



WELLS 2, 3, AND 4 WATER TREATMENT PLANT

Town of Sharon, Finance Committee

October 23, 2023



2022 OPINION OF PROBABLE PROGRAM COSTS

Town of Sharon, Massachusetts
 Wells 2 and 4 Water Treatment Plant
 FY 2022 SRF Project ID. 6942
 Updated Opinion of Probable Project Cost
 August 2022

Opinion of Probable Project Cost					
Item #	Description	Units	Quantity	Unit Cost	Extended Cost
1	Well 2 Finished Water Main	LF	3,900	\$ 310.00	\$ 1,209,000.00
2	Well 2 Raw Water Transmission Main	LF	200	\$ 310.00	\$ 62,000.00
3	Single Point Well Installation	LS	1	\$ 615,500.00	\$ 615,500.00
4	Treatment Building System & Site Work	SF	6,500	\$ 1,170.00	\$ 7,605,000.00
5	Well Pump Upgrades	EA	2	\$ 49,240.00	\$ 98,480.00
6	PFAS Pressure Vessels (Lead-Lag System)	LA	1	\$ 720,190.00	\$ 720,190.00
7	Iron and Manganese Pressure Vessels	LS	1	\$ 1,896,000.00	\$ 1,896,000.00
8	Bag Filters	LS	1	\$ 61,550.00	\$ 61,550.00
9	Chemical Feed	LS	1	\$ 73,860.00	\$ 73,860.00
Project Subtotal					\$ 12,341,580.00
General Requirements (8.5%)					\$ 1,049,034.30
Overhead and Profit (10%)					\$ 1,234,158.00
Construction Subtotal					\$ 14,624,772.30
Engineering News Report (ENR) Index Adjustment (5.5%)					\$ 804,362.48
Opinion of Probable Construction Cost					\$ 15,429,134.78
Construction Contingency (10%)					\$ 1,542,913.48
Construction Administration Costs (20%)					\$ 3,085,826.96
Opinion of Probable Program Cost					\$ 20,060,000.00

OPCC Notes:

1. OPCC assumes Bid Date in May 2024 and a Midpoint of Construction in August 2025.
2. Construction Contingency is 10% per DWSRF Requirements
3. Construction Administration Costs assumed to be 20% of OPCC.
4. Building area increased from 3,750 SF in October 2021 Alternatives Analysis to 6,500 SF.
5. ENR Index Adjustment calculated as the percent increase in the ENR index from March 2022 (12791) to the SRF required index (13500).



2022 CONCEPT DESIGN



2023 OPINION OF PROBABLE PROGRAM COSTS

Town of Sharon, Massachusetts
 Wells 2, 3, and 4 Water Treatment Plant
 FY 2022 SRF Project ID. 12443
 Updated Opinion of Probable Project Cost
 August 2023

