

Perimeter Drainage Ditch Spoils Pile G - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$50,528</b>
A. Excavation of Sediments	\$1,953
Volume of Sediments (cubic yards)	196
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,307
Number of Confirmation Samples =	2
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$242
Pesticides                      8080	\$210
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$44,161
Volume of Soil--25% swell factor (cubic yards)	245
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$3,107
Volume of Soil--25% swell factor (cubic yards)	245
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS            \$50,528</b>
	<b>15% BID CONTINGENCY                \$7,579</b>
	<b>15% SCOPE CONTINGENCY            \$7,579</b>
	<b>5% PERMITTING COSTS               \$2,526</b>
	<b>TOTAL CAPITAL COSTS                \$68,213</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile G - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$6,989</b>
A. Excavation of Sediments	\$1,953
Volume of Sediments (cubic yards)	196
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,307
Number of Confirmation Samples =	2
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$242
Pesticides                      8080	\$210
C. Onbase Disposal	\$623
Volume of Soil--25% swell factor (cubic yards)	245
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
D. Grading of Excavation Site	\$3,107
Volume of Soil--25% swell factor (cubic yards)	245
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS \$6,989</b>
	<b>15% BID CONTINGENCY \$1,048</b>
	<b>15% SCOPE CONTINGENCY \$1,048</b>
	<b>5% PERMITTING COSTS \$349</b>
	<b>TOTAL CAPITAL COSTS \$9,436</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile I - Excavation with Offsite Disposal

**Capital Costs**

1. Pre-design investigation borings		<b>\$180</b>
Assume number of borings =	4	
Assume average depth (linear feet) =	3	
Cost per linear foot =	\$15	
2. Excavation with Offbase Disposal		<b>\$30,340</b>
A. Excavation of Sediments		\$1,749
Volume of Sediments (cubic yards)	108	
Excavation Costs per Cubic Yard	\$2.31	
Mobilization/Demobilization of Equipment		\$1,500
B. Post Excavation Confirmation Sampling Program		\$1,409
Number of Confirmation Samples	2	
Number of QA Samples	1	
Sampling Cost per Sample Location (labor and equipment)	\$208	
Data Validation Labor per Sample	\$55	
Sample Analysis (per sample, includes 15% for CLP)	\$276	
Total Metals 6010/7000		\$240
C. Offbase Disposal to a Class II Hazardous Waste Landfill		\$24,468
Volume of Soil--25% swell factor (cubic yards)	135	
Transportation and Disposal Costs per Cubic Yard	\$179	
Waste Profile Fee (One time cost)		\$300
D. Grading of Excavation Site		\$2,713
Volume of Soil--25% swell factor (cubic yards)	135	
Grading Cost per Cubic Yard	\$3.58	
Mobilization/Demobilization of Equipment		\$2,230
	SUBTOTAL CAPITAL COSTS	<b>\$30,520</b>
	15% BID CONTINGENCY	<b>\$4,578</b>
	15% SCOPE CONTINGENCY	<b>\$4,578</b>
	5% PERMITTING COSTS	<b>\$1,526</b>
	TOTAL CAPITAL COSTS	<b>\$41,202</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile I - Excavation with Onsite Disposal

