279</b>	
10 10 Clearing & Grubbing	1.00	EA	AA PRIME CONTRACTO R	26,177.57 <b>26,178</b>	0	26,177.57 <b>26,178</b>	10,008	36,185.36 <b>36,185</b>	
10 1010 Clearing & Grubbing	1.00	EA	AA PRIME CONTRACTO R	26,177.57 <b>26,178</b>	0	26,177.57 <b>26,178</b>	10,008	36,185.36 <b>36,185</b>	
10 30 Embankment Rehabilitation	1.00	EA	AA PRIME CONTRACTO R	1,310,652.25 <b>1,310,652</b>	0	1,310,652.25 <b>1,310,652</b>	501,068	1,811,719.85 <b>1,811,720</b>	
10 3035 Excavation & Hauling	1.00	EA	AA PRIME CONTRACTO R	98,545.02 <b>98,545</b>	0	98,545.02 <b>98,545</b>	37,674	136,219.17 <b>136,219</b>	
10 3040 Geotextile	1.00	EA	AA PRIME CONTRACTO R	58,479.48 <b>58,479</b>	0	58,479.48 <b>58,479</b>	22,357	80,836.42 <b>80,836</b>	
10 3050 Porous Material	9,300.00	CY	AA PRIME CONTRACTO R	121.40 <b>1,128,992</b>	0	121.40 <b>1,128,992</b>	431,618	167.81 <b>1,560,610</b>	
10 3060 Finished Grading	1.00	EA	AA PRIME CONTRACTO R	23,471.85 <b>23,472</b>	0	23,471.85 <b>23,472</b>	8,973	32,445.23 <b>32,445</b>	
10 3080 Plug Existing Culvert	1.00	EA	AA PRIME CONTRACTO R	1,164.36 <b>1,164</b>	0	1,164.36 <b>1,164</b>	445	1,609.50 <b>1,610</b>	

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectCost</u>	<u>SubCMU</u>	<u>CostToPrime</u>	<u>PrimeCMU</u>	<u>ContractCost</u>	<u>C/O</u>
<b>10 25 Revetment</b>	<b>1.00</b>	<b>EA</b>		<i>2,143,872.37</i> <b>2,143,872</b>	<b>0</b>	<i>2,143,872.37</i> <b>2,143,872</b>	<b>819,611</b>	<i>2,963,483.35</i> <b>2,963,483</b>	
<b>10 2545 Core Rock</b>	<b>1,100.00</b>	<b>CY</b>	<b>AA PRIME CONTRACTO R</b>	<i>151.46</i> <b>166,603</b>	<b>0</b>	<i>151.46</i> <b>166,603</b>	<b>63,693</b>	<i>209.36</i> <b>230,297</b>	
<b>10 2546 "B" Rock</b>	<b>3,100.00</b>	<b>CY</b>	<b>AA PRIME CONTRACTO R</b>	<i>164.72</i> <b>510,637</b>	<b>0</b>	<i>164.72</i> <b>510,637</b>	<b>195,218</b>	<i>227.70</i> <b>705,855</b>	
<b>10 2547 Armor Rock</b>	<b>5,600.00</b>	<b>CY</b>	<b>AA PRIME CONTRACTO R</b>	<i>201.87</i> <b>1,130,485</b>	<b>0</b>	<i>201.87</i> <b>1,130,485</b>	<b>432,189</b>	<i>279.05</i> <b>1,562,674</b>	
<b>10 2548 Riprap</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTO R</b>	<i>298,491.26</i> <b>298,491</b>	<b>0</b>	<i>298,491.26</i> <b>298,491</b>	<b>114,114</b>	<i>412,605.66</i> <b>412,606</b>	
<b>10 2549 Secondary Riprap</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTO R</b>	<i>37,656.16</i> <b>37,656</b>	<b>0</b>	<i>37,656.16</i> <b>37,656</b>	<b>14,396</b>	<i>52,052.26</i> <b>52,052</b>	
<b>Control Surveying</b>	<b>1.00</b>	<b>EA</b>	<b>Survey Sub</b>	<i>34,047.79</i> <b>34,048</b>	<b>12,176</b>	<i>46,223.96</i> <b>46,224</b>	<b>17,672</b>	<i>63,895.56</i> <b>63,896</b>	

