Town of Moreau
SARATOGA COUNTY, NEW YORK

Engineering Report
Sewer District No. 1 Extension 5
County Forcemain Connection Map and Plan
October 2022

PREPARED FOR:
Town of Moreau
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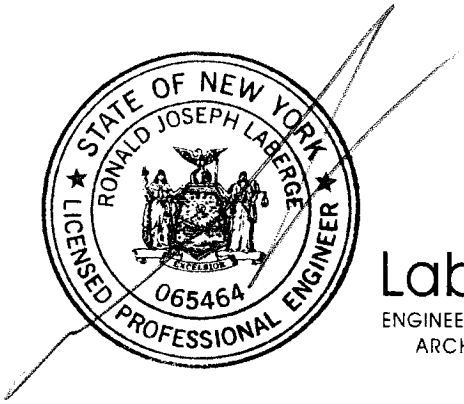
Moreau, NY 12828



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EXECUTIVE SUMMARY

Guided by the original Map, Plan, and Report for Sewer District 1 - Extension 5, the Town of Moreau has attempted to secure 135,000 gallons per day (gpd) of additional treatment capacity for the District. The Town sought to purchase the additional capacity under the existing Facility Agreement with the City of Glens Falls. The Town also commissioned a study to identify available treatment alternatives and determined that Saratoga County Sewer District No. 1 (SCSD) was willing and able to accept flow from District 1 - Extension 5.

Negotiations with the City to purchase the additional capacity have been ongoing for several years, with the City's final proposed terms and costs received in October 2022. Evaluation of City and County treatment options are presented herein and show that Saratoga County treatment is the least costly option for District 1 - Extension 5.

As part of a collaborative effort to facilitate Moreau's discharge to the County, SCSD has committed to upgrading a pump station in the Town of Wilton and will construct a new forcemain extending to the intersection of Washburn and Wilton-Gansevoort Road. District 1 - Extension 5 will be required to build a forcemain along NYS Route 9, Fortsville Road, Old West Road, and Washburn Road to the SCSD connection point. District 1 - Extension 5 will also be responsible for minor upgrades at its Route 9 pump station.

The cost of the District 1 - Extension 5 connection to the SCSD system will be approximately $5.2 million and is less costly than continued City treatment. Since the current District 1 - Extension 5 construction project is nearing completion, and significantly under budget, the SCSD connection can be completed without the need for additional borrowing authorization.

In addition to County treatment being the least costly alternative, additional benefits to be gained by securing treatment from the SCSD include:

- Representation at the County Board of Supervisors and the SCSD Commission
- SCSD does not require the purchase of reserve capacity for development projects which will help encourage public sewer connections which will help advance both groundwater protection and economic development goals.
- As assessed value and service areas grow, user costs will decrease, leading to more sustainable user rates.
- Sending flow from District 1, Extension 5 to the SCSD, the 190,00 gpd of treatment capacity already purchased from the City can be maintained, providing treatment redundancy.

I. INTRODUCTION

The Town of Moreau, located in northern Saratoga County, is re-evaluating its wastewater treatment options for District 1 - Extension 5. The Town of Moreau currently sends its sewage to the City of Glens Falls for treatment. The Town has a facility agreement with the City of Glens Falls, which provides 190,000 gpd of reserve capacity. Since the Town currently discharges about 80,000 gpd to the City for treatment, sufficient treatment capacity remains available for existing development within the Town's Sewer District 1 - Extension 5. However, it is projected that growth within District 1 - Extension 5 will be restricted unless additional reserve capacity can be purchased from the City or treatment obtained elsewhere.

The Extension 5 Map, Plan, and Report recommended the purchase of an additional 135,000 gpd from the City of Glens Falls. However, developer interest within District 1 - Extension 5 has been growing significantly as sewer infrastructure completion nears. Based on recent interest from property owners in the District, an additional 250,000 gpd or more might be needed to accommodate future growth.

In regard to the estimated annual costs and rates, as a conservative approach, this report will be based on the originally recommended need for an additional 135,000 gpd. This will inflate the annual costs presented with the knowledge that as additional development and flow are realized, the costs and rates to users will decrease.

As recommended by the District 1- Extension 5 Map, Plan, and Report, the Town attempted to purchase 135,000 gpd treatment capacity from the City under the terms of their existing facility agreement. Unfortunately, the City would not agree to the terms the Town considered fair and reasonable. During negotiations, the City remained steadfast in substantially increasing the cost of treatment and reserve capacity. Even though it was difficult to justify the purchase of elevated capacity, the Town also offered to purchase 1,000,000 gpd of treatment capacity for $3.39 million as outlined in the Facility Agreement with the City. The City rejected the Town's offer.

In September 2022, the City shared a draft Amended, Updated, and Restated Facility Agreement for consideration by the Town of Moreau. On October 31, 2022, the City provided the Town with proposed rates. The City's proposal would significantly increase the cost to all Sewer Districts within the Town. The revised terms would require the Town to:

- Contribute significantly more toward reconstruction costs at the Glens Falls treatment plant, a change that would increase Reconstruction Fund payments immediate by approximately 50% and likely increase further as the City undertakes reconstruction projects.
- Purchase reserve capacity at a price of $4.80 per gpd in 10,000 gpd increments.
- Purchase additional reserve capacity when the monthly average flow reaches 85% of Moreau's purchased reserve capacity.
- Limit peak hour discharge to three times the monthly average daily flow rate.

The Town of Moreau is within the bounds of the Saratoga County Sewer District (SCSD). The SCSD has indicated its ability and willingness to accept flow from the Town of Moreau without the need for a reserve capacity purchase. They have committed to working with the Town by undertaking a project to upgrade its pump station in Wilton, and to construct a new forcemain from Ballard Road in the Town of Wilton to the intersection of Washburn Road and Wilton-Gansevoort Road. The Town of Moreau would need to upgrade its Route 9 pump station and install a forcemain from the Town's District 1 - Extension 5 to the County's extended forcemain.

II. PROJECT BACKGROUND & HISTORY

A. Existing Facilities and Present Conditions

Moreau Sewer District No.1 - Extension 5 is currently completing a sewer project which provides sewer service to the Route 9 Commercial District and Mobile Home Parks within the Town's newly formed District 1 - Extension 5. This project includes the installation of a central pump station and forcemain which discharges into the Moreau Industrial Park forcemain, which conveys flow to the City of Glens Falls

The Town's Sewer District No. 1 owns and operates the Moreau Industrial Park 8-inch forcemain and pump station. Sewer District No. 1 was created by the Town to encourage economic development within the Moreau Industrial Park. District 1 - Extensions 1 through 4 were formed to serve private apartment developments and were connected to the Industrial Park Forcemain. Extensions 1 through 4 own no infrastructure, and the pump stations and collection systems within these developments are privately owned and operated.

B. Definition of the Problem

Sewer District 1 - Extension 5 is located over excessively well-drained soils, and the District was formed to provide public sewers to protect groundwater resources. However, rate sustainability within this District relies on the growth of assessed value, which requires additional treatment capacity. Although adequate capacity exists for existing development within District 1 - Extension 5, the capacity needed to support the projected demand due to proposed developments is no longer available.

The Town currently has 190,000 gpd of reserve capacity with the City of Glens Falls Treatment Facility. The Map, Plan, and Report for District 1 – Extension 5 recommended the purchase of an additional 135,000 gpd of reserve capacity to accommodate the expected growth in the area. This purchase of reserve capacity was not made since negotiations with the City did not result in favorable terms.

C. Flow Projections

The Town of Moreau has 190,000 gpd of treatment capacity from the City of Glens Falls which is available to serve existing sewer districts. The Map, Plan, and Report developed for the formation of the Town of Moreau Sewer District No. 1- Extension 5 recommended the purchase of 135,000 gpd of reserve capacity from the City to handle additional flow expected to occur within Extension 5. This recommendation was based on the existing metered water use plus projected flow for remaining vacant and underutilized parcels. Since the sewer district

was created, the Town has seen an exponential interest in development in the corridor, exceeding what was estimated in the Map, Plan and Report. If the development pressures remain on the same trajectory, the Town's flow from all districts will likely exceed 440,000 gpd or more.

The table below presents the current and projected sewer flow for each District based on the formation documents and the status of build out and/or occupancy for each District.

District	Current Flow (gpd)	Projected Additional Flow (gpd)	Total Flow (gpd)
District 1 - Moreau Industrial Park	18,079	81,921	100,000
Extension 1 - Leonelli/Schermerhorn	16,841	39,600	56,441
Extension 2 - Bluebird Village	21,561	0	21,561
Extension 3 - The Nest	0	53,800	53,800
Extension 3 - Harrison Place	1,931	0	1,931
Extension 4 - Bluebird Trace & Harrison Quarry	9,752	13,600	23,352
Extension 5 - Route 9 *	55,932	53,068	109,000
Outside Users	3,747	70,000	73,747
Total	**127,843**	**311,989**	**439,832**

*Anticipated flow once fully connected

As of this date, several projects have been discussed at some level with the Town and are included in the table above as "outside users". The table above shows that sewer flow could be as high as 440,000 gpd, while the Town currently has 190,000 gpd. Therefore, the Town may require an additional 250,000 gpd of reserve capacity.

D. Financial Status

The current District 1 - Extension 5 project has a budget of $16M. It was funded in part by a zero percent (0%) New York State Clean Water State Revolving Funds (CWSRF) loan and a NYS Water Grant (NYWIIA), which funded 25% of the project costs. Bids for the construction project were favorable, and the current project cost is under budget at approximately $13,490,000. Of this amount, 25% will be funded the NYWIIA grant resulting in a total loan amount of $10,117,500. The Town has an existing bond resolution authorization for up to $16,000,000, of which approximately $5.88M of bond capacity remains and which may be used by the Town to implement the preferred treatment option.

Saratoga County has committed funding to design the infrastructure needed for Moreau to connect to the County System, will construct a forcemain to the intersection of Washburn Road and Wilton-Gansevoort Road, and will upgrade its pump station in Wilton to support Moreau's connection.

III. ALTERNATIVES ANALYSIS

The following alternatives have been considered for this project:

Alternative 1 - City of Glens Falls Treatment – Existing Terms
Alternative 2 – City of Glens Falls Treatment – Proposed Terms
Alternative 3 - Saratoga County Treatment
Alternative 4 - City and Saratoga County Treatment
Alternative 5 – No Action

The basis for the design for all alternatives, except Alternative 5-No Action, is the *Recommended Standards for Wastewater Facilities, Policies for the Design, Review, and Approval of Plans and Specifications for Wastewater Collection and Treatment Facilities, 2014 Edition.*

A. Alternative 1 – City of Glens Falls Treatment Existing Terms

This alternative assumes that the Town will purchase 1 million gpd of reserve capacity under the existing facility agreement without changing contract terms. Although this purchase of 1 million gpd is far beyond what is needed for District 1- Extension 5, a smaller purchase is prohibited under the terms of the agreement. Assuming the purchase was made by June 1, 2021 it would have cost the Town approximately $3.4 million, the value used for this evaluation.

In addition to the purchase of reserve capacity, the Town would need to undertake a capital project to accommodate flow from all districts. Near-term flow projections show that without equalization at privately owned pump stations serving District 1- Extensions 1-4, the capacity of the existing 8" MIP forcemain will exceeded and unable to accept additional flow. Therefore, the Town will need to install a parallel forcemain from Sisson Road to the City of Glens Falls WWTP. It is anticipated that these improvements will cost the Town approximately $4.3 million.

Under this alternative, no changes to treatment costs or the Town's contribution to the Reconstruction Fund would occur. However, based on the 2023 estimated budgeted costs provided by the City, it appears that the Town's treatment cost will be approximately $3.67 per 1,000 gallons. It should be noted that this cost varies from year to year but has been increasing, on average, by approximately $0.15 annually since 2016. The cost will likely continue to increase as the City takes on additional reconstruction projects.

The expected 2023 costs to District 1, Extension 5 are presented in the table below.

Item	Total Cost	Annual Costs
Reserve Capacity Purchase	$3,400,000	$221,175(Debt Service)
Utility Improvements	$4,300,000	$279,721(Debt Service)
Treatment Cost	135,000 gpd @ $3.67/1000 gal	$180,839.25
	Total Annual Cost	**$681,735.25**

The above debt service costs are based on 30-year, 5% market rate financing.

It is important to note that the above costs assume that construction can be completed in 2023. It is more likely that construction will not be completed until 2025, and this could result in a project cost increase of 20% or more.

In addition to the annual costs, it is also important to note that the Town has no representation in the City's decision-making, which could ultimately increase the Town's rates.

B. Alternative 2 – City of Glens Falls Treatment – Proposed Terms

Alternative 2 utilizes the City of Glens Falls for all wastewater treatment. The City has provided a draft amended agreement, under which the Town can purchase up to 200,000 gpd of additional reserve capacity for treatment from the City, for a total reserved capacity of 390,000 gpd. This proposed agreement includes major changes, including:

- Removal of the language that limits the Town's contribution to the reconstruction fund to 5% of their share of the O&M costs. If removed, the Town's treatment costs will increase significantly.
- Requires that the Town initiate negotiations with the City for the purchase of additional reserve capacity when the flow reaches 85% of the purchased reserved capacity, regardless of the need and at an unspecified rate.
- Limits the peak hourly flow to 3 times the Town's Monthly Average Mean (MAM) daily flow.

In addition to the above, to discharge the amount of wastewater projected from future development, the Town will need to purchase additional reserve capacity from the City of Glens Falls. As previously identified, flow projections estimate that the Town could need an additional 250,000 gpd for a total of 440,000 gpd. However, the proposed terms only allow for the purchase of 200,000 gpd. Therefore, further negotiations with the City will be required in the future to purchase an additional 60,000 gpd to provide the 50,000 gpd of treatment needed due to the City's 85% clause. For a conservative approach in forecasting rates, this report does not include costs and benefits associated with future growth and is based only on the 135,000 gpd currently required.

The treatment cost increase associated with this alternative largely relates to new terms which will reformulate the Town's contribution to the Reconstruction Fund. The Reconstruction Fund requirement is set by the City annually and changes as the City undertakes reconstruction projects. The Town, as an outside user, is not allowed to participate in Reconstruction Fund budget decisions, and the City can plan projects without regard for Moreau user affordability.

To meet the peak hourly discharge limitations in the proposed agreement with the City, this alternative requires a capital project to construct the following improvements as shown on the City Treatment Schematic in Appendix B.

- A parallel forcemain to direct flow from private pump stations to the Moreau Industrial Park Pump Station
- Equalization tank at the Moreau Industrial Park Pump Station
- Equalization tank at the District No. 1 Extension 5 Pump Station
- Larger pumps and generator at the Moreau Industrial Park

Assuming that infrastructure improvements required by this alternative will be financed using conventional financing under the Town's existing bond authorization, with a 30-year term and 5% interest rate, the following costs are anticipated.

Item	Total Cost	Annual Costs
Capital Cost	$5,500,000	$357,783(Debt Service)
Treatment Cost	135,000 gpd @ $4.27/1000 gal	$210,404.25
	Total Annual Cost	**$568,187.25**

The capital cost shown above includes forcemain and Moreau Industrial Park construction costs and the cost to purchase an additional 200,000 gpd of reserve capacity from the City of Glens Falls at a price of $4.80 per gpd. This 200,000 gpd purchase is required to yield the combined reserve capacity of the Town's existing 190,000 gpd and proposed 135,000 gpd required because of the City's proposed 85% rule. A full breakdown of the preliminary opinion of probable cost is included in Appendix F. The preliminary opinion of probable cost assumes that construction will be completed during 2025, which, due to inflation, increases the overall cost of this alternative.

Although this alternative allows some growth to occur and avoids on-site wastewater disposal, the alternative does not address elevated treatment costs or the lack of representation in decision-making at the City of Glens Falls. Furthermore, other alternatives have non-monetary factors, such as treatment redundancy and the ability to accommodate future growth without purchasing reserve capacity, making the other options more attractive.

C. Alternative 3 - Saratoga County Treatment Alternative

The Town of Moreau is within the bounds of the Saratoga County Sewer District No. 1 (SCSD). The SCSD has identified that they can accept flow from the Town of Moreau with no purchase of reserve capacity required. SCSD is designing and planning for system improvements needed to accommodate up to 283,000 gpd from Moreau. SCSD is also planning to construct a new forcemain which will extend to the intersection of Washburn Road and Wilton-Gansevoort Road. The capital cost for these elements will not be the responsibility of the Town of Moreau Sewer District No. 1 - Extension 5. Under this alternative, District 1 - Extension 5 will need to make minor improvements to the Route 9 pump station, and construct a forcemain to the County's forcemain at the intersection of Washburn Road and Wilton-Gansevoort Road.

The County has indicated that flow from the Town of Moreau above 283,000 gpd can easily be accommodated in the future after the County completes a planned project which will upgrade the forcemain on Northern Pines Road. This upgrade will be a SCSD project and will not be a direct cost to District No. 1 - Extension 5.

The County has stated that it will allow the Town to be billed based on the amount of wastewater measured by the flow meter located at the Route 9 pump station. The County charges a flat rate of $274.50 annually per connected EDU. Assuming the use of 200 gpd per EDU, the per 1,000-gallon rate is $3.76 as calculated below, and is less than the proposed $4.27 for City treatment described in Alternative 2:

$$\frac{\$274.50 \text{ per EDU}}{200 \text{ gpd} * 365 \text{ days}} * 1{,}000\ gallons = \$3.76\ per\ 1{,}000\ gallons$$

The above treatment costs are based on 2022 sewer rates since 2023 rates are unavailable at this time. SCSD rates have increased from $3.52 to $3.76 from 2018 to 2022, or approximately $0.06 per year. as compared to the approximately $0.15 annually for City treatment from 2016 to 2023.

For Moreau to discharge to the SCSD, a forcemain connection is required. Three alignment alternatives were evaluated as described below:

- *Alignment Alternative 1 – NYS Rt. 9*
  The most direct route for the proposed forcemain is within the Route 9 corridor. Due to limited ROW, conflicting utilities and the NYSDOT requirement to maintain separation from the edge of the pavement, installation within this corridor will require the acquisition of many easements along the route. Additionally, some portions of this corridor consist of wetlands and steep embankments that drop off the side of the roadway, which, combined with the required separation, will increase construction and maintenance complexity. Although this option is the shortest distance, permitting and easement issues are expected to delay construction by at least two years, increasing costs due to construction inflation. No further analysis of this alternative is required.

- *Alignment Alternative 2 – Existing Utility Corridor*
  The second most direct route is the use of an existing utility corridor parallel to the County Water Authority's drinking water transmission main. Under this alternative, the forcemain would extend from District 1- Extension 5, and parallel the County's drinking water main to Northern Pines Road. The review of this alternative concluded that existing easement agreements are limited to drinking water main installation and do not provide the rights required for a sewer forcemain. New easement agreements would need to be negotiated and acquired from National Grid and other private entities. Based on past projects, it was estimated that new easements would require at least 18-24 months to obtain. This delay will increase project costs due to inflation and erode any benefits gained from a more direct route. It was also concluded that concerns related to impacts to the National Grid gas main and the County drinking water main might be difficult to avoid making use of the existing utility corridor undesirable. The County is planning to install a second 32-inch water main, which will further impede the installation of the proposed sewer main due to the required horizontal separation between water and wastewater mains. No further analysis of this alternative is required.

- *Alignment Alternative 3 – Local Roads*
  This alternative utilizes Town and County owned highway rights of way. The alignment travels along Rt. 9, Fortsville Road, Old West Road, and Washburn Road within the Town of Moreau, and Washburn Road, Wilton-Gansevoort Road, Northern Pines Road, East Lane, and Ballard Road in the Town of Wilton. The improvements can be installed entirely within the public ROW along this route. Although this is the longest route of the alternatives explored, the increased length is not expected to increase overall project costs since soils are conducive to directional drilling. Furthermore, because no easements are required, the project will be able to be constructed at least 12-18 months sooner than the alternatives discussed above, thereby minimizing construction cost escalation. The Town of Moreau will likely be able to avoid paying a treatment penalty associated with excess flow sent to the City of Glens Falls since construction can be completed within the 2023 construction season.

The most desirable route alternative was found to be Alignment Alternative 3 – Local Roads.

In addition to the forcemain discussed above, this alternative also requires minor improvements to the Route 9 pump station. Pump station improvements include additional valves, piping, and on-site flow equalization. A preliminary opinion of the construction cost for this alternative is included in Appendix F.

The table below presents the estimated annual costs if the Town chooses to send all flow from District No. 1 - Extension 5 to the Saratoga County treatment facility as described in this alternative.

Item	Total Cost	Annual Costs
Capital Cost	$5,200,000	$305,742 (Debt Service)
Treatment Cost	135,000 gpd @ $3.76/1000 gal	$184,781.25
	Total Annual Cost	**$490,523.25**

The debt service presented above is based on a $5.2 million capital cost, a $500,000 SAM grant, and financing of remaining construction costs with 5% interest and a 30-year term. No additional borrowing above the previously approved $16 million will be required for this alternative. Although total project spending will increase from $16 million to $20,690,000, no additional borrowing above the previously approved $16 million will be required. This is largely because the Town has been successful in obtaining a total of $5,372,500 in grant funding thus far.

The total required borrowing for the current Extension 5 project and this alternative, less grants, is estimated to total $14,817,500. This cost does not include improvements needed to redirect flow from four (4) private pump stations serving existing apartment developments within District 1 - Extensions 1 through 4. Since these stations are privately owned, this alternative assumes that the landowner will undertake the required improvements.

This alternative was found to be less costly than either of the City treatment alternatives. Pursuit of this option would abandon the 190,000 gpd of reserve capacity the Town has previously purchased and been paying to preserve with annual payments to the City.

D. Alternative 4 - City and Saratoga County Treatment

This alternative utilizes both the City of Glens Falls and Saratoga County for wastewater treatment. Under this alternative the Town retains the ability to discharge up to 190,000 gpd of wastewater to the City of Glens Falls using the existing forcemain and treatment agreement without modification. The remainder of the flow will be directed to the SCSD.

To achieve the split in flow, Sewer Extensions 1 through 4 will continue discharging to the City. Flow from District 1 - Extension 5 will be directed to the County. Sewer District 1, the MIP, will also discharge to the County. This discharge will achieve the scour velocity needed within the forcemain to the Route 9 pump station. Directing MIP flow to the County will also help address the recent City concerns about peak hourly flow.

The private pump stations serving apartment developments will continue to discharge to the City without triggering a reformulation of the Town's contribution to the WWTP Reconstruction Fund and without the need to purchase reserve capacity. This alternative also provides for treatment redundancy.

This alternative requires:

- A new forcemain to the Saratoga County system from the Extension 5 pump station site.
- New pump impellers and equalization at the Extension 5 pump station on Route 9.
- Larger wet well, equalization tank, and pumps at the Wilton pump station to accommodate the increased flow from Moreau.
- Install approximately 500-lf of forcemain to isolate the MIP from the forcemain to the City.

A schematic of the proposed improvements is located in Appendix B.
Moreau Sewer District 1 is already planning to install the MIP forcemain connection as part of a project which plans to replace MIP pumps due to age. These improvements will give the Town control over which facility to direct flow, and offer treatment redundancy for repairs or maintenance. These costs will not be the responsibility of Sewer District 1- Extension 5. In addition, SCSD is planning a project to improve the Wilton pump station and construct a portion of the forcemain to the intersection of Washburn Road and Wilton Gansevoort Road. District 1 and SCSD costs are to be funded independent of the District 1- Extension 5 project.

The preliminary opinion of the probable cost for this alternative is $5,200,000. A detailed cost breakdown is included in Appendix F. The table below presents the estimated annual costs if the Town chooses this alternative.

Item	Total Cost	Annual Costs
Capital Cost	$5,200,000	$305,742 (Debt Service)
Treatment Costs	135,000 gpd @ $3.73 per 1,000 gal.	$183,795.75
	Total	**$489,537.75**

It is assumed that a connection to the County will be made prior to exceeding the maximum allowable flow to the City under the existing agreement. If flow exceeds this amount, the Town must pay a CPI-adjusted penalty of $3.75 per 1,000 gallons in today's dollars. This alternative also assumes that the Town can continue discharging under the terms and conditions of the existing agreement with the City.