**Capital Costs**

1. Pre-design investigation borings		<b>\$180</b>
Assume number of borings =	4	
Assume average depth (linear feet) =	3	
Cost per linear foot =		\$15
2. Excavation with Onbase Disposal		<b>\$6,349</b>
A. Excavation of Sediments		\$1,749
Volume of Sediments (cubic yards)	108	
Excavation Costs per Cubic Yard		\$2.31
Mobilization/Demobilization of Equipment		\$1,500
B. Post Excavation Confirmation Sampling Program		\$1,409
Number of Confirmation Samples	2	
Number of QA Samples	1	
Sampling Cost per Sample Location (labor and equipment)		\$208
Data Validation Labor per Sample		\$55
Sample Analysis (per sample, includes 15% for CLP)		\$276
Total Metals           6010/7000		\$240
C. Onbase Disposal		\$478
Volume of Soil--25% swell factor (cubic yards)	135	
Transportation and Disposal Costs per Cubic Yard		\$1.32
Mobilization/Demobilization of Equipment		\$300
D. Grading of Excavation Site		\$2,713
Volume of Soil--25% swell factor (cubic yards)	135	
Grading Cost per Cubic Yard		\$3.58
Mobilization/Demobilization of Equipment		\$2,230
		<b>SUBTOTAL CAPITAL COST: \$6,529</b>
		<b>15% BID CONTINGENCY \$979</b>
		<b>15% SCOPE CONTINGENCY \$979</b>
		<b>5% PERMITTING COSTS \$326</b>
		<b>TOTAL CAPITAL COSTS \$8,814</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile J - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$12,530</b>
A. Excavation of Sediments	\$1,571
Volume of Sediments (cubic yards)	31
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,307
Number of Confirmation Samples =	2
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$242
Pesticides                      8080	\$210
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$7,282
Volume of Soil--25% swell factor (cubic yards)	39
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$2,370
Volume of Soil--25% swell factor (cubic yards)	39
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS            \$12,530</b>
	<b>15% BID CONTINGENCY                \$1,879</b>
	<b>15% SCOPE CONTINGENCY             \$1,879</b>
	<b>5% PERMITTING COSTS                \$626</b>
	<b>TOTAL CAPITAL COSTS                \$16,915</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile J - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$5,599</b>
A. Excavation of Sediments	\$1,571
Volume of Sediments (cubic yards)	31
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,307
Number of Confirmation Samples =	2
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$242
Pesticides                      8080	\$210
C. Onbase Disposal	\$351
Volume of Soil--25% swell factor (cubic yards)	39
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
D. Grading of Excavation Site	\$2,370
Volume of Soil--25% swell factor (cubic yards)	39
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS      \$5,599</b>
	<b>15% BID CONTINGENCY      \$840</b>
	<b>15% SCOPE CONTINGENCY      \$840</b>
	<b>5% PERMITTING COSTS      \$280</b>
	<b>TOTAL CAPITAL COSTS      \$7,559</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile K - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$24,335</b>
A. Excavation of Sediments	\$1,690
Volume of Sediments (cubic yards)	82
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,307
Number of Confirmation Samples =	2
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$242
Pesticides                      8080	\$210
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$18,740
Volume of Soil--25% swell factor (cubic yards)	103
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$2,599
Volume of Soil--25% swell factor (cubic yards)	103
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS            \$24,335</b>
	<b>15% BID CONTINGENCY                \$3,650</b>
	<b>15% SCOPE CONTINGENCY             \$3,650</b>
	<b>5% PERMITTING COSTS                \$1,217</b>
	<b>TOTAL CAPITAL COSTS                \$32,852</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile K - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$6,031</b>
A. Excavation of Sediments	\$1,690
Volume of Sediments (cubic yards)	82
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,307
Number of Confirmation Samples =	2
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$242
Pesticides                      8080	\$210
C. Onbase Disposal	\$436
Volume of Soil--25% swell factor (cubic yards)	103
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
D. Grading of Excavation Site	\$2,599
Volume of Soil--25% swell factor (cubic yards)	103
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS      \$6,031</b>
	<b>15% BID CONTINGENCY          \$905</b>
	<b>15% SCOPE CONTINGENCY        \$905</b>
	<b>5% PERMITTING COSTS          \$302</b>
	<b>TOTAL CAPITAL COSTS          \$8,142</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile L - Excavation with Offsite Disposal

**Capital Costs**

1. Pre-design investigation borings		<b>\$180</b>
Assume number of borings =		4
Assume average depth (linear feet) =		3
Cost per linear foot =		\$15
2. Excavation with Offbase Disposal		<b>\$7,087</b>
A. Excavation of Sediments		\$1,509
Volume of Sediments (cubic yards)		4
Excavation Costs per Cubic Yard		\$2.31
Mobilization/Demobilization of Equipment		\$1,500
B. Post Excavation Confirmation Sampling Program		\$2,135
Number of Confirmation Samples		2
Number of QA Samples		1
Sampling Cost per Sample Location (labor and equipment)		\$208
Data Validation Labor per Sample		\$55
Sample Analysis (per sample, includes 15% for CLP)		\$518
Total Metals 6010/7000		\$240
Pesticides 8080		\$210
C. Offbase Disposal to a Class II Hazardous Waste Landfill		\$1,195
Volume of Soil--25% swell factor (cubic yards)		5
Transportation and Disposal Costs per Cubic Yard		\$179
Waste Profile Fee (One time cost)		\$300
D. Grading of Excavation Site		\$2,248
Volume of Soil--25% swell factor (cubic yards)		5
Grading Cost per Cubic Yard		\$3.58
Mobilization/Demobilization of Equipment		\$2,230
	SUBTOTAL CAPITAL COSTS	<b>\$7,267</b>
	15% BID CONTINGENCY	<b>\$1,090</b>
	15% SCOPE CONTINGENCY	<b>\$1,090</b>
	5% PERMITTING COSTS	<b>\$363</b>
	<b>TOTAL CAPITAL COSTS</b>	<b>\$9,811</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile L - Excavation with Onsite Disposal

**Capital Costs**

1. Pre-design investigation borings			<b>\$180</b>
Assume number of borings =		4	
Assume average depth (linear feet) =		3	
Cost per linear foot =		\$15	
2. Excavation with Onbase Disposal			<b>\$6,199</b>
A. Excavation of Sediments			\$1,509
Volume of Sediments (cubic yards)		4	
Excavation Costs per Cubic Yard		\$2.31	
Mobilization/Demobilization of Equipment		\$1,500	
B. Post Excavation Confirmation Sampling Program			\$2,135
Number of Confirmation Samples		2	
Number of QA Samples		1	
Sampling Cost per Sample Location (labor and equipment)		\$208	
Data Validation Labor per Sample		\$55	
Sample Analysis (per sample, includes 15% for CLP)		\$518	
Total Metals	6010/7000	\$240	
Pesticides	8080	\$210	
C. Onbase Disposal			\$307
Volume of Soil--25% swell factor (cubic yards)		5	
Transportation and Disposal Costs per Cubic Yard		\$1.32	
Mobilization/Demobilization of Equipment		\$300	
D. Grading of Excavation Site			\$2,248
Volume of Soil--25% swell factor (cubic yards)		5	
Grading Cost per Cubic Yard		\$3.58	
Mobilization/Demobilization of Equipment		\$2,230	
		<b>SUBTOTAL CAPITAL COSTS</b>	<b>\$6,379</b>
		15% BID CONTINGENCY	<b>\$957</b>
		15% SCOPE CONTINGENCY	<b>\$957</b>
		5% PERMITTING COSTS	<b>\$319</b>
		<b>TOTAL CAPITAL COSTS</b>	<b>\$8,611</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile M - Excavation with Offsite Disposal

