

Opinion of Probable Construction Cost

Design Engineer’s Opinion of Phase 2 Construction Cost

30% Design

Effective Date: February 2020

Feature No.	Item No.	Description	Quantity	Unit	Unit Price (\$)	Construction Cost Estimate
1	PREPARE SITE					
	1.1	Mobilization and Demobilization	1	LS	\$ 200,000.00	\$ 200,000.00
	1.2	Dewatering	1	LS	\$ 14,000.00	\$ 14,000.00
	1.3	Remove and Salvage existing Fence on Spillway	540	LF	\$ 3.00	\$ 1,600.00
2	EARTHWORK					
	2.1	Rough Grade slopes for Liner	1,550,000	SF	\$ 0.05	\$ 77,500.00
	2.2	Blanket Sand Filter	22,100	CY	\$ 50.00	\$ 1,105,000.00
	2.3	12" of Road base for access road	61,557	CY	\$ 9.30	\$ 572,500.00
3	LINER INSTALLATION					
	3.1	RPE Liner	1,643,500	SF	\$ 2.05	\$ 3,369,200.00
	3.2	200 lb Geotextile	182,444	SY	\$ 1.41	\$ 257,200.00
	3.3	Install Pressure Release Valve	44	EACH	\$ 4,800.00	\$ 211,700.00
	3.4	Steel Batten Liner Termination at Concrete Structures	2,100	LF	\$ 43.00	\$ 90,300.00
	3.5	Install ballest tube on embankment slope (180' Long)	196	EACH	\$ 345.00	\$ 67,500.00
	3.6	Install ballest tube on reservoir bottom (350' Long)	67	EACH	\$ 576.00	\$ 38,400.00
4	STRUCTURAL					
	4.1	Reinforced Concrete Gravity Drain Spindal and Gravity Drain Control	1	LS	\$ 14,100.00	\$ 14,100.00
	4.2	Reinforced Concrete Cross Pan for Surface Drainage	6	CY	\$ 600.00	\$ 3,600.00
	4.3	Install fence immediately north of new spillway	540	LF	\$ 12.00	\$ 6,500.00
	4.4	Modified Manhole Structures	2	EACH	\$ 14,000.00	\$ 28,000.00
5	UNDERDRAIN SUMP					
	5.1	10" Solid HDPE Pipe	220	LF	\$ 39.40	\$ 8,668.00
	5.2	6" slotted HDPE pipe	400	LF	\$ 24.50	\$ 9,800.00
	5.3	2" Schedule 80 PVC Pipe	210	LF	\$ 13.00	\$ 2,730.00
	5.4	discharge sump, piping and controls	1	EACH	\$ 76,800.00	\$ 76,800.00
	5.5	Zone 2A sand	300	CY	\$ 50.00	\$ 15,000.00
	5.6	Zone 2B Gravel	15	CY	\$ 44.10	\$ 661.50
	5.7	Concrete Manhole	1	EACH	\$ 5,400.00	\$ 5,400.00
6	ALLOWANCES					
	6.1	Reinstall Aerator	1	Each	\$ 7,900.00	\$ 7,900.00
		Estimated Total				\$ 6,184,059.50
		Construction Contingency 20%				\$ 1,236,811.90
		Estimated Total				\$ 7,420,871.40