

0021



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor  
Ted Stewart  
Executive Director  
James W. Carter  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340  
801-359-3940 (Fax)  
801-538-5319 (TDD)

November 6, 1996

Mike Watson  
U.S. Fuel Company  
P.O. Box 887  
Price, Utah 84501

Re: Bond Calculation for Incorporation into Mine Plan, Hiawatha Mine, U.S. Fuel Company, ACT/007/011-94B, Folder #2, Carbon County, Utah

Dear Mr. Watson:

I am enclosing a stamped copy of the revised reclamation cost estimate for the Hiawatha Mine (\$2,838,00 in 1996 dollars) for incorporation into the Hiawatha Mine mining and reclamation plan. This bond amount became effective on March 1, 1995 per a letter to you from James W. Carter, Director.

Sincerely,

  
Pamela Grubaugh-Littig  
Permit Supervisor

Enclosure

cc: Price Field Office  
Susan White (w/o)





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February 24, 1995

RECEIVED

FEB 27 1995

ARAVA NATURAL RESOURCES

Mike Watson  
U. S. Fuel Company  
P. O. Box 887  
Price, Utah 84501

RE: Bond Calculations, Hiawatha Mine, U. S. Fuel, ACT/007/011, Folder #2, Carbon County, Utah.

Mr. Watson:

Enclosed are three copies of the bond calculations. Please call me if you have any questions.

Sincerely,

*Wayne H. Western*  
Wayne H. Western

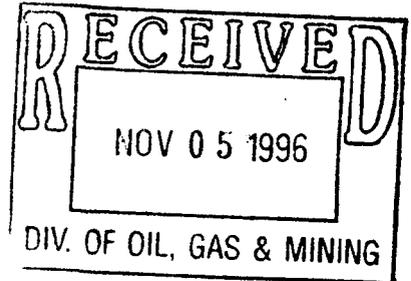
*Brande-*

*Please make 2 copies  
of this and stamp all three*



*Approved effective 3/1/95*

*94 B (Bond Calculations)*



SUMMARY OF RECLAMATION COSTS  
HIAWATHA MINE

HIABLD1B	\$120,300
HIABLD2B	\$165,835
HIABLD3B	\$117,555
MIDDLE FORK	\$259,413
NORTH FORK	\$23,641
PREP PLANT	\$1,223,862
SOUTH FORK	\$142,582
TOP SOIL	\$117,685
DIRECT COSTS	\$2,170,873
STARTUP COST 5%	\$108,544
(mob/demob, permits, bond)	
CONTINGENCY 10%	\$217,087
ENGINEERING FEES 5%	\$108,544
CONTRACT MANAGEMENT 5%	\$108,544
SUBTOTAL INDIRECT COSTS	\$542,719
DIRECT AND INDIRECT COSTS	\$2,713,592
ESCALATION 2.01% TO 1996	\$110,183
TOTAL	\$2,823,775
TOTAL ROUNDED TO NEAREST \$1,000	\$2,824,000

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ANTI- YR RATE	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK- NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST			
	Machine Shop																									
	Structure's Demolition Cost	Mixture of type, average	\$0.21		\$0.21	/CF	42	240	12													120960	CF	\$25,402		
	Structure's Volume (Demolished)																				0.35	1568	CY			
	Structure's Transport Cost																									
	Structure's Disposal Cost	For disposal site, add	\$6.20		\$6.20	/CY																1568	CY	\$9,722		
	Subtotal																							\$34,124		
	Equipment's Demolition Cost																									
	Equipment's Demolition Cost																									
	Equipment's Transport Cost																									
	Equipment's Disposal Cost																									
	Subtotal																									
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78		0.78	/CF	42	90	0.5													1890	CF	\$1,474		
	Floor's Site Factor																									
	Floor's Rein. Factor																									
	Floor's Volume (Diminished)													1890								CF	1.3	91	CY	
	Floor's Transport Cost																									
	Floor's Disposal Fee	For disposal site, add	\$6.20		\$6.20	/CY																	91	CY	\$564	
	Subtotal																								\$4,038	
	Foundation's Demolition Cost																									
	Foundation's Site Factor																									
	Foundation's Rein. Factor																									
	Foundation's Volume (Diminished)																									
	Foundation's Transport Cost																									
	Foundation's Disposal Cost																									
	Subtotal																									
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78		0.78	/CF	42	120	0.33														FT	3040	SF	\$3,931
	Floor's Site Factor																									
	Floor's Rein. Factor																									
	Floor's Volume (Diminished)													1663								CF	1.3	80	CY	
	Floor's Transport Cost																									
	Floor's Disposal Fee	For disposal site, add	\$6.20		\$6.20	/CY																		80	CY	\$496
	Subtotal																									\$4,427
	Total																									\$41,551

Hawatha Prep Plant and Refuse Disposal

MAP REF.	DESCRIPTION	* MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST
	Warehouse																							
	Structure's Demolition Cost	Mixture of type, average	\$0.21			\$0.21	/CF	36	150	15										FT		6100	CF	\$17,010
	Structure's Volume (Demolished)																				0.33	1000	CY	
	Structure's Transport Cost																							
	Structure's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY															1000	CY	\$6,510
	Subtotal																							\$24,520
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal																							
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	32	52	0.08										FT		1664	SF	\$1,296
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Diminished)														133						CF	1.3	8	CY
	Floor's Transport Cost																							
	Floor's Disposal Fee	For disposal site, add	\$6.20			\$6.20	/CY															8	CY	\$37
	Subtotal																							\$1,333
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Diminished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal																							
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	32	58	0.33										FT		1856	/CF	\$1,448
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Diminished)														612						CF	1.3	29	CY
	Floor's Transport Cost																							
	Floor's Disposal Fee	For disposal site, add	\$6.20			\$6.20	/CY															29	CY	\$180
	Subtotal																							\$1,628
	Total																							\$26,148

Hawatha Prep Plant and Refuse Disposal

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Rein Plant																								
	Structure's Demolition Cost																								
	Structure's Volume (Demolished)																								
	Structure's Transport Cost																								
	Structure's Disposal Cost																								
	Subtotal																								
	Equipment's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	/CF			18			18							FT		3218	CF	\$678	
	Equipment's Volume																				0.35	42	CF		
	Equipment's Transport Cost																								
	Equipment's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY															42	CF	\$260	
	Subtotal																							\$868	
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	28	40	0.5										FT		560	CF	\$437	
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Diminished)														560						CF	1.3	27	CY	
	Floor's Transport Cost																								
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																27	CY	\$100
	Subtotal																							\$437	
	Concrete Wall's Demolition Cost	12" thick	\$13.90			\$13.90	/SF	31	64	1.5	1	190								FT		285	SF	\$3,982	
	Concrete Wall's Site Factor																								
	Concrete Wall's Rein. Factor																								
	Concrete Wall's Volume (Diminished)																					1.3	14	CY	
	Concrete Wall's Transport Cost																								
	Concrete Wall's Disposal Cost	Add for disposal, on site	\$3.70			\$3.70	/CY																14	CY	\$52
	Subtotal																							\$32	
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Diminished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal																								
	Total																							\$2,495	

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ADJUSTED COST	ATION YR	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST		
	Tipple Office/Scalehouse																								
	Structure's Demolition Cost	Mixture of type, average	\$0.21	\$0.21		/CF	12	28	8													2688	CY	\$564	
	Structure's Volume (Demolished)																				0.35	35	CY		
	Structure's Transport Cost																								
	Structure's Disposal Cost	For disposal site, add	\$6.20	\$6.20		/CY																35	CY	\$217	
	Subtotal																							\$781	
	Equipment's Demolition Cost																								
	Equipment's Demolition Cost																								
	Equipment's Transport Cost																								
	Equipment's Disposal Cost																								
	Subtotal																								
	Floor's Demolition Cost	4" thick, reinforced, rods	\$3.48	\$3.48		/SF	12	28	0.33													111	CF	\$386	
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Demolished)													111								CF	1.3	5	CY
	Floor's Transport Cost																								
	Floor's Disposal Fee	For disposal site, add	\$6.20	\$6.20		/CY																5	CY	\$31	
	Subtotal																							\$417	
	Foundation's Demolition Cost																								
	Foundation's Site Factor																								
	Foundation's Rein. Factor																								
	Foundation's Volume (Demolished)																								
	Foundation's Transport Cost																								
	Foundation's Disposal Cost																								
	Subtotal																								
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Demolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal																								
	Total																							\$1198	

Hawatha Prep Plant and Refuse Disposal

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ADJUSTED	UNIT	LENGHT	WIDTH	HEIGHT	THICK- NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST		
	Heavy Equipment Shop																							
	Structure's Demolition Cost	Mixture of type, average	\$0.21			30	60	14.5													28100	CF	\$5,481	
	Structure's Volume (Demolished)																			0.35	308	CY		
	Structure's Transport Cost																							
	Structure's Disposal Cost	For disposal site, add	\$8.20																		308	CY	\$2,096	
	Subtotal																						\$7,577	
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal																							
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			30	60	0.5													900	CF	\$702	
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)												900								CF	1.3	43	CY
	Floor's Transport Cost																						43	CY
	Floor's Disposal Fee	Add for disposal, on site	\$3.70																				43	CY
	Subtotal																							\$159
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal																							
	Total																							\$8,436

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ANTION RATE YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Fuel Tank Containment																							
	Structure's Demolition Cost																							
	Structure's Volume (Demolished)																							
	Structure's Transport Cost																							
	Structure's Disposal Cost																							
	Subtotal																							
	Equipment's Demolition Cost																							
	Equipment's Demolish Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal																							
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78		\$0.78	\$/CF	20	30	0.5													300	CF	\$234
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Dimolished)													300								14	CY	
	Floor's Transport Cost																					14	CY	
	Floor's Disposal Fee	For disposal site, add	\$6.20		6.2	/CY																14	CY	\$87
	Subtotal																							\$321
	Wall's Demolition Cost	8' thick	\$9.95		\$9.95	/SF	20	30	3	0.5	100											1800	CF	\$17,910
	Wall's Site Factor																							
	Wall's Rein. Factor																							
	Wall's Volume (Dimolished)													1800								87	CY	
	Wall's Transport Cost																					87	CY	
	Wall's Disposal Cost	For disposal site, add	\$6.20		\$6.20	/CY																87	CY	\$539
	Subtotal																							\$18,449
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Dimolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal																							
	Total																							\$18,770

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFLATION RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST		
	Tipple 2 Operator Building																									
	Structure's Demolition Cost	Mixture of type, average	\$0.21			\$0.21	/CF	11	11	9													1089	CF	\$229	
	Structure's Volume (Demolished)																					0.35	14	CY		
	Structure's Transport Cost																									
	Structure's Disposal Cost	For disposal on site, add	\$8.20			\$8.20	/CY																14	CY	\$87	
	Subtotal																								\$216	
	Equipment's Demolition Cost																									
	Equipment's Demolition Cost																									
	Equipment's Transport Cost																									
	Equipment's Disposal Cost																									
	Subtotal																									
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	11	11	0.5													81	CF	\$48	
	Floor's Site Factor																									
	Floor's Rein. Factor																									
	Floor's Volume (Diminished)														81								1.3	3	CY	
	Floor's Transport Cost																									
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																3	CY	\$11	
	Subtotal																								\$59	
	Foundation's Demolition Cost																									
	Foundation's Site Factor																									
	Foundation's Rein. Factor																									
	Foundation's Volume (Diminished)																									
	Foundation's Transport Cost																									
	Foundation's Disposal Cost																									
	Subtotal																									
	Footer's Demolition Cost																									
	Footer's Site Factor																									
	Footer's Rein. Factor																									
	Footer's Volume (Diminished)																									
	Footer's Transport Cost																									
	Footer's Disposal Cost																									
	Subtotal																									
	Total																								\$475	

