

RIVERVIEW LANDING WASTEWATER TREATMENT PLANT STUDY REPORT

for the

TOWN OF CLIFTON PARK

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TOWN OF CLIFTON PARK

RIVERVIEW LANDING WWTP STUDY

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EXECUTIVE SUMMARY

The existing Riverview Landing Sewer District in Clifton Park serves most of the properties on Riverview Road between Grooms Road and Droms Road and three properties to the east of the Droms intersection on Riverview Road. The system is a low-pressure system, whereby waste is pumped by private residential grinder pumps at each property to the Riverview Landing Wastewater Treatment Plant located between 773 Riverview Road and 781 Riverview Road. The treatment processes at the plant include two septic tanks in series, an automatic dosing siphon, two parallel sand filter beds and a chlorine dosing station. In 2017 filter bed #2 at the plant was removed from service due to groundwater infiltration, resulting in excessive loading of filter bed #1 and subsequent high coliform counts and high nitrogen (ammonia) concentrations in the effluent from the treatment plant.

The Town authorized a study of corrective actions and treatment alternatives which resulted in an October 2020 Engineering Report that detailed nine (9) potential alternatives. A public informational meeting was held on November 19, 2020 where the alternatives were presented and property owners within the sewer district asked questions. This report provides updated and additional information on these alternatives.

SECTION 1 – PROJECT BACKGROUND AND HISTORY

SITE INFORMATION

The project lies on a relatively flat area at the top of a steep slope above the Mohawk River's northeastern bank in the hamlet of Rexford in the Town of Clifton Park. The elevation ranges from 350 feet near the Maria Court – Riverview Landing intersection to 312 feet near Droms Road.

There are no rare plants in the project vicinity, but there is a potential for the project to be located in the vicinity of animals listed as endangered or threatened. The alternatives to pump the wastewater produced by Riverview Landing to the Windhover Farms subdivision (Alternatives 2B and 3B) are located partially within wetland N-11 (a class 2 wetland) and said wetland's checkzone (see Section 2 of this report). The alternatives to pump the wastewater produced by Riverview Landing to the Mohawk River Country Club and the Edison Club Pump Station (Alternatives 2A, 2C, 3A, and 3C) are located partially within the wetland N-11 checkzone. The alternatives to rehabilitate the existing wastewater treatment plant or replace it with a new system (Alternatives 1A, 1B, and 1C) will be located outside of known wetland boundaries and will not impact any areas of land that have not been previously disturbed. See Exhibit 1 for a map from the New York State Department of Environmental Conservation's Environmental Resource Mapper.

This project is located above the 100-year floodplain. All critical pump station equipment in the option to pump the wastewater from Riverview Landing to Windhover Farms will be three feet minimum height above the 100-year flood elevation, and all noncritical equipment will be two feet minimum above the 100-year flood elevation. This complies with requirements in the latest edition of TR-16, Guides for the Design of Wastewater Treatment Works Section 1.2.1.h. See Exhibit 2 for the Federal Emergency Management Agency's Flood Insurance Rate Map for this area.

The soils in the project area are comprised of silt and sand loam complexes with a shallow "depth to restrictive feature" of 30-72 inches in many locations along the collection system route (NRCS Websoil Survey).

The project is not located in an Environmental Justice area. See Exhibit 3 for the NYSDEC Environmental Justice Map of Saratoga County.

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OWNERSHIP AND SERVICE AREA

The existing Riverview Landing Sewer District in Clifton Park serves 37 occupied lots (including one lot that is counted as three units) and three vacant lots (each counted as a half unit) on Riverview Road and Maria Court for a total of 40.5 sewer units. The full Equivalent Dwelling Unit (EDU) listing is found in Exhibit 4.

The district is owned and operated by the Town of Clifton Park, Riverview Landing Sewer District No. 1. The district does not have any existing inter-municipal, private, or industrial agreements and does not have any existing industrial discharges or accept hauled waste.

No publicly accessible population information is available solely for the Riverview Landing Sewer District; however, the service area has grown over the past twenty years with new houses being built near the Droms Road intersection and to the west of the wastewater treatment plant. Furthermore, there are three vacant lots that could be developed and occupied in the future. The 2014 New York State Design Standards for Intermediate Sized Wastewater Treatment Systems states that the typical hydraulic loading rate per bedroom of a single-family residence is 110 gallons per day. Using an estimate of three bedrooms per house gives a total expected hydraulic loading rate of 330 gallons per day per house and a total additional loading rate of 990 gallons per day for the three vacant lots combined. This potential increase in hydraulic loading is factored into the preliminary design of each of the replacement treatment and conveyance options in the Alternatives Analysis section of this report.

EXISTING FACILITIES AND PRESENT CONDITION

The Riverview Landing Sewer District collection system and treatment plant were constructed in 1985 along Riverview Road to provide sanitary sewer service to area residents. The system was originally operated by RLD, Inc., but was abandoned to the Town of Clifton Park in 1999. PRIME AE (fka John M. McDonald Engineering, P.C.) prepared the Map, Plan and Report for the Town to establish the Riverview Landing Sewer District No. 1 (RLSD) and assisted in the transfer of the SPDES permit (Exhibit 5) in 1999 (Town resolution #92 of 1999) from RLD Inc. to the Town of Clifton Park. The Town of Clifton Park Riverview Landing Sewer District No. 1 was then formed in 1999 to provide wastewater treatment services to the Riverview Landing area of Clifton Park (see Ownership and Service Area subsection).

Issues were discovered with the treatment plant in 2002 that led to rebuilding of both intermittent sand filter units, replacement of a dosing siphon and improvements to the chlorine contact chamber in 2003. PRIME AE also prepared the plans and specifications and provided construction phase engineering and inspection services for the rebuilding of the filter beds in 2002/2003. Tholin Excavating completed the work for approximately \$105,000. Condor Constructors LLC completed the chlorine tank access improvements that PRIME AE designed later that same year. PRIME AE provided wastewater treatment plant operation services and engineering technical assistance at this plant from 2004 to 2018.

As part of our plant operation responsibilities, PRIME AE had advised the Town that there was an issue with high flows at the plant in April 2017. The Town and PRIME AE performed an initial investigation and it was noticed that excessive flow was coming from filter bed #2 in the underdrain header inspection manhole when flow to that bed had been shut off. The bed was removed from service and a test pit was dug in the middle of the filter bed on May 16, 2017. The results of this test pit showed that the groundwater table had risen to a level in the sand filter above the underdrain piping compromising its treatment capability, so the filter bed was kept isolated. In a letter dated July 20, 2017, PRIME AE recommended that several corrective options be evaluated including investigation into why the

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groundwater table had risen, consideration of reconstructing the filter bed with a liner to keep out groundwater, and evaluation of sending the wastewater from this sewer district to a nearby sewer district.

The Riverview Landing Sewer District (RLSD) collection system is comprised of approximately 10,285 LF of 1.5-inch through 3-inch HDPE low pressure sewer mains and 36 residential grinder pump units. One house (773 Riverview Road) has a gravity sewer lateral that flows directly to the plant instead of a grinder pump. The 3-inch low pressure sewer main empties into a manhole near the WWTP, where gravity flow takes over to the plant. The current Riverview Landing Sewer District Wastewater Treatment Plant consists of an 8-inch gravity sewer that feeds into a series of two septic tanks (one 8,000 gallon and one 7,000 gallon), an alternating dosing siphon tank, two buried 6,600 square foot sand filter beds, an underdrain header, and a 1,000-gallon chlorine disinfection tank. The effluent from this plant is discharged through a 6-inch PVC pipe into an unnamed tributary of the Mohawk River. The site does not use any electricity to treat influent. A site plan of this facility is located in Exhibit 6A and the Collection System layout in Exhibit 6B.

PRIME AE provided treatment plant operation services with a certified operator at Riverview Landing from 2004-2018 (the Town has taken over operations for the past 2 years). During this time, PRIME AE collected monthly flow data. This measurement is performed by measuring the flow that fills a graduated bucket in one minute and then scaling this value up to a daily value. Since the start of 2015, the values observed have fluctuated between a minimum of 3,600 gallons per day (gpd), observed nine times, and a maximum of 7,290 gpd observed in April 2017. The average over this span was 5,830 gpd. To more accurately measure the flows going into the plant, PRIME AE inserted a portable flow meter into the plant's effluent sewer main and measured the average and maximum daily flows during a two-week span in September 2018 – October 2018. The average daily flow during this span was 7,000 gallons per day (gpd) and the maximum daily flow was 15,000 gpd. A factor of four was used to calculate the peak hourly flow to the plant from the average daily flow. Thus, the estimated peak hourly flow at the Riverview Landing WWTP during this time was 19.5 gpm.

To further quantify these flows, PRIME AE also inserted a flow meter into the plant's effluent manhole for a four-week span in January 2021 – February 2021. The average daily flow during this span was 6,800 gpd and the maximum daily flow was 18,100 gpd.

An average existing flow of 7,000 gpd, plus estimated flows from full buildout (3 vacant lots), was used to estimate the sizing and pricing of each preliminary design alternative. A summary of this information is provided in Section 2 of this report.

PRIME AE performed a site survey on September 27, 2018 to investigate possible reasons for the rise of the groundwater table. It was found that both the drainage swale on the west side of the plant and the Riverview Landing roadside ditch have positive drainage. However, the presence of standing water in the swale, particularly near the wetland northwest of the plant, indicates that the water table is high in this area. This high groundwater condition appears to be the cause of the groundwater intrusion into the existing sand filter bed and will be accounted for as part of each of the alternatives discussed below, particularly rehabilitation of the current WWTP.

Currently, the plant operates under SPDES Permit NY0131768 (renewed by NYSDEC through 2023), which authorizes the facility to discharge treated water into an unnamed tributary of the Mohawk River in accordance with the provisions and conditions written in the permit. These conditions include plant effluent limits for BOD (30 mg/l, monthly average), suspended solids (30 mg/l, monthly average), settleable solids (0.1 ml/l, daily maximum), pH (6.5-8.5), nitrogen (NH₃) (14 mg/l, June-October, and 21

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mg/l, November-May), fecal coliform (200 units/100 ml), and residual chlorine (2 mg/l, daily maximum). As previously mentioned, the SPDES permit is contained in Exhibit 5.

The operator of the plant tests pH, settleable solids, and residual chlorine once each month and samples the other parameters biannually. Plant data collected since 2004 shows that the average influent TSS at the RLSD WWTP has been 1427 mg/l and the average influent BOD has been 903 mg/l. The existing plant sample data can be found in Exhibit 7. The replacement wastewater treatment plant that is selected will need to take wastewater with these influent values and produce effluent with values at or below the values listed in the SPDES permit referenced above.

DEFINITION OF THE PROBLEM

Infiltration of high groundwater and the closure of one of the two filter beds have resulted in reduced effectiveness of the treatment plant. This reduced effectiveness results in effluent that is not adequately treated (high fecal coliform counts and high nitrogen (ammonia) concentrations) during high flow periods. Therefore, improvements are needed in order to protect human health, the Mohawk River, and the surrounding environment from harm caused by pollutant concentrations above the limits set forth in the facility's SPDES permit.

FINANCIAL STATUS

The median household income (MHI) in the Town of Clifton Park is \$108,116 (Census.gov, 2019 dollars), which is more than the current state MHI average of \$68,486 (Census.gov, 2019 dollars).

Due to the high capital cost of the required improvements for either of the alternatives presented and the low number of properties in the district, the anticipated yearly cost to the typical property (properties with the most frequently occurring property assessment value) in the district (debt service and operations and maintenance of proposed replacement) without grant and low interest loan assistance will be at least \$2,749. This resulting price increase of sewer services will cause a financial hardship for many families. Therefore, the Town of Clifton Park is seeking grant funds and low interest loans to make the project more affordable for the residents of the Riverview Landing Sewer District.

There are no other current capital improvement projects in the Riverview Landing Sewer District No. 1.

RLSD residents will continue to pay debt service and interest for the previous wastewater treatment plant rehabilitation (see Existing Facilities Section) until the loan is paid in full in 2023. The debt principal cost shown on the Town of Clifton Park comptroller's latest budget table for the Riverview Landing Sewer District was \$9,000 in 2018 and \$11,250 in 2019. An annual cost of \$12,000 is estimated for 2022 and 2023. The complete budget table can be found in Exhibit 8.

SECTION 2 – ALTERNATIVES ANALYSIS

No Action Alternative

The current treatment system with one of the two filter beds out of service and high groundwater intrusion cannot effectively handle the full flows from the Riverview Landing Collection System. As a result, the residence time of the influent through the one remaining bed is insufficient for proper contaminant removal and the effluent often exceeds the SPDES concentration limits for one or more

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monitored parameters during high flow periods. Effluent that exceeds these limits may impact the water quality of the Mohawk River, which in turn may make the river less suitable for fish, birds, and other wildlife that inhabit it. Therefore, to better protect the Mohawk River environment, action must be taken to improve the existing treatment plant to reduce on-site groundwater intrusion, which will reduce the total flows going through the system and increase its energy efficiency and lifespan or convey the flows to a nearby system for treatment at the SCSO WWTP.

Alternative #1 – Wastewater Treatment Plant Improvements

The first set of alternatives for handling the wastewater from the RLSD studied was to maintain a wastewater treatment plant within the district. This set of alternatives includes both rehabilitation and continued use of the current sand filter bed WWTP (Alternative #1A) and replacement of the plant with a packaged treatment plant (Alternatives #1B and #1C).

Alternative #1A – Rehabilitation of the Current Intermittent Sand Filter Bed WWTP

1) Description: To counteract the problem of excessive infiltration due to high groundwater at the existing site, the level of the site should be raised with additional fill (3 feet of fill over the whole site) and a liner should be installed under the filter beds to prevent future groundwater infiltration. According to The New York State Department of Environmental Conservation (NYSDEC) Design Standards for Intermediate Sized Wastewater Treatment Plants, liners for sand filters should be 30 mil in thickness (0.03 inches) and be surrounded by at least 3 inches of sand to protect the liner. The total surface area of each of the existing beds is 6,600 square feet, for a total of 13,200 square feet.

Rehabilitation of the sand filter bed system would also include removal and disposal of spent filter media, installation of new media, replacement of distribution and underdrain piping, septic tank baffles, and the distribution chambers, and rehabilitation of the dosing chamber and chlorine tank.

Currently, the filter beds are each 6,600 square feet. The NYSDEC Design Standards for Intermediate Sized Wastewater Treatment Plants require that buried filter beds in continuous operation have an average flow loading of no greater than 1 gpd/square foot. Each sand filter bed should be designed such that it can handle the average flow by itself, so that the system remains operational if one bed fails or needs to be inspected. As mentioned in the Ownership and Service Area Section of the report, there are three vacant lots that would add an estimated 990 gallons per day to the existing flows. For design purposes, a total future average flow of 8,000 gpd will be used. Therefore, each bed will need an additional 1,400 square feet to accommodate the 7,000 gpd average flows and the flows from full future buildout (8,000 SF each). The liner underneath will thus need to be an additional 2,800 square feet (16,000 SF).

A site plan for Alternative #1A is included in Exhibit 9A. There would be no change to the low-pressure sanitary sewer system and no additional land requirements as part of this alternative.

This alternative would slightly increase the capacity, sizing and processes of the treatment facility and will decrease the chemical and biological content of the wastes discharged as compared to the existing facility. Furthermore, the alternative is energy and water efficient because no electricity or municipal water are used to treat the influent.

This alternative is constructable on the current site and is expected to take three months to complete (two weeks for excavation of existing beds, eight weeks for pipe and equipment replacement, liner installation, and backfill, and two weeks for restoration). Seasonal limitations are not expected to impact

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the construction of this alternative because it can be performed all in one season in two phases (one bed at a time).

2) Cost Estimate: The preliminary project cost estimate for the rehabilitation of the sand filter bed system, which includes a 10% contingency added to the initial cost and a 20% engineering, legal, and administrative fee, is approximately \$1,264,400 (2021 costs). The comprehensive preliminary cost estimate for rehabilitation of the sand filter beds is in Exhibit 10.

As with the other alternatives, RLSD residents will continue to pay debt service and interest on the current WWTP until the loan is paid off. The final payoff will occur in 2023. Annual Operation and Maintenance costs that RLSD residents will incur over the service life of the filter bed WWTP are labor (operator), maintenance (sludge disposal, chlorine tablets, mowing, plowing, and other miscellaneous items), engineering, and equipment. There are no electrical costs associated with this alternative.

Future capital improvements for the filter bed WWTP will be limited to future rehabilitation of the beds. The beds were last rehabilitated in 2002. Therefore, over the course of 30 years, the filter media in the beds will likely need to be replaced at least once.

The initial construction, operations and maintenance, capital improvement, and debt reduction costs are summarized in the 30-Year Cost (present worth) analysis for this alternative in Exhibit 11. The 30-Year cost analysis factors in all the costs over the 30-year intended usage period of the facility and uses yearly cost increase rates to represent the costs in terms of 2022 dollars. The total 30-year cost of this alternative was determined to be \$2,286,800.

Ad Valorem cost allocation on the basis of property assessment value is the proposed method for determining the costs to each property in the district. The annual cost to a typical property owner in the RLSD for rehabilitation of the current WWTP, debt payments for the current WWTP, and operation and maintenance of the plant is projected to be \$3,010 in 2022. Using an annual 2.5 percent increase in prices (the current yearly labor rate increase according to Bureau of Labor Statistics), 2.0 percent yearly increase for power (Energy Information Administration), and a 2.7 percent increase in labor (Bureau of Labor Statistics) results in an annual cost of \$2,749 in 2024, the first year after the final debt payment for the existing WWTP is made (the bond matures in February, 2023). The calculation of the annual cost for the typical property in the district is in Exhibit 12. The cost to each property in the district on the basis of property assessment value is in Exhibit 15.

3) Non-Monetary Factors: This option will likely be less aesthetically pleasing to some residents than the existing flat grassy area above the beds due to the above grade mounding of the filter beds that will be required to protect the beds from groundwater intrusion. Furthermore, this option requires the Town to maintain the treatment plant and the associated SPDES permit. The Town's sewer department has little experience maintaining treatment plants and is much better suited to maintaining sewer pump stations. However, this option requires no easements or land acquisitions and minimizes the need for additional infrastructure.

Alternative #1B – Orenco Advantex Packaged Treatment Plant

1) Description: Replacement of the intermittent sand filter beds with an Orenco Advantex treatment system would include demolition and decommissioning of the existing WWTP and connection of the new treatment plant to the existing utilities on Riverview Road operated by National Grid. The demolition and decommission work includes proper disposal of the filter media, demolition and disposal of the

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distribution and dosing chambers and chlorine tank, and backfill of the filter bed areas. All influent and effluent pipes to and from these locations would be cut, capped, and sealed or removed completely. The septic tanks will be kept on site and used as a preliminary means of treatment before the wastewater enters the packaged treatment plant. This alternative would not necessitate land acquisition because the plant would be installed on the same lot as the current sand filter bed treatment plant. A connection of 8-inch PVC pipe would be made from the current influent manhole to the influent end of the packaged treatment plant and from the effluent end of the Orenco plant to the chlorine disinfection tanks on site. A general site plan of the packaged treatment plant is in Exhibit 9B. There would be no change to the low-pressure sanitary sewer system as part of this alternative.

Orenco Advantex packaged treatment plants utilize recirculating packed-bed filters that are made from textile fabric to treat wastewater. In addition, they come equipped with fiberglass tanks, pumping systems, and ventilation for storage and movement of the wastewater.

In order to estimate the sizing, requirements, and costs of the Orenco Advantex packaged plant, the vendor, J. Andrew Lange, Inc., needed data regarding the quality of the influent wastewater in terms of Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS) concentrations, as well as the average daily, maximum daily, and peak hourly flows discussed in Section 1 above. PRIME AE provided them with the tables of permitted and observed values found in Exhibit 7.

The Orenco Advantex system will use 26.02 kW-hours of power/day which, at a price of \$.18/kW/hr of power, will cost the residents of the RLSD \$1,710/year (2021 dollars).

This alternative would not alter the flow or sizing of the treatment facility and will decrease the chemical and biological content of the wastes discharged as compared to the existing facility. While this option is not as energy and water efficient as rehabilitating the existing system, it has a small physical footprint and is suitable for the area constraints of the existing wastewater treatment site.

There would be no change to the low-pressure sanitary sewer system and no additional land requirements as part of this alternative.

This alternative is constructable on the current site and is expected to take three to four months to complete (two weeks for decommissioning of existing beds, eight weeks for pipe and equipment replacement, tank installation, well installation, building construction, and backfill, three weeks for electrical work, and three weeks for restoration and fencing). Seasonal limitations are not expected to impact the construction of this alternative because it can be performed all in one season.

2) Cost Estimate: The initial construction cost of an Orenco Advantex system is estimated to be \$1,768,200 (2021 dollars). A comprehensive cost estimate for construction of the plant is in Exhibit 10.

Annual Operation and Maintenance costs that RLSD residents will incur over the service life of the Orenco Advantex WWTP are labor (operator), maintenance (sludge tank pump-outs, preventative and unscheduled maintenance, cellular data, and lab testing), legal, insurance, engineering, and permit fees, and electrical (including SCADA).

Future capital improvements for the Orenco Advantex WWTP will include replacement and repair of tank equipment, textiles, pumps, floats, and contactors.

The initial construction, operations and maintenance, capital improvement, and debt reduction costs are summarized in the 30-Year cost (present worth) analysis for this alternative in Exhibit 11. The total 30-year cost of this alternative was determined to be \$2,835,100 (2022 dollars).

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The annual cost to a typical property owner for construction of the new wastewater treatment plant, debt reduction for the existing filter beds, and operations, maintenance, and electricity is projected to be \$4,013 in 2022 (including 2002 loan fees) and will decrease to \$3,754 in 2024. The calculation of the annual cost for the typical property in the district is in Exhibit 12. The cost to each property in the district on the basis of property assessment value is in Exhibit 15.

3) Non-Monetary Factors: This option will likely be less aesthetically pleasing to some residents than the existing flat grassy area above the beds due to its above grade treatment units. Furthermore, this option requires the Town to maintain the treatment plant and the associated SPDES permit. The Town's sewer department has little experience maintaining treatment plants and is much better suited to maintaining sewer pump stations. However, this option requires no easements or land acquisitions making it minimally disruptive to the surrounding neighborhood.

Alternative #1C – Extended Aeration Packaged Treatment Plant

1) Description: Replacement of the sand filter bed with an extended aeration treatment plant would include demolition and decommissioning of the existing WWTP, backfill of the filter bed pits, and connection of the new treatment plant to the existing utilities on Riverview Road operated by National Grid. The demolition and decommission work includes proper disposal of the filter media and demolition and disposal of the septic tanks, distribution and dosing chambers and chlorine tank. All influent and effluent pipes to and from these locations would be cut, capped, and sealed or removed completely. This alternative would not necessitate land acquisition because the plant would be installed on the same lot as the current sand filter bed treatment plant. A connection of 8" PVC pipe would be made from the current influent manhole to the influent end of the packaged treatment plant and from the effluent end of the Extended Aeration system to the chlorine contact tanks on site. A general site plan of the RLSD with the packaged treatment plant is in Exhibit 9C. There would be no change to the low-pressure sanitary sewer system as part of this alternative.

Extended Aeration packaged plants utilize activated sludge to treat the influent wastewater and clump together into flocs that settle out in the clarifier, prior to discharging treated water.

The vendor of the Extended Aeration packaged plants, Fluence Corporation, used the data discussed in Alternative #1B (Exhibit 7) to estimate the sizing, requirements, and costs of installing an extended aeration packaged plant on the site of the current wastewater treatment plant.

The Extended Aeration system will use 26.5 kW-hours of power/day which, at a price of \$.18/kW/hr of power, will cost the residents of the RLSD \$1,742/year (2021 dollars).

This alternative would not alter the flow or sizing of the treatment facility and will decrease the chemical and biological content of the wastes discharged as compared to the existing facility. While this option is not as energy and water efficient as rehabilitating the existing system, it has a small physical footprint and is suitable for the area constraints of the existing wastewater treatment site.

There would be no change to the low-pressure sanitary sewer system and no additional land requirements as part of this alternative.

This alternative is constructable on the current site and is expected to take three to four months to complete (two weeks for decommissioning of existing beds, eight weeks for extended aeration system installation, well installation, building construction, and backfill, three weeks for electrical work, and three

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weeks for restoration and fencing). Seasonal limitations are not expected to impact the construction of this alternative because it can be performed all in one season.

2) Cost Estimate: The initial construction cost of an Extended Aeration system is estimated to be \$1,559,600 (2021 dollars). A comprehensive cost estimate for construction of the plant is in Exhibit 10.

Annual Operation and Maintenance costs that RLSD residents will incur over the service life of the extended aeration WWTP are labor (operator), maintenance (sludge disposal, chlorine tablets, testing, and miscellaneous), legal, insurance, engineering, and permit fees, and electrical (including SCADA).

Future capital improvements for the extended aeration WWTP will be limited to future replacement of the pumps, blowers, and controls in the WWTP.

The initial construction, operations and maintenance, capital improvement, and debt reduction costs are summarized in the present worth analysis for this alternative in Exhibit 11. The present worth of this alternative was determined to be \$3,183,800 (2022 dollars).

The annual cost to a typical property owner for construction of the new wastewater treatment plant, debt reduction for the existing filter beds, and operations, maintenance, and electricity is projected to be \$4,188 in 2022 and decrease to \$3,961 in 2024. The calculation of the annual cost for the typical property in the district is in Exhibit 12. The cost to each property in the district on the basis of property assessment value is in Exhibit 15.

3) Non-Monetary Factors: This option will likely be less aesthetically pleasing to some residents than the existing flat grassy area above the beds due to its above grade treatment units. Furthermore, this option requires the Town to maintain the treatment plant and the associated SPDES permit. The Town's sewer department has little experience maintaining treatment plants and is much better suited to maintaining sewer pump stations. The Town would need to hire a certified wastewater treatment operator for this option. However, this option requires no easements or land acquisitions making it minimally disruptive to the surrounding neighborhood.

Alternative #2 – Abandoning the Sand Filter Beds and Sending Flow to a Neighboring System Using a Pump Station

This set of alternatives would involve construction of a duplex pumping station on the current Riverview Landing WWTP lot and installation of a forcemain to convey the flows to the neighboring system. There are three locations that the Riverview Landing sewage could potentially be pumped to: the Edison Club Pump Station, the Windhover Farms subdivision and the Mohawk River Country Club Wastewater Treatment Plant.

Alternative #2A – Constructing a Pump Station to Send Flow to the Edison Club Pump Station

1) Description: Construction of a duplex pumping station would begin with demolition of the current facility, disposal of its filter media, tanks, and internal piping, and backfill of the filter bed pits. Construction of the pump station would include constructing a building to house the components of the station as well as installation of pumps, suction and discharge valves, a wet well, electrical conduits, and other components inside the station. The construction of the station would also necessitate the installation of a new fence with controlled access system, a bypass pumping connection on the forcemain,

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and an emergency generator with automatic transfer switch. The pump station would connect to the existing gravity sewer manhole on-site via 8-inch PVC. A site map of this alternative is in Exhibit 9D.

This alternative also includes demolition of the current WWTP and construction of a 7,400-foot long HDPE forcemain from RLSD to the Edison Club Pump Station. The wastewater that goes to the Edison Club pump station is pumped to a manhole near the intersection of Riverview Road and Route 146. From there it is conveyed by a gravity sewer to the Town of Glenville, which sends its wastewater to the City of Schenectady for treatment.

The peak hour flow value of the RLSD is estimated at 66 gallons per minute (gpm), based upon the E-One grinder pump installation guidance manual. To ensure each pump in the pump station is capable of pumping at this rate, each is proposed to operate at 70 gpm.

The sizing of the wetwell of the pump station for storage of wastewater, is based upon the need for a 30-minute storage capacity in the wetwell, and a distance of 4.5 feet between the invert of the inlet pipe and the depth at which both pumps would shut off. Therefore, the average daily flow from RLSD was multiplied by 30 to determine the minimum volume of the wetwell. This volume is 20 cubic feet, or 150 gallons. Dividing this volume by a 4.5-foot depth yields a minimum whole number wetwell diameter of 4 feet.

According to the Ten States Standards for Wastewater Facilities, a minimum water flow velocity of 2 feet per second shall be maintained within the forcemain from a pumping station. In addition, a forcemain should be designed to minimize the head losses that a pumping station has to overcome. Larger diameter forcemains incur lower head losses. Therefore, the forcemain was sized as the largest diameter pipe that had a flow rate greater than 2 feet per second. With a design flow rate of 70 gpm and a forcemain length of 1.3 miles from the Riverview Landing pumping station to the pumping station adjacent to the Edison Club, a 3-inch diameter pipe is the selected size. A 3-inch diameter HDPE pipe with 45 gpm of flow incurs a friction loss of 6.17 feet/1,000 feet of run. Over 1.3 miles, the friction loss will total approximately 114 feet. In addition, because the pumps would be located approximately 10 feet below grade (elevation 317 feet) and the highest point on the 1.3-mile stretch is 9 feet higher than the elevation at the pumping station (336 feet), a total static (elevation) head of 19 feet will also need to be overcome by the pumps. Adding the head losses from the pump station to the approximately 114 feet of friction head results in a total dynamic head of 133 feet. The calculations for the design of the pump station and forcemain are in Exhibit 13.

This alternative would not alter the flow of the Riverview Landing Sewer System and would have a size equivalent to the existing treatment plant. It also will decrease the chemical and biological content of the wastes discharged as compared to the existing facility. While this option is not as energy efficient as rehabilitating the existing system, it has a small physical footprint and is suitable for the area constraints of the existing wastewater treatment site.

There would be no change to the existing low-pressure sanitary sewer system and no additional land requirements as part of this alternative.

A VFD will be used at the pump station to improve the energy efficiency of this alternative.

This alternative is constructable on the current site and is expected to take four months to complete (two weeks for decommissioning of existing beds, four weeks for excavation, installation of pump station, and backfill, three weeks for electrical work, five weeks for forcemain installation, and three weeks for grass

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and road construction). Seasonal limitations are not expected to impact the construction of this alternative because it can be performed all in one season.

2) Cost Estimate: A duplex grinder pump station with pumps that operate at 70 gpm and 115 feet of head and a 4-foot diameter wetwell costs approximately \$110,000 to install. Three-inch directional-drilled forcemain costs \$40/linear foot in soil and \$120/linear foot in rock. According to the NRCS Web Soil Survey, the segment of Riverview Road in which the forcemain will be constructed has rock within the first 5 feet below grade for approximately half the length. Thus, the total forcemain cost of \$592,000.

The preliminary project cost of constructing a pump station and force main from the RLSD to the Edison Club pump station is \$1,567,500 (2021 dollars). A comprehensive review of these costs is in Exhibit 10.

Annual Operation and Maintenance costs that RLSD residents will incur over the service life of the pump station are electrical, maintenance, SCADA, and forcemain cleaning. RLSD residents will also be charged by the Town of Glenville and the City of Schenectady for using their sewer systems.

Future capital improvements of the pump station will include replacement of the forcemain air release and cleanout valves and replacement of the pumps and controls inside the pump station.

The initial construction, operations & maintenance, capital improvement, and debt reduction costs are summarized in the 30-year cost (present worth) analysis for this alternative in Exhibit 11. The total 30-year cost of this alternative was determined to be \$2,706,600.

The annual cost to a typical property owner for construction of the new pump station, servicing the debt for the existing filter beds, operations, maintenance, electricity, and neighboring sewer costs is projected to be \$3,786 in 2022 and decrease to \$3,511 in 2024. The calculation of the annual cost for the typical property in the district is in Exhibit 12. The cost to each property in the district on the basis of property assessment value is in Exhibit 15.

3) Non-Monetary Factors: This option will have minimal aboveground features apart from the generator and pump station vent piping and will thus have minimal impacts to the visual aesthetics of the property. Pump stations are also the preferred option for the Town Sewer Department because the department maintains many pump stations throughout the Town. Furthermore, this option would eliminate a SPDES permit and consolidate the Riverview Landing Sewer District with the nearby Town of Glenville public sewer system.

Alternative #2B – Constructing a Pump Station to Send Flow to the Windhover Farms Subdivision Forcemain

1) Description: Construction of a duplex pumping station to convey RLSD wastewater to Windhover Farms would include most of the same work as construction of a pumping station to the Edison Club pump station, however, there are several key differences. Instead of locating the pump station at the site of the existing WWTP, the pump station would be located at the corner of Riverview Road and Droms Road. The grinder pumps will be redirected to pump to this location. As a result of this change in direction, some of the piping on Riverview Road near the existing WWTP will need to be replaced with smaller piping to accommodate the lower flows going through (the combined flow through the main piping will increase towards the east, where the pump station will be). The public road right-of-way near this intersection is small, so the Town of Clifton Park would need to acquire a small amount of land from one of the property owners near the intersection. The amount of land required for the pump station is small, only about 1,500 square feet. The estimated cost of purchasing this land is \$22,000. The forcemain from the pump station

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would run north on Droms Road to the corner of Grooms Road and then west along Grooms Road to the southern edge of the proposed Windhover Farms subdivision. This option would then require Clifton Park to replace the 900 feet of 2-inch forcemain on the proposed Penfield Drive with 3-inch forcemain and tie into the existing 3-inch forcemain on Holbrook Drive. This proposed forcemain to Windhover Farms would be 5,500 feet long. Adding in the replacement 900 feet gives a total run to Holbrook Drive of 6,400 feet. The design flow rate of 70 gpm, the wetwell diameter of 4 feet, and the forcemain diameter of 3 inches determined in the analysis for Alternative #2A remain the same for Alternative #2B. However, the total dynamic head for the pumps to overcome would be greater due to the increased length of the forcemain and the higher elevation change. The pumps will be at an elevation of 301 feet, and the high point between the Riverview Landing pump station and the proposed Windhover Farms subdivision is 348 feet, resulting in a static head of 47 feet. The friction head loss for this run of pipe will be approximately 98 feet. Adding in the head losses within the pump station, the total dynamic head will be 145 feet from the pump station to Holbrook Drive.

The pump station will also need to overcome the head in the existing forcemain on Holbrook Drive to the existing Saratoga County Sewer System pump station at Settler's Hill. The length of pipe for this second section will be 3,400 feet, the length of the forcemain to the Settler's Hill pump station. Windhover Farms will have approximately 25 houses, each with its own grinder pump. According to the E-One grinder pump design guidance document, about five pumps will run in a 25-pump system. This equates to a maximum flow of 55 gpm. Thus, the head over this last 3,400 feet of pipe will be equal to the static head of the forcemain, 8 feet, and the frictional head, which is the friction losses that the combined flows of Windhover Farms and Riverview Landing will experience (125 gpm). The total head from this second section will be 161 feet and the total head from the whole system for the grinder pumps to overcome will be 306 feet. Providing some additional head capacity for losses within the pump station gives a total head of 310 feet to overcome.

In researching duplex grinder pump stations, it was determined that grinder pumps which can overcome this amount of head are not sold by typical manufacturers in the area (E-One, Goulds, Myers, Flygt, and Zoeller). Therefore, Alternative #2B necessitates two pump stations on the route to the Saratoga County Sewer System. To avoid the need for two land acquisitions for this option, the higher pump station should be positioned near the intersection of Grooms Road and Penfield Drive where there is a sufficient right-of-way. This is shown on the map for Alternative #2B in Exhibit #9E.

In addition, the pumps at the downstream pump station at Settler's Hill will need to be upgraded as well due to the additional flow from Riverview Landing. Replacing the pumps at Settler's Hill will cost \$85,000.

This alternative would not alter the flow volume of the Riverview Landing Sewer System. It also will decrease the chemical and biological content of the wastes discharged as compared to the existing facility.

VFDs will be used at each of the two pump stations to improve the energy efficiency of this alternative.

This alternative is expected to take five months to complete (two weeks for decommissioning of existing beds, eight weeks for excavation, installation of pump stations, replacement of pumps at Settler's Hill Pump Station, and backfill, three weeks for electrical work, six weeks for forcemain and sewer installation, and three weeks for grass and road construction). Seasonal limitations are not expected to impact the construction of this alternative because it can be performed all in one season.

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2) Cost Estimate: The preliminary project cost of constructing a pump station and force main from the RLSD to the Windhover Farms subdivision is \$1,495,600. A comprehensive review of these costs is in Exhibit 10.

Annual Operation and Maintenance costs that RLSD residents will incur over the service life of the pump station are electrical, maintenance, SCADA, and forcemain cleaning. The residents of RLSD would also incur the sewer charges of the Saratoga County Sewer District, estimated at \$265/typical property (2021) in this study.

Future capital improvements of the pump station will include replacement of the forcemain air release and cleanout valves and replacement of the pumps and controls inside the pump station.

The initial construction, operations and maintenance, capital improvement, and debt reduction costs are summarized in the 30-Year cost (present worth) analysis for this alternative in Exhibit 11. The total 30-year cost of this alternative is \$2,358,600.

The annual cost to a typical property owner for construction of the new pump station, and operations, maintenance, electricity, and neighboring sewer costs is projected to be \$3,432 in 2022 and decrease to \$3,158 in 2024. The calculation of the annual cost for the typical property in the district is in Exhibit 12. The cost to each property in the district on the basis of property assessment value is in Exhibit 15.

3) Non-Monetary Factors: This option will have minimal aboveground features apart from the generators and pump station vent piping and will thus have minimal impacts to the visual aesthetics of the property. Pump stations are also the preferred option for the Town Sewer Department because the department maintains many pump stations throughout the Town. Furthermore, this option would eliminate a SPDES permit and consolidate the Riverview Landing Sewer District with the nearby Saratoga County public sewer system.

Alternative #2C – Constructing a Pump Station to Send Flow to the Mohawk River Country Club Wastewater Treatment Plant

1) Description: Construction of a duplex pumping station to the MRCC WWTP would involve most of the same work as construction of a pumping station to the first two sites. The key differences would be the HDPE forcemain length, which would be 4,100 feet, and the need for rehabilitation work at the MRCC WWTP. As for Alternative #2A, the pump station will be constructed at the site of the existing WWTP. A map of this alternative is in Exhibit 9F.

The design flow rate of 70 gpm, the wetwell diameter of 4 feet, and the forcemain diameter of 3 inches determined in the analysis for Alternative #2A remain the same for Alternative #2C. As with Alternative #2B, the total dynamic head for the pumps to overcome would be different for this alternative. For Alternative #2C this is due to the decreased length of the forcemain and the lower elevation change. While the pumps will still be at an elevation of 317 feet, the high point between the Riverview Landing pump station and the MRCC WWTP is only 328 feet, resulting in a static head of 11 feet. The friction head loss for this run of pipe will be approximately 65 feet. Adding in the head losses within the pump station, the total dynamic head will be 80 feet.

The forcemain to the MRCC WWTP will follow the same line as the forcemain to the Edison Club pump station, but will end 3,300 feet shorter. Thus, as with the forcemain to the Edison Club, about half of the forcemain will need to be directional drilled in rock. The price of forcemain to the MRCC WWTP is estimated to be \$328,000.

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The MRCC WWTP has a design capacity of 20,000 gpd. However, currently only an average of 2,500 gpd flows into the facility. Therefore, the facility has enough capacity to accept the maximum day flows of both Mohawk River Country Club (assumed to be double the average flow) and Riverview Landing (15,000 gpd). However, the facility would need to meet the Ten States' Recommended Standards for Wastewater Facilities. These standards state that "properly located and arranged bypass structures and piping shall be provided so that each unit of the plant can be removed from service independently. The bypass design shall facilitate plant operation during unit maintenance..." The MRCC WWTP has no redundant units for treatment. Therefore, while the facility can handle the maximum day flows, it does not have the necessary redundancy to operate while one unit is out of service.

The estimated cost for the redundant unit is larger than the estimated cost for each individual unit of Alternative #1C because this unit will need to accommodate a larger amount of flow.

This alternative would not alter the flow volume of the Riverview Landing Sewer System. It also will decrease the chemical and biological content of the wastes discharged as compared to the existing facility.

There would be no change to the existing low-pressure sanitary sewer system and no additional land requirements as part of this alternative.

A VFD will be used at the pump station to improve the energy efficiency of this alternative.

This alternative is expected to take three to four months to complete (two weeks for decommissioning of existing beds, four weeks for excavation, installation of pump station, and backfill, three weeks for electrical work, three weeks for forcemain installation, and three weeks for grass and road construction). Seasonal limitations are not expected to impact the construction of this alternative because it can be performed all in one season.

2) Cost Estimate: The initial cost of constructing a pump station and force main from the RLSD to the MRCC WWTP is \$1,414,400. A comprehensive review of these costs is in Exhibit 10.

Annual Operation and Maintenance costs that RLSD residents will incur over the service life of the pump station are electrical, maintenance, SCADA, and forcemain cleaning. For this option, the residents will also incur charges for operations and maintenance of the MRCC WWTP.

Future capital improvements of the pump station will include replacement of the forcemain air release and cleanout valves and replacement of the pumps and controls inside the pump station. The MRCC WWTP is an extended aeration facility. Thus, the future capital improvements of the system will be replacement of pumps, blowers, and controls as for Alternative #1C.

The initial construction, operations and maintenance, capital improvement, and debt reduction costs are summarized in the 30-year cost (present worth) analysis for this alternative in Exhibit 11. The total 30-year cost of this alternative is \$2,964,400.

The annual cost to a typical property owner for construction of the new pump station, debt reduction for the existing filter beds, and operations, maintenance, and electricity is projected to be \$3,821 in 2022 and decrease to \$3,591 in 2024. The calculation of the annual cost for the typical property in the district is in Exhibit 12. The cost to each property in the district on the basis of property assessment value is in Exhibit 15.

3) Non-Monetary Factors: This option will have minimal aboveground features apart from the generator and pump station vent piping and will thus have minimal impacts to the visual aesthetics of the property.

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Pump stations are also the preferred option for the Town Sewer Department because the department maintains many pump stations throughout the Town. Furthermore, this option would eliminate a SPDES permit and consolidate the Riverview Landing Sewer District with the nearby private Mohawk River Country Club treatment system.

