



TOWN OF TORREY

Map, Plan and Report

Water District No. 2 (Perry Point Road)

May 2026

NYS PE Expiration 12/31/2028

NYS Engineering Firm Certificate #0021419



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1 General

The Town of Torrey has received notice of public interest in establishing a water district. A water district is a special use district required by Town Law where a specific area of the town receives a specific benefit. The cost of receiving this benefit is borne solely by the property owners in that specific area. The purpose of this project is to provide a safe and reliable potable water supply and fire protection to residents in the Proposed Town of Torrey Water District No. 2.

This report will be the basis of water district formation for the Town of Torrey Water District No. 2. The location of the Proposed Water District is shown in Figure No. 1. The Water District Boundary Map and Legal Description are provided in Appendix A. The new Town water main will connect to the existing Village of Dresden Water System approximately 200-feet south of the intersection of Milo Street and Margaret Street, just north of the Keuka Lake Outlet.

2 Project Planning Area

2.1 LOCATION

As part of the Town of Torrey Water District No. 2, water main will be installed along portions of Kings Hill Road and Perry Point Road. This will involve approximately 14,500 linear feet of 8 and 12-inch water main with 38 residential properties, 4 small commercial properties and 1 large commercial property currently eligible to receive a service. There are an additional 22 vacant properties that if developed could also take advantage of this proposed infrastructure. Based on initial interest of the project it is expected that 85% of the residences will initially connect and at least 2 of the small business will initially connect which would equate to 35 properties paying into the Operation and Maintenance of the infrastructure (O&M). Debt service will be paid by all parties that can benefit from the infrastructure with shares based off of potential usage simplified to Equivalent Dwelling Units (EDUs). Each of the 38 residents will be assessed 1 EDU, the 22 vacant lots will be assessed 0.5 EDU each, the 4 small commercial properties will be assessed 1.0 EDU each and the Binghamton Boating Club will be assessed 4.0 EDUs. The total units within the district would be 57 EDUs. The project location map is shown in Figure No. 1.

2.2 ENVIRONMENTAL RESOURCES PRESENT

There are farmlands and a NYSDEC Class C stream present in the project area. All construction will be taking place in existing road-right of ways or permanent easements and proper construction mitigation and restoration efforts will be implemented based on standard practices common to the industry.

2.3 GROWTH AREAS AND POPULATION TRENDS

According to the United States Census, the Town of Torrey had a population of 1,249 in 2016 and 1,279 in 2022. These numbers reflect a population that is increasing at an average of 0.05% per year.

2.4 COMMUNITY ENGAGEMENT

After being informed of interest for water, the Town sent surveys out to residences within the proposed district area to confirm the interest of Town residents. Throughout the design process informational meetings and updates at Town Board meetings will be conducted as necessary to

allow the community to express their concerns about the proposed design and to help inform the community about the need for the project.

3 Existing Facilities

3.1 LOCATION MAP

The project location map is shown in Figure No. 1. There are some areas within the Town of Torrey that have public water service:

- Water District No. 1 in the northern portion of Town between NYS Route 14 and Seneca Lake, south of the Town of Benton. Water District No. 1 went into service in 2024 and is operated by the Town of Benton Water Department.
- Parcels located along the Village of Dresden transmission line from the Village of Penn Yan along NYS Route 54, served as out-of-district users by the Village of Dresden.
- The Greenidge power plant and Ferro Corporation, both located south of the Village, have a private 4-inch water service that supplies domestic water and a portion of their operational needs. The power plant has a raw water intake from Seneca Lake that can be used for process water. The daily average usage of the joint water service is approximately 13,600 gallons per day (gpd). The Greenidge Generation Power Plant requires approximately 2,220 gpd, and the Ferro Corp. Manufacturing site requires approximately 11,400 gpd. This is the only area within the Town of Torrey Water District No. 2 that currently receives public water service.

The water supply for Water District No. 2 will be purchased from the Village of Dresden, which also purchases its water from the Village of Penn Yan Water System. The Town of Torrey will negotiate with the Town of Benton to provide the operation and maintenance services for this District.

Prior to the installation of Water District No. 2, the Village of Dresden is in the process of upgrading their existing water distribution system from their water storage tank site on NYS Route 54, eastward into the Village. The design alternatives take into consideration the Village's installation of 10" water mains along NYS Route 54 and Main Street, and 8" water mains along Charles and Milo Streets to replace their existing 4", 6" & 8" cast-iron pipes.

3.2 HISTORY

The entire residential area of the proposed water district is presently served by private wells. Since this infrastructure is private, there is limited information available about the reliability of these systems and the frequency of failures. Referencing the NYSDEC DECinfo system, 10 wells have been drilled in the area since 2005 with most of these new wells being drilled to replace existing systems. All of these wells, except 1, are 100 feet or more in depth and require drilling through shale which can result in a large financial burden for those needing a new well.

3.3 CONDITION OF EXISTING WATER SUPPLY

The entire residential area of the proposed water district is presently served by private wells. The Town of Torrey has received several complaints about the quality and quantity of the water in the area. Residents in this area have experienced the following problems:

- A. **Insufficient quantity** of water is available for residential wells. Residents must conserve water by alternating shower days, alternating laundry days, or not washing clothes in their residences at all.
- B. **Poor water quality** is predominant in the existing well supplies. The water quality requires residents to either boil water for consumption or purchase bottled water for cooking and consumption. Raw water prior to private treatment systems has a brown appearance and thus is also aesthetically objectionable in addition to the health hazards.
- C. **High cost** to operate and maintain existing well supplies. Several residents must purchase chemicals for softening and treatment systems and must frequently replace their plumbing systems due to corrosion of their fixtures. Several residents currently pay over \$1,000 per year to operate and maintain their water system, which provides them with poor quality water and insufficient quantities at times.
- D. **Fire Protection:** Currently, there is no water system to provide fire protection in the proposed water district. Although, Seneca Lake could be utilized in some areas of the proposed District to provide an adequate supply of water for fire protection if the Fire Department has direct access.

3.4 FINANCIAL STATUS OF EXISTING FACILITIES

This District is a new district and therefore has not developed any debts or reserves, nor does it collect any income. O&M and financial implications associated with the proposed piping can be found in Section 5 of this report.

3.5 WATER AUDITS

This District is a new district, therefore there is no existing public infrastructure to audit.

4 Need For Project

4.1 HEALTH, SANITATION, SAFETY AND SECURITY

The proposed project will provide safe potable water to the residents of the Town of Torrey Water District No. 2 and will eliminate the public health risks associated with the quality and quantity of ground water in the area and potential contamination of the individual private wellhead. The Village of Dresden's system which is proposed to supply this District follows Department of Health requirements to secure and regularly test their infrastructure to help prevent contamination and increase reliability which can be difficult to attain with small private systems.

4.2 EXISTING AGING INFRASTRUCTURE/SYSTEM O&M

A water distribution network will replace highly expensive individual water treatment units; this will reduce the operation and maintenance costs borne by the residents at this time. While it is unknown the age of the existing wells and O&M associated with the private systems it is known that approximately 15% of the wells have been replaced within the last 25 years, meaning most of the systems have been in service for more than half the typical life expectancy of a well. This is often associated with higher O&M costs as some components of a private well system like pumps, pressure tanks and treatment equipment tend to be worn out resulting in more regular repairs.

4.3 REASONABLE GROWTH

While economic development is viewed as a project benefit, balancing economic development and land protection is necessary, critical, and provided for. Agriculture is important to the Town of Torrey, functioning as a part of the Town’s economic base as well as being the foundation for the rural character that the Town wishes to maintain. Thus, there are no anticipated long-term impacts to the Agricultural Districts as a result of the proposed action including no change in use of agricultural/residential lands within any Agricultural Districts.

5 Alternatives Considered

5.1 ALTERNATIVE 1 – NULL ALTERNATIVE

Estimated Capital Cost: \$ 0

This alternative proposes to “do nothing”. The residents of the Town of Torrey Water District No. 2 would continue using their existing well treatment systems, some whose annual costs exceed \$1,000. Costs for the purchase of bottled water and off-site laundry services add an estimated \$1,000 to \$1,400 per year to the cost of a private well. This could mean escalating health problems and water shortages for the residents of the Town of Torrey Water District No. 2.

5.2 ALTERNATIVE 2 – NEW WATER TREATMENT PLANT & WATER MAIN

Estimated Capital Cost: \$7,714,000

Costs associated with a new public water treatment plant (WTP) for the residents of the Town of Torrey Water District No. 2 could be in excess of \$3 million. This is far more expensive than connecting to the existing Village of Dresden Water System.

The combination of a WTP, transmission main and water main distribution system would have estimated unit costs of approximately \$8,974 without grant assistance and \$6,841 with grants.

By constructing a new WTP and distribution system, the Town would then have to add at least two full-time employees to perform operation and maintenance, adding additional long-term operational costs to the residents.

This alternative is far too expensive to be a feasible option for supplying water to the residents in this area.

A summary of the preliminary cost estimate for this alternative is provided below. A more detailed preliminary cost estimate for Alternatives 2 is detailed in Appendix C.

Preliminary Cost Estimate

Construction Subtotal	\$ 5,647,050.00
Contingency (10%)	\$ 564,705.00
Legal, Engineering and Administration	\$ 1,411,762.50
Permitting Fees	\$ 90,000.00
Total Project Costs	\$ 7,713,517.50
Total Capital Costs (rounded to the nearest \$1,000)	\$ 7,714,000.00

Less Congressionally Directed Spending Grant	\$ (2,050,000.00)
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Net Local Project Cost	\$ 5,664,000.00
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Annual Debt Repayment per Equivalent Dwelling Unit

Annual Debt Payment (rounded)	\$ 335,786.00
System EDUs	57 EDUs
Estimated Debt Service/EDU	\$ 5,891.00

Total Annual Water Cost per Single Family Customer

Water Rate/1,000 gallons	\$ 7.00
Quarterly EDU Charge	\$ 150.00
Annual Metered Water Usage (rounded)	50,000 gallons
Annual Water Usage Cost	\$ 950.00
Annual Debt Service	<u>\$ 5,891.00</u>
Annual Cost of Water	\$ 6,841.00

Total Estimated Unit Cost (Rounded)	\$ 6,841.00
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Non-monetary Factors

This alternative provides a new distribution infrastructure with an estimated lifespan of 50 to 100 years. Properly sized water main will provide fire protection to the District which does not currently have fire protection infrastructure available.

5.3 ALTERNATIVE 3 – NEW WATER MAIN (KINGS HILL TRANSMISSION)

Estimated Capital Cost: \$3,664,000

The proposed action includes the installation of approximately 14,500 linear feet of 8 and 12-inch water mains in the Town of Torrey Water District No. 2 service area including a transmission main along Kings Hill Road to provide potable water and fire service to Kings Hill and Perry Point Roads.

The water main distribution system would have estimated unit costs of approximately \$4,761 without grant assistance and \$2,629 with grants.

The proposed connection to the Village of Dresden Water System would be to the future 8-inch distribution main near the southern Village Line approximately 200-feet south of the intersection of Milo Street and Margaret Street, just north of the Keuka Lake Outlet.

Greenidge has indicated that they own the abandoned railroad siding and will not require boring of the 4 tracks. This will allow for open cut installation leading to the Norfolk Southern Railway Corporation main line track for a bored crossing, both on Kings Hill Road and Perry Point Road.

A summary of the preliminary cost estimate for this alternative is provided below. A more detailed preliminary cost estimate for Alternatives 3 is detailed in Appendix C.

Preliminary Cost Estimate

Construction Subtotal	\$ 2,647,050.00
Contingency (10%)	\$ 264,705.00
Legal, Engineering and Administration	\$ 661,762.50
Permitting Fees	<u>\$ 90,000.00</u>
Total Project Costs	\$ 3,663,517.50
Total Capital Costs (rounded to the nearest \$1,000)	\$ 3,664,000.00
Less Congressionally Directed Spending Grant	\$ (2,050,000.00)
Net Local Project Cost	\$ 1,614,000.00

Annual Debt Repayment per Equivalent Dwelling Unit

Annual Debt Payment (rounded)	\$ 95,685.00
System EDUs	57 EDUs
Estimated Debt Service/EDU	\$ 1,679.00

Total Annual Water Cost per Single Family Customer

Water Rate/1,000 gallons	\$ 7.00
Quarterly EDU Charge	\$ 150.00
Annual Metered Water Usage (rounded)	50,000 gallons
Annual Water Usage Cost	\$ 950.00
Annual Debt Service	<u>\$ 1,679.00</u>
Annual Cost of Water	\$ 2,629.00
Total Estimated Unit Cost (Rounded)	\$ 2,629.00

Non-monetary Factors

This alternative provides a new distribution infrastructure with an estimated lifespan of 50 to 100 years. Properly sized water main will provide fire protection to the District which does not currently have fire protection infrastructure available.

5.4 ALTERNATIVE 4 – NEW WATER MAIN (ROUTE 14 TRANSMISSION)

Estimated Capital Cost: \$3,856,000

The proposed action includes the installation of approximately 15,700 linear feet of 8 and 12-inch water mains in the Town of Torrey Water District No. 2 service area including a transmission main along NYS Route 14 to provide potable water and fire service to parcels along Perry Point Road.

The water main distribution system would have estimated unit costs of approximately \$5,033 without grant assistance and \$2,862 with grants.

The proposed connection to the Village of Dresden Water System would be to the existing 8-inch or future 10-inch transmission main at the intersection of NYS Route 14 and Main Street/NYS Route 54.

A summary of the preliminary cost estimate for this alternative is provided below. A more detailed preliminary cost estimates for Alternative 4 is detailed in Appendix C.

Preliminary Cost Estimate

Construction Subtotal	\$ 2,833,750.00
Contingency (10%)	\$ 283,375.00
Legal, Engineering and Administration	\$ 708,437.50
Permitting Fees	<u>\$ 30,000.00</u>
Total Project Costs	\$ 3,855,562.50
Total Capital Costs (rounded to the nearest \$1,000)	\$ 3,856,000.00
Less Congressionally Directed Spending Grant	\$ (2,050,000.00)
Net Local Project Cost	\$ 1,806,000.00

Annual Debt Repayment per Equivalent Dwelling Unit

Annual Debt Payment (rounded)	\$ 107,068.00
System EDUs	56 EDUs
Estimated Debt Service/EDU	\$ 1,912.00

Total Annual Water Cost per Single Family Customer

Water Rate/1,000 gallons	\$ 7.00
Quarterly EDU Charge	\$ 150.00
Annual Metered Water Usage (rounded)	50,000 gallons
Annual Water Usage Cost	\$ 950.00
Annual Debt Service	<u>\$ 1,912.00</u>
Annual Cost of Water	\$ 2,862.00
Total Estimated Unit Cost (Rounded)	\$ 2,862.00

Non-monetary Factors

This alternative provides a new distribution infrastructure with an estimated lifespan of 50 to 100 years. Properly sized water main will provide fire protection to the District which does not currently have fire protection infrastructure available.

5.5 DESIGN CRITERIA

The Town of Torrey Proposed Water District No. 2 will be designed to provide safe potable water and fire protection for the Town residents within the proposed Water District.

Map

The proposed Water District No. 2 area is shown in Figure No. 1.

Environmental Impacts

There are no anticipated negative environmental impacts associated with the project. However, an environmental review will be done for the project. All construction will be done in existing road Right-of-Ways or permanent easements and proper construction mitigation and restoration efforts will be implemented.

Land Requirements

All water mains associated with Alternatives 2 through 4 are expected to be installed within existing public road rights-of-way owned by the Town or the State. It is not expected that additional land will be needed to install mains. If Alternative 2 is pursued, land will need to be located and purchased to construct the water treatment plant.