**Capital Costs**

1. Pre-design investigation borings		<b>\$180</b>
Assume number of borings =	4	
Assume average depth (linear feet) =	3	
Cost per linear foot =	\$15	
2. Excavation with Offbase Disposal		<b>\$93,688</b>
A. Excavation of Sediments		\$2,383
Volume of Sediments (cubic yards)	383	
Excavation Costs per Cubic Yard	\$2.31	
Mobilization/Demobilization of Equipment	\$1,500	
B. Post Excavation Confirmation Sampling Program		\$1,307
Number of Confirmation Samples	2	
Number of QA Samples	1	
Sampling Cost per Sample Location (labor and equipment)	\$208	
Data Validation Labor per Sample	\$55	
Sample Analysis (per sample, includes 15% for CLP)	\$242	
Pesticides	8080	\$210
C. Offbase Disposal to a Class II Hazardous Waste Landfill		\$86,053
Volume of Soil--25% swell factor (cubic yards)	479	
Transportation and Disposal Costs per Cubic Yard	\$179	
Waste Profile Fee (One time cost)	\$300	
D. Grading of Excavation Site		\$3,945
Volume of Soil--25% swell factor (cubic yards)	479	
Grading Cost per Cubic Yard	\$3.58	
Mobilization/Demobilization of Equipment	\$2,230	
	SUBTOTAL CAPITAL COSTS	<b>\$93,868</b>
	15% BID CONTINGENCY	<b>\$14,080</b>
	15% SCOPE CONTINGENCY	<b>\$14,080</b>
	5% PERMITTING COSTS	<b>\$4,693</b>
	TOTAL CAPITAL COSTS	<b>\$126,722</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile M - Excavation with Onsite Disposal

**Capital Costs**

1. Pre-design investigation borings		<b>\$180</b>
Assume number of borings =	4	
Assume average depth (linear feet) =	3	
Cost per linear foot =		\$15
2. Excavation with Onbase Disposal		<b>\$8,565</b>
A. Excavation of Sediments		<b>\$2,383</b>
Volume of Sediments (cubic yards)	383	
Excavation Costs per Cubic Yard		\$2.31
Mobilization/Demobilization of Equipment		\$1,500
B. Post Excavation Confirmation Sampling Program		<b>\$1,307</b>
Number of Confirmation Samples	2	
Number of QA Samples	1	
Sampling Cost per Sample Location (labor and equipment)		\$208
Data Validation Labor per Sample		\$55
Sample Analysis (per sample, includes 15% for CLP)		\$242
Pesticides	8080	\$210
C. Onbase Disposal		<b>\$931</b>
Volume of Soil--25% swell factor (cubic yards)	479	
Transportation and Disposal Costs per Cubic Yard		\$1.32
Mobilization/Demobilization of Equipment		\$300
D. Grading of Excavation Site		<b>\$3,945</b>
Volume of Soil--25% swell factor (cubic yards)	479	
Grading Cost per Cubic Yard		\$3.58
Mobilization/Demobilization of Equipment		\$2,230
		<b>SUBTOTAL CAPITAL COSTS \$8,745</b>
		<b>15% BID CONTINGENCY \$1,312</b>
		<b>15% SCOPE CONTINGENCY \$1,312</b>
		<b>5% PERMITTING COSTS \$437</b>
		<b>TOTAL CAPITAL COSTS \$11,806</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile N - Excavation with Offsite Disposal

**Capital Costs**

1. Pre-design investigation borings		<b>\$180</b>
Assume number of borings =	4	
Assume average depth (linear feet) =	3	
Cost per linear foot =		\$15
2. Excavation with Offbase Disposal		<b>\$53,211</b>
A. Excavation of Sediments		<b>\$1,977</b>
Volume of Sediments (cubic yards)	207	
Excavation Costs per Cubic Yard		\$2.31
Mobilization/Demobilization of Equipment		\$1,500
B. Post Excavation Confirmation Sampling Program		<b>\$1,409</b>
Number of Confirmation Samples	2	
Number of QA Samples	1	
Sampling Cost per Sample Location (labor and equipment)		\$208
Data Validation Labor per Sample		\$55
Sample Analysis (per sample, includes 15% for CLP)		\$276
Total Metals 6010/7000		\$240
C. Offbase Disposal to a Class II Hazardous Waste Landfill		<b>\$46,667</b>
Volume of Soil--25% swell factor (cubic yards)	259	
Transportation and Disposal Costs per Cubic Yard		\$179
Waste Profile Fee (One time cost)		\$300
D. Grading of Excavation Site		<b>\$3,157</b>
Volume of Soil--25% swell factor (cubic yards)	259	
Grading Cost per Cubic Yard		\$3.58
Mobilization/Demobilization of Equipment		\$2,230
	SUBTOTAL CAPITAL COSTS	<b>\$53,391</b>
	15% BID CONTINGENCY	<b>\$8,009</b>
	15% SCOPE CONTINGENCY	<b>\$8,009</b>
	5% PERMITTING COSTS	<b>\$2,670</b>
	TOTAL CAPITAL COSTS	<b>\$72,078</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Perimeter Drainage Ditch Spoils Pile N - Excavation with Onsite Disposal