Alternative #3 – Abandoning the Sand Filter Beds and Sending Flow to a Neighboring System Using a Low-Pressure Sewer System

This set of alternatives would involve upgrading the residential grinder pumps and low-pressure sewer network and constructing a forcemain to the neighboring system. For the purpose of this study, it is assumed that all the Riverview Landing residential grinder pump cores need to be replaced. As discussed above, there are three locations that the Riverview Landing sewage could potentially be pumped to: the Mohawk River Country Club Wastewater Treatment Plant, the Edison Club pump station, and the Windhover Farms subdivision.

Alternative #3A – Using the Household Grinder Pumps to Send Wastewater to the Edison Club Pump Station

1) Description: Use of the residential E-1 grinder pumps to send wastewater to the pump station near the Edison Club would require the construction of an approximately 7,400-foot stretch of HDPE forcemain from the site of the current wastewater treatment plant to the pump station as well as changing the sizes of the pipes at multiple sections of the current system to lower head losses. A map of this alternative is in Exhibit 9G.

In order to determine if the use of the residential grinder pumps to pump sewage to other sewer systems is a viable option, the total head exerted on the pumps needed to be calculated and compared to the maximum operating heads of the pumps. If the total head is higher than the maximum operating head of the pumps, the pumps will not function. The current E-1 grinder pumps operate at a maximum head of 85 feet. Replacing the pumps with newer models increases the maximum operating head to 180 feet. Therefore, the total head of the system needs to be below 180 feet for the grinder pump system option to work.

The total head for the proposed system from Riverview Landing to the pump station near the Edison Club was calculated by obtaining the sum of the losses that the pump(s) farthest from the Edison Club, in this case the pumps on Lot 275.-1-101 (708 Riverview Road), would have to overcome to pump wastewater to the pump station next to the Edison Club. This sum of losses includes the losses (both static and frictional) from all the pipes that the effluent from this residence goes through to get to the pump station. A table showing the head losses in each section of pipe within the RLSD and the proposed force main to the Edison Club is shown in Exhibit 14. The table shows the losses in all 19 segments of pipe in the RLSD and the proposed forcemain to the pump station (segment 20A); however, the wastewater from Lot 275.-1-101 doesn't flow through all 19 segments. It only flows through the private segment extending from the house to the road and the public segments that take wastewater to the current wastewater treatment plant. These segments are numbers 1, 2, 4, 6, 7, 8, 14, 16, 17, and 19. The proposed grinder pump forcemain extension to the pump station located in Exhibit 9H shows the segment numbers of each pipe. Adding the total losses in each segment (row 15) for the current piping configuration gives a total head of 189.79 feet. Increasing the size of some of the pipe segments to reduce head losses (while still maintaining

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a required minimum velocity of 2 feet per second), reduces the total head to 177.30 feet. Therefore, because the newer model pumps operate at heads at or below 180 feet, sending wastewater to the pump station is a viable option if the current residential E-1 grinder pumps are replaced with newer ones.

This alternative would not alter the flow volume of the Riverview Landing Sewer System. It also will decrease the chemical and biological content of the wastes discharged as compared to the existing facility. There would be no change to the existing low-pressure sanitary sewer system and no additional land requirements as part of this alternative.

This alternative is expected to take three to four months to complete (two weeks for decommissioning of existing beds, seven weeks for sewer and forcemain installation, three weeks for grinder pump replacement, and three weeks for grass and road construction). Seasonal limitations are not expected to impact the construction of this alternative because it can be performed all in one season.

2) Cost Estimate: The initial construction cost for Alternative #3A is estimated at \$1,576,800. A comprehensive review of these costs is in Exhibit 10.

Annual Operation and Maintenance costs that RLSD residents will incur over the service life of the low-pressure sewer system are pump and sewer maintenance and electricity. The residents will also pay sewer charges for the Town of Glenville and the City of Schenectady like Alternative #2A.

Future capital improvements of the low-pressure sewer system will include replacement of the forcemain air release and cleanout valves and maintenance of the residential grinder pumps. This report assumes that the Town of Clifton Park will not be responsible for replacing the newest model grinder pumps after initial construction of the new system is complete. However, replacement of the grinder pumps is included in the present worth analysis to more accurately show the costs that each homeowner will be responsible for.

The initial construction, operations and maintenance, capital improvement, and debt reduction costs are summarized in the 30-year cost (present worth) analysis for this alternative in Exhibit 11. The present worth of this alternative is \$2,406,100.

The annual cost to a typical property owner for construction of the low-pressure sewer system, electricity, debt reduction for the current filter beds, and neighboring sewer fees is projected to be \$3,549 in 2022 and then decrease to \$3,260 in 2024. The calculation of the annual cost for the typical property in the district is in Exhibit 12. The cost to each property in the district on the basis of property assessment value is in Exhibit 15.

3) Non-Monetary Factors: This option will not have any above grade structures and therefore will have no impact on the visual aesthetics of the property. The low-pressure sewer system will also minimize the required operations and maintenance functions that the Town needs to perform. Furthermore, this option would eliminate a SPDES permit and consolidate the Riverview Landing Sewer District with the nearby Town of Glenville sewer system.

Alternative #3B – Using the Household Grinder Pumps to Send Flow to the Windhover Farms Subdivision Forcemain

1) Description: Use of the residential E-1 grinder pumps to send wastewater to the Windhover Farms subdivision would include much of the same work as Alternative #3A, except for the direction of flow and

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location of the forcemain, which will be the same as in Alternative #2B. A map of this alternative is found in Exhibit 9I.

The total head in the system will be the head from the house farthest from the newly installed forcemain plus the head in the forcemain to Windhover Farms plus the head the system would encounter in the Windhover Farms forcemain. From Exhibit 14, page 2, this total head is the sum of pipe segments 1, 3, 4, 5, 7, 13, 14, 15, 17, 18, 21, 22, & 23. The total losses for Alternative #3B are 288.25 feet before head-reducing pipe replacements and 276.73 feet after replacing the pipes. Increasing the forcemain pipe size from 3 inches to 3.5 inches, the largest pipe with greater than 2 ft/s of flow, reduces these values to 256.20 ft and 244.68 ft, respectively. Therefore, because the maximum total dynamic head the system can overcome is 180 feet, sending wastewater to Windhover Farms via low pressure sewer is not a viable option.

2) Cost Estimate: For reference, the initial construction cost for Alternative #3B is estimated to be \$1,216,200. A comprehensive review of these costs is in Exhibit 10.

Annual Operation and Maintenance costs that RLSD residents would incur over the service life of the low-pressure sewer system are pump and sewer maintenance and electricity. The residents would also pay Windhover Farms sewer charges like Alternative #2B.

Future capital improvements of the low-pressure sewer system would include replacement of the forcemain air release and cleanout valves and replacement/maintenance of the residential grinder pumps as in Alternative #3A.

The initial construction, operations & maintenance, capital improvement, and debt reduction costs are summarized in the 30-year cost (present worth) analysis for this alternative in Exhibit 11. The total 30-year cost of this alternative is \$1,762,500.

The annual cost to a typical property owner for construction of this low-pressure sewer system, electricity, debt reduction for the current filter beds, and neighboring sewer fees is projected to be \$2,709 in 2022 and then decrease to \$2,422 in 2024. The calculation of the annual cost for the typical property in the district is in Exhibit 12. The cost to each property in the district on the basis of property assessment value is in Exhibit 15.

3) Non-Monetary Factors: This option, if feasible, would not have any above grade structures and therefore would have no impact on the visual aesthetics of the property. The low-pressure sewer system will also minimize the required operations and maintenance functions that the Town needs to perform. Furthermore, this option would eliminate a SPDES permit and consolidate the Riverview Landing Sewer District with the nearby Saratoga County sewer system.

Alternative #3C – Using the Household Grinder Pumps to Send Flow to the Mohawk River Country Club Wastewater Treatment Plant

1) Description: Use of the residential E-1 grinder pumps to send wastewater to the MRCC WWTP would involve most of the same work as using grinder pumps to send flow to the first two systems. The key differences would be the HDPE forcemain length, which would be 4,100 feet, and the need for rehabilitation work at the MRCC WWTP. A map of this alternative is in Exhibit 9.

The total head in the current piping system will be the same as Alternatives #3A and #3B. This total head plus the head in the proposed 4,100-foot forcemain gives the total for the proposed system to the MRCC WWTP. From Exhibit 14, this total head is the sum of pipe segments 1, 2, 4, 6, 7, 8, 14, 16, 17, 19, and

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20B. The total losses for Alternative #3C are 153.37 feet before head-reducing pipe replacements and 140.89 feet after replacing the pipes. Therefore, sending wastewater to the MRCC WWTP is a viable option if the current residential E-1 grinder pumps are replaced with newer models. Furthermore, because the head losses for the current piping network would be below 180 feet, none of the current piping would need to be replaced. Not replacing any pipes to decrease head losses would result in a savings of \$129,225 for 2,375 feet of pipe and associated excavation and backfill, bedding, valves, and restoration.

This alternative would not alter the flow volume of the Riverview Landing Sewer System. It also will decrease the chemical and biological content of the wastes discharged as compared to the existing facility. There would be no change to the existing low-pressure sanitary sewer system and no additional land requirements as part of this alternative.

This alternative is expected to take three months to complete (two weeks for decommissioning of existing beds, four weeks for sewer and forcemain installation, three weeks for grinder pump replacement, and three weeks for grass and road construction). Seasonal limitations are not expected to impact the construction of this alternative because it can be performed all in one season.

2) Cost Estimate: The initial construction cost for Alternative #3C is estimated at \$1,286,100. A comprehensive review of these costs is in Exhibit 10.

Annual Operation and Maintenance costs that RLSD residents would incur over the service life of the low-pressure sewer system are pump and sewer maintenance and electricity. The residents would also pay for operations and maintenance of the MRCC WWTP as in Alternative #2C.

Future capital improvements of the low-pressure sewer system would include replacement of the forcemain air release and cleanout valves and replacement/maintenance of the residential grinder pumps as in the first two low pressure sewer alternatives.

The initial construction, operations and maintenance, capital improvement, and debt reduction costs are summarized in the 30-year cost (present worth) analysis for this alternative in Exhibit 11. The total 30-year cost of this alternative is \$2,500,200.

The annual cost to a typical property owner for construction of this low-pressure sewer system, electricity, debt reduction, and operations and maintenance of the MRCC WWTP is projected to be \$3,402 in 2022 and decrease to \$3,159 in 2024. The calculation of the annual cost for the typical property in the district is in Exhibit 12. The cost to each property in the district on the basis of property assessment value is in Exhibit 15.

3) Non-Monetary Factors: This option will not have any above grade structures and therefore would have no impact on the visual aesthetics of the property. The low-pressure sewer system will also minimize the required operations and maintenance functions that the Town needs to perform. Furthermore, this option would eliminate a SPDES permit and consolidate the Riverview Landing Sewer District with the nearby private Mohawk River Country Club.

Further Consolidation Opportunities

1) Description: Based upon search results in the DEC Permit Applications – Search Wizard, there are two properties on Grooms Road near the Grooms Road – Riverview Road intersection that have had individual

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SPDES permits: 981 Grooms Road and 993 Grooms Road. In order to consolidate these properties with the Riverview Landing Sewer System, an additional 1,250 feet of low pressure sewer in the public right-of-way would be required to tie into the alternatives that would send wastewater to the Edison Club Pump Station and Mohawk River Country Club (distance from 981 Grooms Road to the Grooms Road – Riverview Road intersection) via low pressure sewer and an additional 3,200 feet of low pressure sewer in the public right-of-way would be required to tie into the treatment plant replacement alternatives, the pump station alternatives, and the alternative that would send wastewater to the Windhover Farms subdivision via low-pressure. In addition, the Town would need to install grinder pumps at each house and low-pressure sewer from the grinder pumps to the street (an additional combined length of approximately 620 linear feet of pipe).

2) Cost Estimate: The initial construction cost for connecting to the alternatives that would send wastewater to the Edison Club Pump Station and Mohawk River Country Club (tying in at the intersection of Riverview Road and Grooms Road) via low-pressure sewer is estimated to be an additional \$235,000 for piping and grinder pumps.

The initial construction cost for connecting to the treatment plant replacement alternatives, the pump station alternatives, and the low-pressure sewer alternative that would send wastewater to the Windhover Farms subdivision (tying in at the intersection of Riverview Road and Grooms Road) is estimated to be an additional \$470,000 for piping and grinder pumps.

An additional annual Operation and Maintenance cost associated with this alternative that RLSD residents (including the two properties that would join the district) would incur over the service life of the low-pressure sewer system is sewer maintenance. For the alternatives that would send wastewater to the Edison Club Pump Station and Mohawk River Country Club, the additional sewer maintenance cost per year (2022) is estimated to be \$1,000. For the treatment plant replacement alternatives and the alternatives that would send wastewater to the Windhover Farms subdivision, the additional sewer maintenance cost per year (2022) is estimated to be \$2,500.

In addition to the initial construction costs for connecting to the nine alternatives, there would also be additional construction costs for increasing the size of the Riverview Landing Wastewater Treatment Plant (Alternatives 1A, 1B, and 1C) and the size of the Mohawk River Country Club Wastewater Treatment Plant (Alternatives 2C and 3C). The pump stations for Alternatives 2A through 2C would not need increased capacity to handle the flows from the two additional houses because the maximum number of grinder pumps pumping at one time would not change (the basis of design grinder pump manufacturer's manual states that any number of grinder pumps between 31 and 50 in a network results in a maximum of six operating at once).

The length of each filter bed would need to be increased by about 10 feet to accommodate the additional 660 gallons per day of flow. Therefore, each bed would be 70' wide by 125' long. The associated filter media, piping, liner, and backfill quantity increases would result in an additional construction cost for Alternative #1A of \$35,695.

The additional operations and maintenance costs for increasing the capacity of Alternative #1A would be a proportional cost increase in labor, sludge disposal, chlorine tablets, miscellaneous materials, and equipment. This cost increase per year would be \$2,030 (2022).

The proportional construction cost increase for increasing the sizes of the primary treatment tank and treatment plant for Alternative #1B would be \$47,500. The ensuing operations and maintenance cost

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increase per year for pumping out tanks, preventative maintenance, service calls, labor, and power would be \$2,050 (2022).

The proportional construction cost increase for increasing the size of the extended aeration plant, including installation and site work, would be \$49,000. The ensuing operations and maintenance cost increase per year for equipment, maintenance, labor, sewage treatment, and power would be \$3,850 (2022).

A third unit would need to be added at Mohawk River Country Club for the additional flows from Grooms Road to be included in Alternatives #2C and #3C so that the plant can treat the full maximum day flows with one unit out of service. The unit would need to be able to treat the maximum day flows from Grooms Road (estimated to be 1,500 gpd). The cost of a 1,500 gpd extended aeration unit and all associated piping connections to the existing system would be \$50,000. Due to the minimal space present for an expansion of the plant, this option will not be as favorable as expanding the Riverview Landing Wastewater Treatment Plant (Alternatives #1A-1C) or pumping the flows to the Edison Club Pump Station or the Windhover Farms Subdivision (most favorable alternative).

The additional operations and maintenance costs for increasing the capacity of Alternatives #2C and #3C would be a proportional cost increase in equipment, maintenance, labor, pipe cleaning, sewage treatment, and power, as well as an increase in the percentage of the overall WWTP maintenance costs covered by the Riverview Landing Sewer District. This cost increase per year would be \$3,270 (2022).

The district would also pay a flat usage rate for additional volume sent to the City of Schenectady (Alternatives #2A and #3A). In the fall of 2018, the rate was \$2.85 per 1,000 gallons. Inflating this value to the spring of 2021 (2.5 years) gives an estimated rate of \$2.95 per 1,000 gallons. In accordance with the New York State Design Standards for Intermediate Sized Wastewater Treatment Systems, each house has an estimated flow rate of 330 gallons per day. For one year, the new flows would equal 240,900 gallons and the resulting additional cost to the district would be \$711.

The residents of 981 Grooms Road and 993 Grooms Road would also have to pay for the electricity cost of running grinder pumps – roughly \$60 per year per property, and annual outside user costs for the Town of Glenville (Alternatives #2A and #3A) and Saratoga County Sewer District (Alternatives #2B and #3B), which would add \$330 per property and \$265 per property, respectively.

Future capital improvements of the low-pressure sewer addition to the system would include replacement of the forcemain air release and cleanout valves and replacement/maintenance of the residential grinder pumps, same as the first two low-pressure sewer alternatives.

The capital costs of consolidating the two properties on Grooms Road with the existing Riverview Landing Sewer District would be allocated among the 40 properties in the existing district and the two Grooms Road properties based on property assessment value. The operations and maintenance costs would be allocated among the 37 occupied properties in the existing district and the two Grooms Road properties based on property assessment value.

The additional annual cost to a typical expanded district property owner, including the two newly included properties, for consolidating the two properties on Grooms Road with Alternative #1A would be \$804 (debt service) + \$113 (operations and maintenance) = \$917.

TOWN OF CLIFTON PARK RIVERVIEW LANDING WWTP STUDY

The additional annual cost to a typical expanded district property owner for consolidating the two properties on Grooms Road with Alternative #1B would be \$823 (debt service) + \$113 (operations and maintenance) = \$936.

The additional annual cost to a typical expanded district property owner for consolidating the two properties on Grooms Road with Alternative #1C would be \$825 (debt service) + \$158 (operations and maintenance) = \$983.

The additional annual cost to a typical expanded district property owner for consolidating the two properties on Grooms Road with Alternative #2A would be \$748 (debt service) + \$62 (sewer maintenance) + \$18 (City of Schenectady) + \$330 (Town of Glenville) = \$1,158.

The additional annual cost to a typical expanded district property owner for consolidating the two properties on Grooms Road with Alternatives #2B and #3B would be \$748 (debt service) + \$62 (sewer maintenance) + \$260 (Saratoga County) = \$1,070.

The additional annual cost to a typical expanded district property owner for consolidating the two properties on Grooms Road with Alternative #2C would be \$827 (debt service) + \$62 (sewer maintenance) + \$82 (WWTP maintenance) = \$971.

The additional annual cost to a typical expanded district property owner for consolidating the two properties on Grooms Road with Alternative #3A would be \$374 (debt service) + \$25 (sewer maintenance) + \$18 (City of Schenectady) + \$330 (Town of Glenville) = \$747.

The additional annual cost to a typical expanded district property owner for consolidating the two properties on Grooms Road with Alternative #3C would be \$453 (debt service) + \$25 (sewer maintenance) + \$82 (WWTP maintenance) = \$560.

At a minimum, the construction costs of consolidating the existing district with the two houses on Grooms Road that have had SPDES permits would need to be funded through grants to make consolidation feasible. If grant funding is not obtained, not consolidating will be cheaper for the current district residents because the cost savings of adding two houses will be less than the additional costs incurred.

3) Non-Monetary Factors: This option will not have any additional above grade structures to those previously listed in the main alternatives. The option to consolidate the two properties on Grooms Road with the Riverview Landing Sewer District would eliminate two additional SPDES discharges from the area. One potential challenge associated with system consolidation will be obtaining consent from the property owners on Grooms Road due to the increased costs they would likely incur (currently only paying \$330 for private SPDES and associated laboratory testing fees).

SECTION 3 – SUMMARY AND COMPARISON OF ALTERNATIVES

The alternatives to address the current issues at the Riverview Landing WWTP include the alternatives discussed in Section 3 above: rehabilitation of the existing WWTP, replacement of the existing WWTP with a packaged treatment system on the same lot, or sending flow to one of the neighboring sewer collection systems. Cost estimates for these alternatives are shown in Exhibit 10. The 30-year cost (present worth) of each alternative is provided in Exhibit 11. Costs to the typical property for each alternative are shown in Exhibit 12. These values are summarized in Table 1 on the following page for ease of comparison.

TOWN OF CLIFTON PARK RIVERVIEW LANDING WWTP STUDY

In addition to average costs to a typical property, the property owners requested property assessment value-based (Ad Valorem) individual estimates for annual costs for each property. These individual costs to each property for each alternative are shown in Exhibit 15.

TABLE #1

ALTERNATIVE	2021 Capital Costs	2022 30-Year Cost (Present Worth)	2022 Annual Cost / Property (Including Prior Debt)	2024 Annual Cost / Property (After Prior Debt Paid)
Alternative #1A Rehabilitation	\$1,264,400	\$2,286,800	\$3,010	\$2,749
Alternative #1B Orenco Plant	\$1,768,200	\$2,835,100	\$4,013	\$3,754
Alternative #1C Extended Aeration	\$1,559,600	\$3,183,800	\$4,188	\$3,961
Alternative #2A Pump Stations to Edison Club PS	\$1,567,500	\$2,706,600	\$3,786	\$3,511
Alternative #2B Pump Station to Windhover Farms	\$1,495,600	\$2,358,600	\$3,432	\$3,158
Alternative #2C Pump Station to MRCC WWTP	\$1,414,400	\$2,964,400	\$3,821	\$3,591
Alternative #3A Grinder Pumps to Edison Club PS	\$1,576,800	\$2,406,100	\$3,549	\$3,260
Alternative #3B Grinder Pumps to Windhover Farms	\$1,216,200	\$1,762,500	\$2,709	\$2,422
Alternative #3C Grinder Pumps to MRCC WWTP	\$1,286,100	\$2,500,200	\$3,402	\$3,159

**TOWN OF CLIFTON PARK
 RIVERVIEW LANDING WWTP STUDY**

TABLE #2

Alternative	Pros	Cons
1A. Rehabilitation of Existing WWTP	Least expensive treatment plant option Minimizes the need for additional infrastructure No easements required Lined replacement beds will reduce groundwater infiltration	Permits and O&M required High groundwater Plant requires expansion to meet current standards. Ongoing liability of treatment system
1B. Orenco Advantex Packaged WWTP	No easements required Newer technology than sand filter	High project cost Requires construction of building on site and electric utilities Permits required Higher O&M cost than 1A Ongoing liability of treatment system
1C. Extended Aeration Packaged WWTP	No easements required Newer technology than sand filter Proven treatment system with predictable effluent results	High project cost Requires construction of building on site and electric utilities Permits required Higher O&M cost than 1A & 1B Ongoing liability of treatment system
2A. Pump Station (PS) to Edison Club P.S.	Eliminates WWTP operation Can sell most of existing WWTP property No easements required	High sewer user fees (Glenville & Schenectady) Long length of forcemain Edison Club Pump station may need upgrades
2B. P.S. to Windhover Farms LPSS	Eliminates WWTP operation Can sell existing WWTP property Lower sewer user fees (CPSD & SCSD)	2 pump stations required due to flow and head conditions. Must acquire property or easements to build pump stations in optimum locations
2C. P.S. to MRCC WWTP	Can sell most of existing WWTP property No sewer user fees from another system. Shortest length of forcemain No easements required	Town must take over operation of existing WWTP and perform upgrades Ongoing liability of treatment system

TOWN OF CLIFTON PARK RIVERVIEW LANDING WWTP STUDY

TABLE #2

Alternative	Pros	Cons
3A. Low Pressure Sewer System (LPSS) to Edison Club P.S.	Town does not operate a WWTP Can sell existing WWTP property No easements required	High sewer user fees (Glenville & Schenectady) Long length of forcemain EC Pump Station may need upgrades
3B. LPSS to Windhover Farms LPSS <div style="border: 1px solid red; padding: 2px; display: inline-block; color: red;">not feasible</div>	Town does not operate a WWTP No easements required Can sell existing WWTP property Lower sewer user fees	Not feasible (pumps cannot overcome the total head) Longest length of forcemain
3C. LPSS to MRCC WWTP	Can sell existing WWTP property No sewer user fees from another system. Shortest length of forcemain No easements required	Town must take over operation of existing WWTP and perform upgrades Ongoing liability of treatment system

SECTION 4 – RECOMMENDED ALTERNATIVE

1) Basis of Selection & Cost Estimate: Alternative 2B, construction of two (2) pump stations and installation of forcemain piping to convey the wastewater from the Riverview Landing Sewer District to the Windhover Farms low pressure sewer system and then ultimately to the Saratoga County Sewer District No. 1 for treatment is the recommended alternative, even though it is not the least expensive alternative. While this option is only the fourth lowest of the eight feasible alternatives in terms of initial capital cost (estimated at \$1,495,600), it is the second most economical alternative over a 30-year planning period with an estimated 30-year present worth cost of \$2,358,600. Initially, this option is the third most cost-effective option on the basis of annual costs to property owners, with higher costs than rehabilitating the existing WWTP and using grinder pumps to pump wastewater to the MRCC WWTP. However, due to Option 2B's low O&M costs and correspondingly low O&M cost increases, this option will have lower annual costs than the grinder pumps to MRCC option during the latter half of the estimated 30-year service life. This option is preferred as it eliminates the only treatment plant that the Town operates and replaces it with two pump stations and forcemain piping. The Town Sewer District staff are trained to perform the operation and maintenance on these types of facilities already.

The most economical alternative based on initial construction costs and for 30 years of operation is to rehabilitate the existing WWTP (Alternate 1A). The initial capital cost is estimated at \$1,264,400, and a detailed breakdown of the costs can be found in Exhibit 10. This option, however, does not allow the Town to do away with the liability of operating a treatment plant and this is the only plant that the Town currently operates. The existing plant is too small based on current NYSDEC design standards and would have to be expanded, which is accounted for in the cost estimates. If treatment standards change in the future, there is not much space remaining at this site for an expansion or additional treatment units.

TOWN OF CLIFTON PARK RIVERVIEW LANDING WWTP STUDY

The second most economical alternative, at least initially, is to extend the low-pressure sewer system to the Mohawk River Country Club WWTP (Alternative 3C) at a cost of \$1,286,100. When the 30-year cost of this alternative is taken into account, it falls to fourth place due to the high annual operations and maintenance costs associated with an extended aeration wastewater treatment plant. The existing plant is situated in a precarious location adjacent to Riverview Road on the Mohawk River side, with barely enough room for the necessary expansion to accommodate the Riverview Landing flows. Future expansion at this location will be almost impossible. This option would also require the Town to reach an agreement with the current plant owner to take over ownership and operations. This report assumes that there would be no cost to the Town for this, as most private sewer facility owners are pleased to be relieved of this liability.

A table showing the short-lived assets for the selected alternative can be found in Exhibit 16.

A list of questions from Riverview Landing Sewer District property owners and responses from Clifton Park and PRIME AE can be found in Exhibit 17.

The Engineering Report Certification can be found in Exhibit 18.

The Smart Growth Assessment form for this project has been completed and is in Exhibit 19.

2) Next Steps:

Community Engagement: a public information session was held on November 19, 2020 to review the aforementioned alternatives for improving the Riverview Landing Treatment Plant. More public information sessions are tentatively planned for the spring or summer to allow the community to provide additional feedback on their preferences and to inform them on the grant funding application and construction processes.

SEQR Review: A SEQR review is planned for the preliminary phase of the design process. This review will include all locations where the existing system will be altered and new locations of piping, pump stations, and other sewer system features.

3) Project Schedule:

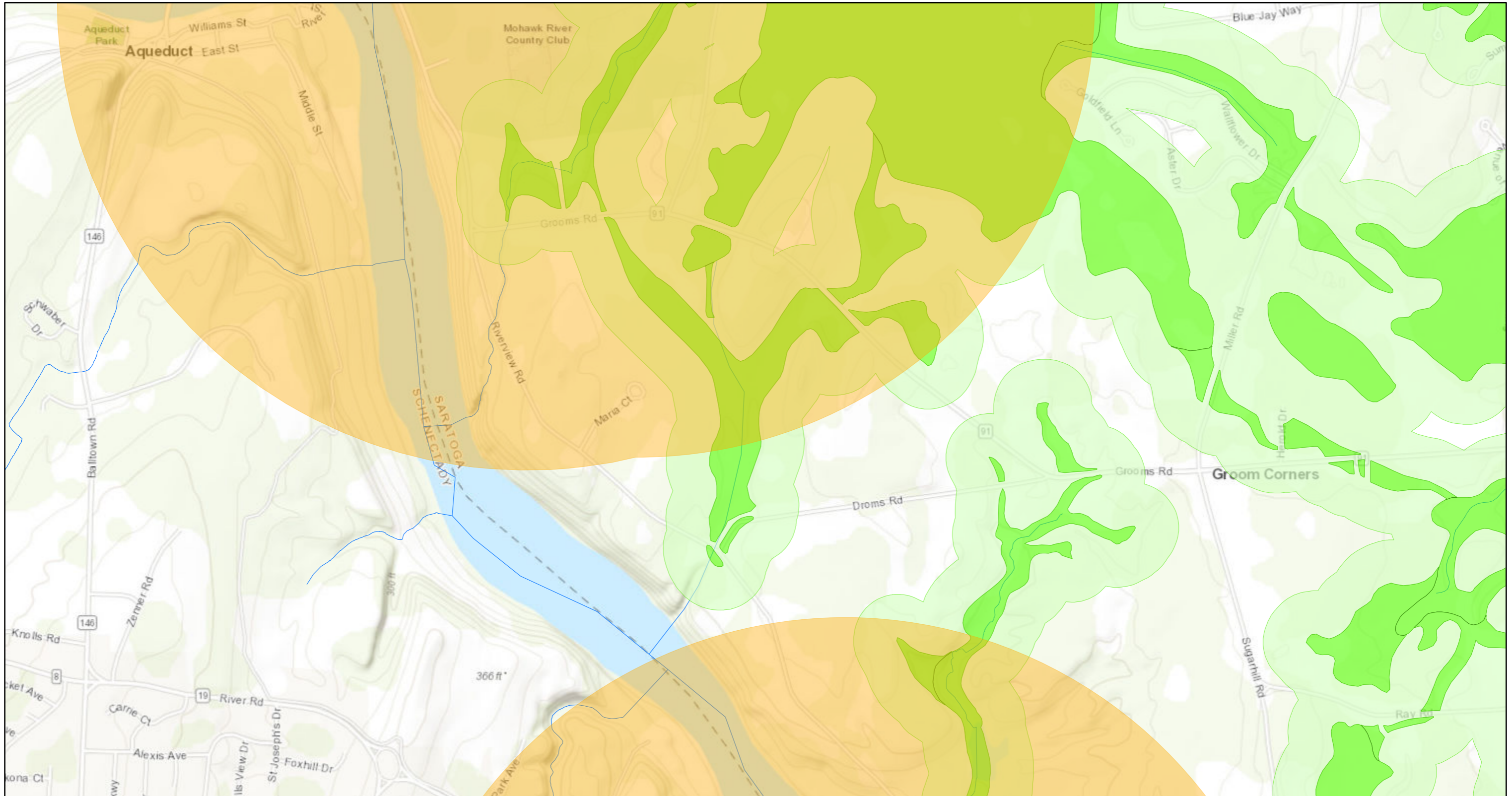
The following schedule is proposed based on a CWSRF Short-term Loan closing in September 2021:

Date	Action
January 2022	Design plans and specifications complete
February 2022	Plans and specifications submitted to Town & NYSDEC for review
March 2022	Town authorizes legal Notice to Bid
April 2022	Bids are opened by the Town Clerk
May 2022	Town awards bid to the low bidder
June 2022	Construction begins
November 2022	Construction substantially complete



EXHIBIT 1
NYSDEC ENVIRONMENTAL RESOURCES MAP

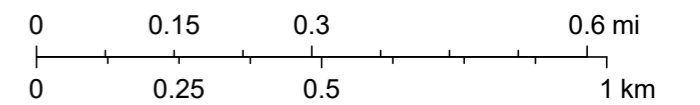
Riverview Landing Sewer District



February 15, 2021

Beige shading is vicinity of endangered or threatened animals.
Dark green shading is state regulated freshwater wetlands.
Light green shading is the regulated freshwater wetlands checkzone.

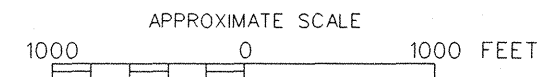
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Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



EXHIBIT 2
FEMA FLOOD INSURANCE RATE MAP



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
 FLOOD INSURANCE RATE MAP
**SARATOGA COUNTY,
 NEW YORK**
(ALL JURISDICTIONS)

PANEL 655 OF 693
 (SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CLIFTON PARK, TOWN OF	3607B	0655	E

Notice to User: The MAP NUMBER shown below should be used when placing map orders; the COMMUNITY NUMBER shown above should be used on insurance applications for the subject community.

MAP NUMBER
 36091C0655 E

EFFECTIVE DATE :
 AUGUST 16, 1995



Federal Emergency Management Agency

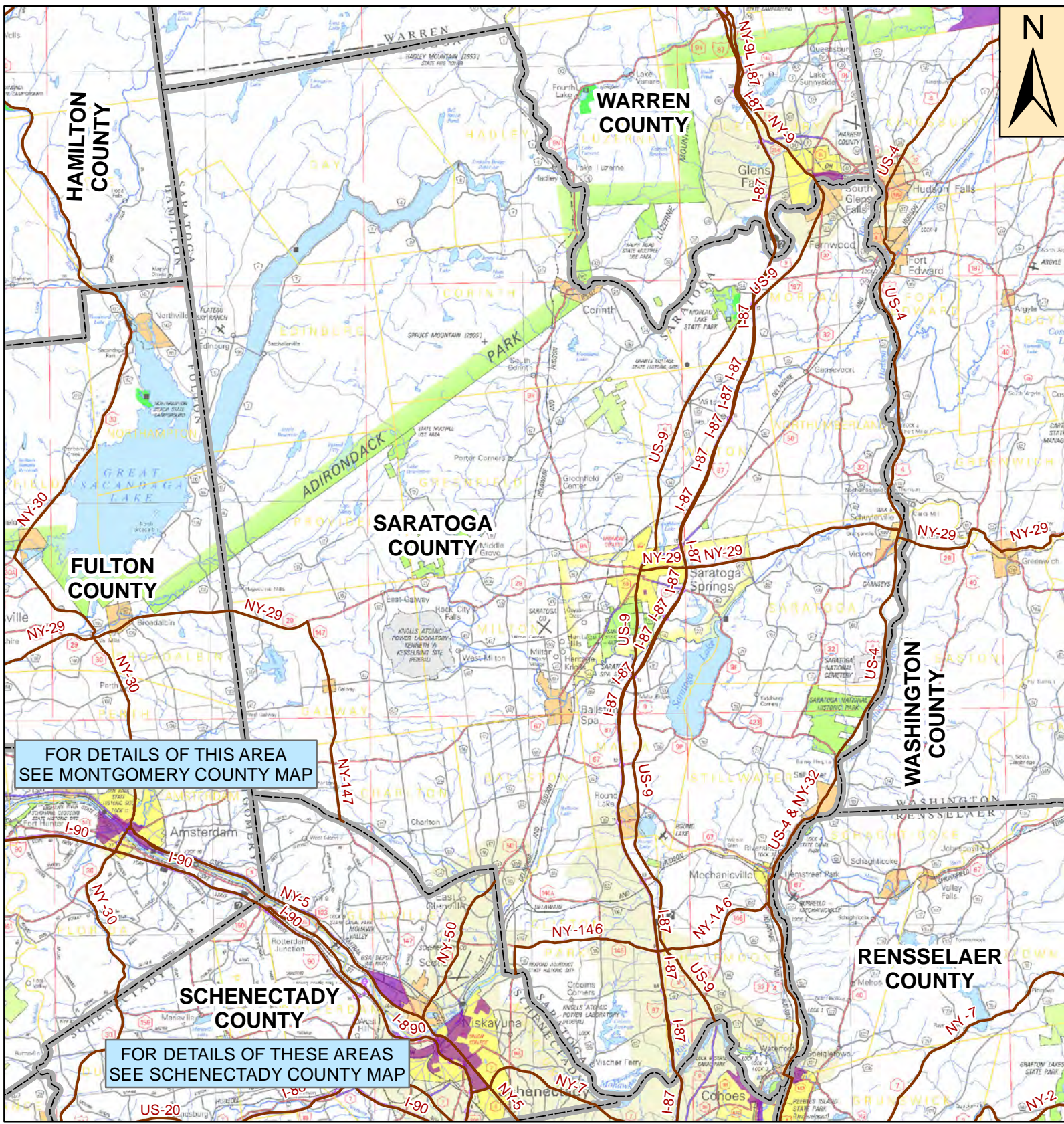
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



EXHIBIT 3
NYSDEC ENVIRONMENTAL JUSTICE MAP, SARATOGA COUNTY

Potential Environmental Justice Areas in Saratoga County, New York

Click on the Potential EJ Area outlined in blue for a detailed map



FOR DETAILS OF THIS AREA SEE MONTGOMERY COUNTY MAP

FOR DETAILS OF THESE AREAS SEE SCHENECTADY COUNTY MAP

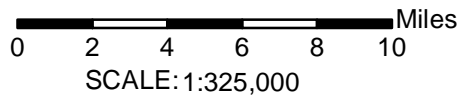
This computer representation has been compiled from supplied data or information that has not been verified by EPA or NYSDEC. The data is offered here as a general representation only and is not to be used for commercial purposes without verification by an independent professional qualified to verify such data or information.

Neither EPA nor NYSDEC guarantee the accuracy, completeness, or timeliness of the information shown and shall not be liable for any loss or injury resulting from reliance.

Data Source for Potential Environmental Justice Areas: U.S. Census Bureau, 2000 U.S. Census

Legend

- Potential EJ Area
- County Boundary



For questions about this map contact:
 New York State Department of Environmental Conservation
 Office of Environmental Justice
 625 Broadway, 14th Floor
 Albany, New York 12233-1500
 (518) 402-8556
 ej@gw.dec.state.ny.us





EXHIBIT 4
EDU LIST

**Town of Clifton Park
Riverview Landing Sewer District
Exhibit 4 - EDU List**

PARCEL ID	PROP ADDRESS	OWNER1	PRP_CLS_CO	PROP_CLASS	EDUs
					EDUs
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	210	1 Family Res	1
275.-1-47	778 Riverview Road	Louise Straney	314	Rural Vac<10	V
275.-1-50	752 Riverview Road	Paula Gargiulo	210	1 Family Res	1
275.-1-51	730 Riverview Road	Robert and Angela Chichester	210	1 Family Res	1
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	210	1 Family Res	1
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	210	1 Family Res	1
275.-1-54	720 Riverview Road	Amy and John Goodell Vanslyke	210	1 Family Res	1
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	210	1 Family Res	1
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	210	1 Family Res	1
275.-1-57	712 Riverview Road	Donald and Georgia Desimone	210	1 Family Res	1
275.-1-63	Riverview Road	C & C Lending	314	1 Family Res	1
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	210	1 Family Res	1
275.-1-65	771 Riverview Road	Inivas R. Sr. & S. Mitta	210	1 Family Res	1
275.-1-66	2 Maria Court	R. Moran and S. Nikravan	210	1 Family Res	1
275.-1-67	4 Maria Court	Anita Dematteo	210	1 Family Res	1
275.-1-68	8 Maria Court	Mark and Eileen Kassner	210	1 Family Res	1
275.-1-69	6 Maria Court	Michael L and Susan M Burke	210	1 Family Res	1
275.-1-70	10 Maria Court	Louise Straney	314	Rural Vac<10	V
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	210	1 Family Res	1
275.-1-72	14 Maria Court	James Chen	210	1 Family Res	1
275.-1-73	Maria Court	Louise Straney	314	Rural Vac<10	V
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	210	1 Family Res	1
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	210	1 Family Res	1
275.-1-76	11 Maria Court	Joanne de Oliveira	210	1 Family Res	1
275.-1-77	9 Maria Court	Christine and Kevin Petronis	210	1 Family Res	1
275.-1-78	5 Maria Court	Scott S and Catherine W Pollard	210	1 Family Res	1
275.-1-79	7 Maria Court	Jack and Judith Dodd	210	1 Family Res	1
275.-1-80.1	735 Riverview Road	Beverly and Richard P Messmer	210	1 Family Res	1
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	210	1 Family Res	1
275.-1-83	733 Riverview Road	Robert and Donna Drum	210	1 Family Res	1
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	210	1 Family Res	1
275.-1-85	713 Riverview Road	Robert P Weiss	210	1 Family Res	1
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	210	1 Family Res	1
275.-1-87	785 Riverview Road	B. Carucci and S. Miller	210	1 Family Res	1
275.-1-91	758 Riverview Road	Margaret Dunster	210	1 Family Res	1
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	210	1 Family Res	1
275.-1-101	708 Riverview Road	Power Angels LLC	250	Estate	3
275.-1-102	1 Maria Court	Christopher J Marsh	210	1 Family Res	1
276.-1-44.1	703 Riverview Road	Robert R. Abbatiello	210	1 Family Res	1
276.-1-44.2	701 Riverview Road	Anthony and Natalie Caruso	210	1 Family Res	1
				Total Residential:	39
				Total Vacant:	3
				Total Debt Units:	40.5
V - Vacant Lot (0.5 Sewer Units)					



EXHIBIT 5
SPDES PERMIT

New York State Department of Environmental Conservation

Division of Environmental Permits, Region 5

232 Golf Course Road, Warrensburg, New York 12885

Phone: (518) 623-1281 • FAX: (518) 623-3603

Website: www.dec.ny.gov



Joe Martens
Commissioner

December 13, 2013

Michael O'Brien
Collection Systems Manager
Town of Clifton Park
One Town Hall Plaza
Clifton Park, NY 12065

RE: Riverview Landing Wastewater Treatment Plant
Town of Clifton Park, Saratoga County
DEC Permit #5-4124-00051/00003 SPDES #NY-0131768

Dear Mr. O'Brien:

Enclosed is the final State Pollutant Discharge Elimination System (SPDES) permit modification and renewal for the above facility. This permit has been modified and renewed under the Environmental Benefit Permit Strategy. No comments were received on the draft permit modification.

If you have questions regarding the terms and conditions of the permit, please contact Robert Streeter of our Division of Water at 623-1221. Thank you.