The existing City treatment rate is based on the actual treatment costs incurred by the City prorated for the amount of flow the Town discharges in addition to a Reconstruction Fund, which is at the discretion of the City. The remaining flow will be sent to the SCSD at an estimated treatment cost of $3.76 per 1,000 gallons as described in Alternative 3. Assuming a projected 2024 flow of 366,000 gpd is discharged from all districts, the blended treatment cost is roughly $3.73 per 1,000 gallons, the lowest long-term treatment cost of all alternatives. This treatment cost is slightly higher than Alternative 3 because the 2023 City treatment rate is $0.03 less costly than the County treatment rate. However, if the City treatment rate continues to rise at its historical pace, the County treatment rate will be less expensive than the City treatment rate within one year.

E. Alternative 5 - No Action

In this alternative, the Town will continue sending all flow to the City of Glens Falls via the existing Moreau Industrial Park (MIP) force main. The Town will be obligated to deny approval of development projects to ensure that discharge to the City does not exceed 190,000 gpd. This alternative does not address the need for additional treatment capacity to support development and groundwater resource protection efforts.

The lack of available capacity under this alternative will limit future development and require on-site wastewater treatment, putting groundwater resources at risk. As with Alternative 1, the treatment cost for this alternative will be approximately $3.67 per 1,000 gallons based on the 2023 estimated budget costs provided by the City. No infrastructure costs are associated with this alternative.

Although this alternative yields the lowest treatment cost and has no capital costs, it is not a preferred alternative since the loss of development opportunities will result in limited growth potential. Without public sanitary sewer infrastructure, future development projects will seek to use on-site wastewater disposal systems, which will put groundwater resources at risk.

Furthermore, as identified in the 2017 District 1 Extension 5 Map, Plan, and Report, sustainable rates within the District rely on the addition of assessed value to the District. By limiting development, sewer rates will remain high within the District.

IV. PREFERRED ALTERNATIVE

Of the alternatives analyzed, Alternative 4 – City and Saratoga County Treatment, is the preferred alternative. This alternative is the lowest cost alternative and comprehensively addresses the issues the Town is facing regarding wastewater treatment. This alternative also offers similar annual costs for sewer users compared to the rates published in the 2017 District No. 1- Extension 5 Map, Plan, and Report, once 2023 treatment rates are applied.

The expected annual costs for this alternative are shown below.

Item	Total Cost	Annual Costs
Infrastructure Cost	$5,200,000	$305,742 (Debt Service)
Split Treatment Costs	135,000 gpd @ $3.73 per 1,000 gal.	$183,795.75
	Total	**$489,537.75**

In addition to being the least costly alternative, there are essential non-monetary factors favoring this SCSD treatment alternative.

- The Town will have representation at the County level, which allows input on decision-making regarding policies and rates which could affect the Town's sewer users.
- The SCSD does not require the purchase of reserve capacity which will promote a fair and predictable development process.
- The SCSD has committed at least 283,000 gpd to District 1- Extension 5, with plans to improve its infrastructure to increase capacity for the Town, which will serve economic development and groundwater protection goals for the foreseeable future.
- This alternative will enable existing commercial and industrial areas within the Town not already inside a sewer district to be added to District 1- Extension 5.
- This alternative will further the Town's groundwater protection goals as mandated in the recent land development ordinance revisions.
- This alternative will also help reduce debt service rates as more assessed value, and land area, is added to District 1, Extension 5.

A. Location of the Preferred Alternative

The proposed project is located in Saratoga County in the Towns of Moreau and Wilton. The project area can generally be described as within the roadway corridor from the Town's Extension 5 pump station on Route 9 southeast to Fortsville Road, south to Old West Road, West to Washburn Road, south to Wilton-Gansevoort Road, southeast to Northern Pines Road, east on East Lane, and continuing east along Ballard Road to join the existing SCSD sewer at a manhole to the east of the NYS Police barracks. Although this report evaluates the entire

project, the Town of Moreau Sewer District No. 1- Extension 5 will only be responsible for forcemain work up to the Wilton-Gansevoort and Washburn Roads intersection. A map showing the general alignment of the preferred alternative is included in Appendix B.

B. Ownership and Service Area

Although the SCSD connection could eventually serve all the existing sewer districts within the Town of Moreau, the connection is necessary for users within Extension 5, since not enough reserve capacity currently exists to accommodate the projected growth from this District. No additional outside sewer connections or district extensions are anticipated as part of this project at this time. All facilities to be constructed by the Town of Moreau will be owned and operated by the Town of Moreau Sewer District 1- Extension 5. All facilities to be constructed as part of the SCSD project will be owned and operated by Saratoga County Sewer District No. 1. It is anticipated that the proposed improvements will add negligible O&M responsibilities for either the Town and County as there will be no additional lift stations to operate.

C. Environmental Impacts and Mitigation Measures

There will be no significant negative environmental impacts associated with this alternative. As outlined in the Environmental Resource section, there is the potential for the presence of threatened and endangered species, archaeological resources, and freshwater wetlands. The Town has undertaken all necessary surveys and studies to ensure that all mitigation measures are in place.

D. Threatened and Endangered Species

The area along Route 9 from Interchange 17 of Interstate 87 and Route 9's intersection with Ballard Road (Rt. 33) has the potential to contain rare plants and animals. Based upon the U.S. Fish and Wildlife Service IPaC Trust Resource Report, located in Appendix C, the following species are identified as potentially affected by activities in these locations:

- Karner Blue Butterfly – Endangered Species
- Monarch Butterfly – Candidate Species
- Indiana Bat – Endangered Species

The Town has commissioned an ecological survey for the project area, the results of which have been shared with the NYS Department of Environmental Conservation (DEC). The Department has concluded that the project is not likely to result in the taking of threatened or endangered species. A copy of the DEC letter is located in Appendix C.

E. Geologic Conditions

The topography in the area is gently undulating, with slopes ranging between 0 and 15 percent. Although the NRCS Soil Resource Report identifies several soil types within the project area, the vast majority of soils identified are loamy sands, sandy loams, and silt loam. The depth to the water table ranges from approximately 18 inches to more than 80 inches. The depth to restrictive layers such as bedrock is in excess of 80 inches in most areas.

A geotechnical investigation has also been completed for the project, which generally verifies NRCS information. The geotechnical investigation revealed no shallow bedrock or other features which will negatively affect construction. A copy of the NRCS Soil Report and geotechnical report are located in Appendix D.

F. Environmental Resources

Based upon the New York Department of Environmental Conservation EAF mapper, the project does not fall within an environmentally critical area. However, it is noted that rare plants and animals may be present in the vicinity of the project area. The mapper also identified the project's proximity to potential wetlands. The Town has undertaken an environmental survey to identify further and delineate sensitive areas to be avoided during the design phase.

G. Floodplain Considerations.

A portion of the proposed project passes through the 500-year flood plain of the North Branch Snook Kill, as shown on the FEMA Map in Appendix E. The proposed facilities to be located within floodplain areas are limited to buried piping and are not expected to be impacted by potential flooding within this area.

H. Environmental Justice Areas

There are no Environmental Justice areas near the project, with the closest locations in the City of Saratoga Springs, Glens Falls, and Hudson Falls.

I. Public Participation

The District 1-Extension 5 County Connection project was developed through a public process that involved two public meetings where the Board reviewed environmental impacts. The District 1- Extension 5 formation process also involved several public meetings, hearings and a public referendum to foster a broadly supported plan. The positive referendum vote for the project shows public support for project goals which intend to encourage economic development while protecting groundwater resources. The SCSD connection project is an extension of original formation and will provide for long-term, predictable, and affordable treatment.

J. Archaeological Resources

The New York State Historic Preservation Office (SHPO) has been contacted, requesting their review of the proposed project and any comments they may have. They have issued letters stating that the project will have no impact on archaeological and/or historic resources or properties. Copies of these letters are located in Appendix C.

K. Freshwater Wetlands

Results from the NYSDEC Environmental mapper in Appendix C identify several wetlands and wetland check zones adjacent to the proposed project. The Town has undertaken a wetland survey to locate and delineate these wetland areas. The project design uses trenchless installation methods and locates flushing stations well outside wetlands and the adjacent regions to eliminate surface disturbance in these sensitive areas. Discussions with the NYSDEC have identified that wetland permits will not be required since no ground disturbance is proposed within areas adjacent to wetlands and since a minimum of 4-ft vertical separation between the bottom of the wetland and the top of the pipe will be maintained.

L. SEQRA Status

The Town of Moreau had initially completed a coordinated SEQRA review, with the Town Board acting as Lead Agency. On November 9, 2021, the Board found the project to be a Type 1 Action and issued a negative declaration. Since the original SEQRA review, the project area has been expanded to include the East Lane and Ballard Road area, the Wilton pump station area, and the MIP connection area on Bluebird Road. On October 11, 2022, the Board amended the original negative declaration to include the expanded project area. Copies of the SEQRA coordination letters as well as the determination resolutions and SEQRA EAF forms, can be found in the appendices.

M. Energy Efficiency

The proposed sewer improvement's energy use is confined to the pump upgrades at the Wilton pump station. This lift station will utilize premium efficiency motors and Variable Frequency Drives (VFD) to ensure energy efficiency.

N. Constructability

There are no known constructability issues. It is proposed that the forcemain be installed via directional drilling methods to reduce surface restoration requirements and eliminate surface disturbance in environmentally sensitive areas.

O. Preliminary Opinion of Probable Cost

The preliminary opinion of the probable cost of the recommended alternative is $5,200,000 for District 1- Extension 5. The detail for this figure is located in Appendix F. SCSD and District 1 costs are beyond the scope of this report.

P. Treatment Costs

Wastewater treatment will occur at both the City of Glens Falls and the Saratoga County wastewater treatment plants. As discussed in Alternative 4, the combined treatment rate is expected to be about $3.73 per 1,000 gallons.

Depending on the timing of the connection to the County, discharge of flow that exceeds 190,000 gpd to the City may be required. As set forth in the existing agreement, monthly arithmetic mean flows in excess of 190,000 gpd will carry a $3.75 per 1,000-gallon penalty in addition to the base treatment rate for all overages. It is less costly to pay the penalty for a short period of time, rather than purchase additional capacity from the City since the purchase will trigger a recalculation of the Town's reconstruction contribution. Based on current projections, it does not appear that flow will exceed 190,000 gpd until 2024. Since the current project schedule expects completion of the County Forcemain Connection by December 2023, this report assumes penalty costs can be avoided.

Q. Non-Monetary Factors

The recommended alternative provides system redundancy by allowing the Town of Moreau to discharge to either the City or County treatment facility. This will provide uninterrupted service in the event a section of forcemain or its appurtenant items is temporarily offline for maintenance.

The Town is able to leverage existing agreements and continue its use of purchased capacity and infrastructure investments.

The Town has representation during policy-making and rate changes, whereas if the Town decides to use the City as the sole treatment facility, the Town will have no input in decisions and rate changes.

The County does not require the purchase of reserve capacity for developers, which will promote a fair and predictable development process without the need for unpredictable purchase negotiations with the City. The County has committed at least 283,000 gpd to Moreau with plans to improve County infrastructure to increase capacity for the Town, which will serve economic development and groundwater protection goals for the foreseeable future.

V. USER COSTS

A. Debt Service

The proposed alternative involves undertaking a construction project which is expected to cost District 1-Extension 5 approximately $5.2 million. In addition to the debt service for the proposed project, the Town's Sewer District No.1-Extension 5 has existing debt service for the construction project currently underway. The Extension 5 project cost, less grant funding, is approximately $10.12 million and is to be financed with a CWSRF loan at 0% interest. The original District 1- Extension 5 project nearing completion is maintaining a $700,000 contingency budget which may not be required. As a conservative approach, this contingency budget is not reallocated in this report. If these contingency funds are not needed for the initial project, they will be used to offset the capital cost for the proposed alternative and thereby reduce rates associated with debt service.

The Town had previously applied for NYWIIA grant funding for a connection to SCSD. Unfortunately, the Town's application was denied since the EFC did not consider the County Forcemain Connection a separate project, but rather an addition to the original project. Therefore, the Town should reapply for hardship financing and determine whether unused NYWIAA grant funds can be applied to the County Forcemain Connection. Since final financing is not yet known, the debt service scenarios presented include market rate, hardship loan, and hardship loan with some NYWIIA grant assistance.

Project costs will be shared amongst all properties within District 1 - Extension 5. This District has an established rate structure that distributes the debt service based on both the size and the assessed value of each parcel. The rates are such that 90% of the debt service is distributed using the ad valorem basis, and the remaining 10% based on parcel acreage.

The table below summarizes the estimated annual costs under various financing scenarios. Rates shown include the previously approved project currently under construction (Phase 1) and the preferred Alternative No. 4 described herein (Phase 2).

PLAN OF FINANCE

FINANCING SCENARIO	Market Rate 5% Financing	Hardship 0% Financing	Hardship 0% Financing with Remaining NYWIIA
TERM	30 Years	30 Years	30 Years
INTEREST RATE	0% - Phase 1 5% -Phase 2	0% - Phase 1 0% -Phase 2	0% - Phase 1 0% -Phase 2
PHASE 1 COST	$13,490,000	$13,490,000	$13,490,000
PHASE 2 COST	$5,200,000	$5,200,000	$5,200,000
NYS WATER GRANT PHASE 1	$3,372,500	$3,372,500	$3,372,500
NYS WATER GRANT PHASE 2	$0	$0	$627,500
SAM GRANT PHASE 2	$500,000	$500,000	$500,000
TOTAL BORROWING	$14,817,500.00	$14,817,500.00	$14,190,000
DEBT SERVICE PHASE 1	$337,250	$337,250	$337,250
DEBT SERVICE PHASE 2	$305,742	$156,667	$135,750
TOTAL DEBT SERVICE	$642,992	$493,917	$473,000
TOTAL ASSESSED VALUE	$64,154,771	$64,154,771	$64,154,771
ACREAGE	538.25	538.25	538.25
TAX RATE (90%) PER $1,000 ASSESSED VALUE	$9.02	$6.93	$6.64
AREA RATE (10%) PER ACRE	$119.46	$91.76	$87.88

The row labeled TAX RATE (90%) presents the ad valorem tax rates that will apply to properties within District 1- Extension 5. The tax rate ranges from a high of $9.02 per $1,000 with 5% market rate financing to a low of $6.64 if the Town is successful in securing 0% financing as can utilize the remaining NYWIIA funds from the original Extension 5 project.

Likewise, the row labeled AREA RATE (10%) presents the applicable cost per acre. The projected cost to landowners ranges from $119.46 to $87.88 per acre, depending on the financing scenario.

B. Operation and Maintenance (O&M) Rates

It is anticipated that the O&M of the proposed project will not result in an increased burden on the Town's staff, and as such, no additional O&M costs are expected beyond what the districts already pay under current billing strategies.

C. Rate Comparison

The table below presents the expected change to user costs between what was identified in the Map, Plan and Report for District 1 - Extension 5 and the rates applicable to the preferred alternative.

		ESTIMATED RATES FOR PHASE 1 & PHASE 2		
	ESTIMATED RATES FOR PHASE 1 (FROM ORIGINAL MAP, PLAN & REPORT WITH CITY TREATMENT)	**Market Rate 5% Financing**	**Hardship 0% Financing**	**Hardship 0% Financing with Remaining NYWIIA**
Ad Valorem Rate	$6.78	$9.02	$6.93	$6.64
Acreage Rate (per acre)	$74.77	$119.46	$91.76	$87.88
O&M Ad Valorem Rate	$1.22	$1.02	$1.02	$1.02
O&M Use Rate Per 1,000 gallons	$4.61	$5.04	$5.04	$5.04

The previously approved District 1- Extension 5 Map Plan and Report rates are shown in the first column. These rates were based on 2016 City treatment rates which have since increased significantly, making a direct comparison difficult. The remaining columns present estimated rates for both Phase 1 and Phase 2.

D. One Time Costs

There are no one-time costs anticipated for users under this alternative.

E. Estimated First Year Costs

The estimated first-year costs for all users in District 1 - Extension 5 are included in Appendix G. These estimates are based on 2021 tax data and the most recent water use data available (2019). The table below presents the estimated first year costs for the average, median and mode properties and compares the existing rates with the proposed rates.

	ASSESSED VALUE	ACRES	ANNUAL WATER USE	FIRST YEAR COST (ORIGINAL MPR RATES)	FIRST YEAR COST WITH PROPOSED RATES		
					Market Rate 5% Financing	Hardship 0% Financing	Hardship 0% Financing with NYWIIA
AVERAGE PROPERTY	$737,411.16	6.21	226,128	$7,406	$9,285	$7,572	$7,334
MEDIAN PROPERTY	$300,000.00	2.18	7,625	$2,598	$3,311	$2,623	$2,528
MODE PROPERTY	$600,000.00	1.84	0	$4,938	$6,244	$4,939	$4,758

Based on the above table, it appears that if the Town is successful in securing 0% financing, the user rates will be very similar to those presented in the District 1 - Extension 5 Map, Plan, and Report. If market-rate financing is required, user costs are expected to increase.

Growth in the assessed value will reduce user rates. For every $10 million of assessed value added to the District, the ad valorem portion of the debt service rate is expected to drop by approximately $1.22 for every $1,000 of assessed value, based on market rate financing. The resulting annual reduction to each of the above properties is as follows:

Average Property	$882
Median Property	$366
Mode Property	$732

As the boundary of District 1- Extension 5 expands to serve additional areas, rates will decrease further as acreage and assessed value is added. In January 2022, the Town revised its land use ordinance to require large projects near a public sewer to connect to the system. As a result of this change, there are several large projects that have received Planning Board approval and, once constructed, will help reduce rates. The effects of these development projects have not been considered in this report.

F. Plan of Finance

The bond resolution for District 1 - Extension 5 authorized financing of up to $16 million in project costs. The cost for the project currently under construction is approximately $13.49 million, with $10,117,500 to be financed under the existing $16 million bond authorization. Therefore, the Town of Moreau can borrow an additional $5.88 million under the existing bond

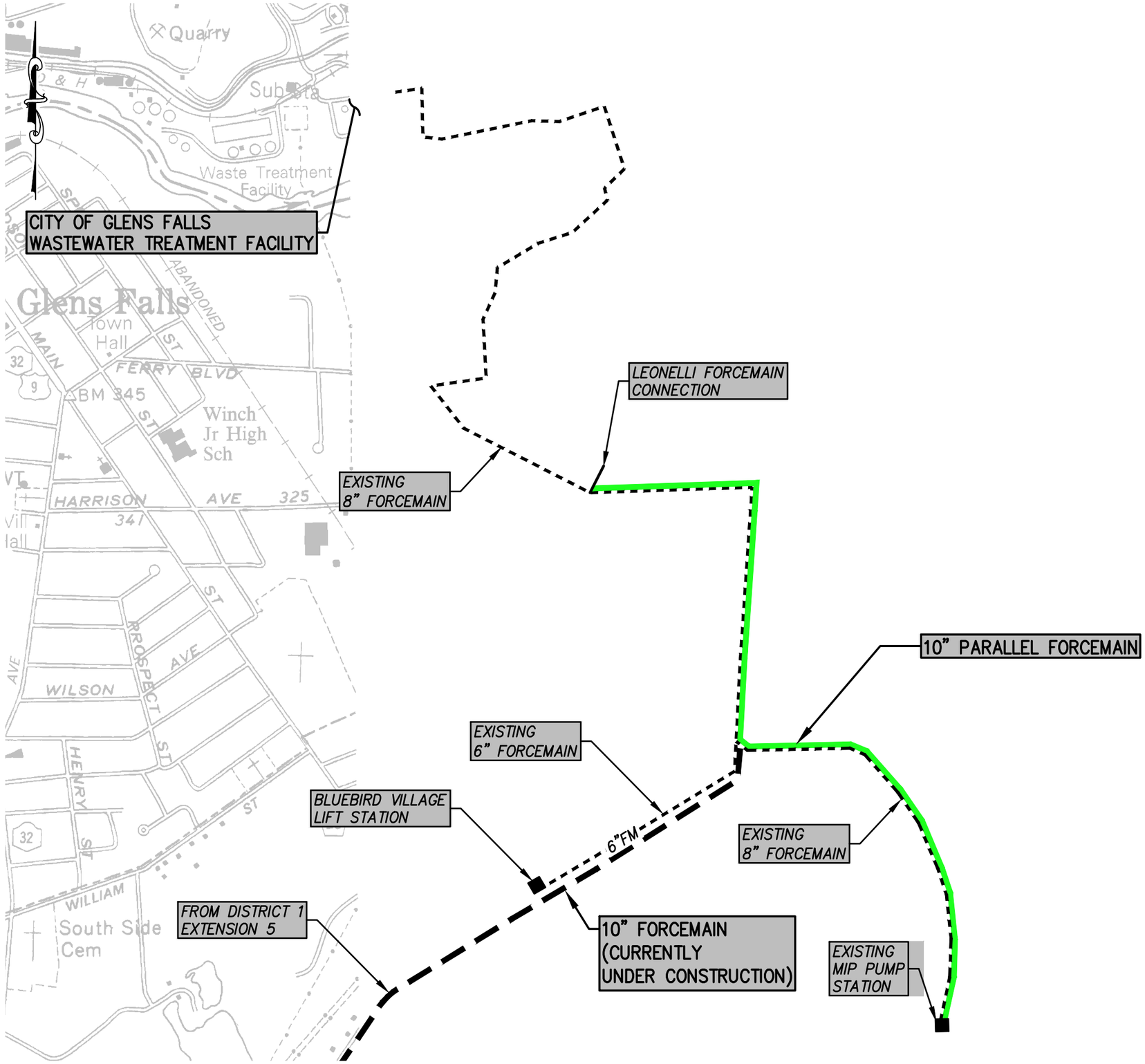
authorization. Since the current plan of finance estimates that only $4.7 million will be borrowed for the SCSD connection, the District will not need to authorize any additional debt to complete the project. A copy of the bond resolution is located in Appendix I.

VI. RECOMMENDATIONS

Should the Town decide to progress the project, the following action items are recommended:

1. Complete Construction of Sewer District 1 - Extension 5.
2. Request permits required for construction of the County Forcemain Connection.
3. Seek financing required for the construction of the preferred alternative.
4. Advertise and authorize the construction of the preferred alternative.