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST		
	Haul Truck Maintenance Shop																									
	Structure's Demolition Cost	Mixture of type, average	\$0.21			\$0.21	/CF	22	80	15													19800	CF	\$4,158	
	Structure's Volume (Diminished)																					0.35	257	CY	\$0	
	Structure's Transport Cost																								\$0	
	Structure's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY																257	CY	\$1,593	
	Subtotal																								\$3,791	
	Equipment's Demolition Cost																									
	Equipment's Demolition Cost																									
	Equipment's Transport Cost																									
	Equipment's Disposal Cost																									
	Subtotal																									
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	22	100	0.5													1100	CF	\$858	
	Floor's Site Factor																									
	Floor's Rein. Factor																									
	Floor's Volume (Diminished)														1100								1.3	53	CY	\$0
	Floor's Transport Cost																								\$0	
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																		\$196	
	Subtotal																								\$1,054	
	Foundation's Demolition Cost																									
	Foundation's Site Factor																									
	Foundation's Rein. Factor																									
	Foundation's Volume (Diminished)																									
	Foundation's Transport Cost																									
	Foundation's Disposal Cost																									
	Subtotal																									
	Footer's Demolition Cost																									
	Footer's Site Factor																									
	Footer's Rein. Factor																									
	Footer's Volume (Diminished)																									
	Footer's Transport Cost																									
	Footer's Disposal Cost																									
	Subtotal																									
	Total																								\$8,905	

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ANTION RATE YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK. NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Haul Truck Office																							
	Structure's Demolition Cost	Mixture of type, average	\$0.21		\$0.21	/CF	14	14	8													1568	CF	\$329
	Structure's Volume (Demolished)																				0.35	20	CY	
	Structure's Transport Cost																							
	Structure's Disposal Cost	For disposal site, add	\$6.20		\$6.20	/CY																20	CY	\$124
	Subtotal																							\$439
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal																							
	Floor's Demolition Cost	4' thick, reinforced, rods	\$3.48		\$3.48	/SF	14	14	0.33													65	CF	\$226
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)													65								3	CY	
	Floor's Transport Cost																							
	Floor's Disposal Fee	Add for disposal, on site	\$3.70		\$3.70	/CY																3	CY	\$11
	Subtotal																							\$237
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal																							
	Total																							\$697

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Haul Truck Fuel Containment																								
	Structure's Demolition Cost																								
	Structure's Volume (Demolished)																								
	Structure's Transport Cost																								
	Structure's Disposal Cost																								
	Subtotal																								
	Equipment's Demolition Cost																								
	Equipment's Demolition Cost																								
	Equipment's Transport Cost																								
	Equipment's Disposal Cost																								
	Subtotal																								
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	14	33	0.5										FT		231	CF	\$180	
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Diminished)														231					CF	1.3	11	CY		
	Floor's Transport Cost																								
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY															11	CY	\$41	
	Subtotal																							\$231	
	Foundation's Demolition Cost	6' thick	\$9.95			\$9.95	/SF	14	33	2	0.5	94								FT		188	SF	\$1,871	
	Foundation's Site Factor																								
	Foundation's Rein. Factor																								
	Foundation's Volume (Diminished)																					1.3	5	CY	
	Foundation's Transport Cost																								
	Foundation's Disposal Cost	Add for disposal, on site	\$3.70			\$3.70	/CY																5	CY	\$19
	Subtotal																							\$1,890	
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Diminished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal																								
	Total																							\$2,111	

MAP REF	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ADJUSTED	ATION YR COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK- NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Explosives Magazine (2)																							
	Structure's Demolition Cost	Mixture of type, average	\$0.21			\$0.21 /CF	6	6	6.5										2 FT		624	CF	\$131	
	Structure's Volume (Demolished)																				0.35	8	CY	
	Structure's Transport Cost																							
	Structure's Disposal Cost	For disposal site, add	\$6.20			\$6.20 /CY																8	CY	\$50
	Subtotal																							\$181
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal																							
	Floor's Demolition Cost																							
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Diminished)																							
	Floor's Transport Cost																							
	Floor's Disposal Fee																							
	Subtotal																							
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Diminished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Diminished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal																							
	Total																							\$181

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Culverts																								
	Undisturbed Drain (3)	48" 6"x3'	\$3.14			\$3.14	\$/LF	725															725	FT	\$3,728
	North Ramp & Ditch (4)	18" to 24" 4"x3'	\$2.06			\$2.06	\$/LF	28															28	FT	\$58
	Road & RR NW & Ditch (34)	36" 5"x4'	\$3.43			\$3.43	\$/LF	100															100	FT	\$343
	Road & RR & South Fork (13)	106" 11"x6"	\$15.09			\$15.09	\$/LF	90															90	FT	\$1,358
	Bell Field Road & South Fork (14)	66" 8"x8"	\$8.23			\$8.23	\$/LF	28															28	FT	\$230
	So. Load Track & Ditch (2)	36" 5"x4'	\$3.43			\$3.43	\$/LF	110															110	FT	\$377
	Subtotal:																								
																									\$6,093
	Total:																								
																									\$6,093

Hiewatha Prep Plant and Refuse Disposal

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ADJUSTED	# YR COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK- NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Powerlines																							
	Structure's Demolition Cost	Powerpole	\$100.00			\$100.00	EA												40	EA		40	EA	\$4,000
	Structure's Volume (Demolished)																							
	Structure's Transport Cost																							
	Structure's Disposal Cost	For disposition site, add	\$6.20			\$6.20	/CY							14								14	CY	\$87
	Subtotal																							\$4,087
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal																							
	Floor's Demolition Cost																							
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)																							
	Floor's Transport Cost																							
	Floor's Disposal Fee																							
	Subtotal																							
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal																							
	Total																							\$4,087



Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFLATION RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST
	Water Tank																							
	Structure's Demolition Cost	Mixture of type, average	\$0.21			\$0.21	/CF			14			24									6333	CF	\$1,300
	Structure's Volume (Demolished)																				0.35	82	CY	
	Structure's Transport Cost																							
	Structure's Disposal Cost	Demolition lumber, trees, brush	\$6.20			\$6.20	/CY															82	CY	\$508
	Subtotal:																							\$1,808
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal:																							
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	\$/CF			0.5			24		228							228	CF	\$1,800
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)																				1.3	11	CY	
	Floor's Transport Cost																							
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY															11	CY	\$41
	Subtotal:																							\$1,841
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal:																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal:																							
	Total																							\$3,649



Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Bath House Shed																						
	Structure's Demolition Cost	Large urban projects, incl. disposal.	\$0.21		\$0.21	/CF	18	18	10									FT		2980	CF	\$605	
	Structure's Volume (Demolished)																		0.35	37	CY		
	Structure's Transport Cost																						
	Structure's Disposal Cost	For disposal site, add	\$6.20		\$6.20	/CY															37	CY	\$229
	Subtotal:																					\$834	
	Structure's Demolition Cost																						
	Structure's Volume (Demolished)																						
	Structure's Transport Cost																						
	Structure's Disposal Cost																						
	Subtotal:																						
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78		\$0.78	/CF	18	18	0.5				144					FT		144	CF	\$112	
	Floor's Site Factor																						
	Floor's Rein. Factor																						
	Floor's Volume (Diminished)																		1.3	7	CY		
	Floor's Transport Cost																						
	Floor's Disposal Fee	Add for disposal on site	\$3.70		\$3.70	/CY															7	CY	\$26
	Subtotal:																					\$138	
	Foundation's Demolition Cost																						
	Foundation's Site Factor																						
	Foundation's Rein. Factor																						
	Foundation's Volume (Diminished)																						
	Foundation's Transport Cost																						
	Foundation's Disposal Cost																						
	Subtotal:																						
	Footer's Demolition Cost																						
	Footer's Site Factor																						
	Footer's Rein. Factor																						
	Footer's Volume (Diminished)																						
	Footer's Transport Cost																						
	Footer's Disposal Cost																						
	Subtotal:																						
	Total:																					\$972	

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGTH	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST		
	Rock Dust Bin																									
	Structure's Demolition Cost	Large urban projects, incl. disposal	\$0.21			\$0.21	/CF	9	14	35												0.35	6930	CF	\$1,433	
	Structure's Volume (Demolished)																						90	CY		
	Structure's Transport Cost																									
	Structure's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY																90	CY	\$558	
	Subtotal																								\$62,012	
	Transfer and Take Up Towers																									
	Structure's Demolition Cost																									
	Structure's Volume (Demolished)																									
	Structure's Transport Cost																									
	Structure's Disposal Cost																									
	Subtotal																									
	Support Bents (8'WF)																									
	Structure's Demolition Cost																									
	Structure's Volume (Demolished)																									
	Structure's Transport Cost																									
	Structure's Disposal Cost																									
	Subtotal																									
	Foundation's Demolition Cost																									
	Foundation's Site Factor																									
	Foundation's Rein. Factor																									
	Foundation's Volume (Demolished)																									
	Foundation's Transport Cost																									
	Foundation's Disposal Cost																									
	Subtotal																									
	Footer's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78		1	1	3					3								4	FT	12	\$9
	Footer's Site Factor																									
	Footer's Rein. Factor																									
	Footer's Volume (Demolished)																									
	Footer's Transport Cost																									
	Footer's Disposal Cost	For disposal site, add	\$6.20			\$6.20																		1		\$6
	Subtotal																									\$15
	Total																									\$62,027

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFLATION RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	King-4 Steam Cleaner Building																								
	Structure's Demolition Cost																								
	Structure's Volume (Demolished)																								
	Structure's Transport Cost																								
	Structure's Disposal Cost																								
	Subtotal																								
	Equipment's Demolition Cost																								
	Equipment's Demolition Cost																								
	Equipment's Transport Cost																								
	Equipment's Disposal Cost																								
	Subtotal																								
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	22	50	0.33					363					FT		363	CF	\$283	
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Demolished)																					1.3	17	CY	
	Floor's Transport Cost																								
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																17	CY	\$63
	Subtotal																							\$346	
	Foundation's Demolition Cost																								
	Foundation's Site Factor																								
	Foundation's Rein. Factor																								
	Foundation's Volume (Demolished)																								
	Foundation's Transport Cost																								
	Foundation's Disposal Cost																								
	Subtotal																								
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Demolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal																								
	Total																							\$346	

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK. NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Main Substation																								
	Structure's Demolition Cost																								
	Structure's Volume (Demolished)																								
	Structure's Transport Cost																								
	Structure's Disposal Cost																								
	Subtotal																								
	Fence																								
	Equipment's Demolition Cost																								
	Equipment's Demolition Cost																								
	Equipment's Transport Cost																								
	Equipment's Disposal Cost																								
	Subtotal																								
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	20	45	0.33					297					FT		297	CF	\$232	
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Demolished)																					1.3	14	CY	
	Floor's Transport Cost																								
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																14	CY	\$52
	Subtotal																								\$284
	Foundation's Demolition Cost																								
	Foundation's Site Factor																								
	Foundation's Rein. Factor																								
	Foundation's Volume (Demolished)																								
	Foundation's Transport Cost																								
	Foundation's Disposal Cost																								
	Subtotal																								
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Demolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal																								
	Total																								\$284

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST
	Secondary Substation																							
	Structure's Demolition Cost																							
	Structure's Volume (Demolished)																							
	Structure's Transport Cost																							
	Structure's Disposal Cost																							
	Subtotal:																							
	Fence																							
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal:																							
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78		10	10	0.33					33					FT		100	SF	\$78
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)																					1.3	2	
	Floor's Transport Cost																							
	Floor's Disposal Fee	For disposal site, add	\$8.20			\$8.20																	2	\$12
	Subtotal:																							\$90
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal:																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal:																							
	Subtotal:																							\$90

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFLATION RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Switch Building Lower																								
	Structure's Demolition Cost	Masonry	\$0.21			\$0.21		17.5	18	10													3150	CF	\$662
	Structure's Volume (Demolished)																					0.35	41	CY	
	Structure's Transport Cost																								
	Structure's Disposal Cost	For disposal site, add	\$6.20			\$6.20																	41	CY	\$254
	Subtotal:																								\$916
	Equipment's Demolition Cost																								
	Equipment's Demolition Cost																								
	Equipment's Transport Cost																								
	Equipment's Disposal Cost																								
	Subtotal:																								
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78		17.5	18	0.33					104								315	SF	\$246
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Dimolished)																					1.3	5		
	Floor's Transport Cost																								
	Floor's Disposal Fee	For disposal site, add	\$6.20			\$6.20																	5	CY	\$31
	Subtotal:																								\$277
	Foundation's Demolition Cost																								
	Foundation's Site Factor																								
	Foundation's Rein. Factor																								
	Foundation's Volume (Dimolished)																								
	Foundation's Transport Cost																								
	Foundation's Disposal Cost																								
	Subtotal:																								
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Dimolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal:																								
	Total:																								\$1,192