**Capital Costs**

1. Pre-design investigation borings		<b>\$180</b>
Assume number of borings =	4	
Assume average depth (linear feet) =	3	
Cost per linear foot =		\$15
2. Excavation with Onbase Disposal		<b>\$7,184</b>
A. Excavation of Sediments		<b>\$1,977</b>
Volume of Sediments (cubic yards)	207	
Excavation Costs per Cubic Yard		\$2.31
Mobilization/Demobilization of Equipment		\$1,500
B. Post Excavation Confirmation Sampling Program		<b>\$1,409</b>
Number of Confirmation Samples	2	
Number of QA Samples	1	
Sampling Cost per Sample Location (labor and equipment)		\$208
Data Validation Labor per Sample		\$55
Sample Analysis (per sample, includes 15% for CLP)		\$276
Total Metals           6010/7000		\$240
C. Onbase Disposal		<b>\$641</b>
Volume of Soil--25% swell factor (cubic yards)	259	
Transportation and Disposal Costs per Cubic Yard		\$1.32
Mobilization/Demobilization of Equipment		\$300
D. Grading of Excavation Site		<b>\$3,157</b>
Volume of Soil--25% swell factor (cubic yards)	259	
Grading Cost per Cubic Yard		\$3.58
Mobilization/Demobilization of Equipment		\$2,230
		<b>SUBTOTAL CAPITAL COSTS   \$7,364</b>
		<b>15% BID CONTINGENCY       \$1,105</b>
		<b>15% SCOPE CONTINGENCY     \$1,105</b>
		<b>5% PERMITTING COSTS       \$368</b>
		<b>TOTAL CAPITAL COSTS       \$9,942</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Onshore Fuel Line - 54 Inch Drain Line Segment - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$463,189</b>
A. Excavation of Sediments	\$6,171
Volume of Sediments (cubic yards)	2,026
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$3,248
Number of Confirmation Samples	8
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$121
TPH as Gasoline/JP-4      8015M	\$105
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$453,770
Volume of Soil--25% swell factor (cubic yards)	2,533
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
	<b>SUBTOTAL CAPITAL COSTS      \$463,189</b>
	<b>15% BID CONTINGENCY      \$69,478</b>
	<b>15% SCOPE CONTINGENCY      \$69,478</b>
	<b>5% PERMITTING COSTS      \$23,159</b>
	<b>TOTAL CAPITAL COSTS      \$625,306</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Onshore Fuel Line - 54 Inch Drain Line Segment - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$13,054</b>
A. Excavation of Sediments	\$6,171
Volume of Sediments (cubic yards)	2,026
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$3,248
Number of Confirmation Samples	8
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$121
TPH as Gasoline/JP-4   8015M	\$105
C. Onbase Disposal	\$3,635
Volume of Soil--25% swell factor (cubic yards)	2,533
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
	<b>SUBTOTAL CAPITAL COSTS   \$13,054</b>
	<b>15% BID CONTINGENCY       \$1,958</b>
	<b>15% SCOPE CONTINGENCY     \$1,958</b>
	<b>5% PERMITTING COSTS       \$653</b>
	<b>TOTAL CAPITAL COSTS       \$17,623</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Onshore Fuel Line - Hangar Segment - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$519,813</b>
A. Excavation of Sediments	\$6,457
Volume of Sediments (cubic yards)	2,150
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$19,984
Number of Confirmation Samples	20
Number of QA Samples	3
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$633
TPH as Gasoline/JP-4   8015M	\$105
PAHs                   8270	\$210
VOCs (Combo)       8010/8020	\$235
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$481,519
Volume of Soil--25% swell factor (cubic yards)	2,688
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$11,853
Volume of Soil--25% swell factor (cubic yards)	2,688
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS       \$519,813</b>
	<b>15% BID CONTINGENCY           \$77,972</b>
	<b>15% SCOPE CONTINGENCY       \$77,972</b>
	<b>5% PERMITTING COSTS         \$25,991</b>
	<b>TOTAL CAPITAL COSTS         \$701,748</b>

**O&M Costs**

No O&M costs are associated with this alternative.