APPENDIX A: CITY OF GLENS FALLS TRANSMISSION SCHEMATIC



TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

SEWER TREATMENT
TRANSMISSION ALTERNATIVES

CITY OF GLENS FALLS TRANSMISSION SCHEMATIC

SCALE: 1"=1000'

Laberge ENGINEERING ARCHITECTURE Group SURVEYING PLANNING
4 Computer Drive West • Albany, New York 12205
(518) 458-7112 • www.labergegroup.com

DATE: 10/27/2022

APPENDIX B: SARATOGA COUNTY TRANSMISSION SCHEMATIC

TO GLENS FALLS WASTE WATER TREATMENT PLANT

DISTRICT 1 EXTENSION 5 PUMP STATION

PROPOSED FORCEMAIN TO SARATOGA COUNTY

TO SARATOGA COUNTY WASTEWATER TREATMENT PLANT

EXISTING SEWER

ADDITIONAL PROJECT AREA

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5 COUNTY FORCEMAIN CONNECTION

COUNTY CONNECTION LOCATION MAP

SCALE: 1"=2000'

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ENGINEERING ARCHITECTURE SURVEYING PLANNING
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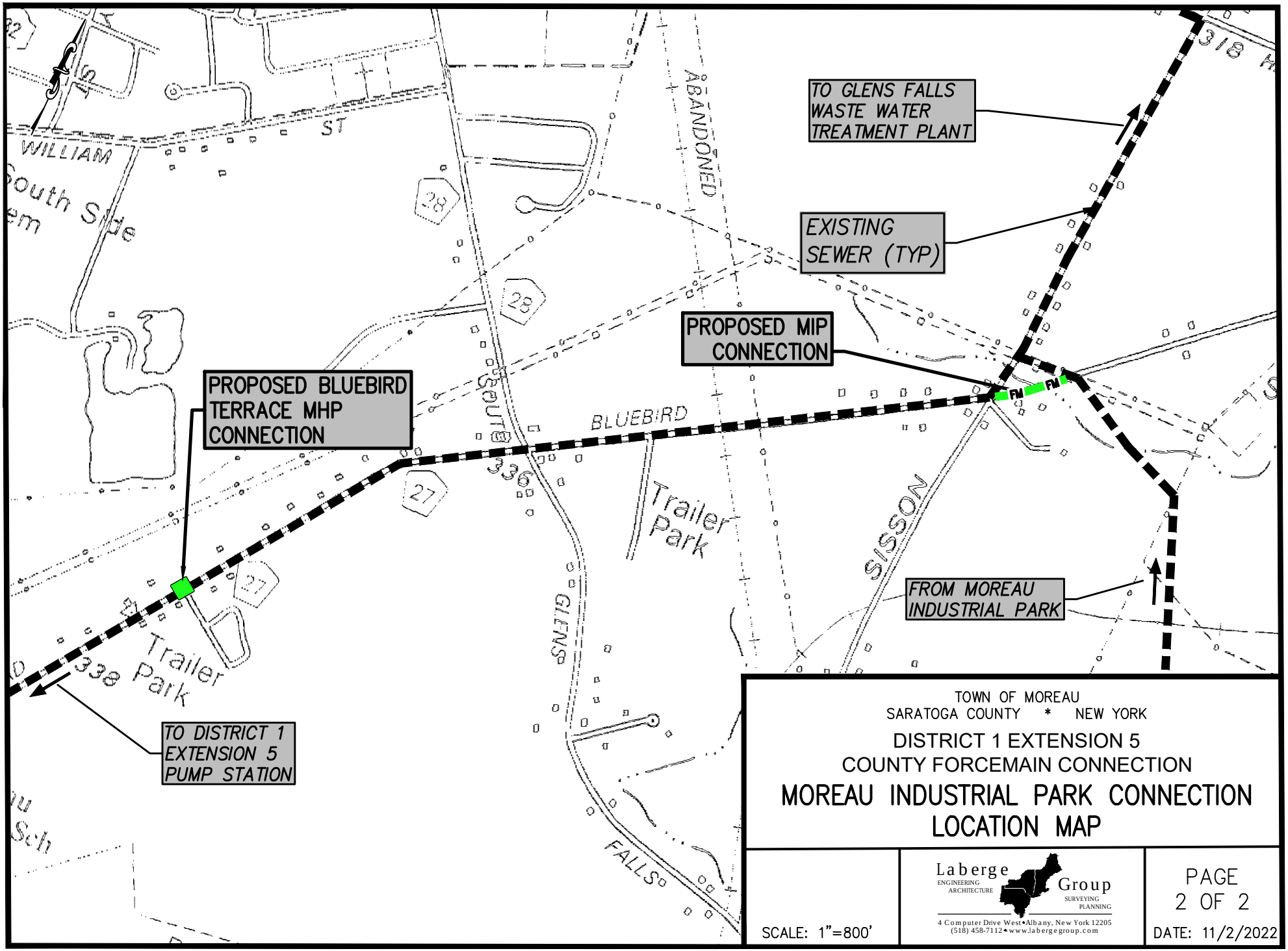
PAGE 1 OF 2

DATE: 10/10/22



TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION

MOREAU INDUSTRIAL PARK CONNECTION LOCATION MAP

SCALE: 1"=800'

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ENGINEERING ARCHITECTURE
SURVEYING PLANNING
4 Computer Drive West • Albany, New York 12205
(518) 458-7112 • www.labergegroup.com

DATE: 11/2/2022

APPENDIX C: ENVIRONMENTAL REVIEW

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 5
232 Golf Course Road, Warrensburg, NY 12885
P: (518) 623-1282 | F: (518) 623-3603
www.dec.ny.gov

LETTER OF NO JURISDICTION
ENDANGERED SPECIES ACT

Sent Via Email Only

October 20, 2022

Stephen George
North Country Ecological Services
25 West Fulton Street #3
Gloversville, NY 12078
northcountryeco@gmail.com

Re: Endangered and Threatened Species Evaluation
Proposed 7 Mile Water Line
Moreau (T), Saratoga County

Dear Luka Koziol:

The Department of Environmental Conservation (DEC) has determined that your proposal for a municipal water line in the town of Moreau is not likely to result in the take of threatened or endangered species. This determination is based on the information submitted by your office on June 28th, 2022, and reviewed by staff from the Division of Fish and Wildlife. Though Karner blue butterflies (*Lycaeides melissa samuelis*) and Frosted elfins (*Callophrys irus*) occur nearby, there is no suitable habitat on or near the project area for either species. Therefore, no permit is required at this time pursuant to the implementing regulations (6NYCRR Part 182) of the New York State Endangered Species Act (Article 11-0535).

Be advised that any changes in location, expansion of the footprint of the project, modifications of the scope, or changes in the timing of proposed actions that are not identified in the submission referenced above may trigger DEC authorization. Please reinitiate contact with this office if such activities are contemplated.

Please note that this letter does not relieve you of the responsibility of obtaining any necessary permits or approvals from other agencies or local municipalities.

Sincerely,

Beth A. Magee
Deputy Regional Permit Administrator

BM: ab

ec: J. Hayden (DEC)

Town Of Moreau Forcemain To Saratoga County

Biological Assessment

Prepared using IPaC

Generated by Christopher Wren (cwren@labergegroup.com)

October 28, 2021

The purpose of this Biological Assessment (BA) is to assess the effects of the proposed project and determine whether the project may affect any Federally threatened, endangered, proposed or candidate species. This BA is prepared in accordance with legal requirements set forth under Section 7 of the Endangered Species Act (16 U.S.C. 1536 (c)).

In this document, any data provided by U.S. Fish and Wildlife Service is based on data as of October 26, 2021.

Prepared using IPaC version 5.65.1

Town Of Moreau Forcemain To Saratoga County Biological Assessment

Table Of Contents

1 Description Of The Action

1.1 Project Name

Town of Moreau Forcemain to Saratoga County

1.2 Executive Summary

The Town of Moreau is considering undertaking a sewer project which would install approximately 7.8 miles of underground sewer forcemain from its pump station on Rt. 9 in the Town of Moreau, to the Saratoga County collection system in the Town of Wilton. The project area consists of Town and County owned right-of-ways along paved roadways. Since the project area is located on the shoulder of paved roadways, and disturbance is temporary, it is anticipated that the project will have no negative effect on endangered species within the project area.

Effect determination summary

1.3 Project Description

1.3.1 Location

LOCATION
Saratoga County, New York

1.3.2 Description of project habitat

The project area is within existing Town and County rights-of-way. The project is an underground utility with all improvements to be constructed either under the roadway, or under the grassed area directly adjacent to the paved surface. No tree clearing is expected as part of this project.

1.3.3 Project proponent information

Provide information regarding who is proposing to conduct the project, and their contact information. Please provide details on whether there is a Federal nexus.

Requesting Agency
Laberge Group

FULL NAME
Christopher Wren

STREET ADDRESS
4 Computer drive West

CITY	STATE	ZIP
Albany	NY	12205

PHONE NUMBER	E-MAIL ADDRESS
(518) 458-7112	cwren@labergegroup.com

Lead agency
Town of Moreau

1.3.4 Project purpose

This project is required to provide the Town of Moreau with a sewer system with adequate capacity to accommodate sewer flows. This project will also provide the Town with a level of redundancy in treatment in case of maintenance or emergency repairs.

1.3.5 Project type and deconstruction

This project is a municipal utilities project.

1.3.5.1 Project map

LEGEND

Project footprint

Sanitary Sewer Forcemain: Install sanitary sewer forcemain

1.3.5.2 install sanitary sewer forcemain

Activity start date
March 31, 2023

Activity end date
December 30, 2024

Stressors
This activity is not expected to have any impact on the environment.

Description
The project intends to install approximately 7.8 miles of underground sewer forcemain and appurtenant structures along established roadway corridors. It is assumed that the pipe will be installed by means of open trenching where possible, and by directional drilling in areas where environmental sensitivity may be a concern. The ground surface will be restored to existing conditions in areas where disturbance occurs.

1.3.6 Anticipated environmental stressors

Describe the anticipated effects of your proposed project on the aspects of the land, air and water that will occur due to the activities above. These should be based on the activity deconstructions done in the previous section and will be used to inform the action area.

1.3.6.1 Animal Features

Individuals from the Animalia kingdom, such as raptors, mollusks, and fish. This feature also includes byproducts and remains of animals (e.g., carrion, feathers, scat, etc.), and animal-related structures (e.g., dens, nests, hibernacula, etc.).

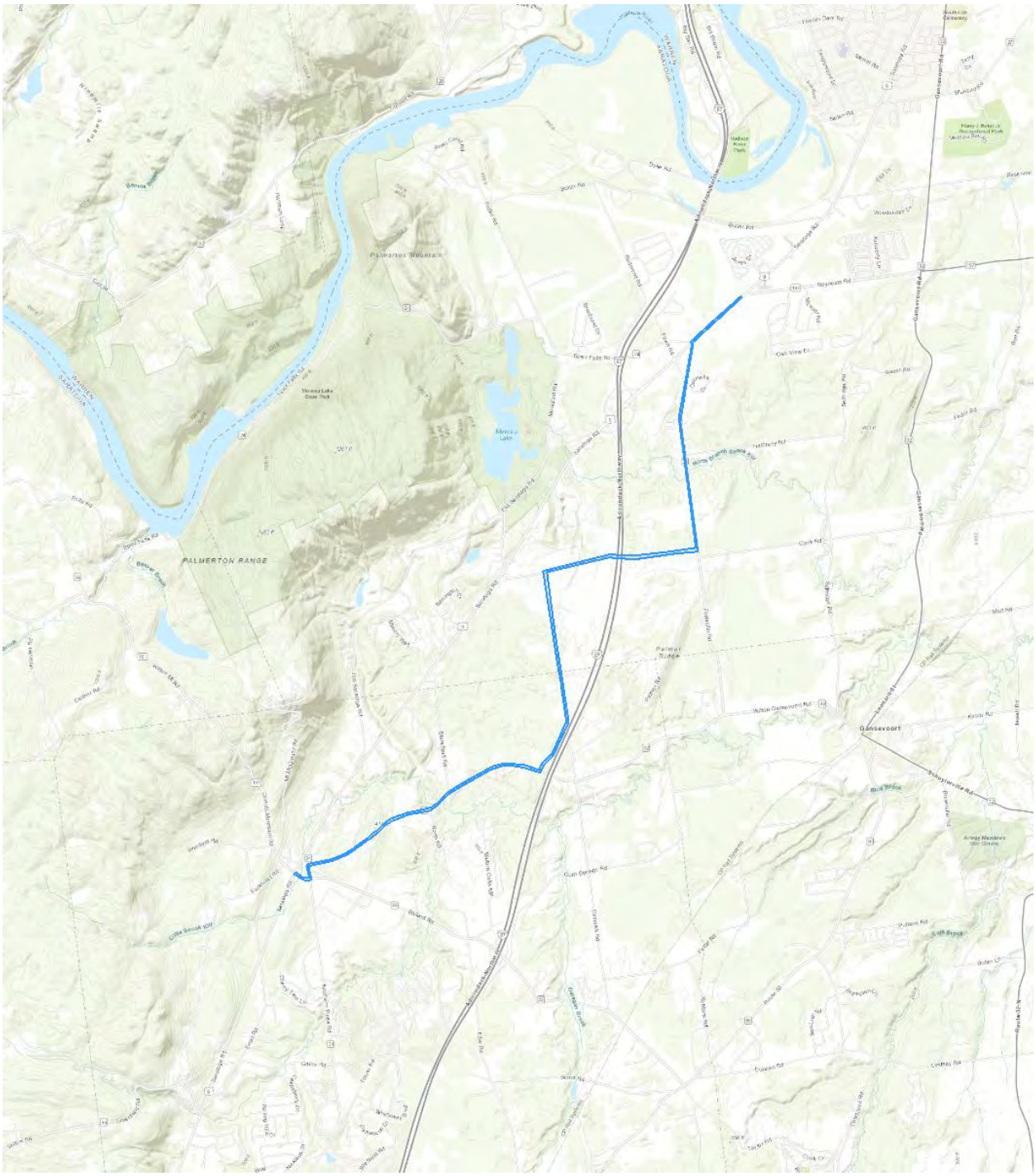
1.3.6.2 Plant Features

Individuals from the Plantae kingdom, such as trees, shrubs, herbs, grasses, ferns, and mosses. This feature also includes products of plants (e.g., nectar, flowers, seeds, etc.).

1.3.6.3 Environmental Processes

Abiotic processes that occur in the natural environment (e.g., erosion, precipitation, flood frequency, photoperiod, etc.).

1.4 Action Area



1.5 Conservation Measures

Describe any proposed measures being implemented as part of the project that are designed to reduce the impacts to the environment and their resulting effects to listed species. To avoid extra verbiage, don't list measures that have no relevance to the species being analyzed.

No conservation measures have been selected for this project.

1.6 Prior Consultation History

N/A

1.7 Other Agency Partners And Interested Parties

N/A

1.8 Other Reports And Helpful Information

None.

2 Species Effects Analysis

This section describes, species by species, the effects of the proposed action on listed, proposed, and candidate species, and the habitat on which they depend. In this document, effects are broken down as direct interactions (something happening directly to the species) or indirect interactions (something happening to the environment on which a species depends that could then result in effects to the species).

These interactions encompass effects that occur both during project construction and those which could be ongoing after the project is finished. All effects, however, should be considered, including effects from direct and indirect interactions and cumulative effects.

2.1 Indiana Bat

This species has been excluded from analysis in this environmental review document.

Justification for exclusion

The proposed project area is along existing roadways and the grassed area adjacent to the pavement, and is therefore not a habitat for Indiana bats. The project area does not consist of any forested areas.

2.2 Karner Blue Butterfly

2.2.1 Status of the species

This section should provide information on the species' background, its biology and life history that is relevant to the proposed project within the action area that will inform the effects analysis.

2.2.1.1 Legal status

The Karner Blue Butterfly is federally listed as 'Endangered' and additional information regarding its legal status can be found on the ECOS species profile.

2.2.1.2 Recovery plans

Available recovery plans for the Karner Blue Butterfly can be found on the ECOS species profile.

2.2.1.3 Life history information

The Karner blue butterfly was first described more than a century ago in Karner, New York. It is a small butterfly, with a wingspan of about one inch. The male's wings are distinctively marked with a silvery or dark blue color. The female is grayish brown, especially on the outer portions of the wings, to blue on the topside, with irregular bands of orange crescents inside the narrow black border.

Identified resource needs

Canopy cover
: Percent cover: low to moderate and type: tree and shrub

Canopy cover
: Percent cover: moderate to high and type: tree and shrub

Grass
: Species: various

Insects
: Species: ants

Leaf litter
: Depth: <3.5 cm (1.38 in.), type: leaves, pine needles and and other herbaceous materials

Nectar
: Source: available species with greatest number of flowers or flowering heads, spatial arrangement: within 200 meters of wild blue lupine plants and time of year: april-july

Snow
: Depth: ≥ 25.4 cm. (10 in.) and time of year: winter

Wild blue lupine
: Part of plant: leaves and part of plant: stem

Wild blue lupine
: Part of plant: leaves

2.2.1.4 Conservation needs

The presence of the Karner Blue Butterfly would require the restoration of existing conditions to ensure that their habitat is distrubed as a result of this project.

2.2.2 Environmental baseline

*The environmental baseline describes the species' health **within the action area only** at the time of the consultation, and does not include the effects of the action under review. Unlike the species information provided above, the environmental baseline is at the scale of the Action area.*

2.2.2.1 Species presence and use
There is the potential for Karner Blue butterfly within the project area. The project area consists of paved roadways and grassed areas. The grassed areas may support wild blue lupine but its extent is unknown at this time.

2.2.2.2 Species conservation needs within the action area
The conservation needs for the Karner Blue Butterfly will be to preserve, or restore existing habitat if it is encountered. The action area is within an established roadway corridor and therefore it is unlikely that any habitat would be disturbed ,if however, disturbance to habitat does occur, the project will restore the disturbed areas to existing conditions.

2.2.2.3 Habitat condition (general)
According the New York State Department of Environmental Conservation, this species is restricted to dry sandy areas with open woods and clearings supporting wild blue lupine.

2.2.2.4 Influences
According to the USFWS, the Karner blue butterfly is threatened with loss or degradation of habitat due to development, land management activities, and the lack of natural disturbance such as wildfire and grazing by large mammals.

2.2.2.5 Additional baseline information
None.

2.2.3 Effects of the action
This section considers and discusses all effects on the listed species that are caused by the proposed action and are reasonably certain to occur, including the effects of other activities that would not occur but for the proposed action.

2.2.3.1 Indirect interactions
Provide a brief overview of what the applicable science has discovered regarding the species and its response to the stressors that each project activity may cause. This should include an explanation of the pathways and mechanisms that have potential to translate environmental change (impact) into response and effects to individuals.

2.2.3.2 Direct interactions

DIRECT IMPACT	CONSERVATION MEASURES	INDIVIDUALS IMPACTED	IMPACT EXPLANATION
Displacement		Yes	It is unknown how many individual butterflies will be displaced as a result of the project. However, it should be noted that the project area is along paved roadways and is a linear utility project. Therefore the displacement is temporary, and would likely only result in a displacement of a few feet from the existing location.

2.2.4 Cumulative effects
None.

2.2.5 Discussion and conclusion

Determination: NLAA

Compensation measures
None.

2.3 Monarch Butterfly
This species has been excluded from analysis in this environmental review document.

Justification for exclusion
Since the Monarch Butterfly is a candidate species, an analysis is not required. Therefore, this species will not be analyzed in this report.

3 Critical Habitat Effects Analysis

No critical habitats intersect with the project action area.

4 Summary Discussion, Conclusion, And Effect Determinations

4.1 Effect Determination Summary

SPECIES (COMMON NAME)	SCIENTIFIC NAME	LISTING STATUS	PRESENT IN ACTION AREA	EFFECT DETERMINATION
Indiana Bat	Myotis sodalis	Endangered	No	NE
Karner Blue Butterfly	Lycaeides melissa samuelis	Endangered	Yes	NLAA
Monarch Butterfly	Danaus plexippus	Candidate	Excluded from analysis	Excluded from analysis

4.2 Summary Discussion

It has been concluded that the project will have no adverse impact on endangered species.

4.3 Conclusion

Although there is the possibility of endangered species within the project area, any negative impacts are unlikely. The disturbance of habitat of is temporary, and limited to the established roadway corridor. Once installation is complete, the disturbed area will be restored to existing conditions.

Saratoga County Pump Station Improvements

Biological Assessment

Prepared using IPaC

Generated by Christopher Wren (cwren@labergegroup.com)

October 10, 2022

The purpose of this Biological Assessment (BA) is to assess the effects of the proposed project and determine whether the project may affect any Federally threatened, endangered, proposed or candidate species. This BA is prepared in accordance with legal requirements set forth under Section 7 of the Endangered Species Act (16 U.S.C. 1536 (c)).

In this document, any data provided by U.S. Fish and Wildlife Service is based on data as of October 10, 2022.

Prepared using IPaC version 6.81.1-rc1

Saratoga County Pump Station Improvements Biological Assessment

Table Of Contents

1 Description Of The Action

1.1 Project Name

Saratoga County Pump Station Improvements

1.2 Executive Summary

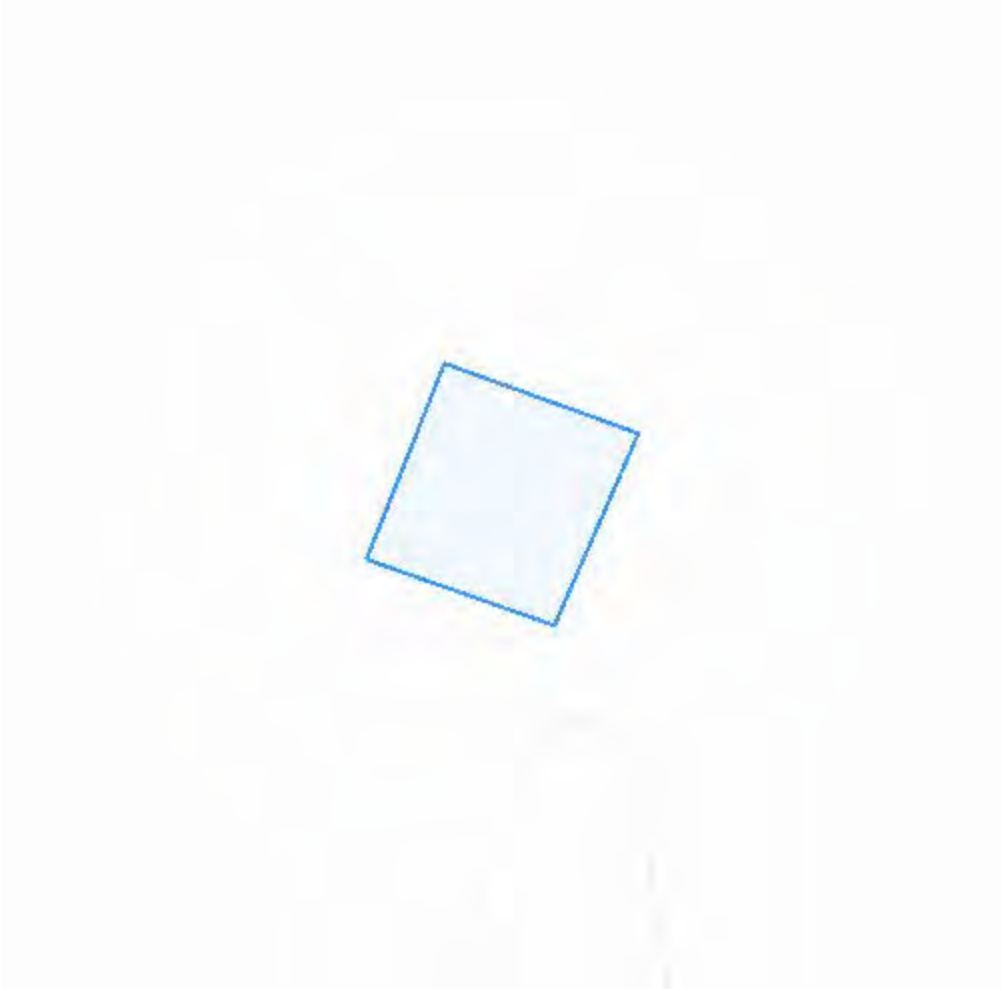
The Town of Wilton and Saratoga County will be upgrading an existing wastewater lift station in order to accommodate additional flow from the Town of Moreau's County Forcemain Connection project. These improvements consist of replacement of the existing pumps and wet well with larger pumps and wet well to increase the pumping rate, and storage capacity at the site. An underground equalization tank is also proposed which will allow additional storage so as to not overwhelm the existing system during peak flow periods.

The USFWS species list notes that the endangered Blue Karner Butterfly, and candidate species, Monarch Butterflies may be present in this location. The existing site is a developed area, with a gravel drive and maintained lawn. Therefore the site does not include habitat for these species. As such, it has been found unlikely that this project will have any effect on these species or their habitat.

Effect determination summary

1.3 Project Description

1.3.1 Location



LOCATION
Saratoga County, New York

1.3.2 Description of project habitat

The project site is a wastewater lift station, which consists of a gravel access area and maintained lawn.

1.3.3 Project proponent information

Provide information regarding who is proposing to conduct the project, and their contact information. Please provide details on whether there is a Federal nexus.