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
<b>Project Direct Costs Report</b>				<b>788,031</b>	<b>1,176,157</b>	<b>2,157,885</b>	<b>0</b>	<b>200,025</b>	<b>4,322,098</b>	
				<i>788,030.60</i>	<i>1,176,157.13</i>	<i>2,157,885.06</i>	<i>0.00</i>		<i>4,322,097.80</i>	
<b>10 Alternative C1</b>	<b>1.00</b>	<b>EA</b>		<b>788,031</b>	<b>1,176,157</b>	<b>2,157,885</b>	<b>0</b>	<b>200,025</b>	<b>4,322,098</b>	
<p>(Note: A 850 linear foot Rock Revetment extending from eastern terminus of the existing harbor sheet-pile bulkhead, wrapping around the existing dredged material containment berm and extending approximately 100 feet landward and parallel to the shoreline where it keys into the east side of the existing containment berm. The top level of the berm is set at +32 feet MLLW. A beach access ramp and disposal area drainage features are included.)</p>										
<b>10 5 MOBILIZATION/DEMobilIZATION</b>	<b>1.00</b>	<b>LS</b>	<b>AA PRIME CONTRACTOR</b>	<b>192,265</b>	<b>428,127</b>	<b>50,850</b>	<b>0</b>	<b>26,500</b>	<b>697,742</b>	
				<i>192,265.20</i>	<i>428,127.30</i>	<i>50,850.00</i>	<i>0.00</i>		<i>697,742.50</i>	
<b>10 5 5 Mob, Demob &amp; Preparatory Work</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>192,265</b>	<b>428,127</b>	<b>50,850</b>	<b>0</b>	<b>26,500</b>	<b>697,742</b>	
USR Mob, Demob Site Crew assuming prime contractor is from Seattle area	15.00	EA	AA PRIME CONTRACTOR	<i>0.00</i> 0	<i>0.00</i> 0	<i>1,500.00</i> 22,500	<i>0.00</i> 0	1,500	<i>1,600.00</i> 24,000	LEM
USR Cleanup Project Site After Const Allowance	1.00	LS	AA PRIME CONTRACTOR	0	0	0	0	15,000	15,000	LEM
USR Mob Equipment Allowance	480.00	EA	AA PRIME CONTRACTOR	<i>0.00</i> 0	<i>42.00</i> 20,160	<i>0.00</i> 0	<i>0.00</i> 0	0	<i>42.00</i> 20,160	LEM
USR Demob equipment (Standby)	480.00	EA	AA PRIME CONTRACTOR	<i>0.00</i> 0	<i>35.00</i> 16,800	<i>0.00</i> 0	<i>0.00</i> 0	0	<i>35.00</i> 16,800	LEM
				<i>40.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>		<i>40.00</i>	