Potential Construction Problems

There are two potential issues that can come up with construction in the proposed area.

1. Looking at projects completed within the area, shale tends to be found relatively close to the ground surface. While the shale found is considered to be diggable, it is harder to dig through than regular soil. Also, it often requires offsite material to be brought in for bedding and backfill to protect the pipe from the sharp nature of broken shale.
2. Alternatives 2 through 4 require the crossing of a minimum of 1 section of railroad. Crossing of any railroad will require extensive review by the railroad to determine that the proposed work will not affect their operations. During construction, the contractor will need to coordinate with the railroad to schedule and pay for inspectors and flaggers from the railroad while they are doing work within the railroad property. Scheduling inspectors and flaggers from the railroad can take time and affect the construction schedule.

Sustainability Considerations

All water main installations will be restored to original surface conditions to prevent negatively impacting existing stormwater management systems. The mains will be sized to provide maximum turnover while also providing adequate fire flow to limit the need for flushing, and conserving water.

If Alternative 2 is selected, equipment will be selected to provide the best energy efficiency. The site will be graded to include stormwater retention and treatment structures to ensure there is no runoff increase to the surrounding area due to the increase in impervious areas associated with a water treatment plant.

Advantages/Disadvantages

Although there are significant costs associated with Alternatives 3 and 4, they are the most viable alternatives as they are consistent with the goals and meets the needs of the Town of Torrey more effectively than the other alternatives. For both Alternatives 3 and 4, it is assumed that the Village of Dresden Water System Improvements have been completed prior to construction of Water District No. 2 to discuss the advantages and disadvantages.

- 1) Alternative 3 – New 8 & 12-Inch Water Main (Kings Hill Transmission Main)
 - a. Advantages are as follows:
 - It will eliminate the ongoing health risks associated with the quality and quantity of ground water in the area.
 - It will be a step towards creating a system, increasing the reliability of potable water supply and fire flow.
 - Allows for future expansion within the Town of Torrey for other residents and businesses further to the south along Seneca Lake and NYS Route 14.
 - Fire flows above the minimum of 500 gpm at 20 psi (650 to 990 gpm).
 - b. Disadvantages are as follows:
 - A large section of Kings Hill Road has no existing residential or commercial occupied parcels.
 - High user costs for both debt service and water usage.

- 2) Alternative 4 – New 8 & 12-Inch Water Main (Route 14 Transmission Main)
- a. Advantages are as follows:
 - It will eliminate the ongoing health risks associated with the quality and quantity of ground water in the area.
 - It will be a step towards creating a system, increasing the reliability of potable water supply and fire flow.
 - Allows for future expansion within the Town of Torrey for other residents and businesses further to the south along Seneca Lake and NYS Route 14.
 - Fire flows above the minimum of 500 gpm at 20 psi (598 to 794 gpm).
 - b. Disadvantages are as follows:
 - A large section of NYS Route 14 has no existing residential or commercial occupied parcels.
 - High user costs for both debt service and water usage.

6 Recommended Alternative

The recommended alternative is Alternative 3: New Water Main (Kings Hill Transmission) for the Proposed Town of Torrey Water District No. 2.

6.1 PRELIMINARY PROJECT DESIGN

Water Supply

The Town of Torrey water main will receive water from the Village of Dresden which purchases water from the Village of Penn Yan. The Town of Torrey will negotiate with the Town of Benton to provide the operation and maintenance services for this District.

Treatment

The Village of Penn Yan will provide treated water to the Town of Torrey through the Village of Dresden. The treated water will meet all the state and federal drinking water standards.

Storage

An existing 300,000-gallon water storage tank is located on NYS Route 54 in the Town of Torrey. The tank is owned and operated by the Village of Dresden. It serves the Village of Dresden and a few out-of-district users within the Town of Torrey between the tank location and the Village.

Pumping Stations

No booster pumping stations will be needed, as the hydraulic grade established by the Village of Dresden's existing 300,000-gallon water storage tank located on NYS Route 54 in the Town of Torrey is sufficient to provide the necessary pressure and fire flow to this District.

Distribution Layout

The connection of the proposed Town of Torrey Water District No. 2 to the Village of Dresden Water Distribution System will be made near the southern Village Line approximately 200-feet south of the intersection of Milo Street and Margaret Street, just north of the Keuka Lake Outlet. The Village of Dresden has plans to replace the existing water mains on NYS Route 54 between the Dresden tank site and the Village of Dresden, as well as all water mains within the Village.

Water Services

Water services for each house or business will be installed up to the right-of-way or easement line by the contractor during water main installation. Installation of the service from the right-of-way or easement line to the home or business will be the responsibility of the property owner. Each property will have to have an individual water pressure regulator and water meter installed.

Hydraulic Analysis

The hydraulic conditions of the proposed system were calculated using the WaterGEMS V8i hydraulic modeling software. The hydraulic analysis of the system includes the evaluation of available pressures and flows for the proposed water main extensions and is included in Appendix B. The results of the modeling are discussed below.

Hydraulic analysis of the system with a connection to the Village of Dresden Water System included the evaluation of available pressures and flows during various demand conditions. It is anticipated, based on 38 residential units and 4 commercial units using 300 gpd, with an additional 4,500 gpd at the Binghamton Boating Club (estimated usage of 75 gallons per day per site with 60 sites) that the water district will have an average daily demand of 17,100 gpd (11.88 gpm), a maximum daily demand of 34,200 gpd (23.75 gpm), and a peak hour demand of 68,400 gpd (47.50 gpm).

Due to the population trends, it is not anticipated that demands within the water district will increase by more than 20% in the near future.

The hydraulic analysis during average daily demands of the proposed water district indicates that adequate flows and pressures are available throughout the proposed system. With the future 10" water main installed on NYS Route 54, static pressures range from 46 psi to 103 psi and available fire flows during peak demand periods range from 650 gpm to 990 gpm while maintaining a minimum of 20 psi residual pressure in the proposed system.

Project Schedule

The anticipated schedule is as follows:

Funding Applications	Spring/Summer 2026
Funding Commitments	Winter 2027
Preliminary Project Design (90% Plans and Specs)	Winter 2027 – Spring 2027
Agency Approval and Final Design (100% Plans and Specs)	Spring 2027 – Fall 2027
Bid Project	Fall 2027
Award Project	Fall 2027
Construction	Winter 2028 - Summer 2028
Final Restoration Complete	Fall 2028

Permit Requirements

Since this project provides public potable water, it requires a permit by the Department of Health to confirm that the proposed plans meet current standards for potable water design and to verify sanitation of the mains for potable use after construction. Other permits that will be required for this project include a NYSDEC Stream Crossing permit for areas where the main crosses regulated streams, a Town Highway permit for construction work within Town Highway Rights-of-ways and a railway encroachment approval by Norfolk Southern for crossing their railroad tracks.

Sustainability Considerations

To prevent negatively impacting existing stormwater management systems all water main installations will be restored to original surface conditions. The water mains will also be sized to

provide maximum turnover while also providing adequate fire flow to limit the need for flushing and conserving water.

The proposed infrastructure will be those typically used for simple gravity distribution systems that have a typical life expectancy of 50-years or more. No control valves, or other complex mechanical devices are being proposed that could result in a shorter estimated life expectancy of the system or increased operation and maintenance requirements providing the most sustainable system available to distribute potable water to the District.

6.2 PROPOSED WATER DISTRICT UNIT COSTS

The estimated water district unit costs are based on receiving a \$2,050,000 Congressionally Directed Spending Grant and remaining financing through USDA Rural Development at a 5.00% interest rate for a 38-year term. The estimated average annual water cost was estimated based on the proposed combined Village of Dresden Water Supply Rates and Town of Benton Water Operation Rates of \$7.00/1000 gallon water usage fee with an average usage of 50,000 gallons/unit/year plus an additional \$150/quarter EDU service charge.

Unit Costs

The estimated costs for the proposed project are detailed in Appendix B and summarized as follows:

Construction Subtotal	\$2,647,050
Non Construction Costs	\$1,016,468
Total Initial Project Cost	\$3,664,000
Estimated Interest	\$2,022,030
Total Project Cost (After Loan Repayment)	\$5,686,030
<u>Secured Congressional Grant (administered via USDA RD)</u>	<u>-\$2,050,000</u>
Net Local Project Costs	\$3,636,030
Estimated Yearly Debt per EDU	\$1,679
Estimated Yearly Water Cost	\$950
Total Estimated Unit Cost	\$2,629

Annual Operating Budget

O&M Revenue

Minimum Quarterly Charge	\$150
<u>Water Rate (per 1,000 gallons)</u>	<u>\$7.00</u>
Annual O&M Revenue (assuming 35 users and 50,000gpy)	\$33,250

Debt Revenue

Debt Service (per EDU w/ 57 EDUs)	\$1,679
Total Annual Debt Service Revenue	\$95,685

O&M Expenses	
Supplies	(\$1,800)
Labor	(\$11,000)
Water Cost (\$7.00/1,000gal + Unit Charge)	(\$12,250)
Dresden Unit Charge (28.50/quarter/EDU)	(\$4,000)
Reserves	(\$4,200)
Cyber Security	(\$0)
Annual O&M Expenses	(\$33,250)
Debt Expenses	
Annual Debt Repayment	(\$95,685)

Supplies

This item includes general material costs associated with the normal operation of the water system which includes paying for billings software, printing, stamps, mailings etc.

Labor

This item covers the labor costs for two part time Certified Water Operators to operate and maintain the system and one part time Administrator to manage billing and other administrative tasks associated with the normal operation of the system.

Reserves

This item is money set aside to cover potential future costs associated with materials that need to be replaced or maintained frequently during the typical lifecycle of the system. See Appendix F for the life cycle analysis completed to determine the minimum annual reserve amount required to pay for routine maintenance.

Cyber Security Costs

This item includes the cost of having a contract with a Cyber Security Firm to monitor and conduct security updates and audits of the system's computer systems. The only part of the system where computers may be used is the billing and administration of the system. As the District plans to contract these duties out to another agency who will also be providing the O&M, it is expected that the agency contracted with will have a way to provide Cyber Security already in place. The District will help pay for whatever system is in place through the supplies and labor costs described above that will go to the contracted agency.

Debt Repayment

This is the annual payments that need to be made to pay back any loans taken out to complete the project.

6.3 SHORT LIVED ASSETS

None of the main equipment installed in the distribution system will have a useful life of less than 30 years. The water main, either PVC, HDPE or DIP, fire hydrants, valves and water services should have a useful life of approximately 50 years with routine maintenance. Hydrants and valves may require replacement earlier if they are struck by a snowplow or damaged in an automobile accident.

Master meters and residential meters have a useful life of 20 years, and the communication radios generally have a 10 year battery life. Additional routine maintenance to protect the new

infrastructure includes cleaning and painting the fire hydrants every 5 years, to keep a protective coating on the hydrant and prevent corrosion. These regular costs will be covered by a reserve fund that is included in the quarterly operations and maintenance costs to users. An overview of the Life Cycle Analysis of these Short Lived Assets and the associated costs and recommended minimum reserve deposit can be found in Appendix F.

7 Miscellaneous Information

7.1 DEFINITION OF A UNIT

Each single-family residential dwelling shall be considered to be one unit and will typically have a 1-inch or less service line and a ¾-inch or less meter. Included in this category will be single family houses, mobile homes, and individual apartments. Multiple single-family dwellings on the same parcel of land will each be considered an individual unit. Any facility will be considered as a minimum of one unit. Vacant land not within a certified agricultural district will be assessed one-half (0.5) of a unit. The parcels within the project area are detailed in Appendix D with their unit charge.

Non-residential, recreational, educational, commercial, industrial, and agricultural facilities will be assigned an equivalent number of units based following method:

The average daily usage divided by 300 gpd (Average Daily Usage ÷ 300 = number of units).

The Average Daily Use will be based on the Design Standards for Wastewater Treatment Works – Intermediate Sized Sewerage Facilities (New York State Department of Environmental Conservation, 2014), Table B-3 – Expected Hydraulic Loading Rates, as provided in Appendix E.

7.2 OTHER ONE TIME COSTS

Water Meter & Touch Pad Purchase Fee	\$240
Water Pressure Regulator Purchase	\$100
Service Line (R.O.W. to House ~ 50ft * \$20/LF avg)	\$1,000
<u>Well Separation/ Plumbing Modifications</u>	<u>\$200</u>
Estimated One Time Costs Total	\$1,540

7.3 OPTIONS FOR PROPERTY OWNER’S WELL

- A. Abandon the well.
- B. Keep well but separate it from public water plumbing.
- C. Keep well and install backflow prevention.

7.4 SERVICE LINE INFORMATION

A service line will be installed to all residences and businesses, from the water main to the road Right-of-Way or easement, for connection to the public water system.

7.5 OPTIONAL WATER ENHANCEMENTS WITH REMAINING FUNDS

- A. Upsize water main diameters to allow for future growth of the water system and maintain above average fire flows. Specifically, the section of Perry Point Road from NYS Route 14 to the Binghamton Boat Club if Vibrantz Technologies manufacturing facility is to connect to the Town Water District.
- B. Extend water mains to the District boundaries and through road intersections.
- C. Installation of automatic flushing units in place of manual 2-inch blow-offs.
- D. Purchase or reimburse the costs of water meters, meter radios, and residential pressure reducing valves for the residents of the District.
- E. Purchase of replacement parts (hydrants, valves, water main, fittings and repair materials) and water system maintenance equipment.
- F. Consideration will also be given to meter reading improvements, water meter telemetry hardware/software, computer hardware/software and metering upgrades to maximize the efficiency of the operation and maintenance of the District.
- G. Purchase of spare water meters, meter touch pads, and residential water pressure regulators for the residents of the District.