Sincerely,

Marc S. Migliore
Regional Permit Administrator

Enclosure

- c: Robert Streeter, Division of Water
Michael Shaw, NYS DOH - Glens Falls
- ec: William Lupo, Regional Water Engineer
Cheri Jamison, Bureau of Water Permits: Permit Coordinator - Albany
Michelle Josilo, EPA - Region 2
Douglas Cole, PE - McDonald Engineering, PC

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT



Industrial Code:	8999	SPDES Number:	NY0131768
Discharge Class (CL):	07	DEC Number:	5-4124-00051/00003
Toxic Class (TX):	N	Effective Date (EDP):	January 1, 2014
Major Drainage Basin:	12	Expiration Date (ExDP):	December 31, 2018
Sub Drainage Basin:	01	Modification Dates: (EDPM)	
Water Index Number:	240-19		
Compact Area:			

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name:	Town of Clifton Park	Attention:	Michael O'Brien, SD#1 Facilities Supervisor
Street:	1 Town Hall Plaza		
City:	Clifton Park	State:	New York
		Zip Code:	12065

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name:	Riverview Landing STP		
Location (C,T,V):	Clifton Park (T)	County:	Saratoga
Facility Address:	Riverview Road		
City:	Clifton Park	State:	NY
		Zip Code:	12065
From Outfall No.:	001	at Latitude:	42 ° 50 ' 45 " & Longitude: 73 ° 52 ' 31 "
into receiving waters known as:	Unnamed trib to Mohawk River		Class: C

and (list other Outfalls, Receiving Waters & Water Classifications)

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1and 750-2.

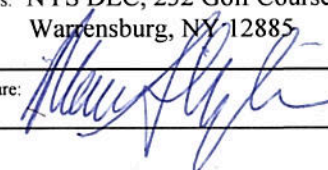
DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name:	McDonald Engineering, P.C.		
Street:	7 South Church Street		
City:	Schenectady	State:	New York
		Zip Code:	12305
Responsible Official or Agent:	John M. McDonald, President	Phone:	518-382-1774

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

CO BWP - Permit Coordinator
RWE
RPA
Region2_NPDES@epa.gov (surface water only & no Class 02 or 04)
NYSEFC (Class 05 & 07 only)

Permit Administrator:	Marc S. Migliore
Address:	NYS DEC, 232 Golf Course Road Warrensburg, NY 12885
Signature:	
Date:	12/13/2013

PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.	See below	See below

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL	COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based limits, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the permittee shall use the approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters present in the sample unless otherwise specified. If a sample result is below the detection limit of the most sensitive method, compliance with the permit limit for that parameter was achieved. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This PQL can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, which trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, temperature, or concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly. All monitoring periods (quarterly, semiannual, annual, etc) are based upon the calendar year unless otherwise specified in this Permit.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Notes:

1. EFFLUENT LIMIT TYPES:

- a. **DAILY DISCHARGE:** The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
- b. **DAILY MAX.:** The highest allowable daily discharge. **DAILY MIN.:** The lowest allowable daily discharge.
- c. **MONTHLY AVG:** The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- d. **7 DAY ARITHMETIC MEAN (7 day average):** The highest allowable average of daily discharges over a calendar week.
- e. **30 DAY GEOMETRIC MEAN:** The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- f. **7 DAY GEOMETRIC MEAN:** The highest allowable geometric mean of daily discharges over a calendar week.
- g. **RANGE:** The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.

- 2. ACTION LEVELS:** Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All Year	Unnamed trib to Mohawk River	January 1, 2014	December 31, 2018

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	0.008	mgd			1/month	Estimate		X	
Flow	Daily Maximum	0.0147	mgd			1/month	Estimate		X	
BOD ₅	Monthly Average	30	mg/l	3.7	lbs/d	2/year	Grab	X	X	(1)
BOD ₅	7-Day Average	45	mg/l	5.5	lbs/d	2/year	Grab		X	
Solids, Suspended	Monthly Average	30	mg/l	3.7	lbs/d	2/year	Grab	X	X	(1)
Solids, Suspended	7-Day Average	45	mg/l	5.5	lbs/d	2/year	Grab		X	
Solids, Settleable	Daily Maximum	0.1	ml/l			1/month	Grab		X	
pH	Range	6.5-8.5	SU			1/month	Grab		X	
Nitrogen, Ammonia (as NH ₃) June 1- October 31	Monthly Average	14	mg/l			2/year	Grab		X	
Nitrogen, Ammonia (as NH ₃) November 1- May 31	Monthly Average	21	mg/l			2/year	Grab		X	
Effluent Disinfection required		[X] All Year		[] Seasonal from _____ to _____						
Coliform, Fecal	30-Day Geometric Mean	200	No./100 ml				Grab		X	
Coliform, Fecal	7 Day Geometric Mean	400	No./100 ml				Grab		X	
Chlorine, Total Residual	Daily Maximum	2.0	mg/l				Grab		X	

FOOTNOTES:

(1) and effluent shall not exceed 15 % and 15 % of influent concentration values for BOD₅ & TSS respectively.

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:

Influent sample to be collected at last manhole before septic tank (MH1).

Effluent sample to be collected at Outfall.

DISCHARGE NOTIFICATION REQUIREMENTS

- (a) Except as provided in (c) and (g) of these Discharge Notification Act requirements, the permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit. Such signs shall be installed before initiation of any discharge.
- (b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.
- (c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.
- (d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:

<p>N.Y.S. PERMITTED DISCHARGE POINT</p> <p>SPDES PERMIT No.: NY _____</p> <p>OUTFALL No. : _____</p> <p>For information about this permitted discharge contact:</p> <p>Permittee Name: _____</p> <p>Permittee Contact: _____</p> <p>Permittee Phone: () - ### - ####</p> <p>OR:</p> <p>NYSDEC Division of Water Regional Office Address :</p> <p>NYSDEC Division of Water Regional Phone: () - ### - ####</p>
--

- (e) For each discharge required to have a sign in accordance with a), the permittee shall, concurrent with the installation of the sign, provide a repository of copies of the Discharge Monitoring Reports (DMRs), as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of this permit. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of your permit, each DMR shall be maintained on record for a period of five years
- (f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

DISCHARGE NOTIFICATION REQUIREMENTS (continued)

- (g) All requirements of the Discharge Notification Act, including public repository requirements, are waived for any outfall meeting any of the following circumstances, provided Department notification is made in accordance with (h) below:
- (i) such sign would be inconsistent with any other state or federal statute;
 - (ii) the Discharge Notification Requirements contained herein would require that such sign could only be located in an area that is damaged by ice or flooding due to a one-year storm or storms of less severity;
 - (iii) instances in which the outfall to the receiving water is located on private or government property which is restricted to the public through fencing, patrolling, or other control mechanisms. Property which is posted only, without additional control mechanisms, does not qualify for this provision;
 - (iv) instances where the outfall pipe or channel discharges to another outfall pipe or channel, before discharge to a receiving water; or
 - (v) instances in which the discharge from the outfall is located in the receiving water, two-hundred or more feet from the shoreline of the receiving water.
- (h) If the permittee believes that any outfall which discharges wastewater from the permitted facility meets any of the waiver criteria listed in (g) above, notification (form enclosed) must be made to the Department's Bureau of Water Permits, Central Office, of such fact, and, provided there is no objection by the Department, a sign and DMR repository for the involved outfall(s) are not required. This notification must include the facility's name, address, telephone number, contact, permit number, outfall number(s), and reason why such outfall(s) is waived from the requirements of discharge notification. The Department may evaluate the applicability of a waiver at any time, and take appropriate measures to assure that the ECL and associated regulations are complied with.

GENERAL REQUIREMENTS

- A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through G as follows:.
- B. General Conditions
- | | |
|--|---|
| 1. Duty to comply | 6NYCRR Part 750-2.1(e) & 2.4 |
| 2. Duty to reapply | 6NYCRR Part 750-1.16(a) |
| 3. Need to halt or reduce activity not a defense | 6NYCRR Part 750-2.1(g) |
| 4. Duty to mitigate | 6NYCRR Part 750-2.7(f) |
| 5. Permit actions | 6NYCRR Part 750-1.1(c), 1.18, 1.20 & 2.1(h) |
| 6. Property rights | 6NYCRR Part 750-2.2(b) |
| 7. Duty to provide information | 6NYCRR Part 750-2.1(i) |
| 8. Inspection and entry | 6NYCRR Part 750-2.1(a) & 2.3 |
- C. Operation and Maintenance
- | | |
|-----------------------------------|--|
| 1. Proper Operation & Maintenance | 6NYCRR Part 750-2.8 |
| 2. Bypass | 6NYCRR Part 750-1.2(a)(17), 2.8(b) & 2.7 |
| 3. Upset | 6NYCRR Part 750-1.2(a)(94) & 2.8(c) |
- D. Monitoring and Records
- | | |
|---------------------------|---|
| 1. Monitoring and records | 6NYCRR Part 750-2.5(a)(2), 2.5(c)(1), 2.5(c)(2), 2.5(d) & 2.5(a)(6) |
| 2. Signatory requirements | 6NYCRR Part 750-1.8 & 2.5(b) |
- E. Reporting Requirements
- | | |
|--|--------------------------------------|
| 1. Reporting requirements | 6NYCRR Part 750-2.5, 2.6, 2.7 & 1.17 |
| 2. Anticipated noncompliance | 6NYCRR Part 750-2.7(a) |
| 3. Transfers | 6NYCRR Part 750-1.17 |
| 4. Monitoring reports | 6NYCRR Part 750-2.5(e) |
| 5. Compliance schedules | 6NYCRR Part 750-1.14(d) |
| 6. 24-hour reporting | 6NYCRR Part 750-2.7(c) & (d) |
| 7. Other noncompliance | 6NYCRR Part 750-2.7(e) |
| 8. Other information | 6NYCRR Part 750-2.1(f) |
| 9. Additional conditions applicable to a POTW | 6NYCRR Part 750-2.9 |
| 10. Special reporting requirements for discharges that are not POTWs | 6NYCRR Part 750-2.6 |
- F. Planned Changes
- The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - The alteration or addition to the permitted facility may meet of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
 - The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or
 - The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such

alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

In addition to the Department, the permittee shall submit a copy of this notice to the United States Environmental Protection Agency at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

GENERAL REQUIREMENTS continued

G. Notification Requirement for POTWs

1. All POTWs shall provide adequate notice to the Department and the USEPA of the following:
 - a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; or
 - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - c. For the purposes of this paragraph, adequate notice shall include information on:
 - i. the quality and quantity of effluent introduced into the POTW, and
 - ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, at the following address:

U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- A. The monitoring information required by this permit shall be summarized, signed and retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**

(if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each 6 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

(if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.

(if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:
 Regional Water Engineer County Health Department or Environmental Control Agency
and/or specified below

Send the **original** (top sheet) of each DMR page to:
Department of Environmental Conservation
Division of Water, Bureau of Water Compliance
625 Broadway, Albany, New York 12233-3506
Phone: (518) 402-8177

Send the **first copy** (second sheet) of each DMR page to:
Department of Environmental Conservation
Regional Water Engineer, Region 5
232 Golf Course Road
Warrensburg, NY 12885
Phone (518) 623-1200

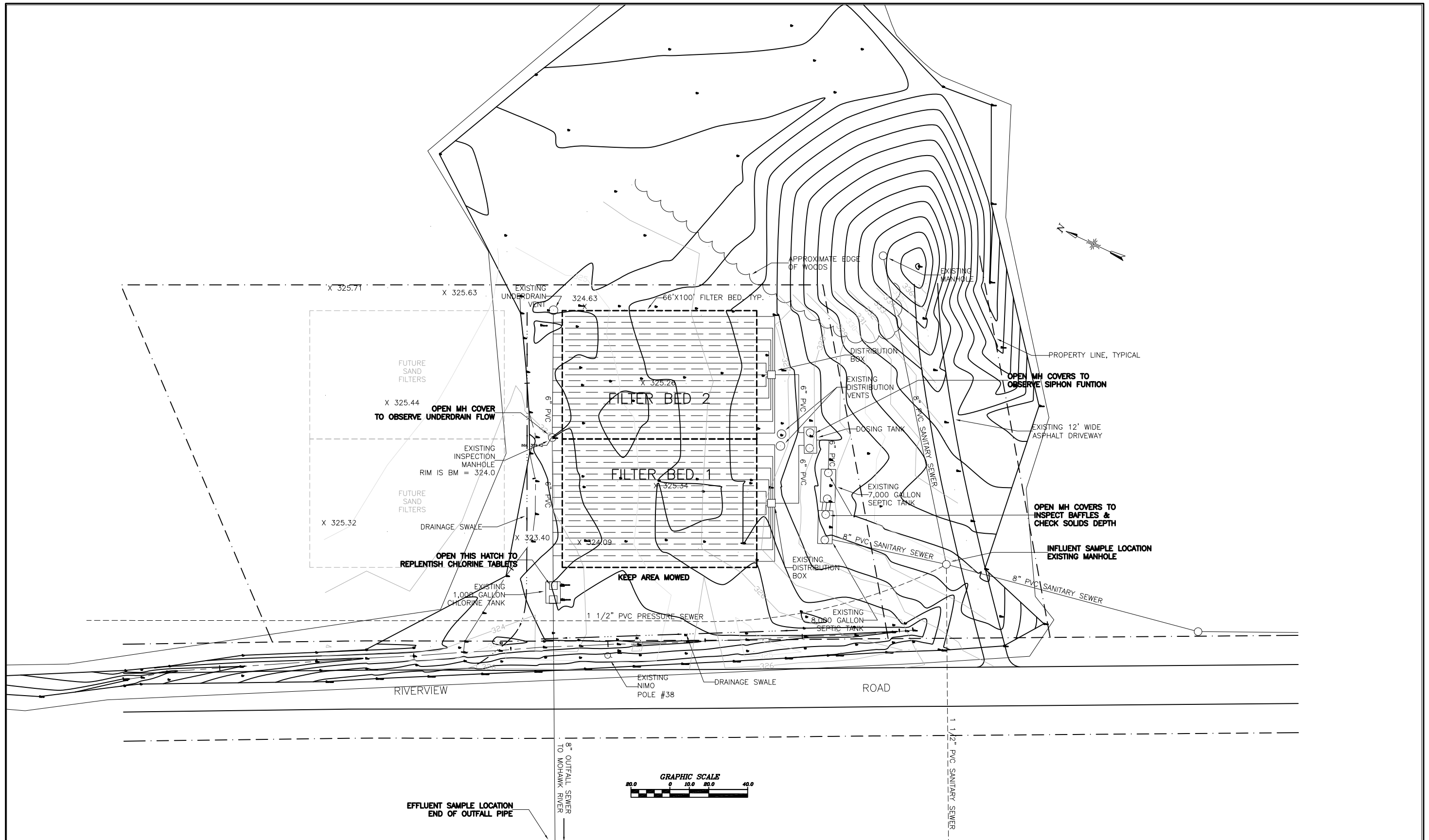
Send an **additional copy** of each DMR page to:

- B. Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- C. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.


- D. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- E. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- F. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.



EXHIBIT 6
EXISTING WWTP SITE PLAN & COLLECTION SYSTEM MAP



NO.	DATE	REVISION	BY
00	1/2002	ORIGINAL ISSUE	JDT
01	01/2019	REVISED ISSUE	MAL
02	02/2021	2021 ISSUE	MAL



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PROJ. ENGR.: DPC	DRAWN BY: JDT	CHECKED BY:
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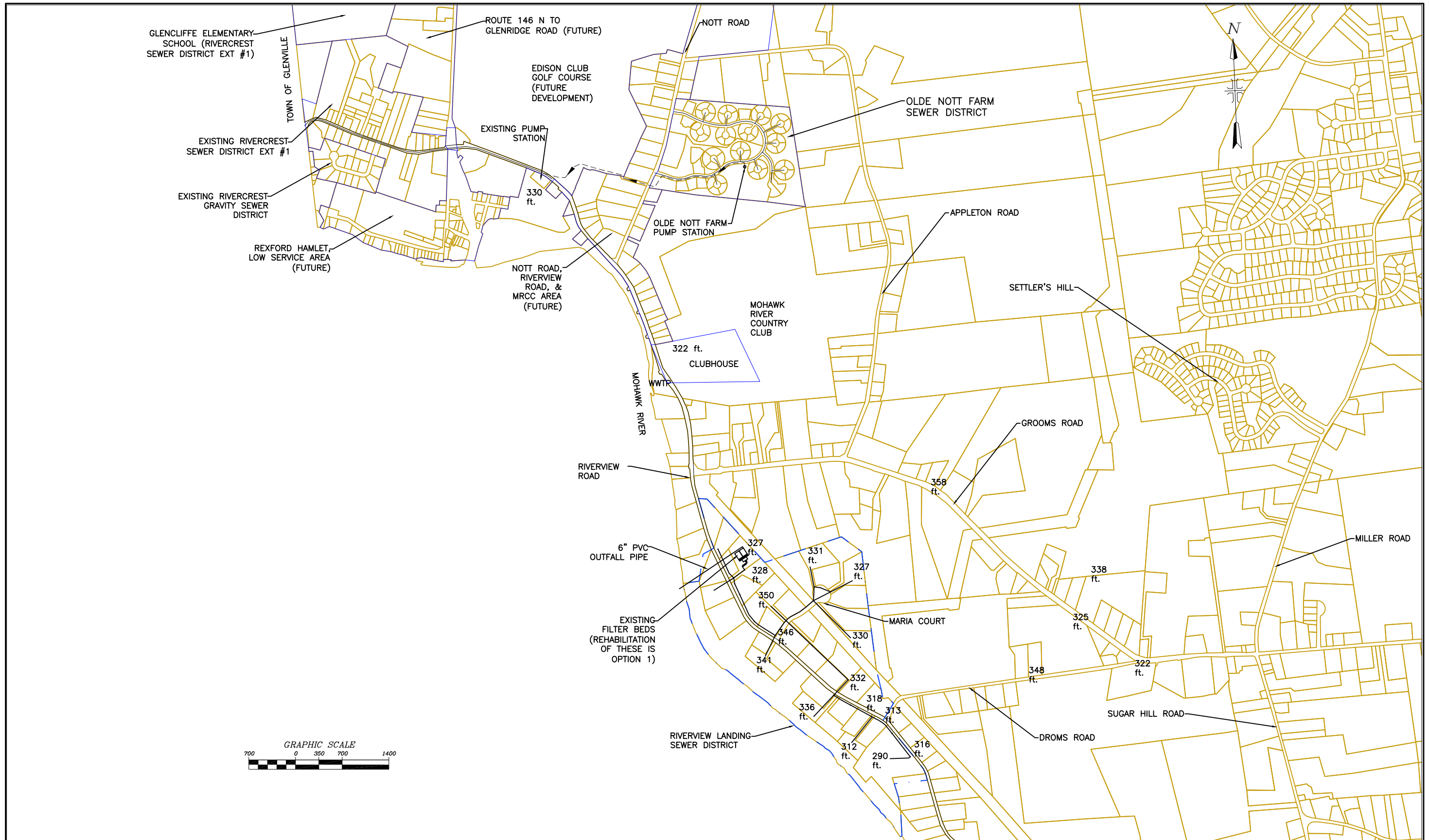
TOWN OF CLIFTON PARK
 SARATOGA COUNTY

RIVERVIEW WWTP STUDY


SHEET TITLE:

EXISTING TREATMENT PLANT SITE PLAN

SCALE: AS SHOWN	6A
FILE NO.: 04-9101-P4-000	
DATE: FEBRUARY 2021	



NO.	DATE	REVISION	BY
00	01/2019	ORIGINAL ISSUE	JRS
01	02/2021	2021 ISSUE	JRS


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TOWN OF CLIFTON PARK
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RIVERVIEW LANDING WWTP STUDY

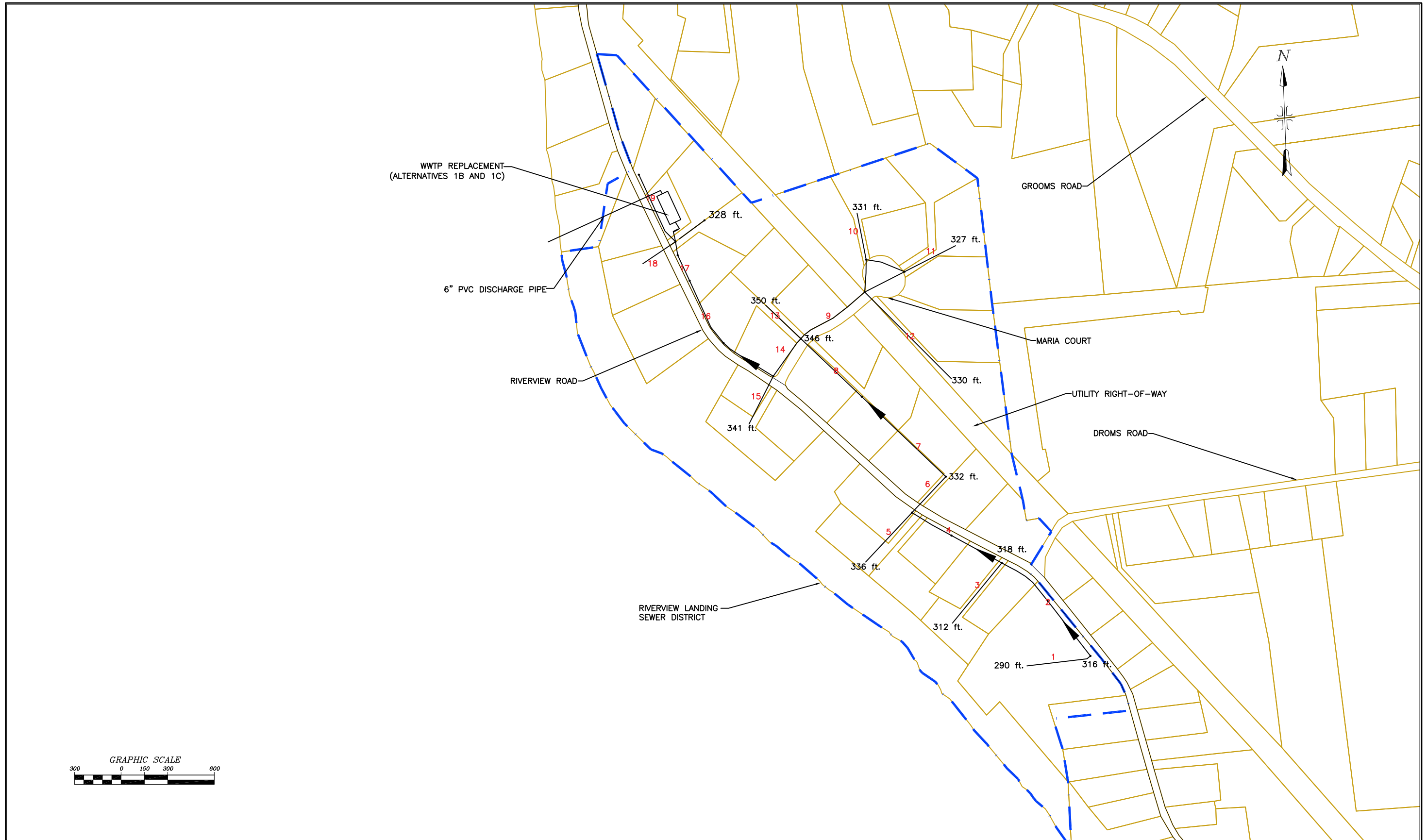
SHEET TITLE:
REHABILITATION (ALTERNATIVE 1A)

SCALE:
 AS SHOWN

FILE NO.:
 04-9101-P4-010

DATE:
 FEBRUARY 2021

SHEET NO.:
6B



NO.	DATE	REVISION	BY
00	01/2019	ORIGINAL ISSUE	JRS
01	02/2021	2021 ISSUE	JRS


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TOWN OF CLIFTON PARK
 SARATOGA COUNTY

RIVERVIEW LANDING WWTP STUDY

SHEET TITLE:
PROPOSED WASTEWATER TREATMENT REPLACEMENT PLANT (ALTERNATIVES 1B AND 1C)

SCALE:	AS SHOWN	SHEET NO.:	6C
FILE NO.:	04-9101-P4-020		
DATE:	FEBRUARY 2021		



EXHIBIT 7
WWTP DATA

Exhibit 7
Riverview Landing WWTP Data

Riverview Landing Wastewater Treatment Plant Influent Data																			
Parameter	Year	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	Avg.	Max	Min
TSS (mg/l)		1580	1445	319.5	1630	956	3047.5	5575	1910	1100.7	370	1023.65	406.5	354.5	1594	96	1427	5575	96
BOD (mg/l)		1040	2115	787.5	1460	677	1525	1246.5	1770	892	341.5	451	304	341.5	370	219.5	903	2115	220
Flow (gpd)		4834	6548	5400	6120	7155	6390	6975	7200	8235	8010	8100	7265	6975	6840	9180	7015	9180	4834



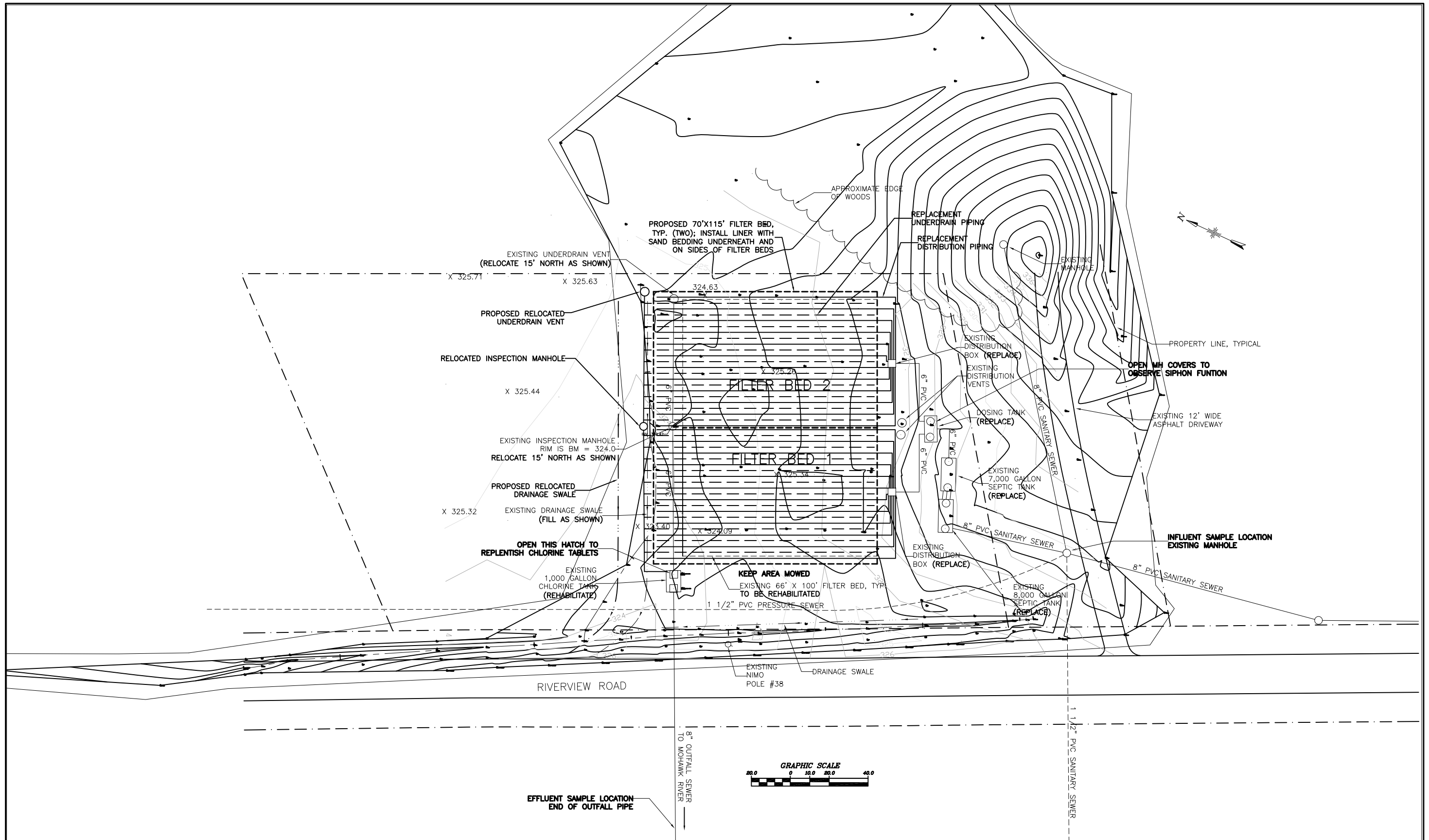
EXHIBIT 8
COMPTROLLER'S BUDGET FOR RIVERVIEW LANDING
SEWER DISTRICT

**TOWN OF CLIFTON PARK
2021 BUDGET
RIVERVIEW LANDING SEWER DISTRICT**

ACCOUNT NUMBER	ACCOUNT NAME	ACTUAL 2018	ACTUAL 2019	ADOPTED 2020	PROJECTED 2020	TENTATIVE 2021	PRELIM 2021	ADOPTED 2021
G3-8110-E4000	Sewer Operator (PT)	0	6,500	14,000	0	0	0	0
Total Salary		0	6,500	14,000	0	0	0	0
G3-9030-101	FICA	0	403	0	0	0	0	0
G3-9035-102	Medicare	0	94	0	0	0	0	0
Total Benefits		0	497	0	0	0	0	0
G3-8111-015	OUTSIDE CONTRACTUAL	13,010	173	500	0	500	500	500
G3-8111-024	MAINTENANCE	6,807	5,176	7,000	4,000	8,873	8,873	8,873
G3-8111-007	DUES & SUBSCRIPTIONS	0	575	0	0	0	0	0
G3-8111-135	ENGINEERING	9,472	499	0	0	6,624	6,624	6,624
TOTAL CONTRACTUAL		29,289	6,423	7,500	4,000	15,997	15,997	15,997
G3-8111-200	EQUIPMENT	0	0	0	0	0	0	0
TOTAL EQUIPMENT		0	0	0	0	0	0	0
G3-9710-124	DEBT PRINCIPAL	9,000	11,250	11,250	11,250	11,250	11,250	11,250
G3-9710-125	INTEREST	1,234	1,031	806	806	582	582	582
TOTAL DEBT EXPENDITURES		10,234	12,281	12,056	12,056	11,832	11,832	11,832
DISTRICT TOTAL		39,523	25,701	33,556	16,056	27,829	27,829	27,829
G3-0960	ASSIGNED FUND BAL	0	0	5,503	0	0	0	0
G3-2401	INVESTMENT INTEREST	0	0	0	0	0	0	0
G3-1001	TAX LEVY OPERATION	17,953	15,906	15,997	15,997	15,997	15,997	15,997
G3-1001	TAX LEVY	10,234	12,281	12,056	12,056	11,832	11,832	11,832
TOTAL REVENUES		28,187	28,187	33,556	28,053	27,829	27,829	27,829



EXHIBIT 9
SITE PLANS FOR EACH ALTERNATIVE



NO.	DATE	REVISION	BY
00	1/2002	ORIGINAL ISSUE	JDT
01	01/2019	REVISED ISSUE	MAL
02	02/2021	2021 ISSUE	JRS

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TOWN OF CLIFTON PARK
 SARATOGA COUNTY

RIVERVIEW WWTP STUDY

SHEET TITLE:

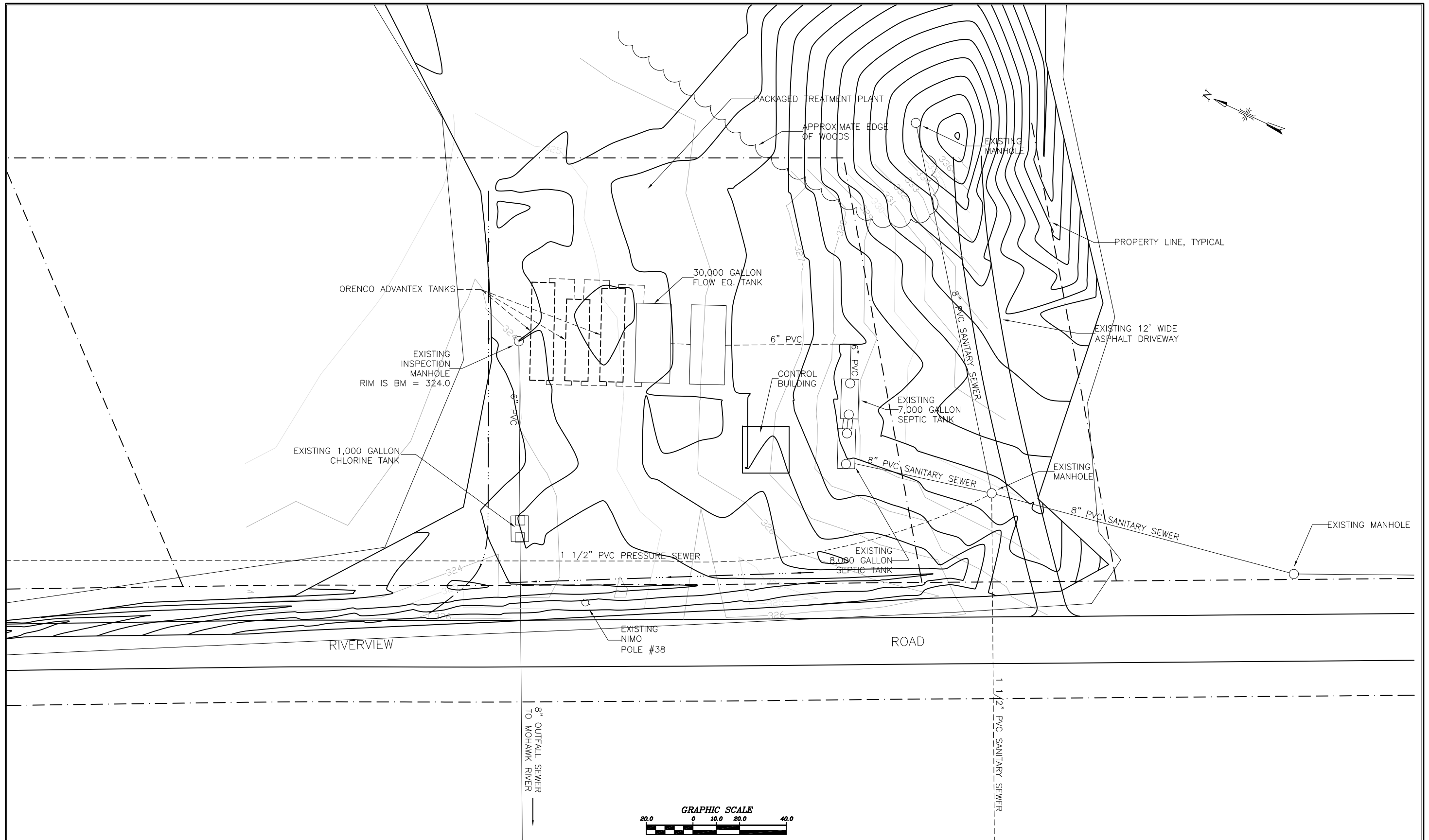
FILTER BED REHABILITATION OPTION 1A

SCALE: AS SHOWN

FILE NO.: 04-9101-P4-000

DATE: FEBRUARY 2021

SHEET NO.: **9A**



NO.	DATE	REVISION	BY
00	1/2002	ORIGINAL ISSUE	JDT
01	01/2019	REVISED ISSUE	JRS
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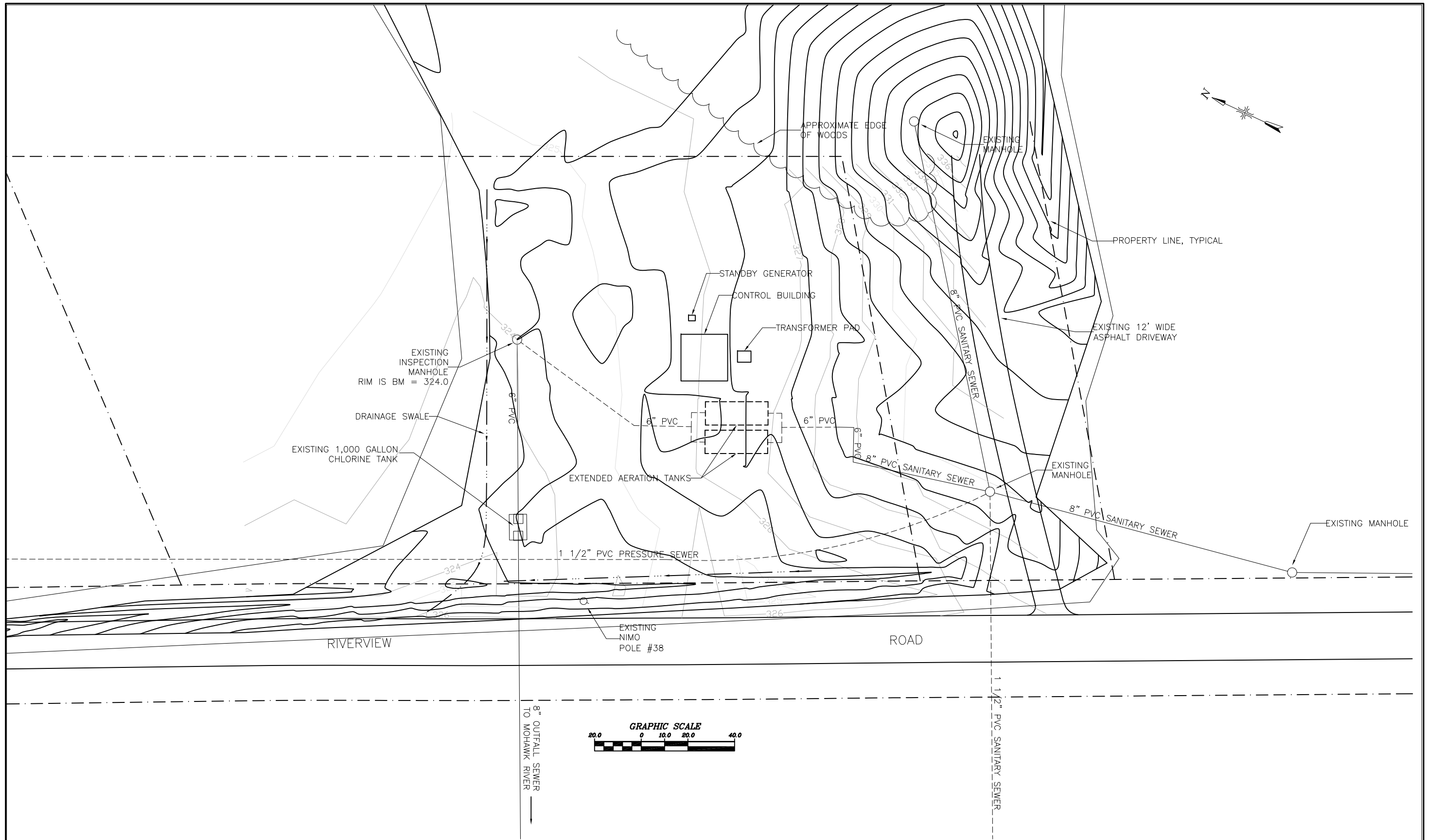
TOWN OF CLIFTON PARK
 SARATOGA COUNTY

RIVERVIEW WWTP STUDY


SHEET TITLE:

**ORENCO ADVANTEX
 TREATMENT PLANT SITE
 PLAN (ALTERNATIVE 1B)**

SCALE: AS SHOWN	SHEET NO.: 9B
FILE NO.: 04-9101-P4-010	
DATE: FEBRUARY 2021	



NO.	DATE	REVISION	BY
00	1/2002	ORIGINAL ISSUE	JDT
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02	02/2021	2021 ISSUE	JRS


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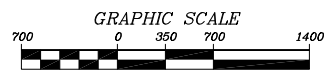
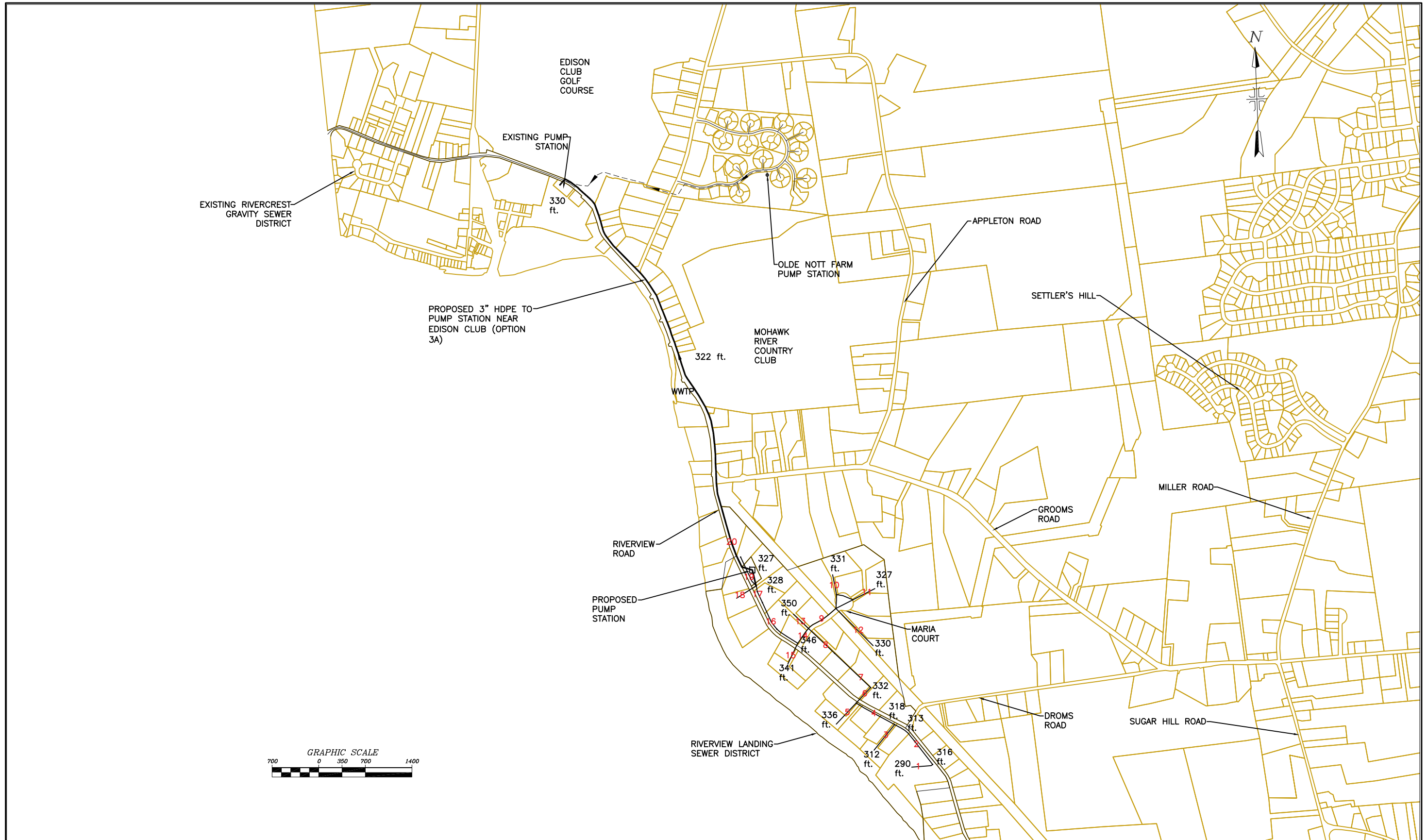
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TOWN OF CLIFTON PARK
 SARATOGA COUNTY