Onshore Fuel Line - Northern Segment - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$423,181</b>
A. Excavation of Sediments	\$5,666
Volume of Sediments (cubic yards)	1,807
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$2,480
Number of Confirmation Samples	6
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$121
TPH as Gasoline/Jf 8015M	\$105
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$404,717
Volume of Soil--25% swell factor (cubic yards)	2,259
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$10,317
Volume of Soil--25% swell factor (cubic yards)	2,259
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS \$423,181</b>
	<b>15% BID CONTINGENCY \$63,477</b>
	<b>15% SCOPE CONTINGENCY \$63,477</b>
	<b>5% PERMITTING COSTS \$21,159</b>
	<b>TOTAL CAPITAL COSTS \$571,294</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Onshore Fuel Line - Northern Segment - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$21,737</b>
A. Excavation of Sediments	\$5,666
Volume of Sediments (cubic yards)	1,807
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$2,480
Number of Confirmation Samples	6
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$121
TPH as Gasoline/JP-4 8015M	\$105
C. Onbase Disposal	\$3,274
Volume of Soil--25% swell factor (cubic yards)	2,259
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
D. Grading of Excavation Site	\$10,317
Volume of Soil--25% swell factor (cubic yards)	2,259
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS \$21,737</b>
	<b>15% BID CONTINGENCY \$3,261</b>
	<b>15% SCOPE CONTINGENCY \$3,261</b>
	<b>5% PERMITTING COSTS \$1,087</b>
	<b>TOTAL CAPITAL COSTS \$29,346</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Northwest Runway Area - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$56,716</b>
A. Excavation of Sediments	\$2,012
Volume of Sediments (cubic yards)	222
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,409
Number of Confirmation Samples	2
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals 6010/7000	\$240
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$50,069
Volume of Soil--25% swell factor (cubic yards)	278
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$3,225
Volume of Soil--25% swell factor (cubic yards)	278
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS \$56,716</b>
	<b>15% BID CONTINGENCY \$8,507</b>
	<b>15% SCOPE CONTINGENCY \$8,507</b>
	<b>5% PERMITTING COSTS \$2,836</b>
	<b>TOTAL CAPITAL COSTS \$76,566</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Northwest Runway Area - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$7,313</b>
A. Excavation of Sediments	\$2,012
Volume of Sediments (cubic yards)	222
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,409
Number of Confirmation Samples	2
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals           6010/7000	\$240
C. Onbase Disposal	\$666
Volume of Soil--25% swell factor (cubic yards)	278
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
D. Grading of Excavation Site	\$3,225
Volume of Soil--25% swell factor (cubic yards)	278
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS   \$7,313</b>
	<b>15% BID CONTINGENCY       \$1,097</b>
	<b>15% SCOPE CONTINGENCY   \$1,097</b>
	<b>5% PERMITTING COSTS     \$366</b>
	<b>TOTAL CAPITAL COSTS      \$9,872</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 1 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$156,321</b>
A. Excavation of Sediments	\$2,973
Volume of Sediments (cubic yards)	639
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$2,916
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$518
Total Metals    6010/7000	\$240
PAHs            8270	\$210
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$143,341
Volume of Soil--25% swell factor (cubic yards)	799
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$5,090
Volume of Soil--25% swell factor (cubic yards)	799
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS           \$156,321</b>
	<b>15% BID CONTINGENCY               \$23,448</b>
	<b>15% SCOPE CONTINGENCY           \$23,448</b>
	<b>5% PERMITTING COSTS             \$7,816</b>
	<b>TOTAL CAPITAL COSTS             \$211,033</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 1 - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal				<b>\$14,332</b>
A. Excavation of Sediments				\$2,973
Volume of Sediments (cubic yards)			639	
Excavation Costs per Cubic Yard			\$2.31	
Mobilization/Demobilization of Equipment				\$1,500
B. Post Excavation Confirmation Sampling Program				\$2,916
Number of Confirmation Samples			3	
Number of QA Samples			1	
Sampling Cost per Sample Location (labor and equipment)				\$208
Data Validation Labor per Sample				\$55
Sample Analysis (per sample, includes 15% for CLP)				\$518
Total Metals	6010/7000			\$240
PAHs	8270			\$210
C. Onbase Disposal				\$1,352
Volume of Soil--25% swell factor (cubic yards)			799	
Transportation and Disposal Costs per Cubic Yard				\$1.32
Mobilization/Demobilization of Equipment				\$300
D. Grading of Excavation Site				\$5,090
Volume of Soil--25% swell factor (cubic yards)			799	
Grading Cost per Cubic Yard				\$3.58
Mobilization/Demobilization of Equipment				\$2,230
E. Asphalt/Concrete Removal				\$2,000
Assume volume of concrete (cubic yards) =			1,500	
Excavation costs per cubic yard =				\$0.80
Mobilization/Demobilization of equipment =				\$800
				<b>SUBTOTAL CAPITAL COSTS \$14,332</b>
				<b>15% BID CONTINGENCY \$2,150</b>
				<b>15% SCOPE CONTINGENCY \$2,150</b>
				<b>5% PERMITTING COSTS \$717</b>
				<b>TOTAL CAPITAL COSTS \$19,348</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 2 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$105,257</b>
A. Excavation of Sediments	\$2,482
Volume of Sediments (cubic yards)	426
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$2,916
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$518
Total Metals   6010/7000	\$240
PAHs           8270	\$210
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$95,720
Volume of Soil--25% swell factor (cubic yards)	533
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$4,138
Volume of Soil--25% swell factor (cubic yards)	533
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS   \$105,257</b>
	<b>15% BID CONTINGENCY       \$15,788</b>
	<b>15% SCOPE CONTINGENCY     \$15,788</b>
	<b>5% PERMITTING COSTS       \$5,263</b>
	<b>TOTAL CAPITAL COSTS       \$142,096</b>

**O&M Costs**

No O&M costs are associated with this alternative.