8 Conclusions

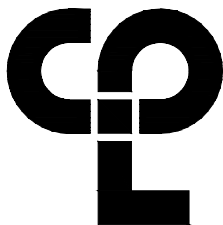
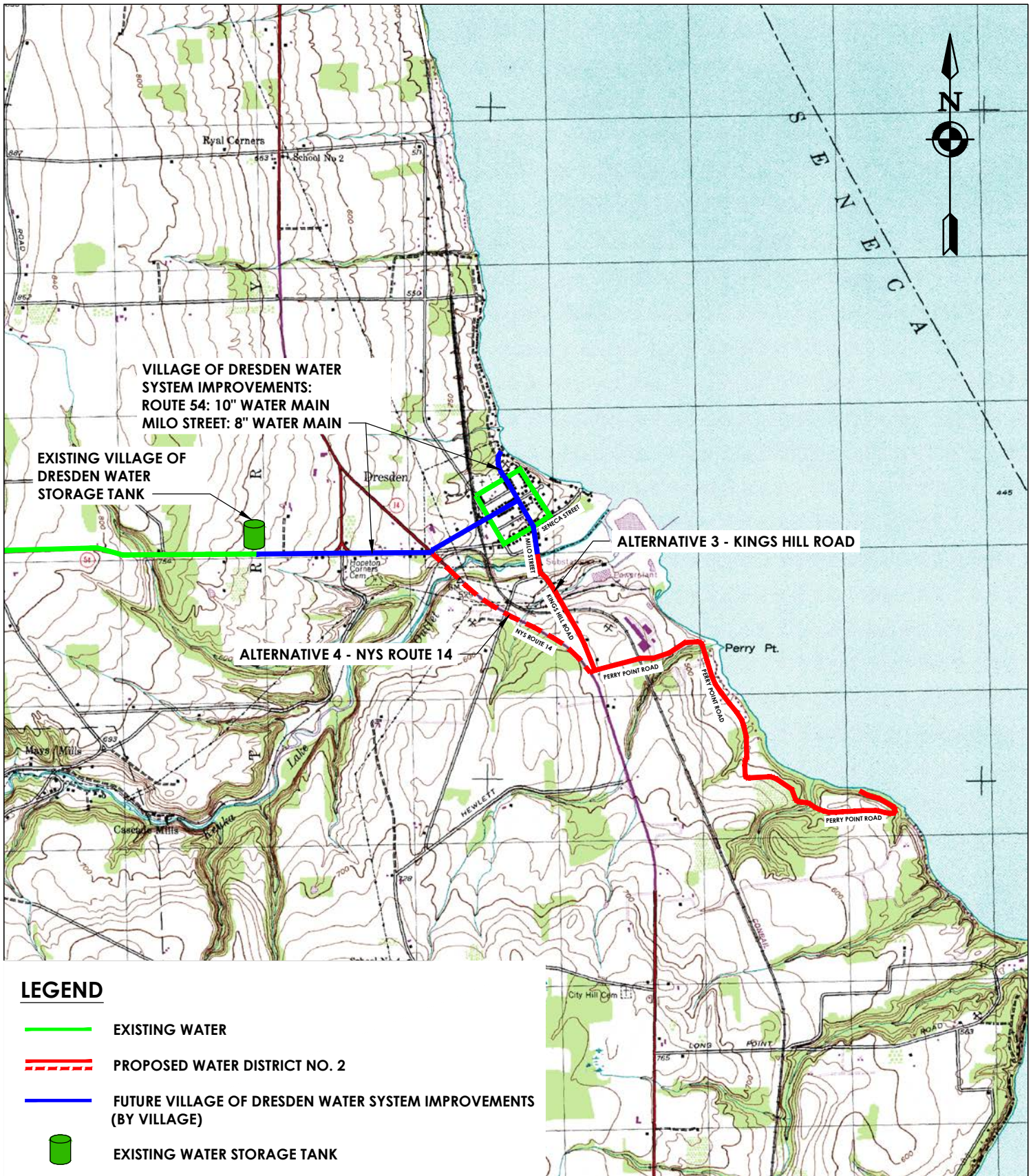
The Town of Torrey is committed to providing safe and reliable potable water supply and fire protection for its residents. This specific project will be instrumental in achieving that goal.

The Town of Torrey should begin discussions and negotiations with the Town of Benton to provide the operation and maintenance services to this District, including the water usage rate. The Town of Torrey should also encourage an existing employee to obtain a NYSDOH Class D operator license to act as a backup operator to both the Village of Dresden and Town of Benton water operators.

It is recommended that the Town of Torrey seek to obtain additional funding, a low interest loan and potentially an additional grant to lower unit costs, for completion of the project on behalf of the residents.

Figure No. 1 – Project Location Map

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CPL | Architecture Engineering Planning
 255 Woodcliff Drive - Suite 200
 Fairport, NY 14450
 CPLteam.com

Project Number R22.00315.00	Drawn By JLM	Checked By JED	Scale 1" = 2000'	Issued 02/11/2026
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Client Name
TOWN OF TORREY

Project Name
WATER DISTRICT NO. 2

Drawing Title
LOCATION MAP

Drawing Number
FIG-01

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Appendix A – Water District Boundary Map and Legal Description

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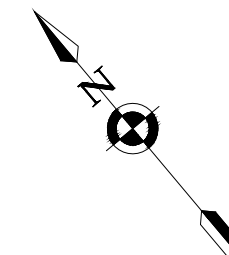


CPL | Architecture Engineering Planning

255 Woodcliff Drive, Suite 200
Fairport, NY 14450

CPLteam.com

NY ENGINEERING FIRM CERTIFICATE #0021419

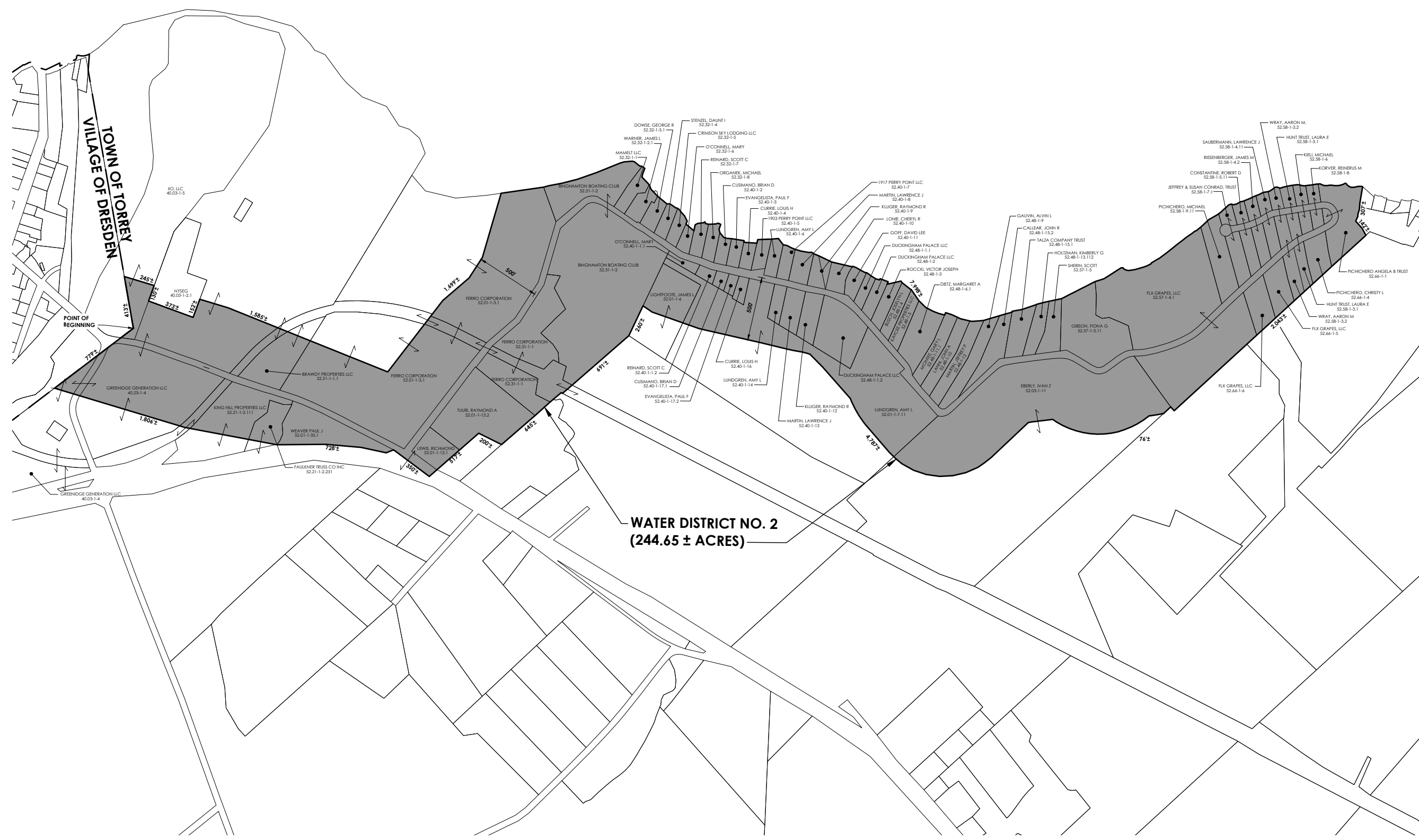


Plotted By: Kathrine Schusler

Date last plotted: 3/10/2026 3:55 PM

Date last accessed: 3/10/2026 3:54 PM

Sheet size: 11x17
Drawing Name: S:\Projects\Torrey_T\WD2\E District Form\ACAD\Perry Point WD 2026 11 02.dwg



PROJECT INFORMATION

Project Number

R22.00315.00

Client Name

TOWN OF TORREY

Project Name

WATER DISTRICT NO. 2

Project Address

PERRY POINT ROAD

SHEET INFORMATION

Issued 03/10/2026 Scale 1" = 800'

Drawn By KMS Checked By JED

Drawing Title
**WATER DISTRICT
BOUNDARY MAP**

Drawing Number
**WD
02**

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**TOWN OF TORREY
PERRY POINT WATER DISTRICT**

All that tract or parcel of land situated in the Town of Torrey, County of Yates, State of New York, and being described as follows:

Beginning at the intersection of the southerly municipal boundary line of the Town of Torrey/Village of Dresden and the easterly municipal boundary line of the Town of Torrey/Village of Dresden; thence,

1. Northeasterly, along the easterly municipal boundary line of the Town of Torrey/Village of Dresden, a distance of 413 feet, more or less, to a point 500 feet easterly of and parallel to the centerline of Kings Hill Road (right-of-way width varies); thence,
2. Southeasterly, through the lands of tax account number 40.03-1-5, along a line 500 feet easterly of and parallel to the centerline of Kings Hill Road, a distance of 245 feet, more or less, to the northerly line of tax account number 40.03-1-4; thence,
3. Southwesterly, along a northerly line of tax account number 40.03-1-4, a distance of 130 feet, more or less, to the easterly line of tax account number 40.03-1-4; thence,
4. Southeasterly, along the easterly line of tax account number 40.03-1-4, a distance of 373 feet, more or less, to a northerly line of tax account number 40.03-1-4; thence,
5. Northeasterly, along a northerly line of tax account number 40.03-1-4, a distance of 152 feet, more or less, to a point 500 feet easterly of and parallel to the centerline of Kings Hill Road; thence,
6. Southeasterly, through the lands of tax account numbers 40.03-1-4, 29.59-1-3, 52.21-1-1.1 and 52.01-1-3.1, along a line 500 feet easterly of and parallel to the centerline of Kings Hill Road, a distance of 1,585 feet, more or less, to a point 500 feet northerly of and parallel to the centerline of Perry Point Road (right-of-way width varies); thence,
7. Northeasterly, through the lands of tax account numbers 52.01-1-3.1, and 29.59-1-3, along a line 500 feet northerly of and parallel to the centerline of Perry Point Road, a distance of 1,699 feet, more or less, to the western shoreline of Seneca Lake; thence,
8. Southeasterly, along the western shoreline of Seneca Lake, a distance of 7,998 feet, more or less, to an easterly line of tax account number 52.66-1-1; thence,
9. Southwesterly, along an easterly line of tax account number 52.66-1-1, a distance of 307 feet, more or less, to an easterly line of tax account number 52.66-1-1; thence,
10. Southerly, along an easterly line of tax account number 52.66-1-1, a distance of 142 feet, more or less, to the southerly line of tax account number 52.66-1-1; thence,
11. Westerly, along the southerly lines of tax account numbers 52.66-1-1, 52.66-1-4, 52.58-1-3.1, 52.58-1-3.2, 52.66-1-5, 52.66-1-6, and 52.57-1-4.1, a distance of 2,043 feet, more or less, to the westerly line of tax account number 52.57-1-4.1; thence,
12. Northerly, along the westerly line of tax account number 52.57-1-4.1, a distance of 41 feet, more or less, to the southerly line of tax account number 52.03-1-11; thence,

13. Westerly, along the southerly line of tax account number 52.03-1-11, a distance of 76 feet, more or less, to a point 500 feet westerly of and parallel to the centerline of Perry Point Road; thence,
14. Northwesterly, through the lands of tax account numbers 52.03-1-11, 52.01-1-7.11, and 52.01-1-6, along a line 500 feet westerly of and parallel to the centerline of Perry Point Road, a distance of 4,787 feet, more or less, to a southerly line of tax account number 52.31-1-2; thence,
15. Southwesterly, along a southerly line of tax account number 52.31-1-2, a distance of 260 feet, more or less, to a southerly line of tax account number 52.31-1-2; thence,
16. Westerly, through the lands of tax account number 29.59-1-3, along a southerly line of tax account number 52.31-1-2 and the westerly extension of a southerly line of tax account number 52.31-1-2, a distance of 691 feet, more or less, to the westerly line of tax account number 29.59-1-3; thence,
17. Northwesterly, along the westerly line of tax account number 29.59-1-3, a distance of 12 feet, more or less, to the southerly line of tax account number 29.59-1-3; thence,
18. Westerly, along the southerly lines of tax account numbers 29.59-1-3, 52.31-1-1, and 52.01-1-13.2, a distance of 645 feet, more or less, to the westerly line of tax account number 52.01-1-13.2; thence,
19. Northwesterly, along the westerly line of tax account number 52.01-1-13.2, a distance of 200 feet, more or less, to a southerly line of tax account number 52.01-1-13.2; thence,
20. Westerly, along the southerly lines of tax account numbers 52.01-1-13.2 and 52.01-1-13.1 and the westerly extension of the southerly line of tax account number 52.01-1-13.1, a distance of 517 feet, more or less, to the centerline of NYS Route 14 (right-of-way varies); thence,
21. Northerly, along the centerline of NYS Route 14, a distance of 350 feet, more or less, to the westerly line of tax account number 52.01-1-35.1; thence,
22. Northwesterly, along the westerly line of tax account number 52.01-1-35.1, a distance of 728 feet, more or less, to a point 500 feet westerly of and parallel to the centerline of Kings Hill Road; thence,
23. Northwesterly, through the lands of tax account numbers 52.21-1-2.231, 52.21-1-2.111, 29.59-1-3, and 40.03-1-4, along a line 500 feet westerly of and parallel to the centerline of Kings Hill Road, a distance of 1,806 feet, more or less, to the southerly municipal boundary line of the Town of Torrey/Village of Dresden; thence,
24. Easterly, along the southerly municipal boundary line of the Town of Torey/Village of Dresden, a distance of 779 feet, more or less, to the easterly municipal boundary line of the Town of Torrey/Village of Dresden, and the point of beginning.

Town of Torrey Water District No. 2, as describes above, contains 244.65 acres of land, more or less.

All as described on a map prepared by CPL, "Town of Torrey Water District No. 2 – Water District Boundary Map WD-02" dated March 10, 2026.