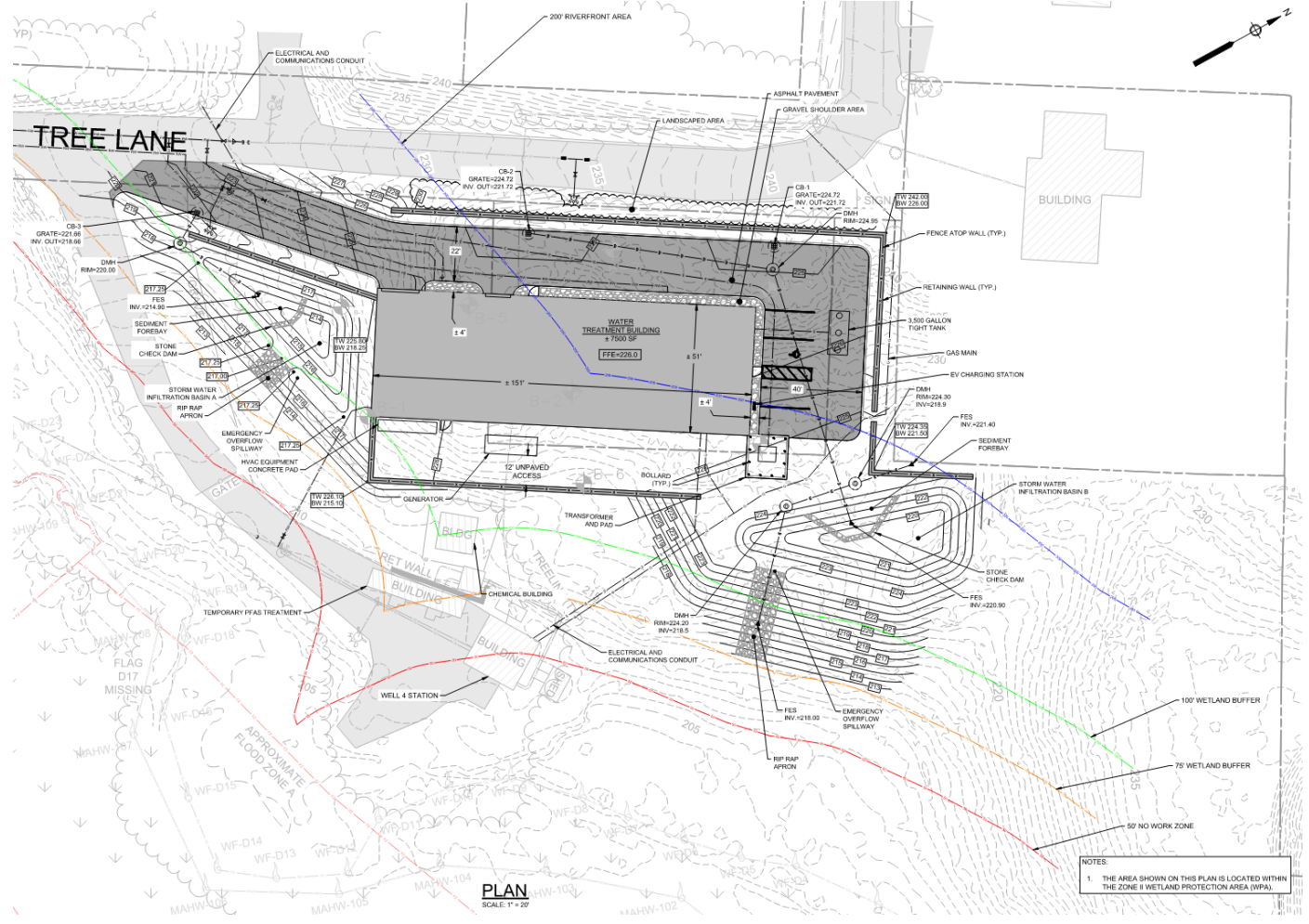
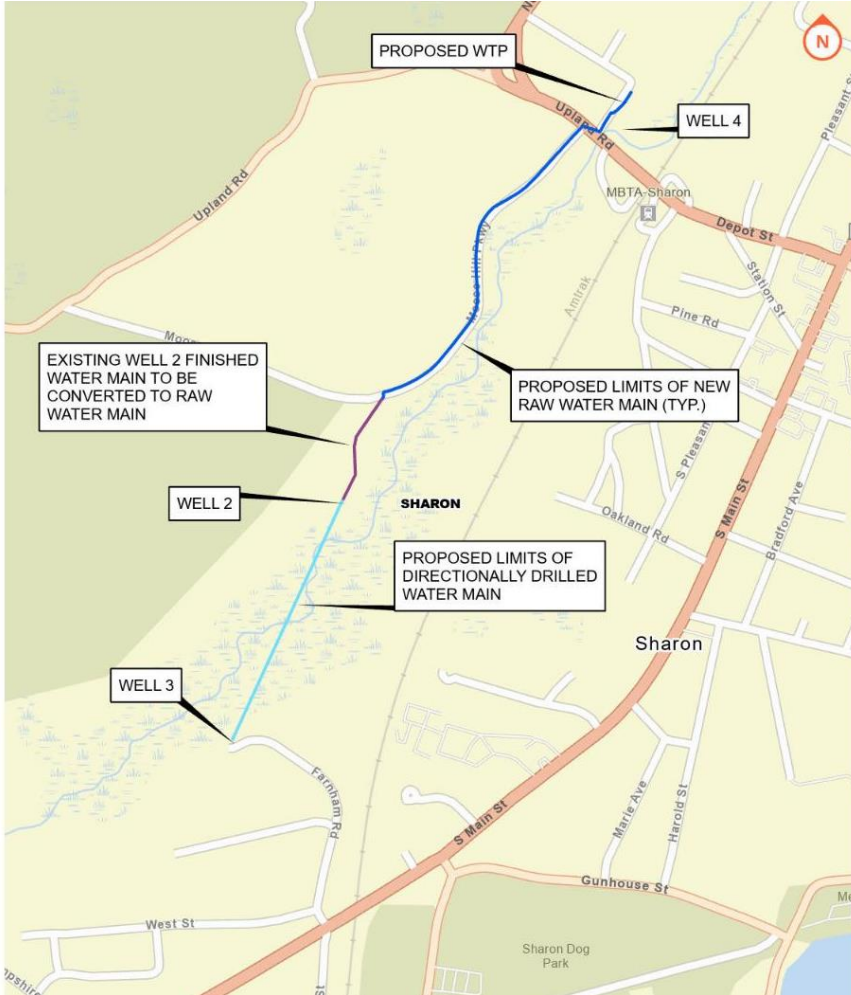
Opinion of Probable Project Cost					
Item #	Description	Units	Quantity	Unit Cost	Extended Cost
1	Well 2 to 4 Raw Water Main	LS	1	\$ 1,397,700.00	\$ 1,397,700.00
2	Well 3 to 2 Raw Water Main	LS	1	\$ 934,500.00	\$ 934,500.00
3	PFAS System Pre-Procurement	LS	1	\$ 2,463,100.00	\$ 2,463,100.00
4	Iron and Manganese System Pre-Procurement	LS	1	\$ 1,129,800.00	\$ 1,129,800.00
5	WTP Site Work	LS	1	\$ 2,791,200.00	\$ 2,791,200.00
6	WTP Building Construction	LS	1	\$ 11,585,900.00	\$ 11,585,900.00
Project Subtotal					\$ 20,302,200.00
General Conditions, Requirements, & GL Insurance (14%; 25% for Water Mains)					\$ 2,781,700.00
Bonds (2%)					\$ 364,500.00
Overhead and Profit (10%)					\$ 1,822,500.00
Construction Subtotal					\$ 25,270,900.00
12 Months Escalation/Market Conditions (8%)					\$ 2,021,700.00
Opinion of Probable Construction Cost					\$ 27,292,600.00
Construction Contingency (10%)					\$ 2,730,000.00
Engineering Design, Permitting, and Bidding Assistance (UNDER CONTRACT)					\$ 1,653,110.00
Construction Administration Costs (10%)					\$ 2,730,000.00