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. # YR. RATE	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK. NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Switch Buildings Upper																							
	Structure's Demolition Cost	Masonry	\$0.21		\$0.21		12	17	12													2448	CF	\$514
	Structure's Volume (Demolished)																				0.35	32	CY	
	Structure's Transport Cost																							
	Structure's Disposal Cost	For disposal site, add	\$6.20		\$6.20																	32	CY	\$196
	Subtotal:																							\$712
	Equipment's Demolition Cost																							
	Equipment's Demolish Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal:																							
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78		\$0.78	\$/CF	12	17	0.33					67								204	SF	\$158
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)																				1.3	3		
	Floor's Transport Cost																							
	Floor's Disposal Fee	For disposal site, add	\$6.20		\$6.20	/CY																3	CY	\$19
	Subtotal:																							\$176
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal:																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal:																							
	Total																							\$888

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Fan Drive Building																								
	Structure's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	/CF	14.5	17	14													3451	CF	\$725
	Structure's Volume (Demolished)																					0.35	45	CY	
	Structure's Transport Cost																								
	Structure's Disposal Cost	For disposal on site, add	\$6.20			\$6.20	/CY																45	CY	\$279
	Subtotal:																							\$1,004	
	Equipment's Demolition Cost																								
	Equipment's Damage Cost																								
	Equipment's Transport Cost																								
	Equipment's Disposal Cost																								
	Subtotal:																								
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	\$/CF	14.5	17	0.33					81								247	SF	\$193
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Demolished)																					1.3	4		
	Floor's Transport Cost																								
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																4	CY	\$15
	Subtotal:																								\$208
	Foundation's Demolition Cost																								
	Foundation's Site Factor																								
	Foundation's Rein. Factor																								
	Foundation's Volume (Demolished)																								
	Foundation's Transport Cost																								
	Foundation's Disposal Cost																								
	Subtotal:																								
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Demolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal:																								
	Total:																								\$1,312

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	King 3 Fan																								
	Structure's Demolition Cost	Masonry	\$0.21			\$0.21	/CF	12	12	11													1584	CF	\$333
	Structure's Volume (Demolished)																					0.35	21	CY	
	Structure's Transport Cost																								
	Structure's Disposal Cost	For disposal site, add	\$8.20			\$8.20	/CY																21	CY	\$130
	Subtotal																								\$463
	Equipment's Demolition Cost																								
	Equipment's Demolition Cost																								
	Equipment's Transport Cost																								
	Equipment's Disposal Cost																								
	Subtotal																								
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	12	12	0.33					48								144	SF	\$112
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Demolished)																					1.3	2		
	Floor's Transport Cost																								
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																2	CY	\$7
	Subtotal																								\$18
	Foundation's Demolition Cost																								
	Foundation's Site Factor																								
	Foundation's Rein. Factor																								
	Foundation's Volume (Demolished)																								
	Foundation's Transport Cost																								
	Foundation's Disposal Cost																								
	Subtotal																								
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Demolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal																								
	Total																								\$588

Middle Park Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ANTION RATE	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST
	King 5 Steam Cleaner																						
	Structure's Demolition Cost	Large urban projects, incl. disposal.	\$0.21		\$0.21	/CF																	
	Structure's Volume (Demolished)																						
	Structure's Transport Cost																						
	Structure's Disposal Cost	For disposal on site, add	\$6.20		\$6.20	/CY																	
	Subtotal:																						
	Equipment's Demolition Cost																						
	Equipment's Demolition Cost																						
	Equipment's Transport Cost																						
	Equipment's Disposal Cost																						
	Subtotal:																						
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78		\$0.78	\$/CF	12	26	0.33					103								312 SF	\$243
	Floor's Site Factor																						
	Floor's Rein. Factor																						
	Floor's Volume (Demolished)																				1.3	5	
	Floor's Transport Cost																						
	Floor's Disposal Fee	Add for disposal, on site	\$3.70		\$3.70	/CY																5 CY	\$19
	Subtotal:																						\$262
	Foundation's Demolition Cost																						
	Foundation's Site Factor																						
	Foundation's Rein. Factor																						
	Foundation's Volume (Demolished)																						
	Foundation's Transport Cost																						
	Foundation's Disposal Cost																						
	Subtotal:																						
	Footer's Demolition Cost																						
	Footer's Site Factor																						
	Footer's Rein. Factor																						
	Footer's Volume (Demolished)																						
	Footer's Transport Cost																						
	Footer's Disposal Cost																						
	Subtotal:																						
	Total:																						\$492

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. ACTION RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST		
	King S Shop																									
	Structure's Demolition Cost	Large urban projects, incl. disposal	\$0.21			\$0.21	/CF	22	40	9													7920	CY	\$1,663	
	Structure's Volume (Demolished)																					0.35	103	CY		
	Structure's Transport Cost																									
	Structure's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY																103	CY	\$629	
	Subtotal																								\$1,332	
	Equipment's Demolition Cost																									
	Equipment's Demolition Cost																									
	Equipment's Transport Cost																									
	Equipment's Disposal Cost																									
	Subtotal																									
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	\$/CF	22	40	0.33					290									880	SF	\$686
	Floor's Site Factor																									
	Floor's Rein. Factor																									
	Floor's Volume (Demolished)																									
	Floor's Transport Cost																									
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																	14	CY	\$52
	Subtotal																									\$738
	Foundation's Demolition Cost																									
	Foundation's Site Factor																									
	Foundation's Rein. Factor																									
	Foundation's Volume (Demolished)																									
	Foundation's Transport Cost																									
	Foundation's Disposal Cost																									
	Subtotal																									
	Footer's Demolition Cost																									
	Footer's Site Factor																									
	Footer's Rein. Factor																									
	Footer's Volume (Demolished)																									
	Footer's Transport Cost																									
	Footer's Disposal Cost																									
	Subtotal																									
	Total																									\$1,090

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST		
	King 3 Substation																									
	Structure's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	/CF	15	25	25													9375	CY	\$1,969	
	Structure's Volume (Demolished)																					0.35	122	CY		
	Structure's Transport Cost																									
	Structure's Disposal Cost	For disposal on site, add	\$6.20			\$6.20	/CY																122	CY	\$756	
	Subtotal																								\$2,725	
	Fence																									
	Equipment's Demolition Cost	Chain link, remove only, 8' to 10' hi	\$2.22			\$2.22	/LF	110															110	LF	\$244	
	Equipment's Demolition Cost																									
	Equipment's Transport Cost																									
	Equipment's Disposal Cost	For disposal on site, add	\$6.20			\$6.20	/CY																1	CY	\$6	
	Subtotal																								\$250	
	Floor's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	15	15	0.33					74								225	SF	\$178	
	Floor's Site Factor																									
	Floor's Rein. Factor																									
	Floor's Volume (Demolished)																					1.3	4			
	Floor's Transport Cost																									
	Floor's Disposal Fee	Add for disposal on site	\$3.70			\$3.70	/CY																4	CY	\$15	
	Subtotal																								\$161	
	Building																									
	Structure's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	/CF	15	15	12													2700	CF	\$567	
	Structure's Volume (Demolished)																						0.35	35	CY	
	Structure's Transport Cost																									
	Structure's Disposal Cost	Add for disposal on site	\$3.70			\$3.70	/CY																35	CY	\$130	
	Subtotal																								\$697	
	Footer's Demolition Cost																									
	Footer's Site Factor																									
	Footer's Rein. Factor																									
	Footer's Volume (Demolished)																									
	Footer's Transport Cost																									
	Footer's Disposal Cost																									
	Subtotal																									
	Total																								\$3,962	

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST		
	Conveyor Control Building																									
	Structure's Demolition Cost	Masonry	\$0.21			\$0.21	/CF	14	17	8													2142	CF	\$450	
	Structure's Volume (Demolished)																					0.35	28	CY		
	Structure's Transport Cost																									
	Structure's Disposal Cost	For disposal on site, add	\$6.20			\$6.20	/CY																28	CY	\$174	
	Subtotal:																								\$824	
	Equipment's Demolition Cost																									
	Equipment's Demolition Cost																									
	Equipment's Transport Cost																									
	Equipment's Disposal Cost																									
	Subtotal:																									
	Concrete Slab Cost	Reinforced Concrete Demo	\$0.78			\$0.78	\$/CF	14	17	0.33					78								238	SF	\$186	
	Slab's Site Factor																									
	Slab's Rein. Factor																									
	Slab's Volume (Demolished)																					1.3	4			
	Slab's Transport Cost																									
	Slab's Disposal Fee	Add for disposal on site	\$3.70			\$3.70	/CY																4	CY	\$15	
	Subtotal:																								\$201	
	Belt Drive Pad Cost	Reinforced Concrete Demo	\$0.78			\$0.78	\$/CF	12.5	16.5	0.5					103								103	SF	\$80	
	Belt Drive Pad's Site Factor																									
	Belt Drive Pad's Rein. Factor																									
	Belt Drive Pad's Volume (Demolished)																						1.3	5	CY	
	Belt Drive Pad's Transport Cost																									
	Belt Drive Pad's Disposal Cost	Add for disposal on site	\$3.70			\$3.70	/CY																5	CY	\$19	
	Subtotal:																								\$99	
	Belt Terminal's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	\$/CF	5	15	0.5					38								38	SF	\$30	
	Belt Terminal's Site Factor																									
	Belt Terminal's Rein. Factor																									
	Belt Terminal's Volume (Demolished)																						1.3	2	CY	
	Belt Terminal's Transport Cost																									
	Belt Terminal's Disposal Cost	Add for disposal on site	\$3.70			\$3.70	/CY																2	CY	\$7	
	Subtotal:																								\$37	
	Total:																								\$961	

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST		
	Rail into Mine																									
	Rail's Demolition Cost	Railroad track removal, ties and track	\$15.80			\$15.80	/LF	700															700	LF	\$11,060	
	Rail's Volume (Demolished)																									
	Rail's Transport Cost																									
	Rail's Disposal Cost																									
	Subtotal																								\$11,060	
	Ballast's Demolition Cost	Ballast	\$3.47			\$3.47	/CY	700	6	2													311	CY	\$1,079	
	Ballast's Volume (Disposal)																					1.3	404	CY		
	Ballast's Transport Cost																									
	Ballast's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY																404	CY	\$2,505	
	Subtotal																									\$2,505
	Floor's Demolition Cost																									
	Floor's Site Factor																									
	Floor's Rein. Factor																									
	Floor's Volume (Diminished)																									
	Floor's Transport Cost																									
	Floor's Disposal Fee																									
	Subtotal																									
	Foundation's Demolition Cost																									
	Foundation's Site Factor																									
	Foundation's Rein. Factor																									
	Foundation's Volume (Diminished)																									
	Foundation's Transport Cost																									
	Foundation's Disposal Cost																									
	Subtotal																									
	Footer's Demolition Cost																									
	Footer's Site Factor																									
	Footer's Rein. Factor																									
	Footer's Volume (Diminished)																									
	Footer's Transport Cost																									
	Footer's Disposal Cost																									
	Subtotal																									
	Total																									\$14,644

Structural Removal Costs South Fork

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFLATION RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST
	Pump Station																							
	Structure's Demolition Cost																							
	Structure's Volume (Demolished)																							
	Structure's Transport Cost																							
	Structure's Disposal Cost																							
	Subtotal																							
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal																							
	Floor's Demolition Cost	Reinforced Concrete Demo	0.78			\$0.78	/CF	64	10	0.33												211	CF	\$165
	Floor's Site Factor																							
	Floor's Rein. Factor																					1.3	10	CY
	Floor's Volume (Demolished)																							
	Floor's Transport Cost																						10	CY
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																	\$37
	Subtotal																							\$708
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal																							
	Total																							\$392