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
USR Travel Time for Personnel say, 12 management persons, 10 skilled and semi-skilled	352.00	EA	AA PRIME CONTRACTOR	14,080	0	0	0	0	14,080	LEM
				<i>46.00</i>	<i>25.00</i>	<i>0.00</i>	<i>0.00</i>		<i>71.00</i>	
USR Temp Building set-up and removal	400.00	EA	AA PRIME CONTRACTOR	18,400	10,000	0	0	0	28,400	LEM
				<i>40.00</i>	<i>30.00</i>	<i>0.00</i>	<i>0.00</i>		<i>70.00</i>	
USR Global Positioning System Will locate the dump scow to the desired location	160.00	EA	AA PRIME CONTRACTOR	6,400	4,800	0	0	0	11,200	LEM
				<i>0.00</i>	<i>0.00</i>	<i>135.00</i>	<i>0.00</i>		<i>135.00</i>	
USR MOB Worker Daily Subsistence (Per Man Day)	210.00	DAY	AA PRIME CONTRACTOR	0	0	28,350	0	0	28,350	LEM
USR Marine Insurance	1.00	LS	AA PRIME CONTRACTOR	0	0	0	0	10,000	10,000	LEM
				<i>245.42</i>	<i>602.19</i>	<i>0.00</i>	<i>0.00</i>		<i>847.60</i>	
USR Barge Mobilization/Demobilization To Dillingham	625.00	HR	AA PRIME CONTRACTOR	153,385	376,367	0	0	0	529,752	E
(Note: 2,500 Miles Each Way from Seattle, WA @ 8 mph assuming 1 round trips, 2500*2/10 = 625 Hours)										
				<i>26,405.25</i>	<i>5,290.37</i>	<i>77,909.70</i>	<i>0.00</i>		<i>109,605.32</i>	
<b>10 15 Access/Staging Area</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>26,405</b>	<b>5,290</b>	<b>77,910</b>	<b>0</b>	<b>0</b>	<b>109,605</b>	
				<i>0.00</i>	<i>0.00</i>	<i>2,134.00</i>	<i>0.00</i>		<i>2,134.00</i>	
<b>10 1510 Traffic Control</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>0</b>	<b>0</b>	<b>2,134</b>	<b>0</b>	<b>0</b>	<b>2,134</b>	

Description	Quantity	UOM	Contractor	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
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(Note: Traffic Control, assume only signage would be required during transporting of materials from the local quarries to the project site.)

CIV TYPE 2 w/ Two Striped Boards 24"Long A-Frame, Traffic Barrier	6.00	EA	AA PRIME CONTRACTOR	0.00 0	0.00 0	59.00 354	0.00 0	0	59.00 354	LEM
CIV Blinking Light Attachment Traffic Barriers	10.00	EA	AA PRIME CONTRACTOR	0.00 0	0.00 0	26.00 260	0.00 0	0	26.00 260	LEM
CIV Safety Barrels 36" Tall Traffic Barriers	10.00	EA	AA PRIME CONTRACTOR	0.00 0	0.00 0	40.00 400	0.00 0	0	40.00 400	LEM
CIV 28" high Traffic Cone	20.00	EA	AA PRIME CONTRACTOR	0.00 0	0.00 0	12.00 240	0.00 0	0	12.00 240	LEM
CIV Large Warning Sign Reflective Sheeting w/ stand	4.00	EA	AA PRIME CONTRACTOR	0.00 0	0.00 0	220.00 880	0.00 0	0	220.00 880	LEM
<b>10 1525 Erosion Control</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACT OR</b>	<b>11,840.97 11,841</b>	<b>0.00 0</b>	<b>2,128.00 2,128</b>	<b>0.00 0</b>	<b>0</b>	<b>13,968.97 13,969</b>	

(Note: Erosion Control, Assume 1600' silt fencing downslope of construction site)

USR 022661120 Erosion control, w/7.5' posts, silt fence, 3' high, polypropylene	1,600.00	LF	AA PRIME CONTRACTOR	3.70 5,920	0.00 0	1.33 2,128	0.00 0	0	5.03 8,048	OM
(Note: 1600' lg downslope of construction)				3.70	0.00	0.00	0.00		3.70	