Owner's Project Manager (OPM) Services (5%)					\$ 958,000.00
Upland Road Tank Altitude Valve					\$ 500,000.00
Total DWSRF Request Amount					\$ 35,863,710.00
Engineering Permitting (UNDER CONTRACT)					\$ 167,000.00
Ductile Iron Water Main Pre-Procurement (AWARDED)					\$ 307,000.00
Opinion of Probable Program Cost					\$ 36,337,710.00

OPCC Notes:

1. OPCC assumes Bid Date in May 2024 and a Midpoint of Construction in August 2025.
2. Construction Contingency is 10% per DWSRF Requirements.
3. Construction Administration Costs assumed to be 10% of OPCC.
4. Building area increased from 6,500 SF in August 2022 PEF to 7,500 SF.



2023 PRELIMINARY DESIGN



BREAKDOWN OF COST INCREASES

Item #	Description	Cost Increase
1	Additional PFAS Treatment Vessels	\$ 1,665,420
2	Well Station 3 Modifications and Water Main	\$ 1,656,772
3	Future Nitrate Treatment Area	\$ 2,031,000
4	Altitude Valve	\$ 500,000
5	OPM Services	\$ 958,000
6	Design Engineering Costs	\$ 1,653,110
7	Additional Contingency (10%)	\$ 1,822,465
8	Design Development and Material/Labor Inflation	\$ 5,519,068
	Total	\$ 15,805,835



Q&A



THANK YOU

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