RIVERVIEW WWTP STUDY

SHEET TITLE:
**EXTENDED AERATION
 TREATMENT PLANT SITE
 PLAN (ALTERNATIVE 1C)**

SCALE: AS SHOWN	9C
FILE NO.: 04-9101-P4-020	
DATE: FEBRUARY 2021	



NO.	DATE	REVISION	BY
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01	02/2021	2021 ISSUE	JRS

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TOWN OF CLIFTON PARK
 SARATOGA COUNTY

RIVERVIEW LANDING WWTP STUDY

SHEET TITLE:

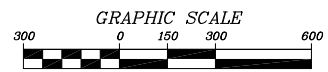
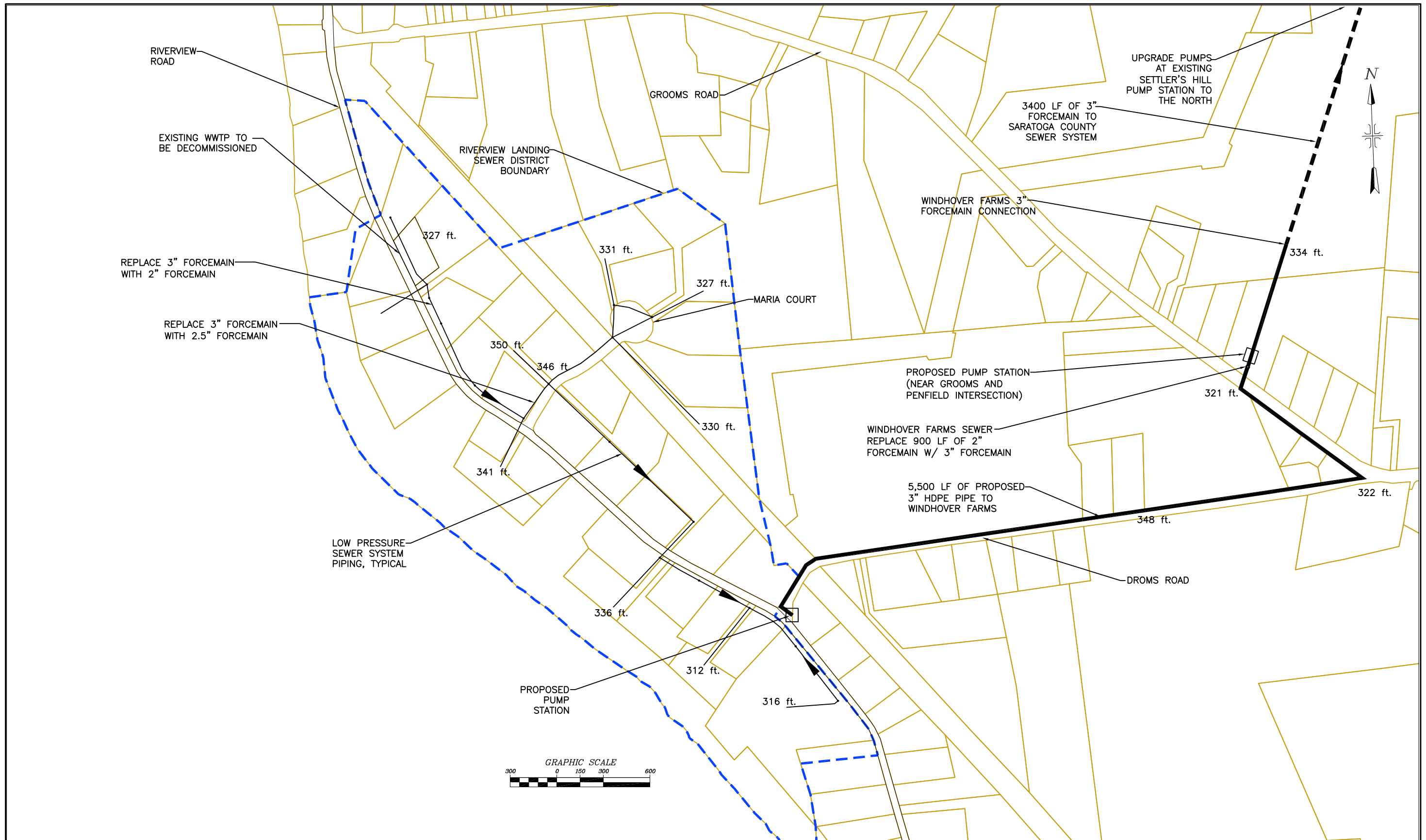
PROPOSED PUMP STATION TO EDISON CLUB PUMP STATION (ALTERNATIVE 2A)

SCALE:
 AS SHOWN

FILE NO.:
 04-9101-P4-130

DATE:
 FEBRUARY 2021

SHEET NO.:
9D



NO.	DATE	REVISION	BY
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01	02/2021	2021 ISSUE	JRS

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TOWN OF CLIFTON PARK
 SARATOGA COUNTY

RIVERVIEW LANDING WWTP STUDY

SHEET TITLE:

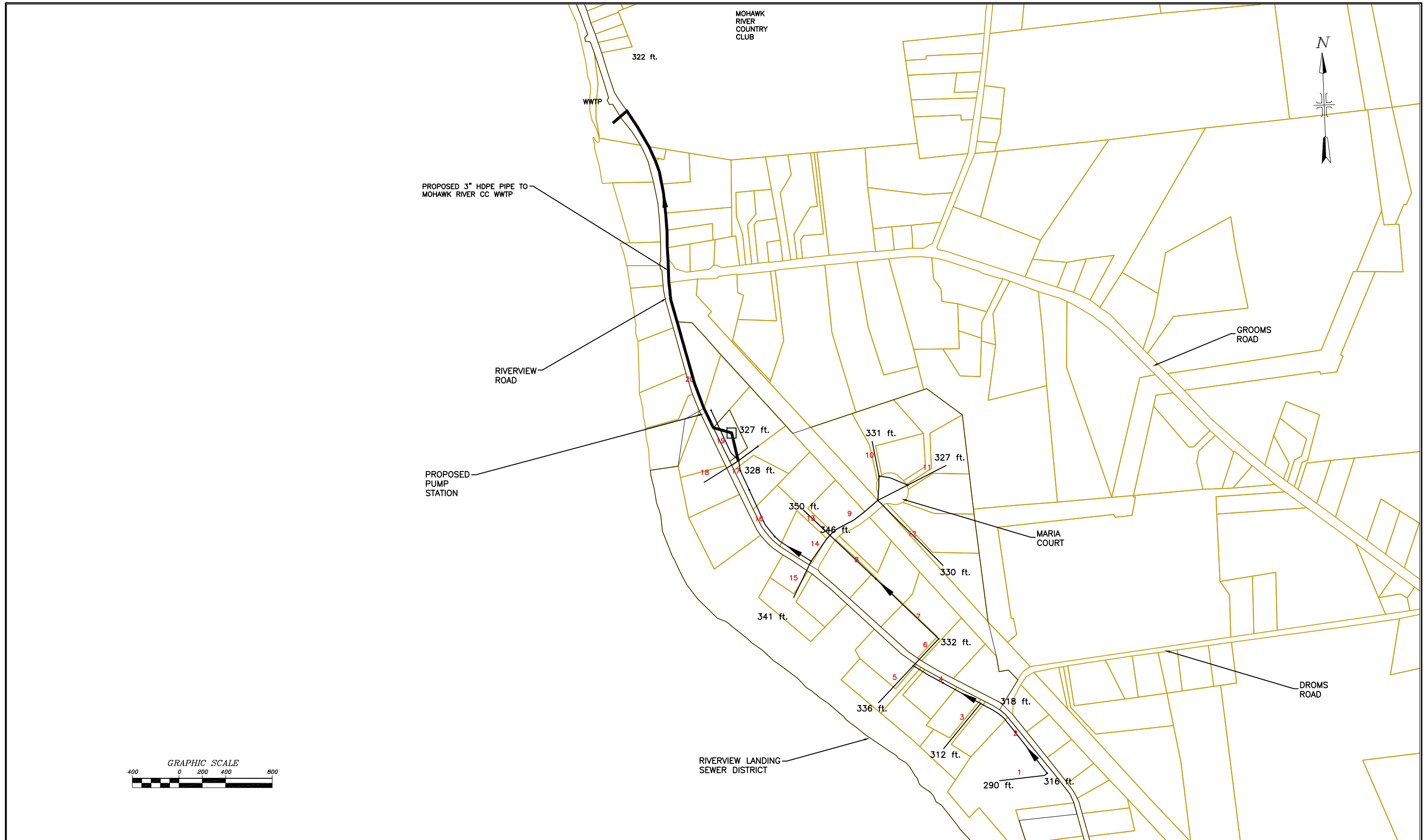
PROPOSED PUMP STATION TO WINDHOVER FARMS (ALTERNATIVE 2B)

SCALE: AS SHOWN

FILE NO.: 04-9101-P4-140

DATE: FEBRUARY 2021

SHEET NO.: 9E



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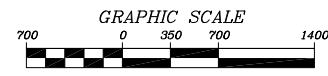
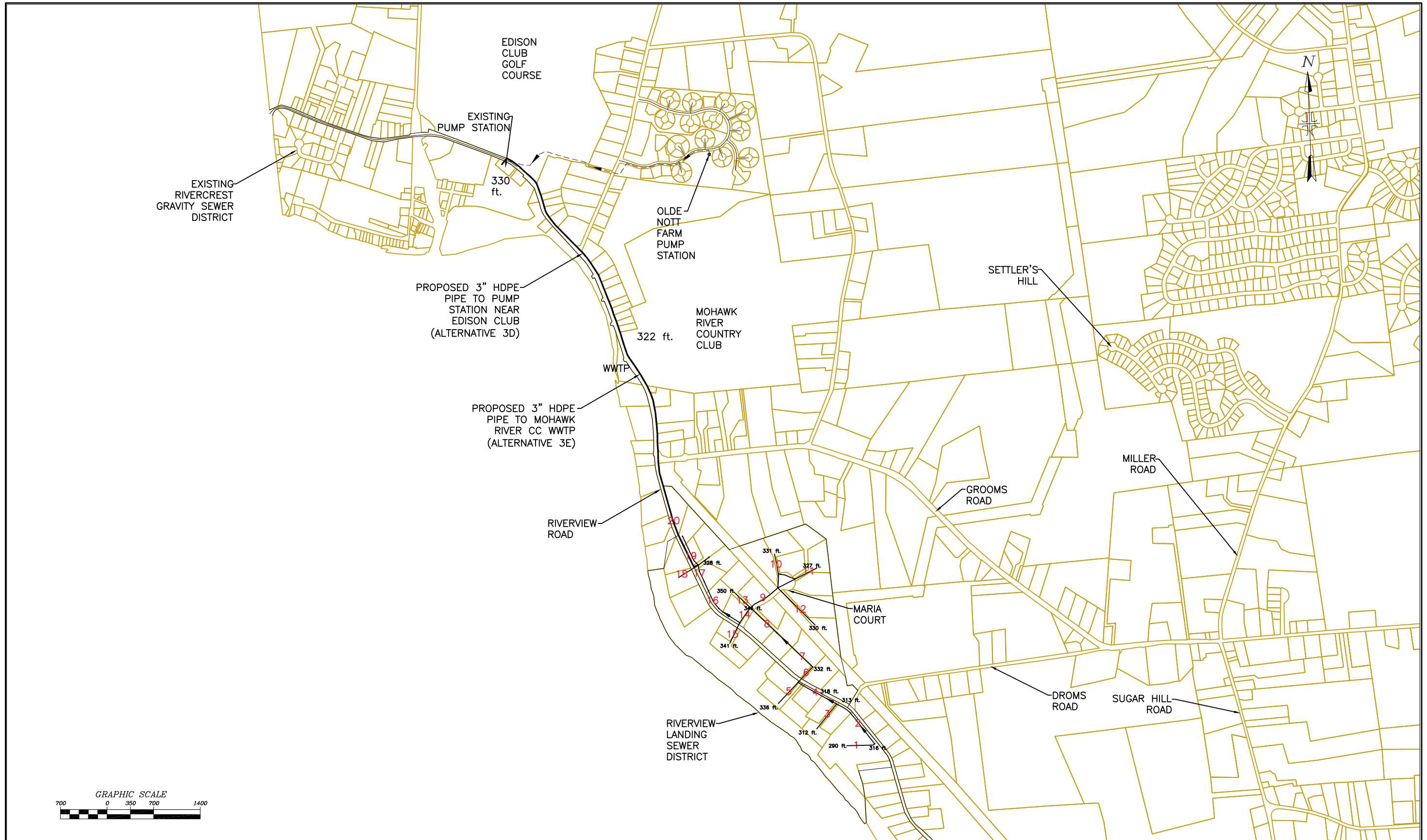
TOWN OF CLIFTON PARK
SARATOGA COUNTY

RIVERVIEW LANDING WWTP STUDY

SHEET TITLE:

PROPOSED PUMP STATION TO MOHAWK RIVER CC WWTP SITE MAP (ALTERNATIVE 2C)

SCALE:	AS SHOWN	SHEET NO.:
FILE NO.:	04-9101-P4-150	
DATE:	FEBRUARY 2021	
		9F



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TOWN OF CLIFTON PARK
 SARATOGA COUNTY

RIVERVIEW LANDING WWTW STUDY

SHEET TITLE:

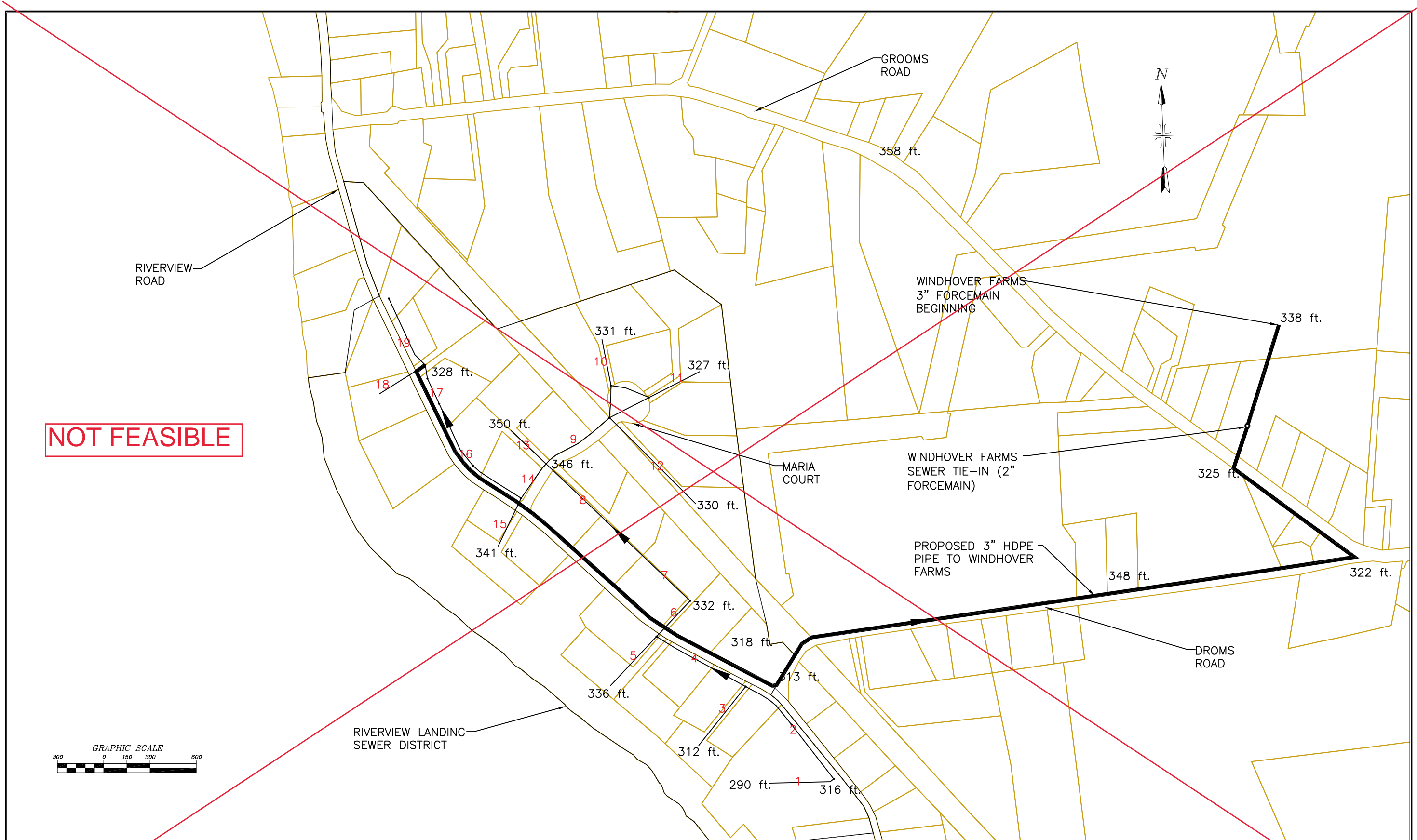
PROPOSED LOW PRESSURE SEWER TO EDISON CLUB PUMP STATION (ALTERNATIVE 3A)

SCALE: AS SHOWN

FILE NO.: 04-9101-P4-160

DATE: FEBRUARY 2021

SHEET NO.: 9G



NOT FEASIBLE



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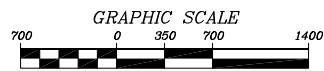
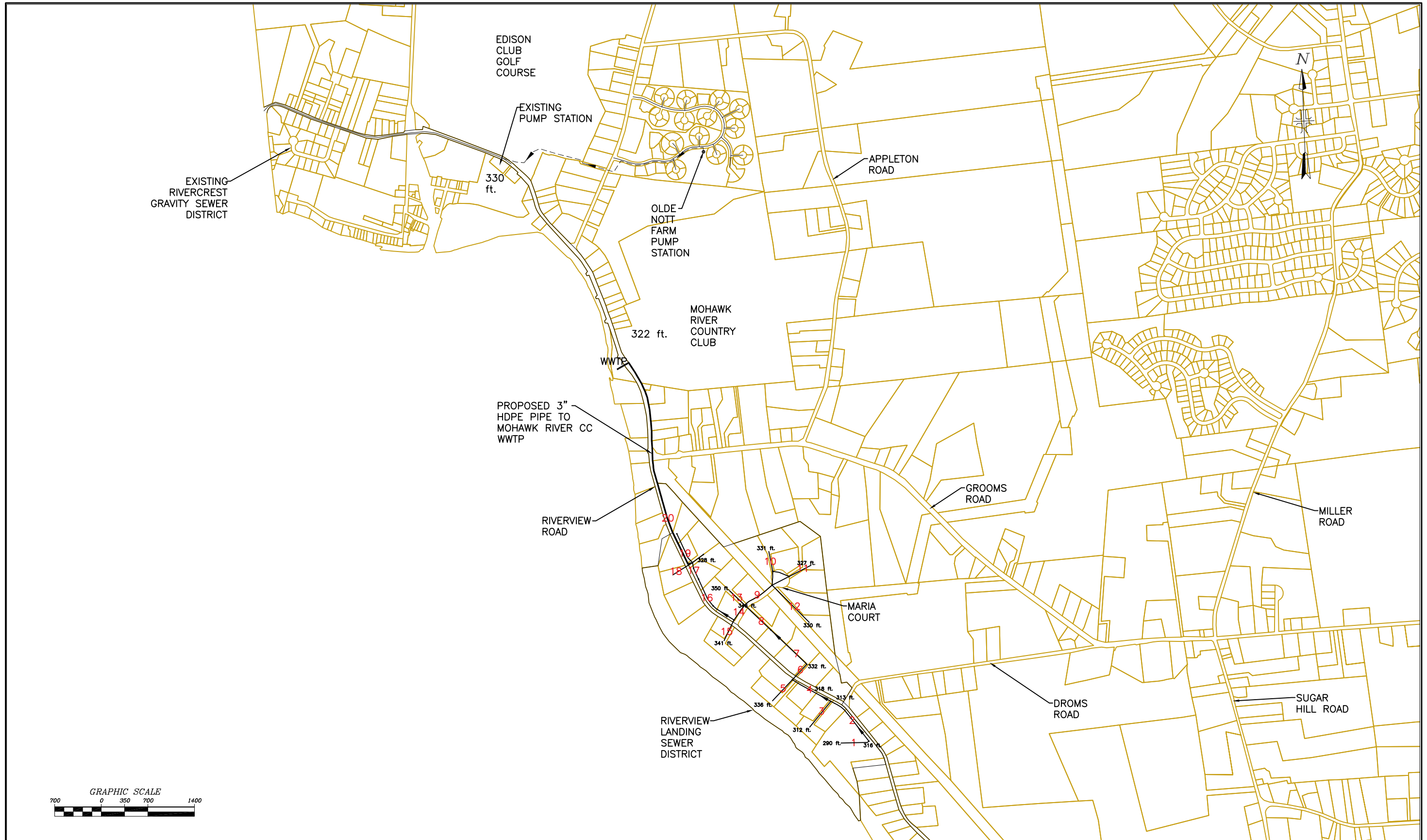
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TOWN OF CLIFTON PARK
 SARATOGA COUNTY

RIVERVIEW LANDING WWTP STUDY

SHEET TITLE:
PROPOSED LOW PRESSURE SEWER TO WINDHOVER FARMS SITE PLAN (ALTERNATIVE 3B)

SCALE: AS SHOWN	SHEET NO.: 9H
FILE NO.: 04-9101-P4-170	
DATE: FEBRUARY 2021	



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TOWN OF CLIFTON PARK
 SARATOGA COUNTY

RIVERVIEW LANDING WWTP STUDY

SHEET TITLE:

PROPOSED LOW PRESSURE SEWER TO MOHAWK RIVER CC WWTP SITE MAP (ALTERNATIVE 3C)

SCALE: AS SHOWN	9I
FILE NO.: 04-9101-P4-180	
DATE: FEBRUARY 2021	



EXHIBIT 10
COST ESTIMATES

**Town of Clifton Park
Riverview Landing WWTP Study
Cost Estimates**



1A. Rehabilitate Current WWTP

Item	Description	Qty.	Unit	Unit Price	Extension
1	General Requirements	1	LS	\$65,000	\$65,000
2	Filter Media & Gravel Removal	1,305	CY	\$32	\$41,760
3	Filter Media & Gravel Disposal	1,770	TON	\$32	\$56,640
4	4" Distribution Piping Replacement	3,400	LF	\$27	\$91,800
5	4" Underdrain Piping Replacement	2,900	LF	\$27	\$78,300
6	6" Underdrain Header Replacement (incl. excavation & backfill)	160	LF	\$60	\$9,600
7	Distribution Chamber replacement	2	EA	\$1,300	\$2,600
8	Filter Media Replacement	1,600	CY	\$53	\$84,800
9	Gravel Replacement	300	CY	\$32	\$9,600
10	Fill (to raise the entire site)	4,000	CY	\$53	\$212,000
11	New Dosing Chamber	1	LS	\$20,000	\$20,000
12	Septic Tank and Baffles	2	EA	\$8,000	\$16,000
13	Chlorine Tank Rehabilitation	1	LS	\$3,500	\$3,500
14	Liner installation	17,800	SF	\$10	\$178,000
15	Sand bedding under Liner	150	CY	\$55	\$8,250
16	Manhole Relocation	1	EA	\$15,000	\$15,000
17	Restoration & Miscellaneous (Including Swale)	1	LS	\$65,000	\$65,000
TOTAL					\$957,850
CONTINGENCIES (10%)					\$95,790
ESTIMATED CONSTRUCTION COST					\$1,053,640
ENGINEERING, ADMINISTRATIVE & LEGAL (20%)					\$210,730
TOTAL PROJECT COST (2021\$)					\$1,264,370
Say					\$1,264,400

1B. Orenco Packaged Treatment Plant

Item	Description	Qty.	Unit	Unit Price	Total
1	General Requirements	1	LS	\$135,000	\$135,000
2	Orenco Primary Treatment Tank	1	LS	\$170,000	\$170,000
3	Orenco Advantex Treatment Plant	1	LS	\$525,000	\$525,000
4	Concrete Foundations	1	LS	\$50,000	\$50,000
5	Control Building	1	LS	\$85,000	\$85,000
6	Well	1	EA	\$21,000	\$21,000
7	Site Work	1	LS	\$32,000	\$32,000
8	New Septic Tank, Baffles, and Effluent Filters	2	EA	\$3,500	\$7,000
9	Chlorine Tank Rehab	1	LS	\$3,500	\$3,500
10	Mission Communications system	1	EA	\$5,000	\$5,000
11	Standby Generator (35 kW) + ATS	1	EA	\$20,000	\$20,000
12	Gas Service to Generators	1	EA	\$5,000	\$5,000
13	National Grid Service	1	LS	\$10,000	\$10,000
14	Stormwater Controls	1	LS	\$25,000	\$25,000
15	Electrical work	1	LS	\$35,000	\$35,000
16	Chlorine Tank Rehab	1	EA	\$16,000	\$16,000
17	Restoration & Miscellaneous	1	LS	\$40,000	\$40,000
18	Existing WWTP Decommissioning	1	LS	\$150,000	\$150,000
19	Chain Link Fence	1	LS	\$5,000	\$5,000
TOTAL					\$1,339,500
CONTINGENCIES (10%)					\$133,950
ESTIMATED CONSTRUCTION COST					\$1,473,450
ENGINEERING, ADMINISTRATIVE & LEGAL (20%)					\$294,690
TOTAL PROJECT COST (2021\$)					\$1,768,140
Say					\$1,768,200

1C. Extended Aeration Packaged Treatment Plant

Item	Description	Qty.	Unit	Unit Price	Total
1	General Requirements	1	LS	\$115,000	\$115,000
2	Extended Aeration Plant	2	LS	\$220,000	\$440,000
3	Site Work & Installation	1	LS	\$110,000	\$110,000
4	Concrete Foundations	1	LS	\$50,000	\$50,000
5	Control Building	1	LS	\$85,000	\$85,000
6	Well	1	EA	\$21,000	\$21,000
7	Mission Communications system	1	EA	\$5,000	\$5,000
8	Standby Generator (35 kW) + ATS	1	EA	\$20,000	\$20,000
9	Gas Service to Generators	1	EA	\$5,000	\$5,500
10	Dosing Chamber Rehabilitation	2	EA	\$12,000	\$24,000
11	National Grid Service	1	LS	\$10,000	\$10,000
12	Stormwater Controls	1	LS	\$25,000	\$25,000
13	Electrical work	1	LS	\$35,000	\$35,000
14	Chlorine Tank Rehab	1	EA	\$16,000	\$16,000
15	Restoration & Miscellaneous	1	LS	\$40,000	\$40,000
16	Existing WWTP Decommissioning	1	CY	\$150,000	\$150,000
17	Chain Link Fence	1	LS	\$5,000	\$5,000
18	Commissioning & Operator Training	1	LS	\$25,000	\$25,000
TOTAL					\$1,181,500
CONTINGENCIES (10%)					\$118,150
ESTIMATED CONSTRUCTION COST					\$1,299,650
ENGINEERING, ADMINISTRATIVE & LEGAL (20%)					\$259,930
TOTAL PROJECT COST (2021\$)					\$1,559,580
Say					\$1,559,600

Notes:

1. Cost of Advantex Treatment System equipment provided by Orenco.
2. Cost of EA plant provided by Fluence.

**Town of Clifton Park
Riverview Landing WWTP Study
Cost Estimates**



2A. Pump Station to Edison Club Pump Station

<u>Item</u>	<u>Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
1	General Requirements	1	LS	\$115,000	\$115,000
2	Force Main Cleanout Structure	15	EA	\$7,000	\$105,000
3	Air/Vacuum Relief Valves	3	EA	\$3,500	\$10,500
4	Air/Vacuum Relief Vaults	3	EA	\$17,500	\$52,500
5	Precast Concrete Manholes incl. frame & cover	1	EA	\$6,000	\$6,000
6	3" HDPE Sewer Forcemain, directional drilled, in soil	3,700	LF	\$40	\$148,000
7	3" HDPE Sewer Forcemain, directional drilled, in rock	3,700	LF	\$120	\$444,000
8	Connection to existing pump station	1	EA	\$6,000	\$6,000
9	Duplex Grinder Pump Station (incl. electrical)	1	EA	\$110,000	\$110,000
10	National Grid Service	1	LS	\$10,000	\$10,000
11	Mission Communications system	1	EA	\$3,000	\$3,000
12	Standby Generator (35 kW) + ATS	1	EA	\$20,000	\$20,000
13	Gas Service to Generators	1	EA	\$5,000	\$5,000
14	Asphalt Pavement Replacement	10	TON	\$200	\$2,000
15	Gravel Subbase for Roads	10	CY	\$50	\$500
16	Existing WWTP Decommissioning	1	LS	\$150,000	\$150,000
TOTAL					\$1,187,500
CONTINGENCIES (10%)					\$118,750
ESTIMATED CONSTRUCTION COST					\$1,306,250
ENGINEERING, ADMINISTRATIVE & LEGAL (20%)					\$261,250
TOTAL PROJECT COST (2021\$)					\$1,567,500
Say					\$1,567,500

2B. Pump Station to Windhover Farms

<u>Item</u>	<u>Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
1	General Requirements	1	LS	\$115,000	\$115,000
2	Land Acquisition	1	LS	\$22,000	\$22,000
3	Force Main Cleanout Structure	13	EA	\$7,000	\$91,000
4	Air/Vacuum Relief Valves	1	EA	\$3,500	\$3,500
5	Air/Vacuum Relief Vaults	1	EA	\$17,500	\$17,500
6	Precast Concrete Manholes incl. frame & cover	1	EA	\$6,000	\$6,000
7	2" PVC Sewer Pipe, incl. excavation & backfill	1,360	LF	\$35	\$47,600
8	2.5" PVC Sewer Pipe, incl. excavation & backfill	290	LF	\$40	\$11,600
9	3" HDPE Sewer Forcemain, directional drilled	6,400	LF	\$40	\$256,000
10	Connection to existing gravity manhole	1	EA	\$6,000	\$6,000
11	Duplex Grinder Pump Station (incl. electrical)	2	EA	\$120,000	\$240,000
12	National Grid Service	2	LS	\$10,000	\$20,000
13	Mission Communications system	2	EA	\$3,000	\$6,000
14	Standby Generator (35 kW) + ATS	2	EA	\$20,000	\$40,000
15	Gas Service to Generators	2	EA	\$5,000	\$10,000
16	Asphalt Pavement Replacement	10	TON	\$200	\$2,000
17	Gravel Subbase for Roads	10	CY	\$50	\$500
18	Surface / Miscellaneous Restoration	1,650	LF	\$2	\$3,300
19	Existing WWTP Decommissioning	1	LS	\$150,000	\$150,000
20	Replace Pumps at Settler's Hill Pump Station	1	LS	\$85,000	\$85,000
TOTAL					\$1,133,000
CONTINGENCIES (10%)					\$113,300
ESTIMATED CONSTRUCTION COST					\$1,246,300
ENGINEERING, ADMINISTRATIVE & LEGAL (20%)					\$249,260
TOTAL PROJECT COST (2021\$)					\$1,495,560
Say					\$1,495,600

2C. Pump Station to Mohawk River CC WWTP

<u>Item</u>	<u>Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
1	General Requirements	1	LS	\$105,000	\$105,000
2	Force Main Cleanout Structure	9	EA	\$7,000	\$63,000
3	Extended Aeration Plant	1	LS	\$230,000	\$230,000
4	Air/Vacuum Relief Valves	2	EA	\$3,500	\$7,000
5	Air/Vacuum Relief Vaults	2	EA	\$17,500	\$35,000
6	Precast Concrete Manholes incl. frame & cover	1	EA	\$6,000	\$6,000
7	3" HDPE Sewer Forcemain, directional drilled, in soil	2,050	LF	\$40	\$82,000
8	3" HDPE Sewer Forcemain, directional drilled, in rock	2,050	LF	\$120	\$246,000
9	Connection to existing gravity manhole	1	EA	\$6,000	\$6,000
10	Duplex Grinder Pump Station (incl. electrical)	1	EA	\$110,000	\$110,000
11	National Grid Service	1	LS	\$10,000	\$10,000
12	Mission Communications system	1	EA	\$3,000	\$3,000
13	Standby Generator (35 kW)	1	EA	\$11,000	\$11,000
14	Gas Service to Generators	1	EA	\$5,000	\$5,000
15	Asphalt Pavement Replacement	10	TON	\$200	\$2,000
16	Gravel Subbase for Roads	10	CY	\$50	\$500
17	Existing WWTP Decommissioning	1	LS	\$150,000	\$150,000
TOTAL					\$1,071,500
CONTINGENCIES (10%)					\$107,150
ESTIMATED CONSTRUCTION COST					\$1,178,650
ENGINEERING, ADMINISTRATIVE & LEGAL (20%)					\$235,730
TOTAL PROJECT COST (2021\$)					\$1,414,380
SAY					\$1,414,400

**Town of Clifton Park
Riverview Landing WWTP Study
Cost Estimates**



3A. Grinder Pump Network to Edison Club

<u>Item</u>	<u>Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
1	General Requirements	1	LS	\$125,000	\$125,000
2	Force Main Cleanout Structure	8	EA	\$7,000	\$56,000
3	2.5" PVC Sewer Pipe, incl. excavation & backfill	700	LF	\$40	\$28,000
4	Air/Vacuum Relief Valves	3	EA	\$3,500	\$10,500
5	Air/Vacuum Relief Vaults	3	EA	\$17,500	\$52,500
6	Precast Concrete Manholes incl. frame & cover	1	EA	\$6,000	\$6,000
7	3" PVC Sewer, incl. excavation & backfill	1,675	LF	\$45	\$75,375
8	3" HDPE Sewer Forcemain, directional drilled, in soil	3,700	LF	\$40	\$148,000
9	3" HDPE Sewer Forcemain, directional drilled, in rock	3,700	LF	\$120	\$444,000
10	Pipe Bedding Material	130	CY	\$40	\$5,200
11	Pipe Zone Backfill Material	530	CY	\$30	\$15,900
12	Gravel Subbase for Roads	10	CY	\$50	\$500
13	Surface / Miscellaneous Restoration	2,375	LF	\$2	\$4,750
14	Connection to existing gravity manhole	1	EA	\$6,000	\$6,000
15	Asphalt Pavement Replacement	10	TON	\$200	\$2,000
16	Replace Grinder Pumps	36	EA	\$1,800	\$64,800
17	Existing WWTP Decommissioning	1	LS	\$150,000	\$150,000
TOTAL					\$1,194,525
CONTINGENCIES (10%)					\$119,453
ESTIMATED CONSTRUCTION COST					\$1,313,978
ENGINEERING, ADMINISTRATIVE & LEGAL (20%)					\$262,800
TOTAL PROJECT COST (2021\$)					\$1,576,778
SAY					\$1,576,800

3B. Grinder Pump Network to Windhover Farms

<u>Item</u>	<u>Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
1	General Requirements	1	LS	\$95,000	\$95,000
2	Force Main Cleanout Structure	13	EA	\$7,000	\$91,000
3	2.5" PVC Sewer Pipe, incl. excavation & backfill	700	LF	\$40	\$28,000
4	Air/Vacuum Relief Valves	1	EA	\$3,500	\$3,500
5	Air/Vacuum Relief Vaults	1	EA	\$17,500	\$17,500
6	Precast Concrete Manholes incl. frame & cover	1	EA	\$6,000	\$6,000
7	3" PVC Sewer, incl. excavation & backfill	1,935	LF	\$45	\$87,075
8	3" HDPE Sewer Forcemain, directional drilled	6,400	LF	\$40	\$256,000
9	Pipe Bedding Material	150	CY	\$40	\$6,000
10	Pipe Zone Backfill Material	590	CY	\$30	\$17,700
11	Gravel Subbase for Roads	10	CY	\$50	\$500
12	Surface / Miscellaneous Restoration	2,635	LF	\$2	\$5,270
13	Connection to existing gravity manhole	1	EA	\$6,000	\$6,000
14	Asphalt Pavement Replacement	10	TON	\$200	\$2,000
15	Replace Grinder Pumps	36	EA	\$1,800	\$64,800
16	Existing WWTP Decommissioning	1	LS	\$150,000	\$150,000
17	Replace Pumps at Settler's Hill Pump Station	1	LS	\$85,000	\$85,000
TOTAL					\$921,345
CONTINGENCIES (10%)					\$92,140
ESTIMATED CONSTRUCTION COST					\$1,013,485
ENGINEERING, ADMINISTRATIVE & LEGAL (20%)					\$202,700
TOTAL PROJECT COST (2021\$)					\$1,216,185
SAY					\$1,216,200

NOT
FEASIBLE

3C. Grinder Pump Network to Mohawk River CC WWTP

<u>Item</u>	<u>Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total</u>
1	General Requirements	1	LS	\$110,000	\$110,000
2	Force Main Cleanout Structure	5	EA	\$7,000	\$35,000
3	Extended Aeration Plant	1	LS	\$230,000	\$230,000
4	Air/Vacuum Relief Valves	2	EA	\$3,500	\$7,000
5	Air/Vacuum Relief Vaults	2	EA	\$17,500	\$35,000
6	Precast Concrete Manholes incl. frame & cover	1	EA	\$6,000	\$6,000
7	3" HDPE Sewer Forcemain, directional drilled, in soil	2,050	LF	\$40	\$82,000
8	3" HDPE Sewer Forcemain, directional drilled, in rock	2,050	LF	\$120	\$246,000
9	Gravel Subbase for Roads	10	CY	\$50	\$500
10	Connection to existing gravity manhole	1	EA	\$6,000	\$6,000
11	Asphalt Pavement Replacement	10	TON	\$200	\$2,000
12	Replace Grinder Pumps	36	EA	\$1,800	\$64,800
13	Existing WWTP Decommissioning	1	LS	\$150,000	\$150,000
TOTAL					\$974,300
CONTINGENCIES (10%)					\$97,430
ESTIMATED CONSTRUCTION COST					\$1,071,730
ENGINEERING, ADMINISTRATIVE & LEGAL (20%)					\$214,350
TOTAL PROJECT COST (2021\$)					\$1,286,080
SAY					\$1,286,100



EXHIBIT 11
PRESENT WORTH ANALYSIS

**Town of Clifton Park
Riverview Landing WWTP Study
30-Year Cost Analysis**



Alternative #1A - Rehabilitation

Year of Proposed Construction (year X):	2022
Life Cycle (years):	30
Horsepower (total @ plant):	0
Yearly Power Cost Increase (12-Month % Change, 30-Yr Avg):	2.00%
Yearly Labor Increase:	2.70%
Discount Rate (CPI 12-Month % Change, 30-Year Average):	2.50%

Initial Rehabilitation Costs	
General Requirements	\$65,000
Filter Media & Gravel Removal	\$41,760
Filter Media & Gravel Disposal	\$56,640
4" Distribution Piping Replacement	\$91,800
4" Underdrain Piping Replacement	\$78,300
6" Underdrain Header Replacement (incl. excavation & backfill)	\$9,600
Distribution Chamber replacement	\$2,600
Filter Media Replacement	\$84,800
Gravel Replacement	\$9,600
Fill (to raise the entire site)	\$212,000
New Dosing Chamber	\$20,000
Septic Tank and Baffles	\$16,000
Chlorine Tank Rehabilitation	\$3,500
Liner Installation	\$178,000
Sand bedding under Liner	\$8,250
Manhole Relocation	\$15,000
Restoration & Miscellaneous (Including Swale)	\$65,000
Sum	\$957,850
Contingencies (10%)	\$95,785
Estimated Construction Cost	\$1,053,635
Engineering, Administrative, & Legal (20%)	\$210,730
Total Project Cost (2021)	\$1,264,370
Total Project Cost (2022)	\$1,298,510

Maintenance Costs	
Labor	\$12,900
Sludge Disp., Chlorine Tablets, & Misc.	\$8,650
Equipment	\$2,900
Engineering	\$510
Sum:	\$24,960
Annual Costs, 1st year of operation (2022)	\$25,640
Yearly P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 30-year Cost	\$772,063

Debt Reduction Costs	
Debt and Interest	\$11,250
Annual Cost, 1st year of operation (2022)	\$12,000
Yearly P/A Factor with Geometric Gradient:	3.87
Yearly Debt Reduction 30-Year Cost	\$46,488

Capital Improvement Costs	
Replacement of Filter Media	\$160,000

Replacement Schedule	Item	2022 Cost	F/P Factor	Future Dollars	P/F Factor	2022 30-Year Cost
Years after Construction		\$160,000	2.22	\$355,830	0.48	\$169,640
15	Filter Media					Capital Improvements 2022 30-Year Cost: \$169,640

Total WWTP 30-Year Cost (2022)	
WWTP Initial Construction Cost (2022):	\$1,298,510
WWTP Debt Reduction (2022):	\$46,488
WWTP Yearly Maintenance 30-Year Cost (2022):	\$772,063
WWTP Capital Improvements 30-Year cost (2022):	\$169,640
Total WWTP 30-Year Cost (2022):	\$2,286,700
Say	\$2,286,800

*Total is equal to the sum of the costs accumulated over the useful life (30 years) of the facility in terms of 2022 dollars.