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
USR 022661120 Remove silt fence polypropylene	1,600.00	LF	AA PRIME CONTRACTOR	5,920	0	0	0	0	5,920	OM
<b>10 1540</b> <b>Geotextile</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>5,263</b>	<b>1,313</b>	<b>9,984</b>	<b>0</b>	<b>0</b>	<b>16,561</b>	
<b>(Note: Non-woven geotextile filter fabric, placed between the excavated soil and the porous material of the access road.)</b>										
USR 022502140 Geotextile fabric, non-woven polypropylene	3,200.00	SY	AA PRIME CONTRACTOR	5,263	1,313	9,984	0	0	16,561	M
<b>10 1550</b> <b>Crushed Rock Road Surface</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>1,931</b>	<b>2,014</b>	<b>54,532</b>	<b>0</b>	<b>0</b>	<b>58,477</b>	
<b>(Note: Crushed Rock Road Surface Material delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Cost for Crushed Rock Road Surface Material is based on the quote for Porous Fill (free-draining) \$43.08/ton (\$77.54/cy using ton factor 1.8T/cy) delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Assume material will be dumped on access road and staging area and spread with D2or D4 dozer and compacted to finished grade.)</b>										
USR Delivered Crushed Rock for Road Surface (AKDOT D1 Spec Material)	700.00	CY	AA PRIME CONTRACTOR	0	0	54,278	0	0	54,278	LEM
AF 022400030 Fill, spread borrow w/dozer	700.00	CY	AA PRIME CONTRACTOR	769	1,132	0	0	0	1,901	N
MIL 022205900 Compaction of backfill, structural, SP roller, 6" lift	700.00	CY	AA PRIME CONTRACTOR	615	645	0	0	0	1,260	N

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
USR 022209010 Compaction, water, truck, 3000 gal, 6 mile haul	700.00	CY	AA PRIME CONTRACTOR	0.78 548	0.34 237	0.36 254	0.00 0	0	1.48 1,039	M
<b>10 1560 Finished Grading</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACT OR</b>	<b>1,618.41 1,618</b>	<b>728.77 729</b>	<b>0.00 0</b>	<b>0.00 0</b>	<b>0</b>	<b>2,347.18 2,347</b>	
<b>(Note: Finished grading, Production has been adjusted to account for grading of small area.)</b>										
USR 022264000 Semi-grade, 2 passes w/grader	700.00	SY	AA PRIME CONTRACTOR	2.31 1,618	1.04 729	0.00 0	0.00 0	0	3.35 2,347	O
<b>10 1570 Fencing and Gates</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACT OR</b>	<b>5,751.39 5,751</b>	<b>1,234.19 1,234</b>	<b>9,131.88 9,132</b>	<b>0.00 0</b>	<b>0</b>	<b>16,117.47 16,117</b>	
USR 028316560 Fence, CL, 6' H, galv line post @ 10' OC, 9g mesh, 1-5/8" top rail	400.00	LF	AA PRIME CONTRACTOR	11.84 4,735	2.24 896	17.52 7,008	0.00 0	0	31.60 12,639	OM
USR 028356670 Fence, CL, 6' H, indl, end gate post, steel, 3" OD, set in conc	4.00	EA	AA PRIME CONTRACTOR	28.56 114	5.41 22	97.84 391	0.00 0	0	131.80 527	OM
USR 028357275 Fence, CL, 6' high, dbl, 20'W, indl, gates, swing, galv, w/o barb wire	2.00	EA	AA PRIME CONTRACTOR	451.32 903	158.10 316	866.26 1,733	0.00 0	0	1,475.67 2,951	M
				17,280.45	8,897.12	0.00	0.00		26,177.57	

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
<b>10 10 Clearing &amp; Grubbing</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>17,280</b>	<b>8,897</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26,178</b>	
				<i>17,280.45</i>	<i>8,897.12</i>	<i>0.00</i>	<i>0.00</i>		<i>26,177.57</i>	
<b>10 1010 Clearing &amp; Grubbing</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>17,280</b>	<b>8,897</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26,178</b>	

(Note: Clearing and grubbing is for the entire footprint of project site. Assume D2 or D4 Cat to push up organics and debris from area to be cleared. Stockpiled organic and debris material to be loaded with frontend wheeled loader into 10 cu yd truck for hauling off-site. Assume 2 mile round trip haul to area just north of City Shop building. Disposal material will be accepted by the City in this location for an area that they are filling according to Ramon Roque, City of Dillingham Public Works, phone #907-842-4598. No disposal fee, however a dozer will need to push and level out the disposal material as it is dumped.)