Requesting Agency
Laberge Group

FULL NAME
Christopher Wren

STREET ADDRESS
4 Computer drive West

CITY	STATE	ZIP
Albany	NY	12205

PHONE NUMBER	E-MAIL ADDRESS
5184587112	cwren@labergegroup.com

Lead agency
Lead agency is the same as requesting agency

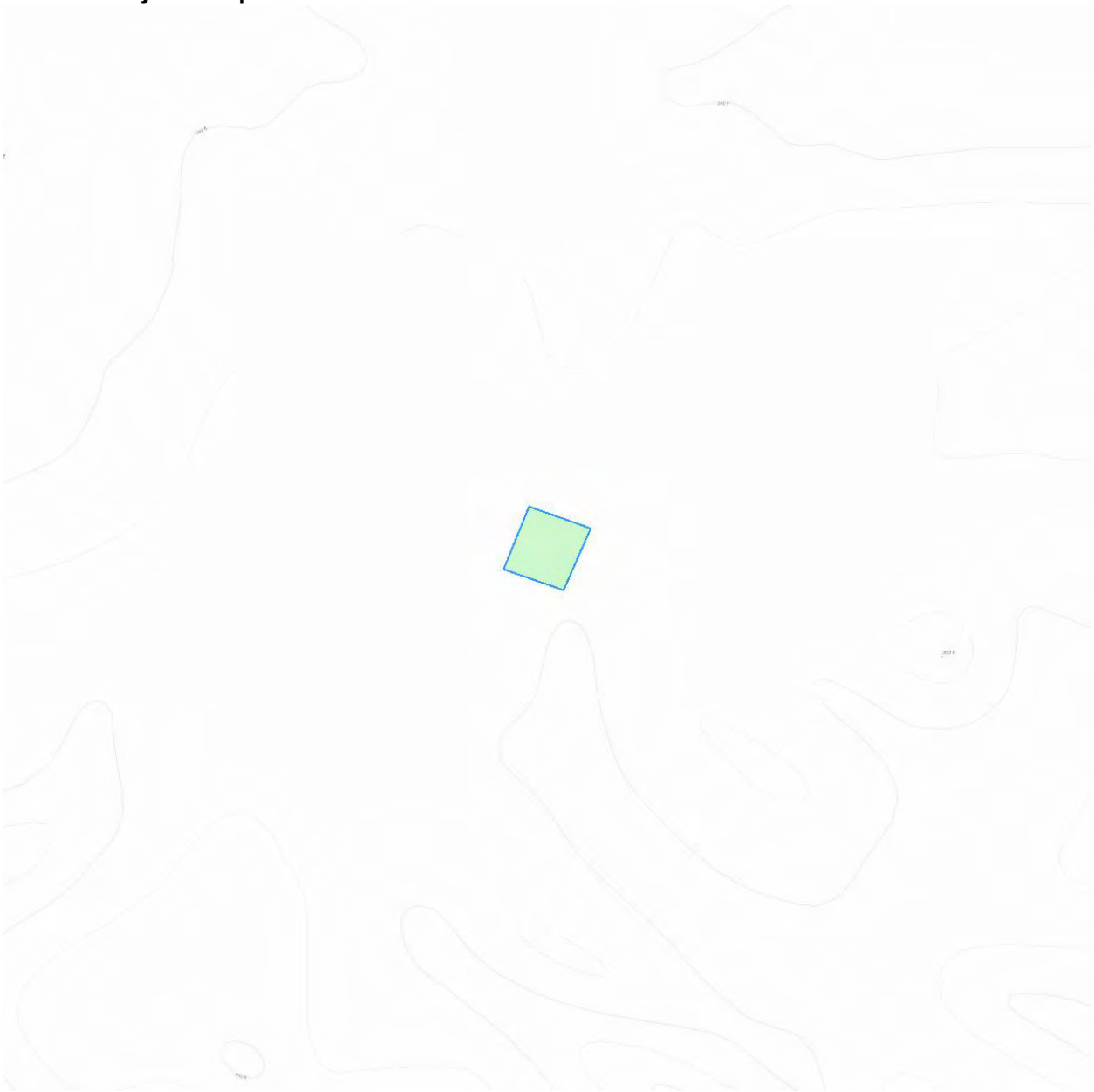
1.3.4 Project purpose

The project is being undertaken to increase the existing lift station pumping rate and capacity in order to handle the additional sewer flow as part of the Town of Moreau's County Forcemain Connection project.

1.3.5 Project type and deconstruction

This project is a municipal utilities project.

1.3.5.1 Project map



LEGEND

Project footprint

Layer 1: Replace wastewater pump

1.3.5.2 replace wastewater pump

Activity start date
April 01, 2023

Activity end date
September 15, 2023

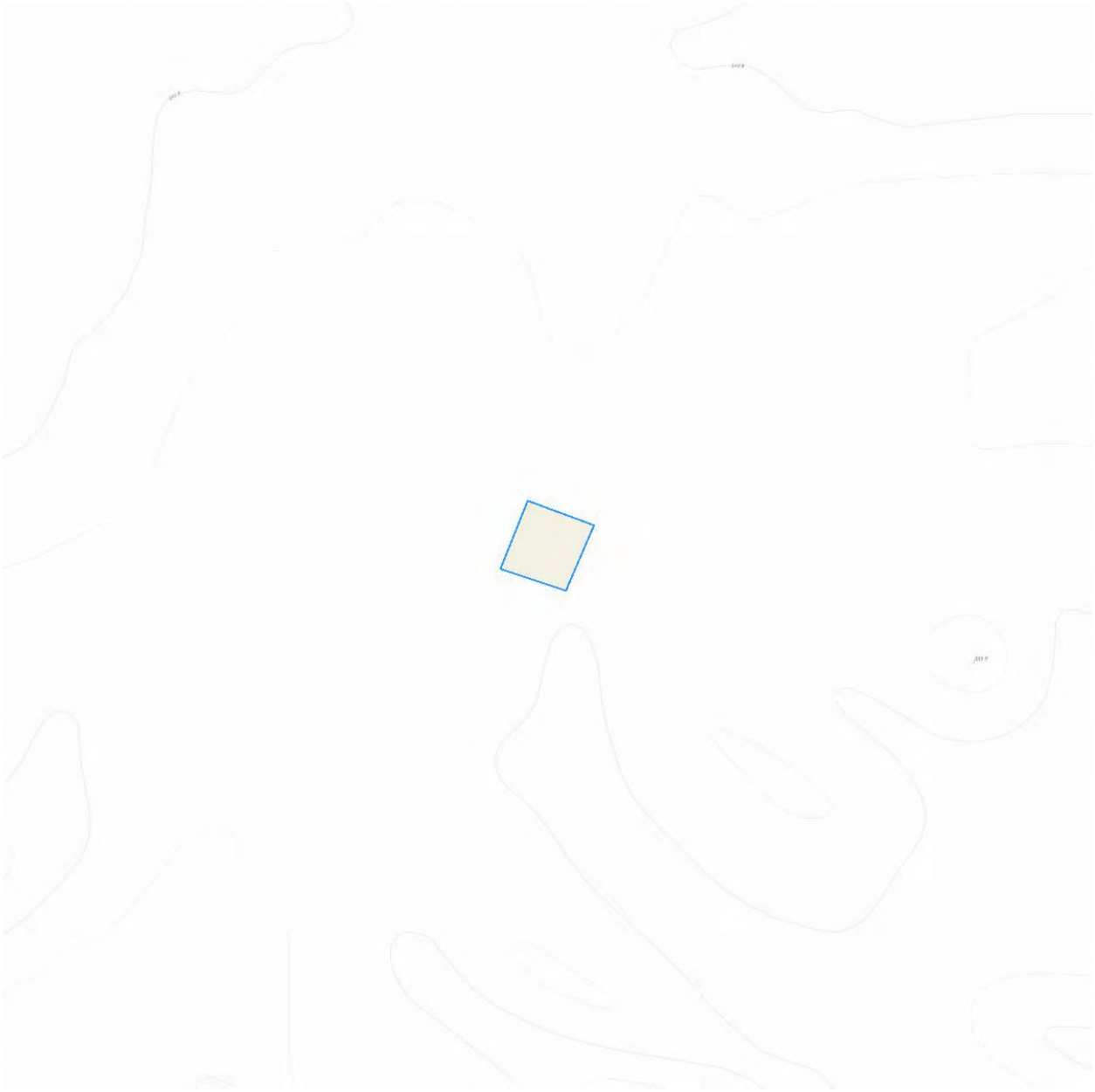
Stressors
This activity is not expected to have any impact on the environment.

Description
The work will include the replacement of the existing wet well and pumps, along with the installation of an underground equalization tank and associated piping. all work will be performed within the existing lift station site as shown on the project area map included herein.

1.3.6 Anticipated environmental stressors

Describe the anticipated effects of your proposed project on the aspects of the land, air and water that will occur due to the activities above. These should be based on the activity deconstructions done in the previous section and will be used to inform the action area.

1.4 Action Area



1.5 Conservation Measures

Describe any proposed measures being implemented as part of the project that are designed to reduce the impacts to the environment and their resulting effects to listed species. To avoid extra verbiage, don't list measures that have no relevance to the species being analyzed.

No conservation measures have been selected for this project.

1.6 Prior Consultation History

No prior consultation with USFWS on this project has occured.

1.7 Other Agency Partners And Interested Parties

The proposed improvements will be funded by both the Town of Wilton, and Saratoga County.

Town of Wilton Water & Sewer Commission - Mike Mooney - mmooney@townofwilton.com

Saratoga County Sewer District No. 1 - Dan Rourke - DRourke@saratogacountyny.gov

1.8 Other Reports And Helpful Information

N/A

2 Species Effects Analysis

This section describes, species by species, the effects of the proposed action on listed, proposed, and candidate species, and the habitat on which they depend. In this document, effects are broken down as direct interactions (something happening directly to the species) or indirect interactions (something happening to the environment on which a species depends that could then result in effects to the species).

These interactions encompass effects that occur both during project construction and those which could be ongoing after the project is finished. All effects, however, should be considered, including effects from direct and indirect interactions and cumulative effects.

2.1 Karner Blue Butterfly

This species has been excluded from analysis in this environmental review document.

Justification for exclusion

The site is a sewer pump station, with a regularly maintained lawn. No lupine patches are located at the within the project area.

2.2 Monarch Butterfly

This species has been excluded from analysis in this environmental review document.

Justification for exclusion

This analysis will no include the Monarch Butterfly since it is a candidate species, which is not required to be analyzed for consultation.

3 Critical Habitat Effects Analysis

No critical habitats intersect with the project action area.

4 Summary Discussion, Conclusion, And Effect Determinations

4.1 Effect Determination Summary

SPECIES (COMMON NAME)	SCIENTIFIC NAME	LISTING STATUS	PRESENT IN ACTION AREA	EFFECT DETERMINATION
Karner Blue Butterfly	Lycaeides melissa samuelis	Endangered	No	NE
Monarch Butterfly	Danaus plexippus	Candidate	Excluded from analysis	Excluded from analysis

4.2 Summary Discussion

The proposed lift station improvements will install new wastewater pumps, equalization storage and associated piping within the existing lift station site in order to accommodate higher flow from the Town of Moreau County Forcemain Connection project. Since the project will take place within an existing site which includes no critical habitats, the effects on endangered species or their habitats are not likely to occur.

4.3 Conclusion

Since the project limits do not include any critical habitats, the project has been found unlikely to have any significant impact to endangered species or critical habitats.

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

October 27, 2021

Christopher Wren
Laberge Group
4 Computer Drive West
Albany, NY 12205

Re: SEQRA
Town Of Moreau Sewer Transmission
Towns of Moreau and Wilton, Saratoga County, NY
21PR07166
2021075-1

Dear Christopher Wren:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

August 01, 2022

Christopher Wren
Laberge Group
4 Computer Drive West
Albany, NY 12205

Re: SEQRA
Town Of Moreau Sewer Transmission, with Addition of East and Ballard Road Segments
Towns of Moreau and Wilton, Saratoga County, NY
21PR07166
2021075-1

Dear Christopher Wren:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

August 19, 2022

Christopher Wren
Laberge Group
4 Computer Drive West
Albany, NY 12205

Re: SEQRA
Town Of Moreau Sewer Transmission, with Addition of East and Ballard Road Segments and Bluebird Road Segment East of Sisson Road
Towns of Moreau and Wilton, Saratoga County, NY
21PR07166
2021075-1

Dear Christopher Wren:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

October 05, 2022

Christopher Wren
Laberge Group
4 Computer Drive West
Albany, NY 12205

Re: DEC
Saratoga County Pump Station Improvements
Town of Wilton, Saratoga County, NY
22PR07210

Dear Christopher Wren:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

rev: J. Schreyer

TOWN OF MOREAU

SEWER TREATMENT ALTERNATIVES
RESOLUTION TO DECLARE INTENT FOR LEAD AGENCY and CLASSIFY PROJECT as a TYPE I ACTION

WHEREAS, the Town is proposing to undertake improvements to the existing Sewer District 1, Extension 5 sewer system, hereafter referred to as the "Project"; and

WHEREAS, pursuant to 6 NYCRR 617.6 the Town Board seeks to be established as Lead Agency as part of undertaking a coordinated review of this action with any Involved and Interested Agencies; and

WHEREAS. the Town Board considers the proposed Project to be a Type I action, pursuant to the New York State Environmental Quality Review Act (SEQRA) 6 NYCRR Part, and

WHEREAS, the Town Board has prepared the Full Environmental Assessment Form (FEAF) in accordance with SEQR, and it seeks to circulate a Notice of Intent to be Lead Agency (Notice), to all Involved and Interested Agencies, who shall be given 30 days to deliver any comments in response to this Notice that such other Involved or Interested entity may have regarding the Town Board taking on the Lead Agency role; and

NOW, THEREFORE, BE IT RESOLVED that the Town Board of the Town of Moreau classifies the project as a Type I Action pursuant to standards in the New York State Environmental Quality Review Act; and

BE IT FURTHER RESOLVED, that it is the intention of the Town Board of the Town of Moreau to declare itself as Lead Agency for SEQR Coordinated Review of this Action; and

BE IT FURTHER RESOLVED that the Town Board of the Town of Moreau hereby directs Laberge Group, as Engineer for the Project, to submit Lead Agency designations to all involved and interested agencies for the project through the service of a notice of intent.

Motion: Councilmember Hogan
Second: Councilmember VanTassel

The question of the adoption of the foregoing Resolution was duly put to a vote, which resulted as follows:

Councilmember Hogan	Aye
Councilmember Noonan	Aye
Councilmember VanTassel	Aye
Councilmember Donohue	Aye
Supervisor Kusnierz	Aye

The foregoing Resolution was thereupon declared duly adopted.

CERTIFICATION

RESOLUTION NO.

Year 2021

I, Leeann McCabe , Moreau Town Clerk, do hereby certify that the RESOLUTION attached hereto was duly adopted by the Town Board at a meeting held on the 20th day of October, 2021 in accordance with the applicable provisions of law and is an exact duplicate copy of the original thereof on file in the Town Clerk's office, and I do hereby further certify that said RESOLUTION has not been amended, repealed nor in any way altered and is in full force and effect.

In witness whereof I have hereunto set my hand and affixed the seal of the Town of Moreau this 21st day of October, 2021.

Leeann McCabe

Town Clerk
Town of Moreau
County of Saratoga, New York

SEAL

Moreau Town Board
Type I Action - Coordinated Environmental Review

NOTICE TO INVOLVED AGENCIES
DECLARATION OF INTENT TO BE LEAD AGENCY

Sewer Treatment Alternatives

Date: October 21, 2021

PLEASE TAKE NOTICE, that on October 20, 2021 the Town of Moreau declared its intent to serve as Lead Agency in accordance with the standards of the State Environmental Quality Review Act (SEQRA) and its implementing regulations (6 NYCRR Part 617) for the proposed Type I Action described below; agreement among Involved Agencies is requested pursuant to the applicable requirements set forth in SEQRA, 6 NYCRR Part 617.

PROPOSED ACTION

The installation of approximately 40,000 linear feet of sanitary sewer forcemain, along with associated appurtenances within existing highway rights of way. Interstate 87 will be crossed by directional drilling under or, if possible, by hanging from the Old West Road bridge to cross over the Interstate. Please refer to the attached Location Map for detailed location information.

These improvements are necessary since the Town may not be able to continue discharging sanitary sewer flows to the City of Glens Falls, and this Project will allow discharge to Saratoga County.

The Town Board has classified the Project as a Type I Action and has declared their intent to serve as Lead Agency.

SITE LOCATION

The improvements contemplated herein are contained within the Towns of Moreau and Wilton. The proposed sewer main would extend from the Moreau Sewer District 1, Extension 5 pump station at 1406 Route 9 in Moreau, and extend to the Saratoga County Sewer System located near the intersection of Ballard Road and Saratoga Road in the Town of Wilton.

IDENTIFIED INVOLVED AGENCIES

The following potential Involved and Interested Agencies have been identified:

NYS Department of Transportation, Region 1
Mark Pyskadlo, Regional Traffic and Safety Engineer
50 Wolf Road
Albany, NY 12205
(518) 457-5283 - Mark.Pyskadlo@dot.ny.gov

NYSDEC Division of Environmental Permits, R5
Beth Magee, Regional Permit Administrator
232 Golf Course Rd.
Warrensburg, NY 12885-1172
518-623-1282 - dep.r5@dec.ny.gov

John Lant, Supervisor
Town of Wilton
20 Traver Rd
Gansevoort, NY 12831
(518) 587-1939 Ext: 218 - jlant@townofwilton.com

Chad M. Cooke, P.E., Commissioner
Saratoga County Public Works Department
3654 Galway Rd.
Ballston Spa, NY 12020
(518) 885-2235 - ccooke@saratogacountyny.gov

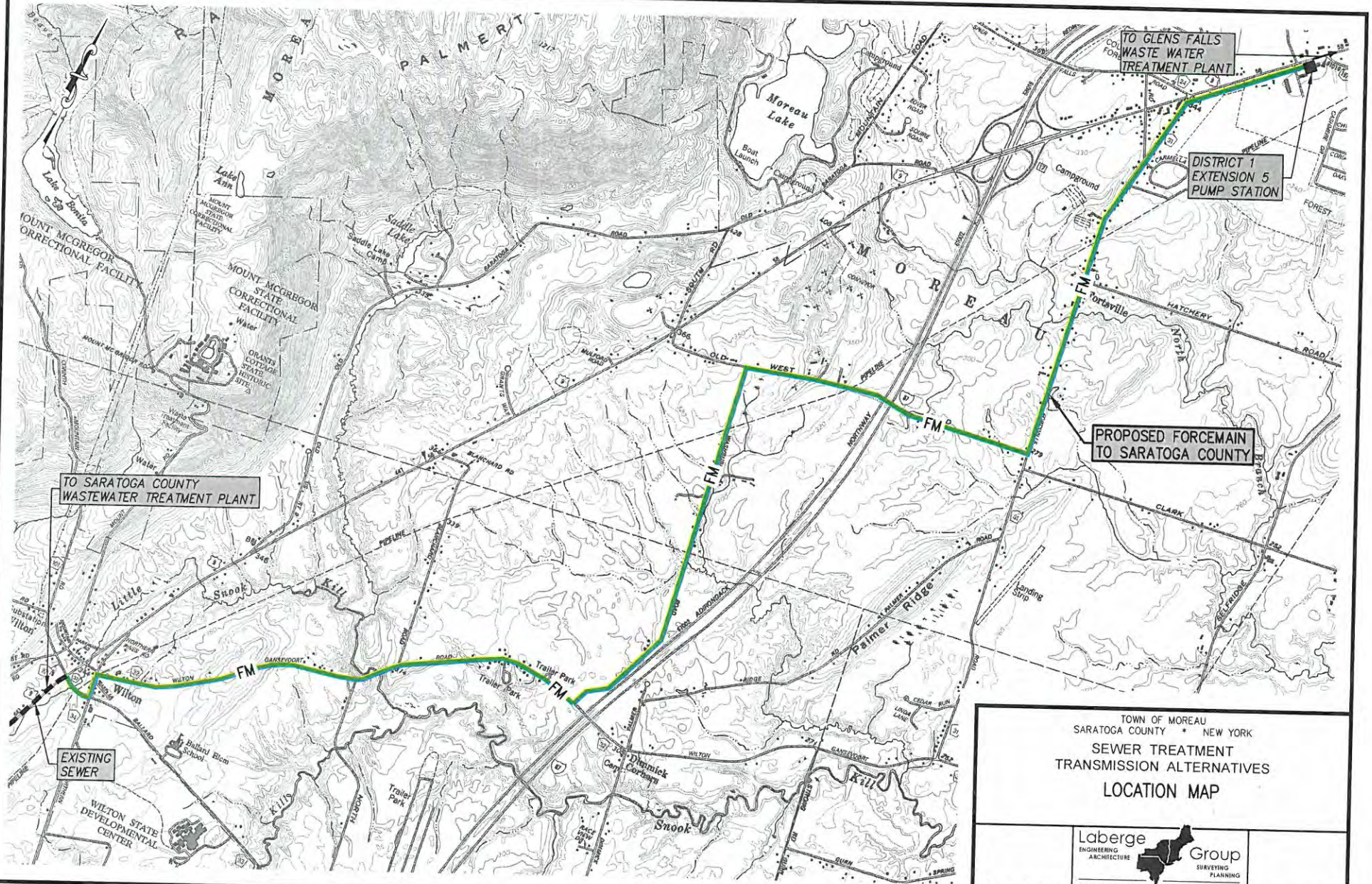
COORDINATED ENVIRONMENTAL REVIEW PROCEDURES

Under the applicable standards of SEQRA, 6 NYCRR Part 617.6, the Moreau Town Board has concluded that it is the appropriate agency to serve as Lead Agency for the coordinated environmental review of the proposed Type I Action. At a regular meeting held on October 19, 2021 the Moreau Town Board declared its intent to serve as Lead Agency and further authorized circulation of said intent to other Involved Agencies.

This Notification, along with a copy of the Full Environmental Assessment Form (FEAF), will be sent to all Involved Agencies. The Moreau Town Board asks that each Involved Agency fill out the attached "***Lead Agency Agreement***" form either consenting or not consenting to the Town Board serving as Lead Agency. Please return the completed form within 30 days of the date on which it was received by the Town Supervisor's office at the above address. If, however, any Involved Agency does not agree that the Moreau Town Board should be designated as the Lead Agency, it may follow the procedures set forth in SEQRA 6 NYCRR Part 617.6. If you have any questions or comments, you may contact:

Theodore T. Kusnierz, Jr., Supervisor
Town of Moreau
351 Reynolds Rd
Fort Edward New York 12828

If you do not respond within 30 days, it will be interpreted as consent for the Moreau Town Board to serve as Lead Agency. You will continue to be notified of SEQR determinations and hearings, and copies of all environmental documents will be made available to you.



TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

SEWER TREATMENT
TRANSMISSION ALTERNATIVES

LOCATION MAP

SCALE: 1"=2000'

Laberge Group
ENGINEERING ARCHITECTURE SURVEYING PLANNING
4 Computer Drive West • Albany, New York 12205
(518) 458-7112 • www.labergegroup.com

DATE: 10/18/21

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 5
232 Golf Course Road, Warrensburg, NY 12885
P: (518) 623-1282 | F: (518) 623-3603
www.dec.ny.gov

October 26, 2021

Theodore T. Kusnierz, Jr., Supervisor
Town of Moreau
Town Office Complex
351 Reynolds Road
Fort Edward, NY 12828

RE: Sewer Treatment Alternatives
Towns of Moreau & Wilton, Saratoga County
SEQR Lead Agency Coordination Response

Dear Supervisor Kusnierz:

Thank you for your October 21, 2021 lead agency communication for the above project, pursuant to the State Environmental Quality Review Act (SEQR).

DEC Position: **Based on the information provided, DEC agrees to the Town of Moreau serving as SEQR lead agency for this project.**

New York State Freshwater Wetlands GA-12, GA-16, GA-14 and GA-18 and their adjacent area are located within or immediately adjacent to the project area. An Article 24 Freshwater Wetlands Permit is required for any physical disturbance withinthe boundaries of the wetland or within the regulated 100-feet adjacent area. (Please note that the jurisdictional maps are meant to provide approximate sizes and locations of resources. Actual field conditions may vary from those depicted on the maps.)

There are protected classified streams located within the project area. Disturbance to the bed or banks of this stream requires an Article 15 Protection of Waters Permit for Stream Disturbance.

GIS review indicates that the project site is located within an archaeologically sensitive area. It is suggested that recommendations be sought from NYS OPRHP regarding the potential impacts on historic and archeological resources from the development of this area. Additional information can befound on NYS OPRHP's website at http://nysparks.com/shpo/online-tools/ or by calling (518) 237- 8643.
Potential impacts to these resources must be considered in the State Environmental Quality Review (SEQR) documentation. For example, previous disturbance should be described to indicate whether future project components will have the potential to further affect archeological resources.

Thank you for providing this opportunity to review this project.

Sincerely,

Susan Clickner
Program Aide

Enclosure

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Moreau Town Board
Type I Action - Coordinated Environmental Review

LEAD AGENCY AGREEMENT

Sewer Treatment Alternatives

On behalf of NYSDEC Division of Environmental Permits, R5,
(INSERT NAME OF AGENCY)

I acknowledge receipt of the Lead Agency notice on the above referenced matter, which was received on October 21, 2021.

The above named Involved Agency hereby:

(Please Check One)

☑ **AGREES** that the Moreau Town Board serves as Lead Agency for the coordinated environmental review of the proposed action and requests that the undersigned continue to be notified of all filings and hearings on this matter.