**Town of Clifton Park
Riverview Landing WWTP Study
30-Year Cost Analysis**



Alternative #1B - ORENCO WWTP

Year of Proposed Construction (year X):	2022
Life Cycle (years):	30
Horsepower (total @ plant):	0
Yearly Power Cost Increase (12-Month % Change, 30-Yr Avg):	2.00%
Yearly Labor Increase:	2.70%
Discount Rate (CPI 12-Month % Change, 30-Year Average):	2.50%

Notes:

1. Power costs calculated using estimated hours of operation and \$0.18/KWH.

Power Costs	
KW hours/year:	9,497
Cost/KWH:	\$0.18
Power Cost/year:	\$1,710
Power cost/year in 2022:	\$1,779
Power P/A Factor with Geometric Gradient:	27.29
Power 30-Year Cost:	\$48,536

Initial Construction Costs	
General Requirements	\$135,000
Orenco Primary Treatment Tank	\$170,000
Orenco Advantex Treatment Plant	\$525,000
Concrete Foundations	\$50,000
Control Building	\$85,000
Well	\$21,000
Site Work	\$32,000
New Septic Tank, Baffles, and Effluent Filters	\$7,000
Chlorine Tank Rehab	\$3,500
Mission Communications system	\$5,000
Standby Generator (35 kW) + ATS	\$20,000
Gas Service to Generators	\$5,000
National Grid Service	\$10,000
Stormwater Controls	\$25,000
Electrical work	\$35,000
Chlorine Tank Rehab	\$16,000
Restoration & Miscellaneous	\$40,000
Existing WWTP Decommissioning	\$150,000
Chain Link Fence	\$5,000
Sum	\$1,339,500
Contingencies (10%)	\$133,950
Estimated Construction Cost	\$1,473,450
Engineering, Administrative, & Legal (20%)	\$294,690
Total Project Cost (2021)	\$1,768,140
Total Project Cost (2022)	\$1,815,880

Maintenance Costs	
Primary Tank Pump-Out Cost	\$7,800
Proactive Preventative Maintenance	\$60
Unscheduled Service Calls	\$2,000
Advantex Component Maintenance	\$1,500
Cellular Data	\$125
AX-MAX Pump-Out Cost	\$250
Labor (Operators, Admin, Benefits)	\$12,500
Fees (Insurance, legal, SPDES)	\$2,000
Sewers (cleaning & TV)	\$500
1st-year SCADA Fee	\$260
Annual Costs, 1st year of operation (2022)	\$26,995
Yearly P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 30-Year Cost	\$812,859

Capital Improvement Costs	
Replacement of tank equipment, textiles, pumps, floats, and contractors	\$105,000

Replacement Schedule

Years after Construction	Item	2022 Cost	F/P Factor	Future Dollars	P/F Factor	2022 30-Year Cost
15	Pumps & Controls	\$105,000	2.22	\$233,508	0.48	\$111,323
				Capital Improvements 2022 30-Year Cost:		\$111,320

Debt Reduction Costs	
Debt and Interest	\$11,250
Annual Cost, 1st year of operation (2022)	\$12,000
Yearly P/A Factor with Geometric Gradient:	3.87
Yearly Maintenance 2022 30-Year Cost	\$46,488

Total WWTP 30-Year Cost (2022)	
WWTP Initial Construction Cost (2022):	\$1,815,880
WWTP Electricity 30-Year Cost (2022):	\$48,536
WWTP Debt Reduction Costs (2022):	\$46,488
WWTP Yearly Maintenance 30-Year Cost (2022):	\$812,859
WWTP Capital Improvements 30-Year Cost (2022):	\$111,320
Total WWTP 30-Year Cost (2022):	\$2,835,083
Say	\$2,835,100

Note: Some of annual operating costs provided by Orenco.

*Total is equal to the sum of the costs acculated over the useful life (30 years) of the facility in terms of 2022 dollars

**Town of Clifton Park
Riverview Landing WWTP Study
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Alternative #1C - Extended Aeration WWTP

Year of Proposed Construction (year X):	2022
Life Cycle (years):	30
Horsepower (total @ plant):	5,125
Yearly Power Cost Increase (12-Month % Change, 30-Yr Avg):	2.00%
Yearly Labor Increase:	2.70%
Discount Rate (CPI 12-Month % Change, 30-Year Average):	2.50%

Notes:

1. Power costs calculated using estimated hours of operation and \$0.18/KWH.

Power Costs

KW hours/year:	9,673
Cost/KWH:	\$0.18
Power Cost/year:	\$1,742
Power cost/year in 2022:	\$1,813
Power P/A Factor with Geometric Gradient:	27.29
Power 30-Year Cost:	\$49,480

Initial Construction Costs

General Requirements	\$115,000
Extended Aeration Plant	\$440,000
Site Work & Installation	\$110,000
Concrete Foundations	\$50,000
Control Building	\$85,000
Well	\$21,000
Mission Communications system	\$5,000
Standby Generator (35 kW) + ATS	\$20,000
Gas Service to Generators	\$5,500
Dosing Chamber Rehabilitation	\$24,000
National Grid Service	\$10,000
Stormwater Controls	\$25,000
Electrical work	\$35,000
Chlorine Tank Rehab	\$16,000
Restoration & Miscellaneous	\$40,000
Existing WWTP Decommissioning	\$150,000
Chain Link Fence	\$5,000
Commissioning & Operator Training	\$25,000
Sum	\$1,181,500
Contingencies (10%)	\$118,150
Estimated Construction Cost	\$1,299,650
Engineering, Administrative, & Legal (20%)	\$259,930
Total Project Cost (2021)	\$1,559,580
Total Project Cost (2022)	\$1,601,690

Maintenance Costs

1st Year SCADA Fee	\$275
General equipment	\$1,700
Maintenance contracts	\$500
Labor (Operators, Admin, Benefits)	\$32,000
Sewers (cleaning & TV)	\$525
Fees (Insurance, legal, SPDES)	\$2,000
Sewage Treatment (sludge disposal, chemicals, equipment, testing, fuel, & telephone)	\$10,500
Sum:	\$47,500
Annual Costs, 1st year of operation (2022)	\$48,790
Yearly P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 30-Year Cost	\$1,469,150

Capital Improvement Costs

Replacement of pumps, blowers & Controls	\$16,000
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Replacement Schedule

Years after Construction	Item	2022 Cost	F/P Factor	Future Dollars	P/F Factor	2022 30-Year Cost
20	Pumps & Controls	\$16,000	2.22	\$35,590	0.48	\$16,970
Capital Improvements 2022 30-Year Cost:						\$16,970

Debt Reduction Costs

Debt and Interest	\$11,250
Annual Cost, 1st year of operation (2022)	\$12,000
Yearly P/A Factor with Geometric Gradient:	3.87
Yearly Maintenance 2022 30-Year Cost	\$46,488

Total WWTP 30-Year Cost (2022)

WWTP Initial Construction Cost (2022):	\$1,601,690
WWTP Electricity 30-Year Cost (2022):	\$49,480
WWTP Debt Reduction Costs (2022):	\$46,488
WWTP Yearly Maintenance 30-Year Cost (2022):	\$1,469,150
WWTP Capital Improvements 30-Year Cost (2022):	\$16,970
Total WWTP 30-Year Cost (2022):	\$3,183,778
Say	\$3,183,800

*Total is equal to the sum of the costs accumulated over the useful life (30 years) of the facility in terms of 2022 dollars

**Town of Clifton Park
Riverview Landing WWTP Study
30-Year Cost Analysis**



Alternative #2A - Pump to EC PS

Year of Proposed Construction (year X):	2022
Life Cycle (years):	30
Horsepower:	2
Yearly Power Cost Increase (12-Month % Change, 30-Yr Avg):	2.00%
Yearly Labor Increase:	2.70%
Discount Rate (CPI 12-Month % Change, 30-Year Average):	2.50%
Length of Foremain (ft)	7400
Air Release Valves & Cleanouts	15

General Requirements	\$115,000
Force Main Cleanout Structure	\$105,000
Air/Vacuum Relief Valves	\$10,500
Air/Vacuum Relief Vaults	\$52,500
Precast Concrete Manholes incl. frame & cover	\$6,000
3" HDPE Sewer Foremain, directional drilled, in soil	\$148,000
3" HDPE Sewer Foremain, directional drilled, in rock	\$444,000
Connection to existing pump station	\$6,000
Duplex Grinder Pump Station (incl. electrical)	\$110,000
National Grid Service	\$10,000
Mission Communications system	\$3,000
Standby Generator (35 kW) + ATS	\$20,000
Gas Service to Generators	\$5,000
Asphalt Pavement Replacement	\$2,000
Gravel Subbase for Roads	\$500
Existing WWTP Decommissioning	\$150,000
Sum	\$1,187,500
Contingencies (10%)	\$118,750
Estimated Construction Cost	\$1,306,250
Engineering, Administrative, & Legal (20%)	\$261,250
Total Project Cost (2021)	\$1,567,500
Sale Price for Part of Current WWTP Lot not needed for Pump Station	\$39,970
Net Project Cost (2021)	\$1,527,530
Net Project Cost (2022)	\$1,578,020

Pump Station Power Costs

Horsepower hours/year:	2,552
KW hours/year:	1,904
Cost/KWH:	\$0.18
Power Cost/year:	\$343
Power cost/year in 2022:	\$350
Power P/A Factor with Geometric Gradient:	27.29
Power 30-Year Cost:	\$9,547

Notes:

1. Power costs calculated using estimated hours of operation and \$0.18/KWH.

Pump Station Maintenance Costs

1st Year SCADA Fee	\$260
1st Year Maintenance Cost	\$530
1st Year Odor Control Cost	\$310
1st Year Labor Cost	\$9,500
Annual Costs, 1st year of operation (2022)	\$10,600
Yearly P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 30-Year Cost	\$319,187

Capital Improvement Costs

Rebuild Pumps & Controls	\$10,500
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Replacement Schedule

Years after Construction	Item	2022 Cost	F/P Factor	Future Dollars	P/F Factor	2022 30-Year Cost
20	Pumps & Controls	\$10,500	2.22	\$23,351	0.48	\$11,132
Capital Improvements 2022 30-Year Cost:						\$11,130

Foremain Maintenance Costs

Maintenance Costs

Yearly Maintenance Cost	\$3,700
Annual Costs, 1st year of operation	\$3,800
Maint P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 2022 30-Year Cost	\$114,425

Capital Improvement Costs

Replacement of Air Release & Cleanout Valves	\$850
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Replacement Schedule

Years after Construction	Item	2022 Cost	F/P Factor	Future Dollars	P/F Factor	2022 30-Year Cost
15	ARV & CO	\$12,750	1.49	\$19,014	0.69	\$13,129
Capital Improvements 2022 30-Year Cost:						\$13,130

Debt Reduction Costs

Debt and Interest	\$11,250
Annual Cost, 1st year of operation (2022)	\$12,000
Yearly P/A Factor with Geometric Gradient:	3.97
Yearly Maintenance 2022 30-Year Cost	\$46,488

Sewer System Costs

Glenville Trans Fee	\$12,870
Schenectady Trans Fee	\$7,540
Annual Costs (2022)	\$20,410
Sewer System Fee P/A Factor with Geometric Gradient:	30.11
Yearly Sewer System Fee 30-Year Cost	\$614,579

Pump Station Total 30-Year Cost (2022)

PS Initial Construction Cost (minus property sale):	\$1,578,020
PS Electricity 30-Year Cost:	\$9,547
PS Maintenance 30-Year Cost (2022):	\$319,187
PS Capital Improvement 30-Year Cost (2022):	\$11,130
PS Sewer Maintenance 30-Year Cost (2022):	\$114,425
PS Sewer Capital Improvement 30-Year Cost (2022):	\$13,130
Current WWTP Debt Reduction 30-Year Cost (2022):	\$46,488
PS Sewer System Costs (Glenville, Schenectady):	\$614,579
Total PS 30-Year Cost (2022):	\$2,706,506
Say	\$2,706,600

*Total is equal to the sum of the costs accumulated over the useful life (30 years) of the facility in terms of 2022 dollars.

**Town of Clifton Park
Riverview Landing WWTP Study
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Alternative #2B - Pump Station to Windhover Farms

Year of Proposed Construction (year X):	2022
Life Cycle (years):	30
Horsepower:	2
Yearly Power Cost Increase (12-Month % Change, 30-Yr Avg):	2.00%
Yearly Labor Increase:	2.70%
Discount Rate (CPI 12-Month % Change, 30-Year Average):	2.50%
Length of Forcemain (ft)	6400
Air Release Valves & Cleanouts	15

General Requirements	\$115,000
Land Acquisition	\$22,000
Force Main Cleanout Structure	\$91,000
Air/Vacuum Relief Valves	\$3,500
Air/Vacuum Relief Vaults	\$17,500
Precast Concrete Manholes incl. frame & cover	\$6,000
2" PVC Sewer Pipe, incl. excavation & backfill	\$47,600
2.5" PVC Sewer Pipe, incl. excavation & backfill	\$11,600
3" HDPE Sewer Forcemain, directional drilled	\$256,000
Connection to existing gravity manhole	\$6,000
Duplex Grinder Pump Station (incl. electrical)	\$240,000
National Grid Service	\$20,000
Mission Communications system	\$6,000
Standby Generator (35 kW) + ATS	\$40,000
Gas Service to Generators	\$10,000
Asphalt Pavement Replacement	\$2,000
Gravel Subbase for Roads	\$500
Surface/Miscellaneous Restoration	\$3,300
Existing WWTP Decommissioning	\$150,000
Replace Pumps at Settler's Hill Pump Station	\$85,000
Sum	\$1,133,000
Contingencies (10%)	\$113,300
Estimated Construction Cost	\$1,246,300
Engineering, Administrative, & Legal (20%)	\$249,260
Total Project Cost	\$1,495,560
Sale Price for Part of Current WWTP Lot not needed for Pump Station	\$30,970
Net Project Cost (2021)	\$1,464,590
Net Project Cost (2022)	\$1,504,140

Pump Station Power Costs	
Horsepower hours/year:	2,279
KW hours/year:	1,700
Cost/KWH:	\$0.18
Power Cost/year:	\$307
Power cost/ year in 2022:	\$313
Power P/A Factor with Geometric Gradient:	27.29
Power 2022 30-Year Cost:	\$8,545

Notes:
1. Power costs calculated using estimated hours of operation and \$0.18/KWH.

Pump Station Maintenance Costs	
1st Year SCADA Fee	\$260
1st Year Maintenance Cost	\$530
1st Year Odor Control Cost	\$310
1st Year Labor Cost	\$9,500
Annual Costs, 1st year of operation (2022)	\$10,600
Yearly P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 2022 30-Year Cost	\$319,187

Capital Improvement Costs	
Rebuild Pumps & Controls	\$10,500
Replacement Schedule	
Years after Construction	20
Item	Pumps & Controls

2022 Cost	F/P Factor	Future Dollars	P/F Factor	2022 30-Year Cost
\$10,500	2.22	\$23,351	0.48	\$11,132
Capital Improvements 2017 30-Year Cost:				\$11,130

Forcemain Maintenance Costs	
Yearly Maintenance Cost	\$4,560
Annual Costs, 1st year of operation	\$4,800
Maint P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 2022 30-Year Cost	\$144,536

Capital Improvement Costs	
Replacement of Air Release & Cleanout Valves	\$860
Replacement Schedule	
Years after Construction	15
Item	ARV & CO

2022 Cost	F/P Factor	Future Dollars	P/F Factor	2022 30-Year Cost
\$12,900	1.49	\$19,238	0.69	\$13,284
Capital Improvements 2022 30-Year Cost:				\$13,280

Debt Reduction Costs	
Debt and Interest	\$11,250
Annual Cost, 1st year of operation (2022)	\$12,000
Yearly P/A Factor with Geometric Gradient:	3.87
Yearly Maintenance 2022 30-Year Cost	\$46,466

Sewer System Costs	
Annual Costs (2022)	\$10,335
Sewer System Fee P/A Factor with Geometric Gradient:	30.11
Yearly Sewer System Fee 2022 30-Year Cost	\$311,204

Pump Station Total 30-Year Cost (2022)	
PS Initial Construction Cost (minus property sale):	\$1,504,140
PS Electricity 30-Year Cost (2022):	\$8,545
PS Maintenance 30-Year Cost (2022):	\$319,187
PS Capital Improvements 30-Year Cost (2022):	\$11,130
Forcemain Maintenance 30-Year Cost (2022):	\$144,536
Forcemain Capital Improvements 30-Year Cost (2022):	\$13,280
Current WWTP Debt Reduction 30-Year Cost (2022):	\$46,466
Sewer System Costs 30-Year Cost (2022):	\$311,204
Total PS 30-Year Cost (2022):	\$2,358,510
Say	\$2,358,600

*Total is equal to the sum of the costs accumulated over the useful life (30 years) of the facility in terms of 2022 dollars.

**Town of Clifton Park
Riverview Landing WWTP Study
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Alternative #2C: Pump Station to MRCC WWTP

Year of Proposed Construction (year X):	2022
Life Cycle (years):	30
Horsepower:	1
Yearly Power Cost Increase (12-Month % Change, 30-Yr Avg):	2.00%
Yearly Labor Increase:	2.70%
Discount Rate (CPI 12-Month % Change, 30-Year Average):	2.50%
Length of Forcemain (ft)	4100
Air Release Valves & Cleanouts	15

General Requirements	\$105,000
Force Main Cleanout Structure	\$63,000
Extended Aeration Plant	\$230,000
Air/Vacuum Relief Valves	\$7,000
Air/Vacuum Relief Vaults	\$35,000
Precast Concrete Manholes incl. frame & cover	\$0,000
3" HDPE Sewer Forcemain, directional drilled, in soil	\$82,000
3" HDPE Sewer Forcemain, directional drilled, in rock	\$246,000
Connection to existing gravity manhole	\$6,000
Duplex Grinder Pump Station (incl. electrical)	\$110,000
National Grid Service	\$10,000
Mission Communications system	\$3,000
Standby Generator (35 kW)	\$11,000
Gas Service to Generators	\$5,000
Asphalt Pavement Replacement	\$2,000
Gravel Subbase for Roads	\$500
Existing WWTP Decommissioning	\$150,000
Sum	\$1,071,500
Contingencies (10%)	\$107,150
Estimated Construction Cost	\$1,178,650
Engineering, Administrative, & Legal (20%)	\$235,730
Total Project Cost	\$1,414,380
Sale Price for Part of Current WWTP Lot not needed for Pump Station	\$30,970
Net Project Cost (2021)	\$1,383,410
Net Project Cost (2022)	\$1,420,770

Pump Station Power Costs

Horsepower hours/year:	1,456
KW hours/year:	1,086
Cost/KWH:	\$0.18
Power Cost/year:	\$196
Power cost/year in 2022:	\$199
Power P/A Factor with Geometric Gradient:	27.29
Power 2022 30-Year Cost:	\$5,442

Notes:

1. Power costs calculated using estimated hours of operation and \$0.18/KWH.

Pump Station Maintenance Costs

1st Year SCADA Fee	\$260
1st Year Maintenance Cost	\$530
1st Year Odor Control Cost	\$310
1st Year Labor Cost	\$9,500
Annual Costs, 1st year of operation (2022)	\$10,600
Yearly P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 2022 30-Year Cost	\$319,187

Capital Improvement Costs

Rebuild/Replace pumps, blowers, & controls (Pump Station and WWTP)	\$42,000
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Replacement Schedule

Years after Construction	Item	2022 Cost	F/P Factor	Future Dollars	P/F Factor	2022 30-Year Cost
20	Pumps & Controls	\$42,000	2.22	\$93,403	0.48	\$44,529
Capital Improvements 2017 30-Year Cost:						\$44,530

Forcemain Maintenance Costs

Maintenance Costs

Yearly Maintenance Cost for Cleaning	\$2,200
Annual Costs, 1st year of operation	\$2,321
Maint P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 2022 30-Year Cost	\$69,890

Capital Improvement Costs

Replacement of Air Release & Cleanout Valves	\$860
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Replacement Schedule

Years after Construction	Item	2022 Cost	F/P Factor	Future Dollars	P/F Factor	Year Cost
15	ARV & CO	\$12,900	1.49	\$19,238	0.69	\$13,284
Capital Improvements 2022 30-Year Cost:						\$13,290

Debt Reduction Costs

Debt and Interest	\$11,250
Annual Cost, 1st year of operation (2022)	\$12,000
Yearly P/A Factor with Geometric Gradient:	3.87
Yearly Maintenance 2022 30-Year Cost	\$46,488

WWTP Power Costs (Riverview Landing Portion)

KW hours/year:	7,127
Cost/KWH:	\$0.18
Power Cost/year:	\$1,283
Power cost/year in 2022:	\$1,335
Power P/A Factor with Geometric Gradient:	27.29
Power 2022 30-Year Cost:	\$36,440

WWTP Maintenance Costs

1st Year SCADA Fee	\$275
General equipment	\$2,100
Maintenance contracts	\$450
Labor (Operators, Admin, Benefits)	\$31,600
Sewers (cleaning & TV)	\$560
Fees (Insurance, legal, SPDES)	\$2,100
Sewage Treatment (sludge disposal, chemicals, equipment, testing, fuel, & telephone)	\$5,700
Sum:	\$42,785
Annual Costs, 1st year of operation (2022)	\$43,950
Annual Costs, 1st year, allocated to RLSD	\$33,486
Yearly P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 2022 30-Year Cost	\$1,008,310

Pump Station Total 30-Year Cost (2022)

PS Initial Construction 30-Year Cost (2022):	\$1,420,770
PS Electricity 30-Year Cost (2022):	\$5,442
PS Maintenance 30-Year Cost (2022):	\$319,187
PS Capital Improvements 30-Year Cost (2022):	\$44,530
Forcemain Maintenance 30-Year Cost (2022):	\$69,890
Forcemain Capital Improvements 30-Year Cost (2022):	\$13,290
Current WWTP Debt Reduction 30-Year Cost (2022):	\$46,488
MRCC WWTP Power Cost 30-Year Cost (2022):	\$36,440
MRCC WWTP Maintenance Costs 30-Year Cost (2022):	\$1,008,310
Total PS 30-Year Cost (2022):	\$2,964,347
Say	\$2,964,400

*Total is equal to the sum of the costs accumulated over the useful life (30 years) of the facility in terms of 2022 dollars.

**Town of Clifton Park
Riverview Landing WWTP Study
30-Year Cost Analysis**



Alternative #3A - LPSS to EC PS

Year of Proposed Construction (year X):	2022
Life Cycle (years):	30
Number of Simplex Stations:	37
Length of forceman, ft (all sizes):	7400
Air Release Valves & Cleanouts	15
Yearly Power Cost Increase (12-Month % Change, 30-Yr Avg):	2.00%
Yearly Labor Increase:	2.70%
Discount Rate (CPI 12-Month % Change, 30-Year Average):	2.50%

Low Pressure Sewer Initial Construction Costs

General Requirements	\$125,000
Force Main Cleanout Structure	\$56,000
2.5" PVC Sewer Pipe, incl. excavation & backfill	\$28,000
Air/Vacuum Relief Valves	\$10,500
Air/Vacuum Relief Vaults	\$52,500
Precast Concrete Manholes incl. frame & cover	\$6,000
3" PVC Sewer, incl. excavation & backfill	\$75,375
3" HDPE Sewer Forceman, directional drilled, in soil	\$148,000
3" HDPE Sewer Forceman, directional drilled, in rock	\$444,000
Pipe Bedding Material	\$5,200
Pipe Zone Backfill Material	\$15,900
Gravel Subbase for Roads	\$500
Surface Miscellaneous Restoration	\$4,750
Connection to existing gravity manhole	\$6,000
Asphalt Pavement Replacement	\$2,000
Replace Grinder Pumps	\$64,800
Existing WWTP Decommissioning	\$150,000
Sum	\$1,194,525
Contingencies (10%)	\$119,453
Estimated Construction Cost	\$1,313,978
Engineering, Administrative, & Legal (20%)	\$262,800
Total Project Cost	\$1,576,778
Current WWTP Property Value	\$31,700
Net Project Cost (2021)	\$1,545,078
Net Project Cost (2022)	\$1,586,810

Power Costs

Average Pump Run Time/year:	183
Horsepower hours/year:	6,570
KW hours/year:	4,901
Cost/KWH:	\$0.18
Power Cost/year:	\$883
2022 Power Cost	\$919
Power P/A Factor with Geometric Gradient:	27.29
Power 2022 30-Year Cost:	\$24,096

Notes:

1. Power costs calculated using estimated hours of operation and \$0.18/KWH.

Low Pressure Sewer Maintenance Costs

Maintenance Costs

1st Year Maintenance Cost	\$3,700
1st Year Odor Control Cost	\$310
Annual Costs, 1st year of operation	\$4,010
Maint P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 2022 30-Year Cost	\$120,748

Capital Improvement Costs

Replacement of Air Release & Cleanout Valves	\$860
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Replacement Schedule

Years after Construction	Item	2022 Cost	F/P Factor	Future Dollars	P/F Factor	2022 30-Year Cost
15	ARV & CO	\$12,900	1.49	\$19,238	0.69	\$13,284
Capital Improvements 2022 30-Year Cost						\$13,280

Debt Reduction Costs

Debt and Interest	\$11,250
Annual Cost, 1st year of operation (2022)	\$12,000
Yearly P/A Factor with Geometric Gradient:	3.97
Yearly Maintenance 2022 30-Year Cost	\$46,488

Sewer System Costs

Glenville Trans Fee	\$12,870
Schenectady Trans Fee	\$7,540
Annual Costs (2022)	\$20,410
Sewer System Fee P/A Factor with Geometric Gradient:	30.11
Yearly Sewer System Fee 2022 30-Year Cost	\$614,579

LPSS 30-Year Cost (2022):

LPSS Initial Construction 30-Year Cost (2022):	\$1,586,810
LPSS Electricity 30-Year Cost (2022):	\$24,096
LPSS Sewer Maintenance 30-Year Cost (2022):	\$120,748
LPSS Pump Replacement 30-Year Cost (2022):	\$13,280
Current WWTP Debt Reduction 30-Year Cost (2022):	\$46,488
External Sewer System Usage Costs (2022):	\$614,579
Total LPSS 30-Year Cost (2022):	\$2,406,011
Say	\$2,406,100

*Total is equal to the sum of the costs accumulated over the useful life (30 years) of the facility in terms of 2022 dollars

Town of Clifton Park
Riverview Landing WWTP Study
30-Year Cost Analysis



Alternative #3B - LPSS to Windhover Farms

Year of Proposed Construction (year X):	2022
Life Cycle (years):	30
Number of Simplex Stations:	36
Length of force main, ft (all sizes):	7400
Air Release Valves & Cleanouts	15
Yearly Power Cost Increase (12-Month % Change, 30-Yr Avg):	2.00%
Yearly Labor Increase:	2.70%
Discount Rate (CPI 12-Month % Change, 30-Year Average):	2.50%

Low Pressure Sewer Initial Construction Costs

General Requirements	\$95,000
Force Main Cleanout Structure	\$91,000
2.5" PVC Sewer Pipe, incl. excavation & backfill	\$28,000
Air/Vacuum Relief Valves	\$3,500
Air/Vacuum Relief Vaults	\$17,500
Precast Concrete Manholes incl. frame & cover	\$6,000
4" PVC Sewer, incl. excavation & backfill	\$87,075
3" HDPE Sewer Force main, directional drilled	\$256,000
Pipe Bedding Material	\$6,000
Pipe Zone Backfill Material	\$17,700
Gravel Subbase for Roads	\$500
Surface Miscellaneous Restoration	\$5,270
Connection to existing gravity manhole	\$6,000
Asphalt Pavement Replacement	\$2,000
Replace Grinder Pumps	\$64,800
Existing WWTP Decommissioning	\$150,000
Replace Pumps at Settler's Hill Pump Station	\$85,000
Sum	\$921,345
Contingencies (10%)	\$92,140
Estimated Construction Cost	\$1,013,485
Engineering, Administrative & Legal (20%)	\$202,700
Total Project Cost	\$1,216,185
Current WWTP Property Value	\$31,700
Net Project Cost (2021)	\$1,184,485
Net Project Cost (2022)	\$1,216,470

Power Costs

Average Pump Run Time/year:	183
Horsepower hours/year:	6,570
KW hours/year:	4,901
Cost/KWH:	\$0.18
Power Cost/year:	\$883
2022 Power Cost:	\$919
Power PIA Factor with Geometric Gradient:	27.29
Power 2022 30-Year Cost:	\$24,097

Notes:

1. Power costs calculated using estimated hours of operation and \$0.18/KWH.

NOT FEASIBLE

Maintenance Costs

Yearly Maintenance Cost	\$7,700
1st Year Odor Control Cost	\$310
Annual Costs, 1st year of operation	\$5,010
Maint PIA Factor with Geometric Gradient:	30.11
Yearly Maintenance 2022 30-Year Cost	\$150,859

Low Pressure Sewer Maintenance Costs

Capital Improvement Costs

Replacement of Air Release & Cleanout Valves	\$860
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Replacement Schedule

Years after Construction	Item	2022 Cost	F/P Factor	Future Dollars	P/F Factor	2022 30-Year Cost
15	ARV & CO	\$12,900	1.49	\$19,237	0.69	\$13,283
Capital Improvements 2022 30-Year Cost:						\$13,280

Debt Reduction Costs

Debt and Interest	\$11,250
Annual Cost, 1st year of operation (2022)	\$12,000
Yearly PIA Factor with Geometric Gradient:	3.87
Yearly Maintenance 2022 30-Year Cost	\$46,488

Sewer System Costs

Annual Costs (2022)	\$10,335
Sewer System Fee PIA Factor with Geometric Gradient:	30.11
Yearly Sewer System Fee 2022 30-Year Cost	\$311,204

LPSS 30-Year Cost (2022):

LPSS Initial Construction 30-Year Cost (2022):	\$1,216,470
LPSS Electricity 30-Year Cost (2022):	\$24,097
LPSS Sewer Maintenance 30-Year Cost (2022):	\$150,859
LPSS Sewer Capital Improvement 30-Year Cost (2022):	\$13,280
Current WWTP Debt Reduction Costs (2022):	\$46,488
External Sewer System Usage Costs (2022):	\$311,204
Total LPSS 30-Year Cost (2022):	\$1,762,408
Say	\$1,762,500

*Total is equal to the sum of the costs accumulated over the useful life (30 years) of the facility in terms of 2022 dollars

**Town of Clifton Park
Riverview Landing WWTP Study
30-Year Cost Analysis**



Alternative #3C - LPSS to MRCC WWTP

Year of Proposed Construction (year X):	2022
Life Cycle (years):	30
Number of Simmplex Stations:	37
Length of force main, ft (all sizes):	4100
Air Release Valves & Cleanouts	9
Yearly Power Cost Increase (12-Month % Change, 30-Yr Avg):	2.00%
Yearly Labor Increase:	2.70%
Discount Rate (CPI 12-Month % Change, 30-Year Average):	2.50%

Low Pressure Sewer Initial Construction Costs

General Requirements	\$110,000
Force Main Cleanout Structure	\$35,000
Extended Aeration Plant	\$230,000
Air/Vacuum Relief Valves	\$7,000
Air/Vacuum Relief Vaults	\$35,000
Precast Concrete Manholes incl. frame & cover	\$6,000
3" HDPE Sewer Force main, directional drilled, in soil	\$82,000
3" HDPE Sewer Force main, directional drilled, in rock	\$246,000
Gravel Subbase for Roads	\$500
Connection to existing gravity manhole	\$6,000
Asphalt Pavement Replacement	\$2,000
Replace Grinder Pumps	\$64,800
Existing WWTP Decommissioning	\$150,000
Sum	\$974,300
Contingencies (10%)	\$97,430
Estimated Construction Cost	\$1,071,730
Engineering, Administrative, & Legal (20%)	\$214,350
Total Project Cost	\$1,286,080
Current WWTP Property Value	\$31,700
Net Project Cost (2021)	\$1,254,380
Net Project Cost (2022)	\$1,288,250

Grinder Pump Maintenance Costs

Grinder Pump Power Costs	
Average Pump Run Time/year:	183
Horsepower hours/year:	6,570
KW hours/year:	4,901
Cost/KWH:	\$0.18
Power Cost/year:	\$883
Power Cost/year (2022):	\$919
Power P/A Factor with Geometric Gradient:	27.29
Power 2022 30-Year Cost:	\$24,097

Notes:

1. Power costs calculated using estimated hours of operation and \$0.18/KWH.

Maintenance Costs	
1st Year Maintenance Cost	\$2,200
1st Year Odor Control Cost	\$310
Annual Costs, 1st year of operation	\$2,510
Maint P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 2022 30-Year Cost	\$75,580

Capital Improvement Costs	
Replacement of Air Release & Cleanout Valves	\$860

Replacement Schedule

Years after Construction	Item	2022 Cost	F/P Factor	Future Dollars	P/F Factor	2022 30-Year Cost
15	ARV & CO	\$7,740	1.49	\$11,542	0.69	\$7,970
Capital Improvements 2022 30-Year Cost:						\$7,970

Debt Reduction Costs	
Debt and Interest	\$11,250
Annual Cost, 1st year of operation (2022)	\$12,000
Yearly P/A Factor with Geometric Gradient:	3.87
Yearly Maintenance 2022 30-Year Cost	\$46,488

WWTP Power Costs (Riverview Landing Portion)	
KW hours/year:	9,673
Cost/KWH:	\$0.18
Power Cost/year:	\$1,742
Power cost/year in 2022:	\$1,813
Power P/A Factor with Geometric Gradient:	27.29
Power 2022 30-Year Cost:	\$49,480

WWTP Maintenance Costs	
1st Year SCADA Fee	\$275
General equipment	\$2,100
Maintenance contracts	\$450
Labor (Operators, Admin, Benefits)	\$31,600
Sewers (cleaning & TV)	\$560
Fees (insurance, legal, SPDES)	\$2,100
Sewage Treatment (sludge disposal, chemicals, equipment, testing, fuel, & telephone)	\$5,700
Sum:	\$42,785
Annual Costs, 1st year of operation (2022)	\$43,950
Annual Costs, 1st year, RLSD	\$33,486
Yearly P/A Factor with Geometric Gradient:	30.11
Yearly Maintenance 2022 30-Year Cost	\$1,008,310

LPSS 30-Year Cost (2022):	
LPSS Initial Construction 30-Year Cost (2022):	\$1,288,250
LPSS Electricity 30-Year Cost (2022):	\$24,097
LPSS Sewer Maintenance 30-Year Cost (2022):	\$75,580
LPSS Sewer Capital Improvement 30-Year Cost (2022):	\$7,970
Current WWTP Debt Reduction Costs (2022):	\$46,488
MRCC WWTP Power Cost 30-Year Cost (2022):	\$49,480
MRCC WWTP Maintenance 30-Year Cost (2022):	\$1,008,310
Total LPSS 30-Year Cost (2022):	\$2,500,175
Say	\$2,500,200

*Total is equal to the sum of the costs accumulated over the useful life (30 years) of the facility in terms of 2022 dollars



EXHIBIT 12
ANNUAL COSTS TO A TYPICAL PROPERTY

**EXHIBIT 12
ANNUAL COSTS TO A TYPICAL PROPERTY - 2022**



ANNUAL COST FOR OPTION 1A:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 1A;	
Option 1A Cost	\$1,264,370
Annual Debt Service	\$82,184
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,075
OPERATION AND MAINTENANCE COSTS	
Labor	\$12,900
Maintenance	\$8,650
Equipment	\$2,900
Engineering	\$510
Total O&M	\$24,960
Typ. Property Value / Occupied District Assessment	0.0256
Annual O&M COST, TYPICAL PROPERTY	\$639
Annual DEBT REDUCTION COST, TYPICAL PROPERTY	\$296
Annual COST, TYPICAL PROPERTY (2022)	\$3,010

ANNUAL COST FOR OPTION 1B:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 1B;	
Option 1B Cost	\$1,815,880
Annual Debt Service	\$118,032
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,980
OPERATION AND MAINTENANCE COSTS	
Labor & Lab Testing	\$12,500
Maintenance	\$12,110
Fees (inc. cellular data)	\$2,125
Power & SCADA	\$2,039
Total O&M	\$28,773
Typ. Property Value / Occupied District Assessment	0.0256
Annual O&M COST, TYPICAL PROPERTY	\$737
Annual DEBT REDUCTION COST, TYPICAL PROPERTY	\$296
Annual COST, TYPICAL PROPERTY (2022)	\$4,013

ANNUAL COST FOR OPTION 1C:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 1C;	
Option 1C Cost	\$1,601,690
Annual Debt Service	\$104,110
Riverview Landing Units	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,629
OPERATION AND MAINTENANCE COSTS	
SCADA & Equipment	\$275
Maintenance & Contracts	\$13,225
Labor	\$32,000
Fees	\$2,000
Power	\$1,813
Total	\$49,313
Riverview Landing Units	0.0256
Annual O&M COST, TYPICAL PROPERTY	\$1,263
Annual DEBT REDUCTION COST, TYPICAL PROPERTY	\$296
Annual COST, TYPICAL PROPERTY (2022)	\$4,188

Note: A typical property is a property that has an assessed value equal to the mode of the assessed values of all occupied lots. For Riverview Landing, a typical property has an assessed value of \$337,500.