RSM 022302000550 Selective clearing, brush, medium clearing, with dozer and brush rake, excludes removal offsite	2.00	ACR	AA PRIME CONTRACTOR	<i>115.60</i> 231	<i>129.38</i> 259	<i>0.00</i> 0	<i>0.00</i> 0	0	<i>244.99</i> 490	N
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(Note: Total construction footprint is 1.6 acres per Oct 2007 report)

MIL 021102000 Clearing, machine load spoils, 2 mi haul to dump	1,590.00	CY	AA PRIME CONTRACTOR	<i>8.75</i> 13,906	<i>2.63</i> 4,175	<i>0.00</i> 0	<i>0.00</i> 0	0	<i>11.37</i> 18,081	N
AF 022400030 Fill, spread disposal material w/dozer	1,590.00	CY	AA PRIME CONTRACTOR	<i>1.10</i> 1,746	<i>1.62</i> 2,572	<i>0.00</i> 0	<i>0.00</i> 0	0	<i>2.72</i> 4,318	N
				<i>0.88</i>	<i>1.19</i>	<i>0.00</i>	<i>0.00</i>		<i>2.07</i>	



<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
USR 022320270 Load, wheeled loader, 5 CY, wet material	1,590.00	CY	AA PRIME CONTRACTOR	1,397	1,892	0	0	0	3,289	OLE
				<i>182,189.75</i>	<i>205,938.19</i>	<i>869,049.31</i>	<i>0.00</i>		<i>1,310,652.25</i>	
<b>10 30 Embankment Rehabilitation</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>182,190</b>	<b>205,938</b>	<b>869,049</b>	<b>0</b>	<b>53,475</b>	<b>1,310,652</b>	
				<i>45,261.02</i>	<i>53,284.00</i>	<i>0.00</i>	<i>0.00</i>		<i>98,545.02</i>	
<b>10 3035 Excavation &amp; Hauling</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>45,261</b>	<b>53,284</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>98,545</b>	
<p><b>(Note: Excavation is for the revetment toe protection. Assume a hydraulic excavator w/ 3.5 cu yd bucket to excavate and stockpile, and a wheeled frontend loader (988) with a 5 cu yd bucket to be load into 10 cu yd truck for hauling off-site. Assume 2 mile round trip haul to area just north of City Shop building. Disposal material will be accepted by the City in this location for an area that they are filling according to Ramon Roque, City of Dillingham Public Works, phone #907-842-4598. No disposal fee, however adozer will need to push and level out the disposal material as it is dumped.)</b></p>										
CIV 022320165 Excavate, hydr excavator, 3.5 CY, wet material	7,700.00	CY	AA PRIME CONTRACTOR	<i>1.13</i> 8,691	<i>1.67</i> 12,859	<i>0.00</i> 0	<i>0.00</i> 0		<i>2.80</i> 21,550	OLE
USR 022320270 Load, wheeled loader, 5 CY, wet material	7,700.00	CY	AA PRIME CONTRACTOR	<i>0.88</i> 6,764	<i>1.19</i> 9,163	<i>0.00</i> 0	<i>0.00</i> 0		<i>2.07</i> 15,927	OLE
AF 022400030 Fill, spread disposal material w/dozer	7,700.00	CY	AA PRIME CONTRACTOR	<i>1.10</i> 8,455	<i>1.64</i> 12,628	<i>0.00</i> 0	<i>0.00</i> 0		<i>2.74</i> 21,083	OLE
AF 022340245 Hauling, hwy haulers, 10 CY, 2 miround trip @ 20 MPH (2.6 cyc/hr)	7,700.00	CY	AA PRIME CONTRACTOR	<i>2.77</i> 21,350	<i>2.42</i> 18,634	<i>0.00</i> 0	<i>0.00</i> 0		<i>5.19</i> 39,984	OLE