☐ **DOES NOT AGREE** to the Moreau Town Board serving as Lead Agency and wishes that _____ serve as Lead Agency. *To contest Lead Agency designation, the undersigned intends to follow the procedures in accordance with SEQRA 6 NYCRR Part 617.6.*

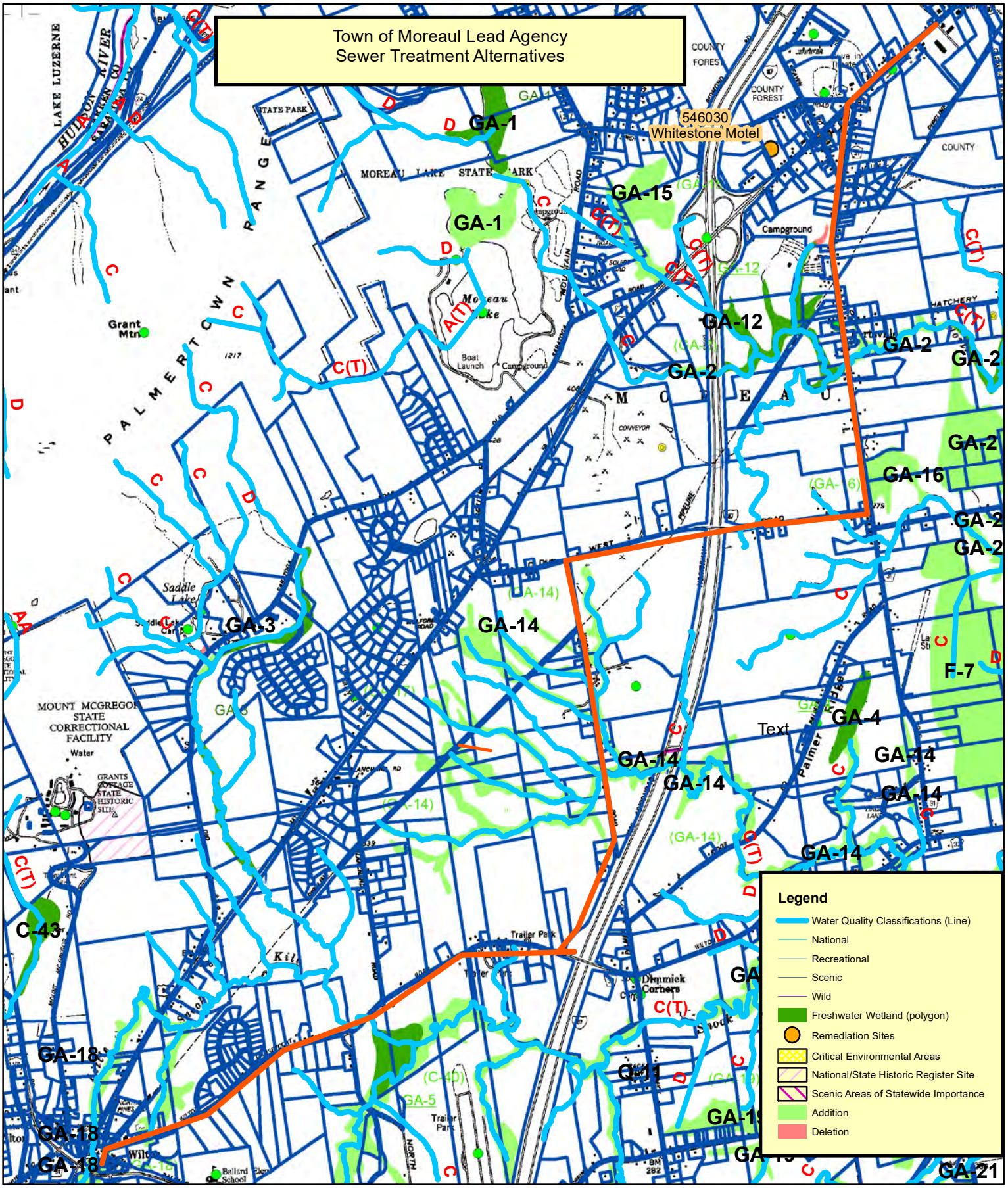
DATED: 10/25/2021

Please return this agreement as soon as possible but no later than November 20, 2021 (within 30 days). If applicbale, please specify the jurisdiction that your agency has over this Project and what issues you believe are relevant for inclusion.

Please return your response via mail, email or fax to:
Theodore T. Kusnierz, Jr., Supervisor
Town of Moreau
351 Reynolds Rd
Fort Edward New York 12828
moreausuper@townofmoreau.org
Fax: (518)792-1062

Susan Clickner	Program Aide
Print Name	Title
Susan Clickner	10/25/2021
Signature	Date

PLEASE NOTE THAT SEQRA MUST BE COMPLETE FOR A GRANT APPLICATION DUE ON MONDAY NOVEMBER 22, 2021. YOUR PROMPT RESPONSE WOULD BE GREATLY APPRECIATED.



NEW YORK STATE Department of Environmental Conservation

0 0.15 0.3 0.6 0.9 1.2 Miles

N W E S

Moreau Town Board
Type I Action - Coordinated Environmental Review

LEAD AGENCY AGREEMENT

Sewer Treatment Alternatives

On behalf of Saratoga County Public Works Department,
(INSERT NAME OF AGENCY)

I acknowledge receipt of the Lead Agency notice on the above referenced matter, which was received on October 21, 2021.

The above named Involved Agency hereby:

(Please Check One)

☒ **AGREES** that the Moreau Town Board serves as Lead Agency for the coordinated environmental review of the proposed action and requests that the undersigned continue to be notified of all filings and hearings on this matter.

☐ **DOES NOT AGREE** to the Moreau Town Board serving as Lead Agency and wishes that _____ serve as Lead Agency. *To contest Lead Agency designation, the undersigned intends to follow the procedures in accordance with SEQRA 6 NYCRR Part 617.6.*

DATED: 10/22/21

Please return this agreement as soon as possible but no later than November 20, 2021 (within 30 days). If applicbale, please specify the jurisdiction that your agency has over this Project and what issues you believe are relevant for inclusion.

Please return your response via mail, email or fax to:
Theodore T. Kusnierz, Jr., Supervisor
Town of Moreau
351 Reynolds Rd
Fort Edward New York 12828
moreausuper@townofmoreau.org
Fax: (518)792-1062

CHAD M. COOKE, P.E.
Print Name

COMMISSIONER of PUBLIC WORKS
Title

Signature

10/22/21
Date

PLEASE NOTE THAT SEQRA MUST BE COMPLETE FOR A GRANT APPLICATION DUE ON MONDAY NOVEMBER 22, 2021. YOUR PROMPT RESPONSE WOULD BE GREATLY APPRECIATED.

Moreau Town Board
Type I Action - Coordinated Environmental Review

LEAD AGENCY AGREEMENT

Sewer Treatment Alternatives

On behalf of Saratoga County Public Works Department,
(INSERT NAME OF AGENCY)

I acknowledge receipt of the Lead Agency notice on the above referenced matter, which was received on October 21, 2021.

The above named Involved Agency hereby:

(Please Check One)

☑ **AGREES** that the Moreau Town Board serves as Lead Agency for the coordinated environmental review of the proposed action and requests that the undersigned continue to be notified of all filings and hearings on this matter.

☐ **DOES NOT AGREE** to the Moreau Town Board serving as Lead Agency and wishes that _____ serve as Lead Agency. *To contest Lead Agency designation, the undersigned intends to follow the procedures in accordance with SEQRA 6 NYCRR Part 617.6.*

DATED: November 1, 2021

Please return this agreement as soon as possible but no later than November 20, 2021 (within 30 days). If applicbale, please specify the jurisdiction that your agency has over this Project and what issues you believe are relevant for inclusion.

Please return your response via mail, email or fax to:
Theodore T. Kusnierz, Jr., Supervisor
Town of Moreau
351 Reynolds Rd
Fort Edward New York 12828
moreausuper@townofmoreau.org
Fax: (518)792-1062

GARY MEIER	Engineer Tech
Print Name	Title
Signature	November 1, 2021
	Date

PLEASE NOTE THAT SEQRA MUST BE COMPLETE FOR A GRANT APPLICATION DUE ON MONDAY NOVEMBER 22, 2021. YOUR PROMPT RESPONSE WOULD BE GREATLY APPRECIATED.

Moreau Town Board
Type I Action - Coordinated Environmental Review

LEAD AGENCY AGREEMENT

Sewer Treatment Alternatives

On behalf of Town of Wilton,
(INSERT NAME OF AGENCY)

I acknowledge receipt of the Lead Agency notice on the above referenced matter, which was received on October 21, 2021.

The above named Involved Agency hereby:

(Please Check One)

☒ **AGREES** that the Moreau Town Board serves as Lead Agency for the coordinated environmental review of the proposed action and requests that the undersigned continue to be notified of all filings and hearings on this matter.

☐ **DOES NOT AGREE** to the Moreau Town Board serving as Lead Agency and wishes that _____ serve as Lead Agency. *To contest Lead Agency designation, the undersigned intends to follow the procedures in accordance with SEQRA 6 NYCRR Part 617.6.*

DATED: 11/1/21

Please return this agreement as soon as possible but no later than November 20, 2021 (within 30 days). If applicbale, please specify the jurisdiction that your agency has over this Project and what issues you believe are relevant for inclusion.

Please return your response via mail, email or fax to:
Theodore T. Kusnierz, Jr., Supervisor
Town of Moreau
351 Reynolds Rd
Fort Edward New York 12828
moreausuper@townofmoreau.org
Fax: (518)792-1062

JOHN J HANT
Print Name

TOWN OF WILTON SUPERVISOR
Title

Signature

11/1/21
Date

PLEASE NOTE THAT SEQRA MUST BE COMPLETE FOR A GRANT APPLICATION DUE ON MONDAY NOVEMBER 22, 2021. YOUR PROMPT RESPONSE WOULD BE GREATLY APPRECIATED.

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Moreau Sewer Alternatives		
Project Location (describe, and attach a general location map): From the District 1, Extension 5 Pump Station southwest along State Route 9, Fortsville, Old West, Washburn, Wilton Ganesvort, Northern Pines & Ballard		
Brief Description of Proposed Action (include purpose or need): Install a sanitary sewer forcemain from the District 1, Extension 5 Pump Station to allow discharge to the Saratoga County collection system near the intersection of Northern Pine Rd and Wilton Gansevoort Rd.		
Name of Applicant/Sponsor: Town of Moreau	Telephone: (518) 792-1030 E-Mail: moreausuper@townofmoreau.org	
Address: 351 Reynolds Rd		
City/PO: Fort Edward	State: New York	Zip Code: 12828
Project Contact (if not same as sponsor; give name and title/role):	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees ☐Yes ☐No		
b. City, Town or Village Planning Board or Commission ☐Yes ☐No		
c. City, Town or Village Zoning Board of Appeals ☐Yes ☐No		
d. Other local agencies ☑Yes ☐No	Towns of Moreau and Wilton Highway Work Permits	
e. County agencies ☑Yes ☐No	Saratoga County Highway Work Permit	
f. Regional agencies ☐Yes ☐No		
g. State agencies ☑Yes ☐No	NYSDOT Highway Work Permit & NYSDEC Plan Approval	
h. Federal agencies ☐Yes ☐No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☐Yes ☑No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

NYS Heritage Areas:Mohawk Valley Heritage Corridor

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☑Yes ☐No

If Yes, identify the plan(s):

Located within or near Saratoga County Agricultural District, but all work will be completed along existing roadways

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☐ Yes ☑ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
Question not applicable to this underground utility project.

b. Is the use permitted or allowed by a special or conditional use permit? ☐ Yes ☑ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Varies - Question not applicable to this underground utility project.

b. What police or other public protection forces serve the project site?
Question not applicable to this underground utility project.

c. Which fire protection and emergency medical services serve the project site?
Question not applicable to this underground utility project.

d. What parks serve the project site?
Question not applicable to this underground utility project.

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? General nature is a transportation corridor.

b. a. Total acreage of the site of the proposed action? 56 acres
b. Total acreage to be physically disturbed? 10 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: _____ months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐Yes ☑No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase	_____	_____	_____	_____
At completion of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? ☐Yes ☑No

If Yes,

i. Total number of structures _____

ii. Dimensions (in feet) of largest proposed structure: _____height; _____width; and _____ length

iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐Yes ☑No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐Yes ☑No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

iv. Will there be onsite dewatering or processing of excavated materials? ☐Yes ☐No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐Yes ☐No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐Yes ☑No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☐Yes ☑No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐Yes ☐No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐Yes ☐No
- Is the project site in the existing district? ☐Yes ☐No
- Is expansion of the district needed? ☐Yes ☐No
- Do existing lines serve the project site? ☐Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐Yes ☐No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐Yes ☑No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

_____

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐Yes ☐No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐Yes ☐No
- Is the project site in the existing district? ☐Yes ☐No
- Is expansion of the district needed? ☐Yes ☐No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will a line extension within an existing district be necessary to serve the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

_____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☑No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

_____

_____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

_____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐Yes ☑No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

_____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

_____

_____

- If to surface waters, identify receiving water bodies or wetlands: _____

_____

_____

- Will stormwater runoff flow to adjacent properties? ☐Yes ☐No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☑Yes ☐No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

Heavy equipment such as trucks and excavators will be used to install the sewer main.

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

_____

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

_____

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☐No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

_____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☑No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

_____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

_____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7-5
- Saturday: _____
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: _____
- Saturday: _____
- Sunday: _____
- Holidays: _____

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Construction work is expected during weekdays from 7AM-5PM.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: _____

n. Will the proposed action have outdoor lighting? ☐ Yes ☑ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☐ No

Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities:_____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☑ Commercial ☑ Residential (suburban) ☑ Rural (non-farm)
☑ Forest ☑ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

The sewer main will be installed along existing roadways which travel through various adjoining uses selected above.

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	27.5	27.5	0
• Forested	0	0	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	18.4	18.4	0
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

Question not applicable to this underground utility project.

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☑ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No

☐ Yes – Spills Incidents database — Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☑ Yes ☐ No

If yes, provide DEC ID number(s): 546025, 546030, 546039

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

546025 The remedial program is now complete and the site has been remediated, 546030 The site has been delisted from the Registry, 546039 This site was identified as a vapor intrusion legacy site and a vapor intrusion evaluation was conducted, resulting in a determination in 2007 that no further action was required.

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? varies feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:

Loamy Sand	41 %
Silt Loam	32 %
Loamy fine sand	27 %

d. What is the average depth to the water table on the project site? Average: >2 feet

e. Drainage status of project site soils:

- ☑ Well Drained: 42 % of site
- ☑ Moderately Well Drained: 43 % of site
- ☑ Poorly Drained 15 % of site

f. Approximate proportion of proposed action site with slopes:

- ☑ 0-10%: 75 % of site
- ☐ 10-15%: 25 % of site
- ☐ 15% or greater: _____% of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☑ Yes ☐ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 941-366, 941-362.1, 941-363, 941-363.1, 941-349... Classification C(T), D
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters, Federal Waters, Federal Waters,... Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☑ Yes ☐ No
If Yes:

i. Name of aquifer: Principal Aquifer

m. Identify the predominant wildlife species that occupy or use the project site:
Animals cross but do not use site

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation):
ii. Source(s) of description or evaluation:
iii. Extent of community/habitat:
- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐ No

If Yes:
i. Species and listing (endangered or threatened):
Karner Blue, Frosted Elfin

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:
i. Species and listing:

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☑ Yes ☐ No
If yes, give a brief description of how the proposed action may affect that use:
Project will have no effect.

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☑ Yes ☐ No
If Yes, provide county plus district name/number: SARA001

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No
i. If Yes: acreage(s) on project site?
ii. Source(s) of soil rating(s):

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No
If Yes:
i. CEA name:
ii. Basis for designation:
iii. Designating agency and date:

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☑ Archaeological Site ☑ Historic Building or District

ii. Name: Eligible property:150 Old West Road, Gansevoort

iii. Brief description of attributes on which listing is based:

EAF database indicated property as a historic or archaeological resource. No relevent records can be found. Project will not impact this resource.

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ No

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Town of Moreau Date October 19, 2021

Signature _____ Title Supervisor

PRINT FORM

EAF Mapper Summary Report

Monday, October 18, 2021 4:05 PM

Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Heritage Areas:Mohawk Valley Heritage Corridor
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	546025, 546030, 546039
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	941-366, 941-362.1, 941-363, 941-363.1, 941-349, 941-341, 941-340
E.2.h.iv [Surface Water Features - Stream Classification]	C(T), D
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No

E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Karner Blue, Frosted Elfin
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	Yes
E.3.a. [Agricultural District]	SARA001
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Eligible property:150 Old West Road, Gansevoort
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

November 9, 2021

RESOLUTION
TOWN BOARD
TOWN OF MOREAU
SUBJECT: SEQR DETERMINATION REGARDING THE COUNTY CONNECTION FOR SEWER DISTRICT 1, EXTENSION 5

WHEREAS the Town Board has had an opportunity to review the County Connection for Sewer District 1, Extension 5, which includes the installation of sewer infrastructure to connect with the Saratoga County Sewer District; and

WHEREAS, the Town Board has reviewed Part I of the Long Environmental Assessment Form prepared by Laberge Group, engineer for the Project, and

WHEREAS, by Resolution dated October 20, 2021, the Town Board declared itself Lead Agency for this Type I project under the State Environmental Quality Review Act (hereinafter referred to as "SEQRA"); and

WHEREAS, the Town sent Lead Agency designations to all interested and involved agencies, all of whom have agreed to the Town's designation as Lead Agency for this action; and

WHEREAS, the Town has reviewed Parts 2 and 3 of the EAF as to whether the action will have any significant adverse environmental impacts; and

WHEREAS, after reviewing Parts 2 and 3, the Town Board determined that the action will not have any significant adverse environmental impacts and a negative declaration should be issued;

NOW THEREFORE BE IT RESOLVED THAT, the Town Board hereby determines there is no significant environmental impacts and that a negative declaration be issued, and

BE IT FURTHER RESOLVED, that the Attorney for the Town is directed to file the negative declaration with the Environmental Notice Bulletin.

MOTION: Councilmember Noonan
SECOND: Councilmember HOgan

Roll Call:

	Aye	Nay
Councilmember Donohue	X	
Councilmember Hogan	X	
Councilmember Noonan	X	
Councilmember Van Tassel	X	
Supervisor Kusnierz	X	

I hereby certify that this Resolution was duly adopted by the Town Board of the Town Moreau at a regular meeting of the Town Board conducted on November 9, 2021.

By: Leeann McCabe

Leeann McCabe, Town Clerk
Town of Moreau

691225

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Moreau Sewer Alternatives		
Project Location (describe, and attach a general location map): Bluebird Rd, Rt 9, Fortsville Rd, Old West Rd, Washburn Rd, Wilton-Gansevort Rd, Northern Pines Rd, East Rd & Ballard Rd. See attached maps.		
Brief Description of Proposed Action (include purpose or need): - Mainline - Install a sanitary sewer forcemain from the District 1, Extension 5 Pump Station to allow discharge to the Saratoga County collection system on the southern edge of Ballard Road, to the east of the NYS Trooper Barracks. - Bluebird/Sisson Road Area - Install an approximately 400-ft section of forcemain along Bluebird Road, east of its intersection with Sisson Road to allow the Moreau Industrial Park to discharge to the County. - Bluebird Terrace Connection - Install a MH to allow the Bluebird Terrace Mobile Home Park to discharge to the County. - Wilton PS Area - Install larger pumps/wetwell and on-site equalization to accomodate the increased flow from the Town of Moreau.		
Name of Applicant/Sponsor: Town of Moreau	Telephone: (518) 792-1030 E-Mail: moreausuper@townofmoreau.org	
Address: 351 Reynolds Rd		
City/PO: Fort Edward	State: New York	Zip Code: 12828
Project Contact (if not same as sponsor; give name and title/role):	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees ☐Yes ☐No		
b. City, Town or Village Planning Board or Commission ☐Yes ☐No		
c. City, Town or Village Zoning Board of Appeals ☐Yes ☐No		
d. Other local agencies ☑Yes ☐No	Towns of Moreau and Wilton Highway Work Permits	
e. County agencies ☑Yes ☐No	Saratoga County Highway Work Permit	
f. Regional agencies ☐Yes ☐No		
g. State agencies ☑Yes ☐No	NYSDOT Highway Work Permit & NYSDEC Plan Approval	
h. Federal agencies ☐Yes ☐No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☐Yes ☑No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

NYS Heritage Areas:Mohawk Valley Heritage Corridor

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☑Yes ☐No

If Yes, identify the plan(s):

Located within or near Saratoga County Agricultural District, but all work will be completed along existing roadways

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☐ Yes ☑ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
Question not applicable to this underground utility project.

b. Is the use permitted or allowed by a special or conditional use permit? ☐ Yes ☑ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Varies - Question not applicable to this underground utility project.

b. What police or other public protection forces serve the project site?
Question not applicable to this underground utility project.

c. Which fire protection and emergency medical services serve the project site?
Question not applicable to this underground utility project.

d. What parks serve the project site?
Question not applicable to this underground utility project.

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? General nature is a transportation corridor.

b. a. Total acreage of the site of the proposed action? 51.2 acres
b. Total acreage to be physically disturbed? 10 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: _____ months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐Yes ☑No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase	_____	_____	_____	_____
At completion of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? ☐Yes ☑No

If Yes,

i. Total number of structures _____

ii. Dimensions (in feet) of largest proposed structure: _____height; _____width; and _____ length

iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐Yes ☑No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐Yes ☑No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

iv. Will there be onsite dewatering or processing of excavated materials? ☐Yes ☐No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐Yes ☐No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐Yes ☑No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☐Yes ☑No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐Yes ☐No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐Yes ☐No
- Is the project site in the existing district? ☐Yes ☐No
- Is expansion of the district needed? ☐Yes ☐No
- Do existing lines serve the project site? ☐Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐Yes ☐No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐Yes ☑No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

_____

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐Yes ☐No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐Yes ☐No
- Is the project site in the existing district? ☐Yes ☐No
- Is expansion of the district needed? ☐Yes ☐No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will a line extension within an existing district be necessary to serve the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

_____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☑No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

_____

_____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

_____

_____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐Yes ☑No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

_____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

_____

_____

- If to surface waters, identify receiving water bodies or wetlands: _____

_____

_____

- Will stormwater runoff flow to adjacent properties? ☐Yes ☐No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☑Yes ☐No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

Heavy equipment such as trucks and excavators will be used to install the sewer main and other improvements

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

_____

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

_____

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☐No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend

☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

_____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☑No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

_____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

_____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7-5
- Saturday: _____
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: _____
- Saturday: _____
- Sunday: _____
- Holidays: _____

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Construction work is expected during weekdays from 7AM-5PM.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: _____

n. Will the proposed action have outdoor lighting? ☐ Yes ☑ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☐ No

Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities:_____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☑ Commercial ☑ Residential (suburban) ☑ Rural (non-farm)
☑ Forest ☑ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

The sewer main will be installed along existing roadways which travel through various adjoining uses selected above. The Wilton Pump Station area

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	30.7	30.7	0
• Forested	0	0	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	20.5	20.5	0
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

Question not applicable to this underground utility project.

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☑ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No

☐ Yes – Spills Incidents database Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures:_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☑ Yes ☐ No If yes, provide DEC ID number(s): 546025, 546030, 546039, 546001, 546032

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

~~546025 The remedial program is now complete and the site has been remediated, 546030 The site has been delisted from the Registry, 546039 T~~his site was identified as a vapor intrusion legacy site and a vapor intrusion evaluation was conducted, resulting in a determination in 2007 that no further action was required. 546001 The site is remediated and access is restricted. Semi-annual monitoring ensures that contaminated groundwater does not leave the site. Soil gas sampling in the area has not detected contaminants at significant levels.546032 the site has been classified as a coal tar waste disposal site . The waste has been removed and there are no on-site exposures/ Groundwater contamination remains, however the direction of groundwater movement is away from any residential wells. Sampling of private wells in the area confirm the lack of contamination. Further groundwater monitoring will be done.

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? varies feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:

Loamy Sand	41 %
Silt Loam	32 %
Loamy fine sand	27 %

d. What is the average depth to the water table on the project site? Average: >2 feet

e. Drainage status of project site soils:

- ☑ Well Drained: 42 % of site
- ☑ Moderately Well Drained: 43 % of site
- ☑ Poorly Drained 15 % of site

f. Approximate proportion of proposed action site with slopes:

- ☑ 0-10%: 75 % of site
- ☐ 10-15%: 25 % of site
- ☐ 15% or greater: _____% of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☑ Yes ☐ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 941-366, 941-362.1, 941-363, 941-363.1, 941-349... Classification C(T), D
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters, Federal Waters, Federal Waters,... Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☑ Yes ☐ No
If Yes:

i. Name of aquifer: Principal Aquifer

m. Identify the predominant wildlife species that occupy or use the project site:
Animals cross but do not use site

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No
If Yes:
i. Describe the habitat/community (composition, function, and basis for designation):
ii. Source(s) of description or evaluation:
iii. Extent of community/habitat:
- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐ No

If Yes:
i. Species and listing (endangered or threatened):
Karner Blue, Frosted Elfin

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:
i. Species and listing:

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☑ Yes ☐ No
If yes, give a brief description of how the proposed action may affect that use:
Project will have no effect.