ANNUAL COST FOR OPTION 2A:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 2A;	
Option 2A Cost	\$1,578,020
Annual Debt Service	\$102,571
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,590
OPERATION AND MAINTENANCE COSTS	
SCADA	\$260
Station & Sewer Maintenance	\$14,140
Power	\$350
Subtotal:	\$14,750
SEWER COSTS	
Schenectady (\$2.95/1000 gallons)	\$7,540
Glenville (\$330/unit)	\$12,870
Subtotal:	\$20,410
O&M / Sewer Total	\$35,160
Typ. Property Value / Occupied District Assessment	0.0256
Annual O&M & SEWER COST, TYPICAL PROPERTY	\$900
Annual DEBT REDUCTION COST, TYPICAL PROPERTY	\$296
Annual COST, TYPICAL PROPERTY (2022)	\$3,786

ANNUAL COST FOR OPTION 2B:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 2B;	
Option 2B Cost	\$1,504,140
Annual Debt Service	\$97,769
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,469
OPERATION AND MAINTENANCE COSTS	
SCADA	\$260
Station & Sewer Maintenance	\$15,140
Power	\$313
Total	\$15,713
SEWER COSTS	
Saratoga County (\$265/unit)	\$10,335
O&M / Sewer Total	\$26,048
Typ. Property Value / Occupied District Assessment	0.0256
Annual O&M & SEWER COST, TYPICAL PROPERTY	\$667
Annual DEBT REDUCTION COST, TYPICAL PROPERTY	\$296
Annual COST, TYPICAL PROPERTY (2022)	\$3,432

ANNUAL COST FOR OPTION 2C:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 2C;	
Option 2C Cost	\$1,420,770
Annual Debt Service	\$92,350
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,332
OPERATION AND MAINTENANCE COSTS	
SCADA	\$520
Power	\$199
Station & Sewer Maintenance	\$12,661
WWTP Maintenance	\$33,211
Total	\$46,591
Typ. Property Value / Occupied District Assessment	0.0256
Annual O&M COST, TYPICAL PROPERTY	\$1,193
Annual DEBT REDUCTION COST, TYPICAL PROPERTY	\$296
Annual COST, TYPICAL PROPERTY (2022)	\$3,821

ANNUAL COST FOR OPTION 3A:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 3A;	
Option 3A Cost	\$1,586,810
Annual Debt Service	\$103,143
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,604
OPERATION AND MAINTENANCE COSTS	
Sewer Maintenance	\$4,010
Power	\$919
Subtotal	\$4,929
SEWER COSTS	
Schenectady (\$2.95/1000 gallons)	\$7,540
Glenville (\$330/unit)	\$12,870
Subtotal	\$20,410
Typ. Property Value / Occupied District Assessment	0.0256
Annual O&M & SEWER COST, TYPICAL PROPERTY	\$649
Annual DEBT REDUCTION COST, TYPICAL PROPERTY	\$296
Annual COST, TYPICAL PROPERTY (2022)	\$3,549

ANNUAL COST FOR OPTION 3B:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 3B;	
Option 3B Cost	\$1,216,470
Annual Debt Service	\$79,071
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$1,997
OPERATION AND MAINTENANCE COSTS	
Sewer Maintenance	\$5,010
Power	\$919
Subtotal	\$5,929
SEWER COSTS	
Saratoga County (\$265/unit)	\$10,335
Typ. Property Value / Occupied District Assessment	0.0256
Annual O&M & SEWER COST, TYPICAL PROPERTY	\$416
Annual DEBT REDUCTION COST, TYPICAL PROPERTY	\$296
Annual COST, TYPICAL PROPERTY (2022)	\$2,709

NOT FEASIBLE

ANNUAL COST FOR OPTION 3C:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 3C;	
Option 3C Cost	\$1,288,250
Annual Debt Service	\$83,736
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,114
OPERATION AND MAINTENANCE COSTS	
Sewer Maintenance	\$2,510
Power	\$2,732
WWTP Maintenance	\$33,486
Total	\$38,728
Typ. Property Value / Occupied District Assessment	0.0256
Annual O&M COST, TYPICAL PROPERTY	\$992
Annual DEBT REDUCTION COST, TYPICAL PROPERTY	\$296
Annual COST, TYPICAL PROPERTY (2022)	\$3,402

**EXHIBIT 12
ANNUAL COSTS TO A TYPICAL PROPERTY - 2024**



ANNUAL COST FOR OPTION 1A:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 1A;	
Option 1A Cost	\$1,264,370
Annual Debt Service	\$82,184
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,075
OPERATION AND MAINTENANCE COSTS	
Labor	\$13,610
Maintenance	\$9,130
Equipment	\$3,050
Engineering	\$540
Total O&M	\$26,330
Typ. Property Value / Occupied District Assesmer	0.0256
Annual O&M COST, TYPICAL PROPERTY	\$674
Annual COST, TYPICAL PROPERTY (2024)	\$2,749

ANNUAL COST FOR OPTION 1B:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 1B;	
Option 1B Cost	\$1,815,880
Annual Debt Service	\$118,032
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,980
OPERATION AND MAINTENANCE COSTS	
Labor & Lab Testing	\$13,190
Maintenance	\$12,780
Fees (inc. cellular data)	\$2,140
Power & SCADA	\$2,130
Total O&M	\$30,240
Typ. Property Value / Occupied District Assesmer	0.0256
Annual O&M COST, TYPICAL PROPERTY	\$774
Annual COST, TYPICAL PROPERTY (2024)	\$3,754

ANNUAL COST FOR OPTION 1C:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 1C;	
Option 1C Cost	\$1,601,690
Annual Debt Service	\$104,110
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,629
OPERATION AND MAINTENANCE COSTS	
SCADA & Equipment	\$300
Maintenance & Contracts	\$13,950
Labor	\$33,760
Fees	\$2,110
Power	\$1,890
Total	\$52,010
Typ. Property Value / Occupied District Assesmer	0.0256
Annual O&M COST, TYPICAL PROPERTY	\$1,332
Annual COST, TYPICAL PROPERTY (2024)	\$3,961

ANNUAL COST FOR OPTION 2A:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 2A;	
Option 2A Cost	\$1,578,020
Annual Debt Service	\$102,571
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,590
OPERATION AND MAINTENANCE COSTS	
SCADA	\$280
Station & Sewer Maintenance	\$14,920
Power	\$370
Subtotal:	\$15,570
SEWER COSTS	
Schenectady (\$2.95/1000 gallons)	\$7,540
Glenville (\$330/unit)	\$12,870
Subtotal:	\$20,410
O&M / Sewer Total	\$35,980
Typ. Property Value / Occupied District Assesmen	0.0256
Annual O&M & SEWER COST, TYPICAL PROPERTY	\$921
Annual COST, TYPICAL PROPERTY (2024)	\$3,511

ANNUAL COST FOR OPTION 2B:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 2B;	
Option 2B Cost	\$1,504,140
Annual Debt Service	\$97,769
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,469
OPERATION AND MAINTENANCE COSTS	
SCADA	\$280
Station & Sewer Maintenance	\$15,970
Power	\$330
Total	\$16,580
SEWER COSTS	
Saratoga County (\$265/unit)	\$10,335
O&M / Sewer Total	\$26,915
Typ. Property Value / Occupied District Assesmen	0.0256
Annual O&M & SEWER COST, TYPICAL PROPERTY	\$689
Annual COST, TYPICAL PROPERTY (2024)	\$3,158

ANNUAL COST FOR OPTION 2C:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 2C;	
Option 2C Cost	\$1,420,770
Annual Debt Service	\$92,350
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,332
OPERATION AND MAINTENANCE COSTS	
SCADA	\$550
Power	\$210
Station & Sewer Maintenance	\$13,360
WWTP Maintenance	\$35,030
Total	\$49,150
Typ. Property Value / Occupied District Assesmen	0.0256
Annual O&M COST, TYPICAL PROPERTY	\$1,259
Annual COST, TYPICAL PROPERTY (2024)	\$3,591

ANNUAL COST FOR OPTION 3A:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 3A;	
Option 3A Cost	\$1,586,810
Annual Debt Service	\$103,143
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,604
OPERATION AND MAINTENANCE COSTS	
Sewer Maintenance	\$4,230
Power	\$960
Subtotal	\$5,190
SEWER COSTS	
Schenectady (\$2.95/1000 gallons)	\$7,540
Glenville (\$330/unit)	\$12,870
Subtotal	\$20,410
Typ. Property Value / Occupied District Assesmen	0.0256
Annual O&M & SEWER COST, TYPICAL PROPERTY	\$656
Annual COST, TYPICAL PROPERTY (2024)	\$3,260

ANNUAL COST FOR OPTION 3B:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 3B;	
Option 3B Cost	\$1,216,470
Annual Debt Service	\$79,071
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$1,997
OPERATION AND MAINTENANCE COSTS	
Sewer Maintenance	\$5,290
Power	\$960
Subtotal	\$6,250
SEWER COSTS	
Saratoga County (\$265/unit)	\$10,335
Typ. Property Value / Occupied District Assesmen	0.0256
Annual O&M & SEWER COST, TYPICAL PROPERTY	\$425
Annual COST, TYPICAL PROPERTY (2024)	\$2,422

NOT FEASIBLE

ANNUAL COST FOR OPTION 3C:	
DEBT SERVICE, TYPICAL PROPERTY, OPTION 3C;	
Option 3C Cost	\$1,288,250
Annual Debt Service	\$83,736
Typ. Property Value / Total District Assessment	0.0253
Annual DEBT SERVICE COST, TYP. PROPERTY	\$2,114
OPERATION AND MAINTENANCE COSTS	
Sewer Maintenance	\$2,650
Power	\$2,850
WWTP Maintenance	\$35,320
Total	\$40,820
Typ. Property Value / Occupied District Assesmen	0.0256
Annual O&M COST, TYPICAL PROPERTY	\$1,045
Annual COST, TYPICAL PROPERTY (2024)	\$3,159



EXHIBIT 13
PUMP STATION DESIGN CALCULATIONS

**Town of Clifton Park
Riverview Landing WWTP Study
Exhibit 13
Alternative 2A - Pump Station Design**



SECTION	ITEM	VALUE	UNITS		
FLOW					
RESIDENTIAL USERS					
Based on population served & buildout of vacant lots	<INPUT> Number of Houses Served	39	EACH		
Assume 3 people/household if no data given	<INPUT> Number of People Per House	3.00	EACH		
	Residential Population Served	117	EACH		
	<INPUT> Per Capita Wastewater Flow	100	GPD		
Full Flow (Existing Avg. + Future Buildout)	Total Residential Flow	8,000	GPD		
COMMERCIAL AND INDUSTRIAL METERED USERS					
Average Daily Flow and Peak Flow should be based on actual water use records and operating shift durations where possible	<INPUT> User #1 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #2 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #3 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #4 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #5 Average Meter Value	0	GPD		
	<INPUT> User #6 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #7 Average Meter Value	0	GPD	Future Allowance	Future Allowance
	Total Daily Commercial Flow	0	GPD		
Total Average Daily Flow	Average Daily Flow Rate	8,000	GPD		
	Average Daily Flow Rate	5.56	GPM		
	<INPUT>Peak Hr. Flow Factor	Peak hour flow estimate provided by manufacturer			
	Peak Hr. Flow	66.00	GPM		
LIFT STATION DESIGN					
	Design Flow	66.00	GPM		
	Design Pump Capacity	70.00	GPM		
DESIGN STORAGE VOLUME					
(DESIGN FOR 30 MIN ADF STORAGE CAPACITY)					
	Min. Volume (Required)	166.67	GAL		
	Volume (Required)	22.28	FT^3		
Wetwell Sizing	<INPUT>Diameter	4.00	FT		
Note: Suction inlet pipe mouth should be submerged at least 12".	<INPUT>Depth Below Inlet Inv. (Inv. In - Lowest Pump Off)	4.50	FT	Grade	Grade
	Storage Vol. Per Vert. Ft.	12.57	FT^3		
	Total Storage Volume Below Inv.	56.55	FT^3		
	Total Storage Volume(Gals.)	422.98	GAL		
	Is Proposed Volume Adequate?	YES			
CYCLE TIME					
	<INPUT> Pump Drawdown Depth	2.00	FT		
	Drawdown Volume (No Inflow)	187.99	Gals.		
	<INPUT> Pump Discharge Rate	70.00	GPM		
	Pump Run Time (No Inflow)	2.69	MIN		
Min. pump run time should be >1 minute	Pump Run Time (With Inflow)	2.92	MIN		
	Pump Off Time (With Inflow)	33.84	MIN		
	Average Cycle Time	36.76	MIN		
	Avg. Cycles Per Hr.	1.63	CYCLES/HR		
	Avg. Cycles Per Day	39.18	CYCLES/DAY		
	Avg. Cycles Per Year	14,299.78	CYCLES/YR		
	Avg. Pump Run Time/Year	695.24	HRS.		
STATIC HEAD					
	<INPUT>Lowest Suction WS Elev.	317.00	FT		

**Town of Clifton Park
Riverview Landing WWTP Study
Exhibit 13
Alternative 2A - Pump Station Design**



	<INPUT>Highest Disch. WS Elev.	336.00	FT		
	Computed Static Head	19.00	FT		
FORCE MAIN LENGTH	<INPUT> Actual Length	7,400	FT		
	<INPUT> Equiv. Length Ftgs.	740	FT		
	Total Equival. Length	8,140	FT		
FORCE MAIN EVALUATION					
Try a minimum of three (3) sizes	<INPUT> Diameter of Pipe, Inches	1.50	2.00	3.00	4.00
	Area of Flow (A)	0.012	0.022	0.049	0.087
	Gal./Ft of Pipe	0.092	0.163	0.367	0.653
	Force Main Volume, Gals.	679.271	1207.593	2717.085	4830.373
Maximum horsepower is calculated using a Hazen-Williams	Pump Discharge Rate, GPM	70.00	70.00	70.00	70.00
	Coefficient of 120 Velocity, Ft/Sec	12.71	7.15	3.18	1.79
Actual horsepower is calculated using a Hazen-Williams	<INPUT>Hazen-Wms. "C" Factor	140.00	140.00	140.00	140.00
	Coefficient of 140 Hydraulic Radius, Ft.	0.0313	0.0417	0.0625	0.0833
	Friction Loss, Ft/1,000	408.79	100.70	13.98	3.44
Check Motor HP Using	Total FM Friction Loss, Ft	3327.51	819.72	113.79	28.03
Coeff. of 140 on pump curve	Static Head, Ft.	19.00	19.00	19.00	19.00
	Total Dynamic Head, Ft	3346.51	838.72	132.79	47.03
	<INPUT> Wire to Water Effic., E	0.60	0.60	0.60	0.60
	Computed HP Req'd.	98.55	24.70	3.91	1.39
	HP-Hrs/Yr.	68,518	17,172	2,719	963
	Kw-Hrs/Yr	51,114	12,811	2,028	718
	<INPUT> Cost/Kw-hr, \$	0.17	0.17	0.17	0.17
	Power Cost/Year	\$8,689	\$2,178	\$345	\$122
	Is Velocity > 2FPS	Yes	Yes	Yes	No
	FM Detention Time @ Flow, Min.	9.70	17.25	38.82	69.01
	Is Pump On Time > FM Det. Time	No	No	No	No
Riverview Landing PS					
Pump Design:	70 gpm @ 140' TDH				

**Town of Clifton Park
Riverview Landing WWTP Study
Exhibit 13
Alternative 2B - Pump Station Design**



SECTION	ITEM	VALUE	UNITS		
FLOW					
RESIDENTIAL USERS					
Based on population served & buildout of vacant lots	<INPUT> Number of Houses Served	39	EACH		
Assume 3 people/household if no data given	<INPUT> Number of People Per House	3.00	EACH		
	Residential Population Served	117	EACH		
	<INPUT> Per Capita Wastewater Flow	100	GPD		
Full Flow (Existing Avg. + Future Buildout)	Total Residential Flow	8,000	GPD		
COMMERCIAL AND INDUSTRIAL METERED USERS					
Average Daily Flow and Peak Flow should be based on actual	<INPUT> User #1 Average Meter Value	0	GPD	Name	Name
water use records and operating shift durations where possible	<INPUT> User #2 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #3 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #4 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #5 Average Meter Value	0	GPD		
	<INPUT> User #6 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #7 Average Meter Value	0	GPD	Future Allowance	Future Allowance
	Total Daily Commercial Flow	0	GPD		
Total Average Daily Flow	Average Daily Flow Rate	8,000	GPD		
	Average Daily Flow Rate	5.56	GPM		
	Peak Hr. Flow	66.00	GPM		
LIFT STATION DESIGN					
	Design Flow	66.00	GPM		
	Design Pump Capacity	80.00	GPM		
DESIGN STORAGE VOLUME					
(DESIGN FOR 30 MIN ADF STORAGE CAPACITY)					
	Min. Volume (Required)	166.67	GAL		
	Volume (Required)	22.28	FT^3		
Wetwell Sizing	<INPUT> Diameter	4.00	FT		
Note: Suction inlet pipe mouth should be submerged at least 12".	<INPUT> Depth Below Inlet Inv. (Inv. In - Lowest Pump Off)	4.50	FT	Grade	Grade
	Storage Vol. Per Vert. Ft.	12.57	FT^3		
	Total Storage Volume Below Inv.	56.55	FT^3		
	Total Storage Volume(Gals.)	422.98	GAL		
	Is Proposed Volume Adequate?	YES			
CYCLE TIME					
	<INPUT> Pump Drawdown Depth	2.00	FT		
	Drawdown Volume (No Inflow)	187.99	Gals.		
	<INPUT> Pump Discharge Rate	80.00	GPM		
	Pump Run Time (No Inflow)	2.35	MIN		
Min. pump run time should be >1 minute	Pump Run Time (With Inflow)	2.53	MIN		
	Pump Off Time (With Inflow)	33.84	MIN		
	Average Cycle Time	36.36	MIN		
	Avg. Cycles Per Hr.	1.65	CYCLES/HR		
	Avg. Cycles Per Day	39.60	CYCLES/DAY		
	Avg. Cycles Per Year	14,453.87	CYCLES/YR		
	Avg. Pump Run Time/Year	608.33	HRS.		
STATIC HEAD					
	<INPUT> Lowest Suction WS Elev.	301.00	FT		
	<INPUT> Highest Disch. WS Elev.	348.00	FT		
	Computed Static Head	47.00	FT		

**Town of Clifton Park
Riverview Landing WWTP Study
Exhibit 13
Alternative 2B - Pump Station Design**



FORCE MAIN LENGTH	<INPUT> Actual Length	6.400	FT	<INPUT> Actual Length	3.400
	<INPUT> Equiv. Length Ftgs.	640	FT	<INPUT> Equiv. Length Ftgs.	340
	Total Equival. Length	7,040	FT	Total Equival. Length	3,740
FORCE MAIN EVALUATION				Section A to 3" on Holbrook Drive	Section B to existing Settler's Hill P.S.
Try a minimum of three (3) sizes	<INPUT> Diameter of Pipe, Inches	1.50	2.00	3.00	3.00
	Area of Flow (A) Gal./Ft of Pipe	0.012	0.022	0.049	0.049
	Velocity, Ft/Sec	0.092	0.163	0.367	0.367
	Force Main Volume, Gals.	587.478	1044.405	2349.911	1248.390
Maximum horsepower is calculated using a Hazen-Williams	Pump Discharge Rate, GPM	70.00	70.00	70.00	125.00
Coefficient of 120	Velocity, Ft/Sec	12.71	7.15	3.18	5.67
Actual horsepower is calculated using a Hazen-Williams	<INPUT>Hazen-Wms. "C" Factor	140.00	140.00	140.00	140.00
Coefficient of 140	Hydraulic Radius, Ft.	0.0313	0.0417	0.0625	0.0625
	Friction Loss, Ft/1,000	408.79	100.70	13.98	40.86
Check Motor HP Using	Total FM Friction Loss, Ft	2877.85	708.95	98.41	152.83
Coeff. of 140 on pump curve	Static Head, Ft.	47.00	47.00	47.00	8.00
	Total Dynamic Head, Ft	2924.85	755.95	145.41	160.83
	<INPUT> Wire to Water Effic., E	0.60	0.60	0.60	0.60
	Computed HP Req'd.	86.14	22.26	4.28	8.46
	HP-Hrs/Yr.	52,399	13,543	2,605	5,145
	Kw-Hrs/Yr	39,090	10,103	1,943	3,838
	<INPUT> Cost/Kw-hr, \$	0.17	0.17	0.17	0.17
	Power Cost/Year	\$6,645	\$1,718	\$330	\$653
	Is Velocity > 2FPS	Yes	Yes	Yes	Yes
	FM Detention Time @ Flow, Min.	8.39	14.92	33.57	9.99
	Is Pump On Time > FM Det. Time	No	No	No	No
Riverview Landing PS					
Pump Design:	Additional head in Windhover mains equals 96 feet				
	70 gpm @ 310' TDH				

Town of Clifton Park
Riverview Landing WWTP Study
Exhibit 13
Alternative 2C - Pump Station Design



SECTION	ITEM	VALUE	UNITS		
FLOW					
RESIDENTIAL USERS					
Based on population served & buildout of vacant lots	<INPUT> Number of Houses Served	39	EACH		
Assume 3 people/household if no data given	<INPUT> Number of People Per House	3.00	EACH		
	Residential Population Served	117	EACH		
	<INPUT> Per Capita Wastewater Flow	100	GPD		
Full Flow (Existing Avg. + Future Buildout)	Total Residential Flow	8,000	GPD		
COMMERCIAL AND INDUSTRIAL METERED USERS					
Average Daily Flow and Peak Flow should be based on actual	<INPUT> User #1 Average Meter Value	0	GPD	Name	Name
water use records and operating shift durations where possible	<INPUT> User #2 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #3 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #4 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #5 Average Meter Value	0	GPD		
	<INPUT> User #6 Average Meter Value	0	GPD	Name	Name
	<INPUT> User #7 Average Meter Value	0	GPD	Future Allowance	Future Allowance
	Total Daily Commercial Flow	0	GPD		
Total Average Daily Flow	Average Daily Flow Rate	8,000	GPD		
	Average Daily Flow Rate	5.56	GPM		
	<INPUT>Peak Hr. Flow Factor	Peak hour flow from grinder pump manufacturer			
	Peak Hr. Flow	66.00	GPM		
LIFT STATION DESIGN					
	Design Flow	66.00	GPM		
	Design Pump Capacity	70.00	GPM		
DESIGN STORAGE VOLUME					
(DESIGN FOR 30 MIN ADF STORAGE CAPACITY)					
	Min. Volume (Required)	166.67	GAL		
	Volume (Required)	22.28	FT^3		
Wetwell Sizing	<INPUT>Diameter	4.00	FT		
Note: Suction inlet pipe mouth should be submerged at least 12".	<INPUT>Depth Below Inlet Inv. (Inv. In - Lowest Pump Off)	4.50	FT	Grade	Grade
	Storage Vol. Per Vert. Ft.	12.57	FT^3		
	Total Storage Volume Below Inv.	56.55	FT^3		
	Total Storage Volume(Gals.)	422.98	GAL		
	Is Proposed Volume Adequate?	YES			
CYCLE TIME					
	<INPUT> Pump Drawdown Depth	2.00	FT		
	Drawdown Volume (No Inflow)	187.99	Gals.		
	<INPUT> Pump Discharge Rate	70.00	GPM		
	Pump Run Time (No Inflow)	2.69	MIN		
Min. pump run time should be >1 minute	Pump Run Time (With Inflow)	2.92	MIN		
	Pump Off Time (With Inflow)	33.84	MIN		
	Average Cycle Time	36.76	MIN		
	Avg. Cycles Per Hr.	1.63	CYCLES/HR		
	Avg. Cycles Per Day	39.18	CYCLES/DAY		
	Avg. Cycles Per Year	14,299.78	CYCLES/YR		
	Avg. Pump Run Time/Year	695.24	HRS.		
STATIC HEAD					
	<INPUT>Lowest Suction WS Elev.	317.00	FT		

**Town of Clifton Park
Riverview Landing WWTP Study
Exhibit 13
Alternative 2C - Pump Station Design**



	<INPUT>Highest Disch. WS Elev.	328.00	FT		
	Computed Static Head	11.00	FT		
FORCE MAIN LENGTH	<INPUT> Actual Length	4,200	FT		
	<INPUT> Equiv. Length Ftgs.	420	FT		
	Total Equival. Length	4,620	FT		
FORCE MAIN EVALUATION					
Try a minimum of three (3) sizes	<INPUT> Diameter of Pipe, Inches	1.50	2.00	3.00	4.00
	Area of Flow (A)	0.012	0.022	0.049	0.087
	Gal./Ft of Pipe	0.092	0.163	0.367	0.653
	Force Main Volume, Gals.	385.532	685.391	1542.129	2741.563
Maximum horsepower is calculated using a Hazen-Williams	Pump Discharge Rate, GPM	70.00	70.00	70.00	70.00
	Coefficient of 120 Velocity, Ft/Sec	12.71	7.15	3.18	1.79
Actual horsepower is calculated using a Hazen-Williams	<INPUT>Hazen-Wms. "C" Factor	140.00	140.00	140.00	140.00
	Coefficient of 140 Hydraulic Radius, Ft.	0.0313	0.0417	0.0625	0.0833
	Friction Loss, Ft/1,000	408.79	100.70	13.98	3.44
Check Motor HP Using	Total FM Friction Loss, Ft	1888.59	465.25	64.58	15.91
Coeff. of 140 on pump curve	Static Head, Ft.	11.00	11.00	11.00	11.00
	Total Dynamic Head, Ft	1899.59	476.25	75.58	26.91
	<INPUT> Wire to Water Effic., E	0.60	0.60	0.60	0.60
	Computed HP Req'd.	55.94	14.03	2.23	0.79
	HP-Hrs/Yr.	38,893	9,751	1,548	551
	Kw-Hrs/Yr	29,014	7,274	1,154	411
	<INPUT> Cost/Kw-hr, \$	0.17	0.17	0.17	0.17
	Power Cost/Year	\$4,932	\$1,237	\$196	\$70
	Is Velocity > 2FPS	Yes	Yes	Yes	No
	FM Detention Time @ Flow, Min.	5.51	9.79	22.03	39.17
	Is Pump On Time > FM Det. Time	No	No	No	No
Riverview Landing PS					
Pump Design:	70 gpm @ 80' TDH				



EXHIBIT 14
HEADLOSS CALCULATIONS

Riverview Landing WWTP Study
Exhibit 14
Headloss Calculations



Grinder Pump Network with Current Pipes and Proposed Forcemains

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20A	20B	20C	20D	20E	20F
Pipe Diameter	2.00	2.50	1.50	2.50	1.50	2.50	2.50	3.00	2.00	1.50	1.50	1.50	1.50	3.00	1.50	3.00	8.00	1.50	1.50	3.00	3.00	3.00	3.00	3.00	3.00
Pipe Area	0.022	0.034	0.012	0.034	0.012	0.034	0.034	0.049	0.022	0.012	0.012	0.012	0.012	0.049	0.012	0.049	0.349	0.012	0.012	0.049	0.049	0.049	0.049	0.049	0.049
Gal/ft	0.163	0.255	0.092	0.255	0.092	0.255	0.255	0.367	0.163	0.092	0.092	0.092	0.092	0.367	0.092	0.367	2.611	0.092	0.092	0.367	0.367	0.367	0.367	0.367	0.367
Force main volume (gal)	97.91	219.28	41.31	152.99	41.31	70.12	203.99	183.59	114.23	55.08	45.90	73.43	27.54	106.48	32.13	323.11	1253.29	22.95	55.08	2717.08	1505.41	1542.13	1174.96	422.25	73.43
Pump Discharge Rate, GPM	22.00	22.00	11.00	44.00	22.00	44.00	44.00	44.00	33.00	22.00	22.00	22.00	22.00	55.00	22.00	66.00	66.00	11.00	11.00	66.00	66.00	66.00	66.00	66.00	66.00
Velocity, Ft/Sec	2.25	1.44	2.00	2.88	3.99	2.88	2.88	2.00	3.37	3.99	3.99	3.99	3.99	2.50	3.99	3.00	0.42	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
<INPUT>Hazen-Wms. "C" Factor	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00
Hydraulic Radius, Ft.	0.0417	0.0521	0.0313	0.0521	0.0313	0.0521	0.0521	0.0625	0.0417	0.0313	0.0313	0.0313	0.0313	0.0625	0.0313	0.0625	0.1667	0.0313	0.0313	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625
Friction Loss, Ft/1,000	10.42	3.51	11.73	12.67	42.28	12.67	12.67	5.21	22.05	42.28	42.28	42.28	42.28	7.88	42.28	11.03	0.09	11.73	11.73	11.03	11.03	11.03	11.03	11.03	11.03
Total FM Friction Loss, Ft	6.25	3.02	5.28	7.60	19.03	3.48	10.13	2.61	15.44	25.37	21.14	33.82	12.68	2.28	14.80	9.71	0.04	2.93	7.04	81.66	45.24	46.35	35.31	12.69	2.21
Static Head, Ft.	26.00	0.00	7.00	15.00	3.00	0.00	0.00	3.00	17.00	0.00	0.00	0.00	0.00	2.00	5.00	5.00	0.00	8.00	0.00	12.00	12.00	23.00	35.00	3.00	3.00
Total Dynamic Head, Ft	32.25	3.02	12.28	22.60	22.03	3.48	10.13	5.61	32.44	25.37	21.14	33.82	12.68	4.28	19.80	14.71	0.04	10.93	7.04	93.66	57.24	69.35	70.31	15.69	5.21
<INPUT> Wire to Water Effic., E	0.60	0.60	1.60	0.60	1.60	0.60	0.60	0.60	2.60	3.60	4.60	5.60	1.60	0.60	1.60	0.60	1.60	1.60	0.60	1.60	1.60	0.60	0.60	0.60	0.60
Computed HP Req'd.	0.30	0.03	0.02	0.42	0.08	0.06	0.19	0.10	0.10	0.04	0.03	0.03	0.04	0.10	0.07	0.41	0.00	0.02	0.03	0.98	0.60	1.93	1.95	0.44	0.14
Pipe lengths (ft)	600	860	450	600	450	275	800	500	700	600	500	800	300	290	350	880	480	250	600	7400	4100	4200	3200	1150	200
# of houses using pipe	3	2	1	12	2	14	16	18	6	2	2	2	2	31	2	34	34	1	1	37	37	37	37	37	37
Static head (ft)	26	0	7	15	3	0	0	3	17	0	0	0	0	2	5	5	0	8	0	12	12	23	35	3	3
Max # of pumps operating simultaneously	2	2	1	4	2	4	4	4	3	2	2	2	2	5	2	6	6	1	1	6	6	6	6	6	6

TOTAL HEAD to MRCC WWTP = 153.37 ft

TOTAL HEAD to EC PS = 189.79 ft

Grinder Pump Network with Replacement Pipes and Proposed Forcemains

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20A	20B	20C	20D	20E	20F
Pipe Diameter	2.00	2.50	1.50	3.00	1.50	3.00	3.00	3.00	2.50	1.50	1.50	1.50	1.50	3.00	1.50	3.00	8.00	1.50	1.50	3.00	3.00	3.00	3.00	3.00	3.00
Pipe Area	0.022	0.034	0.012	0.049	0.012	0.049	0.049	0.049	0.034	0.012	0.012	0.012	0.012	0.049	0.012	0.049	0.349	0.012	0.012	0.049	0.049	0.049	0.049	0.049	0.049
Gal/ft	0.163	0.255	0.092	0.367	0.092	0.367	0.367	0.367	0.255	0.092	0.092	0.092	0.092	0.367	0.092	0.367	2.611	0.092	0.092	0.367	0.367	0.367	0.367	0.367	0.367
Force main volume (gal)	97.91	219.28	41.31	220.30	41.31	100.97	293.74	183.59	178.49	55.08	45.90	73.43	27.54	106.48	32.13	323.11	1253.29	22.948	55.076	2717.08	1505.41	1542.13	1174.96	422.25	73.43
Pump Discharge Rate, GPM	22.00	22.00	11.00	44.00	22.00	44.00	44.00	44.00	33.00	22.00	22.00	22.00	22.00	55.00	22.00	66.00	66.00	11.00	11.00	66.00	66.00	66.00	66.00	66.00	66.00
Velocity, Ft/Sec	2.25	1.44	2.00	2.00	3.99	2.00	2.00	2.00	2.16	3.99	3.99	3.99	3.99	2.50	3.99	3.00	0.42	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
<INPUT>Hazen-Wms. "C" Factor	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00
Hydraulic Radius, Ft.	0.0417	0.0521	0.0313	0.0625	0.0313	0.0625	0.0625	0.0625	0.0521	0.0313	0.0313	0.0313	0.0313	0.0625	0.0313	0.0625	0.1667	0.0313	0.0313	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625
Friction Loss, Ft/1,000	10.42	3.51	11.73	5.21	42.28	5.21	5.21	5.21	7.44	42.28	42.28	42.28	42.28	7.88	42.28	11.03	0.09	11.73	11.73	11.03	11.03	11.03	11.03	11.03	11.03
Total FM Friction Loss, Ft	6.25	3.02	5.28	3.13	19.03	1.43	4.17	2.61	5.21	25.37	21.14	33.82	12.68	2.28	14.80	9.71	0.04	2.93	7.04	81.66	45.24	46.35	35.31	12.69	2.21
Static Head, Ft.	26.00	0.00	7.00	15.00	3.00	0.00	0.00	3.00	17.00	0.00	0.00	0.00	0.00	2.00	5.00	5.00	0.00	8.00	0.00	12.00	12.00	23.00	35.00	3.00	3.00
Total Dynamic Head, Ft	32.25	3.02	12.28	18.13	22.03	1.43	4.17	5.61	22.21	25.37	21.14	33.82	12.68	4.28	19.80	14.71	0.04	10.93	7.04	93.66	57.24	69.35	70.31	15.69	5.21
<INPUT> Wire to Water Effic., E	0.60	0.60	1.60	0.60	1.60	0.60	0.60	0.60	2.60	3.60	4.60	5.60	1.60	0.60	1.60	0.60	1.60	1.60	0.60	1.60	1.60	0.60	0.60	0.60	0.60
Computed HP Req'd.	0.30	0.03	0.02	0.34	0.08	0.03	0.08	0.10	0.07	0.04	0.03	0.03	0.04	0.10	0.07	0.41	0.00	0.02	0.03	0.98	0.60	1.93	1.95	0.44	0.14
Pipe lengths (ft)	600	860	450	600	450	275	800	500	700	600	500	800	300	290	350	880	480	250	600	7400	4100	4200	3200	1150	200
# of houses using pipe	3	2	1	12	2	14	16	18	6	2	2	2	2	31	2	34	34	1	1	37	37	37	37	37	37
Static head (ft)	26	0	7	15	3	0	0	3	17	0	0	0	0	2	5	5	0	8	0	12	12	23	35	3	3
Max # of pumps operating simultaneously	2	2	1	4	2	4	4	4	3	2	2	2	2	5	2	6	6	1	1	6	6	6	6	6	6

TOTAL HEAD to MRCC WWTP = 140.89 ft

TOTAL HEAD to EC PS = 177.30 ft

Riverview Landing WWTP Study
Exhibit 14
Headloss Calculations

Grinder Pump Network from west to east using existing pipes

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Pipe Diameter	1.50	1.50	8.00	3.00	1.50	3.00	1.50	2.00	1.50	1.50	1.50	3.00	2.50	2.50	1.50	2.50	1.50	2.50	2.00	2.50	3.00	3.00	3.00
Pipe Area	0.012	0.012	0.349	0.049	0.012	0.049	0.012	0.022	0.012	0.012	0.012	0.049	0.034	0.034	0.012	0.034	0.012	0.034	0.022	0.034	0.049	0.049	0.049
Gal/ft	0.092	0.092	2.611	0.367	0.092	0.367	0.092	0.163	0.092	0.092	0.092	0.367	0.255	0.255	0.092	0.255	0.092	0.255	0.163	0.255	0.367	0.367	0.367
Force main volume	55.076	22.948	1253.286	323.113	32.128	106.480	27.538	114.232	55.076	45.897	73.435	183.587	203.985	70.120	41.307	152.989	41.307	66.295	97.913	152.989	1468.695	550.760	1578.847
Pump Discharge Rate, GPM	22.00	11.00	22.00	22.00	22.00	33.00	22.00	33.00	22.00	22.00	22.00	55.00	55.00	55.00	22.00	66.00	11.00	66.00	22.00	22.00	66.00	66.00	66.00
Velocity, Ft/Sec	3.99	2.00	0.14	1.00	3.99	1.50	3.99	3.37	3.99	3.99	3.99	2.50	3.60	3.60	3.99	4.31	2.00	4.31	2.25	1.44	3.00	3.00	3.00
<INPUT>Hazen-Wms. "C" Factor	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00
Hydraulic Radius, Ft.	0.0313	0.0313	0.1667	0.0625	0.0313	0.0625	0.0313	0.0417	0.0313	0.0313	0.0313	0.0625	0.0521	0.0521	0.0313	0.0521	0.0313	0.0521	0.0417	0.0521	0.0625	0.0625	0.0625
Friction Loss, Ft/1,000	42.28	11.73	0.01	1.45	42.28	3.06	42.28	22.05	42.28	42.28	42.28	7.88	19.14	19.14	42.28	26.82	11.73	26.82	10.42	3.51	11.03	11.03	11.03
Total FM Friction Loss, Ft	25.37	2.93	0.01	1.27	14.80	0.89	12.68	15.44	25.37	21.14	33.82	3.94	15.31	5.26	19.03	16.09	5.28	6.97	6.25	2.11	44.14	16.55	47.45
Static Head, Ft.	2.00	8.00	10.00	13.00	5.00	0.00	0.00	17.00	0.00	0.00	0.00	0.00	19.00	6.00	3.00	0.00	7.00	0.00	26.00	0.00	35.00	3.00	17.00
Total Dynamic Head, Ft	27.37	10.93	10.01	14.27	19.80	0.89	12.68	32.44	25.37	21.14	33.82	3.94	34.31	11.26	22.03	16.09	12.28	6.97	32.25	2.11	79.14	19.55	64.45
<INPUT> Wire to Water Effic., E	0.60	1.60	1.60	0.60	1.60	0.60	1.60	2.60	3.60	4.60	5.60	0.60	0.60	0.60	1.60	0.60	1.60	0.60	0.60	0.60	0.60	0.60	0.60
Computed HP Req'd.	0.25	0.02	0.03	0.13	0.07	0.01	0.04	0.10	0.04	0.03	0.03	0.09	0.79	0.26	0.08	0.45	0.02	0.19	0.30	0.02	2.20	0.54	1.79

TOTAL HEAD (Farthest House) =
288.25 ft

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Pipe lengths (ft)	600	250	480	880	350	290	300	700	600	500	800	500	800	275	450	600	450	260	600	600	4000	1500	4300
# of houses using pipe	2	1	2	2	2	7	2	6	2	2	2	21	25	25	2	32	1	34	3	4	36	36	36
Static head (ft)	2	8	10	13	5	0	0	17	0	0	0	0	19	6	3	0	7	0	26	0	35	3	17
Max # of pumps operating simultaneously	2	1	2	2	2	3	2	3	2	2	2	5	5	5	2	6	1	6	2	2	6	6	6

total volumetric flow rate =

Grinder Pump Network from farthest house to Windhover Acres with replacement pipes

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Pipe Diameter	1.50	1.50	2.00	2.00	1.50	2.50	1.50	2.50	1.50	1.50	1.50	3.00	3.00	3.00	1.50	3.00	1.50	3.00	2.00	2.00	3.00	3.00	3.00
Pipe Area	0.012	0.012	0.022	0.022	0.012	0.034	0.012	0.034	0.012	0.012	0.012	0.049	0.049	0.049	0.012	0.049	0.012	0.049	0.022	0.022	0.049	0.049	0.049
Gal/ft	0.092	0.092	0.163	0.163	0.092	0.255	0.092	0.255	0.092	0.092	0.092	0.367	0.367	0.367	0.092	0.367	0.092	0.367	0.163	0.163	0.367	0.367	0.367
Force main volume	55.076	22.948	78.330	143.606	32.128	73.945	27.538	178.487	55.076	45.897	73.435	183.587	293.739	100.973	41.307	220.304	41.307	95.465	97.913	97.913	1468.695	550.760	1578.847
Pump Discharge Rate, GPM	22.00	11.00	22.00	22.00	22.00	33.00	22.00	33.00	22.00	22.00	22.00	55.00	55.00	55.00	22.00	66.00	11.00	66.00	22.00	22.00	66.00	66.00	66.00
Velocity, Ft/Sec	3.99	2.00	2.25	2.25	3.99	2.16	3.99	2.16	3.99	3.99	3.99	2.50	2.50	2.50	3.99	3.00	2.00	3.00	2.25	2.25	3.00	3.00	3.00
<INPUT>Hazen-Wms. "C" Factor	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00
Hydraulic Radius, Ft.	0.0313	0.0313	0.0417	0.0417	0.0313	0.0521	0.0313	0.0521	0.0313	0.0313	0.0313	0.0625	0.0625	0.0625	0.0313	0.0625	0.0313	0.0625	0.0417	0.0417	0.0625	0.0625	0.0625
Friction Loss, Ft/1,000	42.28	11.73	10.42	10.42	42.28	7.44	42.28	7.44	42.28	42.28	42.28	7.88	7.88	7.88	42.28	11.03	11.73	11.03	10.42	10.42	11.03	11.03	11.03
Total FM Friction Loss, Ft	25.37	2.93	5.00	9.17	14.80	2.16	12.68	5.21	25.37	21.14	33.82	3.94	6.30	2.17	19.03	6.62	5.28	2.87	6.25	6.25	44.14	16.55	47.45
Static Head, Ft.	2.00	8.00	10.00	13.00	5.00	0.00	0.00	17.00	0.00	0.00	0.00	0.00	19.00	6.00	3.00	0.00	7.00	0.00	26.00	0.00	35.00	3.00	17.00
Total Dynamic Head, Ft	27.37	10.93	15.00	22.17	19.80	2.16	12.68	22.21	25.37	21.14	33.82	3.94	25.30	8.17	22.03	6.62	12.28	2.87	32.25	6.25	79.14	19.55	64.45
<INPUT> Wire to Water Effic., E	0.60	1.60	1.60	0.60	1.60	0.60	1.60	2.60	3.60	4.60	5.60	0.60	0.60	0.60	1.60	0.60	1.60	0.60	0.60	0.60	0.60	0.60	0.60
Computed HP Req'd.	0.25	0.02	0.05	0.21	0.07	0.03	0.04	0.07	0.04	0.03	0.03	0.09	0.59	0.19	0.08	0.18	0.02	0.08	0.30	0.06	2.20	0.54	1.79

TOTAL HEAD (farthest house) =
276.73 ft

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Pipe lengths (ft)	600	250	480	880	350	290	300	700	600	500	800	500	800	275	450	600	450	260	600	600	4000	1500	4300
# of houses using pipe	2	1	2	2	2	7	2	6	2	2	2	21	25	25	2	32	1	34	3	4	36	36	36
Static head (ft)	2	8	10	13	5	0	0	17	0	0	0	0	19	6	3	0	7	0	26	0	35	3	17
Max # of pumps operating simultaneously	2	1	2	2	2	3	2	3	2	2	2	5	5	5	2	6	1	6	2	2	6	6	6

total volumetric flow rate =



EXHIBIT 15
COSTS TO EACH PROPERTY

**Town of Clifton Park
Riverview Landing Sewer District
Current System Costs for Each Property, 2021**

PARCEL ID	PROP ADDRESS	OWNER	Existing Debt Service	Existing O&M	Existing Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$296.30	\$410.26	\$706.56
275.-1-47	778 Riverview Road	Louise Straney	\$148.15	\$0.00	\$148.15
275.-1-50	752 Riverview Road	Paula Gargiulo	\$296.30	\$410.26	\$706.56
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$296.30	\$410.26	\$706.56
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrig	\$296.30	\$410.26	\$706.56
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$296.30	\$410.26	\$706.56
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$296.30	\$410.26	\$706.56
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$296.30	\$410.26	\$706.56
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$296.30	\$410.26	\$706.56
275.-1-57	712 Riverview Road	Georgia Desimone	\$296.30	\$410.26	\$706.56
275.-1-63	Riverview Road	C & C Lending	\$296.30	\$410.26	\$706.56
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$296.30	\$410.26	\$706.56
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$296.30	\$410.26	\$706.56
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$296.30	\$410.26	\$706.56
275.-1-67	4 Maria Court	Anita Dematteo	\$296.30	\$410.26	\$706.56
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$296.30	\$410.26	\$706.56
275.-1-69	6 Maria Court	Michael and Susan Burke	\$296.30	\$410.26	\$706.56
275.-1-70	10 Maria Court	Louise Straney	\$148.15	\$0.00	\$148.15
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$296.30	\$410.26	\$706.56
275.-1-72	14 Maria Court	James Chen	\$296.30	\$410.26	\$706.56
275.-1-73	Maria Court	Louise Straney	\$148.15	\$0.00	\$148.15
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$296.30	\$410.26	\$706.56
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$296.30	\$410.26	\$706.56
275.-1-76	11 Maria Court	Joanne de Oliveira	\$296.30	\$410.26	\$706.56
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$296.30	\$410.26	\$706.56
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$296.30	\$410.26	\$706.56
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$296.30	\$410.26	\$706.56
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$296.30	\$410.26	\$706.56
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$296.30	\$410.26	\$706.56
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$296.30	\$410.26	\$706.56
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$296.30	\$410.26	\$706.56
275.-1-85	713 Riverview Road	Robert P Weiss	\$296.30	\$410.26	\$706.56
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$296.30	\$410.26	\$706.56
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$296.30	\$410.26	\$706.56
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$296.30	\$410.26	\$706.56
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$296.30	\$410.26	\$706.56
275.-1-101	708 Riverview Road	Power Angels LLC	\$888.89	\$1,230.78	\$2,119.67
275.-1-102	1 Maria Court	Christopher J Marsh	\$296.30	\$410.26	\$706.56
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$296.30	\$410.26	\$706.56
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$296.30	\$410.26	\$706.56