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
<b>10 3040</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME</b>	<i>18,585.86</i> <b>18,586</b>	<i>4,637.62</i> <b>4,638</b>	<i>35,256.00</i> <b>35,256</b>	<i>0.00</i> <b>0</b>	<b>0</b>	<i>58,479.48</i> <b>58,479</b>	
<b>Geotextile</b>			<b>CONTRACTOR</b>							
			<b>OR</b>							
<b>(Note: Non-woven geotextile filter fabric, placed between the excavated soil and the porous material of the maintenance access road embankment.)</b>										
USR 022502140	11,300.00	SY	AA PRIME	<i>1.64</i> 18,586	<i>0.41</i> 4,638	<i>3.12</i> 35,256	<i>0.00</i> 0	0	<i>5.18</i> 58,479	M
Geotextile fabric, non-woven polypropylene			CONTRACTOR							
<b>10 3050 Porous</b>	<b>9,300.00</b>	<b>CY</b>	<b>AA PRIME</b>	<i>10.94</i> <b>101,709</b>	<i>15.12</i> <b>140,639</b>	<i>89.59</i> <b>833,168</b>	<i>0.00</i> <b>0</b>	<b>53,475</b>	<i>121.40</i> <b>1,128,992</b>	
<b>Material</b>			<b>CONTRACTOR</b>							
			<b>OR</b>							
<b>(Note: Porous Material delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Quote for Porous Fill \$43.08/ton (\$77.54/cy using ton factor 1.8T/cy) delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Assume material will be dumped along maintenance access road embankment and spread with D2 or D4 dozer and compacted to finished grade.)</b>										
USR Delivered	10,695.00	CY	AA PRIME	<i>0.00</i> 0	<i>0.00</i> 0	<i>77.54</i> 829,290	<i>0.00</i> 0	53,475	<i>82.54</i> 882,765	LEM
Porous Material			CONTRACTOR							
<b>(Note: 9300 neat CY + 15% = 10695 CY)</b>										
AF 10 3050	10,695.00	CY	AA PRIME	<i>9.51</i> 101,709	<i>13.15</i> 140,639	<i>0.36</i> 3,878	<i>0.00</i> 0	0	<i>23.02</i> 246,226	LE
Porous Material			CONTRACTOR							
<b>10 3060</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME</b>	<i>16,184.14</i> <b>16,184</b>	<i>7,287.71</i> <b>7,288</b>	<i>0.00</i> <b>0</b>	<i>0.00</i> <b>0</b>	<b>0</b>	<i>23,471.85</i> <b>23,472</b>	
<b>Finished</b>			<b>CONTRACTOR</b>							
<b>Grading</b>			<b>OR</b>							
<b>(Note: Finished grading, Production has been adjusted to account for grading of small area.)</b>										
USR 022264000	7,000.00	SY	AA PRIME	<i>2.31</i> 16,184	<i>1.04</i> 7,288	<i>0.00</i> 0	<i>0.00</i> 0	0	<i>3.35</i> 23,472	O
Semi-grade, 2 passes w/grader			CONTRACTOR							

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
<b>10 3080 Plug Existing Culvert</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACTOR</b>	<b>450</b>	<b>90</b>	<b>625</b>	<b>0</b>	<b>0</b>	<b>1,164</b>	
<b>(Note: Cut existing 24" culvert flush with embankment and fill remaining section with concrete.)</b>										
RSM 033107002500 Structural concrete, placing, spread footing, with crane and bucket, under 1 C.Y., includes vibrating, excludes material	2.50	CY	AA PRIME CONTRACTOR	223	62	625	0	0	910	M
RSM 022202402960 Minor site demolition, pipe, sewer/water, 24" diameter, remove, excludes excavation, hauling	20.00	LF	AA PRIME CONTRACTOR	227	28	0	0	0	255	N
<b>10 25 Revetment</b>	<b>1.00</b>	<b>EA</b>		<b>342,283</b>	<b>527,351</b>	<b>1,155,088</b>	<b>0</b>	<b>119,150</b>	<b>2,143,872</b>	
<b>10 2545 Core Rock</b>	<b>1,100.00</b>	<b>CY</b>	<b>AA PRIME CONTRACTOR</b>	<b>21,777</b>	<b>33,552</b>	<b>99,774</b>	<b>0</b>	<b>11,500</b>	<b>166,603</b>	