Appendix B – Hydraulic Analysis

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FUTURE VILLAGE OF
DRESDEN WATER MAIN
REPLACEMENT (ROUTE 54)

PROPOSED WATER
DISTRICT NO. 2

T-1 Dresden
Grd Elev: 634.0 ft
HGL: 699.0 ft
Overflow: 701.0 ft
% Full: 94.7 %
Outflow: 96.00 gpm

J-114
Grd Elev: 636.0 ft
Static: 94.8 psi
AFF: 669.68 gpm
Demand: 1.00 gpm
Residual: 93.8 psi

J-113
Grd Elev: 636.0 ft
Static: 20.0 psi
AFF: 8.41 gpm
Demand: 1.00 gpm
Residual: 20.0 psi

J-122
Grd Elev: 636.0 ft
Static: 27.2 psi
AFF: 2,002.65 gpm
Demand: 1.00 gpm
Residual: 20.0 psi

J-107
Grd Elev: 620.0 ft
Static: 54.1 psi
AFF: 2,002.26 gpm
Demand: 1.00 gpm
Residual: 20.0 psi

J-106
Grd Elev: 595.0 ft
Static: 49.2 psi
AFF: 2,004.90 gpm
Demand: 1.00 gpm
Residual: 20.0 psi

J-105
Grd Elev: 545.0 ft
Static: 66.5 psi
AFF: 1,976.67 gpm
Demand: 1.00 gpm
Residual: 20.0 psi

J-120
Grd Elev: 545.0 ft
Static: 66.5 psi
AFF: 1,962.38 gpm
Demand: 5.00 gpm
Residual: 20.0 psi

J-626
Grd Elev: 513.0 ft
Static: 80.3 psi
AFF: 1,212.05 gpm
Demand: 5.00 gpm
Residual: 44.7 psi

J-609
Grd Elev: 510.0 ft
Static: 81.6 psi
AFF: 1,219.68 gpm
Demand: 5.00 gpm
Residual: 54.7 psi

J-614
Grd Elev: 494.0 ft
Static: 89.5 psi
AFF: 1,179.75 gpm
Demand: 5.00 gpm
Residual: 53.5 psi

J-629
Grd Elev: 490.0 ft
Static: 94.5 psi
AFF: 1,199.04 gpm
Demand: 5.00 gpm
Residual: 60.2 psi

J-610
Grd Elev: 507.9 ft
Static: 82.9 psi
AFF: 1,195.43 gpm
Demand: 5.00 gpm
Residual: 53.9 psi

J-611
Grd Elev: 504.0 ft
Static: 84.2 psi
AFF: 1,197.53 gpm
Demand: 5.00 gpm
Residual: 53.2 psi

J-612
Grd Elev: 485.0 ft
Static: 92.4 psi
AFF: 1,159.34 gpm
Demand: 5.00 gpm
Residual: 59.0 psi

J-613
Grd Elev: 488.0 ft
Static: 91.1 psi
AFF: 1,126.67 gpm
Demand: 5.00 gpm
Residual: 64.1 psi

J-615
Grd Elev: 481.0 ft
Static: 94.1 psi
AFF: 1,041.27 gpm
Demand: 5.00 gpm
Residual: 67.2 psi

J-616
Grd Elev: 480.0 ft
Static: 94.8 psi
AFF: 1,003.83 gpm
Demand: 5.00 gpm
Residual: 67.6 psi

J-2301
Grd Elev: 450.0 ft
Static: 107.9 psi
AFF: 989.77 gpm
Demand: 2.00 gpm
Residual: 80.6 psi

J-2302
Grd Elev: 495.0 ft
Static: 88.0 psi
AFF: 975.39 gpm
Demand: 2.00 gpm
Residual: 61.1 psi

J-2303
Grd Elev: 535.0 ft
Static: 70.7 psi
AFF: 966.63 gpm
Demand: 2.00 gpm
Residual: 43.8 psi

J-2006
Grd Elev: 465.0 ft
Static: 101.0 psi
AFF: 935.11 gpm
Demand: 2.00 gpm
Residual: 55.7 psi

J-2004
Grd Elev: 450.0 ft
Static: 107.9 psi
AFF: 935.11 gpm
Demand: 2.00 gpm
Residual: 61.6 psi

J-2005
Grd Elev: 550.0 ft
Static: 64.2 psi
AFF: 935.08 gpm
Demand: 2.00 gpm
Residual: 29.5 psi

J-2008
Grd Elev: 474.0 ft
Static: 97.1 psi
AFF: 926.14 gpm
Demand: 4.00 gpm
Residual: 49.4 psi

J-2009
Grd Elev: 460.0 ft
Static: 103.1 psi
AFF: 810.81 gpm
Demand: 2.00 gpm
Residual: 55.5 psi

J-2010
Grd Elev: 500.0 ft
Static: 85.8 psi
AFF: 774.50 gpm
Demand: 2.00 gpm
Residual: 38.2 psi

J-2011
Grd Elev: 520.0 ft
Static: 75.7 psi
AFF: 685.80 gpm
Demand: 2.00 gpm
Residual: 29.5 psi

J-2012
Grd Elev: 500.0 ft
Static: 85.8 psi
AFF: 676.43 gpm
Demand: 2.00 gpm
Residual: 38.2 psi

J-2016
Grd Elev: 480.0 ft
Static: 103.1 psi
AFF: 649.46 gpm
Demand: 2.00 gpm
Residual: 50.2 psi

J-2015
Grd Elev: 480.0 ft
Static: 84.3 psi
AFF: 649.44 gpm
Demand: 2.00 gpm
Residual: 44.4 psi

J-2014
Grd Elev: 520.0 ft
Static: 77.2 psi
AFF: 649.48 gpm
Demand: 2.00 gpm
Residual: 27.7 psi

H-2002
Grd Elev: 450.0 ft
Static: 107.9 psi
AFF: 689.16 gpm
Residual: 59.8 psi

J-2018
Grd Elev: 500.0 ft
Static: 85.8 psi
AFF: 676.43 gpm
Demand: 2.00 gpm
Residual: 38.2 psi

H-2003
Grd Elev: 542.0 ft
Static: 87.4 psi
AFF: 649.44 gpm
Residual: 20.0 psi

PRV-1 Dresden
Grd Elev: 636.0 ft
From: 160.8 psi
To: 94.8 psi
Set: 20.0 psi
Flow: 2.00 gpm
HGL (From): 1,008.0 ft
HGL (To): 882.7 ft

PRV-2 Dresden
Grd Elev: 636.0 ft
From: 94.8 psi
To: 20.0 psi
Set: 20.0 psi
Flow: 1.00 gpm
HGL (From): 855.1 ft
HGL (To): 682.7 ft

VILLAGE OF DRESDEN TRANSMISSION MAIN
FROM VILLAGE OF PENN YAN WATER SUPPLY

REVISIONS				
NO.	DATE	BY	CHKD	DESCRIPTION



TOWN OF TORREY

TOWN OF TORREY COUNTY OF YATES STATE OF NEW YORK

DATE:	3/10/26
DRAWN:	JED
DESIGNED:	JED
CHECKED:	JED
SCALE:	1"=1000'

WATER DISTRICT NO. 2

DRESDEN/TORREY HYDRAULIC MODEL
ALTERNATIVE 3 - KINGS HILL ROAD

PROJECT NUMBER	R22.00315.00
DRAWING NUMBER	ALT-3

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Fire Flow Node FlexTable: Fire Flow Results Table

Label	Zone	Satisfies Fire Flow Constraints ?	Fire Flow Status	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Zone Lower Limit) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (System Lower Limit) (psi)	Pressure (Calculated System Lower Limit) (psi)	Junction w/ Minimum Pressure (System)	Is Fire Flow Run Balanced ?
H-10	<None>	True	Passed	500.00	1,199.52	500.00	1,199.52	20.0	57.3	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
H-2002	<None>	True	Passed	500.00	689.12	500.00	689.12	20.0	59.8	20.0	20.0	1089: H-2003	(N/A)	20.0	889: J-113	True
H-2003	<None>	True	Passed	500.00	649.40	500.00	649.40	20.0	20.0	20.0	29.5	1086: J-2014	(N/A)	20.0	889: J-113	True
H-2004	<None>	True	Passed	500.00	934.94	500.00	934.94	20.0	61.6	20.0	20.0	1063: J-2004	(N/A)	20.0	1063: J-2004	True
H-2301	<None>	True	Passed	500.00	998.86	500.00	998.86	20.0	80.6	20.0	20.0	1063: J-2004	(N/A)	20.0	1063: J-2004	True
H-2407	<None>	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-105	917: Dresden	True	Passed	500.00	1,976.87	501.00	1,977.87	20.0	20.0	20.0	20.0	692: J-120	(N/A)	0.5	1063: J-2004	True
J-106	917: Dresden	True	Passed	500.00	2,054.93	501.00	2,055.93	20.0	20.0	20.0	37.2	692: J-120	(N/A)	17.7	1063: J-2004	True
J-107	460: Zone - connection	True	Passed	500.00	2,002.26	501.00	2,003.26	20.0	20.0	20.0	20.0	889: J-113	(N/A)	20.0	889: J-113	True
J-108	916: Penn Yan	True	Passed	500.00	847.81	501.00	848.81	20.0	20.0	20.0	20.0	875: J-108	(N/A)	-2.2	877: J-109	True
J-109	917: Dresden	True	Passed	500.00	669.68	501.00	670.68	20.0	20.0	20.0	28.0	879: J-110	(N/A)	20.0	889: J-113	True
J-110	917: Dresden	True	Passed	500.00	772.37	501.00	773.37	20.0	20.0	20.0	26.5	877: J-109	(N/A)	20.0	889: J-113	True
J-111	917: Dresden	True	Passed	500.00	1,233.73	501.00	1,234.73	20.0	29.5	20.0	20.0	879: J-110	(N/A)	20.0	879: J-110	True
J-112	917: Dresden	True	Passed	500.00	5,000.00	501.00	5,001.00	20.0	59.4	20.0	40.8	879: J-110	(N/A)	20.0	889: J-113	True
J-113	460: Zone - connection	False	Residual Pressure Failed	500.00	8.41	501.00	9.41	20.0	20.0	20.0	27.2	951: J-122	(N/A)	27.2	951: J-122	True
J-114	917: Dresden	True	Passed	500.00	669.68	501.00	670.68	20.0	93.8	20.0	20.0	877: J-109	(N/A)	20.0	877: J-109	True
J-120	917: Dresden	True	Passed	500.00	1,962.39	505.00	1,967.39	20.0	20.0	20.0	20.6	870: J-105	(N/A)	0.5	1063: J-2004	True
J-121	917: Dresden	True	Passed	500.00	669.68	501.00	670.68	20.0	98.8	20.0	20.0	877: J-109	(N/A)	20.0	877: J-109	True

Fire Flow Node FlexTable: Fire Flow Results Table

Label	Zone	Satisfies Fire Flow Constraints ?	Fire Flow Status	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Zone Lower Limit) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (System Lower Limit) (psi)	Pressure (Calculated System Lower Limit) (psi)	Junction w/ Minimum Pressure (System)	Is Fire Flow Run Balanced ?
J-122	460: Zone - connection	True	Passed	500.00	2,002.65	501.00	2,003.65	20.0	20.0	20.0	20.0	889: J-113	(N/A)	20.0	889: J-113	True
J-201	457: Zone - 1	True	Passed	500.00	1,642.46	501.00	1,643.46	20.0	20.0	20.0	20.0	25: J-201	(N/A)	20.0	889: J-113	True
J-401	457: Zone - 1	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-402	457: Zone - 1	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-403	457: Zone - 1	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-404	457: Zone - 1	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-405	457: Zone - 1	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-406	457: Zone - 1	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-407	457: Zone - 1	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-408	457: Zone - 1	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-409	457: Zone - 1	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-410	457: Zone - 1	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-411	457: Zone - 1	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-510	912: Torrey-North	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-511	912: Torrey-North	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-513	912: Torrey-North	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-514	912: Torrey-North	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-515	912: Torrey-North	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

Fire Flow Node FlexTable: Fire Flow Results Table

Label	Zone	Satisfies Fire Flow Constraints ?	Fire Flow Status	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Zone Lower Limit) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (System Lower Limit) (psi)	Pressure (Calculated System Lower Limit) (psi)	Junction w/ Minimum Pressure (System)	Is Fire Flow Run Balanced ?
J-516	912: Torrey-North	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-517	912: Torrey-North	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-518	912: Torrey-North	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-519	912: Torrey-North	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-524	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-525	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-526	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-527	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-528	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-529	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-530	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-531	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-532	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-533	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

Fire Flow Node FlexTable: Fire Flow Results Table

Label	Zone	Satisfies Fire Flow Constraints ?	Fire Flow Status	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Zone Lower Limit) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (System Lower Limit) (psi)	Pressure (Calculated System Lower Limit) (psi)	Junction w/ Minimum Pressure (System)	Is Fire Flow Run Balanced ?
J-534	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-535	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-536	913: Torrey-South	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-537	914: Milo	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-538	914: Milo	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-539	914: Milo	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-540	914: Milo	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-541	914: Milo	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-542	914: Milo	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-543	914: Milo	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-544	914: Milo	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-545	914: Milo	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-546	914: Milo	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-547	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-548	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-549	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-550	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-551	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-552	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-553	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

Fire Flow Node FlexTable: Fire Flow Results Table

Label	Zone	Satisfies Fire Flow Constraints ?	Fire Flow Status	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Zone Lower Limit) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (System Lower Limit) (psi)	Pressure (Calculated System Lower Limit) (psi)	Junction w/ Minimum Pressure (System)	Is Fire Flow Run Balanced ?
J-554	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-555	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-556	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-557	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-558	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-559	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-560	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-561	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-562	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-563	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-564	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-565	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-566	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-567	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-568	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-569	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-570	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-571	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-572	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-573	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-574	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

Fire Flow Node FlexTable: Fire Flow Results Table

Label	Zone	Satisfies Fire Flow Constraints ?	Fire Flow Status	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Zone Lower Limit) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (System Lower Limit) (psi)	Pressure (Calculated System Lower Limit) (psi)	Junction w/ Minimum Pressure (System)	Is Fire Flow Run Balanced ?
J-575	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-576	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-577	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-578	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-579	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-580	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-582	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-583	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-584	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-585	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-587	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-588	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-589	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-590	915: Starkey	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-598	<None>	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-605	<None>	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-607	<None>	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-608	<None>	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-609	<None>	True	Passed	500.00	1,219.68	505.00	1,224.68	20.0	54.7	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
J-610	<None>	True	Passed	500.00	1,195.40	505.00	1,200.40	20.0	55.9	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
J-611	<None>	True	Passed	500.00	1,187.77	505.00	1,192.77	20.0	53.1	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
J-612	<None>	True	Passed	500.00	1,158.83	505.00	1,163.83	20.0	59.0	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
J-613	<None>	True	Passed	500.00	1,126.39	505.00	1,131.39	20.0	64.1	20.0	20.0	1063: J-2004	(N/A)	20.0	1063: J-2004	True

Fire Flow Node FlexTable: Fire Flow Results Table

Label	Zone	Satisfies Fire Flow Constraints ?	Fire Flow Status	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Zone Lower Limit) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (System Lower Limit) (psi)	Pressure (Calculated System Lower Limit) (psi)	Junction w/ Minimum Pressure (System)	Is Fire Flow Run Balanced ?
J-614	<None>	True	Passed	500.00	1,179.59	505.00	1,184.59	20.0	53.5	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
J-615	<None>	True	Passed	500.00	1,040.99	505.00	1,045.99	20.0	67.2	20.0	20.0	1063: J-2004	(N/A)	20.0	1063: J-2004	True
J-616	<None>	True	Passed	500.00	1,003.29	505.00	1,008.29	20.0	67.6	20.0	20.0	1063: J-2004	(N/A)	20.0	1063: J-2004	True
J-626	<None>	True	Passed	500.00	1,212.16	505.00	1,217.16	20.0	44.6	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
J-627	<None>	True	Passed	500.00	1,199.35	500.00	1,199.35	20.0	54.3	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
J-628	<None>	True	Passed	500.00	1,195.08	505.00	1,200.08	20.0	49.8	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
J-629	<None>	True	Passed	500.00	1,199.40	505.00	1,204.40	20.0	60.0	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
J-2004	<None>	True	Passed	500.00	934.94	502.00	936.94	20.0	20.0	20.0	37.3	1065: J-2005	(N/A)	20.0	889: J-113	True
J-2005	<None>	True	Passed	500.00	934.91	502.00	936.91	20.0	29.5	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
J-2006	<None>	True	Passed	500.00	934.94	502.00	936.94	20.0	55.7	20.0	20.0	1063: J-2004	(N/A)	20.0	1063: J-2004	True
J-2008	<None>	True	Passed	500.00	926.05	504.00	930.05	20.0	49.4	20.0	20.0	1089: H-2003	(N/A)	20.0	889: J-113	True
J-2009	<None>	True	Passed	500.00	810.54	502.00	812.54	20.0	55.5	20.0	20.0	1089: H-2003	(N/A)	20.0	889: J-113	True
J-2010	<None>	True	Passed	500.00	774.45	502.00	776.45	20.0	38.2	20.0	20.0	1089: H-2003	(N/A)	20.0	889: J-113	True
J-2011	<None>	True	Passed	500.00	757.70	502.00	759.70	20.0	29.5	20.0	20.0	1089: H-2003	(N/A)	20.0	889: J-113	True
J-2012	<None>	True	Passed	500.00	695.56	502.00	697.56	20.0	38.2	20.0	20.0	1089: H-2003	(N/A)	20.0	889: J-113	True
J-2013	<None>	True	Passed	500.00	676.39	502.00	678.39	20.0	38.2	20.0	20.0	1089: H-2003	(N/A)	20.0	889: J-113	True
J-2014	<None>	True	Passed	500.00	649.44	502.00	651.44	20.0	27.7	20.0	20.0	1089: H-2003	(N/A)	20.0	889: J-113	True
J-2015	<None>	True	Passed	500.00	649.42	502.00	651.42	20.0	44.4	20.0	20.0	1089: H-2003	(N/A)	20.0	889: J-113	True
J-2016	<None>	True	Passed	500.00	649.42	502.00	651.42	20.0	50.2	20.0	20.0	1089: H-2003	(N/A)	20.0	889: J-113	True
J-2301	<None>	True	Passed	500.00	990.57	502.00	992.57	20.0	71.9	20.0	20.0	1063: J-2004	(N/A)	20.0	1063: J-2004	True
J-2302	<None>	True	Passed	500.00	975.20	502.00	977.20	20.0	61.1	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True

