

Hydrometrics, Inc.
Calculation Sheet



1. Purpose
Determine Quantities & Approximate Costs for Construction of the Timbrshor HOA McCarthy Well Water System.

2. References
A 2020 RS Means
B Multiple Supplier Quotes and References

Job Number: 21042
Client: McCarthy Well Group
Project: McCarthy Well Water System
By: 3/14/2022
Checked by:
K:\project\21001-THOA\Opinion of Probable Capital Costs

3. Assumptions
1 See Below
2 Service connections will be the responsibility of each homeowner. Estimated costs are shown at the bottom of the table.

4. Calculations

McCarthy PWS

Item #	Bid Item	QNTY	Unit	Price/Unit	Cost	Source/Calculation	Cost Source
1	Mobilization/Demobilization/Cleanup	1	LS	\$10,000.00	\$10,000		~10% of Subtotal
Item #1 - Subtotal Mobilization/Demobilization/Cleanup:							\$10,000
2a	McCarthy Pumphouse-Grading and Site Preparation	400	SF	\$10.00	\$4,000		RS Means Section 31
2b	McCarthy Pumphouse-Pumphouse #4 Foundation	200	SF	\$60.00	\$12,000		Estimated Cost
2c	McCarthy Pumphouse-Pumphouse #4 Building	120	SF	\$100.00	\$12,000		Estimated Cost
2d	McCarthy Pumphouse-120 gal Pressure Tanks	4	EA	\$1,500.00	\$6,000		Online Supplier Quote. Assumed 50% labor, 50% Equipment
2e	McCarthy Pumphouse Piping, Meters and Valves	1	LS	\$5,000.00	\$5,000		Estimated Cost
2f	McCarthy Pumphouse-VFDs	1	LS	\$5,000.00	\$5,000		Supplier Quote (\$2,500 Ea w/ Enclosure + \$2,500 Install)
2g	McCarthy Pumphouse-Electrical & Controls (Including lighting, electrical, etc.)	1	LS	\$12,000.00	\$12,000	=2742*5*1.25/2+3000	Estimated Cost. RS Means 2020 Crew R1C-0.5wk, \$3,000 Materials
Item #2 - Subtotal Pumphouse:							\$56,000
3a	Water Mains-Raw Water Pipe	50	LF	\$100.00	\$5,000		Excavation/Backfill @ \$75/LF, Pipe at \$25/LF
3b	Water Mains-Surface Restoration	50	LF	\$10.00	\$500		3-Ft Wide, Similar Cost to Asphalt Paving
3c	Water Mains-Service Line Connections	4	EA	\$250.00	\$1,000		Combination of Supplier Quotes
Item #3 - Subtotal Water Piping:							\$6,500
4	Generator Building & Generator	1	LS	\$0.00	\$0		Covered Under Well No. 4 PWS Cost (~\$1,000/unit if costs shared)
5	Propane Tank and Gas Line	1	LS	\$0.00	\$0		Covered Under Well No. 4 PWS Cost (~\$1,000/unit if costs shared)
6	Buried Electric Cable	150	LF	\$45.00	\$6,750		(2020 RS Means 26.05.13.16L0800(\$10.50*1.25)+\$25/LF Excav&Backfill+\$5/LF Pipe)
Item # 4,5,6 - Subtotal Backup Power Facilities :							\$6,750
7	Site Restoration	1	LS	\$3,000.00	\$3,000	=74.76*40*1	(RS Means Crew A-2=1 wk)
8	Start-Up, Demonstration & Instruction of Systems	1	LS	\$3,200.00	\$3,200	=40*2*40	40 Hours for Start-Up and Instruction - 2 Persons @ \$40/HR
9	Special Bedrock Excavation	20	CY	\$211.00	\$4,220	=50*2*4/27*1.25	2020 RS Means 31.23.16.30.2200
Item #7,8,9 - Subtotal Additional Project Work:							\$10,420
SUBTOTAL:					\$89,670		
	Final Engineering Plans, Well Pump Testing & Reporting (Separate Contract)				\$2,860	=20*143	Final Design (20hrs @\$143/HR)
	McCarthy Well New Pump Cost & Well Improvements				\$5,000		Online supplier quote, estimate for excavation and concrete around well casing.
Subtotal Well Cost							\$7,860
	Surveying (5%)				\$4,500		Typical Assumption
	Contractor Profit (5%)				\$4,500		Typical Assumption
	Part-time Construction Observation and Engineering Support During Construction				\$11,000		3 Weeks of Construction (1 Site Visit per Week) + \$5,000 of In-Office Construction Support
	Contingency (15%) {HEI Contingency is 10%}				\$13,500		Level of Capital Cost Opinion
Subtotal Construction Support & Contingency:							\$33,500
McCarthy PWS - Opinion of Probable Capital Costs					\$131,000		
	Number of Units				4		
Cost Per Unit					\$32,750		

Service Line Connection

10a	Water Mains-Service Line for Unit 317	50	LF	\$25.00	\$1,250		RS Means - Trench Already Constructed (No Add'l Excavation Needed)
10b	Water Mains-Service Line for Units 318	40	LF	\$90.00	\$3,600		Excavation/Backfill @ \$75/LF, Pipe at \$15/LF
10c	Water Mains-Service Line for Units 320	150	LF	\$90.00	\$13,500		Excavation/Backfill @ \$75/LF, Pipe at \$15/LF
10d	Water Mains-Service Line for Units 414	125	LF	\$90.00	\$11,250		Excavation/Backfill @ \$75/LF, Pipe at \$15/LF
McCarthy PWS - Opinion of Probable Capital Costs - Service Line Costs					\$29,600		

5. Conclusions
1 See above