Revetment 3 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$118,833</b>
A. Excavation of Sediments	\$2,609
Volume of Sediments (cubic yards)	481
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,948
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals 6010/7000	\$240
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$107,894
Volume of Soil--25% swell factor (cubic yards)	601
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$4,382
Volume of Soil--25% swell factor (cubic yards)	601
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS \$118,833</b>
	<b>15% BID CONTINGENCY \$17,825</b>
	<b>15% SCOPE CONTINGENCY \$17,825</b>
	<b>5% PERMITTING COSTS \$5,942</b>
	<b>TOTAL CAPITAL COSTS \$160,424</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 3 - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$12,030</b>
A. Excavation of Sediments	\$2,609
Volume of Sediments (cubic yards)	481
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,948
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals              6010/7000	\$240
C. Onbase Disposal	\$1,091
Volume of Soil--25% swell factor (cubic yards)	601
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
D. Grading of Excavation Site	\$4,382
Volume of Soil--25% swell factor (cubic yards)	601
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS              \$12,030</b>
	<b>15% BID CONTINGENCY              \$1,804</b>
	<b>15% SCOPE CONTINGENCY              \$1,804</b>
	<b>5% PERMITTING COSTS              \$601</b>
	<b>TOTAL CAPITAL COSTS              \$16,240</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 4 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$168,680</b>
A. Excavation of Sediments	\$3,098
Volume of Sediments (cubic yards)	693
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$2,916
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$518
Total Metals    6010/7000	\$240
PAHs            8270	\$210
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$155,336
Volume of Soil--25% swell factor (cubic yards)	866
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$5,330
Volume of Soil--25% swell factor (cubic yards)	866
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS           \$168,680</b>
	<b>15% BID CONTINGENCY               \$25,302</b>
	<b>15% SCOPE CONTINGENCY           \$25,302</b>
	<b>5% PERMITTING COSTS             \$8,434</b>
	<b>TOTAL CAPITAL COSTS             \$227,718</b>

**O&M Costs**

No O&M costs are associated with this alternative.





Revetment 6 - Excavation with Onsite Disposal

**Capital Costs**

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$909</b>
A. Excavation	\$0
Will be conducted as part of wetland construction	
2. Onbase Disposal	\$909
Volume of Soil--25% swell factor (cubic yards)	463
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
	<b>SUBTOTAL CAPITAL COSTS \$909</b>
	<b>15% BID CONTINGENCY \$136</b>
	<b>15% SCOPE CONTINGENCY \$136</b>
	<b>5% PERMITTING COSTS \$45</b>
	<b>TOTAL CAPITAL COSTS \$1,227</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 7 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$41,476</b>	
A. Excavation	\$0	
Will be conducted as part of wetland construction		
2. Offbase Disposal to a Class II Hazardous Waste Landfill	\$41,476	
Volume of Soil--25% swell factor (cubic yards)	230	
Transportation and Disposal Costs per Cubic Yard	\$179	
Waste Profile Fee (One time cost)	\$300	
	<b>SUBTOTAL CAPITAL COSTS</b>	<b>\$41,476</b>
	15% BID CONTINGENCY	<b>\$6,221</b>
	15% SCOPE CONTINGENCY	<b>\$6,221</b>
	5% PERMITTING COSTS	<b>\$2,074</b>
	<b>TOTAL CAPITAL COSTS</b>	<b>\$55,992</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 7 - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$603</b>	
A. Excavation	\$0	
Will be conducted as part of wetland construction		
2. Onbase Disposal	\$603	
Volume of Soil--25% swell factor (cubic yards)	230	
Transportation and Disposal Costs per Cubic Yard	\$1.32	
Mobilization/Demobilization of Equipment	\$300	
	<b>SUBTOTAL CAPITAL COSTS</b>	<b>\$603</b>
	15% BID CONTINGENCY	<b>\$90</b>
	15% SCOPE CONTINGENCY	<b>\$90</b>
	5% PERMITTING COSTS	<b>\$30</b>
	<b>TOTAL CAPITAL COSTS</b>	<b>\$814</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 11 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$15,938</b>
A. Excavation of Sediments	\$1,599
Volume of Sediments (cubic yards)	43
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,948
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals 6010/7000	\$240
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$9,967
Volume of Soil--25% swell factor (cubic yards)	54
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$2,423
Volume of Soil--25% swell factor (cubic yards)	54
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS \$15,938</b>
	<b>15% BID CONTINGENCY \$2,391</b>
	<b>15% SCOPE CONTINGENCY \$2,391</b>
	<b>5% PERMITTING COSTS \$797</b>
	<b>TOTAL CAPITAL COSTS \$21,516</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 11 - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$6,342</b>
A. Excavation of Sediments	\$1,599
Volume of Sediments (cubic yards)	43
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,948
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals           6010/7000	\$240
C. Onbase Disposal	\$371
Volume of Soil--25% swell factor (cubic yards)	54
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
D. Grading of Excavation Site	\$2,423
Volume of Soil--25% swell factor (cubic yards)	54
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS       \$6,342</b>
	15% BID CONTINGENCY <b>\$951</b>
	15% SCOPE CONTINGENCY <b>\$951</b>
	5% PERMITTING COSTS <b>\$317</b>
	<b>TOTAL CAPITAL COSTS       \$8,561</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 12 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$10,375</b>
A. Excavation of Sediments	\$1,523
Volume of Sediments (cubic yards)	10
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,948
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals 6010/7000	\$240
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$2,627
Volume of Soil--25% swell factor (cubic yards)	13
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$2,277
Volume of Soil--25% swell factor (cubic yards)	13
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS \$10,375</b>
	<b>15% BID CONTINGENCY \$1,556</b>
	<b>15% SCOPE CONTINGENCY \$1,556</b>
	<b>5% PERMITTING COSTS \$519</b>
	<b>TOTAL CAPITAL COSTS \$14,006</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 12 - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$8,065</b>
A. Excavation of Sediments	\$1,523
Volume of Sediments (cubic yards)	10
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,948
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals           6010/7000	\$240
C. Onbase Disposal	\$317
Volume of Soil--25% swell factor (cubic yards)	13
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
D. Grading of Excavation Site	\$2,277
Volume of Soil--25% swell factor (cubic yards)	13
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS           \$8,065</b>
	<b>15% BID CONTINGENCY               \$1,210</b>
	<b>15% SCOPE CONTINGENCY           \$1,210</b>
	<b>5% PERMITTING COSTS             \$403</b>
	<b>TOTAL CAPITAL COSTS             \$10,887</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 13 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$105,626</b>
A. Excavation of Sediments	\$2,487
Volume of Sediments (cubic yards)	428
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$2,916
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$518
Total Metals   6010/7000	\$240
PAHs           8270	\$210
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$96,078
Volume of Soil--25% swell factor (cubic yards)	535
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$4,145
Volume of Soil--25% swell factor (cubic yards)	535
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS   \$105,626</b>
	<b>15% BID CONTINGENCY       \$15,844</b>
	<b>15% SCOPE CONTINGENCY     \$15,844</b>
	<b>5% PERMITTING COSTS       \$5,281</b>
	<b>TOTAL CAPITAL COSTS       \$142,596</b>