Fire Flow Node FlexTable: Fire Flow Results Table

Label	Zone	Satisfies Fire Flow Constraints ?	Fire Flow Status	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Zone Lower Limit) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (Zone)	Pressure (System Lower Limit) (psi)	Pressure (Calculated System Lower Limit) (psi)	Junction w/ Minimum Pressure (System)	Is Fire Flow Run Balanced ?
J-2303	<None>	True	Passed	500.00	966.44	502.00	968.44	20.0	43.8	20.0	20.0	1063: J-2004	(N/A)	20.0	889: J-113	True
J-2408	917: Dresden	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-2409	917: Dresden	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-2410	917: Dresden	(N/A)	(N/A)	500.00	(N/A)	(N/A)	(N/A)	20.0	(N/A)	20.0	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand Collection	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-105	545.0	917: Dresden	<Collection: 1 items>	1.00	698.6	66.5
J-106	585.0	917: Dresden	<Collection: 1 items>	1.00	698.8	49.2
J-107	620.0	460: Zone - connection	<Collection: 1 items>	1.00	698.9	34.1
J-108	754.0	916: Penn Yan	<Collection: 1 items>	1.00	1,008.0	109.9
J-109	867.0	917: Dresden	<Collection: 1 items>	1.00	1,008.0	61.0
J-110	882.0	917: Dresden	<Collection: 1 items>	1.00	1,008.0	54.5
J-111	860.0	917: Dresden	<Collection: 1 items>	1.00	1,008.0	64.0
J-112	839.0	917: Dresden	<Collection: 1 items>	1.00	1,008.0	73.1
J-113	636.0	460: Zone - connection	<Collection: 1 items>	1.00	682.2	20.0
J-114	636.0	917: Dresden	<Collection: 1 items>	1.00	855.1	94.8
J-120	545.0	917: Dresden	<Collection: 1 items>	5.00	698.6	66.5
J-121	636.0	917: Dresden	<Collection: 1 items>	1.00	1,008.0	160.9
J-122	636.0	460: Zone - connection	<Collection: 1 items>	1.00	698.9	27.2
J-201	490.0	457: Zone - 1	<Collection: 1 items>	1.00	716.0	97.8
J-401	510.0	457: Zone - 1	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-402	550.0	457: Zone - 1	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-403	545.0	457: Zone - 1	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-404	460.0	457: Zone - 1	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-405	458.0	457: Zone - 1	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-406	460.0	457: Zone - 1	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-407	466.0	457: Zone - 1	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-408	462.0	457: Zone - 1	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-409	462.0	457: Zone - 1	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-410	550.0	457: Zone - 1	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-411	610.0	457: Zone - 1	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-510	550.0	912: Torrey-North	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-511	550.0	912: Torrey-North	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-513	580.0	912: Torrey-North	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-514	635.0	912: Torrey-North	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-515	663.0	912: Torrey-North	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-516	675.0	912: Torrey-North	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-517	677.0	912: Torrey-North	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-518	610.0	912: Torrey-North	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-519	545.0	912: Torrey-North	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-524	585.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-525	580.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-526	600.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-527	622.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-528	642.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-529	665.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-530	750.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-531	765.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-532	762.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-533	740.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-534	751.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-535	811.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-536	782.0	913: Torrey-South	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-537	754.0	914: Milo	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-538	754.0	914: Milo	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-539	731.0	914: Milo	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-540	706.0	914: Milo	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-541	705.0	914: Milo	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-542	705.0	914: Milo	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-543	736.0	914: Milo	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-544	741.0	914: Milo	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-545	698.0	914: Milo	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-546	695.0	914: Milo	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-547	686.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-548	678.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand Collection	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-549	679.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-550	670.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-551	660.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-552	665.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-553	648.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-554	641.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-555	635.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-556	632.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-557	648.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-558	652.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-559	650.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-560	685.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-561	695.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-562	694.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-563	692.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-564	696.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-565	740.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-566	770.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-567	802.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-568	822.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-569	816.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-570	809.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-571	811.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-572	846.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-573	842.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-574	852.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-575	841.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-576	834.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-577	829.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-578	808.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-579	819.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-580	821.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-582	868.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-583	866.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-584	868.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-585	868.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-587	735.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-588	785.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-589	809.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-590	875.0	915: Starkey	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-598	0.0	<None>	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-605	677.5	<None>	<Collection: 0 items>	(N/A)	(N/A)	(N/A)
J-607	108.8	<None>	<Collection: 0 items>	(N/A)	(N/A)	(N/A)
J-608	308.3	<None>	<Collection: 0 items>	(N/A)	(N/A)	(N/A)
J-609	510.0	<None>	<Collection: 1 items>	5.00	698.5	81.6
J-610	507.0	<None>	<Collection: 1 items>	5.00	698.5	82.9
J-611	504.0	<None>	<Collection: 1 items>	5.00	698.5	84.2
J-612	485.0	<None>	<Collection: 1 items>	5.00	698.5	92.4
J-613	488.0	<None>	<Collection: 1 items>	5.00	698.5	91.1
J-614	494.0	<None>	<Collection: 1 items>	5.00	698.5	88.5
J-615	481.0	<None>	<Collection: 1 items>	5.00	698.5	94.1
J-616	480.0	<None>	<Collection: 1 items>	5.00	698.5	94.5
J-626	513.0	<None>	<Collection: 1 items>	5.00	698.5	80.3
J-627	505.0	<None>	<Collection: 0 items>	0.00	698.5	83.7
J-628	504.0	<None>	<Collection: 1 items>	5.00	698.5	84.2
J-629	480.0	<None>	<Collection: 1 items>	5.00	698.5	94.5
J-2004	590.0	<None>	<Collection: 1 items>	2.00	698.5	46.9
J-2005	550.0	<None>	<Collection: 1 items>	2.00	698.5	64.2
J-2006	465.0	<None>	<Collection: 1 items>	2.00	698.4	101.0

FlexTable: Junction Table

Label	Elevation (ft)	Zone	Demand Collection	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-2008	474.0	<None>	<Collection: 1 items>	4.00	698.4	97.1
J-2009	460.0	<None>	<Collection: 1 items>	2.00	698.4	103.1
J-2010	500.0	<None>	<Collection: 1 items>	2.00	698.4	85.8
J-2011	520.0	<None>	<Collection: 1 items>	2.00	698.4	77.2
J-2012	500.0	<None>	<Collection: 1 items>	2.00	698.4	85.8
J-2013	500.0	<None>	<Collection: 1 items>	2.00	698.4	85.8
J-2014	520.0	<None>	<Collection: 1 items>	2.00	698.4	77.2
J-2015	480.0	<None>	<Collection: 1 items>	2.00	698.4	94.5
J-2016	460.0	<None>	<Collection: 1 items>	2.00	698.4	103.1
J-2301	470.0	<None>	<Collection: 1 items>	2.00	698.5	98.9
J-2302	495.0	<None>	<Collection: 1 items>	2.00	698.5	88.0
J-2303	535.0	<None>	<Collection: 1 items>	2.00	698.5	70.7
J-2408	529.0	917: Dresden	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-2409	525.0	917: Dresden	<Collection: 1 items>	(N/A)	(N/A)	(N/A)
J-2410	590.0	917: Dresden	<Collection: 1 items>	(N/A)	(N/A)	(N/A)

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FlexTable: Hydrant Table

Label	Hydrant Status	Include Hydrant Lateral Loss?	Emitter Coefficient (gpm/psi^n)	Length (Hydrant Lateral) (ft)	Elevation (ft)	Zone	Demand Collection	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
H-2301	Closed	False	0.000	20	450.0	<None>	<Collection: 0 items>	0.00	698.5	107.5
H-2002	Closed	False	0.000	20	450.0	<None>	<Collection: 0 items>	0.00	698.4	107.5
H-2003	Closed	False	0.000	20	542.0	<None>	<Collection: 0 items>	0.00	698.4	67.7
H-10	Closed	False	0.000	20	455.0	<None>	<Collection: 0 items>	0.00	698.5	105.4
H-2004	Closed	False	0.000	20	450.0	<None>	<Collection: 0 items>	0.00	698.4	107.5
H-2407	Closed	False	0.000	20	460.0	<None>	<Collection: 0 items>	(N/A)	(N/A)	(N/A)

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FlexTable: Pipe Table

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Has Check Valve?	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Has User Defined Length?	Length (User Defined) (ft)
P-101	1,024	294: PMP-1	25: J-201	10.0	Ductile Iron	130.0	False	0.000	1.00	0.00	0.000	False	0
P-102	749	294: PMP-1	465: R-1	10.0	Ductile Iron	130.0	False	0.000	-1.00	0.00	0.000	False	0
P-105	1,877	870: J-105	871: J-106	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-106	1,320	871: J-106	873: J-107	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-108	4,538	875: J-108	877: J-109	8.0	Ductile Iron	130.0	False	0.000	-4.00	0.03	0.000	False	0
P-109	3,788	877: J-109	879: J-110	8.0	Ductile Iron	130.0	False	0.000	-5.00	0.03	0.000	False	0
P-110	4,010	879: J-110	881: J-111	8.0	Ductile Iron	130.0	False	0.000	-6.00	0.04	0.000	False	0
P-111	2,841	881: J-111	883: J-112	8.0	Ductile Iron	130.0	False	0.000	-7.00	0.04	0.000	False	0
P-112	631	883: J-112	885: R-2	12.0	Ductile Iron	130.0	False	0.000	-8.00	0.02	0.000	False	0
P-113	115	870: J-105	692: J-120	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-114	656	873: J-107	951: J-122	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-116	223	889: J-113	888: T-1	2.0	Ductile Iron	130.0	True	0.000	0.00	0.00	0.000	False	0
P-122	250	889: J-113	903: PRV-2	8.0	Ductile Iron	130.0	False	0.000	-1.00	0.01	0.000	False	0
P-124	250	903: PRV-2	906: J-114	8.0	Ductile Iron	130.0	False	0.000	-1.00	0.01	0.000	False	0
P-125	1,014	945: J-121	875: J-108	8.0	Ductile Iron	130.0	False	0.000	-3.00	0.02	0.000	False	0
P-126	250	906: J-114	948: PRV-1	8.0	Ductile Iron	130.0	False	0.000	-2.00	0.01	0.000	False	0
P-127	250	948: PRV-1	945: J-121	8.0	Ductile Iron	130.0	False	0.000	-2.00	0.01	0.000	False	0
P-131	67	951: J-122	889: J-113	8.0	Ductile Iron	130.0	False	0.000	0.00	0.00	0.000	False	0
P-132	233	888: T-1	951: J-122	8.0	Ductile Iron	130.0	True	0.000	96.00	0.61	0.000	False	0
P-501	1,622	25: J-201	624: J-401	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-502	1,913	624: J-401	626: J-402	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-504	624	624: J-401	630: J-404	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-505	527	630: J-404	632: J-405	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-506	405	630: J-404	640: J-406	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-507	1,204	626: J-402	634: J-407	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-508	532	634: J-407	636: J-408	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-509	583	634: J-407	638: J-409	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-510	85	626: J-402	642: J-410	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-511	1,768	642: J-410	628: J-403	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-512	1,175	628: J-403	666: J-411	2.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-515	369	918: J-510	628: J-403	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-516	1,828	675: J-511	918: J-510	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-518	986	672: J-513	675: J-511	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-519	2,454	670: J-514	672: J-513	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-520	3,564	669: J-515	670: J-514	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-521	1,757	669: J-515	867: J-516	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-522	1,596	867: J-516	686: J-517	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-523	4,137	686: J-517	688: J-518	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-524	2,657	688: J-518	690: J-519	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-525	1,025	690: J-519	1120: H-2407	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-529	751	698: J-2410	700: J-524	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-530	366	700: J-524	702: J-525	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0

FlexTable: Pipe Table

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Has Check Valve?	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Has User Defined Length?	Length (User Defined) (ft)
P-531	1,933	702: J-525	704: J-526	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-532	685	704: J-526	706: J-527	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-533	533	706: J-527	708: J-528	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-534	1,170	708: J-528	710: J-529	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-536	1,433	712: J-530	714: J-531	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-537	1,729	714: J-531	716: J-532	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-538	1,699	716: J-532	718: J-533	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-539	655	718: J-533	720: J-534	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-540	2,753	720: J-534	722: J-535	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-541	2,924	722: J-535	724: J-536	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-543	326	726: J-537	728: J-538	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-544	3,746	728: J-538	730: J-539	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-545	2,119	730: J-539	732: J-540	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-546	1,515	732: J-540	734: J-541	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-547	392	734: J-541	736: J-542	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-548	2,064	736: J-542	738: J-543	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-549	1,102	738: J-543	740: J-544	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-550	1,431	740: J-544	742: J-545	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-551	2,002	742: J-545	744: J-546	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-552	1,352	744: J-546	746: J-547	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-553	1,143	746: J-547	748: J-548	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-554	1,264	748: J-548	750: J-549	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-555	201	750: J-549	752: J-550	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-556	486	752: J-550	754: J-551	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-557	1,361	754: J-551	756: J-552	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-558	1,427	756: J-552	758: J-553	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-559	447	758: J-553	760: J-554	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-560	868	760: J-554	762: J-555	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-561	599	762: J-555	764: J-556	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-562	1,003	764: J-556	766: J-557	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-563	1,087	766: J-557	768: J-558	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-564	165	768: J-558	770: J-559	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-565	1,426	770: J-559	772: J-560	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-566	2,109	772: J-560	774: J-561	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-567	967	774: J-561	776: J-562	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-568	1,035	776: J-562	778: J-563	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-569	975	778: J-563	780: J-564	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-570	1,344	780: J-564	782: J-565	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-571	647	782: J-565	784: J-566	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-572	993	784: J-566	786: J-567	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-573	1,406	786: J-567	788: J-568	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-574	1,264	788: J-568	790: J-569	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0