Structural Removal Costs South Fork

MAP REF. #	DESCRIPTION	MATERIALS	UNIT COST	INFLATION RATE	# YR	ADJUSTED COST	UNIT	LENGTH	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Fan																								
	Structure's Demolition Cost	Concrete	\$0.21			\$0.21	/CF	12	20	10													2400	CF	\$504
	Structure's Volume (Demolished)																					0.35	31	CY	
	Structure's Transport Cost																								
	Structure's Disposal Cost	For disposal on site, add	\$6.20			\$6.20	/CY																31	CY	\$192
	<b>Subtotal</b>																								\$696
	Ventilation Fan's Demolition Cost																								
	Ventilation Fan's Demolition Cost																								
	Ventilation Fan's Transport Cost																								
	Ventilation Fan's Disposal Cost																								
	<b>Subtotal</b>																								
	Floor's Demolition Cost	Reinforced Concrete Demo	0.78			\$0.78	/CF	10	10	0.33													33	SF	\$26
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Demolished)																					1.3	2	CY	
	Floor's Transport Cost																								
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																2	CY	\$7
	<b>Subtotal</b>																								\$23
	Plenum Chamber Pad's Cost	Reinforced Concrete Demo	0.78			\$0.78	/CF	30	32	0.33													960	SF	\$748
	Plenum Chamber Pad's Site Factor																								
	Plenum Chamber Pad's Rein. Factor																								
	Plenum Chamber Pad's Volume (Demolished)																					1.3	15	CY	
	Plenum Chamber Pad's Transport Cost																								
	Plenum Chamber Pad's Disposal Cost	Add for disposal, on site	3.7001			\$3.70	/CY																15	CY	\$56
	<b>Subtotal</b>																								\$60
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Demolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	<b>Subtotal</b>																								
	<b>Total</b>																								\$1,321

Structural Removal Costs South Fork

MAP REF. #	DESCRIPTION	MATERIALS	UNIT COST	INFL. # YR RATE	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Shed																							
	Structure's Demolition Cost	Large urban projects, incl. disposal	\$0.21		\$0.21	/CF	60	62	14													32060	CF	\$10,937
	Structure's Volume (Demolished)																				0.35	675	CY	
	Structure's Transport Cost																							
	Structure's Disposal Cost	For disposal site, add	\$6.20		\$6.20	/CY																675	CY	\$4,185
	Subtotal:																							\$15,122
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal:																							
	Floor's Demolition Cost	Reinforced Concrete Demo	0.78		\$0.78	\$/CF	75	62	0.33													1335	SF	\$1,197
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)																				1.3	74	CY	
	Floor's Transport Cost																							
	Floor's Disposal Fee	Add for disposal on site	\$3.70		\$3.70	/CY																74	CY	\$274
	Subtotal:																							\$5,471
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal:																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal:																							
	Total																							\$18,395

Structural Removal Costs South Fork

MAP REF. #	DESCRIPTION	MATERIALS	UNIT COST	INFLATION RATE	# YR	ADJUSTED COST	UNIT	LENGTH	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST
	Upper Retaining Wall																							
	Structure's Demolition Cost																							
	Structure's Volume (Demolished)																							
	Structure's Transport Cost																							
	Structure's Disposal Cost																							
	Subtotal:																							
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal:																							
	Floor's Demolition Cost																							
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)																							
	Floor's Transport Cost																							
	Floor's Disposal Fee																							
	Subtotal:																							
	Wall's Demolition Cost	12" thick	\$13.90			\$13.90	/SF	36		10	1												360 SF	\$5,202
	Wall's Site Factor																							
	Wall's Rein. Factor																							
	Wall's Volume (Demolished)																					1.3	18 CY	
	Wall's Transport Cost																							
	Wall's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY																18 CY	\$112
	Subtotal:																							\$5,314
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal:																							
	Total:																							\$1,307

Structural Removal Costs South Fork

MAP REF. #	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Storage Shed																								
	Structure's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	/CF	31	31	12											FT	11532	CF	\$2,422	
	Structure's Volume (Demolished)																					0.35	149	CY	
	Structure's Transport Cost																								
	Structure's Disposal Cost	For disposal on site, add	\$6.20			\$6.20	/CY																149	CY	\$924
	Subtotal:																							\$2,996	
	Equipment's Demolition Cost																								
	Equipment's Dismantle Cost																								
	Equipment's Transport Cost																								
	Equipment's Disposal Cost																								
	Subtotal:																								
	Floor's Demolition Cost	Reinforced Concrete Demo	0.78			\$0.78	\$/CF	31	31	0.33											FT	317	CF	\$247	
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Demolished)																					1.3	15	CY	
	Floor's Transport Cost																								
	Floor's Disposal Fee	Add for disposal, on site	3.7001			\$3.70	/CY																15	CY	\$56
	Subtotal:																							\$392	
	Foundation's Demolition Cost																								
	Foundation's Site Factor																								
	Foundation's Rein. Factor																								
	Foundation's Volume (Demolished)																								
	Foundation's Transport Cost																								
	Foundation's Disposal Cost																								
	Subtotal:																								
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Demolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal:																								
	Total:																							\$3,648	

Structural Removal Costs South Fork

MAP #	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Bath House																								
	Structure's Demolition Cost	Large urban projects, incl. disposal	\$0.21			\$0.21	/CF	40	100	18.5											FT	118400	CF	\$24,864	
	Structure's Volume (Demolished)																					0.35	1535	CY	
	Structure's Transport Cost																						1535	CY	\$9,517
	Structure's Disposal Cost	For disposal site, add	\$8.20			\$8.20	/CY																	\$9,517	
	Subtotal:																								
	Equipment's Demolition Cost																								
	Equipment's Demolition Cost																								
	Equipment's Transport Cost																								
	Equipment's Disposal Cost																								
	Subtotal:																								
	Floor's Demolition Cost	Reinforced Concrete Demo	0.78			\$0.78	/CF	40	107	0.33											FT	1412	CF	\$1,101	
	Floor's Site Factor																								
	Floor's Reim. Factor																					1.3	68	CY	
	Floor's Volume (Demolished)																								
	Floor's Transport Cost																						68	CY	\$232
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																68	CY	\$1,556
	Subtotal:																								
	Foundation's Demolition Cost																								
	Foundation's Site Factor																								
	Foundation's Reim. Factor																								
	Foundation's Volume (Demolished)																								
	Foundation's Transport Cost																								
	Foundation's Disposal Cost																								
	Subtotal:																								
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Reim. Factor																								
	Footer's Volume (Demolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal:																								
	Total:																							\$35,734	

Structural Removal Costs South Fork

MAP REF. #	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST
	Water Tank																							
	Structure's Demolition Cost	Mixture of type, average	0.21			\$0.21	/CF			14			20										4396 CF	\$923
	Structure's Volume (Demolished)																					0.35	57 CY	
	Structure's Transport Cost																						57 CY	
	Structure's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY																57 CY	\$353
	Subtotal:																							\$1,276
	Equipment's Demolition Cost																							
	Equipment's Dismantle Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal:																							
	Floor's Demolition Cost	Reinforced Concrete Demo	0.78			\$0.78	\$/CF			0.5			20										157 CF	\$122
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)																					1.35	8 CY	
	Floor's Transport Cost																						8 CY	
	Floor's Disposal Fee	Add for disposal on site	3.7001			\$3.70	/CY																8 CY	\$30
	Subtotal:																							\$158
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal:																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal:																							
	Total																							\$1,428



Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Miscellaneous Equipment																								
	Structure's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	CF															13500	CF	\$2,835	
	Structure's Volume (Demolished)																					0.35	175	cy	
	Structure's Transport Cost																						175	cy	
	Structure's Disposal Cost	For disposal site, add	\$8.20			\$8.20	CF																175	cy	\$1,085
	Subtotal																							\$1,820	
	Equipment's Demolition Cost																								
	Equipment's Demolition Cost																								
	Equipment's Transport Cost																								
	Equipment's Disposal Cost																								
	Subtotal																								
	Floor's Demolition Cost																								
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Demolished)																								
	Floor's Transport Cost																								
	Floor's Disposal Fee																								
	Subtotal																								
	Foundation's Site Factor																								
	Foundation's Rein. Factor																								
	Foundation's Volume (Demolished)																								
	Foundation's Transport Cost																								
	Foundation's Disposal Cost																								
	Subtotal																								
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Demolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal																								
	Total																							\$1,820	

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST
	Power Lines																							
	Structure's Demolition Cost	Powerpole	\$100.00			\$100.00	EA															50	pole	\$5,000
	Structure's Volume (Demolished)																							
	Structure's Transport Cost																							
	Structure's Disposal Cost	For dispoession site. eed	\$6.20			\$6.20	/CY								15							15	CY	\$93
	Subtotal																							\$5,093
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal																							
	Floor's Demolition Cost																							
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Dimolished)																							
	Floor's Transport Cost																							
	Floor's Disposal Fee																							
	Subtotal																							
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Dimolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Dimolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal																							
	Total																							\$5,093

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ADJUSTED	UNIT	LENGHT	WIDTH	HEIGHT	THICK. NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Removed During Backfilling																						
	Structure's Demolition Cost	Large urban projects, incl. disposal	\$0.21										15687						CF		15687	CF	\$3.294
	Structure's Volume (Demolished)																			0.35	203	CY	
	Structure's Transport Cost																						
	Structure's Deposal Cost	For deposal on site, add	\$6.20																		203	CY	\$1.259
	<b>Total</b>																						\$4.553



Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. ACTION RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Screen-Crusher Site Facility																								
	Large Pad's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	4	16	0.5													64	SF	\$50
	Large Pad's Volume (Demolished)																					1.3	2	CY	
	Large Pad's Transport Cost																								
	Large Pad's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY																2	CY	\$12
	Subtotal																								\$62
	Small Pad's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	8	12	0.5					48								48	SF	\$37
	Small Pad's Volume (Demolished)																					1.3	2	CY	
	Small Pad's Transport Cost																								
	Small Pad's Disposal Cost	Add for disposal, on site	\$3.70			\$3.70	/CY																2	CY	\$7
	Subtotal																								\$44
	Main Pad's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	22	22	1					484								484	SF	\$378
	Main Pad's Site Factor		100%																						
	Main Pad's Rein. Factor																								
	Main Pad's Volume (Demolished)																					1.3	23	CY	
	Main Pad's Transport Cost																								
	Main Pad's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																23	CY	\$85
	Subtotal																								\$443
	Transfer Pl. Slab's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	4	8	0.5					16								2	CF	\$25
	Transfer Pl. Slab's Site Factor																								
	Transfer Pl. Slab's Rein. Factor																								
	Transfer Pl. Slab's Volume (Demolished)																					1.3	2	CY	
	Transfer Pl. Slab's Transport Cost																								
	Transfer Pl. Slab's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY																2	CY	\$12
	Subtotal																								\$12
	Silo Slab's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/CF	22	22	1					484								484	CF	\$378
	Silo Slab's Site Factor		100%																						
	Silo Slab's Rein. Factor																								
	Silo Slab's Volume (Demolished)																					1.3	23	CY	
	Silo Slab's Transport Cost																								
	Silo Slab's Disposal Cost	Add for disposal, on site	\$3.70			\$3.70	/CY																23	CY	\$85
	Subtotal																								\$443
	Total																								\$1,069

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFLATION RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST
	Gallery																							
	Structure's Demolition Cost	Concrete	\$0.29			\$0.29	/CF	27.5	100	12														
	Structure's Volume (Demolished)																				0.35	33000	CF	\$9,570
	Structure's Transport Cost																					428	CY	
	Structure's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY															428	CY	\$2,654
	Subtotal																							\$12,278
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal																							
	Retaining Wall's Demolition Cost	Concrete	\$0.29			\$0.29	/CF	12	128	10														
	Retaining Wall's Site Factor																							
	Retaining Wall's Rein. Factor																							
	Retaining Wall's Volume (Demolished)																				0.35	196	CY	
	Retaining Wall's Transport Cost																							
	Retaining Wall's Disposal Fee	For disposal site, add	\$6.20			\$6.20	/CY															196	CY	\$1,215
	Subtotal																							\$1,215
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal																							
	Total																							\$13,622

