



MAP, PLAN AND REPORT

FOR

LEVINSON/OLD POST ROAD AREA WATER DISTRICT
IMPROVEMENTS

TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

PREPARED FOR:

Town of Newburgh
1496 Route 300
Newburgh, NY 12550

PREPARED BY:

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DATE: 19 April 2024

JOB #: 24-105

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I. INTRODUCTION

The Town of Newburgh proposes to make improvements to construct new water mains including all necessary appurtenances to provide water service to 24 parcels within its Consolidated Water District (District). These residents are currently using private wells but can connect to the District’s infrastructure once the project is completed. Connection of these properties to the District may be necessary for providing potable water subsequent to the shutdown of New York City Department of Environmental Protection’s (NYCDEP) Delaware Aqueduct, scheduled for late 2024. Well monitoring by NYCDEP has shown that the water supply coming from these wells is augmented by the leakage from the Delaware Aqueduct Tunnel and the residents’ wells may be adversely impacted when the leakage is eliminated. It is therefore expected that the private wells will suffer from decreased yields during and after shutdown.

There is an understanding between the NYCDEP and the Town of Newburgh that funding for the District improvements will be financed by the NYCDEP via reimbursement to the Town. This understanding will be solidified through a Letter of Understanding between the two parties before the project commences.

II. BENEFIT AREA

The Benefit Area includes the 24 parcels that will receive water from the District. This Area includes properties north and west of the hamlet of Roseton and to the east of State Route 9W, in a part of the Town that includes Old Post Road, River Road and the Levinson Heights neighborhood. All properties are within the boundaries of the Town of Newburgh Consolidated Water District. The 24 parcels in the Benefit Area include (see Appendix #1 for a map of parcels and proposed improvements):

8-1-35.1	8-2-4	8-2-15
8-1-35.21	8-2-5	8-2-16
8-1-35.221	8-2-6	8-2-19.1
8-1-37	8-2-7	8-2-20
8-1-38.21	8-2-8	8-2-23
8-1-96	8-2-9	8-2-24
8-1-97	8-2-10	9-1-32
8-2-3	8-2-11	9-1-33

III. PROPOSED IMPROVEMENTS

Improvements to be made include:

1. A new 12" water main will be connected to the end of an existing water main in front of the Roseton Generating Facility. This new main will be 1,010+/- linear feet and will serve two properties on River Road.
2. A new 8" water main will be connected to the existing main that currently runs beneath Old Post Road from State Route 9W. This will serve Levinson Heights Road and Cedar Court and will include 1,225+/- linear feet of new 8" main.
3. A new segment of 8" water main will be connected to the existing water main on Old Post Road at the northeastern edge of the current district. This will connect the district's existing main to the proposed new district extension along Old Post Road. This segment is 610 linear feet.

In total, this improvement project will consist of 1,010+/- linear feet of 12" water main, 1,829+/- linear feet of 8" water main, 24 water service connections, 11 gate valves and 7 fire hydrants. Cost estimates for constructing the project are included within Appendix #2.

IV. ANNUAL COST

The following cost impact to a typical household has been estimated assuming 100% of the estimated project construction cost will be financed by the New York City Department of Environmental Protection. Homeowners that are being added to the Water District will assume the same annual debt as the existing users and will be responsible for paying the same annual operation and maintenance fees as the existing users.

As per Appendix 2, the cost estimate of improvements is \$3,374,557. The assessed value of parcels already in the District is \$974,724,229. Therefore the cost ratio of the improvements is 0.35%.

Below is an analysis of the annual user cost for an average single-family home receiving improvements.

Yearly debt service for Water 1 (based on average assessed value of the homes in this District of \$103,192)	\$158.92
Operation and Maintenance per year based on the Town's annual water costs for the average single-family home using 72,000 gallons/yr	\$313.76
Total yearly cost per household	\$472.68

V. CONCLUSION

On the basis of the above and attached, we find that this project is both economically and technically feasible and therefore recommend that the Town proceed with this expansion and improvement project.

Respectfully submitted,

Shawn E. Arnott, P.E.
Associate
MHE Engineering, D.P.C.

APPENDIX 1

PROJECT AREA MAP

APPENDIX 2

COST ESTIMATE



TOWN OF NEWBURGH
 LEVINSON/OLD POST ROAD AREA
 WATER MAIN IMPROVEMENTS
 COST ESTIMATE

Last Revised:
 3-Apr-24
 Revised By:
 KDM

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXT. PRICE	TOTALS
<u>WATER MAIN IMPROVEMENTS:</u>						
1	12" Water Main Extension	1,010	LF	\$ 400.00	\$ 404,000	
2	8" Water Main Extension	1,829	LF	\$ 300.00	\$ 548,700	
3	12" Gate Valves	3	EA	\$ 6,000.00	\$ 18,000	
4	8" Gate Valves	8	EA	\$ 4,000.00	\$ 32,000	
5	Hydrant Assemblies	7	EA	\$ 10,000	\$ 70,000	
6	Rock Excavation	1,893	CY	\$ 150	\$ 283,950	
7	Service Laterals	24	EA	\$ 20,000	\$ 480,000	
8	Well Decommissioning	24	EA	\$ 10,000	\$ 240,000	
<i>Subtotal</i>						\$ 2,076,650
<i>Construction Contingencies (30%)</i>						\$ 622,995
<i>Estimated Total Construction Cost</i>						\$ 2,699,645
<i>Administration Including Legal, Engineering and Design Services (25%)</i>						\$ 674,912
<i>Total Design and Construction Cost</i>						<u>\$ 3,374,557</u>

* Note(s): 1) This is an "Estimate of Probable Construction Cost," for estimating purposes only.