FlexTable: Pipe Table

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Has Check Valve?	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Has User Defined Length?	Length (User Defined) (ft)
P-575	500	790: J-569	792: J-570	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-576	1,695	792: J-570	794: J-571	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-577	1,861	794: J-571	796: J-572	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-578	452	796: J-572	798: J-573	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-579	1,280	798: J-573	800: J-574	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-580	2,261	800: J-574	802: J-575	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-581	2,362	802: J-575	804: J-576	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-582	1,345	804: J-576	806: J-577	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-583	4,980	806: J-577	808: J-578	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-584	3,327	808: J-578	810: J-579	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-585	460	810: J-579	812: J-580	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-587	2,633	786: J-567	894: J-582	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-588	1,852	894: J-582	896: J-583	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-589	711	896: J-583	898: J-584	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-590	1,393	898: J-584	900: J-585	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-591	3,147	900: J-585	798: J-573	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-598	475	776: J-562	928: J-587	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-599	927	928: J-587	930: J-588	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-600	605	930: J-588	932: J-589	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-601	2,259	932: J-589	934: J-590	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-626	300	724: J-536	978: PRV-54	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-628	1,974	736: J-542	982: J-598	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-629	193	982: J-598	981: T-3	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-630	571	981: T-3	982: J-598	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-631	586	774: J-561	987: PMP-4	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-633	635	934: J-590	991: T-4	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-634	617	991: T-4	934: J-590	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-646	1,350	945: J-121	1011: PRV-55	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-647	4,988	1011: PRV-55	1120: H-2407	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-648	700	710: J-529	1014: PMP-5	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-649	300	710: J-529	1016: J-605	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-650	1,743	1016: J-605	712: J-530	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-651	799	1014: PMP-5	1016: J-605	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-655	300	978: PRV-54	1024: J-607	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-656	1,720	1024: J-607	726: J-537	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-657	334	987: PMP-4	1027: J-608	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-659	345	928: J-587	1027: J-608	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-660	4,071	934: J-590	894: J-582	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-662	780	1035: J-609	1037: J-610	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-663	417	1037: J-610	1039: J-611	6.0	Ductile Iron	130.0	False	0.000	11.57	0.13	0.000	False	0
P-664	674	1039: J-611	1041: J-612	6.0	Ductile Iron	130.0	False	0.000	10.52	0.12	0.000	False	0
P-665	451	1041: J-612	1043: J-613	6.0	Ductile Iron	130.0	False	0.000	5.52	0.06	0.000	False	0

FlexTable: Pipe Table

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Has Check Valve?	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Has User Defined Length?	Length (User Defined) (ft)
P-666	768	1043: J-613	1045: J-614	6.0	Ductile Iron	130.0	False	0.000	-9.82	0.11	0.000	False	0
P-667	681	1045: J-614	1035: J-609	6.0	Ductile Iron	130.0	False	0.000	-14.82	0.17	0.000	False	0
P-668	690	1037: J-610	1043: J-613	8.0	HDPE	130.0	False	0.000	31.66	0.20	0.000	False	0
P-669	375	1043: J-613	1049: J-615	8.0	HDPE	130.0	False	0.000	42.00	0.27	0.000	False	0
P-670	196	1049: J-615	1051: J-616	8.0	HDPE	130.0	False	0.000	37.00	0.24	0.000	False	0
P-690	2,382	1061: J-2303	1065: J-2005	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-692	573	1035: J-609	1094: J-626	6.0	Ductile Iron	130.0	False	0.000	10.21	0.12	0.000	False	0
P-693	772	1094: J-626	1096: J-627	6.0	Ductile Iron	130.0	False	0.000	5.21	0.06	0.000	False	0
P-694	579	1096: J-627	1037: J-610	8.0	Ductile Iron	130.0	False	0.000	-8.73	0.06	0.000	False	0
P-695	589	1039: J-611	1099: J-628	6.0	Ductile Iron	130.0	False	0.000	-3.95	0.04	0.000	False	0
P-696	406	1099: J-628	1096: J-627	8.0	Ductile Iron	130.0	False	0.000	-8.95	0.10	0.000	False	0
P-697	455	1096: J-627	1102: J-629	8.0	Ductile Iron	130.0	False	0.000	5.00	0.03	0.000	False	0
P-698	302	1102: J-629	1104: H-10	8.0	Ductile Iron	130.0	False	0.000	0.00	0.00	0.000	False	0
P-704	656	951: J-122	873: J-107	8.0	PVC	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-705	1,320	873: J-107	871: J-106	8.0	PVC	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-706	1,877	871: J-106	870: J-105	8.0	PVC	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-707	115	870: J-105	692: J-120	8.0	PVC	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-708	1,550	692: J-120	1035: J-609	8.0	PVC	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-709	780	1035: J-609	1037: J-610	8.0	PVC	130.0	False	0.000	20.36	0.13	0.000	False	0
P-710	656	951: J-122	873: J-107	10.0	HDPE	130.0	False	0.000	95.00	0.39	0.000	False	0
P-711	1,320	873: J-107	871: J-106	10.0	HDPE	130.0	False	0.000	94.00	0.38	0.000	False	0
P-712	1,877	871: J-106	870: J-105	10.0	HDPE	130.0	False	0.000	93.00	0.38	0.000	False	0
P-713	115	870: J-105	692: J-120	10.0	HDPE	130.0	False	0.000	64.44	0.26	0.000	False	0
P-714	1,550	692: J-120	1035: J-609	10.0	HDPE	130.0	False	0.000	87.00	0.36	0.000	False	0
P-715	780	1035: J-609	1037: J-610	10.0	HDPE	130.0	False	0.000	36.61	0.15	0.000	False	0
P-716	656	951: J-122	873: J-107	8.0	Ductile Iron	100.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-717	1,320	873: J-107	871: J-106	8.0	Ductile Iron	100.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-718	1,877	871: J-106	870: J-105	8.0	Ductile Iron	100.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-719	115	870: J-105	692: J-120	8.0	Ductile Iron	100.0	False	0.000	27.56	0.18	0.000	False	0
P-720	1,550	692: J-120	1035: J-609	8.0	Ductile Iron	100.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-721	780	1035: J-609	1037: J-610	8.0	Ductile Iron	100.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-2005	1,073	1063: J-2004	1065: J-2005	8.0	Ductile Iron	130.0	False	0.000	24.00	0.15	0.000	False	0
P-2006	1,442	1065: J-2005	1109: J-2006	8.0	Ductile Iron	130.0	False	0.000	22.00	0.14	0.000	False	0
P-2007	85	1109: J-2006	1118: H-2004	8.0	Ductile Iron	130.0	False	0.000	20.00	0.13	0.000	False	0
P-2008	357	1118: H-2004	1106: J-2008	8.0	Ductile Iron	130.0	False	0.000	20.00	0.13	0.000	False	0
P-2009	1,796	1106: J-2008	1113: J-2009	8.0	Ductile Iron	130.0	False	0.000	16.00	0.10	0.000	False	0
P-2010	726	1113: J-2009	1114: J-2010	8.0	Ductile Iron	130.0	False	0.000	14.00	0.09	0.000	False	0
P-2011	372	1114: J-2010	1115: J-2011	8.0	Ductile Iron	130.0	False	0.000	12.00	0.08	0.000	False	0
P-2012	1,615	1115: J-2011	1116: J-2012	8.0	Ductile Iron	130.0	False	0.000	10.00	0.06	0.000	False	0
P-2013	191	1116: J-2012	1077: H-2002	8.0	Ductile Iron	130.0	False	0.000	8.00	0.05	0.000	False	0
P-2014	397	1077: H-2002	1117: J-2013	8.0	Ductile Iron	130.0	False	0.000	8.00	0.05	0.000	False	0
P-2015	917	1117: J-2013	1089: H-2003	8.0	Ductile Iron	130.0	False	0.000	6.00	0.04	0.000	False	0

FlexTable: Pipe Table

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Has Check Valve?	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Has User Defined Length?	Length (User Defined) (ft)
P-2016	509	1089: H-2003	1086: J-2014	8.0	Ductile Iron	130.0	False	0.000	6.00	0.04	0.000	False	0
P-2017	168	1086: J-2014	1085: J-2015	8.0	Ductile Iron	130.0	False	0.000	4.00	0.03	0.000	False	0
P-2018	780	1085: J-2015	1083: J-2016	8.0	Ductile Iron	130.0	False	0.000	2.00	0.01	0.000	False	0
P-2300	177	1051: J-616	1055: H-2301	12.0	Ductile Iron	130.0	False	0.000	32.00	0.09	0.000	False	0
P-2301	338	1055: H-2301	1057: J-2301	12.0	Ductile Iron	130.0	False	0.000	32.00	0.09	0.000	False	0
P-2302	633	1057: J-2301	1059: J-2302	12.0	Ductile Iron	130.0	False	0.000	30.00	0.09	0.000	False	0
P-2303	394	1059: J-2302	1061: J-2303	12.0	Ductile Iron	130.0	False	0.000	28.00	0.08	0.000	False	0
P-2304	1,484	1061: J-2303	1063: J-2004	12.0	Ductile Iron	130.0	False	0.000	26.00	0.07	0.000	False	0
P-2406	683	692: J-120	1120: H-2407	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-2407	221	1120: H-2407	694: J-2408	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-2408	1,309	694: J-2408	696: J-2409	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-2409	2,351	696: J-2409	698: J-2410	12.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0
P-2410	112	1063: J-2004	698: J-2410	8.0	Ductile Iron	130.0	False	0.000	(N/A)	(N/A)	(N/A)	False	0

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FlexTable: Tank Table

Label	Zone	Elevation (Base) (ft)	Elevation (Minimum) (ft)	Elevation (Initial) (ft)	Elevation (Maximum) (ft)	Volume (Inactive) (MG)	Diameter (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
T-1 Dresden	<None>	663.0	663.0	699.0	701.0	0.00	38.00	96.00	699.0
T-3	<None>	0.0	0.0	875.0	0.0	0.00	10.00	(N/A)	(N/A)
T-4	<None>	0.0	0.0	945.0	0.0	0.00	10.00	(N/A)	(N/A)

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FlexTable: PRV Table

Label	Elevation (ft)	Diameter (Valve) (in)	Minor Loss Coefficient (Local)	Hydraulic Grade Setting (Initial) (ft)	Pressure Setting (Initial) (psi)	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)	Headloss (ft)
PRV-2 Dresden	636.0	6.0	0.000	682.2	20.0	1.00	855.1	682.2	172.85
PRV-1 Dresden	636.0	6.0	0.000	855.0	94.8	2.00	1,008.0	855.1	152.90
PRV-54	0.0	6.0	0.000	880.0	42.4	(N/A)	(N/A)	(N/A)	(N/A)
PRV-55	616.2	6.0	0.000	800.0	71.0	(N/A)	(N/A)	(N/A)	(N/A)

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Appendix C – Opinion of Probable Costs

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**TOWN OF TORREY
WATER DISTRICT No. 2
PRELIMINARY COST ESTIMATE
April 21, 2025
Revised May 8, 2026**

Alternate 2 - WTP & Distribution
Project Area Description:
Kings Hill Road: 200-feet south of Milo & Margaret St intersection to Perry Point Rd
Perry Point Road: Kings Hill Rd southeast to end of Perry Point Rd
NYS Route 14: Not Serviced

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED TOTAL
1	Mobilization	LS	1	\$ 75,000.00	\$ 75,000.00
2	Maintenance and Protection of Traffic, Including Signs and Flagmen, Meeting NYSDOT Requirements	LS	1	\$ 62,000.00	\$ 62,000.00
3	Erosion Control	LS	1	\$ 15,000.00	\$ 15,000.00
4	Rock Excavation	CY	300	\$ 75.00	\$ 22,500.00
5	Select Fill	CY	300	\$ 35.00	\$ 10,500.00
6A	Furnish and Install 8-inch Water Main Complete	LF	9,850	\$ 85.00	\$ 837,250.00
6B	Furnish and Install 12-inch Water Main Complete	LF	3,200	\$ 105.00	\$ 336,000.00
7A	Directional Drilling with 8-Inch HDPE (Creek Crossing)	LF	750	\$ 350.00	\$ 262,500.00
7B	Directional Drilling with 12-Inch HDPE (Creek Crossing)	LF	400	\$ 475.00	\$ 190,000.00
8	Boring with 24-Inch Casing Pipe (Railroad Crossing)	LF	320	\$ 750.00	\$ 240,000.00
9A	Furnish and Install 8-inch Gate Valves Complete	EA	11	\$ 3,500.00	\$ 38,500.00
9B	Furnish and Install 12-inch Gate Valves Complete	EA	4	\$ 4,700.00	\$ 18,800.00
10	Furnish and Install Hydrant Assemblies Complete	EA	24	\$ 7,500.00	\$ 180,000.00
11A	Furnish and Install 1" Water Services with Meter Pit	EA	56	\$ 3,500.00	\$ 196,000.00
11B	Furnish and Install 2" Water Service with Meter Pit	EA	4	\$ 4,500.00	\$ 18,000.00
12	Connection to Existing Water Mains	EA	1	\$ 5,000.00	\$ 5,000.00
13	Asphalt Road Restoration	LF	200	\$ 60.00	\$ 12,000.00
14	Asphalt Driveway Restoration	LF	400	\$ 50.00	\$ 20,000.00
15	Stone Driveway Restoration	LF	800	\$ 35.00	\$ 28,000.00
16	Meter Vault	EA	1	\$ 75,000.00	\$ 75,000.00
17	Compaction Testing	LS	1	\$ 5,000.00	\$ 5,000.00
WTP	Water Treatment Plant	EA	1	\$ 3,000,000.00	\$ 3,000,000.00

Construction Subtotal = \$ 5,647,050.00 \$ 5,647,050.00

Contingency (10%) = \$ 564,705.00 \$ 564,705.00

Legal, Engineering, Administration (25%) = \$ 1,411,762.50 \$ 1,411,762.50

Railroad Fees (Application, Occupancy, Insurance, Flagging & Monitoring) = \$ 90,000.00 \$ 90,000.00

Total = \$ 7,713,517.50 \$ 7,713,517.50

Total Estimated Capital Cost = \$ 7,714,000.00 \$ 7,714,000.00

Less Congressionally Directed Spending/USDA Grant = \$0.00 (\$2,050,000.00)

Net Local Project Cost = \$ 7,714,000.00 \$ 5,664,000.00

Estimated Debt Service at 5.000% for 38yrs = \$ 457,319.00 \$ 335,786.00

Number of EDU's = 57 57

Estimated Debt Service/Unit/Year = \$ 8,024.00 \$ 5,891.00

Estimated Yearly Water Cost (\$7.00/1,000 gal., 50,000 gpy, \$150/quarter EDU Charge) = \$ 950.00 \$ 950.00

Total Unit Cost = \$ 8,974.00 \$ 6,841.00

Total Estimated Unit Cost = \$ 8,974.00 \$ 6,841.00

Percentage of MHI = (No Grant) 16.91% (w/ Grant) 12.89%

Notes:

1. Estimated costs based on contractor installation.
2. NYS Comptroller Limit for first year costs at Formation of Water Districts in 2026 is \$1,213.
3. 2021 Census Data: Town of Torrey MHI = \$62,813. Poverty below \$58,620; Intermediate below \$73,275.
4. USDA Interst Rate 2nd Quarter FY 2026 = 4.750% Market/3.750% Intermediate/2.875% Poverty Rate. 5.000% used for Estimate.
5. Assumed that 1 EDU = 300 gpd, typical residential/commercial user.
6. Commercial Lot EDU = Boating Club 4.0 EDU (Seasonal 6 month Usage w/ July as Peak month is average 832 gpd) + 4 Commercial Lots @ 1.0 EDU = 8.0 EDU
7. Number of EDU = 38 Residential (@ 1.0 EDU) + 22 Vacant Lot (@ 0.5 EDU) + 8.0 Commercial = 57 EDU
8. Proposed Combined Dresden/Benton Water Rate: \$7.00/1,000 gallons and \$150/Quarter for each EDU Charge = \$950.00/Year.