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST			
	Stockpile Reclaim Facility																										
	Control Building's Demolition Cost	Masonry	\$0.21			\$0.21	/CF	10	16	2													320	CF	\$67		
	Control Building's Volume (Demolished)																					0.35	4	CY			
	Control Building's Transport Cost																							4	CY	\$15	
	Control Building's Disposal Cost	Add for disposal, on site	\$3.70			\$3.70	/CY																				
	Subtotal																										
	Conveyor's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	/CF	7.5	166	9														11205	CF	\$2,353	
	Conveyor's Demolition Cost																						0.35	143	CY		
	Conveyor's Transport Cost																								143	CY	\$899
	Conveyor's Disposal Cost	For disposal on site, add	\$6.20			\$6.20	/CY																				
	Subtotal																										
	Pad's Demolition Cost	Reinforced Concrete Demolition	\$0.78			\$0.78	/CF	14	17	0.33					79									238	SF	\$186	
	Pad's Site Factor																										
	Pad's Rein. Factor																										
	Pad's Volume (Diminished)																						1.3	4			
	Pad's Transport Cost																										
	Pad's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																	4	CY	\$15	
	Subtotal																										
	Retaining Wall's Demolition Cost	8" thick	\$11.60			\$11.60	/SF	8	16	9	0.67	48												432	SF	\$3,011	
	Retaining Wall's Site Factor																										
	Retaining Wall's Rein. Factor																										
	Retaining Wall's Volume (Diminished)																						1.3	14	CY		
	Retaining Wall's Transport Cost																										
	Retaining Wall's Disposal Cost	Add for disposal, on site	\$3.70			\$3.70	/CY																	14	CY	\$52	
	Subtotal																										
	Facility's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	/CF	14	17	9														2142	CF	\$450	
	Facility's Site Factor																										
	Facility's Rein. Factor																										
	Facility's Volume (Diminished)																						0.35	28	CY	\$0	
	Facility's Transport Cost																								28	CY	\$0
	Footer's Disposal Cost	Add for disposal, on site	\$3.70			\$3.70	/CY																		28	CY	\$104
	Subtotal																										
	CONTRACT																										

Middle Fork Removal Costs

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFLATION RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Stacking Conveyor																								
	Stacking Conveyor's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	/CF	7.5	175	9												11813	CF	\$2,481	
	Stacking Conveyor's Volume (Demolished)																				0.35	153	CY		
	Stacking Conveyor's Transport Cost																								
	Stacking Conveyor's Disposal Cost	For disposal site, add	\$6.20			\$6.2	/CY															153	CY	\$949	
	Subtotal																							\$3,430	
	Stacking Tower's																								
	Stacking Tower's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			0.21	/CF	23	23	112					59248							59248	CF	\$12,442	
	Stacking Tower's Volume (Demolished)																				0.35	768	CY		
	Stacking Tower's Transport Cost																								
	Stacking Tower's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY															768	CY	\$4,762	
	Subtotal																							\$17,202	
	Floor's Demolition Cost																								
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Demolished)																								
	Floor's Transport Cost																								
	Floor's Disposal Fee																								
	Subtotal																								
	Foundation's Demolition Cost	Reinforced Concrete Demo	\$0.78			\$0.78	/SF	25	28	1					700							700	SF	\$546	
	Foundation's Site Factor																								
	Foundation's Rein. Factor																								
	Foundation's Volume (Demolished)																					1.3	34	CY	
	Foundation's Transport Cost																								
	Foundation's Disposal Cost	Add for disposal, on site	\$3.70			\$3.70	/CY															34	CY	\$126	
	Subtotal																							\$672	
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Demolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal																								
	Total																							\$21,306	

Structural Removal Costs South Fork

MAP REF. #	DESCRIPTION	MATERIALS	UNIT COST	INFL. # YR RATE	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK-NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Substation Shed																							
	Structure's Demolition Cost	Large urban projects, incl. disposal.	\$0.21		\$0.21	/CF	14	16	10											FT		2240	CF	\$470
	Structure's Volume (Demolished)																				0.35	29	CY	
	Structure's Transport Cost																					29	CY	\$180
	Structure's Disposal Cost	For disposal site, add	\$6.20		\$6.20	/CY																29	CY	\$180
	Subtotal																						\$630	
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																						\$0	
	Floor's Demolition Cost	Reinforced Concrete Demo	0.78		\$0.78	\$/CF	14	16	0.33											FT		74	CF	\$58
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)																				1.3	4	CY	
	Floor's Transport Cost																							
	Floor's Disposal Fee	Add for disposal, on site	\$3.70		\$3.70	/CY																4	CY	\$15
	Subtotal																						\$73	
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal																							
	Total																						\$723	

Structural Removal Costs South Fork

MAP REF. #	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Substation																								
	Structure's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	/CF	12	18	25	FT											5400	CF	\$1,134	
	Structure's Volume (Demolished)																					0.35	70	CY	
	Structure's Transport Cost																						70	CY	\$434
	Structure's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY																	\$1,366	
	Subtotal																								
	Equipment's Demolition Cost																								
	Equipment's Dismette Cost																								
	Equipment's Transport Cost																								
	Equipment's Disposal Cost																							\$2	
	Subtotal																								
	Floor's Demolition Cost	Reinforced Concrete Demo	0.78			\$0.78	/CF	12	18	0.33	FT												71	SF	\$55
	Floor's Site Factor																								
	Floor's Rein. Factor																								
	Floor's Volume (Dimolished)																					1.3	3	CY	
	Floor's Transport Cost																								
	Floor's Disposal Fee	Add for disposal, on site	\$3.70			\$3.70	/CY																3	CY	\$11
	Subtotal																							\$68	
	Foundation's Demolition Cost																								
	Foundation's Site Factor																								
	Foundation's Rein. Factor																								
	Foundation's Volume (Dimolished)																								
	Foundation's Transport Cost																								
	Foundation's Disposal Cost																								
	Subtotal																								
	Footer's Demolition Cost																								
	Footer's Site Factor																								
	Footer's Rein. Factor																								
	Footer's Volume (Dimolished)																								
	Footer's Transport Cost																								
	Footer's Disposal Cost																								
	Subtotal																								
	Total																							\$1,623	

Structural Removal Costs South Fork

MAP REF. #	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ANNUAL RATE	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Overland Conveyor shed																							
	17 Support Piers' Demolition Cost	Reinforced Concrete Demo	0.78		\$0.78	\$/CF	4.5	6.5	3										17	FT		1482	CF	\$1,184
	17 Support Piers' Volume (Demolished)																				1.3	72	CY	
	17 Support Piers' Transport Cost																					72	CY	\$448
	17 Support Piers' Disposal Cost	For disposal site, add	6.2		\$6.20	/CY																72	CY	\$1,416
	Subtotal																							
	Transfer Pad's Demolition Cost	Reinforced Concrete Demo	0.78		\$0.78	\$/CF	5	20	3													300	CF	\$234
	Transfer Pad's Volume (Demolished)																				1.3	14	CY	
	Transfer Pad's Transport Cost																					14	CY	\$87
	Transfer Pad's Disposal Cost	For disposal site, add	6.2		\$6.20	/CY																14	CY	\$238
	Subtotal																							
	Floor's Demolition Cost	Reinforced Concrete Demo	0.78		\$0.78	\$/CF	30	40	0.33													398	CF	\$308
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)																				1.3	19	CY	
	Floor's Transport Cost																					19	CY	\$70
	Floor's Disposal Fee	Add for disposal, on site	\$3.70		\$3.70	/CY																19	CY	\$70
	Subtotal																							
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal																							
	Total																							\$2,315

Structural Removal Costs South Fork

MAP REF.	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST
	Stacking Conveyor																							
	Conveyor's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	/CF	10	275	10												27500	CF	\$5,775
	Conveyor's Volume (Demolished)																				0.35	356	CY	
	Conveyor's Transport Cost																							
	Conveyor's Disposal Cost	For disposal site, add	\$6.20			\$6.20	/CY															356	CY	\$2,207
	Subtotal																							\$7,982
	Support Bent's (4) Demolition Cost	Large urban projects, incl. disposal.	0.21			\$0.21	/CF	0.5	3	20												200	CF	\$42
	Support Bent's (4) Demolition Cost																				0.35	3	CY	
	Support Bent's (4) Transport Cost																							
	Support Bent's (4) Disposal Cost	For disposal site, add	6.2			\$6.20	/CY															3	CY	\$19
	Subtotal																							\$63
	Concret Pier (8) Demolition Cost	Reinforced Concrete Demo	0.76			\$0.76	/CF			3			3									170	CF	\$133
	Concret Pier (8) Site Factor																							
	Concret Pier (8) Rein. Factor																							
	Concret Pier (8) Volume (Dimolished)																				1.3	8	CY	
	Concret Pier (8) Transport Cost																							
	Concret Pier (8) Disposal Fee	For disposal site, add	6.2			\$6.20	/CY															8	CY	\$50
	Subtotal																							\$183
	Tower's Demolition Cost	Large urban projects, incl. disposal.	0.21			\$0.21	/CF	1.5	24	70												2520	CF	\$529
	Tower's Demolition Cost																				0.35	33	CY	
	Tower's Transport Cost																							
	Tower's Disposal Cost	For disposal site, add	6.2			\$6.20	/CY															33	CY	\$205
	Subtotal																							\$734
	Foundation's Demolition Cost	Reinforced Concrete Demo	0.76			\$0.76	/CF	3	24	3												218	CF	\$168
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Dimolished)																				1.3	10	CY	
	Foundation's Transport Cost																							
	Foundation's Disposal Cost	For disposal site, add	6.2			\$6.20	/CY															10	CY	\$62
	Subtotal																							\$230
	Total																							\$9,195

Structural Removal Costs South Fork

MAP REF. #	DESCRIPTION	MATERIALS	UNIT COST	INFLATION RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Stockpile Reclaim Conveyor																								
	Conveyor's Demolition Cost	Large urban projects, incl. disposal.	\$0.21			\$0.21	/CF	8	110	8												7040	CF	\$1,478	
	Conveyor's Volume (Demolished)																				0.35	81	CY		
	Conveyor's Transport Cost																								
	Conveyor's Disposal Cost	For disposal on site, add	\$6.20			\$6.20	/CY															81	CY	\$564	
	<b>SUBTOTAL</b>																							\$2,042	
	Support Bent's Demolition Cost	Large urban projects, incl. disposal.	0.21			\$0.21	/CF	0.87	8	13												80	CF	\$17	
	Support Bent's Demolition Cost																				0.35	1	CY		
	Support Bent's Transport Cost																								
	Support Bent's Disposal Cost	For disposal on site, add	6.2			\$6.20	/CY															1	CY	\$6	
	<b>SUBTOTAL</b>																							\$23	
	Gallery's Demolition Cost	Concrete	0.28			\$0.28	/CF	12	42	12												6048	CF	\$1,734	
	Gallery's Site Factor																								
	Gallery's Rein. Factor																								
	Gallery's Volume (Dimolished)																				0.35	78	CY		
	Gallery's Transport Cost																								
	Gallery's Disposal Fee	For disposal on site, add	6.2			\$6.20	/CY															78	CY	\$484	
	<b>SUBTOTAL</b>																							\$2,238	
	Concrete Pier's Demolition Cost	Reinforced Concrete Demo	0.78			\$0.78	/CF	1.5	10	5												75	CF	\$59	
	Concrete Pier's Site Factor																								
	Concrete Pier's Rein. Factor																								
	Concrete Pier's Volume (Dimolished)																					1.3	4	CY	
	Concrete Pier's Transport Cost																								
	Concrete Pier's Disposal Cost	For disposal on site, add	6.2			\$6.20	/CY															4	CY	\$25	
	<b>SUBTOTAL</b>																							\$81	
	Stockpile Retaining Wall's Demolition Cost	Large urban projects, incl. disposal.	0.21			\$0.21	/CF	55	3	15												2475	CF	\$520	
	Stockpile Retaining Wall's Site Factor																								
	Stockpile Retaining Wall's Rein. Factor																								
	Stockpile Retaining Wall's Volume (Dimolished)																					1.3	358	CY	
	Stockpile Retaining Wall's Transport Cost																								
	Stockpile Retaining Wall's Disposal Cost	Add for disposal, on site	3.7001			\$3.70	/CY															358	CY	\$1,323	
	<b>SUBTOTAL</b>																							\$1,843	
	<b>Total</b>																							\$8,226	



