

**ENGINEERING REPORT
FOR
THE EXTENSION OF
WATER DISTRICT #13
IN THE
TOWN OF NEW WINDSOR
ORANGE COUNTY, NEW YORK**

PREPARED BY:

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1.0 INTRODUCTION

It is proposed that water is to be provided to the project through an extension of the Town of New Windsor Water District #13. This district is located north of and east of the project site. The water district would be extended to include the parcels in New Windsor with service provided to the Cornwall parcels via an inter-municipal agreement.

The Town of New Windsor currently supplies water service to a number of parcels located within the eastern portion of the town. Water District #13 covers a small area located in the southern central portion of the Town. Water District #13 supplies water service to residences in the area of Mt. Airy Road, Bethlehem Road and Dean Hill Road. The New York City Aqueduct located to the east of Mt. Airy Road, presently supplies the water district via the Riley Road water treatment plant. This plant is permitted to treat 3.0 million gallons per day. The Town also has an existing tap to the Catskill Aqueduct at Stewart Airport, this tap feeds the Stewart Field water treatment plant which is permitted to treat 700,000 GPD but is in need of upgrades and is currently only being used on an emergency basis. In addition to this capacity the Town also has agreements with the Town of Newburgh and the City of Newburgh for an additional 1.0 million gallons per day and 0.5 million gallons per day respectively. This gives a total system capacity of approximately 4.5 million gallons per day with an emergency capacity of up to 5.2 million gallons per day using the Stewart Field Plant. Based on the Town of New Windsor Water Quality report the Town water districts were using an average of 2.432 million gallons per day therefore giving an excess capacity of over 2.0 million gallons per day.

2.0 SITE DESCRIPTION

The project site includes parcels in both the Town of New Windsor and Town of Cornwall totaling 169 acres. The 136 acres in the Town of New Windsor are identified as Section 65 Block 1 Lot 61.1, 61.2 and Section 65 Block 1 Lot 78. Seventy-four single family homes are proposed in the Town of New Windsor.

The project site is located south and west of Mt. Airy Road, north of N.Y.S. Route 94 and east of Bethlehem Road. Currently, the existing water district boundary is located north and east of the project site. The water district would be extended to include the two parcels in New Windsor with service provided to the Cornwall parcels via an inter-municipal agreement as has been done in similar situations. Mr. DiDio indicated that there is an existing 12" water main located in the right-of-way of Dean Hill Road, which is located approximately 1,600 feet from the northeast corner of the site. This main has been tested and contains adequate flow and pressure to services the proposed district extension. Appendix A illustrates the current district boundary and the proposed water district extension.

3.0 PROPOSED WATER FACILITIES

The proposed water district extension will consist of a water main designed to service the 74 proposed single-family residential homes. A total of 11,920 feet of new 8" diameter class 52 cement lined ductile iron pipe will be installed. The proposed water system will begin at the nearest connection point in Dean Hill Road, continue through the site and loop back to and interconnection with the Reserve. All new mains shall have hydrants and valves spaced as needed and will be designed and constructed in accordance with the requirements of the Town of New Windsor and NYSDOH specifications.

Refer to Appendix B for a conceptual plan of the proposed water district extension improvements. All improvements will be constructed within the Town of New Windsor road right-of-way, otherwise water easements will be granted to the Town of New Windsor.

4.0 COST OF IMPROVEMENTS

The estimated construction cost of the water system improvements is \$668,500. The costs for the proposed improvements will be borne by the developer. There

would not be any additional costs to district users for the proposed district extension. Refer to Appendix C for the construction cost estimate.

Finally, the developer would be responsible for the water permit, which is \$250/residence, the meter and remote which are \$255/residence and the ditch and final inspection fee of \$100/residence. Assuming 74 units the developer would be accountable for \$44,770.

5.0 WATER FEES

Since all improvement costs are the responsibility of the developer, the only fees that will be assessed to the typical residence are debt service and user fees. In accordance with the Town of New Windsor's 2003 tax schedule, residents in Water District #13 will be charged a debt service of \$15.61 per \$1000 of their assessed property value each year. Residents are also charged a usage fee each quarter of \$4.03 per 1000 gallons of water consumed.

According to the Tax Assessor's office a typical \$300,000 single-family home with an equalization rate of 19.21% would have an assessed value of approximately \$57,630 per year. Therefore the typical residence would pay \$899.60 per year in debt service fees. Assuming the average home water usage would most likely be in the range of 300 gallons per day (gpd), based on 75 gpd per person. Consequently the water usage fee would be \$441.29 per year, bringing the total yearly cost for the typical residence to \$1,340.89.

APPENDIX A

APPENDIX B

APPENDIX C