**O&M Costs**

No O&M costs are associated with this alternative.



Revetment 14 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$121,942</b>
A. Excavation of Sediments	\$2,634
Volume of Sediments (cubic yards)	492
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$2,476
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$408
Total Metals 6010/7000	\$240
TPH as Diesel 8015M	\$115
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$110,400
Volume of Soil--25% swell factor (cubic yards)	615
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$4,432
Volume of Soil--25% swell factor (cubic yards)	615
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS \$121,942</b>
	<b>15% BID CONTINGENCY \$18,291</b>
	<b>15% SCOPE CONTINGENCY \$18,291</b>
	<b>5% PERMITTING COSTS \$6,097</b>
	<b>TOTAL CAPITAL COSTS \$164,622</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 14 - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$12,652</b>
A. Excavation of Sediments	\$2,634
Volume of Sediments (cubic yards)	492
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$2,476
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$408
Total Metals           6010/7000	\$240
TPH as Diesel         8015M	\$115
C. Onbase Disposal	\$1,110
Volume of Soil--25% swell factor (cubic yards)	615
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
D. Grading of Excavation Site	\$4,432
Volume of Soil--25% swell factor (cubic yards)	615
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS         \$12,652</b>
	<b>15% BID CONTINGENCY             \$1,898</b>
	<b>15% SCOPE CONTINGENCY         \$1,898</b>
	<b>5% PERMITTING COSTS            \$633</b>
	<b>TOTAL CAPITAL COSTS            \$17,080</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 15 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$70,350</b>
A. Excavation of Sediments	\$2,143
Volume of Sediments (cubic yards)	279
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,948
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals 6010/7000	\$240
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$62,780
Volume of Soil--25% swell factor (cubic yards)	349
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$3,479
Volume of Soil--25% swell factor (cubic yards)	349
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS \$70,350</b>
	<b>15% BID CONTINGENCY \$10,553</b>
	<b>15% SCOPE CONTINGENCY \$10,553</b>
	<b>5% PERMITTING COSTS \$3,518</b>
	<b>TOTAL CAPITAL COSTS \$94,973</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 15 - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$8,330</b>
A. Excavation of Sediments	\$2,143
Volume of Sediments (cubic yards)	279
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,948
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals           6010/7000	\$240
C. Onbase Disposal	\$759
Volume of Soil--25% swell factor (cubic yards)	349
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
D. Grading of Excavation Site	\$3,479
Volume of Soil--25% swell factor (cubic yards)	349
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
	<b>SUBTOTAL CAPITAL COSTS   \$8,330</b>
	<b>15% BID CONTINGENCY       \$1,250</b>
	<b>15% SCOPE CONTINGENCY   \$1,250</b>
	<b>5% PERMITTING COSTS     \$417</b>
	<b>TOTAL CAPITAL COSTS     \$11,246</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 16 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$120,307</b>
A. Excavation of Sediments	\$2,623
Volume of Sediments (cubic yards)	487
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,948
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals 6010/7000	\$240
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$109,326
Volume of Soil--25% swell factor (cubic yards)	609
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$4,410
Volume of Soil--25% swell factor (cubic yards)	609
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS \$120,307</b>
	<b>15% BID CONTINGENCY \$18,046</b>
	<b>15% SCOPE CONTINGENCY \$18,046</b>
	<b>5% PERMITTING COSTS \$6,015</b>
	<b>TOTAL CAPITAL COSTS \$162,415</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 16 - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal	<b>\$12,083</b>
A. Excavation of Sediments	\$2,623
Volume of Sediments (cubic yards)	487
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$1,948
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$276
Total Metals           6010/7000	\$240
C. Onbase Disposal	\$1,102
Volume of Soil--25% swell factor (cubic yards)	609
Transportation and Disposal Costs per Cubic Yard	\$1.32
Mobilization/Demobilization of Equipment	\$300
D. Grading of Excavation Site	\$4,410
Volume of Soil--25% swell factor (cubic yards)	609
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS           \$12,083</b>
	<b>15% BID CONTINGENCY               \$1,812</b>
	<b>15% SCOPE CONTINGENCY           \$1,812</b>
	<b>5% PERMITTING COSTS             \$604</b>
	<b>TOTAL CAPITAL COSTS             \$16,312</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 19 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$179,467</b>
A. Excavation of Sediments	\$3,195
Volume of Sediments (cubic yards)	735
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$3,928
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$771
Total Metals                      6010/7000	\$240
PAHs                                      8270	\$210
TPH as Gasoline/JP-4              8015M	\$105
TPH as Diesel                      8015M	\$115
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$164,824
Volume of Soil--25% swell factor (cubic yards)	919
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$5,520
Volume of Soil--25% swell factor (cubic yards)	919
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS              \$179,467</b>
	<b>15% BID CONTINGENCY                  \$26,920</b>
	<b>15% SCOPE CONTINGENCY              \$26,920</b>
	<b>5% PERMITTING COSTS                \$8,973</b>
	<b>TOTAL CAPITAL COSTS                 \$242,280</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 19 - Excavation with Onsite Disposal