Structural Removal Costs South Fork

MAP REF. #	DESCRIPTION	MATERIALS	UNIT COST	INFL. RATE	# YR	ADJUSTED COST	UNIT	LENGHT	WIDTH	HEIGHT	THICKNESS	PERM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST
	Powerlines																							
	Structure's Demolition Cost																							\$19,200
	Structure's Volume (Demolished)																							
	Structure's Transport Cost																							
	Structure's Disposal Cost																							
	Subtotal																							\$19,200
	Equipment's Demolition Cost																							
	Equipment's Demolition Cost																							
	Equipment's Transport Cost																							
	Equipment's Disposal Cost																							
	Subtotal																							
	Floor's Demolition Cost																							
	Floor's Site Factor																							
	Floor's Rein. Factor																							
	Floor's Volume (Demolished)																							
	Floor's Transport Cost																							
	Floor's Disposal Fee																							
	Subtotal																							
	Foundation's Demolition Cost																							
	Foundation's Site Factor																							
	Foundation's Rein. Factor																							
	Foundation's Volume (Demolished)																							
	Foundation's Transport Cost																							
	Foundation's Disposal Cost																							
	Subtotal																							
	Footer's Demolition Cost																							
	Footer's Site Factor																							
	Footer's Rein. Factor																							
	Footer's Volume (Demolished)																							
	Footer's Transport Cost																							
	Footer's Disposal Cost																							
	Subtotal																							
	Total																							\$19,200

Structural Removal Costs South Fork

MAP REF. #	DESCRIPTION	MATERIALS	UNIT COST	INFL. # ADJUSTED ACTION RATE YR COST	UNIT	LENGHT	WIDTH	HEIGHT	THICK- NESS	PERIM.	DIA.	AREA	VOLUME	WEIGHT	DENSITY	TIME	#	UNIT	SWELL FACTOR	QUANTITY	UNIT	COST	
	Miscellaneous Equipment																						
	Structure's Demolition Cost	Large urban projects, incl. disposal.	\$0.21																		500	CY	\$105
	Structure's Volume (Demolished)																			0.35	175	CY	
	Structure's Transport Cost																						
	Structure's Disposal Cost	For disposal site, add	\$6.20																		175	CY	\$1,085
	<b>Subtotal:</b>																						\$1,190
	Equipment's Demolition Cost																						
	Equipment's Dismantle Cost																						
	Equipment's Transport Cost																						
	Equipment's Disposal Cost																						
	<b>Subtotal:</b>																						
	Floor's Demolition Cost																						
	Floor's Site Factor																						
	Floor's Rein. Factor																						
	Floor's Volume (Diminished)																						
	Floor's Transport Cost																						
	Floor's Disposal Fee																						
	<b>Subtotal:</b>																						
	Foundation's Demolition Cost																						
	Foundation's Site Factor																						
	Foundation's Rein. Factor																						
	Foundation's Volume (Diminished)																						
	Foundation's Transport Cost																						
	Foundation's Disposal Cost																						
	<b>Subtotal:</b>																						
	Footer's Demolition Cost																						
	Footer's Site Factor																						
	Footer's Rein. Factor																						
	Footer's Volume (Diminished)																						
	Footer's Transport Cost																						
	Footer's Disposal Cost																						
	<b>Subtotal:</b>																						
	<b>Total:</b>																						\$1,190



Reclamation Cost Estimate  
Hiawatha Middle Fork Facilities

	Equipment	Hours In	Hourly	Hourly	Equip.	Operator	Number	Total Hourly	Base	Material		Escalation	Number of	Escalated			Application/			
	Costs	Eq. Rental	Equipmen	Operating	& Mat.	Hourly	of Men	Equip & Labor	Material	Costs	Incl. O&P	Rate	Years	Equip & Labor	Units	Material	Production	Units	Cost	
	Costs	Period	Costs	Costs	Overhead	Rate	or Equip.	Costs	Cost		Units	Rate	Escalated	Costs	Units	Quantity	Units	Rates	Units	Cost
<b>BACKFILL AND GRADE</b>																				
Remove Contaminated Material (6" deep)																				
D11N U Blade	30580	176	173.75	83.45	0.1	37.35	\$1.00	\$320.27				2.01%	0	\$320.27	HR			12.3	HR	\$3,939
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			12.3	HR	\$185
Remove and Stockpile Topsoil																				
1.5' Deep from Areas A, B, & C																				
D11N U Blade	30580	176	173.75	83.45	0.1	37.35	\$1.00	\$320.27				2.01%	0	\$320.27	HR			16.3	HR	\$5,220
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			16.3	HR	\$245
Cut and Fill Site																				
D11N U Blade	30580	176	173.75	83.45	0.1	37.35	\$1.00	\$320.27				2.01%	0	\$320.27	HR			151.9	HR	\$48,649
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			151.9	HR	\$2,286
Subtotal																				\$60,524
<b>BACKFILL AND GRADING (Timber Yards)</b>																				
Remove and Stockpile Topsoil (6" deep)																				
D9N U Blade	14355	176	81.56	42.8	0.1	37.35	\$1.00	\$174.15				2.01%	0	\$174.15	HR			4.9	HR	\$853
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			4.9	HR	\$74
Cut and Fill Sites																				
D9N U Blade	14355	176	81.56	42.8	0.1	37.35	\$1.00	\$174.15				2.01%	0	\$174.15	HR			6	HR	\$1,045
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			6	HR	\$90
Replace Topsoil																				
D9N U Blade	14355	176	81.56	42.8	0.1	37.35	\$1.00	\$174.15				2.01%	0	\$174.15	HR			4.9	HR	\$853
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			4.9	HR	\$74
Subtotal																				\$2,989
<b>BACKFILL AND GRADING (Road)</b>																				
Rip Pavement																				
D9N U Blade	14355	176	81.56	42.8	0.1	37.35	\$1.00	\$174.15				2.01%	0	\$174.15	HR			5.2	HR	\$908
Multi-Shank Ripper 380-519	\$2,550.00	176	\$14.49	\$5.15	10.00%		\$1.00	\$21.60				2.01%	0	\$21.60	HR			5.2	HR	\$112
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			5.2	HR	\$78
Grade Pavement to Windrow																				
14G	\$6,990.00	176	\$39.72	\$39.95	10.00%	37.35	\$1.00	\$124.99				2.01%	0	\$124.99	HR			5.6	HR	\$700
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			5.6	HR	\$84
Load Pavement to Slurry Pond																				
988B (1994)	\$11,900.00	176	\$67.61	\$39.95	10.00%	37.35	\$1.00	\$155.67				2.01%	0	\$155.67	HR			221.5	HR	\$34,481
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			221.5	HR	\$3,334
Haul Pavement to Slurry Pond																				
6X4 12-18 CY	3745	176	21.28	17.9	0.1	30.35	\$1.00	\$73.45				2.01%	0	\$73.45	HR			241.6	HR	\$17,746
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			241.6	HR	\$3,836
Backfill and Grade (4 CY/ FT)																				
D9N U Blade	14355	176	81.56	42.8	0.1	37.35	\$1.00	\$174.15				2.01%	0	\$174.15	HR			83.6	HR	\$14,559
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			83.6	HR	\$1,258
Subtotal																				\$78,894
<b>TOPSOIL REPLACEMENT (Mine Site)</b>																				
Haul From Stockpile																				
988B (1994)	\$6,990.00	176	\$39.72	\$39.95	10.00%	37.35	\$1.00	\$124.99				2.01%	0	\$124.99	HR			70.8	HR	\$8,849
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			70.8	HR	\$1,066
06D Angle	5190	176	29.49	16.05	0.1	37.35	\$1.00	\$87.44				2.01%	0	\$87.44	HR			6.6	HR	\$577
Common Building Laborers						30.1	\$0.50	\$15.05				2.01%	0	\$15.05	HR			6.6	HR	\$99







Reclamation Cost Estimate  
Hiawatha Processing Topsoil Borrow Areas

	Equipment	Hours In	Hourly	Hourly	Equip.	Operator	Number	Total Hourly	Base	Material			Number of	Escalated							
	Costs	Eq. Rental	Eq. Rental	Operating	& Mat.	Hourly	of Men	Equip & Labor	Material	Costs	Incl. O&P	Units	Years	Equip, Labor	Material	Production					
	Costs	Period	Costs	Costs	Overhead	Rate	or Equip.	Costs	Cost			Factor	Escalated	Material Costs	Units	Quantity	Units	Rate	Units	Cost	
<b>GRADE AND RESHAPE SURFACE AREA</b>																					
D9N U Blade	\$14,355.00	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15					2.01%	0	\$174.15	HR		88.9	HR	\$15,462	
Common Building Laborers						\$30.35	0.5	\$15.18					2.01%	0	\$15.18	HR		88.9	HR	\$1,350	
Subtotal																				\$16,832	
<b>REVEGETATION</b>																					
Scarify total area to be revegetated																					
D6D Angle	\$5,190.00	176	\$29.49	\$18.05	10.00%	\$37.35	1	\$87.44					2.01%	0	\$87.44	HR		17.4	HR	\$1,521	
Multi-Shank Ripper 130-189	\$890.00	176	\$5.06	\$2.05	10.00%		1	\$7.82					2.01%	0	\$7.82	HR		17.4	HR	\$136	
Common Building Laborers						\$30.35	0.5	\$15.18					2.01%	0	\$15.18	HR		17.4	HR	\$264	
Apply Fertilizer																					
D6D Angle	\$5,190.00	176	\$29.49	\$18.05	10.00%	\$37.35	1	\$87.44					2.01%	0	\$87.44	HR		13.1	HR	\$1,145	
Common Building Laborers						\$30.35	0.5	\$15.18					2.01%	0	\$15.18	HR		13.1	HR	\$199	
Disc harrow along contour																					
D6D Angle	\$5,190.00	176	\$29.49	\$18.05	10.00%	\$37.35	1	\$87.44					2.01%	0	\$87.44	HR		8.7	HR	\$761	
Common Building Laborers						\$30.35	0.5	\$15.18					2.01%	0	\$15.18	HR		8.7	HR	\$132	
Drill Seeding																					
D6D Angle	\$5,190.00	176	\$29.49	\$18.05	10.00%	\$37.35	1	\$87.44					2.01%	0	\$87.44	HR		13.1	HR	\$1,145	
Common Building Laborers						\$30.35	0.5	\$15.18					2.01%	0	\$15.18	HR		13.1	HR	\$199	
Apply straw mulch																					
D6D Angle	\$5,190.00	176	\$29.49	\$18.05	10.00%	\$37.35	1	\$87.44					2.01%	0	\$87.44	HR		13.1	HR	\$1,145	
Common Building Laborers						\$30.35	0.5	\$15.18					2.01%	0	\$15.18	HR		13.1	HR	\$199	
Crimp mulch into soil																					
D6D Angle	\$5,190.00	176	\$29.49	\$18.05	10.00%	\$37.35	1	\$87.44					2.01%	0	\$87.44	HR		8.7	HR	\$761	
Common Building Laborers						\$30.35	0.5	\$15.18					2.01%	0	\$15.18	HR		8.7	HR	\$132	
Materials																					
Fertilizer					10.00%				\$0.21	\$0.23	/LB		2.01%	0	\$0.23	/LB	52.2	AC	148	LB/AC	\$1,777
Seed					10.00%				\$10.00	\$11.00	/LB		2.01%	0	\$11.00	/LB	52.2	AC	33	LB/AC	\$18,949
Hay Mulch					10.00%				\$0.04	\$0.04	/LB		2.01%	0	\$0.04	/LB	52.2	AC	5000	LB/AC	\$10,440
Subtotal																				\$38,905	
<b>INSTALL AND REMOVE STREAM CROSSING</b>																					
Install Culvert (30" dia.)																					
Remove Culvert (30" dia.)																					
Construct Stream Crossing																					
D9N U Blade	\$14,355.00	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15					2.01%	0	\$174.15	HR		8.7	HR	\$1,515	
826C	\$176.00	176	\$73.61	\$42.50	10.00%	\$37.35	1	\$165.07					2.01%	0	\$165.07	HR		8.7	HR	\$1,436	
Common Building Laborers						\$30.35	1	\$30.35					2.01%	0	\$30.35	HR		8.7	HR	\$264	
Remove Stream Crossing																					
D9N U Blade	\$14,355.00	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15					2.01%	0	\$174.15	HR		8.7	HR	\$1,515	
Common Building Laborers						\$30.35	0.5	\$15.18					2.01%	0	\$15.18	HR		8.7	HR	\$132	
Subtotal																				\$4,862	
<b>INSTALL AND REMOVE SEDIMENT PONDS</b>																					
Construct Sediment Ponds (3)																					
D9N U Blade	\$14,355.00	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15					2.01%	0	\$174.15	HR		12.2	HR	\$2,125	
826C	\$176.00	176	\$73.61	\$42.50	10.00%	\$37.35	1	\$165.07					2.01%	0	\$165.07	HR		12.2	HR	\$2,014	
Common Building Laborers						\$30.35	1	\$30.35					2.01%	0	\$30.35	HR		12.2	HR	\$370	