**(Note: Core Rock (12-260#) delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Quote for Core Rock \$43.38/ton delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Use Ton factor 1.8T/cy. Assume maintenance access road loop will be constructed so that the 10 cy end dump trucks will be able to dump at embankment. Place Core Rock with clamshell crawler & 3cy skip bucket-  
 Production = (1cycle/1.5min) x (1.8T/cy) x (50min/hr) x(85% fill factor) = 153 Ton/hr.)**

0.00 0.00 43.38 0.00 48.38

Description	Quantity	UOM	Contractor	DirectLabor	DirectEQ	DirectMatl	DirectSubBid	DirectUserCost	DirectCost	C/O
USR Delivered Core Rock (12-260#)	2,300.00	TON	AA PRIME CONTRACTOR	0	0	99,774	0	11,500	111,274	LEM
(Note: 1100 CY x 1.8T/CY = 1980 T + 15% fill factor = 2277bulk tons, say 2300 T)										
				9.47	14.59	0.00	0.00		24.06	
USR 022700100 Place Core Rock with clamshell & 3 CY skip bucket	2,300.00	TON	AA PRIME CONTRACTOR	21,777	33,552	0	0	0	55,329	LM
				23.48	36.18	95.15	0.00		164.72	
<b>10 2546 "B" Rock</b>	<b>3,100.00</b>	<b>CY</b>	<b>AA PRIME CONTRACTOR</b>	<b>72,788</b>	<b>112,144</b>	<b>294,954</b>	<b>0</b>	<b>30,750</b>	<b>510,637</b>	

(Note: "B" Rock (260-2590#) delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Quote for "B" Rock \$47.96/ton delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Use Ton factor 1.8T/cy. Assume maintenance access road loop will be constructed so that the 10 cy end dump trucks will be able to dump at embankment. Place "B" Rock with clamshell crawler & 3 cy skip bucket- Production = (1cycle/1.8min) x (1.8T/cy) x (50min/hr) x (75%fill factor) = 112 Ton/hr.)

USR Delivered "B" Rock (260-2590#)	6,150.00	TON	AA PRIME CONTRACTOR	0	0	294,954	0	30,750	325,704	LEM
(Note: 3100 neat CY x 1.8 T/CY = 5580 CY + 10% fill factor =6138T, say 6150T)										
				11.84	18.23	0.00	0.00		30.07	
USR 022700100 Place "B" Rock with clamshell & 3 CY skip bucket	6,150.00	TON	AA PRIME CONTRACTOR	72,788	112,144	0	0	0	184,933	LM
				35.19	54.22	102.56	0.00		201.87	
<b>10 2547 Armor Rock</b>	<b>5,600.00</b>	<b>CY</b>	<b>AA PRIME CONTRACTOR</b>	<b>197,062</b>	<b>303,609</b>	<b>574,314</b>	<b>0</b>	<b>55,500</b>	<b>1,130,485</b>	

(Note: Armor Rock (2590-4315#) delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Quote for Armour Rock \$51.74/ton delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Use Ton factor 1.8T/cy. Assume maintenance access road loop will be constructed so that the 10 cy end dump trucks will be able to dump at embankment. Place Armor Rock with clamshell crawler & 3cy skip bucket- Production = (1cycle/2min) x (1.8T/cy) x (50min/hr) x (60%fill factor) = 81 Ton/hr.)