**Capital Costs**

1. Excavation with Onbase Disposal				<b>\$16,153</b>
A. Excavation of Sediments				\$3,195
Volume of Sediments (cubic yards)			735	
Excavation Costs per Cubic Yard			\$2.31	
Mobilization/Demobilization of Equipment				\$1,500
B. Post Excavation Confirmation Sampling Program				\$3,928
Number of Confirmation Samples			3	
Number of QA Samples			1	
Sampling Cost per Sample Location (labor and equipment)				\$208
Data Validation Labor per Sample				\$55
Sample Analysis (per sample, includes 15% for CLP)				\$771
Total Metals	6010/7000			\$240
PAHs	8270			\$210
TPH as Gasoline/JP-4	8015M			\$105
TPH as Diesel	8015M			\$115
C. Onbase Disposal				\$1,510
Volume of Soil--25% swell factor (cubic yards)			919	
Transportation and Disposal Costs per Cubic Yard				\$1.32
Mobilization/Demobilization of Equipment				\$300
D. Grading of Excavation Site				\$5,520
Volume of Soil--25% swell factor (cubic yards)			919	
Grading Cost per Cubic Yard				\$3.58
Mobilization/Demobilization of Equipment				\$2,230
E. Asphalt/Concrete Removal				\$2,000
Assume volume of concrete (cubic yards) =			1,500	
Excavation costs per cubic yard =				\$0.80
Mobilization/Demobilization of equipment =				\$800
				<b>SUBTOTAL CAPITAL COSTS \$16,153</b>
				<b>15% BID CONTINGENCY \$2,423</b>
				<b>15% SCOPE CONTINGENCY \$2,423</b>
				<b>5% PERMITTING COSTS \$808</b>
				<b>TOTAL CAPITAL COSTS \$21,806</b>

**O&M Costs**

No O&M costs are associated with this alternative.

Revetment 20 - Excavation with Offsite Disposal

**Capital Costs**

1. Excavation with Offbase Disposal	<b>\$126,256</b>
A. Excavation of Sediments	\$2,674
Volume of Sediments (cubic yards)	509
Excavation Costs per Cubic Yard	\$2.31
Mobilization/Demobilization of Equipment	\$1,500
B. Post Excavation Confirmation Sampling Program	\$2,916
Number of Confirmation Samples	3
Number of QA Samples	1
Sampling Cost per Sample Location (labor and equipment)	\$208
Data Validation Labor per Sample	\$55
Sample Analysis (per sample, includes 15% for CLP)	\$518
Total Metals     6010/7000	\$240
PAHs             8270	\$210
C. Offbase Disposal to a Class II Hazardous Waste Landfill	\$114,160
Volume of Soil--25% swell factor (cubic yards)	636
Transportation and Disposal Costs per Cubic Yard	\$179
Waste Profile Fee (One time cost)	\$300
D. Grading of Excavation Site	\$4,507
Volume of Soil--25% swell factor (cubic yards)	636
Grading Cost per Cubic Yard	\$3.58
Mobilization/Demobilization of Equipment	\$2,230
E. Asphalt/Concrete Removal	\$2,000
Assume volume of concrete (cubic yards) =	1,500
Excavation costs per cubic yard =	\$0.80
Mobilization/Demobilization of equipment =	\$800
	<b>SUBTOTAL CAPITAL COSTS     \$126,256</b>
	<b>15% BID CONTINGENCY         \$18,938</b>
	<b>15% SCOPE CONTINGENCY       \$18,938</b>
	<b>5% PERMITTING COSTS         \$6,313</b>
	<b>TOTAL CAPITAL COSTS         \$170,446</b>

**O&M Costs**

No O&M costs are associated with this alternative.