Reclamation Cost Estimate  
Hiawatha Processing Plant and Refuse Disposal Areas

	Equip.	Hours in Rental	Hourly Equip. Costs	Hourly Operating Costs	Equip. & Mat. O. H.	Oper. Hourly Wage	# of Men or Equip.	Total Hourly Equip & Labor Costs	Base Material Cost	Material Incl. O&P Units	Escal. Rate	Number of Years Escalated	Escalated Equip & Labor Material Costs	Units	Material Quantity	Units	Application/ Production Rate	Units	Machine Time	Units	Cost
<b>BACKFILL AND GRADE</b>																					
<b>Cut and Fill Sites</b>																					
D11N U Blade		176	\$173.75	\$83.45	10.00%	\$37.35	1	\$320.27			2.01%	0	\$320.27	HR	808274	CY	588	CY/HR	1379.3	HR	\$441,748
Common Building Laborers						\$30.10	0.5	\$15.05			2.01%	0	\$15.05	HR	808274	CY	588	CY/HR	1379.3	HR	\$20,758
<b>Subtotal</b>																					
<b>Pond Regrading</b>																					
D11N U Blade		176	173.75	83.45	0.1	37.35	1	\$320.27			2.01%	0	\$320.27	HR	66000	CY	588	CY/HR	112.8	HR	\$36,062
Common Building Laborers						30.1	0.5	\$15.05			2.01%	0	\$15.05	HR	66000	CY	588	CY/HR	112.8	HR	\$1,695
<b>Subtotal</b>																					
<b>REMOVE TRUCK HAUL ROAD</b>																					
<b>Rip Paved Surface (24' x 800')</b>																					
D9N U Blade		176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15			2.01%	0	\$174.15	HR	0.44	AC	2.3	AC/HR	0.2	HR	\$35
Multi-Shank Ripper 360-519		176	\$14.49	\$5.15	10.00%		1	\$21.60			2.01%	0	\$21.60	HR	0.44	AC	2.3	AC/HR	0.2	HR	\$4
Common Building Laborers						\$30.10	0.5	\$15.05			2.01%	0	\$15.05	HR	0.44	AC	2.3	AC/HR	0.2	HR	\$3
<b>Subtotal</b>																					
<b>Push ripped pavement to fill site</b>																					
D9N U Blade		176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15			2.01%	0	\$174.15	HR	356	CY	234	CY/HR	1.5	HR	\$261
Common Building Laborers						\$30.10	0.5	\$15.05			2.01%	0	\$15.05	HR	356	CY	234	CY/HR	1.5	HR	\$23
<b>Subtotal</b>																					
<b>Reshaped surface (3 CY/FT)</b>																					
D9N U Blade		176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15			2.01%	0	\$174.15	HR	2400	CY	234	CY/HR	10.3	HR	\$1,794
Common Building Laborers						\$30.10	0.5	\$15.05			2.01%	0	\$15.05	HR	2400	CY	234	CY/HR	10.3	HR	\$155
<b>Subtotal</b>																					
<b>TOPSOIL REMOVAL (NON-REFUSE AREAS)</b>																					
<b>Remove 6" of surface material, place in fill</b>																					
D9N U Blade		176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15			2.01%	0	\$174.15	HR	37510	CY	436	CY/HR	86	HR	\$14,977
Common Building Laborers						\$30.10	0.5	\$15.05			2.01%	0	\$15.05	HR	37510	CY	436	CY/HR	86	HR	\$1,294
<b>Subtotal</b>																					
<b>Remove and stockpile 18" of existing material</b>																					
D9N U Blade		176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15			2.01%	0	\$174.15	HR	129349		436	CY/HR	296.7	HR	\$51,670
Common Building Laborers						\$30.10	0.5	\$15.05			2.01%	0	\$15.05	HR	129349		436	CY/HR	296.7	HR	\$4,465
<b>Subtotal</b>																					
<b>TOPSOIL PLACEMENT (REFUSE AREAS)</b>																					
<b>Haul topsoil from borrow areas A, B, C &amp; D</b>																					
D9N U Blade		176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15			2.01%	0	\$174.15	HR			271	HR			\$47,195
Common Building Laborers						\$30.10	0.5	\$15.05			2.01%	0	\$15.05	HR			271	HR			\$4,079
<b>Subtotal</b>																					
631E		176	\$94.86	\$61.35	10.00%	\$37.35	4	\$836.72			2.01%	0	\$836.72	HR	286100	CY	289	CY/HR	247.5	HR	\$207,068
Common Building Laborers						\$30.10	2	\$60.20			2.01%	0	\$60.20	HR	286100	CY	289	CY/HR	247.5	HR	\$14,900
<b>Subtotal</b>																					
<b>Spread topsoil to grade stakes (3 passes)</b>																					
14G	6990	176	39.72	39.95	0.1	37.35	1	\$124.99			2.01%	0	\$124.99	HR	133	AC	6	AC/HR	22.2	HR	\$2,775
14G	6990	176	39.72	39.95	0.1	37.35	1	\$124.99			2.01%	0	\$124.99	HR	133	AC	6	AC/HR	22.2	HR	\$2,775
14G	\$6,990	176	\$39.72	\$39.95	10.00%	\$37.35	1	\$124.99			2.01%	0	\$124.99	HR	133	AC	6	AC/HR	22.2	HR	\$2,775



Common Building Laborers						\$30.10	1.5	\$45.15				2.01%	0	\$45.15	HR	133	AC	6	AC/HR	22.2	HR	\$1,002
Subtotal																						\$6,387
TOPSOIL PLACEMENT (NON-REFUSE AREA)																						
Haul topsoil from Upper R.R. yard to upper R.R. grade																						
D9N U Blade	\$14,355	178	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15				2.01%	0	\$174.15	HR					7.5	HR	\$1,306
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					7.5	HR	\$113
Subtotal																						\$1,419
631E	\$16,695	176	\$94.86	\$61.35	10.00%	\$37.35	4	\$836.72				2.01%	0	\$836.72	HR	10807	CY	361	CY/HR	7.5	HR	\$6,275
Common Building Laborers						\$30.10	2	\$60.20				2.01%	0	\$60.20	HR					7.5	HR	\$452
Subtotal																						\$6,727
Spread topsoil to grade																						
D9N U Blade	\$14,355	178	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15				2.01%	0	\$174.15	HR	112936	CY	436	CY/HR	259	HR	\$45,105
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					259	HR	\$3,898
Subtotal																						\$49,003
SOIL TESTING																						
Labor																						
						\$34.80	1	\$34.80				2.01%	0	\$34.80	HR					10	HR	\$348
Conventional 3/4 ton 4wh pickup	\$630	176	\$3.58	\$5.20	10.00%		1	\$9.66				2.01%	0	\$9.66	HR					10	HR	\$97
Sample Analysis					10.00%				\$130.00	\$143.00	EA	2.01%	0	\$143.00	EA					30	Sample	\$4,290
Subtotal																						\$4,735
REVEGETATION																						
Scarify total area to be reclaimed																						
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR	203	AC	3	AC/HR	67.7	HR	\$5,920
Multi-Shank Ripper 130-189	\$16,695	176	\$94.86	\$61.35	10.00%	\$37.35	1	\$209.18				2.01%	0	\$209.18	HR					67.7	HR	\$14,161
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					67.7	HR	\$1,019
Subtotal																						\$21,000
Apply Fertilizer																						
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR	195	AC	4	AC/HR	48.8	HR	\$4,267
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					48.8	HR	\$734
Subtotal																						\$5,001
Disc harrow along contour																						
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR	195	AC	6	AC/HR	32.5	HR	\$2,842
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					32.5	HR	\$489
Subtotal																						\$3,331
Drill Seeding																						
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR	195	AC	4	AC/HR	48.8	HR	\$4,267
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					48.8	HR	\$734
Subtotal																						\$5,001
Apply straw mulch																						
					10.00%			\$0.04	\$0.04	/LB	2.01%	0	\$0.04	/LB	195	AC	3000	LB/AC				\$23,400
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	AC					48.8	HR	\$4,267
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					48.8	HR	\$734
Subtotal																						\$28,401
Crimp mulch into soil																						
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR	195	AC	6	AC/HR	32.5	HR	\$2,842
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					32.5	HR	\$489
Fertilizer					10.00%			\$0.21	\$0.23	/LB	2.01%	0	\$0.23	/LB	195	AC	100	LB/AC				\$4,485
Seed					10.00%			\$10.00	\$11.00	/LB	2.01%	0	\$11.00	/LB	195	AC	22	LB/AC				\$47,190
Hay Mulch					10.00%			\$0.04	\$0.04	/LB	2.01%	0	\$0.04	/LB	195	AC	39	LB/AC				\$304
Subtotal																						\$52,110
Hydroseed part of upper RR yard																						
					10.00%			\$1,800	\$1,980	/AC	2.01%	0	\$1,980	AC						8	AC	\$15,840
Subtotal																						\$15,840
Supervision & Support																						





Common Building Laborers						\$30.10	1.5	\$45.15				2.01%	0	\$45.15	HR	133	AC	6	AC/HR	22.2	HR	\$1,002
Subtotal																						\$4,327
TOPSOIL PLACEMENT (NON-REFUSE AREA)																						
Haul topsoil from Upper R.R. yard to upper R.R. grade																						
D9N U Blade	\$14,355	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15				2.01%	0	\$174.15	HR					7.5	HR	\$1,306
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					7.5	HR	\$113
Subtotal																						\$139
631E	\$16,695	176	\$94.86	\$61.35	10.00%	\$37.35	4	\$836.72				2.01%	0	\$836.72	HR	10807	CY	361	CY/HR	7.5	HR	\$6,275
Common Building Laborers						\$30.10	2	\$60.20				2.01%	0	\$60.20	HR					7.5	HR	\$452
Subtotal																						\$727
Spread topsoil to grade																						
D9N U Blade	\$14,355	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15				2.01%	0	\$174.15	HR	112936	CY	436	CY/HR	259	HR	\$45,105
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					259	HR	\$3,898
Subtotal																						\$49,003
SOIL TESTING																						
Labor																						
Conventional 3/4 ton 4wh pickup	\$630	176	\$3.58	\$5.20	10.00%	\$34.80	1	\$34.80				2.01%	0	\$34.80	HR					10	HR	\$348
Sample Analysis					10.00%				\$130.00	\$143.00	EA	2.01%	0	\$143.00	EA			30	Sample			\$4,290
Subtotal																						\$4,738
REVEGETATION																						
Scarify total area to be reclaimed																						
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR	203	AC	3	AC/HR	67.7	HR	\$5,920
Multi-Shank Ripper 130-189	\$16,695	176	\$94.86	\$61.35	10.00%	\$37.35	1	\$209.18				2.01%	0	\$209.18	HR					67.7	HR	\$14,161
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					67.7	HR	\$1,019
Subtotal																						\$21,000
Apply Fertilizer																						
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR	195	AC	4	AC/HR	48.8	HR	\$4,267
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					48.8	HR	\$734
Subtotal																						\$5,001
Disc harrow along contour																						
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR	195	AC	6	AC/HR	32.5	HR	\$2,842
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					32.5	HR	\$489
Subtotal																						\$3,331
Drill Seeding																						
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR	195	AC	4	AC/HR	48.8	HR	\$4,267
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					48.8	HR	\$734
Subtotal																						\$5,001
Apply straw mulch																						
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44	\$0.04	\$0.04	/LB	2.01%	0	\$0.04	/LB	195	AC	3000	LB/AC			\$23,400
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					48.8	HR	\$734
Subtotal																						\$24,134
Crimp mulch into soil																						
D6D Angle	\$5,190	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR	195	AC	6	AC/HR	32.5	HR	\$2,842
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR					32.5	HR	\$489
Fertilizer					10.00%				\$0.21	\$0.23	/LB	2.01%	0	\$0.23	/LB	195	AC	100	LB/AC			\$4,485
Seed					10.00%				\$10.00	\$11.00	/LB	2.01%	0	\$11.00	/LB	195	AC	22	LB/AC			\$47,190
Hay Mulch					10.00%				\$0.04	\$0.04	/LB	2.01%	0	\$0.04	/LB	195	AC	39	LB/AC			\$304
Subtotal																						\$52,100
Hydroseed part of upper RR yard																						
					10.00%				\$1,800	\$1,980	/AC	2.01%	0	\$1,980	AC			8	AC			\$15,840
Subtotal																						\$15,840
Supervision & Support																						