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☑ Yes ☐ No
If Yes, provide county plus district name/number: SARA001

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No
i. If Yes: acreage(s) on project site?
ii. Source(s) of soil rating(s):

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No
If Yes:
i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No
If Yes:
i. CEA name:
ii. Basis for designation:
iii. Designating agency and date:

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☑ Archaeological Site ☑ Historic Building or District

ii. Name: Eligible property:150 Old West Road, Gansevoort

iii. Brief description of attributes on which listing is based:

EAF database indicated property as a historic or archaeological resource. No relevent records can be found. Project will not impact this resource.

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ No

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Town of Moreau Date October 11, 2022

Signature _____ Title Supervisor

PRINT FORM

EAF Mapper Summary Report

Monday, October 18, 2021 4:05 PM

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B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Heritage Areas:Mohawk Valley Heritage Corridor
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	546025, 546030, 546039
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	941-366, 941-362.1, 941-363, 941-363.1, 941-349, 941-341, 941-340
E.2.h.iv [Surface Water Features - Stream Classification]	C(T), D
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No

E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Karner Blue, Frosted Elfin
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	Yes
E.3.a. [Agricultural District]	SARA001
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Eligible property:150 Old West Road, Gansevoort
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

EAF Mapper Summary Report

Tuesday, October 11, 2022 3:36 PM

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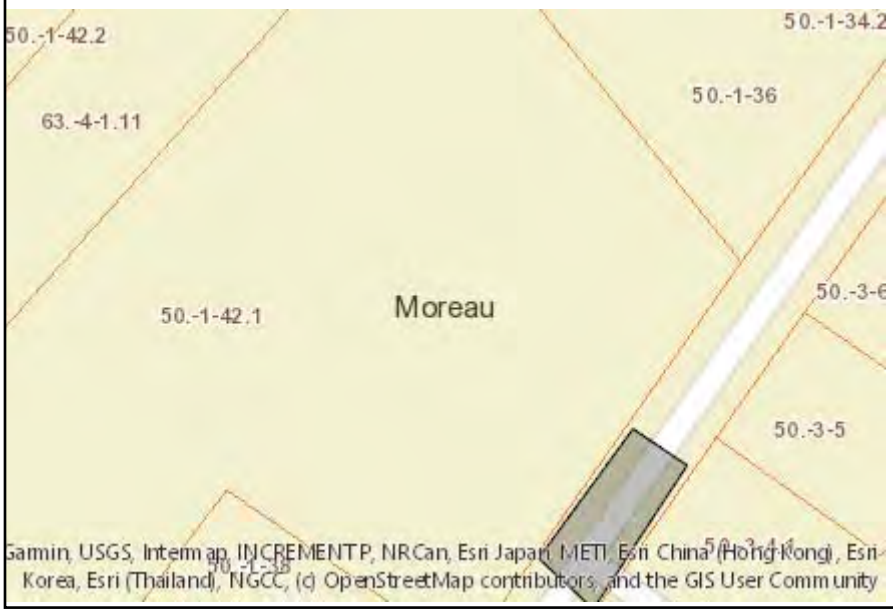
B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Heritage Areas:Mohawk Valley Heritage Corridor
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer

E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No

EAF Mapper Summary Report

Tuesday, October 11, 2022 3:36 PM



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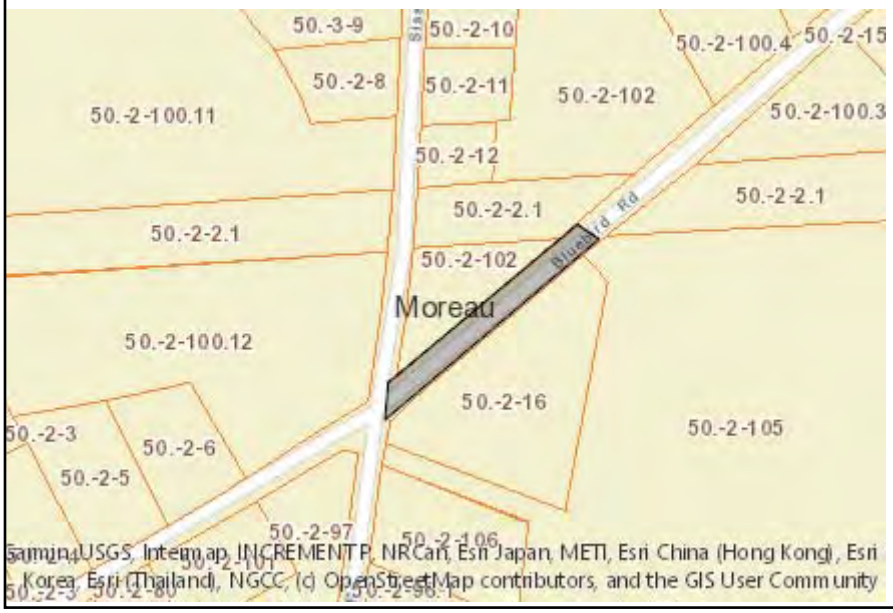
B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Heritage Areas:Mohawk Valley Heritage Corridor
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	546001
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.

E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No

EAF Mapper Summary Report

Tuesday, October 11, 2022 3:33 PM



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B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Heritage Areas:Mohawk Valley Heritage Corridor
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	546032
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	941-390
E.2.h.iv [Surface Water Features - Stream Classification]	C(T)
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No

E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No

EAF Mapper Summary Report

Tuesday, October 11, 2022 3:28 PM

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B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Heritage Areas:Mohawk Valley Heritage Corridor
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	No
E.2.h.iii [Surface Water Features]	No
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer

E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Agency Use Only [If applicable]

Project : Moreau Sewer Alternatives

Date : October 11, 2022

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "**Yes**" to a numbered question, please complete all the questions that follow in that section.
- If you answer "**No**" to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land
Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)
If "Yes", answer questions a - j. If "No", move on to Section 2.

☐ NO ☑ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	☑	☐
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	☑	☐
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	☑	☐
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	☑	☐
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	☑	☐
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	☑	☐
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	☑	☐
h. Other impacts: Temporary impacts are expected during construction but will be restored to avoid permanent negative impacts.		☑	☐

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) ☑NO ☐YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	☐	☐
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	☐	☐
c. Other impacts: _____ _____		☐	☐

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) ☑NO ☐YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	☐	☐
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	☐	☐
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	☐	☐
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	☐	☐
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	☐	☐
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	☐	☐
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	☐	☐
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	☐	☐
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	☐	☐
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	☐	☐
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	☐	☐

l. Other impacts: _____ _____		☐	☐

4. Impact on groundwater

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) ☑ NO ☐ YES

If "Yes", answer questions a - h. If "No", move on to Section 5.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	☐	☐
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	☐	☐
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	☐	☐
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	☐	☐
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	☐	☐
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	☐	☐
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	☐	☐
h. Other impacts: _____ _____		☐	☐

5. Impact on Flooding

The proposed action may result in development on lands subject to flooding. (See Part 1. E.2) ☑ NO ☐ YES

If "Yes", answer questions a - g. If "No", move on to Section 6.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	☐	☐
b. The proposed action may result in development within a 100 year floodplain.	E2j	☐	☐
c. The proposed action may result in development within a 500 year floodplain.	E2k	☐	☐
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	☐	☐
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	☐	☐
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	☐	☐

g. Other impacts: _____ _____		☐	☐

6. Impacts on Air

The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2.h, D.2.g) ☑NO ☐YES

If "Yes", answer questions a - f. If "No", move on to Section 7.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. More than 1000 tons/year of carbon dioxide (CO_2)	D2g	☐	☐
ii. More than 3.5 tons/year of nitrous oxide (N_2O)	D2g	☐	☐
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	☐	☐
iv. More than .045 tons/year of sulfur hexafluoride (SF_6)	D2g	☐	☐
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions	D2g	☐	☐
vi. 43 tons/year or more of methane	D2h	☐	☐
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	☐	☐
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	☐	☐
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	☐	☐
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	☐	☐
f. Other impacts: _____ _____		☐	☐

7. Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) ☑NO ☐YES

If "Yes", answer questions a - j. If "No", move on to Section 8.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	☐	☐
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	☐	☐
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	☐	☐
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	☐	☐

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	☐	☐
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	☐	☐
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	☐	☐
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ _____	E1b	☐	☐
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	☐	☐
j. Other impacts: _____ _____		☐	☐

8. Impact on Agricultural Resources
The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) ☐NO ☑YES
If "Yes", answer questions a - h. If "No", move on to Section 9.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	☑	☐
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	☑	☐
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	☑	☐
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	☑	☐
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1 a, E1b	☑	☐
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	☑	☐
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	☑	☐
h. Other impacts: Portions of project site are located in an agricultural district.		☑	☐

9. Impact on Aesthetic Resources
The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) ☐NO ☑YES
If "Yes", answer questions a - g. If "No", go to Section 10.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	☑	☐
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	☑	☐
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	☑ ☑	☐ ☐
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	☑ ☑	☐ ☐
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	☑	☐
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile ½ -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	☑	☐
g. Other impacts: Temporary visual impacts during construction only during construction of underground improvements.		☑	☐

10. Impact on Historic and Archeological Resources
The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) ☐NO ☑YES
If "Yes", answer questions a - e. If "No", go to Section 11.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. **The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places.**	E3e	☑	☐
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	☑	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: Project will not negatively impact resources.	E3g	☑	☐

d. Other impacts: _____		☑	☐
e. If any of the above (a-d) are answered "Moderate to large impact may occur", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	☑	☐
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	☐	☐
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	☑	☐

11. Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.
(See Part 1. C.2.c, E.1.c., E.2.q.)
If "Yes", answer questions a - e. If "No", go to Section 12.

☐ NO ☑ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	☒	☐
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	☒	☐
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	☒	☐
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	☒	☐
e. Other impacts: Located within agricultural district but along existing roadway areas resulting in no agricultural impacts.		☒	☐

12. Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)
If "Yes", answer questions a - c. If "No", go to Section 13.

☑ NO ☐ YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	☐	☐
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	☐	☐
c. Other impacts: _____		☐	☐

13. Impact on Transportation
The proposed action may result in a change to existing transportation systems. ☑ NO ☐ YES
(See Part 1. D.2.j)
If "Yes", answer questions a - f. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	☐	☐
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	☐	☐
c. The proposed action will degrade existing transit access.	D2j	☐	☐
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	☐	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	☐	☐
f. Other impacts: _____ _____		☐	☐

14. Impact on Energy
The proposed action may cause an increase in the use of any form of energy. ☑ NO ☐ YES
(See Part 1. D.2.k)
If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	☐	☐
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	☐	☐
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	☐	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	☐	☐
e. Other Impacts: _____ _____			

15. Impact on Noise, Odor, and Light
The proposed action may result in an increase in noise, odors, or outdoor lighting. ☐ NO ☑ YES
(See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	☑	☐
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	☑	☐
c. The proposed action may result in routine odors for more than one hour per day.	D2o	☑	☐

d. The proposed action may result in light shining onto adjoining properties.	D2n	☑	☐
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	☑	☐
f. Other impacts: Construction work is expected to create temporary noise and light impacts.		☑	☐

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.) ☑ NO ☐ YES

If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No,or small impact may cccur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	☐	☐
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	☐	☐
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	☐	☐
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	☐	☐
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	☐	☐
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	☐	☐
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	☐	☐
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	☐	☐
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	☐	☐
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	☐	☐
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	☐	☐
m. Other impacts:			

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans. ☑ NO ☐ YES
(See Part 1. C.1, C.2. and C.3.)
If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	☐	☐
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	☐	☐
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	☐	☐
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, E1b	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	☐	☐
h. Other: _____ _____		☐	☐

18. Consistency with Community Character

The proposed project is inconsistent with the existing community character. ☑ NO ☐ YES
(See Part 1. C.2, C.3, D.2, E.3)
If "Yes", answer questions a - g. If "No", proceed to Part 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	☐	☐
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	☐	☐
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	☐	☐
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	☐	☐
g. Other impacts: _____ _____		☐	☐

PRINT FULL FORM

Agency Use Only [If Applicable]

Project : Moreau Sewer Alternatives

Date : October 11, 2022

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

The Moreau Town Board completed a review of the original project limits and concluded that the project would have no significant environmental impacts and issued a negative declaration on November 8, 2021. During design it was identified that the project would benefit by extending project limits to include (1) the extension of about 550-feet of forcemain on Bluebird Road in the Town of Moreau, and (2) the extension of about 2,500-feet of forcemain on East Lane and Ballard Road in the Town of Wilton, and (3) improvements to an existing sanitary sewer pump station in the Town of Wilton. Since these new limits were not reviewed as part of the Board's November 8, 2021 negative declaration, additional SEQRA review is required and now reflected on the revised Environmental Assessment Form dated October 11, 2022.

As documented in Laberge Group's letter, revised project areas have been coordinated with the US Fish and Wildlife Service (USFW), NYSDEC Division of Environmental Permits (DEC), and NYS Historic Preservation Office (SHPO). The USFW and DEC concluded that the project is not likely to impact threatened or endangered species. The SHPO determined that the project will have no impact on archaeological and/or historic resources.

Based on our thorough review of the overall project and revised project limits, the Town Board has concluded that the project will not result in significant environmental impacts.

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: ☐ Type 1 ☑ Unlisted

Identify portions of EAF completed for this Project: ☑ Part 1 ☑ Part 2 ☑ Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information
Supporting documentation from the US Fish and Wildlife Service (USFW), NYSDEC Division of Environmental Permits (DEC), and NYS Historic Preservation Office (SHPO).

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the Moreau Town Board as lead agency that:

☑ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: Moreau Sewer Alternatives

Name of Lead Agency: Moreau Town Board

Name of Responsible Officer in Lead Agency: Theodore T. Kusnierz, Jr.

Title of Responsible Officer: Supervisor

Signature of Responsible Officer in Lead Agency: Theodore J. Kusnierz, Jr. Date: 10-11-22

Signature of Preparer (if different from Responsible Officer) Date:

For Further Information:

Contact Person: Theodore T. Kusnierz, Jr.

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Telephone Number: 518-792-1030

E-mail: moreausuper@townofmoreau.org

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

PRINT FULL FORM

RESOLUTION
TOWN BOARD
TOWN OF MOREAU

RESOLUTION TO AMEND SEQRA DETERMINATION REGARDING THE COUNTY CONNECTION FOR SEWER DISTRICT 1, EXTENSION 5

WHEREAS, by Resolution dated October 20, 2021, the Town Board declared itself as the lead agency under the State Environmental Quality Review Act (hereinafter referred to as "SEQRA") for the Sewer District 1, Extension 5 County connection project (hereinafter referred to as "Project"); and

WHEREAS, by Resolution dated November 9, 2021, the Town Board determined that the Project would have no significant environmental impacts and issued a negative declaration; and

WHEREAS, during the subsequent development of plans for construction, a change to the project limits was identified that would benefit the Project; and

WHEREAS, the original SEQRA review did not include expanded project limits, and the Town Board as Lead Agency is required to consider potential impacts and issue a revised determination for the Project; and

WHEREAS, the Town Board has received and reviewed the letter report from Laberge Group, which includes relevant environmental review documentation; and

WHEREAS, the expanded project area includes the extension of about 550 feet of forcemain along Bluebird Road, west of Sisson Road, to connect the Moreau Industrial Park to the constructed District 1, Extension 5 forcemain; and

WHEREAS, the expanded project area also includes the extension of the forcemain in the Town of Wilton easterly from Northern Pines Road along East Lane and Ballard Road as needed for a connection with an existing gravity sewer collection system; and

WHEREAS, the expanded project area also includes improvements to an existing pump station in the Town of Wilton, located on the eastern end of Camp Wilton Road; and

WHEREAS, Project information for the expanded project area was circulated for review by the U.S. Fish and Wildlife Service (USFWS) and NYSDEC Division of Environmental Permits (DEC), who determined that the Project is not likely to impact threatened or endangered species; and

WHEREAS, information for the expanded project area has been circulated for review by the NYS Historic Preservation Office (SHPO) and determined to have no impact on archaeological and/or historic resources; and

WHEREAS, wetlands and watercourses for the expanded project area have been delineated by qualified professionals, and it has been determined that impacts can be avoided, and

NOW, THEREFORE, BE IT RESOLVED, that Project changes are minor in nature and will occur along existing roadways and previously developed and disturbed areas; and

BE IT FURTHER RESOLVED, that the Town Board of the Town of Moreau, acting as the Lead Agency for the Project, determines that there are no significant environmental impacts associated with the Project and hereby amends the original negative declaration be issued on November 9, 2021, to include the expanded project area; and

BE IT FURTHER RESOLVED, that the Attorney for the Town is directed to file this amended negative declaration with the Environmental Notice Bulletin; and

Moved by: Councilmember VanTasssel
Seconded by: Councilmember Noonan

The question of the adoption of the foregoing Resolution was duly put to a vote on roll call, which resulted as follows:

	Absent	Aye	Nay
Councilmember Stewart		X	
Councilmember Noonan		X	
Councilmember VanTassel		X	
Councilmember Donohue		X	
Supervisor Kusnierz		X	

The foregoing Resolution was thereupon declared duly adopted.

CERTIFICATION

RESOLUTION NO. 303

Year 2022

I, Leeann McCabe , Moreau Town Clerk, do hereby certify that the RESOLUTION attached hereto was duly adopted by the Town Board at a meeting held on the 11th day of October, 2022 in accordance with the applicable provisions of law and is an exact duplicate copy of the original thereof on file in the Town Clerk's office, and I do hereby further certify that said RESOLUTION has not been amended, repealed nor in any way altered and is in full force and effect.

In witness whereof I have hereunto set me hand and affixed the seal of the Town of Moreau this 12th day of October, 2022.

Leeann McCabe

Leeann McCabe, Town Clerk
Town of Moreau
County of Saratoga, New York

SEAL

APPENDIX D: NRCS SOIL REPORT

United States Department of Agriculture

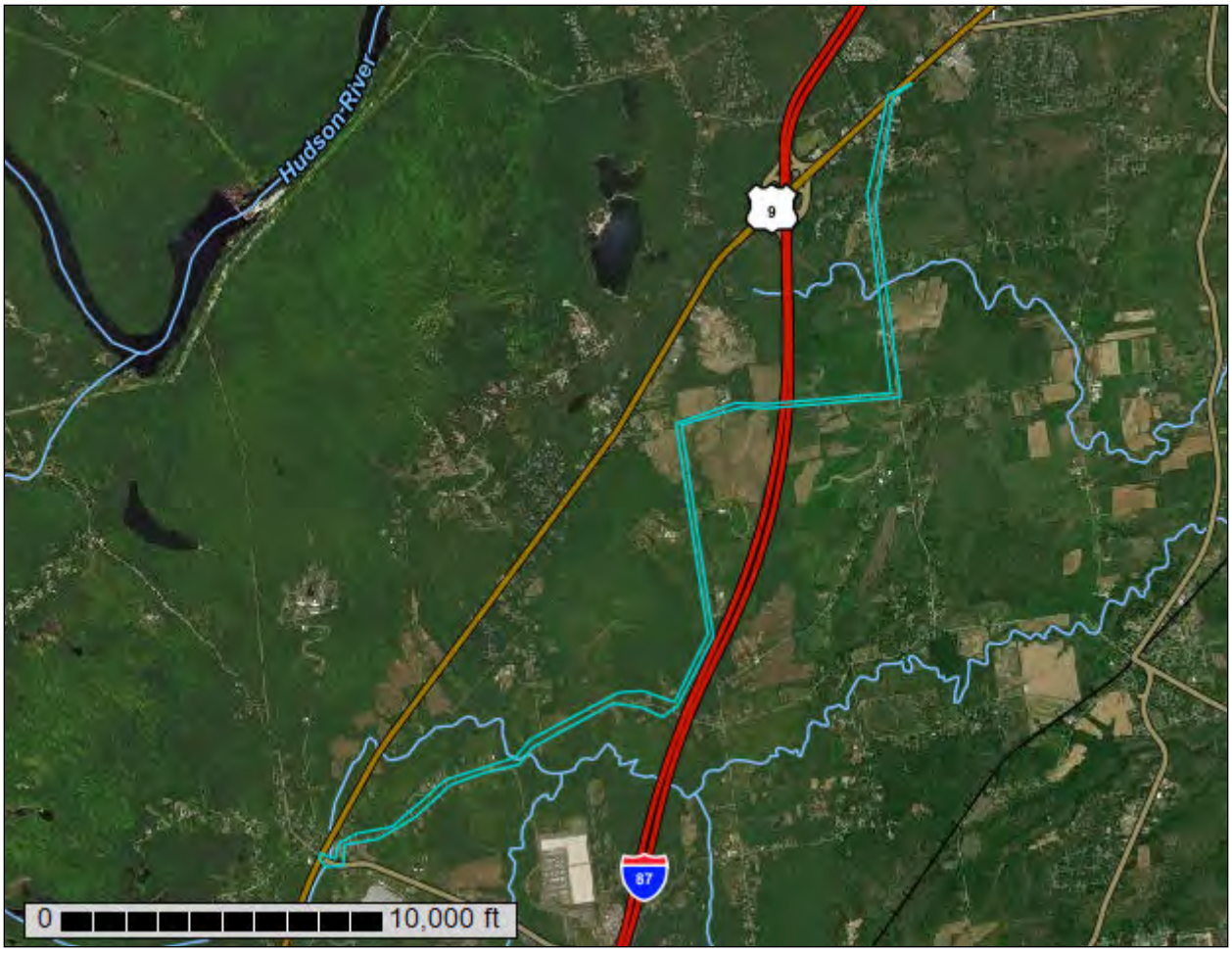
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Saratoga County, New York

Town Of Moreau Sewer Transmission to Saratoga County



October 28, 2021

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

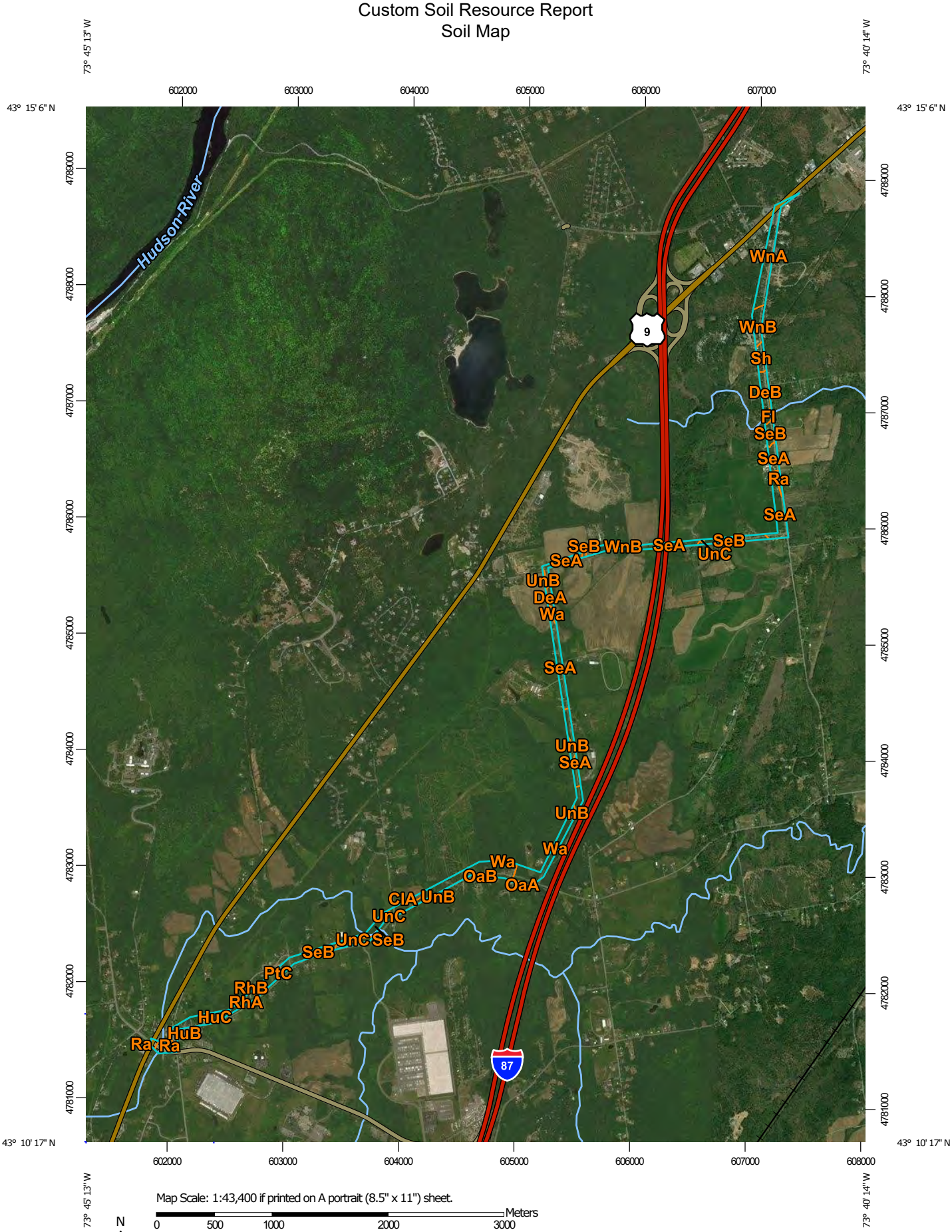
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:43,400 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 500 1000 2000 3000