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**TOWN OF TORREY
WATER DISTRICT No. 2
PRELIMINARY COST ESTIMATE
April 21, 2025
Revised May 8, 2026**

Alternate 3 - Distribution
Project Area Description:
Kings Hill Road: 200-feet south of Milo & Margaret St intersection to Perry Point Rd
Perry Point Road: Kings Hill Rd southeast to end of Perry Point Rd
NYS Route 14: Not Serviced

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED TOTAL
1	Mobilization	LS	1	\$ 75,000.00	\$ 75,000.00
2	Maintenance and Protection of Traffic, Including Signs and Flagmen, Meeting NYSDOT Requirements	LS	1	\$ 62,000.00	\$ 62,000.00
3	Erosion Control	LS	1	\$ 15,000.00	\$ 15,000.00
4	Rock Excavation	CY	300	\$ 75.00	\$ 22,500.00
5	Select Fill	CY	300	\$ 35.00	\$ 10,500.00
6A	Furnish and Install 8-inch Water Main Complete	LF	9,850	\$ 85.00	\$ 837,250.00
6B	Furnish and Install 12-inch Water Main Complete	LF	3,200	\$ 105.00	\$ 336,000.00
7A	Directional Drilling with 8-Inch HDPE (Creek Crossing)	LF	750	\$ 350.00	\$ 262,500.00
7B	Directional Drilling with 12-Inch HDPE (Creek Crossing)	LF	400	\$ 475.00	\$ 190,000.00
8	Boring with 24-Inch Casing Pipe (Railroad Crossing)	LF	320	\$ 750.00	\$ 240,000.00
9A	Furnish and Install 8-inch Gate Valves Complete	EA	11	\$ 3,500.00	\$ 38,500.00
9B	Furnish and Install 12-inch Gate Valves Complete	EA	4	\$ 4,700.00	\$ 18,800.00
10	Furnish and Install Hydrant Assemblies Complete	EA	24	\$ 7,500.00	\$ 180,000.00
11A	Furnish and Install 1" Water Services with Meter Pit	EA	56	\$ 3,500.00	\$ 196,000.00
11B	Furnish and Install 2" Water Service with Meter Pit	EA	4	\$ 4,500.00	\$ 18,000.00
12	Connection to Existing Water Mains	EA	1	\$ 5,000.00	\$ 5,000.00
13	Asphalt Road Restoration	LF	200	\$ 60.00	\$ 12,000.00
14	Asphalt Driveway Restoration	LF	400	\$ 50.00	\$ 20,000.00
15	Stone Driveway Restoration	LF	800	\$ 35.00	\$ 28,000.00
16	Meter Vault	EA	1	\$ 75,000.00	\$ 75,000.00
17	Compaction Testing	LS	1	\$ 5,000.00	\$ 5,000.00

Construction Subtotal = \$ 2,647,050.00

Contingency (10%) = \$ 264,705.00

Legal, Engineering, Administration (25%) = \$ 661,762.50

Railroad Fees (Application, Occupancy, Insurance, Flagging & Monitoring) = \$ 90,000.00

Total = \$ 3,663,517.50

Total Estimated Capital Cost = \$ 3,664,000.00

Less Congressionally Directed Spending/USDA Grant = \$0.00 (\$2,050,000.00)

Net Local Project Cost = \$ 3,664,000.00 \$ 1,614,000.00

Estimated Debt Service at 5.000% for 38yrs = \$ 217,218.00 \$ 95,685.00

Number of EDU's = 57 57

Estimated Debt Service/Unit/Year = \$ 3,811.00 \$ 1,679.00

Estimated Yearly Water Cost (\$7.00/1,000 gal., 50,000 gpy, \$150/quarter EDU Charge) = \$ 950.00 \$ 950.00

Total Unit Cost = \$ 4,761.00 \$ 2,629.00

Total Estimated Unit Cost = \$ 4,761.00 \$ 2,629.00

(No Grant) (w/ Grant)

Percentage of MHI = 8.97% 4.96%

Notes:

1. Estimated costs based on contractor installation.
2. NYS Comptroller Limit for first year costs at Formation of Water Districts in 2026 is \$1,213.
3. 2021 Census Data: Town of Torrey MHI = \$62,813. Poverty below \$58,620; Intermediate below \$73,275.
4. USDA Interst Rate 2nd Quarter FY 2026 = 4.750% Market/3.750% Intermediate/2.875% Poverty Rate. 5.000% used for Estimate.
5. Assumed that 1 EDU = 300 gpd, typical residential/commercial user.
6. Commercial Lot EDU = Boating Club 4.0 EDU (Seasonal 6 month Usage w/ July as Peak month is average 832 gpd) + 4 Commercial Lots @ 1.0 EDU = 8.0 EDU
7. Number of EDU = 38 Residential (@ 1.0 EDU) + 22 Vacant Lot (@ 0.5 EDU) + 8.0 Commercial = 57 EDU
8. Proposed Combined Dresden/Benton Water Rate: \$7.00/1,000 gallons and \$150/Quarter for each EDU Charge = \$950.00/Year.

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**TOWN OF TORREY
PERRY POINT WATER DISTRICT
PRELIMINARY COST ESTIMATE
April 21, 2025
Revised May 8, 2026**

Alternate 4 - Distribution
Project Area Description:
Kings Hill Road: Not Serviced
Perry Point Road: NYS Route 14 southeast to end of Perry Point Rd
NYS Route 14: Perry Point Rd to NYS Route 54 @ Main St

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED TOTAL
1	Mobilization	LS	1	\$ 80,000.00	\$ 80,000.00
2	Maintenance and Protection of Traffic, Including Signs and Flagmen, Meeting NYSDOT Requirements	LS	1	\$ 67,000.00	\$ 67,000.00
3	Erosion Control	LS	1	\$ 15,000.00	\$ 15,000.00
4	Rock Excavation	CY	300	\$ 75.00	\$ 22,500.00
5	Select Fill	CY	300	\$ 35.00	\$ 10,500.00
6A	Furnish and Install 8-inch Water Main Complete	LF	10,000	\$ 85.00	\$ 850,000.00
6B	Furnish and Install 12-inch Water Main Complete	LF	4,000	\$ 105.00	\$ 420,000.00
7A	Directional Drilling with 8-Inch HDPE (Creek Crossing)	LF	750	\$ 350.00	\$ 262,500.00
7B	Directional Drilling with 12-Inch HDPE (Creek Crossing)	LF	850	\$ 475.00	\$ 403,750.00
8	Boring with 24-Inch Casing Pipe (Railroad Crossing)	LF	100	\$ 750.00	\$ 75,000.00
9A	Furnish and Install 8-inch Gate Valves Complete	EA	11	\$ 3,500.00	\$ 38,500.00
9B	Furnish and Install 12-inch Gate Valves Complete	EA	5	\$ 4,700.00	\$ 23,500.00
10	Furnish and Install Hydrant Assemblies Complete	EA	26	\$ 7,500.00	\$ 195,000.00
11A	Furnish and Install 1" Water Services with Meter Pit	EA	58	\$ 3,500.00	\$ 203,000.00
11B	Furnish and Install 2" Water Service with Meter Pit	EA	5	\$ 4,500.00	\$ 22,500.00
12	Connection to Existing Water Mains	EA	1	\$ 5,000.00	\$ 5,000.00
13	Asphalt Road Restoration	LF	200	\$ 60.00	\$ 12,000.00
14	Asphalt Driveway Restoration	LF	400	\$ 50.00	\$ 20,000.00
15	Stone Driveway Restoration	LF	800	\$ 35.00	\$ 28,000.00
16	Meter Vault	EA	1	\$ 75,000.00	\$ 75,000.00
17	Compaction Testing	LS	1	\$ 5,000.00	\$ 5,000.00

Construction Subtotal =	\$ 2,833,750.00	\$ 2,833,750.00
Contingency (10%) =	\$ 283,375.00	\$ 283,375.00
Legal, Engineering, Administration (25%) =	\$ 708,437.50	\$ 708,437.50
Railroad Fees (Application, Occupancy, Insurance, Flagging) =	\$ 30,000.00	\$ 30,000.00
Total =	\$ 3,855,562.50	\$ 3,855,562.50
Total Estimated Capital Cost =	\$ 3,856,000.00	\$ 3,856,000.00
Less USDA Grant (Maximum 45%) =	\$ 0.00	(\$2,050,000.00)
Net Local Project Cost =	\$ 3,856,000.00	\$ 1,806,000.00
Estimated Debt Service at 5.000% for 38yrs =	\$ 228,600.00	\$ 107,068.00
Number of EDU's =	56	56
Estimated Debt Service/Unit/Year =	\$ 4,083.00	\$ 1,912.00
Estimated Yearly Water Cost (\$7.00/1,000 gal., 50,000 gpy, \$150/quarter EDU Charge) =	\$ 950.00	\$ 950.00
Total Unit Cost =	\$ 5,033.00	\$ 2,862.00
Total Estimated Unit Cost =	\$ 5,033.00	\$ 2,862.00
Percentage of MHI =	(No Grant) 9.49%	(w/ Grant) 5.39%

Notes:

- Estimated costs based on contractor installation.
- NYS Comptroller Limit for first year costs at Formation of Water Districts in 2026 is \$1,213.
- 2021 Census Data: Town of Torrey MHI = \$62,813. Poverty below \$58,620; Intermediate below \$73,275.
- USDA Interst Rate 2nd Quarter FY 2026 = 4.750% Market/3.750% Intermediate/2.875% Poverty Rate. 5.000% used for Estimate.
- Assumed that 1 EDU = 300 gpd, typical residential/commercial user.
- Commercial Lot EDU = Boating Club 4.0 EDU (Seasonal 6 month Usage w/ July as Peak month is average 832 gpd) + 3 Commercial Lots @ 1.0 EDU = 7.0 EDU
- Number of EDU = 38 Residential (@ 1.0 EDU) + 22 Vacant Lot (@ 0.5 EDU) + 7.0 Commercial = 56 EDU
- Proposed Combined Dresden/Benton Water Rate: \$7.00/1,000 gallons and \$150/Quarter for each EDU Charge = \$950.00/Year.

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Appendix D – Water District Equivalent Dwelling Units

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Town of Torrey
Water District No. 2
Equivalent Dwelling Units

Tax Account	Owner Name	Mailing Address	Property Address	Use	Unit Charge	Benefit Charge	Assessed Value
40.03-1-4	Greenidge Generation LLC	PO Box 187 Dresden, NY 14441	590 Plant Road	Elec-fossil <i>Village Water</i>	1.00		\$6,400,000.00
40.03-1-5	IIO, LLC	60 Wharf Drive, 2207 Brooklyn, NY 11222	Kings Hill Road	Vacant Comm	0.50		\$101,700.00
52.21-1-2.111	Industrial Metals, Inc.	PO Box 89 Pultneyville, NY 14538	1802 Kings Hill Road	Vacant Comm w/ Imprv	0.50		\$107,500.00
52.21-1-2.231	Burkholder Partners, LLC	4445 Sr 14 Dundee, NY 14837	1873 SR 14	Warehouse	1.00		\$192,000.00
52.01-1-35.1	Paul J Weaver Keren G Weaver	645 Oliver Rd Penn Yan, NY 14527	1881 SR 14	Lite Ind Manftr	1.00		\$265,000.00
52.01-1-13.1	Richmond Lewis Shirley Lewis	1911 State Route 14 Penn Yan, NY 14527	1911 State Route 14	1 Family Res	1.00		\$165,200.00
52.01-1-13.2	Raymond A. Tuuri Judy Rae Tuuri	3502 Ritter Rd Waterloo, NY 13165	Perry Point Road	Res vac land	0.50		\$51,100.00
52.01-1-3.1	Vibrantz PY Sub LLC	6060 Parkland Blvd Ste 250 Mayfield Heights, OH 44124	1789 Transelco Drive	Manufacture <i>Village Water</i>	1.00		\$2,800,000.00
52.31-1-1	Ferro Corporation	6060 Parkland Blvd Mayfield Heights, OH 44124	Perry Point Road	Res vac land	0.50		\$39,400.00
52.31-1-2	Binghamton Boating Club	PO Box 181 Vestal, NY 13850	1840 Perry Point Road	Camping park	4.00		\$775,000.00
52.01-1-6	James L Lightfoote Jeanine L Lightfoote	1868 Perry Point Road Penn Yan, NY 14527	1868 Perry Point Road	1 Family Res	1.00		\$245,000.00
52.01-1-7.11	Amy L Lundgren	1909 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Vac farmland	0.00		\$257,100.00
52.03-1-11	Ivan Z Eberly Miriam S Eberly	2105 Sr 14 Penn Yan, NY 14527	2105 SR 14	Dairy farm (Ag Exempt)	0.00		\$1,083,700.00

Town of Torrey
Water District No. 2
Equivalent Dwelling Units

Tax Account	Owner Name	Mailing Address	Property Address	Use	Unit Charge	Benefit Charge	Assessed Value
52.32-1-1	Mamelt LLC	5207 Winterton Drive Fayetteville, NY 13066	1839 Perry Point Road	1 Family Res	1.00		\$881,000.00
52.32-1-2.1	James L Warner Diann M Warner	520 Kashong Road Geneva, NY 14456	1841 Perry Point Road	1 Family Res	1.00		\$849,000.00
52.32-1-3.1	George R Dowse Pamela H Dowse	1847 Perry Point Road Penn Yan, NY 14527	1847 Perry Point Road	1 Family Res	1.00		\$695,000.00
52.32-1-4	Matthew Murphy Jamie Murphy	4 Sherman Ave Clifton Springs, NY 14432	1853 Perry Point Road	1 Family Res	1.00		\$773,000.00
52.32-1-5	Crimson Sky Lodging LLC	11026 Ring Road Reston, VA 20190	1857 Perry Point Road	1 Family Res	1.00		\$761,400.00
52.32-1-6	Mary O'Connell	1865 Perry Point Road Penn Yan, NY 14527	1865 Perry Point Road	1 Family Res	1.00		\$706,900.00
52.32-1-7	Scott C Reinard Lisa Walk Reinard	1871 Perry Point Road Penn Yan, NY 14527	1871 Perry Point Road	1 Family Res	1.00		\$786,000.00
52.32-1-8	Micheal Organek Christina Cellini	82 Bentbrook Circle Webster, NY 14580	1879 Perry Point Road	1 Family Res	1.00		\$717,400.00
52.40-1-1.1	Mary O'Connell	1865 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Vac w/imprv	0.50		\$9,100.00
52.40-1-1.2	Scott C Reinard Lisa L Walk Reinard	1871 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Res vac land	0.50		\$6,500.00
52.40-1-10	Cheryl R Lonie	1939 Perry Point Road Penn Yan, NY 14527	1939 Perry Point Road	1 Family Res	1.00		\$847,000.00
52.40-1-11	David lee Goff Vanessa Anne Goff	4 Whispering Meadow Pittsford, NY 14534	1949 Perry Point Road	1 Family Res	1.00		\$629,000.00
52.40-1-12	Raymond & Joyce Kluger Rev Living Trust	PO Box 246 Dresden, NY 14441	Perry Point Road	Res vac land	0.50		\$15,000.00