Reclamation Cost Estimate  
Hiawatha South Fork Facilities

	Equipment Costs	Hours In Eq. Rental Period	Hourly Equipment Costs	Hourly Operating Costs	Equip. & Mat. Overhead	Operator Hourly Rate	Number of Men or Equip.	Total Hourly Equip & Labor Costs	Base Material Cost	Material Costs Incl. O&P	Units	Escalation Rate	Number of Years Escalated	Escalated Equip & Labor Costs	Units	Material Quantity	Material Units	Application/Production Rates	Units	Cost
<b>BACKFILL AND GRADE</b>																				
Remove Contaminated Material																				
D11N U Blade	\$30,580.00	176	\$173.75	\$83.45	10.00%	\$37.35	1	\$320.27				2.01%	0	\$320.27	HR			9.2	HR	\$2,946
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			9.2	HR	\$138
Remove and Stockpile Topsoil																				
1.5' Deep from Area A & B																				
D11N U Blade	\$30,580.00	176	\$173.75	\$83.45	10.00%	\$37.35	1	\$320.27				2.01%	0	\$320.27	HR			9.8	HR	\$3,139
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			9.8	HR	\$147
Cut and Fill Site																				
D11N U Blade	\$30,580.00	176	\$173.75	\$83.45	10.00%	\$37.35	1	\$320.27				2.01%	0	\$320.27	HR			86.7	HR	\$27,767
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			86.7	HR	\$1,305
Subtotal																				\$35,442
<b>BACKFILL AND GRADING (Road)</b>																				
Remove and Stockpile Topsoil (6" deep)																				
09N U Blade	\$14,355.00	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15				2.01%	0	\$174.15	HR			4.3	HR	\$749
Multi-Shank Ripper 360-519	\$2,550.00	176	\$14.49	\$5.15	10.00%		1	\$21.60				2.01%	0	\$21.60	HR			4.3	HR	\$93
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			4.3	HR	\$65
Grade Pavement to Window																				
14G	\$6,990.00	176	\$39.72	\$39.95	10.00%	\$37.35	1	\$124.99				2.01%	0	\$124.99	HR			4.6	HR	\$575
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			4.6	HR	\$69
Load Pavement on Dump Truck																				
988B (1994)	\$11,900.00	176	\$67.61	\$39.95	10.00%	\$37.35	1	\$155.67				2.01%	0	\$155.67	HR			50	HR	\$7,784
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			50	HR	\$753
Haul Pavement to Slurry Pond																				
6X4 12-18 CY	\$3,745.00	176	\$21.28	\$17.90	10.00%	\$30.35	1	\$73.45				2.01%	0	\$73.45	HR			198.8	HR	\$14,602
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			198.8	HR	\$2,992
Backfill and Grade																				
09N U Blade	\$14,355.00	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15				2.01%	0	\$174.15	HR			83	HR	\$14,454
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			83	HR	\$1,249
Subtotal																				\$43,385
<b>TOPSOIL REPLACEMENT (Mine Site Only)</b>																				
Haul From Stockpile																				
988B (1994)	\$11,900.00	176	\$67.61	\$39.95	10.00%	\$37.35	1	\$155.67				2.01%	0	\$155.67	HR			16.8	HR	\$2,815
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			16.8	HR	\$253
Grade to Stakes																				
D6D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			4.7	HR	\$411
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			4.7	HR	\$71
Subtotal																				\$3,350
<b>TOPSOIL REPLACEMENT (Mine Site)</b>																				
Haul From Stockpile																				
988B (1994)	\$6,990.00	176	\$39.72	\$39.95	10.00%	\$37.35	1	\$124.99				2.01%	0	\$124.99	HR			16.8	HR	\$2,100
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			16.8	HR	\$253
D6D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			4.7	HR	\$411
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			4.7	HR	\$71
Subtotal																				\$2,835
<b>SOIL TESTING</b>																				

Labor						\$34.80	1	\$34.80				2.01%	0	\$34.80	HR			10	HR	\$348
Conventional 3/4 ton 4wh pickup	\$630.00	176	\$3.56	\$5.20	10.00%		1	\$9.66				2.01%	0	\$9.66	HR			10	HR	\$97
Sample Analysis					10.00%				\$130.00	\$143.00	EA	2.01%	0	\$143.00	EA	12	Sample			\$1,716
Subtotal																				\$2,161
REVEGETATION																				
Scarify total area to be reclaimed																				
D&D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			6.8	HR	\$595
Multi-Shank Ripper 130-189	\$890.00	176	\$5.06	\$2.05	10.00%		1	\$7.82				2.01%	0	\$7.82	HR			6.8	HR	\$63
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			6.8	HR	\$102
Apply Fertilizer																				
D&D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			2.8	HR	\$245
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			2.8	HR	\$42
Fertilizer					10.00%				\$0.21	\$0.23	/LB	2.01%	0	\$0.23	/LB	11.3	AC	100	LB/AC	\$260
Disc harrow along contour																				
D&D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			1.9	HR	\$166
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			1.9	HR	\$29
Drill Seeding																				
D&D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			2.8	HR	\$245
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			2.8	HR	\$42
Seed					10.00%				\$0.21	\$0.23	/LB	2.01%	0	\$0.23	/LB	11.3	AC	100	LB/AC	\$260
Apply straw mulch																				
D&D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			2.8	HR	\$245
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			2.8	HR	\$42
Hay					10.00%				\$0.04	\$0.04	/LB	2.01%	0	\$0.04	/LB	11.3	AC	3000	LB/AC	\$1,356
Crimp mulch into soil																				
D&D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			1.9	HR	\$166
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			1.9	HR	\$29
Hydroseed steep areas																				
Plant Nursery Grown Trees					10.00%							2.01%	0	\$1,980.00	AC			9.7	AC	\$19,206
Common Building Laborers						\$30.10	1	\$30.10				2.01%	0	\$30.10	HR			164	HR	\$4,936
Trees					10.00%				\$0.50	\$0.55	EA	2.01%	0	\$0.55	EA	20.5	AC	500	TREE/AC	\$5,638
Plant Nursery Grown Shrubs																				
Common Building Laborers						\$30.10	1	\$30.10				2.01%	0	\$30.10	HR			72	HR	\$2,167
Shrubs					10.00%				\$0.50	\$0.55	EA	2.01%	0	\$0.55	EA	2	AC	2250	SHRUB/A	\$2,475
Subtotal																				\$35,824
RESTORE STREAM CHANNEL																				
D&D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$37.35				2.01%	0	\$37.35	HR			40	HR	\$1,494
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			40	HR	\$602
24" Riprap					10.00%				\$12.00	\$13.20	/CY	2.01%	0	\$13.20	/CY			556	CY	\$7,339
Filter Gravel					10.00%				\$10.00	\$11.00	/CY	2.01%	0	\$11.00	/CY			296	CY	\$3,256
Subtotal																				\$12,691
PROJECT MAINTENANCE																				
Foreman Average, Outside																				
Conventional 3/4 ton 4wh pickup	\$630.00	176	\$3.56	\$5.20	10.00%		1	\$9.66				2.01%	0	\$9.66	HR			40	HR	\$386
Repair rills and gullies																				
Farm Tractor																				
D3C SA	\$3,455.00	176	\$19.63	\$11.30	10.00%	\$37.35	1	\$37.35				2.01%	0	\$37.35	HR			24	HR	\$896
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			24	HR	\$361
Reseeding (20% of area for 2nd year)																				
Drill seed																				
D&D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	1	\$89.20	HR			0.8	HR	\$71
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	1	\$15.35	HR			0.8	HR	\$12
Seed					10.00%				\$0.21	\$0.23	/LB	2.01%	0	\$0.23	/LB	5	AC	100	LB/AC	\$115

Reclamation Cost Estimate  
Hiawatha Processing Topsoil Borrow Areas

	Equipment	Hours in Eq. Rental	Hourly Equip. Costs	Hourly Operating Costs	Equip. & Mat. Overhead	Operator Hourly Rate	Number of Men or Equip.	Total Hourly Equip & Labor Costs	Base Material Cost	Material Costs Incl. O&P	Units	Escalation Factor	Number of Years Escalated	Escalated Equip. Labor Material Costs	Units	Material Quantity	Units	Production Rate	Units	Cost
GRADE AND RESHAPE SURFACE AREA																				
D9N U Blade	\$14,355.00	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15				2.01%	0	\$174.15	HR			86.9	HR	\$15,482
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			86.9	HR	\$1,338
Subtotal																				\$16,820
REVEGETATION																				
Scarify total area to be revegetaed																				
D6D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			17.4	HR	\$1,521
Multi-Shank Ripper 130-189	\$890.00	176	\$5.06	\$2.05	10.00%		1	\$7.82				2.01%	0	\$7.82	HR			17.4	HR	\$136
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			17.4	HR	\$262
Apply Fertilizer																				
D6D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			13.1	HR	\$1,145
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			13.1	HR	\$197
Disc harrow along contour																				
D6D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			8.7	HR	\$761
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			8.7	HR	\$131
Drill Seeding																				
D6D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			13.1	HR	\$1,145
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			13.1	HR	\$197
Apply straw mulch																				
D6D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			13.1	HR	\$1,145
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			13.1	HR	\$197
Crimp mulch into soil																				
D6D Angle	\$5,190.00	176	\$29.49	\$16.05	10.00%	\$37.35	1	\$87.44				2.01%	0	\$87.44	HR			8.7	HR	\$761
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			8.7	HR	\$131
Materials																				
Fertilizer					10.00%				\$0.21	\$0.23	/LB	2.01%	0	\$0.23	/LB	52.2	AC	148	LB/AC	\$1,777
Seed					10.00%				\$10.00	\$11.00	/LB	2.01%	0	\$11.00	/LB	52.2	AC	33	LB/AC	\$18,949
Hay Mulch					10.00%				\$0.04	\$0.04	/LB	2.01%	0	\$0.04	/LB	52.2	AC	5000	LB/AC	\$10,440
Subtotal																				\$38,695
INSTALL AND REMOVE STREAM CROSSING																				
Install Culvert (30" dia.)																				
Remove Culvert (30" dia.)																				
Construct Stream Crossing																				
D9N U Blade	\$14,355.00	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15				2.01%	0	\$174.15	HR			8.7	HR	\$1,515
826C	\$12,955.00	176	\$73.61	\$42.50	10.00%	\$37.35	1	\$165.07				2.01%	0	\$165.07	HR			8.7	HR	\$1,436
Common Building Laborers						\$30.10	1	\$30.10				2.01%	0	\$30.10	HR			8.7	HR	\$262
Remove Stream Crossing																				
D9N U Blade	\$14,355.00	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15				2.01%	0	\$174.15	HR			8.7	HR	\$1,515
Common Building Laborers						\$30.10	0.5	\$15.05				2.01%	0	\$15.05	HR			8.7	HR	\$131
Subtotal																				\$4,659
INSTALL AND REMOVE SEDIMENT PONDS																				
Construct Sediment Ponds (3)																				
D9N U Blade	\$14,355.00	176	\$81.56	\$42.80	10.00%	\$37.35	1	\$174.15				2.01%	0	\$174.15	HR			12.2	HR	\$2,125
826C	\$12,955.00	176	\$73.61	\$42.50	10.00%	\$37.35	1	\$165.07				2.01%	0	\$165.07	HR			12.2	HR	\$2,014
Common Building Laborers						\$30.10	1	\$30.10				2.01%	0	\$30.10	HR			12.2	HR	\$367