Feet
0 2000 4000 8000 12000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Saratoga County, New York
Survey Area Data: Version 21, Sep 1, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 10, 2015—Mar 29, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ClA	Claverack loamy fine sand, 0 to 3 percent slopes	4.0	2.2%
DeA	Deerfield loamy fine sand, 0 to 3 percent slopes	2.0	1.1%
DeB	Deerfield loamy fine sand, 3 to 8 percent slopes	6.0	3.2%
Fl	Fluvaqvents frequently flooded	1.8	1.0%
HoB	Hoosic gravelly sandy loam, undulating	0.1	0.0%
HuB	Hudson silt loam, 3 to 8 percent slopes	6.9	3.7%
HuC	Hudson silt loam, 8 to 15 percent slopes	4.4	2.4%
OaA	Oakville loamy fine sand, nearly level	1.2	0.7%
OaB	Oakville loamy fine sand, undulating	21.1	11.3%
PtC	Paxton fine sandy loam, 8 to 15 percent slopes	9.6	5.2%
Ra	Raynham silt loam	5.5	3.0%
RhA	Rhinebeck silt loam, 0 to 3 percent slopes	0.4	0.2%
RhB	Rhinebeck silt loam, 3 to 8 percent slopes	1.5	0.8%
SeA	Scio silt loam, 0 to 3 percent slopes	36.3	19.4%
SeB	Scio silt loam, 3 to 8 percent slopes	19.9	10.6%
Sh	Shaker very fine sandy loam	4.0	2.1%
UnB	Unadilla very fine sandy loam, 3 to 8 percent slopes	11.9	6.4%
UnC	Unadilla very fine sandy loam, 8 to 15 percent slopes	2.5	1.3%
W	Water	1.4	0.8%
Wa	Wareham loamy sand	18.3	9.8%
WnA	Windsor loamy sand, 0 to 3 percent slopes	17.2	9.2%
WnB	Windsor loamy sand, 3 to 8 percent slopes	8.2	4.4%
WnC	Windsor loamy sand, 8 to 15 percent slopes	2.5	1.4%
Totals for Area of Interest		**187.0**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas

shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Saratoga County, New York

ClA—Claverack loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9w9q
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Claverack and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Claverack

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Sandy glaciolacustrine deposits, derived primarily from non-calcareous sandstone or granite, that overlie clayey glaciolacustrine deposits

Typical profile

H1 - 0 to 8 inches: loamy fine sand
H2 - 8 to 27 inches: fine sand
2C - 27 to 31 inches: silt loam
3C - 31 to 72 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F101XY006NY - Moist Outwash
Hydric soil rating: No

Minor Components

Cosad
Percent of map unit: 10 percent
Hydric soil rating: No

Hudson
Percent of map unit: 10 percent
Hydric soil rating: No

Oakville
Percent of map unit: 5 percent
Hydric soil rating: No

Deerfield
Percent of map unit: 3 percent
Hydric soil rating: No

Rhinebeck
Percent of map unit: 1 percent
Hydric soil rating: No

Madalin
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

DeA—Deerfield loamy fine sand, 0 to 3 percent slopes

Map Unit Setting
National map unit symbol: 2xfg8
Elevation: 0 to 1,100 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 145 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Deerfield and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Deerfield

Setting
Landform: Outwash terraces, outwash deltas, outwash plains, kame terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Parent material: Sandy outwash derived from granite, gneiss, and/or quartzite

Typical profile

Ap - 0 to 9 inches: loamy fine sand
Bw - 9 to 25 inches: loamy fine sand
BC - 25 to 33 inches: fine sand
Cg - 33 to 60 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: About 15 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Sodium adsorption ratio, maximum: 11.0
Available water supply, 0 to 60 inches: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A
Ecological site: F144AY027MA - Moist Sandy Outwash
Hydric soil rating: No

Minor Components

Windsor

Percent of map unit: 7 percent
Landform: Outwash terraces, kame terraces, outwash deltas, outwash plains
Landform position (three-dimensional): Tread
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

Wareham

Percent of map unit: 5 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Sudbury

Percent of map unit: 2 percent
Landform: Outwash plains, kame terraces, outwash deltas, outwash terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

Ninigret

Percent of map unit: 1 percent
Landform: Kame terraces, outwash plains, outwash terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex, linear

Across-slope shape: Convex, concave
Hydric soil rating: No

DeB—Deerfield loamy fine sand, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2xfg9
Elevation: 0 to 1,190 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 145 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Deerfield and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Deerfield

Setting

Landform: Outwash deltas, outwash terraces, outwash plains, kame terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Parent material: Sandy outwash derived from granite, gneiss, and/or quartzite

Typical profile

Ap - 0 to 9 inches: loamy fine sand
Bw - 9 to 25 inches: loamy fine sand
BC - 25 to 33 inches: fine sand
Cg - 33 to 60 inches: sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: About 15 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Sodium adsorption ratio, maximum: 11.0
Available water supply, 0 to 60 inches: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A

Ecological site: F144AY027MA - Moist Sandy Outwash
Hydric soil rating: No

Minor Components

Windsor
Percent of map unit: 7 percent
Landform: Outwash terraces, outwash plains, kame terraces, outwash deltas
Landform position (three-dimensional): Tread
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

Wareham
Percent of map unit: 5 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Sudbury
Percent of map unit: 2 percent
Landform: Kame terraces, outwash deltas, outwash terraces, outwash plains
Landform position (three-dimensional): Tread
Down-slope shape: Concave, convex, linear
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

Ninigret
Percent of map unit: 1 percent
Landform: Outwash plains, outwash terraces, kame terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex, linear
Across-slope shape: Convex, concave
Hydric soil rating: No

Fl—Fluvaqvents frequently flooded

Map Unit Setting
National map unit symbol: 9wb0
Elevation: 300 to 1,800 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition
Fluvaquents, frequently flooded, and similar soils: 60 percent
Minor components: 40 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fluvaquents, Frequently Flooded

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Alluvium with highly variable texture

Typical profile

H1 - 0 to 10 inches: gravelly loamy sand
H2 - 10 to 72 inches: gravelly sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: NoneFrequent
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 2 percent
Available water supply, 0 to 60 inches: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components

Unnamed soils

Percent of map unit: 15 percent

Limerick

Percent of map unit: 10 percent
Landform: Flood plains
Hydric soil rating: Yes

Palms

Percent of map unit: 5 percent
Landform: Marshes, swamps
Hydric soil rating: Yes

Raynham

Percent of map unit: 5 percent
Hydric soil rating: No

Madalin

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

HoB—Hoosic gravelly sandy loam, undulating

Map Unit Setting

National map unit symbol: 9wb8
Elevation: 100 to 1,100 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hoosic and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hoosic

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and gravelly glaciofluvial deposits

Typical profile

H1 - 0 to 9 inches: gravelly sandy loam
H2 - 9 to 18 inches: gravelly sandy loam
2BC - 18 to 24 inches: very gravelly loamy sand
2C - 24 to 72 inches: stratified very gravelly sand to coarse sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Windsor
Percent of map unit: 10 percent
Hydric soil rating: No

Chenango
Percent of map unit: 10 percent
Hydric soil rating: No

Oakville
Percent of map unit: 10 percent
Hydric soil rating: No

HuB—Hudson silt loam, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 9wbb
Elevation: 300 to 1,800 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Hudson and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hudson

Setting
Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile
H1 - 0 to 8 inches: silt loam
H2 - 8 to 13 inches: silty clay loam
H3 - 13 to 32 inches: silty clay
H4 - 32 to 72 inches: clay

Properties and qualities
Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 72 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Unadilla

Percent of map unit: 10 percent
Hydric soil rating: No

Rhinebeck

Percent of map unit: 10 percent
Hydric soil rating: No

Scio

Percent of map unit: 10 percent
Hydric soil rating: No

HuC—Hudson silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9wbc
Elevation: 300 to 1,800 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hudson and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hudson

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave

Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 13 inches: silty clay loam
H3 - 13 to 32 inches: silty clay
H4 - 32 to 72 inches: clay

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 20 to 72 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Rhinebeck

Percent of map unit: 10 percent
Hydric soil rating: No

Unadilla

Percent of map unit: 10 percent
Hydric soil rating: No

Scio

Percent of map unit: 10 percent
Hydric soil rating: No

OaA—Oakville loamy fine sand, nearly level

Map Unit Setting

National map unit symbol: 9wbz
Elevation: 600 to 1,200 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Oakville and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Oakville

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy eolian, beach ridge, or glaciofluvial deposits

Typical profile

H1 - 0 to 7 inches: loamy fine sand
H2 - 7 to 37 inches: loamy fine sand
H3 - 37 to 90 inches: loamy fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Windsor

Percent of map unit: 10 percent
Hydric soil rating: No

Wareham

Percent of map unit: 5 percent
Hydric soil rating: Yes

Unnamed soils

Percent of map unit: 5 percent

Wareham

Percent of map unit: 5 percent
Hydric soil rating: No

Deerfield

Percent of map unit: 5 percent
Hydric soil rating: No

OaB—Oakville loamy fine sand, undulating

Map Unit Setting

National map unit symbol: 9wc0
Elevation: 600 to 1,200 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Oakville and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Oakville

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy eolian, beach ridge, or glaciofluvial deposits

Typical profile

H1 - 0 to 7 inches: loamy fine sand
H2 - 7 to 37 inches: loamy fine sand
H3 - 37 to 90 inches: loamy fine sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Windsor
Percent of map unit: 10 percent
Hydric soil rating: No

Wareham
Percent of map unit: 5 percent
Hydric soil rating: No

Wareham
Percent of map unit: 5 percent
Hydric soil rating: Yes

Deerfield
Percent of map unit: 5 percent
Hydric soil rating: No

Unnamed soils
Percent of map unit: 5 percent

PtC—Paxton fine sandy loam, 8 to 15 percent slopes

Map Unit Setting
National map unit symbol: 2w66y
Elevation: 0 to 1,320 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Paxton and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Paxton

Setting
Landform: Ground moraines, hills, drumlins
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex
Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile
Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 15 inches: fine sandy loam
Bw2 - 15 to 26 inches: fine sandy loam

Cd - 26 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: F144AY007CT - Well Drained Dense Till Uplands
Hydric soil rating: No

Minor Components

Charlton

Percent of map unit: 7 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Woodbridge

Percent of map unit: 6 percent
Landform: Hills, drumlins, ground moraines
Landform position (two-dimensional): Footslope, summit, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Ridgebury

Percent of map unit: 2 percent
Landform: Drumlins, drainageways, depressions, ground moraines, hills
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

Ra—Raynham silt loam

Map Unit Setting

National map unit symbol: 9wcd
Elevation: 50 to 500 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Raynham and similar soils: 60 percent
Minor components: 40 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Raynham

Setting

Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand

Typical profile

H1 - 0 to 12 inches: silt loam
H2 - 12 to 34 inches: very fine sandy loam
H3 - 34 to 72 inches: very fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Available water supply, 0 to 60 inches: High (about 11.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F144AY019NH - Wet Lake Plain
Hydric soil rating: No

Minor Components

Raynham
Percent of map unit: 10 percent
Hydric soil rating: Yes

Rhinebeck
Percent of map unit: 10 percent
Hydric soil rating: No

Scio
Percent of map unit: 10 percent
Hydric soil rating: No

Unadilla
Percent of map unit: 5 percent
Hydric soil rating: No

Madalin
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

RhA—Rhinebeck silt loam, 0 to 3 percent slopes

Map Unit Setting
National map unit symbol: 9wcf
Elevation: 80 to 1,000 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Prime farmland if drained

Map Unit Composition
Rhinebeck and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rhinebeck

Setting
Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile
H1 - 0 to 11 inches: silt loam
H2 - 11 to 37 inches: silty clay

H3 - 37 to 72 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Hornell

Percent of map unit: 10 percent
Hydric soil rating: No

Hudson

Percent of map unit: 10 percent
Hydric soil rating: No

Madalin

Percent of map unit: 10 percent
Landform: Depressions
Hydric soil rating: Yes

RhB—Rhinebeck silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9wcg
Elevation: 80 to 1,000 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Rhinebeck and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rhinebeck

Setting

Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 11 inches: silt loam
H2 - 11 to 37 inches: silty clay
H3 - 37 to 72 inches: silty clay loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Hudson

Percent of map unit: 10 percent
Hydric soil rating: No

Hornell

Percent of map unit: 10 percent
Hydric soil rating: No

Madalin

Percent of map unit: 10 percent
Landform: Depressions
Hydric soil rating: Yes

SeA—Scio silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9wcl
Elevation: 100 to 1,000 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Scio and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Scio

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Glaciolacustrine deposits, eolian deposits, or old alluvium, comprised mainly of silt and very fine sand

Typical profile

H1 - 0 to 4 inches: silt loam
H2 - 4 to 23 inches: silt loam
H3 - 23 to 72 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Ecological site: F144AY026CT - Moist Silty Outwash
Hydric soil rating: No

Minor Components

Unadilla
Percent of map unit: 10 percent
Hydric soil rating: No

Raynham
Percent of map unit: 10 percent
Hydric soil rating: No

Deerfield
Percent of map unit: 5 percent
Hydric soil rating: No

Hudson
Percent of map unit: 5 percent
Hydric soil rating: No

SeB—Scio silt loam, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 9wcm
Elevation: 100 to 1,000 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Scio and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Scio

Setting
Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Glaciolacustrine deposits, eolian deposits, or old alluvium, comprised mainly of silt and very fine sand

Typical profile
H1 - 0 to 4 inches: silt loam
H2 - 4 to 23 inches: silt loam
H3 - 23 to 72 inches: silt loam

Properties and qualities
Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B/D
Ecological site: F144AY026CT - Moist Silty Outwash
Hydric soil rating: No

Minor Components

Unadilla

Percent of map unit: 10 percent
Hydric soil rating: No

Raynham

Percent of map unit: 10 percent
Hydric soil rating: No

Deerfield

Percent of map unit: 5 percent
Hydric soil rating: No

Hudson

Percent of map unit: 5 percent
Hydric soil rating: No

Sh—Shaker very fine sandy loam

Map Unit Setting

National map unit symbol: 9wcn
Elevation: 50 to 410 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Shaker and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Shaker

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Loamy over clayey glaciolacustrine or glaciomarine deposits

Typical profile

H1 - 0 to 9 inches: very fine sandy loam
H2 - 9 to 31 inches: loam
H3 - 31 to 72 inches: stratified clay to silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Ecological site: F144AY019NH - Wet Lake Plain
Hydric soil rating: Yes

Minor Components

Cheektowaga

Percent of map unit: 10 percent
Landform: Depressions
Hydric soil rating: Yes

Raynham

Percent of map unit: 10 percent
Hydric soil rating: No

Cosad

Percent of map unit: 10 percent
Hydric soil rating: No

UnB—Unadilla very fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9wd0
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Unadilla and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Unadilla

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Glaciolacustrine deposits, eolian deposits, or old alluvium, comprised mainly of silt and very fine sand

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
H2 - 2 to 8 inches: very fine sandy loam
H3 - 8 to 42 inches: very fine sandy loam
2C - 42 to 72 inches: loamy very fine sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F144AY024NY - Well Drained Eolian Outwash
Hydric soil rating: No

Minor Components

Scio

Percent of map unit: 10 percent
Hydric soil rating: No

Hudson

Percent of map unit: 10 percent
Hydric soil rating: No

Windsor

Percent of map unit: 5 percent
Hydric soil rating: No

Oakville

Percent of map unit: 5 percent
Hydric soil rating: No

UnC—Unadilla very fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9wd1
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Unadilla and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Unadilla

Setting

Landform: Lake plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Glaciolacustrine deposits, eolian deposits, or old alluvium, comprised mainly of silt and very fine sand

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
H2 - 2 to 8 inches: very fine sandy loam
H3 - 8 to 42 inches: very fine sandy loam
2C - 42 to 72 inches: loamy very fine sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: F144AY024NY - Well Drained Eolian Outwash
Hydric soil rating: No

Minor Components

Scio

Percent of map unit: 10 percent
Hydric soil rating: No

Hudson

Percent of map unit: 10 percent
Hydric soil rating: No

Oakville

Percent of map unit: 5 percent
Hydric soil rating: No

Windsor

Percent of map unit: 5 percent
Hydric soil rating: No

W—Water

Map Unit Setting

National map unit symbol: 9wd3
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Wa—Wareham loamy sand

Map Unit Setting

National map unit symbol: 9wd4
Elevation: 100 to 1,000 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Wareham, poorly drained, and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wareham, Poorly Drained

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
H2 - 2 to 8 inches: loamy sand
H3 - 8 to 19 inches: loamy sand
C - 19 to 72 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 5.95 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F144AY028MA - Wet Outwash
Hydric soil rating: Yes

Minor Components

Wareham, somewhat poorly drained

Percent of map unit: 10 percent

Hydric soil rating: No

Deerfield

Percent of map unit: 5 percent
Hydric soil rating: No

Cheektowaga

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Raynham

Percent of map unit: 5 percent
Hydric soil rating: No

Scarboro

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

WnA—Windsor loamy sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2svkg
Elevation: 0 to 990 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Windsor, loamy sand, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windsor, Loamy Sand

Setting

Landform: Outwash plains, outwash terraces, deltas, dunes
Landform position (three-dimensional): Tread, riser
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Parent material: Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

Typical profile

O - 0 to 1 inches: moderately decomposed plant material
A - 1 to 3 inches: loamy sand
Bw - 3 to 25 inches: loamy sand
C - 25 to 65 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Deerfield, loamy sand

Percent of map unit: 10 percent
Landform: Deltas, terraces, outwash plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Hinckley, loamy sand

Percent of map unit: 5 percent
Landform: Deltas, kames, eskers, outwash plains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, crest, head slope, rise
Down-slope shape: Convex
Across-slope shape: Convex, linear
Hydric soil rating: No

WnB—Windsor loamy sand, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2svkf
Elevation: 0 to 1,210 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Windsor, loamy sand, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windsor, Loamy Sand

Setting

Landform: Dunes, outwash plains, deltas, outwash terraces
Landform position (three-dimensional): Tread, riser
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

Typical profile

O - 0 to 1 inches: moderately decomposed plant material
A - 1 to 3 inches: loamy sand
Bw - 3 to 25 inches: loamy sand
C - 25 to 65 inches: sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Hinckley, loamy sand

Percent of map unit: 10 percent
Landform: Deltas, kames, eskers, outwash plains
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Head slope, nose slope, side slope, crest, rise
Down-slope shape: Convex
Across-slope shape: Convex, linear
Hydric soil rating: No

Deerfield, loamy sand

Percent of map unit: 5 percent

Landform: Deltas, terraces, outwash plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

WnC—Windsor loamy sand, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2svkq
Elevation: 0 to 1,260 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Windsor and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windsor

Setting

Landform: — error in exists on —
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope, riser
Down-slope shape: Convex
Across-slope shape: Convex, linear
Parent material: Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
Ap - 1 to 11 inches: loamy sand
Bw - 11 to 31 inches: loamy sand
C - 31 to 65 inches: sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Hinckley

Percent of map unit: 10 percent
Landform: Deltas, kames, eskers, outwash plains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, crest, head slope, rise
Down-slope shape: Convex
Across-slope shape: Convex, linear
Hydric soil rating: No

Deerfield

Percent of map unit: 5 percent
Landform: Deltas, terraces, outwash plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

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United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Saratoga County, New York

September 16, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


73° 44' 43" W
73° 43' 56" W
602000
602100
602200
602300
602400
602500
602600
602700
602800
602900
603000
43° 10' 51" N
43° 10' 28" N
4781600
4781500
4781400
4781300
4781200
4781100
4781000
HuB
RhB
RhB
RhA
PtB
RhA
33
33
Northern Pines Rd
Parking Lot
Soil Map may not be valid at this scale.
Map Scale: 1:4,890 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0 50 100 200 300
Feet
0 200 400 800 1200
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Saratoga County, New York
Survey Area Data: Version 21, Sep 1, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 1, 2020—Oct 1, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HuB	Hudson silt loam, 3 to 8 percent slopes	2.4	17.0%
PtB	Paxton fine sandy loam, 3 to 8 percent slopes	6.0	41.7%
RhA	Rhinebeck silt loam, 0 to 3 percent slopes	4.3	30.4%
RhB	Rhinebeck silt loam, 3 to 8 percent slopes	1.6	10.9%
Totals for Area of Interest		**14.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Saratoga County, New York

HuB—Hudson silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9wbb
Elevation: 300 to 1,800 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Hudson and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hudson

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 13 inches: silty clay loam
H3 - 13 to 32 inches: silty clay
H4 - 32 to 72 inches: clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 72 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Unadilla
Percent of map unit: 10 percent
Hydric soil rating: No

Rhinebeck
Percent of map unit: 10 percent
Hydric soil rating: No

Scio
Percent of map unit: 10 percent
Hydric soil rating: No

PtB—Paxton fine sandy loam, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 2t2qp
Elevation: 0 to 1,570 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Paxton and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Paxton

Setting
Landform: Ground moraines, drumlins, hills
Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Nose slope, crest, side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex
Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile
Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 15 inches: fine sandy loam
Bw2 - 15 to 26 inches: fine sandy loam
Cd - 26 to 65 inches: gravelly fine sandy loam

Properties and qualities
Slope: 3 to 8 percent
Depth to restrictive feature: 18 to 39 inches to densic material
Drainage class: Well drained
Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: C
Ecological site: F144AY007CT - Well Drained Dense Till Uplands
Hydric soil rating: No

Minor Components

Woodbridge

Percent of map unit: 9 percent
Landform: Ground moraines, drumlins, hills
Landform position (two-dimensional): Backslope, footslope, summit
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Ridgebury

Percent of map unit: 6 percent
Landform: Depressions, ground moraines, hills, drainageways
Landform position (two-dimensional): Toeslope, backslope, footslope
Landform position (three-dimensional): Base slope, head slope, dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Charlton

Percent of map unit: 5 percent
Landform: Hills
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

RhA—Rhinebeck silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9wcf
Elevation: 80 to 1,000 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Rhinebeck and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rhinebeck

Setting

Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 11 inches: silt loam
H2 - 11 to 37 inches: silty clay
H3 - 37 to 72 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Hornell

Percent of map unit: 10 percent
Hydric soil rating: No

Hudson

Percent of map unit: 10 percent
Hydric soil rating: No

Madalin

Percent of map unit: 10 percent
Landform: Depressions
Hydric soil rating: Yes

RhB—Rhinebeck silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9wcg
Elevation: 80 to 1,000 feet
Mean annual precipitation: 36 to 48 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 125 to 160 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Rhinebeck and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rhinebeck

Setting

Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 11 inches: silt loam
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Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
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Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Hudson

Percent of map unit: 10 percent
Hydric soil rating: No

Hornell

Percent of map unit: 10 percent
Hydric soil rating: No

Madalin

Percent of map unit: 10 percent
Landform: Depressions
Hydric soil rating: Yes

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ATLANTIC TESTING LABORATORIES

Canton
6431 U.S. Highway 11
P.O. Box 29
Canton, NY 13617
315-386-4578 (T)
315-386-1012 (F)

October 20, 2022

Laberge Group
4 Computer Drive West
Albany, New York 12205

Attn: Donald Rhodes Telephone: 518-458-7112

Re: **Subsurface Investigation Services**
County Forcemain Connection
Moreau & Wilton, Saratoga County, New York
ATL No. CD10363D-01-10-22

Ladies and Gentleman:

At the request of Donald Rhodes, representing Laberge Group (Laberge), and in accordance with our proposal (ATL No. CD998-712-03-22, dated April 7, 2022), Atlantic Testing Laboratories, Limited (ATL) performed a subsurface investigation for the referenced project. The field investigation was performed between the dates of September 26 and September 29, 2022.