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
USR Delivered Armor Rock (2590-4315#)	11,100.00	TON	AA PRIME CONTRACTOR	0.00 0	0.00 0	51.74 574,314	0.00 0	55,500	56.74 629,814	LEM
(Note: 5600 neat CY x 1.8T/CY = 10080 T + 10% fill factor = 11088 T, say 11100 T)										
USR 022700100 Place Armor Rock with clamshell & 3 CY skip bucket	11,100.00	TON	AA PRIME CONTRACTOR	17.75 197,062	27.35 303,609	0.00 0	0.00 0	0	45.11 500,671	LM
<b>10 2548 Riprap</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACT OR</b>	<b>44,975.00 44,975</b>	<b>69,292.26 69,292</b>	<b>165,224.00 165,224</b>	<b>0.00 0</b>	<b>19,000</b>	<b>298,491.26 298,491</b>	
<b>(Note: Weighted Toe Riprap (140-4500#) delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Quote for Riprap \$43.48/ton delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Use Ton factor 1.8T/cy. Assume maintenance access road loop will be constructed so that the 10 cy end dump trucks will be able to dump at embankment. Place Riprap with clamshell crawler &amp; 3 cy skip bucket-Production = (1cycle/1.8min) x (1.8T/cy) x (50min/hr) x (75% fill factor) =112 Ton/hr.)</b>										
USR Delivered Riprap (140- 4500#)	3,800.00	TON	AA PRIME CONTRACTOR	0.00 0	0.00 0	43.48 165,224	0.00 0	19,000	48.48 184,224	LEM
(Note: 12.25' wide x 5' high x 850' long = 52062.5 CF = 1928 CY x 1.8T/CY = 3470T + 10% fill factor = 3817 T, say 3800 T)										
USR 022700100 Place Riprap with clamshell & 3 CY skip bucket	3,800.00	TON	AA PRIME CONTRACTOR	11.84 44,975	18.23 69,292	0.00 0	0.00 0	0	30.07 114,267	LM
<b>10 2549 Secondary Riprap</b>	<b>1.00</b>	<b>EA</b>	<b>AA PRIME CONTRACT OR</b>	<b>5,681.05 5,681</b>	<b>8,752.71 8,753</b>	<b>20,822.40 20,822</b>	<b>0.00 0</b>	<b>2,400</b>	<b>37,656.16 37,656</b>	

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>Contractor</u>	<u>DirectLabor</u>	<u>DirectEQ</u>	<u>DirectMatl</u>	<u>DirectSubBid</u>	<u>DirectUserCost</u>	<u>DirectCost</u>	<u>C/O</u>
<p><b>(Note: Ramp underlayer and Rock Drain Secondary Riprap (8-240#) delivered to the Dillingham Small Boat Harbor from the Snake Lake Quarry. Cost for Secondary Riprap is based on the quote for Core Rock \$43.08/Ton delivered from Dave Smith of BC Contractors, Inc, phone #907-222-6256. Use Ton factor 1.8T/cy. Assume maintenance access road loop will be constructed so that the 10 cy end dump trucks will be able to dump at ramp and rock drain location. Place Secondary Riprap with clamshell crawler &amp; 3 cy skip bucket- Production = (1cycle/1.5min) x (1.8T/cy) x (50min/hr) x (85% fill factor) = 153 Ton/hr.)</b></p>										
USR Delivered Secondary Riprap (8-240#)	480.00	TON	AA PRIME CONTRACTOR	0.00 0	0.00 0	43.38 20,822	0.00 0	2,400	48.38 23,222	LEM
USR 022700100 Place Secondary Riprap with clamshell & 3 CY skip bucket	480.00	TON	AA PRIME CONTRACTOR	11.84 5,681	18.23 8,753	0.00 0	0.00 0	0	30.07 14,434	LM
<b>Control Surveying</b>	<b>1.00</b>	<b>EA</b>	<b>Survey Sub</b>	27,606.53 <b>27,607</b>	553.60 <b>554</b>	4,987.65 <b>4,988</b>	0.00 <b>0</b>	<b>900</b>	34,047.79 <b>34,048</b>	
RSM 011077000100 Conventional Surveying, topographical, maximum w/ 2- person crew  (Note: 2 months , say 320 hrs)	320.00	HR	Survey Sub	86.27 27,607	1.73 554	15.59 4,988	0.00 0	0	103.59 33,148	N
USR Perdiem, 2 Man Survey Crew	6.00	DAY	Survey Sub	0.00 0	0.00 0	0.00 0	0.00 0	900	150.00 900	N