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 1A, 2022 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Existing Debt from 2004 Upgrades	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$296.30	\$2,329.74	\$717.56	\$3,343.60
275.-1-47	778 Riverview Road	Louise Straney	\$148.15	\$284.07	\$0.00	\$432.22
275.-1-50	752 Riverview Road	Paula Gargiulo	\$296.30	\$1,721.63	\$530.26	\$2,548.20
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$296.30	\$2,280.55	\$702.41	\$3,279.26
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$296.30	\$1,627.56	\$501.29	\$2,425.15
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$296.30	\$2,029.07	\$624.95	\$2,950.32
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$296.30	\$1,672.44	\$515.11	\$2,483.86
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$296.30	\$2,234.43	\$688.20	\$3,218.94
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$296.30	\$1,863.05	\$573.82	\$2,733.17
275.-1-57	712 Riverview Road	Georgia Desimone	\$296.30	\$2,246.73	\$691.99	\$3,235.02
275.-1-63	Riverview Road	C & C Lending	\$296.30	\$2,206.76	\$679.68	\$3,182.75
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$296.30	\$2,265.18	\$697.67	\$3,259.15
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$296.30	\$2,253.49	\$694.08	\$3,243.87
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$296.30	\$2,238.12	\$689.34	\$3,223.76
275.-1-67	4 Maria Court	Anita Dematteo	\$296.30	\$2,114.53	\$651.28	\$3,062.11
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$296.30	\$2,394.91	\$737.63	\$3,428.85
275.-1-69	6 Maria Court	Michael and Susan Burke	\$296.30	\$2,449.02	\$754.30	\$3,499.62
275.-1-70	10 Maria Court	Louise Straney	\$148.15	\$430.41	\$0.00	\$578.56
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$296.30	\$1,610.96	\$496.17	\$2,403.43
275.-1-72	14 Maria Court	James Chen	\$296.30	\$1,832.31	\$564.35	\$2,692.96
275.-1-73	Maria Court	Louise Straney	\$148.15	\$430.41	\$0.00	\$578.56
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$296.30	\$1,844.61	\$568.14	\$2,709.04
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$296.30	\$2,305.76	\$710.17	\$3,312.23
275.-1-76	11 Maria Court	Joanne de Oliveira	\$296.30	\$2,835.78	\$873.42	\$4,005.49
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$296.30	\$1,491.06	\$459.24	\$2,246.60
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$296.30	\$2,213.53	\$681.77	\$3,191.59
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$296.30	\$1,525.49	\$469.85	\$2,291.64
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$296.30	\$1,530.41	\$471.37	\$2,298.07
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$296.30	\$1,643.54	\$506.21	\$2,446.06
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$296.30	\$1,794.19	\$552.61	\$2,643.10
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$296.30	\$1,451.09	\$446.94	\$2,194.33
275.-1-85	713 Riverview Road	Robert P Weiss	\$296.30	\$2,075.18	\$639.16	\$3,010.64
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$296.30	\$2,075.18	\$639.16	\$3,010.64
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$296.30	\$1,141.20	\$351.49	\$1,788.98
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$296.30	\$2,321.75	\$715.10	\$3,333.14
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$296.30	\$1,497.82	\$461.33	\$2,255.45
275.-1-101	708 Riverview Road	Power Angels LLC	\$888.89	\$10,760.21	\$3,314.14	\$14,963.23
275.-1-102	1 Maria Court	Christopher J Marsh	\$296.30	\$1,385.91	\$426.86	\$2,109.08
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$296.30	\$1,462.16	\$450.34	\$2,208.80
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$296.30	\$2,313.75	\$712.63	\$3,322.69

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 1A, 2024 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$2,329.74	\$756.94	\$3,086.68
275.-1-47	778 Riverview Road	Louise Straney	\$284.07	\$0.00	\$284.07
275.-1-50	752 Riverview Road	Paula Gargiulo	\$1,721.63	\$559.37	\$2,281.00
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$2,280.55	\$740.96	\$3,021.51
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$1,627.56	\$528.80	\$2,156.36
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$2,029.07	\$659.25	\$2,688.32
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$1,672.44	\$543.39	\$2,215.83
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$2,234.43	\$725.98	\$2,960.41
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$1,863.05	\$605.31	\$2,468.37
275.-1-57	712 Riverview Road	Georgia Desimone	\$2,246.73	\$729.97	\$2,976.71
275.-1-63	Riverview Road	C & C Lending	\$2,206.76	\$716.99	\$2,923.75
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$2,265.18	\$735.97	\$3,001.14
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$2,253.49	\$732.17	\$2,985.67
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$2,238.12	\$727.18	\$2,965.30
275.-1-67	4 Maria Court	Anita Dematteo	\$2,114.53	\$687.02	\$2,801.56
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$2,394.91	\$778.12	\$3,173.03
275.-1-69	6 Maria Court	Michael and Susan Burke	\$2,449.02	\$795.70	\$3,244.72
275.-1-70	10 Maria Court	Louise Straney	\$430.41	\$0.00	\$430.41
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$1,610.96	\$523.41	\$2,134.36
275.-1-72	14 Maria Court	James Chen	\$1,832.31	\$595.33	\$2,427.64
275.-1-73	Maria Court	Louise Straney	\$430.41	\$0.00	\$430.41
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$1,844.61	\$599.32	\$2,443.93
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$2,305.76	\$749.15	\$3,054.91
275.-1-76	11 Maria Court	Joanne de Oliveira	\$2,835.78	\$921.36	\$3,757.13
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$1,491.06	\$484.45	\$1,975.51
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$2,213.53	\$719.19	\$2,932.71
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$1,525.49	\$495.64	\$2,021.13
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$1,530.41	\$497.24	\$2,027.65
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$1,643.54	\$534.00	\$2,177.54
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$1,794.19	\$582.94	\$2,377.13
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$1,451.09	\$471.47	\$1,922.56
275.-1-85	713 Riverview Road	Robert P Weiss	\$2,075.18	\$674.24	\$2,749.42
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$2,075.18	\$674.24	\$2,749.42
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$1,141.20	\$370.78	\$1,511.98
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$2,321.75	\$754.35	\$3,076.09
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$1,497.82	\$486.65	\$1,984.47
275.-1-101	708 Riverview Road	Power Angels LLC	\$10,760.21	\$3,496.04	\$14,256.25
275.-1-102	1 Maria Court	Christopher J Marsh	\$1,385.91	\$450.29	\$1,836.21
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$1,462.16	\$475.06	\$1,937.22
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$2,313.75	\$751.75	\$3,065.50

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 1B, 2022 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Existing Debt from 2004 Upgrades	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$296.30	\$3,345.95	\$827.18	\$4,469.43
275.-1-47	778 Riverview Road	Louise Straney	\$148.15	\$407.98	\$0.00	\$556.13
275.-1-50	752 Riverview Road	Paula Gargiulo	\$296.30	\$2,472.60	\$611.27	\$3,380.16
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$296.30	\$3,275.31	\$809.71	\$4,381.32
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$296.30	\$2,337.49	\$577.87	\$3,211.65
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$296.30	\$2,914.13	\$720.42	\$3,930.85
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$296.30	\$2,401.95	\$593.80	\$3,292.05
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$296.30	\$3,209.08	\$793.34	\$4,298.71
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$296.30	\$2,675.70	\$661.48	\$3,633.48
275.-1-57	712 Riverview Road	Georgia Desimone	\$296.30	\$3,226.74	\$797.70	\$4,320.74
275.-1-63	Riverview Road	C & C Lending	\$296.30	\$3,169.34	\$783.51	\$4,249.15
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$296.30	\$3,253.23	\$804.25	\$4,353.78
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$296.30	\$3,236.45	\$800.11	\$4,332.86
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$296.30	\$3,214.37	\$794.65	\$4,305.32
275.-1-67	4 Maria Court	Anita Dematteo	\$296.30	\$3,036.88	\$750.77	\$4,083.94
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$296.30	\$3,439.56	\$850.32	\$4,586.17
275.-1-69	6 Maria Court	Michael and Susan Burke	\$296.30	\$3,517.27	\$869.53	\$4,683.09
275.-1-70	10 Maria Court	Louise Straney	\$148.15	\$618.15	\$0.00	\$766.30
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$296.30	\$2,313.64	\$571.97	\$3,181.91
275.-1-72	14 Maria Court	James Chen	\$296.30	\$2,631.55	\$650.56	\$3,578.41
275.-1-73	Maria Court	Louise Straney	\$148.15	\$618.15	\$0.00	\$766.30
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$296.30	\$2,649.21	\$654.93	\$3,600.44
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$296.30	\$3,311.51	\$818.66	\$4,426.47
275.-1-76	11 Maria Court	Joanne de Oliveira	\$296.30	\$4,072.72	\$1,006.84	\$5,375.86
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$296.30	\$2,141.44	\$529.40	\$2,967.15
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$296.30	\$3,179.05	\$785.91	\$4,261.27
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$296.30	\$2,190.90	\$541.63	\$3,028.82
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$296.30	\$2,197.96	\$543.37	\$3,037.63
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$296.30	\$2,360.45	\$583.54	\$3,240.29
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$296.30	\$2,576.80	\$637.03	\$3,510.13
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$296.30	\$2,084.04	\$515.21	\$2,895.56
275.-1-85	713 Riverview Road	Robert P Weiss	\$296.30	\$2,980.36	\$736.80	\$4,013.46
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$296.30	\$2,980.36	\$736.80	\$4,013.46
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$296.30	\$1,638.98	\$405.18	\$2,340.46
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$296.30	\$3,334.47	\$824.34	\$4,455.11
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$296.30	\$2,151.16	\$531.80	\$2,979.26
275.-1-101	708 Riverview Road	Power Angels LLC	\$888.89	\$15,453.72	\$3,820.42	\$20,163.03
275.-1-102	1 Maria Court	Christopher J Marsh	\$296.30	\$1,990.44	\$492.07	\$2,778.81
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$296.30	\$2,099.94	\$519.14	\$2,915.38
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$296.30	\$3,322.99	\$821.50	\$4,440.79

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 1B, 2024 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$3,345.95	\$869.35	\$4,215.30
275.-1-47	778 Riverview Road	Louise Straney	\$407.98	\$0.00	\$407.98
275.-1-50	752 Riverview Road	Paula Gargiulo	\$2,472.60	\$642.43	\$3,115.03
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$3,275.31	\$850.99	\$4,126.30
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$2,337.49	\$607.33	\$2,944.81
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$2,914.13	\$757.15	\$3,671.28
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$2,401.95	\$624.08	\$3,026.03
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$3,209.08	\$833.79	\$4,042.86
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$2,675.70	\$695.20	\$3,370.91
275.-1-57	712 Riverview Road	Georgia Desimone	\$3,226.74	\$838.37	\$4,065.11
275.-1-63	Riverview Road	C & C Lending	\$3,169.34	\$823.46	\$3,992.80
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$3,253.23	\$845.26	\$4,098.49
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$3,236.45	\$840.90	\$4,077.35
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$3,214.37	\$835.16	\$4,049.54
275.-1-67	4 Maria Court	Anita Dematteo	\$3,036.88	\$789.05	\$3,825.92
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$3,439.56	\$893.67	\$4,333.23
275.-1-69	6 Maria Court	Michael and Susan Burke	\$3,517.27	\$913.86	\$4,431.13
275.-1-70	10 Maria Court	Louise Straney	\$618.15	\$0.00	\$618.15
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$2,313.64	\$601.13	\$2,914.78
275.-1-72	14 Maria Court	James Chen	\$2,631.55	\$683.73	\$3,315.28
275.-1-73	Maria Court	Louise Straney	\$618.15	\$0.00	\$618.15
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$2,649.21	\$688.32	\$3,337.53
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$3,311.51	\$860.40	\$4,171.91
275.-1-76	11 Maria Court	Joanne de Oliveira	\$4,072.72	\$1,058.18	\$5,130.90
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$2,141.44	\$556.39	\$2,697.84
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$3,179.05	\$825.99	\$4,005.04
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$2,190.90	\$569.24	\$2,760.14
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$2,197.96	\$571.08	\$2,769.04
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$2,360.45	\$613.29	\$2,973.74
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$2,576.80	\$669.51	\$3,246.30
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$2,084.04	\$541.48	\$2,625.52
275.-1-85	713 Riverview Road	Robert P Weiss	\$2,980.36	\$774.36	\$3,754.72
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$2,980.36	\$774.36	\$3,754.72
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$1,638.98	\$425.84	\$2,064.82
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$3,334.47	\$866.37	\$4,200.84
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$2,151.16	\$558.92	\$2,710.07
275.-1-101	708 Riverview Road	Power Angels LLC	\$15,453.72	\$4,015.20	\$19,468.93
275.-1-102	1 Maria Court	Christopher J Marsh	\$1,990.44	\$517.16	\$2,507.60
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$2,099.94	\$545.61	\$2,645.55
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$3,322.99	\$863.38	\$4,186.38

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 1C, 2022 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Existing Debt from 2004 Upgrades	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$296.30	\$2,951.29	\$1,417.67	\$4,665.26
275.-1-47	778 Riverview Road	Louise Straney	\$148.15	\$359.86	\$0.00	\$508.01
275.-1-50	752 Riverview Road	Paula Gargiulo	\$296.30	\$2,180.95	\$1,047.63	\$3,524.88
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$296.30	\$2,888.98	\$1,387.73	\$4,573.01
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$296.30	\$2,061.78	\$990.38	\$3,348.46
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$296.30	\$2,570.41	\$1,234.71	\$4,101.41
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$296.30	\$2,118.64	\$1,017.70	\$3,432.63
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$296.30	\$2,830.56	\$1,359.67	\$4,486.53
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$296.30	\$2,360.10	\$1,133.68	\$3,790.08
275.-1-57	712 Riverview Road	Georgia Desimone	\$296.30	\$2,846.14	\$1,367.16	\$4,509.60
275.-1-63	Riverview Road	C & C Lending	\$296.30	\$2,795.51	\$1,342.84	\$4,434.65
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$296.30	\$2,869.51	\$1,378.38	\$4,544.19
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$296.30	\$2,854.71	\$1,371.27	\$4,522.28
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$296.30	\$2,835.24	\$1,361.92	\$4,493.45
275.-1-67	4 Maria Court	Anita Dematteo	\$296.30	\$2,678.67	\$1,286.71	\$4,261.69
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$296.30	\$3,033.86	\$1,457.33	\$4,787.48
275.-1-69	6 Maria Court	Michael and Susan Burke	\$296.30	\$3,102.40	\$1,490.25	\$4,888.95
275.-1-70	10 Maria Court	Louise Straney	\$148.15	\$545.24	\$0.00	\$693.39
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$296.30	\$2,040.75	\$980.28	\$3,317.33
275.-1-72	14 Maria Court	James Chen	\$296.30	\$2,321.15	\$1,114.98	\$3,732.43
275.-1-73	Maria Court	Louise Straney	\$148.15	\$545.24	\$0.00	\$693.39
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$296.30	\$2,336.73	\$1,122.46	\$3,755.49
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$296.30	\$2,920.92	\$1,403.07	\$4,620.29
275.-1-76	11 Maria Court	Joanne de Oliveira	\$296.30	\$3,592.34	\$1,725.59	\$5,614.23
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$296.30	\$1,888.86	\$907.32	\$3,092.48
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$296.30	\$2,804.08	\$1,346.95	\$4,447.33
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$296.30	\$1,932.48	\$928.27	\$3,157.05
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$296.30	\$1,938.71	\$931.27	\$3,166.28
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$296.30	\$2,082.03	\$1,000.11	\$3,378.44
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$296.30	\$2,272.86	\$1,091.78	\$3,660.94
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$296.30	\$1,838.23	\$883.00	\$3,017.53
275.-1-85	713 Riverview Road	Robert P Weiss	\$296.30	\$2,628.82	\$1,262.77	\$4,187.89
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$296.30	\$2,628.82	\$1,262.77	\$4,187.89
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$296.30	\$1,445.66	\$694.43	\$2,436.39
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$296.30	\$2,941.17	\$1,412.80	\$4,650.27
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$296.30	\$1,897.43	\$911.44	\$3,105.16
275.-1-101	708 Riverview Road	Power Angels LLC	\$888.89	\$13,630.94	\$6,547.68	\$21,067.51
275.-1-102	1 Maria Court	Christopher J Marsh	\$296.30	\$1,755.67	\$843.34	\$2,895.31
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$296.30	\$1,852.25	\$889.74	\$3,038.29
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$296.30	\$2,931.04	\$1,407.94	\$4,635.28

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 1C, 2024 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$2,951.29	\$1,495.20	\$4,446.49
275.-1-47	778 Riverview Road	Louise Straney	\$359.86	\$0.00	\$359.86
275.-1-50	752 Riverview Road	Paula Gargiulo	\$2,180.95	\$1,104.92	\$3,285.88
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$2,888.98	\$1,463.63	\$4,352.61
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$2,061.78	\$1,044.55	\$3,106.33
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$2,570.41	\$1,302.23	\$3,872.64
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$2,118.64	\$1,073.36	\$3,191.99
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$2,830.56	\$1,434.03	\$4,264.60
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$2,360.10	\$1,195.69	\$3,555.79
275.-1-57	712 Riverview Road	Georgia Desimone	\$2,846.14	\$1,441.93	\$4,288.07
275.-1-63	Riverview Road	C & C Lending	\$2,795.51	\$1,416.28	\$4,211.79
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$2,869.51	\$1,453.77	\$4,323.27
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$2,854.71	\$1,446.27	\$4,300.98
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$2,835.24	\$1,436.40	\$4,271.64
275.-1-67	4 Maria Court	Anita Dematteo	\$2,678.67	\$1,357.08	\$4,035.76
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$3,033.86	\$1,537.03	\$4,570.89
275.-1-69	6 Maria Court	Michael and Susan Burke	\$3,102.40	\$1,571.76	\$4,674.16
275.-1-70	10 Maria Court	Louise Straney	\$545.24	\$0.00	\$545.24
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$2,040.75	\$1,033.89	\$3,074.64
275.-1-72	14 Maria Court	James Chen	\$2,321.15	\$1,175.96	\$3,497.11
275.-1-73	Maria Court	Louise Straney	\$545.24	\$0.00	\$545.24
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$2,336.73	\$1,183.85	\$3,520.58
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$2,920.92	\$1,479.81	\$4,400.73
275.-1-76	11 Maria Court	Joanne de Oliveira	\$3,592.34	\$1,819.97	\$5,412.31
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$1,888.86	\$956.94	\$2,845.80
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$2,804.08	\$1,420.62	\$4,224.70
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$1,932.48	\$979.04	\$2,911.52
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$1,938.71	\$982.20	\$2,920.91
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$2,082.03	\$1,054.81	\$3,136.84
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$2,272.86	\$1,151.49	\$3,424.35
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$1,838.23	\$931.29	\$2,769.52
275.-1-85	713 Riverview Road	Robert P Weiss	\$2,628.82	\$1,331.83	\$3,960.65
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$2,628.82	\$1,331.83	\$3,960.65
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$1,445.66	\$732.41	\$2,178.07
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$2,941.17	\$1,490.07	\$4,431.24
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$1,897.43	\$961.28	\$2,858.71
275.-1-101	708 Riverview Road	Power Angels LLC	\$13,630.94	\$6,905.78	\$20,536.72
275.-1-102	1 Maria Court	Christopher J Marsh	\$1,755.67	\$889.46	\$2,645.13
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$1,852.25	\$938.40	\$2,790.65
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$2,931.04	\$1,484.94	\$4,415.98

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 2A, 2022 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Existing Debt from 2004 Upgrades	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$296.30	\$2,907.67	\$1,010.79	\$4,214.76
275.-1-47	778 Riverview Road	Louise Straney	\$148.15	\$354.54	\$0.00	\$502.69
275.-1-50	752 Riverview Road	Paula Gargiulo	\$296.30	\$2,148.71	\$746.96	\$3,191.97
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$296.30	\$2,846.27	\$989.45	\$4,132.02
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$296.30	\$2,031.30	\$706.14	\$3,033.74
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$296.30	\$2,532.41	\$880.34	\$3,709.05
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$296.30	\$2,087.32	\$725.61	\$3,109.23
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$296.30	\$2,788.72	\$969.44	\$4,054.46
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$296.30	\$2,325.21	\$808.31	\$3,429.82
275.-1-57	712 Riverview Road	Georgia Desimone	\$296.30	\$2,804.07	\$974.78	\$4,075.14
275.-1-63	Riverview Road	C & C Lending	\$296.30	\$2,754.19	\$957.44	\$4,007.92
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$296.30	\$2,827.09	\$982.78	\$4,106.17
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$296.30	\$2,812.51	\$977.71	\$4,086.52
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$296.30	\$2,793.32	\$971.04	\$4,060.67
275.-1-67	4 Maria Court	Anita Dematteo	\$296.30	\$2,639.08	\$917.42	\$3,852.80
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$296.30	\$2,989.01	\$1,039.07	\$4,324.38
275.-1-69	6 Maria Court	Michael and Susan Burke	\$296.30	\$3,056.54	\$1,062.54	\$4,415.39
275.-1-70	10 Maria Court	Louise Straney	\$148.15	\$537.18	\$0.00	\$685.33
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$296.30	\$2,010.58	\$698.94	\$3,005.82
275.-1-72	14 Maria Court	James Chen	\$296.30	\$2,286.84	\$794.97	\$3,378.12
275.-1-73	Maria Court	Louise Straney	\$148.15	\$537.18	\$0.00	\$685.33
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$296.30	\$2,302.19	\$800.31	\$3,398.80
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$296.30	\$2,877.74	\$1,000.39	\$4,174.42
275.-1-76	11 Maria Court	Joanne de Oliveira	\$296.30	\$3,539.23	\$1,230.34	\$5,065.88
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$296.30	\$1,860.94	\$646.92	\$2,804.15
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$296.30	\$2,762.63	\$960.37	\$4,019.30
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$296.30	\$1,903.91	\$661.86	\$2,862.07
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$296.30	\$1,910.05	\$663.99	\$2,870.34
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$296.30	\$2,051.25	\$713.08	\$3,060.63
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$296.30	\$2,239.26	\$778.43	\$3,314.00
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$296.30	\$1,811.06	\$629.58	\$2,736.93
275.-1-85	713 Riverview Road	Robert P Weiss	\$296.30	\$2,589.96	\$900.35	\$3,786.61
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$296.30	\$2,589.96	\$900.35	\$3,786.61
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$296.30	\$1,424.29	\$495.12	\$2,215.71
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$296.30	\$2,897.69	\$1,007.32	\$4,201.31
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$296.30	\$1,869.38	\$649.85	\$2,815.53
275.-1-101	708 Riverview Road	Power Angels LLC	\$888.89	\$13,429.44	\$4,668.47	\$18,986.80
275.-1-102	1 Maria Court	Christopher J Marsh	\$296.30	\$1,729.71	\$601.30	\$2,627.31
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$296.30	\$1,824.87	\$634.38	\$2,755.55
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$296.30	\$2,887.71	\$1,003.85	\$4,187.87

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 2A, 2024 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$2,907.67	\$1,034.36	\$3,942.03
275.-1-47	778 Riverview Road	Louise Straney	\$354.54	\$0.00	\$354.54
275.-1-50	752 Riverview Road	Paula Gargiulo	\$2,148.71	\$764.38	\$2,913.09
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$2,846.27	\$1,012.53	\$3,858.80
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$2,031.30	\$722.61	\$2,753.91
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$2,532.41	\$900.87	\$3,433.28
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$2,087.32	\$742.54	\$2,829.86
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$2,788.72	\$992.05	\$3,780.77
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$2,325.21	\$827.16	\$3,152.38
275.-1-57	712 Riverview Road	Georgia Desimone	\$2,804.07	\$997.51	\$3,801.58
275.-1-63	Riverview Road	C & C Lending	\$2,754.19	\$979.77	\$3,733.95
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$2,827.09	\$1,005.70	\$3,832.79
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$2,812.51	\$1,000.51	\$3,813.02
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$2,793.32	\$993.69	\$3,787.01
275.-1-67	4 Maria Court	Anita Dematteo	\$2,639.08	\$938.82	\$3,577.89
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$2,989.01	\$1,063.30	\$4,052.31
275.-1-69	6 Maria Court	Michael and Susan Burke	\$3,056.54	\$1,087.32	\$4,143.87
275.-1-70	10 Maria Court	Louise Straney	\$537.18	\$0.00	\$537.18
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$2,010.58	\$715.24	\$2,725.82
275.-1-72	14 Maria Court	James Chen	\$2,286.84	\$813.51	\$3,100.36
275.-1-73	Maria Court	Louise Straney	\$537.18	\$0.00	\$537.18
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$2,302.19	\$818.97	\$3,121.16
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$2,877.74	\$1,023.72	\$3,901.46
275.-1-76	11 Maria Court	Joanne de Oliveira	\$3,539.23	\$1,259.04	\$4,798.27
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$1,860.94	\$662.00	\$2,522.94
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$2,762.63	\$982.77	\$3,745.40
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$1,903.91	\$677.29	\$2,581.20
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$1,910.05	\$679.48	\$2,589.53
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$2,051.25	\$729.71	\$2,780.96
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$2,239.26	\$796.59	\$3,035.85
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$1,811.06	\$644.26	\$2,455.32
275.-1-85	713 Riverview Road	Robert P Weiss	\$2,589.96	\$921.35	\$3,511.31
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$2,589.96	\$921.35	\$3,511.31
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$1,424.29	\$506.67	\$1,930.96
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$2,897.69	\$1,030.82	\$3,928.51
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$1,869.38	\$665.01	\$2,534.39
275.-1-101	708 Riverview Road	Power Angels LLC	\$13,429.44	\$4,777.35	\$18,206.79
275.-1-102	1 Maria Court	Christopher J Marsh	\$1,729.71	\$615.32	\$2,345.03
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$1,824.87	\$649.17	\$2,474.04
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$2,887.71	\$1,027.27	\$3,914.98

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 2B, 2022 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Existing Debt from 2004 Upgrades	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$296.30	\$2,771.54	\$748.84	\$3,816.68
275.-1-47	778 Riverview Road	Louise Straney	\$148.15	\$337.94	\$0.00	\$486.09
275.-1-50	752 Riverview Road	Paula Gargiulo	\$296.30	\$2,048.12	\$553.38	\$2,897.79
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$296.30	\$2,713.02	\$733.03	\$3,742.35
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$296.30	\$1,936.20	\$523.14	\$2,755.64
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$296.30	\$2,413.85	\$652.19	\$3,362.34
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$296.30	\$1,989.60	\$537.57	\$2,823.46
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$296.30	\$2,658.16	\$718.20	\$3,672.66
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$296.30	\$2,216.35	\$598.83	\$3,111.49
275.-1-57	712 Riverview Road	Georgia Desimone	\$296.30	\$2,672.79	\$722.16	\$3,691.25
275.-1-63	Riverview Road	C & C Lending	\$296.30	\$2,625.25	\$709.31	\$3,630.85
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$296.30	\$2,694.74	\$728.08	\$3,719.12
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$296.30	\$2,680.84	\$724.33	\$3,701.47
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$296.30	\$2,662.55	\$719.39	\$3,678.24
275.-1-67	4 Maria Court	Anita Dematteo	\$296.30	\$2,515.53	\$679.66	\$3,491.49
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$296.30	\$2,849.08	\$769.79	\$3,915.16
275.-1-69	6 Maria Court	Michael and Susan Burke	\$296.30	\$2,913.44	\$787.18	\$3,996.92
275.-1-70	10 Maria Court	Louise Straney	\$148.15	\$512.03	\$0.00	\$660.18
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$296.30	\$1,916.45	\$517.80	\$2,730.55
275.-1-72	14 Maria Court	James Chen	\$296.30	\$2,179.78	\$588.95	\$3,065.03
275.-1-73	Maria Court	Louise Straney	\$148.15	\$512.03	\$0.00	\$660.18
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$296.30	\$2,194.41	\$592.90	\$3,083.61
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$296.30	\$2,743.01	\$741.13	\$3,780.44
275.-1-76	11 Maria Court	Joanne de Oliveira	\$296.30	\$3,373.54	\$911.49	\$4,581.33
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$296.30	\$1,773.81	\$479.26	\$2,549.38
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$296.30	\$2,633.29	\$711.48	\$3,641.08
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$296.30	\$1,814.78	\$490.33	\$2,601.41
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$296.30	\$1,820.63	\$491.91	\$2,608.84
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$296.30	\$1,955.22	\$528.28	\$2,779.80
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$296.30	\$2,134.43	\$576.70	\$3,007.43
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$296.30	\$1,726.27	\$466.42	\$2,488.99
275.-1-85	713 Riverview Road	Robert P Weiss	\$296.30	\$2,468.71	\$667.02	\$3,432.03
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$296.30	\$2,468.71	\$667.02	\$3,432.03
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$296.30	\$1,357.61	\$366.81	\$2,020.72
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$296.30	\$2,762.03	\$746.27	\$3,804.60
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$296.30	\$1,781.86	\$481.44	\$2,559.60
275.-1-101	708 Riverview Road	Power Angels LLC	\$888.89	\$12,800.72	\$3,458.60	\$17,148.21
275.-1-102	1 Maria Court	Christopher J Marsh	\$296.30	\$1,648.73	\$445.47	\$2,390.50
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$296.30	\$1,739.44	\$469.97	\$2,505.71
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$296.30	\$2,752.52	\$743.70	\$3,792.52

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 2B, 2024 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$2,771.54	\$773.76	\$3,545.30
275.-1-47	778 Riverview Road	Louise Straney	\$337.94	\$0.00	\$337.94
275.-1-50	752 Riverview Road	Paula Gargiulo	\$2,048.12	\$571.79	\$2,619.91
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$2,713.02	\$757.42	\$3,470.45
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$1,936.20	\$540.55	\$2,476.75
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$2,413.85	\$673.90	\$3,087.75
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$1,989.60	\$555.46	\$2,545.06
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$2,658.16	\$742.11	\$3,400.27
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$2,216.35	\$618.76	\$2,835.12
275.-1-57	712 Riverview Road	Georgia Desimone	\$2,672.79	\$746.19	\$3,418.98
275.-1-63	Riverview Road	C & C Lending	\$2,625.25	\$732.92	\$3,358.16
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$2,694.74	\$752.32	\$3,447.05
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$2,680.84	\$748.44	\$3,429.28
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$2,662.55	\$743.33	\$3,405.88
275.-1-67	4 Maria Court	Anita Dematteo	\$2,515.53	\$702.29	\$3,217.81
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$2,849.08	\$795.41	\$3,644.48
275.-1-69	6 Maria Court	Michael and Susan Burke	\$2,913.44	\$813.38	\$3,726.82
275.-1-70	10 Maria Court	Louise Straney	\$512.03	\$0.00	\$512.03
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$1,916.45	\$535.04	\$2,451.49
275.-1-72	14 Maria Court	James Chen	\$2,179.78	\$608.55	\$2,788.33
275.-1-73	Maria Court	Louise Straney	\$512.03	\$0.00	\$512.03
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$2,194.41	\$612.64	\$2,807.05
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$2,743.01	\$765.80	\$3,508.81
275.-1-76	11 Maria Court	Joanne de Oliveira	\$3,373.54	\$941.83	\$4,315.37
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$1,773.81	\$495.22	\$2,269.03
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$2,633.29	\$735.16	\$3,368.46
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$1,814.78	\$506.65	\$2,321.43
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$1,820.63	\$508.28	\$2,328.91
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$1,955.22	\$545.86	\$2,501.08
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$2,134.43	\$595.89	\$2,730.32
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$1,726.27	\$481.94	\$2,208.21
275.-1-85	713 Riverview Road	Robert P Weiss	\$2,468.71	\$689.22	\$3,157.93
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$2,468.71	\$689.22	\$3,157.93
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$1,357.61	\$379.02	\$1,736.63
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$2,762.03	\$771.11	\$3,533.14
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$1,781.86	\$497.46	\$2,279.32
275.-1-101	708 Riverview Road	Power Angels LLC	\$12,800.72	\$3,573.72	\$16,374.44
275.-1-102	1 Maria Court	Christopher J Marsh	\$1,648.73	\$460.29	\$2,109.03
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$1,739.44	\$485.62	\$2,225.05
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$2,752.52	\$768.45	\$3,520.97

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 2C, 2022 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Existing Debt from 2004 Upgrades	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$296.30	\$2,617.92	\$1,339.41	\$4,253.64
275.-1-47	778 Riverview Road	Louise Straney	\$148.15	\$319.21	\$0.00	\$467.36
275.-1-50	752 Riverview Road	Paula Gargiulo	\$296.30	\$1,934.60	\$989.80	\$3,220.70
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$296.30	\$2,562.65	\$1,311.13	\$4,170.08
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$296.30	\$1,828.88	\$935.72	\$3,060.90
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$296.30	\$2,280.06	\$1,166.55	\$3,742.91
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$296.30	\$1,879.32	\$961.52	\$3,137.14
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$296.30	\$2,510.83	\$1,284.62	\$4,091.75
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$296.30	\$2,093.51	\$1,071.11	\$3,460.92
275.-1-57	712 Riverview Road	Georgia Desimone	\$296.30	\$2,524.65	\$1,291.69	\$4,112.64
275.-1-63	Riverview Road	C & C Lending	\$296.30	\$2,479.74	\$1,268.71	\$4,044.75
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$296.30	\$2,545.38	\$1,302.30	\$4,143.97
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$296.30	\$2,532.25	\$1,295.58	\$4,124.13
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$296.30	\$2,514.97	\$1,286.74	\$4,098.02
275.-1-67	4 Maria Court	Anita Dematteo	\$296.30	\$2,376.10	\$1,215.69	\$3,888.09
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$296.30	\$2,691.16	\$1,376.88	\$4,364.34
275.-1-69	6 Maria Court	Michael and Susan Burke	\$296.30	\$2,751.96	\$1,407.99	\$4,456.25
275.-1-70	10 Maria Court	Louise Straney	\$148.15	\$483.65	\$0.00	\$631.80
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$296.30	\$1,810.23	\$926.17	\$3,032.70
275.-1-72	14 Maria Court	James Chen	\$296.30	\$2,058.96	\$1,053.43	\$3,408.69
275.-1-73	Maria Court	Louise Straney	\$148.15	\$483.65	\$0.00	\$631.80
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$296.30	\$2,072.78	\$1,060.50	\$3,429.58
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$296.30	\$2,590.98	\$1,325.63	\$4,212.90
275.-1-76	11 Maria Court	Joanne de Oliveira	\$296.30	\$3,186.56	\$1,630.34	\$5,113.20
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$296.30	\$1,675.50	\$857.24	\$2,829.04
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$296.30	\$2,487.34	\$1,272.60	\$4,056.24
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$296.30	\$1,714.19	\$877.03	\$2,887.52
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$296.30	\$1,719.72	\$879.86	\$2,895.88
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$296.30	\$1,846.85	\$944.91	\$3,088.05
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$296.30	\$2,016.13	\$1,031.51	\$3,343.94
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$296.30	\$1,630.59	\$834.26	\$2,761.15
275.-1-85	713 Riverview Road	Robert P Weiss	\$296.30	\$2,331.88	\$1,193.06	\$3,821.24
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$296.30	\$2,331.88	\$1,193.06	\$3,821.24
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$296.30	\$1,282.36	\$656.10	\$2,234.76
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$296.30	\$2,608.94	\$1,334.82	\$4,240.06
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$296.30	\$1,683.10	\$861.13	\$2,840.53
275.-1-101	708 Riverview Road	Power Angels LLC	\$888.89	\$12,091.22	\$6,186.26	\$19,166.37
275.-1-102	1 Maria Court	Christopher J Marsh	\$296.30	\$1,557.35	\$796.79	\$2,650.44
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$296.30	\$1,643.02	\$840.62	\$2,779.95
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$296.30	\$2,599.96	\$1,330.22	\$4,226.48

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 2C, 2024 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$2,617.92	\$1,412.98	\$4,030.90
275.-1-47	778 Riverview Road	Louise Straney	\$319.21	\$0.00	\$319.21
275.-1-50	752 Riverview Road	Paula Gargiulo	\$1,934.60	\$1,044.17	\$2,978.76
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$2,562.65	\$1,383.15	\$3,945.80
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$1,828.88	\$987.11	\$2,815.99
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$2,280.06	\$1,230.62	\$3,510.68
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$1,879.32	\$1,014.33	\$2,893.65
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$2,510.83	\$1,355.18	\$3,866.01
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$2,093.51	\$1,129.94	\$3,223.45
275.-1-57	712 Riverview Road	Georgia Desimone	\$2,524.65	\$1,362.64	\$3,887.28
275.-1-63	Riverview Road	C & C Lending	\$2,479.74	\$1,338.40	\$3,818.13
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$2,545.38	\$1,373.82	\$3,919.20
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$2,532.25	\$1,366.74	\$3,898.99
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$2,514.97	\$1,357.42	\$3,872.39
275.-1-67	4 Maria Court	Anita Dematteo	\$2,376.10	\$1,282.46	\$3,658.56
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$2,691.16	\$1,452.51	\$4,143.67
275.-1-69	6 Maria Court	Michael and Susan Burke	\$2,751.96	\$1,485.33	\$4,237.29
275.-1-70	10 Maria Court	Louise Straney	\$483.65	\$0.00	\$483.65
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$1,810.23	\$977.04	\$2,787.27
275.-1-72	14 Maria Court	James Chen	\$2,058.96	\$1,111.29	\$3,170.25
275.-1-73	Maria Court	Louise Straney	\$483.65	\$0.00	\$483.65
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$2,072.78	\$1,118.75	\$3,191.53
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$2,590.98	\$1,398.44	\$3,989.41
275.-1-76	11 Maria Court	Joanne de Oliveira	\$3,186.56	\$1,719.89	\$4,906.45
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$1,675.50	\$904.32	\$2,579.82
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$2,487.34	\$1,342.50	\$3,829.84
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$1,714.19	\$925.21	\$2,639.40
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$1,719.72	\$928.19	\$2,647.91
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$1,846.85	\$996.81	\$2,843.65
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$2,016.13	\$1,088.17	\$3,104.29
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$1,630.59	\$880.08	\$2,510.67
275.-1-85	713 Riverview Road	Robert P Weiss	\$2,331.88	\$1,258.59	\$3,590.47
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$2,331.88	\$1,258.59	\$3,590.47
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$1,282.36	\$692.13	\$1,974.49
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$2,608.94	\$1,408.13	\$4,017.07
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$1,683.10	\$908.42	\$2,591.52
275.-1-101	708 Riverview Road	Power Angels LLC	\$12,091.22	\$6,526.04	\$18,617.26
275.-1-102	1 Maria Court	Christopher J Marsh	\$1,557.35	\$840.55	\$2,397.90
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$1,643.02	\$886.80	\$2,529.82
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$2,599.96	\$1,403.28	\$4,003.24

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 3A, 2022 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Existing Debt from 2004 Upgrades	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$296.30	\$2,923.88	\$728.45	\$3,948.63
275.-1-47	778 Riverview Road	Louise Straney	\$148.15	\$356.51	\$0.00	\$504.66
275.-1-50	752 Riverview Road	Paula Gargiulo	\$296.30	\$2,160.69	\$538.31	\$2,995.31
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$296.30	\$2,862.15	\$713.07	\$3,871.52
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$296.30	\$2,042.63	\$508.90	\$2,847.83
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$296.30	\$2,546.53	\$634.44	\$3,477.27
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$296.30	\$2,098.96	\$522.93	\$2,918.19
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$296.30	\$2,804.27	\$698.65	\$3,799.23
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$296.30	\$2,338.18	\$582.53	\$3,217.01
275.-1-57	712 Riverview Road	Georgia Desimone	\$296.30	\$2,819.70	\$702.50	\$3,818.50
275.-1-63	Riverview Road	C & C Lending	\$296.30	\$2,769.55	\$690.00	\$3,755.85
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$296.30	\$2,842.85	\$708.27	\$3,847.42
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$296.30	\$2,828.19	\$704.61	\$3,829.11
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$296.30	\$2,808.90	\$699.81	\$3,805.01
275.-1-67	4 Maria Court	Anita Dematteo	\$296.30	\$2,653.79	\$661.16	\$3,611.26
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$296.30	\$3,005.68	\$748.83	\$4,050.81
275.-1-69	6 Maria Court	Michael and Susan Burke	\$296.30	\$3,073.59	\$765.75	\$4,135.64
275.-1-70	10 Maria Court	Louise Straney	\$148.15	\$540.17	\$0.00	\$688.32
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$296.30	\$2,021.79	\$503.71	\$2,821.80
275.-1-72	14 Maria Court	James Chen	\$296.30	\$2,299.59	\$572.92	\$3,168.81
275.-1-73	Maria Court	Louise Straney	\$148.15	\$540.17	\$0.00	\$688.32
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$296.30	\$2,315.03	\$576.76	\$3,188.09
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$296.30	\$2,893.79	\$720.96	\$3,911.04
275.-1-76	11 Maria Court	Joanne de Oliveira	\$296.30	\$3,558.97	\$886.68	\$4,741.95
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$296.30	\$1,871.31	\$466.22	\$2,633.83
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$296.30	\$2,778.03	\$692.12	\$3,766.45
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$296.30	\$1,914.53	\$476.98	\$2,687.81
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$296.30	\$1,920.70	\$478.52	\$2,695.52
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$296.30	\$2,062.69	\$513.90	\$2,872.89
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$296.30	\$2,251.75	\$561.00	\$3,109.05
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$296.30	\$1,821.16	\$453.72	\$2,571.18
275.-1-85	713 Riverview Road	Robert P Weiss	\$296.30	\$2,604.41	\$648.86	\$3,549.57
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$296.30	\$2,604.41	\$648.86	\$3,549.57
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$296.30	\$1,432.23	\$356.83	\$2,085.36
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$296.30	\$2,913.85	\$725.95	\$3,936.10
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$296.30	\$1,879.80	\$468.33	\$2,644.44
275.-1-101	708 Riverview Road	Power Angels LLC	\$888.89	\$13,504.33	\$3,364.46	\$17,757.68
275.-1-102	1 Maria Court	Christopher J Marsh	\$296.30	\$1,739.36	\$433.34	\$2,469.00
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$296.30	\$1,835.05	\$457.18	\$2,588.53
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$296.30	\$2,903.82	\$723.46	\$3,923.57

