

ENGINEER'S OPINION OF PROBABLE PROJECT COST

PROJECT: Lathrup Village SRT	DATE: 12/18/2023
LOCATION: Lathrup Village, MI	PROJECT NO. _____
BASIS FOR ESTIMATE: <input type="checkbox"/> CONCEPTUAL <input checked="" type="checkbox"/> PRELIMINARY <input type="checkbox"/> FINAL	ESTIMATOR: _____
WORK: Includes all items that need to be repaired or replaced in addition to work required for proposed operational	CHECKED BY: _____
	ENR CCI _____

DESCRIPTION	QUANT.	UNIT	UNIT AMOUNT	TOTAL AMOUNT
Mobilization, 5% Max	1	LS	\$50,000	\$50,000
Mechanical				
Demo existing pumps, pedestals, valves, mechanical, electrical	1	LS	\$40,000	\$40,000
16" Influent suction isolation plug valves - P-1 thru P-3)	3	EA	\$12,000	\$36,000
P-4 & P-5 suction piping - core new openings, sleeve & link-seal	2	EA	\$5,000	\$10,000
16" Influent suction piping	20	LF	\$125	\$2,500
16" Influent suction isolation plug valves - P-4 & P-5	2	EA	\$12,000	\$24,000
New centrifugal pumps P-4 & P-5 (Installed)	2	EA	\$55,000	\$110,000
12" discharge piping - P-4 & P-5	30	LF	\$100	\$3,000
12" discharge isolation plug valves	5	EA	\$8,000	\$40,000
12" discharge isolation plug valve actuators	3	EA	\$8,000	\$24,000
Rebuild Pump & Motor, Perform maintenance for P1, P2, P3	1	LS	\$47,000	\$47,000
12" Influent pump check valves (P1, P2, P3)	3	EA	\$5,000	\$15,000
12" bypass pump check valves (P4, P5)	2	EA	\$5,000	\$10,000
12" combined dewatering/bypass piping	40	LF	\$100	\$4,000
12" isolation plug valves - effluent chamber	4	EA	\$8,000	\$32,000
12" plug valve actuators - effluent chamber	3	EA	\$8,000	\$24,000
12" P4/P5 discharge piping - Core new hole and seal	2	EA	\$5,000	\$10,000
12" Wall Pipe with Structural Concrete & Water Stop	1	LS	\$15,000	\$15,000
8" Dewatering Pump Suction Isolation Plug Valves - 8"	4	EA	\$6,000	\$24,000
Rebuild Pump & Motor, Perform maintenance for P7, P9	1	LS	\$10,000	\$10,000
8" Dewatering pump check valves P-7 & P-8	2	EA	\$3,500	\$7,000
Dry well duplex sump pump, valves, piping	1	LS	\$15,000	\$15,000
New 4'x4' Sump Pit Grating	1	LS	\$3,500	\$3,500
Flushing system hose bibbs & piping	6	EA	\$3,000	\$18,000
4" Air Relief Valves	5	EA	\$2,000	\$10,000
4" Gate Valves - ARV Isolation	5	EA	\$1,000	\$5,000
HVAC				
Unit heaters Replacement Allowance (13 Heaters)	1	LS	\$15,000	\$15,000
Supply & Exhaust Fans Maintenance Allowance	1	LS	\$10,000	\$10,000
Building/Ancillary				
Dry well & wet well lighting - LED	1	LS	\$25,000	\$25,000
Tank crack injection repair - Type 1A (Non-weeping cracks)	500	LF	\$15	\$7,500
Tank crack injection repair - Type 1B (Weeping Cracks)	500	LF	\$25	\$12,500
Ceiling repair - Tank stairwells	1	LS	\$10,000	\$10,000
Electrical				
Repair emergency lights throughout entire building	1	LS	\$5,000	\$5,000
Wire and Conduit	1	LS	\$60,000	\$60,000
Revisions to MCC/New Buckets	1	LS	\$10,000	\$10,000
Junction Boxes/Racks/Supports	1	LS	\$40,000	\$40,000
Disconnect Switches	1	LS	\$25,000	\$25,000
Arc flash study & labeling	1	LS	\$10,000	\$10,000
Instrumentation				
New area-velocity gravity flow meter - 18"	1	LS	\$20,000	\$20,000
New PLC Panel & SCADA integration	1	LS	\$189,600	\$189,600
Floats & Level transducers	1	LS	\$20,000	\$20,000
			Subtotal	\$1,048,600
General Conditions, Overhead and Profit (15%)			\$157,000	\$157,000
Contingency (15%)			\$157,000	\$157,000
Total Construction Cost				\$1,362,600
Total Project Cost Percentage				100%

Notes	Cost Allocation	1 Lathrup Village	2 EFSDS
	2	\$ -	\$ 50,000
	2	\$ -	\$ 40,000
V-1, V-2, V-3	1	\$ 36,000	\$ -
	2	\$ -	\$ 10,000
P-4 & P-5	2	\$ -	\$ 2,500
	2	\$ -	\$ 24,000
V-4, V-5	2	\$ -	\$ 110,000
	2	\$ -	\$ 3,000
V-9, V-10, V-11, V-12, V-12A	2	\$ -	\$ 40,000
	2	\$ -	\$ 24,000
V-11, V-12, V-12A	2	\$ -	\$ 24,000
AC-Pumps (Kennedy)	1	\$ 47,000	\$ -
	2	\$ -	\$ 15,000
V-13, V-14, V-15	2	\$ -	\$ 15,000
	2	\$ -	\$ 10,000
V-16, V-17	2	\$ -	\$ 10,000
Combined pipe to sewer (40')	2	\$ -	\$ 4,000
	2	\$ -	\$ 32,000
V-36, V-39, V-40, V-88	2	\$ -	\$ 32,000
	2	\$ -	\$ 24,000
V-36, V-39, V-88	2	\$ -	\$ 24,000
Through wet well	2	\$ -	\$ 10,000
	2	\$ -	\$ 15,000
36" to 12" gravity wall penetration	2	\$ -	\$ 15,000
	1	\$ 24,000	\$ -
V-19, V-20, V-21, V-22	1	\$ 24,000	\$ -
	1	\$ 10,000	\$ -
Kennedy	1	\$ 10,000	\$ -
	1	\$ 7,000	\$ -
V-29, V-30	1	\$ 7,000	\$ -
	1	\$ 15,000	\$ -
	1	\$ 3,500	\$ -
	1	\$ 18,000	\$ -
	1	\$ 10,000	\$ -
V-13A, V-14A, V-15A, V-16A, V-17A	1	\$ 10,000	\$ -
	1	\$ 5,000	\$ -
V-13B, V-14B, V-15B, V-16B, V-17B	1	\$ 5,000	\$ -
	1	\$ 15,000	\$ -
	1	\$ 10,000	\$ -
	1	\$ 25,000	\$ -
	1	\$ 7,500	\$ -
	1	\$ 12,500	\$ -
	1	\$ 10,000	\$ -
	1	\$ 5,000	\$ -
	2	\$ -	\$ 60,000
	2	\$ -	\$ 10,000
	2	\$ -	\$ 40,000
	2	\$ -	\$ 25,000
	2	\$ -	\$ 10,000
	2	\$ -	\$ 20,000
	2	\$ -	\$ 189,600
	2	\$ -	\$ 20,000
	Subtotal	\$ 260,500	\$ 788,100
		\$ 39,000	\$ 118,000
		\$ 39,000	\$ 118,000
		\$ 338,500	\$ 1,024,100
		LATHRUP	EFSDS
		25%	75%