Town of Torrey
Water District No. 2
Equivalent Dwelling Units

Tax Account	Owner Name	Mailing Address	Property Address	Use	Unit Charge	Benefit Charge	Assessed Value
52.40-1-13	Martin Joint Living Trust Lawrence & Susan J Martin	1925 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Vac w/imprv	0.50		\$54,100.00
52.40-1-14	Amy L Lundgren	1909 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Vac w/imprv	0.50		\$47,600.00
52.40-1-16	Louis H Currie Linda C Currie	217 Cloverdale Rd Rochester, NY 14616	Perry Point Road	Res vac land	0.50		\$44,700.00
52.40-1-17.1	Brian D Cusimano	1885 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Vac w/imprv	0.50		\$57,000.00
52.40-1-17.2	Paul F Evangelista Heather C Evangelista	32B Thayer Road West Point, NY 10996	Perry Point Road	Vac w/imprv	0.50		\$11,100.00
52.40-1-2	Brian D Cusimano	1885 Perry Point Road Penn Yan, NY 14527	1885 Perry Point Road	1 Family Res	1.00		\$721,500.00
52.40-1-3	Paul F Evangelista Heather C Evangelista	32B Thayer Road West Point, NY 10996	1891 Perry Point Road	1 Family Res	1.00		\$704,900.00
52.40-1-4	Louis H Currie Linda C Currie	217 Cloverdale Rd Rochester, NY 14616	1893 Perry Point Road	1 Family Res	1.00		\$705,900.00
52.40-1-5	1903 Perry Point LLC	380 Washington St Geneva, NY 14456	1903 Perry Point Road	Seasonal res	1.00		\$595,100.00
52.40-1-6	Amy L Lundgren	1909 Perry Point Road Penn Yan, NY 14527	1909 Perry Point Road	1 Family Res	1.00		\$702,500.00
52.40-1-7	1917 Perry Point LLC	3020 Attaberry Drive Charlotte, NC 28205	1917 Perry Point Road	1 Family Res	1.00		\$770,100.00
52.40-1-8	Martin Joint Living Trust Lawrence & Susan Martin	1925 Perry Point Road Penn Yan, NY 14527	1925 Perry Point Road	1 Family Res	1.00		\$759,800.00
52.40-1-9	Kluger Rev Living Trust Raymond & Joyce A Kluger	PO Box 246 Dresden, NY 14441	1931 Perry Point Road	1 Family Res	1.00		\$765,400.00

Town of Torrey
Water District No. 2
Equivalent Dwelling Units

Tax Account	Owner Name	Mailing Address	Property Address	Use	Unit Charge	Benefit Charge	Assessed Value
52.48-1-1.1	Duckingham Palace LLC	3475 Palmyra Rd Marion, NY 14505	Perry Point Road	Res vac land	0.50		\$105,600.00
52.48-1-1.2	Duckingham Palace LLC	3475 Palmyra Rd Marion, NY 14505	Perry Point Road	Res vac land	0.50		\$20,700.00
52.48-1-10	John A Lanni Christine M Lanni	289 14Th St Surf City, NJ 08008	1995 Perry Point Road	1 Family Res	1.00		\$564,000.00
52.48-1-11.1	Gary L McIntee	1989 Perry Point Road Penn Yan, NY 14527	1989 Perry Point Road	1 Family Res	1.00		\$632,000.00
52.48-1-12	Jeffrey P Martin Yvonne L Martin	5014 Prairieview Dr Camillus, NY 13031	1999 Perry Point Road	Vac w/imprv	0.50		\$231,100.00
52.48-1-13.112	Kimberly G Holtzman	2007 Perry Point Road Penn Yan, NY 14527	2007 Perry Point Road	1 Family Res	1.00		\$799,800.00
52.48-1-15.1	Talza Company Trust	2007 Perry Point Road Penn Yan, NY 14527	2009 Perry Point Road	Res vac land	0.50		\$181,400.00
52.48-1-15.2	John R Callear Judy K Callear	35 Main Street Wellsburg, NY 14894	2005 Perry Point Road	1 Family Res	1.00		\$725,500.00
52.48-1-2	Duckingham Palace LLC	3475 Palmyra Road Marion, NY 14505	1959 Perry Point Road	Seasonal res	1.00		\$406,800.00
52.48-1-3	Pattiland LLC	297 Longview Rd Far Hills, NJ 07931	1965 Perry Point Road	1 Family Res	1.00		\$768,200.00
52.48-1-4	Michael Karet Christa Karet	1969 Perry Point Road Penn Yan, NY 14527	1969 Perry Point Road	1 Family Res	1.00		\$462,000.00
52.48-1-5	Kaycee Properties LLC	3475 Palmyra Rd Marion, NY 14505	Perry Point Road	Vac w/imprv	0.50		\$257,300.00
52.48-1-6.1	Margaret A Dietz Jason E Dietz	232 Hampden Ave Narberth, PA 19072	1985 Perry Point Road	1 Family Res	1.00		\$814,300.00

Town of Torrey
Water District No. 2
Equivalent Dwelling Units

Tax Account	Owner Name	Mailing Address	Property Address	Use	Unit Charge	Benefit Charge	Assessed Value
52.48-1-9	Alvin L Gauvin Elise C Gauvin	2003 Perry Point Road Penn Yan, NY 14527	2003 Perry Point Road	1 Family Res	1.00		\$783,800.00
52.57-1-3.111	Fiona G Gibson	2015 Perry Point Road Penn Yan, NY 14527	2015 Perry Point Road	1 Family Res	1.00		\$1,196,000.00
52.57-1-5	Scott Sherin Sharon Gray	472 Claybourne Rd Rochester, NY 14618	Perry Point Road	Res vac land	0.50		\$193,400.00
52.57-1-4.11	Timothy Robinson Teresa Robinson	265 Danforth Cres Rochester, NY 14618	2057 Perry Point Road	Rural res	1.00		\$749,000.00
52.58-1-3.1	Laura E Hunt Trust	170 Ralston Ave South Orange, NJ 07079	Perry Point Road	Res vac land	0.50		\$187,200.00
52.58-1-3.2	Aaron M. Wray	1500 SW 17th St Boca Raton, FL 33486	Perry Point Road	Res vac land	0.50		\$187,200.00
52.58-1-4.11	Lawrence J Saubermann	6 Wenham Ln Pittsford NY 14534	2121 Perry Point Road	1 Family Res	1.00		\$789,000.00
52.58-1-4.2	James M Riesenberger Audrey P Riesenberger	2115 Perry Point Road Penn Yan, NY 14527	2115 Perry Point Road	1 Family Res	1.00		\$736,600.00
52.58-1-5.11	Constantine Living Trust Robert & Jean L Constantine	2109 Perry Point Road Penn Yan, NY 14527	2109 Perry Point Road	1 Family Res	1.00		\$767,600.00
52.58-1-6	Kieli Living Trust Michael & Katarzyna Kieli	38 Hemlock Ln Painted Post, NY 14870	2137 Perry Point Road	1 Family Res	1.00		\$810,000.00
52.58-1-7.1	Jeffrey & Susan Conrad, Trust	2103 Perry Point Road Penn Yan, NY 14527	2103 Perry Point Road	1 Family Res	1.00		\$630,500.00
52.58-1-8	Reinerus M Korver Barbara W Korver	547 W Brook Road South New Berlin, NY 13483	2143 Perry Point Road	1 Family Res	1.00		\$823,700.00
52.58-1-9.11	Michael Pichichero	2151 Perry Point Road Penn Yan, NY 14527	Perry Point Road	Rural vac<10	0.50		\$237,800.00

Appendix E – Expected Hydraulic Loading Rates

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Table 3. Expected Hydraulic Loading Rates

Type of Facility	Flow Rate Per Person (Gals./Day)	Flow Rate Per Unit (Gals./Day)
Airports		
Per Passenger	3	
Per Employee	15	
Apartments	75	
1 Bedroom		150
2 Bedroom		300
3 Bedroom		450
Bathhouse		
Per Swimmer	10	
Boarding House	75	
Bowling Alley		
Per Lane – No Food Service		75
Per Lane – with Food Service (Add Food Service Value)		
Campgrounds (Recreational Vehicle – Per Site)		
Sewered Sites		100
Central Facilities		
Served Sites, 300-foot Radius		100
Peripheral Sites, 500-foot Radius		75
Subtractions from above		
No Showers		25
Dual Service (Central Facilities and Sewered Facilities overlapping the Central)		25
Campgrounds (Summer Camp)		
Central Facilities	50	
Separate Facilities		
Toilet	10	
Shower	25	
Kitchen	10	
Campground Dumping Stations		
Per Unsewered Site		10
Per Sewered Site		5
Camps, Day	13	
Add for Lunch	3	
Add for Showers	5	
Carwash, Assuming No Recycle		
Tunnel Per Car		80
Rollover Per Car		40
Wandwash Per 5 Minutes Cycle		20
Churches		
Per Seat		3
With Catering (Add Food Service Value)		
Clubs		
Country		
Per Resident Member		75
Per Non-Resident Member		25
Racquet (Per Court Per Hour)		80

Table 3. Expected Hydraulic Loading Rates

Type of Facility	Flow Rate Per Person (Gals./Day)	Flow Rate Per Unit (Gals./Day)
Factories		
Per Person/Shift	25	
Add for Showers	10	
Food Service Operations (Per Seat)		
Ordinary Restaurant		35
24-Hour Restaurant		50
Restaurant Along Freeway		70
Tavern (Little Food Service)		20
Curb Service (Drive-In Per Car)		50
Catering or Banquet Facilities	20	
Hair Dresser		
Per Station		170
Hospitals		
Per Bed		175
Hotels		
Per Room		120
Add for Banquet Facilities, Theatre, Night Club, as applicable		
Homes		
1 Bedroom		150
2 Bedroom		300
3 Bedroom		400
4 Bedroom		475
5 Bedroom		550
Institutions (Other Than Hospitals)		
Per Person	125	
Laundromats		
Per Machine		580
Mobile Home Parks		
Less than 5 Units: Use Flow Rates for Homes		
5 to 20 Units: Use Prorated Scale		
20 or More units		
Per Trailer		200
Per Double Wide		300
Motels		
Per Living Unit		100
With Kitchen		150
Office Building		
Per Employee	15	
Per Square Foot		0.1
Dentist – Per Chair/Day		750
Parks (Per Picnicker)		
Restroom Only	5	
Showers and Restroom	10	

Table 3. Expected Hydraulic Loading Rates

Type of Facility	Flow Rate Per Person (Gals./Day)	Flow Rate Per Unit (Gals./Day)
Schools (Per Student)		
Boarding	75	
Day	10	
Cafeteria – Add	5	
Showers – Add	5	
Service Stations		
Per Toilet (Not Including Car Wash)		400
Shopping Centers		
Per Square Foot-Food Extra		0.1
Per Employee	15	
Per Toilet		400
Swimming Pools (Per Swimmer)	10	
Sports Stadium	5	
Theatre		
Drive-In (Per Space)		
Movie (Per Seat)		
Dinner Theatre, Individual (Per Seat)	20	
With Hotel	10	

Source:

Design Standards for Wastewater Treatment Works – Intermediate Sized Sewerage Facilities (New York State Department of Environmental Conservation, 2014), Table B-3 – Typical Per-Unit Hydraulic Loading Rates

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Appendix F – Life Cycle Analysis

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Town of Torrey
Water District 2
Short Lived Assets - Water Main

Description	Year									
	1	2	3	4	5	6	7	8	9	10
Residential Water Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,250
Meter Transmitters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,125
Meter Boxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Hydrants	\$ -	\$ -	\$ -	\$ -	\$ 150	\$ -	\$ -	\$ -	\$ -	\$ 174
Total Annual Cost =	\$ -	\$ -	\$ -	\$ -	\$ 150	\$ -	\$ -	\$ -	\$ -	\$ 11,549

Sinking Fund Factor @ 5% interest = 1.000 0.488 0.317 0.232 0.181 0.147 0.123 0.105 0.091 0.080
Annual Cost for Asset Replacement = \$ - \$ - \$ - \$ - \$ 27.15 \$ - \$ - \$ - \$ - \$ 918.19

Description	Year									
	11	12	13	14	15	16	17	18	19	20
Residential Water Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,056
Meter Transmitters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,231
Meter Boxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Hydrants	\$ -	\$ -	\$ -	\$ 12,250	\$ 202	\$ -	\$ -	\$ -	\$ -	\$ 234
Total Annual Cost =	\$ -	\$ -	\$ -	\$ 12,250	\$ 202	\$ -	\$ -	\$ -	\$ -	\$ 15,521

Sinking Fund Factor @ 5% interest = 0.070 0.063 0.056 0.051 0.046 0.042 0.039 0.036 0.033 0.030
Annual Cost for Asset Replacement = \$ - \$ - \$ - \$ 625.04 \$ 9.34 \$ - \$ - \$ - \$ - \$ 469.39

Description	Year									
	21	22	23	24	25	26	27	28	29	30
Residential Water Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,482
Meter Transmitters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,062
Meter Boxes	\$ -	\$ -	\$ -	\$ -	\$ 1,100	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Hydrants	\$ -	\$ -	\$ -	\$ -	\$ 271	\$ -	\$ -	\$ 18,529	\$ -	\$ 314
Total Annual Cost =	\$ -	\$ -	\$ -	\$ -	\$ 1,371	\$ -	\$ -	\$ 18,529	\$ -	\$ 20,859

Sinking Fund Factor @ 5% interest = 0.028 0.026 0.024 0.022 0.021 0.020 0.018 0.017 0.016 0.015
Annual Cost for Asset Replacement = \$ - \$ - \$ - \$ - \$ 28.72 \$ - \$ - \$ 317.27 \$ - \$ 313.95

Description	Year									
	31	32	33	34	35	36	37	38	39	40
Residential Water Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,743
Meter Transmitters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,867
Meter Boxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Hydrants	\$ -	\$ -	\$ -	\$ -	\$ 364	\$ -	\$ -	\$ -	\$ -	\$ 422
Total Annual Cost =	\$ -	\$ -	\$ -	\$ -	\$ 364	\$ -	\$ -	\$ -	\$ -	\$ 28,032

Sinking Fund Factor @ 5% interest = 0.014 0.013 0.012 0.012 0.011 0.010 0.010 0.009 0.009 0.008
Annual Cost for Asset Replacement = \$ - \$ - \$ - \$ - \$ 4.03 \$ - \$ - \$ - \$ - \$ 232.05

Description	Year									
	41	42	43	44	45	46	47	48	49	50
Residential Water Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,126
Meter Transmitters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,980
Meter Boxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,303
Fire Hydrants	\$ -	\$ 28,027	\$ -	\$ -	\$ 489	\$ -	\$ -	\$ -	\$ -	\$ 567
Total Annual Cost =	\$ -	\$ 28,027	\$ -	\$ -	\$ 489	\$ -	\$ -	\$ -	\$ -	\$ 39,976

Sinking Fund Factor @ 5% interest = 0.008 0.007 0.007 0.007 0.006 0.006 0.006 0.005 0.005 0.005
Annual Cost for Asset Replacement = \$ - \$ 207.25 \$ - \$ - \$ 3.06 \$ - \$ - \$ - \$ - \$ 190.96

Rec. Annual Reserve Deposit = \$ 3,346.41

- Notes:
1. Residential Water Meters: Replaced every 10 years due to meter head battery.
2. Meter Transmitters: Replaced every 10 years due to transmitter battery.
3. Meter Boxes: Estimated 1 to be replaced every 25 years due to wear/damage
4. Fire Hydrants: Re-painting every 5 years. Replace 1 due to damage every 14 years.
5. 3% Cost to Replace/Fix Increase Per Year Applied to All Values to Provide for Inflation