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 3A, 2024 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$2,923.88	\$735.96	\$3,659.84
275.-1-47	778 Riverview Road	Louise Straney	\$356.51	\$0.00	\$356.51
275.-1-50	752 Riverview Road	Paula Gargiulo	\$2,160.69	\$543.86	\$2,704.55
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$2,862.15	\$720.42	\$3,582.56
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$2,042.63	\$514.14	\$2,556.77
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$2,546.53	\$640.98	\$3,187.51
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$2,098.96	\$528.32	\$2,627.28
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$2,804.27	\$705.85	\$3,510.12
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$2,338.18	\$588.53	\$2,926.71
275.-1-57	712 Riverview Road	Georgia Desimone	\$2,819.70	\$709.74	\$3,529.44
275.-1-63	Riverview Road	C & C Lending	\$2,769.55	\$697.11	\$3,466.66
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$2,842.85	\$715.56	\$3,558.42
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$2,828.19	\$711.87	\$3,540.06
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$2,808.90	\$707.02	\$3,515.92
275.-1-67	4 Maria Court	Anita Dematteo	\$2,653.79	\$667.97	\$3,321.77
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$3,005.68	\$756.55	\$3,762.22
275.-1-69	6 Maria Court	Michael and Susan Burke	\$3,073.59	\$773.64	\$3,847.22
275.-1-70	10 Maria Court	Louise Straney	\$540.17	\$0.00	\$540.17
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$2,021.79	\$508.90	\$2,530.69
275.-1-72	14 Maria Court	James Chen	\$2,299.59	\$578.82	\$2,878.42
275.-1-73	Maria Court	Louise Straney	\$540.17	\$0.00	\$540.17
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$2,315.03	\$582.71	\$2,897.73
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$2,893.79	\$728.38	\$3,622.17
275.-1-76	11 Maria Court	Joanne de Oliveira	\$3,558.97	\$895.81	\$4,454.78
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$1,871.31	\$471.02	\$2,342.33
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$2,778.03	\$699.25	\$3,477.28
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$1,914.53	\$481.90	\$2,396.43
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$1,920.70	\$483.45	\$2,404.15
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$2,062.69	\$519.19	\$2,581.88
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$2,251.75	\$566.78	\$2,818.53
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$1,821.16	\$458.39	\$2,279.55
275.-1-85	713 Riverview Road	Robert P Weiss	\$2,604.41	\$655.54	\$3,259.95
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$2,604.41	\$655.54	\$3,259.95
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$1,432.23	\$360.50	\$1,792.73
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$2,913.85	\$733.43	\$3,647.28
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$1,879.80	\$473.16	\$2,352.96
275.-1-101	708 Riverview Road	Power Angels LLC	\$13,504.33	\$3,399.12	\$16,903.45
275.-1-102	1 Maria Court	Christopher J Marsh	\$1,739.36	\$437.81	\$2,177.16
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$1,835.05	\$461.89	\$2,296.94
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$2,903.82	\$730.91	\$3,634.72

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 3B, 2022 Costs for Each Property**



NOT FEASIBLE

PARCEL ID	PROP ADDRESS	OWNER	Existing Debt from 2004 Upgrades	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$296.30	\$2,241.49	\$467.56	\$3,005.35
275.-1-47	778 Riverview Road	Louise Straney	\$148.15	\$273.31	\$0.00	\$421.46
275.-1-50	752 Riverview Road	Paula Gargiulo	\$296.30	\$1,656.42	\$345.52	\$2,298.24
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$296.30	\$2,194.17	\$457.69	\$2,948.16
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$296.30	\$1,565.91	\$326.64	\$2,188.85
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$296.30	\$1,952.21	\$407.22	\$2,655.73
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$296.30	\$1,609.09	\$335.65	\$2,241.04
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$296.30	\$2,149.80	\$448.44	\$2,894.53
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$296.30	\$1,792.48	\$373.90	\$2,462.69
275.-1-57	712 Riverview Road	Georgia Desimone	\$296.30	\$2,161.63	\$450.90	\$2,908.83
275.-1-63	Riverview Road	C & C Lending	\$296.30	\$2,123.18	\$442.88	\$2,862.36
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$296.30	\$2,179.38	\$454.61	\$2,930.28
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$296.30	\$2,168.14	\$452.26	\$2,916.70
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$296.30	\$2,153.35	\$449.18	\$2,898.82
275.-1-67	4 Maria Court	Anita Dematteo	\$296.30	\$2,034.44	\$424.37	\$2,755.11
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$296.30	\$2,304.20	\$480.64	\$3,081.14
275.-1-69	6 Maria Court	Michael and Susan Burke	\$296.30	\$2,356.26	\$491.50	\$3,144.06
275.-1-70	10 Maria Court	Louise Straney	\$148.15	\$414.11	\$0.00	\$562.26
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$296.30	\$1,549.94	\$323.31	\$2,169.54
275.-1-72	14 Maria Court	James Chen	\$296.30	\$1,762.90	\$367.73	\$2,426.94
275.-1-73	Maria Court	Louise Straney	\$148.15	\$414.11	\$0.00	\$562.26
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$296.30	\$1,774.74	\$370.20	\$2,441.24
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$296.30	\$2,218.42	\$462.75	\$2,977.47
275.-1-76	11 Maria Court	Joanne de Oliveira	\$296.30	\$2,728.36	\$569.12	\$3,593.78
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$296.30	\$1,434.58	\$299.25	\$2,030.12
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$296.30	\$2,129.68	\$444.24	\$2,870.22
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$296.30	\$1,467.71	\$306.16	\$2,070.16
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$296.30	\$1,472.44	\$307.14	\$2,075.88
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$296.30	\$1,581.29	\$329.85	\$2,207.44
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$296.30	\$1,726.23	\$360.08	\$2,382.61
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$296.30	\$1,396.13	\$291.22	\$1,983.65
275.-1-85	713 Riverview Road	Robert P Weiss	\$296.30	\$1,996.58	\$416.48	\$2,709.35
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$296.30	\$1,996.58	\$416.48	\$2,709.35
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$296.30	\$1,097.97	\$229.03	\$1,623.30
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$296.30	\$2,233.80	\$465.96	\$2,996.06
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$296.30	\$1,441.09	\$300.60	\$2,037.99
275.-1-101	708 Riverview Road	Power Angels LLC	\$888.89	\$10,352.63	\$2,159.50	\$13,401.02
275.-1-102	1 Maria Court	Christopher J Marsh	\$296.30	\$1,333.42	\$278.14	\$1,907.86
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$296.30	\$1,406.77	\$293.45	\$1,996.52
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$296.30	\$2,226.11	\$464.35	\$2,986.76

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 3B, 2024 Costs for Each Property**



NOT FEASIBLE

PARCEL ID	PROP ADDRESS	OWNER	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$2,241.49	\$476.79	\$2,718.28
275.-1-47	778 Riverview Road	Louise Straney	\$273.31	\$0.00	\$273.31
275.-1-50	752 Riverview Road	Paula Gargiulo	\$1,656.42	\$352.34	\$2,008.76
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$2,194.17	\$466.72	\$2,660.89
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$1,565.91	\$333.09	\$1,899.00
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$1,952.21	\$415.26	\$2,367.47
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$1,609.09	\$342.27	\$1,951.37
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$2,149.80	\$457.29	\$2,607.08
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$1,792.48	\$381.28	\$2,173.77
275.-1-57	712 Riverview Road	Georgia Desimone	\$2,161.63	\$459.80	\$2,621.43
275.-1-63	Riverview Road	C & C Lending	\$2,123.18	\$451.62	\$2,574.80
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$2,179.38	\$463.58	\$2,642.95
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$2,168.14	\$461.19	\$2,629.32
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$2,153.35	\$458.04	\$2,611.39
275.-1-67	4 Maria Court	Anita Dematteo	\$2,034.44	\$432.75	\$2,467.19
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$2,304.20	\$490.13	\$2,794.33
275.-1-69	6 Maria Court	Michael and Susan Burke	\$2,356.26	\$501.20	\$2,857.46
275.-1-70	10 Maria Court	Louise Straney	\$414.11	\$0.00	\$414.11
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$1,549.94	\$329.69	\$1,879.63
275.-1-72	14 Maria Court	James Chen	\$1,762.90	\$374.99	\$2,137.89
275.-1-73	Maria Court	Louise Straney	\$414.11	\$0.00	\$414.11
275.-1-74	15 Maria Court	Roya and Miramjan Ajoby	\$1,774.74	\$377.51	\$2,152.24
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$2,218.42	\$471.88	\$2,690.30
275.-1-76	11 Maria Court	Joanne de Oliveira	\$2,728.36	\$580.35	\$3,308.71
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$1,434.58	\$305.15	\$1,739.73
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$2,129.68	\$453.01	\$2,582.69
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$1,467.71	\$312.20	\$1,779.90
275.-1-80.1	735 Riverview Road	Severly and Richard Messmer	\$1,472.44	\$313.20	\$1,785.64
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$1,581.29	\$336.36	\$1,917.65
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$1,726.23	\$367.19	\$2,093.41
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$1,396.13	\$296.97	\$1,693.10
275.-1-85	713 Riverview Road	Robert P Weiss	\$1,996.58	\$424.69	\$2,421.27
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$1,996.58	\$424.69	\$2,421.27
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$1,097.97	\$233.55	\$1,331.52
275.-1-91	756 Riverview Road	Mark and Kimberly Jo Gatta	\$2,233.80	\$475.16	\$2,708.96
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$1,441.09	\$306.54	\$1,747.62
275.-1-101	708 Riverview Road	Power Angels LLC	\$10,352.63	\$2,202.12	\$12,554.75
275.-1-102	1 Maria Court	Christopher J Marsh	\$1,333.42	\$283.63	\$1,617.05
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$1,406.77	\$299.24	\$1,706.01
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$2,226.11	\$473.52	\$2,699.63

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 3C, 2022 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Existing Debt from 2004 Upgrades	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$296.30	\$2,373.73	\$1,113.36	\$3,783.40
275.-1-47	778 Riverview Road	Louise Straney	\$148.15	\$289.43	\$0.00	\$437.58
275.-1-50	752 Riverview Road	Paula Gargiulo	\$296.30	\$1,754.15	\$822.76	\$2,873.20
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$296.30	\$2,323.62	\$1,089.86	\$3,709.77
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$296.30	\$1,658.29	\$777.80	\$2,732.39
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$296.30	\$2,067.39	\$969.68	\$3,333.36
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$296.30	\$1,704.03	\$799.25	\$2,799.58
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$296.30	\$2,276.63	\$1,067.82	\$3,640.75
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$296.30	\$1,898.24	\$890.34	\$3,084.88
275.-1-57	712 Riverview Road	Georgia Desimone	\$296.30	\$2,289.16	\$1,073.70	\$3,659.16
275.-1-63	Riverview Road	C & C Lending	\$296.30	\$2,248.44	\$1,054.60	\$3,599.33
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$296.30	\$2,307.95	\$1,082.51	\$3,686.77
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$296.30	\$2,296.05	\$1,076.93	\$3,669.28
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$296.30	\$2,280.39	\$1,069.58	\$3,646.27
275.-1-67	4 Maria Court	Anita Dematteo	\$296.30	\$2,154.47	\$1,010.52	\$3,461.29
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$296.30	\$2,440.14	\$1,144.51	\$3,880.95
275.-1-69	6 Maria Court	Michael and Susan Burke	\$296.30	\$2,495.27	\$1,170.37	\$3,961.94
275.-1-70	10 Maria Court	Louise Straney	\$148.15	\$438.54	\$0.00	\$586.69
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$296.30	\$1,641.38	\$769.86	\$2,707.54
275.-1-72	14 Maria Court	James Chen	\$296.30	\$1,866.91	\$875.65	\$3,038.86
275.-1-73	Maria Court	Louise Straney	\$148.15	\$438.54	\$0.00	\$586.69
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$296.30	\$1,879.44	\$881.52	\$3,057.27
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$296.30	\$2,349.30	\$1,101.91	\$3,747.51
275.-1-76	11 Maria Court	Joanne de Oliveira	\$296.30	\$2,889.33	\$1,355.20	\$4,540.82
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$296.30	\$1,519.22	\$712.57	\$2,528.08
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$296.30	\$2,255.33	\$1,057.83	\$3,609.46
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$296.30	\$1,554.30	\$729.02	\$2,579.62
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$296.30	\$1,559.31	\$731.37	\$2,586.98
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$296.30	\$1,674.58	\$785.44	\$2,756.32
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$296.30	\$1,828.07	\$857.43	\$2,981.80
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$296.30	\$1,478.49	\$693.47	\$2,468.26
275.-1-85	713 Riverview Road	Robert P Weiss	\$296.30	\$2,114.37	\$991.71	\$3,402.39
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$296.30	\$2,114.37	\$991.71	\$3,402.39
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$296.30	\$1,162.75	\$545.37	\$2,004.42
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$296.30	\$2,365.59	\$1,109.55	\$3,771.44
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$296.30	\$1,526.11	\$715.80	\$2,538.20
275.-1-101	708 Riverview Road	Power Angels LLC	\$888.89	\$10,963.41	\$5,142.22	\$16,994.52
275.-1-102	1 Maria Court	Christopher J Marsh	\$296.30	\$1,412.09	\$662.32	\$2,370.71
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$296.30	\$1,489.77	\$698.75	\$2,484.83
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$296.30	\$2,357.45	\$1,105.73	\$3,759.47

**Town of Clifton Park
Riverview Landing Sewer District
Alternative 3C, 2024 Costs for Each Property**

PARCEL ID	PROP ADDRESS	OWNER	Proposed Debt Service	Proposed O&M	Proposed Total
275.-1-46	776 Riverview Road	Steven R. and Helen Hagen	\$2,373.73	\$1,173.51	\$3,547.24
275.-1-47	778 Riverview Road	Louise Straney	\$289.43	\$0.00	\$289.43
275.-1-50	752 Riverview Road	Paula Gargiulo	\$1,754.15	\$867.20	\$2,621.34
275.-1-51	730 Riverview Road	Robert and Angela Chichester	\$2,323.62	\$1,148.73	\$3,472.35
275.-1-52	728 Riverview Road	Miro J and Volk Maida Skrlg	\$1,658.29	\$819.81	\$2,478.11
275.-1-53	722 Riverview Road	Bruce and Christene Thurston	\$2,067.39	\$1,022.06	\$3,089.44
275.-1-54	720 Riverview Road	John Goodell and Amy Vanslyke Goodell	\$1,704.03	\$842.42	\$2,546.45
275.-1-55	718 Riverview Road	Robert and Cynthia Romano	\$2,276.63	\$1,125.50	\$3,402.13
275.-1-56	716 Riverview Road	Brian and Anne Marie Daley	\$1,898.24	\$938.43	\$2,836.67
275.-1-57	712 Riverview Road	Georgia Desimone	\$2,289.16	\$1,131.70	\$3,420.85
275.-1-63	Riverview Road	C & C Lending	\$2,248.44	\$1,111.56	\$3,360.00
275.-1-64	773 Riverview Road	W. Ting Ting and W. Hsin Pang	\$2,307.95	\$1,140.99	\$3,448.94
275.-1-65	771 Riverview Road	Inivas & Swatantra Mitta	\$2,296.05	\$1,135.10	\$3,431.15
275.-1-66	2 Maria Court	Robert Moran and Susan Nikravan	\$2,280.39	\$1,127.36	\$3,407.75
275.-1-67	4 Maria Court	Anita Dematteo	\$2,154.47	\$1,065.11	\$3,219.57
275.-1-68	8 Maria Court	Mark and Eileen Kassner	\$2,440.14	\$1,206.34	\$3,646.48
275.-1-69	6 Maria Court	Michael and Susan Burke	\$2,495.27	\$1,233.59	\$3,728.86
275.-1-70	10 Maria Court	Louise Straney	\$438.54	\$0.00	\$438.54
275.-1-71	12 Maria Court	Brian John and Kelsi Lynn Clark	\$1,641.38	\$811.45	\$2,452.83
275.-1-72	14 Maria Court	James Chen	\$1,866.91	\$922.95	\$2,789.86
275.-1-73	Maria Court	Louise Straney	\$438.54	\$0.00	\$438.54
275.-1-74	15 Maria Court	Roya and Miramjan Aioby	\$1,879.44	\$929.14	\$2,808.58
275.-1-75	13 Maria Court	Carolyn and Leonard Montorio	\$2,349.30	\$1,161.43	\$3,510.73
275.-1-76	11 Maria Court	Joanne de Oliveira	\$2,889.33	\$1,428.40	\$4,317.73
275.-1-77	9 Maria Court	Christine and Kevin Petronis	\$1,519.22	\$751.06	\$2,270.27
275.-1-78	5 Maria Court	Scott and Catherine Pollard	\$2,255.33	\$1,114.97	\$3,370.30
275.-1-79	7 Maria Court	Jack and Judith Dodd	\$1,554.30	\$768.40	\$2,322.70
275.-1-80.1	735 Riverview Road	Beverly and Richard Messmer	\$1,559.31	\$770.88	\$2,330.19
275.-1-82	731 Riverview Road	Richard and Linda Clingerman	\$1,674.58	\$827.87	\$2,502.45
275.-1-83	733 Riverview Road	Jeremy Rosner Root and Megan Root	\$1,828.07	\$903.75	\$2,731.82
275.-1-84	727 Riverview Road	Kenneth and Judith Drum	\$1,478.49	\$730.93	\$2,209.42
275.-1-85	713 Riverview Road	Robert P Weiss	\$2,114.37	\$1,045.28	\$3,159.66
275.-1-86	781 Riverview Road	Michael J. and Judith T. Hylan	\$2,114.37	\$1,045.28	\$3,159.66
275.-1-87	785 Riverview Road	Brian Carucci and Suzanne Miller	\$1,162.75	\$574.83	\$1,737.58
275.-1-91	758 Riverview Road	Mark and Kimberly Jo Gatta	\$2,365.59	\$1,169.48	\$3,535.07
275.-1-99	768 Riverview Road	Danuta and Piotr Olkowska	\$1,526.11	\$754.46	\$2,280.57
275.-1-101	708 Riverview Road	Power Angels LLC	\$10,963.41	\$5,420.00	\$16,383.40
275.-1-102	1 Maria Court	Christopher J Marsh	\$1,412.09	\$698.10	\$2,110.18
276.-1-44.1	703 Riverview Road	Robert Abbatiello	\$1,489.77	\$736.50	\$2,226.27
276.-1-44.2	701 Riverview Road	Anthony & Natalie Caruso	\$2,357.45	\$1,165.45	\$3,522.90



EXHIBIT 16
SHORT-LIVED ASSETS

**Town of Clifton Park
Riverview Landing Sewer District
Short-Lived Assets**

Item	No. Units	Expected Useful Life, years	Est. Replacement Cost (each)	Annual Required Revenue
Sewage pump & motors	2	30	\$60,000	\$4,000
Pump Controls	2	25	\$5,500	\$440
VFDs	2	25	\$5,000	\$400
Air Release & Cleanout Valves	15	15	\$860	\$860
Annual Required Reserves Total:				\$5,700



EXHIBIT 17
PROPERTY OWNER QUESTIONS AND RESPONSES

Town of Clifton Park Riverview Landing Sewer District (RLSD) Public Information Session 11/19/2020

Question: How much do the residents of other sewer districts pay each year for sewer?

Response: See below list from the Town Comptroller:

- Clifton Park Sewer District #1= \$180/unit plus SCSD fee ~\$255.50
- Clifton Park Sewer District #2= \$175/unit plus SCSD fee ~\$255.50
- Old Nott Farm Sewer District - Based on water consumption \$81,192 to be collected 2020 Residentials averaged \$843
- Rivercrest Sewer District - Average \$603 per user. 18 users total levy \$10,850
- Rivercrest Ext. Sewer District - Based on units \$47,182 to be collected, 63 units 2020 Residentials averaged \$700
- Dutch Meadows Sewer District - \$157.46 per unit, plus \$0.844602 per assessed value for debt, average \$111.20 plus SCSD fee
- Woodland Hills Sewer District - \$62.69 per unit, plus \$0.240618 per assessed value for debt, average \$ 27.30, plus SCSD fee
- Sherwood Forest Sewer District - \$180 average for debt, plus SCSD collector fee \$50, plus SCSD fee ~\$255.50
- Clifton Country Road Sewer District - \$148.68 per unit, plus SCSD fee ~\$255.50
- Corporate Commerce Sewer District - \$ 66.902 per unit, 74.84 total units, plus SCSD fee (units include acreage and assessed value)

Question: Will each property owner pay an equal share of the debt or will Ad Valorem be used as is the case currently?

Response: The method used in the report to calculate the annual cost of the options for the properties in the District was unit based, where one single family home is equal to one unit and are charged the same amount for debt and O&M. We are looking into revising the debt payment (loan for construction) to an assessment base to match the existing rate structure and keeping the operation and maintenance (O&M) charges as unit based as the Districts that the wastewater would be sent to charge this way.

Question: How much do the residents of Riverview Landing currently pay each year for sewer?

Response: Residents pay \$394.99 per unit, total units in district 40.5, plus \$0.879056 per assessed value for debt.

Question: If the power goes out how will the sewage get transported from the grinder pump tank to the treatment plant or the proposed pump station?

Response: It does not, which is no change from the way the system operates now. There is a maximum of 30 gallons of storage in the grinder pump basin at each home.

Question: Do they have to change grinder pumps for the new proposed system?

Response: No. The design will account for the capacity of the existing pumps.

Question: Can they only replace the half of the plant that is currently out of service?

Response: No. The groundwater table is expected to be already impacting the second half of the plant to a lesser extent, but it will eventually fail. If the replacement of the intermittent sand filters alternative is selected, both sides would need to be completely rebuilt with impermeable liners to prevent this problem in the future.

Question: Are there any systems around Riverview Landing that need upgrades or will soon? If so, can they join with Riverview Landing to share/reduce costs?

Question: Can people neighboring the district be included to increase the size of the district and lower costs?

Response: The above two questions have a common answer. Currently, there are no other proposed sewer districts in the area. If one is proposed in the future and they decide to connect to RLSD, they would pay a portion of the RLSD debt and O&M costs. The Town cannot require additional properties to connect to the RLSD just to reduce costs to the existing district.

Question: Will Windhover Farms benefit from proposed Alternative #2B (pump station to Windhover Farms)?

Response: No. This system was paid for by the developer, so there is no debt to the residents (it is built into the cost they paid for the homes and they pay a mortgage). They pay the Saratoga County Sewer District No. 1 annual charge, which would be the same fee for Riverview Landing Sewer District residents, plus their own O&M costs. The Riverview SD users would pay a portion of the O&M costs for the segment of the Windhover System that they would utilize.

Question: Does the Town or Sewer District own the treatment plant?

Response: See the attached memo from the Town attorney (following this list of questions and responses) and the information regarding the Rexford Heights Land Company, Inc., the last deed holder for the property (dissolved in 1991).

Question: Can the plant not be decommissioned to save money if Alternative 2B is selected?

Response: No. NYSDEC requires treatment plants that are no longer in service to be decommissioned (demolished and removed).

Question: Who decides which alternative is selected?

Response: The Town Board will take all of the information contained in a final report and especially public input into consideration to arrive at a decision.

Question: Are all the houses tied into the Riverview Landing Sewer system included in the EDUs list/typical costs computations?

Response: The Town Assessor will provide an updated list of properties and their classification so that it can be confirmed that all properties have been included in the district list in the report exhibit.

Question: Will the grinder pumps be able to pump to the proposed pump station?

Response: Yes. The design will account for the capacity of the existing pumps.

Question: Will any of the pipes in the existing system need to be replaced with larger piping?

Response: If the alternative to send the wastewater to Windhover Farms is selected some of the existing piping along Riverview Road would need to be enlarged as the direction of flow would be changing along this road. This has been included in the construction cost estimate for this alternative.

Question: What will a raised-up filter bed (Alternative 1A) look like from the outside?

Response: It is anticipated that the plant site would need to be raised approximately three to four feet to be above the groundwater table. It will remain to be a grass-covered field.

Question: Are filter bed replacements included in the 30-Year present worth analysis for Option 1A?

Response: Yes. One replacement of the filter media is included in the cost analysis over the 30-year planning period. This would require an additional borrowing at that time (in approx. 20 years), which would result in higher annual debt costs associated with a new 20+ year bond.

Question: Can the Town address the high groundwater issue and thereby fix the problem at the plant? Why is the groundwater higher now than in the past?

Response: A study of the changing groundwater hydrology in the area over the past 35 years since the plant was originally built could be performed, but the outcome could end up being inconclusive.

It is believed that the dealing with the present condition is the most expedient course of action as the plant is only operating at half capacity and could fail at any moment.

Question: (from email) It has been observed by several residents of Riverview Landing that there are areas along Riverview Road and adjacent to the WWTP in which the ditches and culverts require maintenance. Trees and brush are growing in culverts and in some areas water is stagnant and not flowing away from the site. This is especially evident in the small culvert that runs alongside the leach field. Would the town consider working on these ditches and culverts to facilitate the drainage in this area before the heavy winter weather arrives in order to help the water level to subside?

Response: Mike O'Brien will forward your request to the Town Highway Department. This issue was investigated by the Engineers on site a few years ago and the elevation measurements indicated the ditches had positive drainage past the plant and along the road. That said, the Town is looking at all angles on this issue and any other concerns that arise during this process.

Question: Was there any communication to Riverview Landing owners in 2017 when the project/research began to investigate alternatives for an inevitable repair? If not, why?

Response: No, a report was developed to better understand any options available and to provide a tangible document for residents to digest.

Question: What is the timeline for beginning the project and when are we expected to begin paying for it?

Response: Timeline is hard to pin down. Due to the current pandemic, questions people have asked, and state of the plant. An optimistic estimate would be 2021, however, that remains undetermined. Typically, the payback begins the following tax year after the money is borrowed.

Question: If the Town is coordinating this project, do they need our approval to proceed? From all the property owners?

Response: Pursuant to sections of the NYS Town Law, beginning with NYSTL 194, (under which all Town's operate and finance their operations) sanitary sewer improvements are owned by the Town through Special Districts. The Town is required to determine the properties benefitted by sewer improvements, and determine an equitable way to distribute costs of operation, maintenance, and repair among those property owners. In determining whether to establish or expand a Special District, the Town Board generally does not move forward unless there is a high level of support among properties to be benefitted. That is less so with required maintenance or repair, as the The Town Board as commissioners of the district is obliged to act in the public good and in advance of health, safety and public welfare. If the system is polluting the Mohawk River in violation of our permits and federal law, it is incumbent upon them to identify a solution and implement that solution. The purpose of the public informational process is to bring everyone into the fold and work together to identify the best direction to go. Further, as outlined below, if the Town/District comes under

enforcement orders from State or Federal Environmental Authorities, it would be the same structure to deal with any fines, and with the remediation orders and associated costs.

Question: What happens if we do nothing? Does someone pay some sort of penalty/fine? Who?

Response: If the Town does nothing, the State and EPA could/will levy fines for violations to our State Pollution Discharge Elimination System Permit and Clean Water Act. Eventually, if we are not ahead of this, New York State would put the Riverview Landing Sewer District under a Consent Order and force the necessary work to be done. No matter how this issue is eventually resolved, the costs are only borne by the District (you and the residents of the Riverview Landing Sewer District). This is under the same principle outlined above as a matter of State law. Only the properties served by particular infrastructure are to pay the operation, maintenance and repair costs of that infrastructure. Since the WWTP exists to serve the Riverview Landing Sewer User alone, the town must determine that those are the property (owners) to be assessed.

Question: Why is the proposed property cost being evaluated against equal amounts for all the properties vs. against assessment value (like it currently is)?

Response: This is one way of administering a debt service. It is known as a unit charge. This was a direction prescribed to the engineers by my office when the report was generated. My feeling was you all use the system fairly equally and should share the cost equally. It cuts down on neighbors hearing numbers that are different and the frustration that comes with that. We have received a bunch of questions on this and will provide the alternative figures for an Ad-valorem charge. You are currently charged this way, based on your property value. We can certainly go this way. I apologize for any confusion this way have caused.

Question: It sounds like a core part of the problem is a high ground water level near the leach field. Can this not be mitigated by good drainage to lower the groundwater level? Has the current drainage solution been properly maintained to allow good flow? Additionally, as groundwater levels raise and lower throughout the year – is this system working fine during low-water seasons?

Response: Yes, a combination of improved drainage and raising the level of the sand filters will mitigate this issue. The current drainage solution has been properly maintained to allow good flow. However, the groundwater table has risen since the last reconstruction of the sand filters independently from the wastewater treatment plant and adjacent stormwater management systems (these systems were only constructed to handle the flows that the area was experiencing at the time of their construction). Groundwater intrusion necessitated the closure of one of the two cells of the existing wastewater treatment system. Thus, the other cell has been taking all of the flow instead of half, speeding up its deterioration. Therefore, at a minimum, the existing cells will need to be reconstructed and raised up above the new groundwater table (Alternative #1A).

Question: The proposed plan says the initial cost is approximately 1.7 million, and a 5% APR loan over 30 years brings the total cost way above and beyond the initial cost. The % rate seems way too high, especially for a town-managed project like this. Getting a much better rate would take a big chunk out of the cost. I have seen local news stories where towns have gotten interest-free loans and/or grants to help pay for this. What can be done about this? Why is this rate so high?

Response: When you are doing a report over time and don't have an actual borrow date, it is better to be conservative on the figures to best represent the potential costs. I agree rate is high, I would expect a figure more in the range of 2.5%. Keep in mind rates are always moving could be less than 2.5%.

Question: Is there an option for each property to have their own septic system vs. using this? If not, why not? The incredible cost to each property owner for the proposed solution far exceeds the cost of putting in our own septic systems per-property over the life of the loan.

Response: To date the DEC has not provided a final answer to this question. It is possible that the DEC would allow a shift from the current public sewer system to individual septic systems; however, before they can make a determination, every parcel in the district would need to have soil testing performed to see if the parcels are suitable for septic systems (testing would be paid for by the residents of the district). If even one parcel has bedrock that is too high or soils that do not drain well enough, the system would not be eligible to shift to private septic systems. Soils in the Riverview Landing Sewer District have some or all of the following characteristics depending upon location: seasonally high water tables, bedrock that is only two to three feet below the surface, and slow draining soils. Furthermore, while some houses may have enough space to provide adequate separation between septic systems and drinking water wells (50 feet minimum between septic tanks and wells and 100 feet minimum between septic fields and wells), others may not depending upon the well location. Therefore, this option is very unlikely to be feasible.

Question: Can you please supply the total projected cost for each property after 30 years, and the total cost for the project after 30 years? I can do simple math but I'd like it to be stated from the Town.

Response: For Alternative 1A, the typical property will pay a debt service of \$2,075 per year for thirty years, which equals \$62,250. The O&M cost for 2022 is equal to \$639. If we assume a 2.5% O&M cost increase per year, the cost in 2051 for 1A would be \$1,308. The total of the annual costs with increasing O&M costs over the 30 years would be \$90,304 + about \$4,000 for one filter media replacement = \$94,304. The total cost to the district after 30 years would be the annual debt service (\$82,184) times 30, which equals \$2,465,520 plus the total O&M cost. The total O&M cost for thirty years of operation would be \$1,095,811 and the total combined cost to the district would be \$3,561,331.

For Alternative 2B, the thirty-year summation for a typical property is \$103,354 + about \$3,000 for pump, valve, and control replacements and cleaning = \$106,354. The total combined cost to the district would be \$4,076,648.

Question: Have any other districts been the same situation as ours where the cost to repair is incredibly high and is split by a small number of houses? If so, what districts? Was the cost mitigated in some way by the Town, the state, or Federal government? What happens if a family literally cannot afford an extra \$300 a month towards sewer?

Response: The Rivercrest Extension and Olde Nott Farm Sewer received funds from NYS that the Town recognized. That totaled \$298,880. This was recognized in 2011. We received a \$125,000 grant, through Assemblyman Reilly's office via the NYS Dormitory, and then a portion of the grant through Niskayuna School District which totaled \$173,880. Note: This is not typical for sewer projects in Clifton Park. The Town would attempt to qualify this project for funding grants and other programs.



Town of Clifton Park

Office of Town Attorney

Thomas McCarthy
Town Attorney

MEMO

.....
Date: March 5, 2021

To: Mike O'Brien

From: *Tom*

RE Land under the Riverview Landing WTPP
.....

Residents of Riverview Landing have asked about the ownership of 275.-1-88, the parcel of land on which the Wastewater Treatment Plant is situated.

Here's what the record shows: The last deed to the property is dated April 10, 1981, conveying the parcel from Kenneth and Thelma Lally to the Rexford Heights Land Company, Inc.

In 1984, Rexford Heights Land Company Inc. incorporated a Transportation Company they named RLD, Inc. which they (apparently later conveyed to "SOFCO, Inc.).

According to JME's March, 1999 MPR for the Riverview Landing Sewer District, SOFCO abandoned RLD, Inc. to the Town on July 31, 1998. The MPR states that the treatment plant property was within the legal description of the parcels within the abandoned Sewer Transportation Corp./Sewer District. However, there was no conveyance of the property by deed to the Town.

In 2002, the Town Assessor changed the codes for the property to indicate "Town of Clifton Park" as owner. This was done to prevent the property from going to auction for non-payment of taxes, thus putting the town in a position to either pay back taxes on the property or to risk having a third party buy it at auction, thus having the Treatment plant on lands of another.

However, as a matter of real property law, the fact remains that the last deed in for the property on file in the Saratoga County Clerk's office shows Rexford Heights Land Company, Inc. as property owner.

As far as I am aware, the only ways to acquire title to Real Property as a matter of Law are by Deed, Dedication, or Eminent Domain. I will research the extent to which we may be considered owner by abandonment, but I would be inclined to believe that some further action by the Town would be necessary before we considered conveying any portion of the property

for value, whether that be an action at Law to Quiet Title, or an Eminent Domain proceeding to take any remaining interest in the property that we do not own.

In that regard, I will also need to research the “Rexford Heights Land Corporation, Inc.” at the NY Secretary of State’s Office to determine if it is an active NY corporation, and if so, whether they are still in existence, and therefore, who owns it.

In terms of the responsibility for the upgrades to the Treatment Plant, the ownership of the property the Plant is situated on would not be material, as the Plant itself is an improvement that was abandoned to the Town under the Transportation Corporation Law.

I hope this answers your question for now. As for the status quo, the property is abandoned. Exactly to whom it is abandoned is not clear, although the best claim is obviously the Town.

NYS Department of State

Division of Corporations

Entity Information

The information contained in this database is current through March 9, 2021.

Selected Entity Name: REXFORD HEIGHTS LAND COMPANY, INC.

Selected Entity Status Information

Current Entity Name: REXFORD HEIGHTS LAND COMPANY, INC.

DOS ID #: 690481

Initial DOS Filing Date: APRIL 03, 1981

County: SCHENECTADY

Jurisdiction: NEW YORK

Entity Type: DOMESTIC BUSINESS CORPORATION

Current Entity Status: INACTIVE - Dissolution (Jun 04, 1991)

Selected Entity Address Information

DOS Process (Address to which DOS will mail process if accepted on behalf of the entity)

REXFORD HEIGHTS LAND COMPANY, INC.

702 CORPORATIONS PARK

SCOTIA, NEW YORK, 12302

Registered Agent

NONE

This office does not record information regarding the names and addresses of officers, shareholders or directors of nonprofessional corporations except the chief executive officer, if provided, which would be listed above. Professional corporations must include the name(s) and address(es) of the initial officers, directors, and shareholders in the initial certificate of incorporation, however this information is not recorded and only available by [viewing the certificate](#).

***Stock Information**

# of Shares	Type of Stock	\$ Value per Share
200	No Par Value	

*Stock information is applicable to domestic business corporations.

Name History

Filing Date	Name Type	Entity Name
APR 03, 1981	Actual	REXFORD HEIGHTS LAND COMPANY, INC.

A **Fictitious** name must be used when the **Actual** name of a foreign entity is unavailable for use in New York State. The entity must use the fictitious name when conducting its activities or business in New York State.

NOTE: New York State does not issue organizational identification numbers.

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EXHIBIT 18
ENGINEERING REPORT CERTIFICATION

Engineering Report Certification

To Be Provided by the Professional Engineer Preparing the Report

During the preparation of this Engineering Report, I have studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is being sought from the New York State Clean Water State Revolving Fund. In my professional opinion, I have recommended for selection, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account the cost of constructing the project or activity, the cost of operating and maintaining the project or activity over the life of the project or activity, and the cost of replacing the project and activity.

Title of Engineering Report: Riverview Landing Wastewater Treatment Plant Study Report

Date of Report: April 2021

Professional Engineer's Name: Douglas P. Cole, P.E.

Signature: 

Date: 4/12/2021



EXHIBIT 19
SMART GROWTH ASSESSMENT FORM



Smart Growth Assessment Form

This form should be completed by an authorized representative of the applicant, preferably the project engineer or other design professional.¹

Section 1 – General Applicant and Project Information

Applicant: Town of Clifton Park

Project No.: N/A

Project Name: Riverview Landing Wastewater Treatment Plant Study Report

Is project construction complete? Yes, date: No

Please provide a brief project summary in plain language including the location of the area the project serves:

Replacement of the existing Riverview Landing Wastewater Treatment Plant with two pump stations and forcemain to the Windhover Farms Subdivision.

Section 2 – Screening Questions

A. Prior Approvals

- Has the project been previously approved for Environmental Facilities Corporation (EFC) financial assistance? Yes No
- If yes to A(1), what is the project number(s) for the prior approval(s)? Project No.:
- If yes to A(1), is the scope of the previously-approved project substantially the same as the current project? Yes No

If your responses to A(1) and A(3) are both yes, please proceed to Section 5, Signature.

B. New or Expanded Infrastructure

- Does the project involve the construction or reconstruction of new or expanded infrastructure? Yes No

Examples of new or expanded infrastructure include, but are not limited to:

- (i) The addition of new wastewater collection/new water mains or a new wastewater treatment system/water treatment plant where none existed previously;
- (ii) An increase of the State Pollutant Discharge Elimination System (SPDES) permitted flow capacity for an existing wastewater treatment system; and OR

¹ If project construction is complete and the project was not previously financed through EFC, an authorized municipal representative may complete and sign this assessment.

- (iii) An increase of the permitted water withdrawal or the permitted flow capacity for the water treatment system such that a Department of Environmental Conservation (DEC) water withdrawal permit will need to be obtained or modified, or result in the Department of Health (DOH) approving an increase in the capacity of the water treatment plant.

If your response to B(1) is no, please proceed to Section 5, Signature.

Section 3 –Smart Growth Criteria

Your project must be consistent will all relevant Smart Growth criteria. For each question below please provide a response and explanation.

1. Does the project use, maintain, or improve existing infrastructure?
 Yes No

Explain your response:

The existing residential grinder pumps and low pressure sewer will be reused to the maximum extent practicable.

2. Is the project located in a (1) municipal center, (2) area adjacent to a municipal center, or (3) area designated as a future municipal center, as such terms are defined herein (please select one response)?

Yes, my project is located in a municipal center, which is an area of concentrated and mixed land uses that serves as a center for various activities, including but not limited to: central business districts, main streets, downtown areas, brownfield opportunity areas (see www.dos.ny.gov for more information), downtown areas of local waterfront revitalization program areas (see www.dos.ny.gov for more information), areas of transit-oriented development, environmental justice areas (see www.dec.ny.gov/public/899.html for more information), and hardship areas (projects that primarily serve census tracts or block numbering areas with a poverty rate of at least twenty percent according to the latest census data).

Yes, my project is located in an area adjacent to a municipal center which has clearly defined borders, is designated for concentrated development in the future in a municipal or regional comprehensive plan, and exhibits strong land use, transportation, infrastructure, and economic connections to an existing municipal center.

Yes, my project is located in an area designated as a future municipal center in a municipal or comprehensive plan and is appropriately zoned in a municipal zoning ordinance

No, my project is not located in a (1) municipal center, (2) area adjacent to a municipal center, or (3) area designated as a future municipal center.

Explain your response and reference any applicable plans:

3. Is the project located in a developed area or an area designated for concentrated infill development in a municipally-approved comprehensive land use plan, local waterfront revitalization plan, and/or brownfield opportunity area plan?

Yes No

Explain your response and reference any applicable plans:

4. Does the project protect, preserve, and enhance the State's resources, including surface and groundwater, agricultural land, forests, air quality, recreation and open space, scenic areas, and significant historic and archaeological resources?

Yes No

Explain your response:

The project protects surface and groundwater as the existing WWTP is planned to be abandoned and wastewater would be transported to the Saratoga County Sewer District No. 1 (SCSD) WWTP.

5. Does the project foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development, and the integration of all income and age groups?

Yes No

Explain your response:

6. Does the project provide mobility through transportation choices including improved public transportation and reduced automobile dependency?

Yes No N/A

Explain your response:

7. Does the project involve coordination between State and local government, intermunicipal planning, or regional planning?

Yes No

Explain your response and reference any applicable plans:

The SCSD #1 will need to approve the acceptance of the additional wastewater flow.

8. Does the project involve community-based planning and collaboration?

Yes No

Explain your response and reference any applicable plans:

A public information meeting has taken place and more are planned.

9. Does the project support predictability in building and land use codes?

Yes No N/A

Explain your response:

10. Does the project promote sustainability by adopting measures such as green infrastructure techniques, decentralized infrastructure techniques, or energy efficiency measures?

Yes No

Explain your response and reference any applicable plans:

11. Does the project mitigate future physical climate risk due to sea-level rise, storm surges, and/or flooding, based on available data predicting the likelihood of future extreme weather events, including hazard risk analysis data, if applicable?

Yes No

Explain your response and reference any applicable plans:

Section 4 – Miscellaneous

1. Is the project expressly required by a court or administrative consent order? Yes No

If yes, and you have not previously provided the applicable order to EFC/DOH, please submit it with this form.

Section 5 – Signature

By signing below, you agree that you are authorized to act on behalf of the applicant and that the information contained in this Smart Growth Assessment is true, correct and complete to the best of your knowledge and belief.

Applicant: Town of Clifton Park	Phone Number: 518-371-6651
Name and Title of Signatory: Douglas P. Cole, P.E., Senior Director of Water and Wastewater, KB Group of NY, Inc.	
Signature: <i>Douglas P Cole</i>	Date: 4/12/2021