The boring and probe locations were selected and staked by representatives of Laberge. The boring and probe elevations were not provided to ATL at the time of report issuance. The **Boring and Probe Location Plans** are included in **Attachment A**.

Two borings were advanced utilizing NW (3-inch ID) flush joint casing, to a depth of 41 feet each. Split spoon sampling was performed at 5-foot intervals throughout each boring. The **Subsurface Investigation Logs** are included in **Attachment B**.

Twenty-seven soil probes were advanced by driving a steel drill rod with a fixed point, to depths ranging from 10 to 20 feet. Refusal was not encountered within any of the soil probes. A **Table of Probe Termination Depths** is included in **Attachment C**.

The soil borings and probes were backfilled with on-site soils upon completion. It is important that the backfilled borings and probes be monitored for settlement or subsidence. This will be the responsibility of Laberge and/or their Client. ATL assumes no liability for loss or damage resulting from bore hole settlement.

The soil samples obtained during this investigation will be retained for a period of 6 months and discarded thereafter, unless directed otherwise.

Please contact our office should you have any questions; or if we may be of further service. We look forward to our continued association to obtain a successful completion of the project.

Sincerely,
ATLANTIC TESTING LABORATORIES, Limited

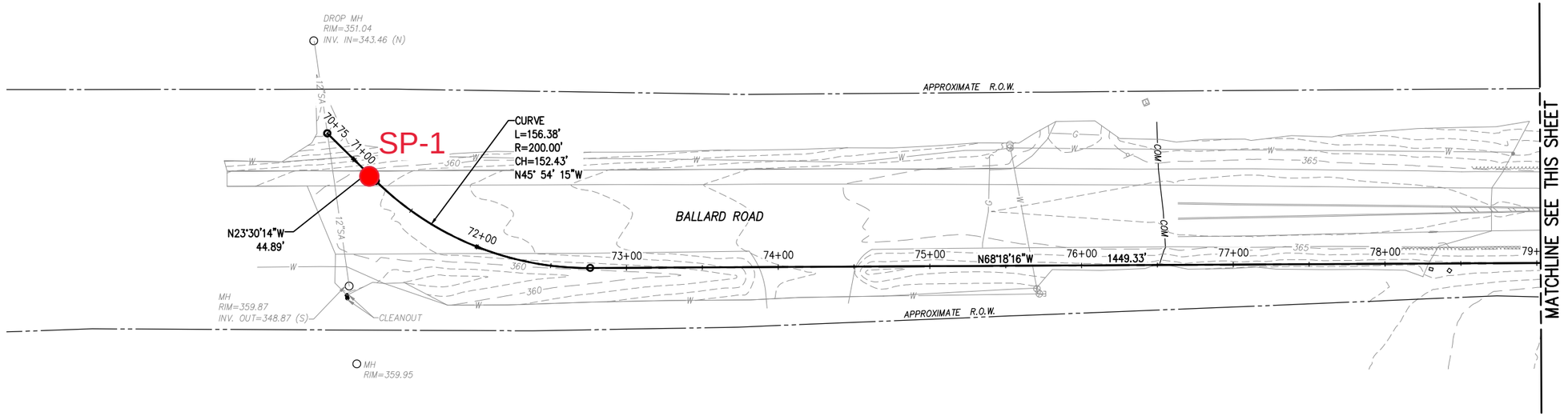
Aaron D. Woods, IE
Operations Manager

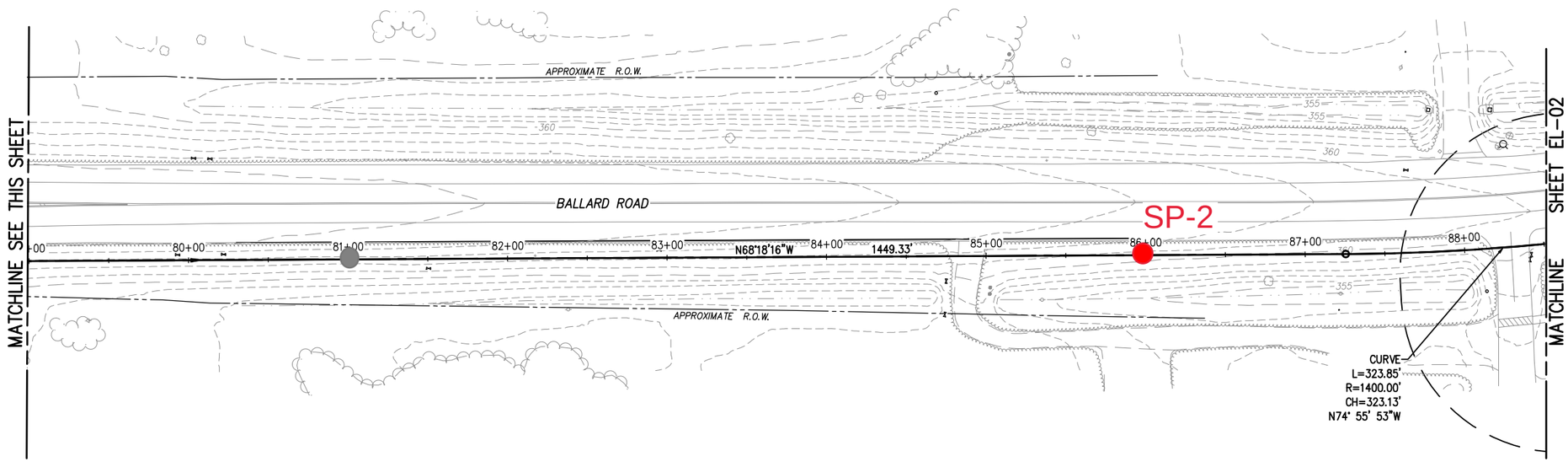
ADW/AJS/adw

Enclosures

ATTACHMENT A

BORING AND PROBE LOCATION PLANS





● SOIL PROBE LOCATION

◉ BORING LOCATAION

HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK
DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
STA. 70+75 TO STA. 88+50

DESIGNED BY CDW
DRAWN BY WJB
REVIEWED BY

Laberge ENGINEERING ARCHITECTURE Group SURVEYING PLANNING
4 Computer Drive West • Albany, New York 12205
(518) 458-7112 • www.labergegroup.com

DATE 08/16/22
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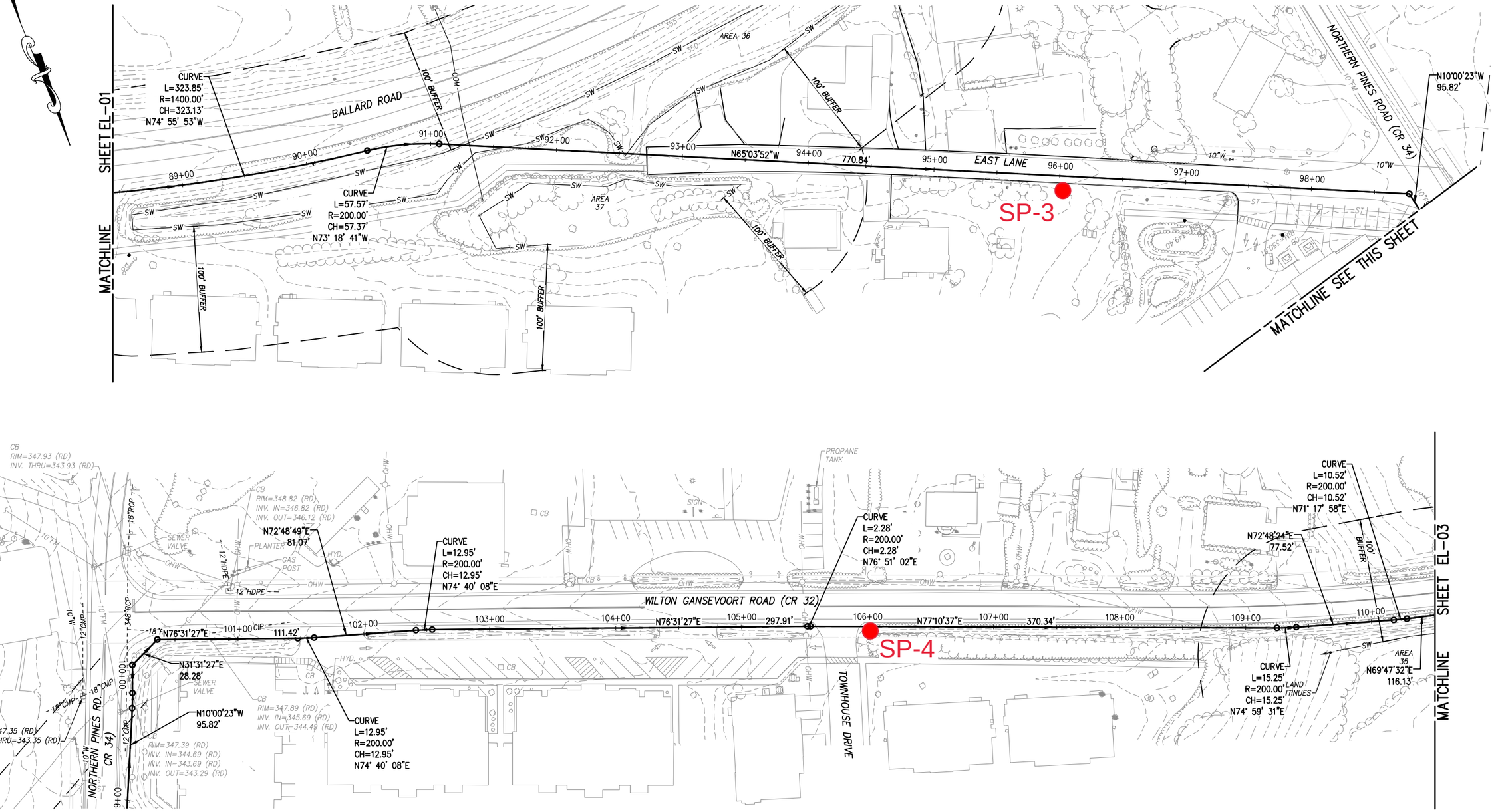

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09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
STA. 88+50 TO STA. 110+50

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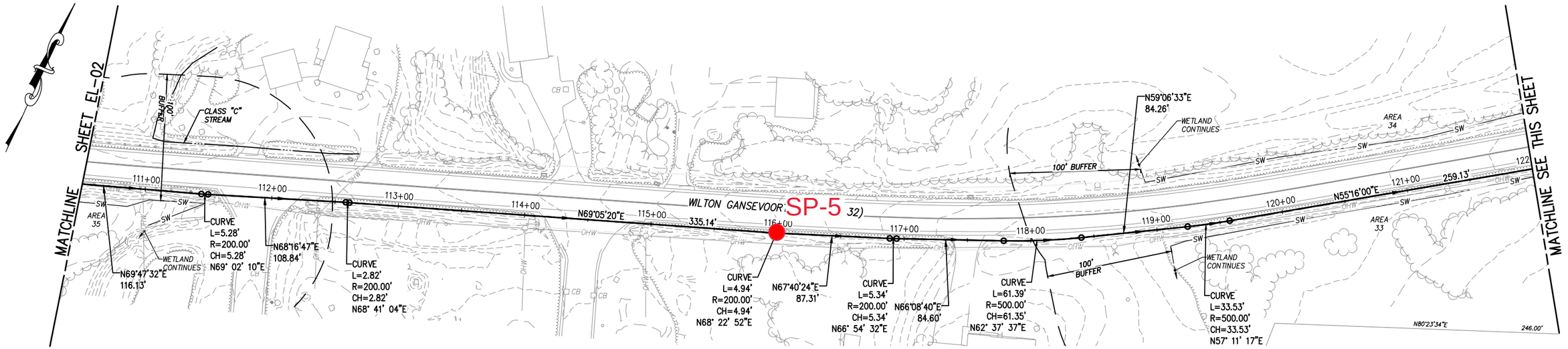

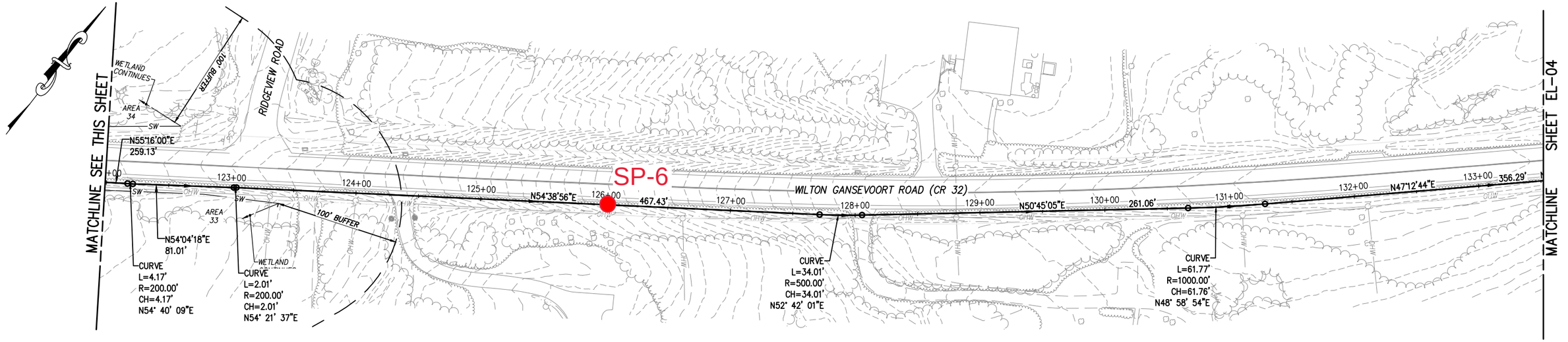

HALF SCALE

PRELIMINARY PLANS
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09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
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1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK
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COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
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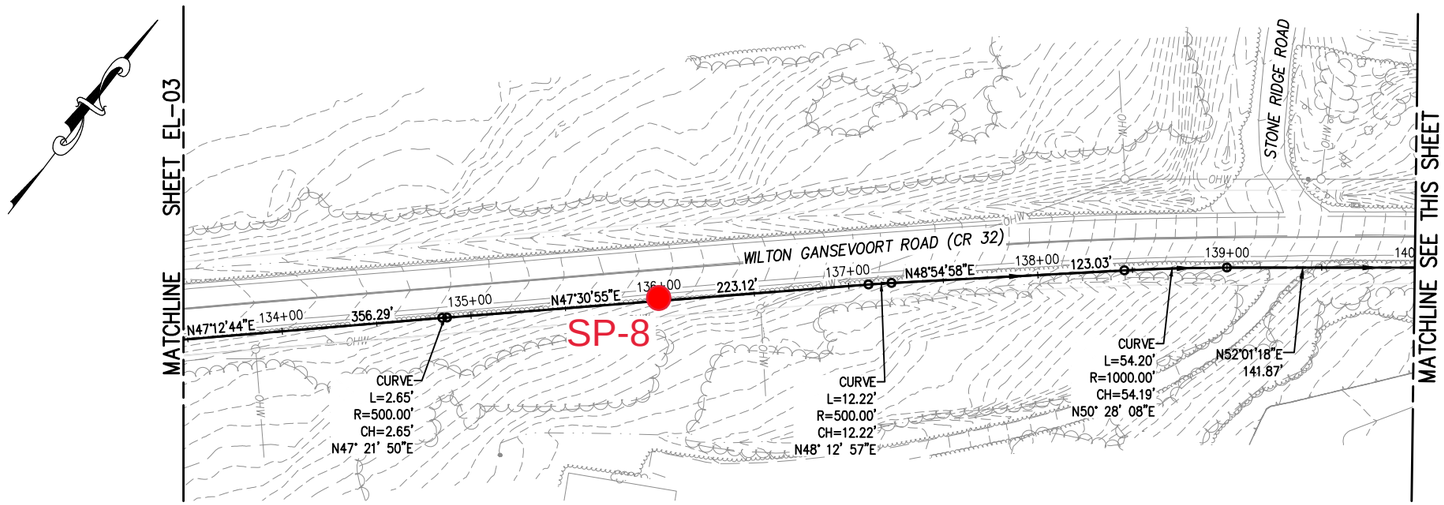

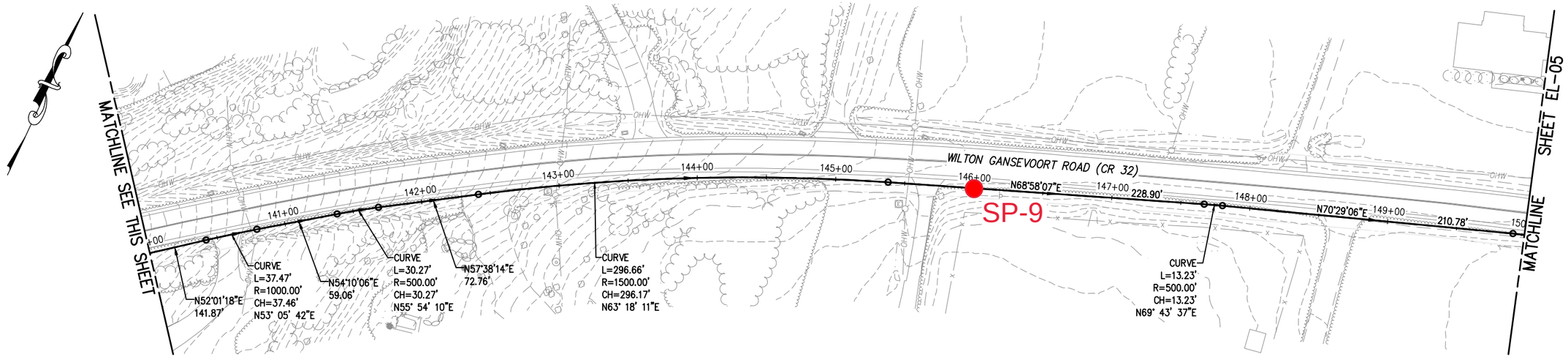

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09/02/22

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NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
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1" = 40'

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SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
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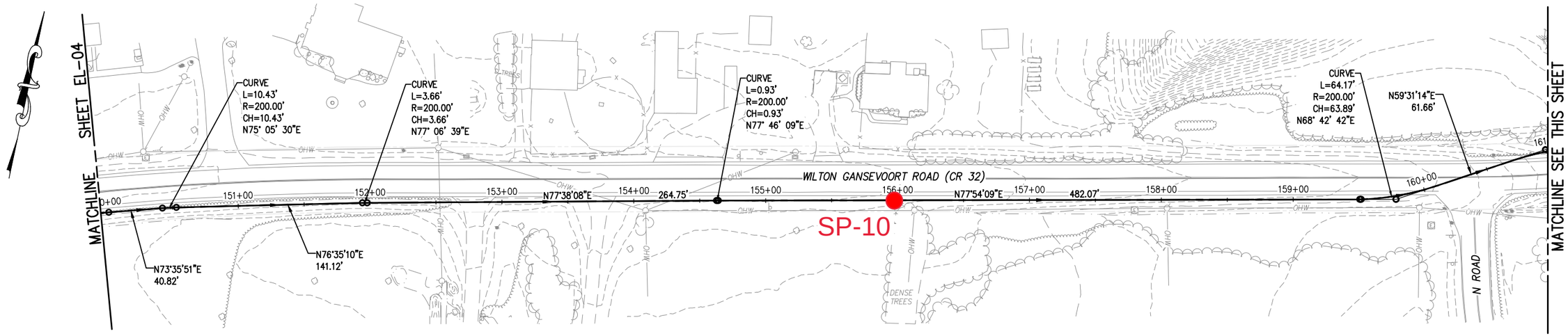

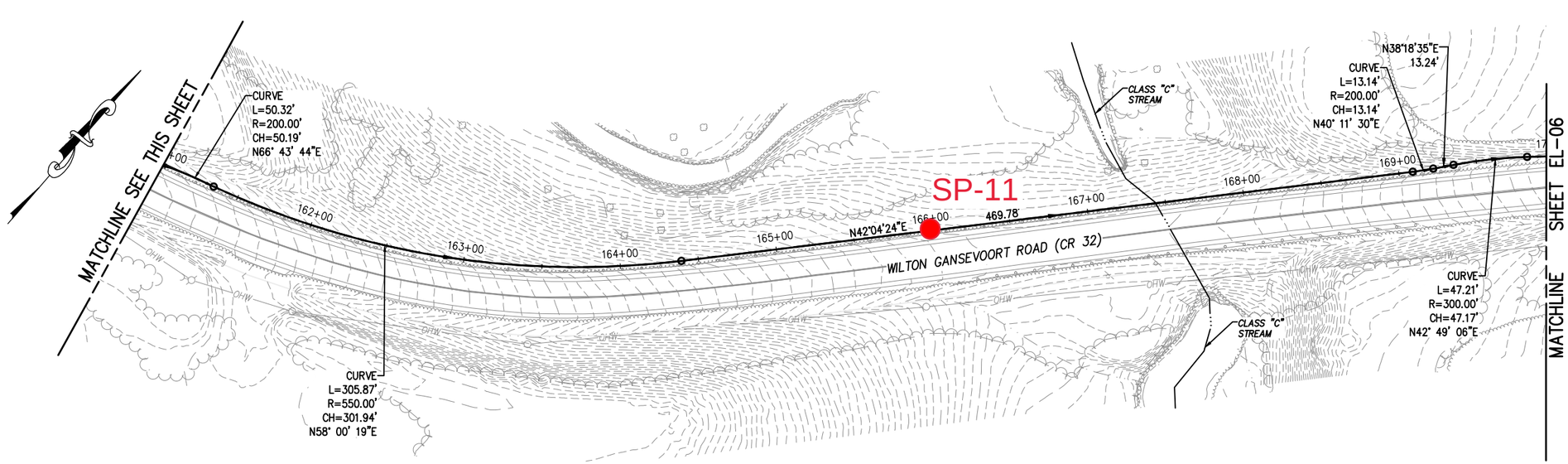

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REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 150+00 TO STA. 170+00)

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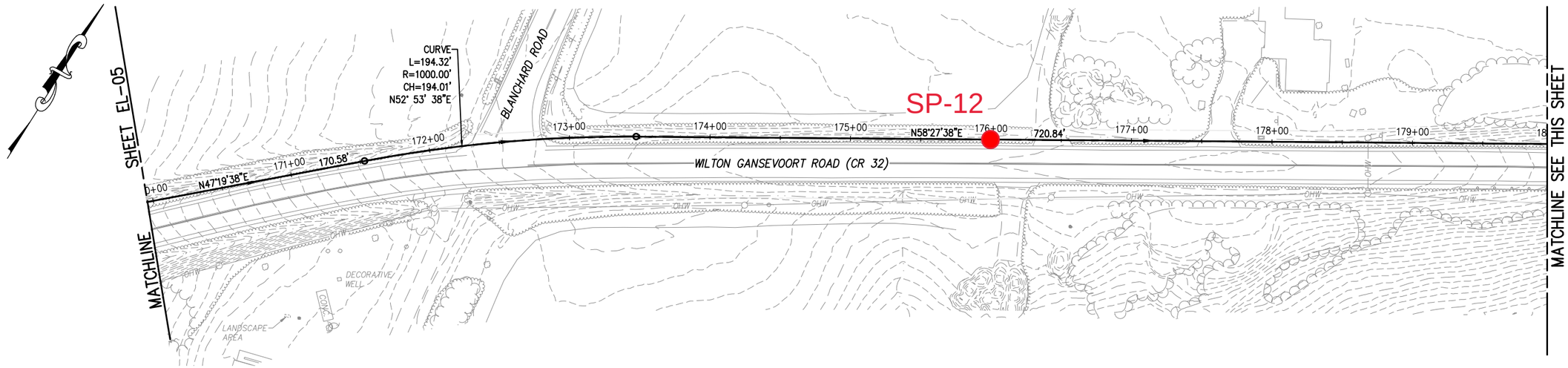

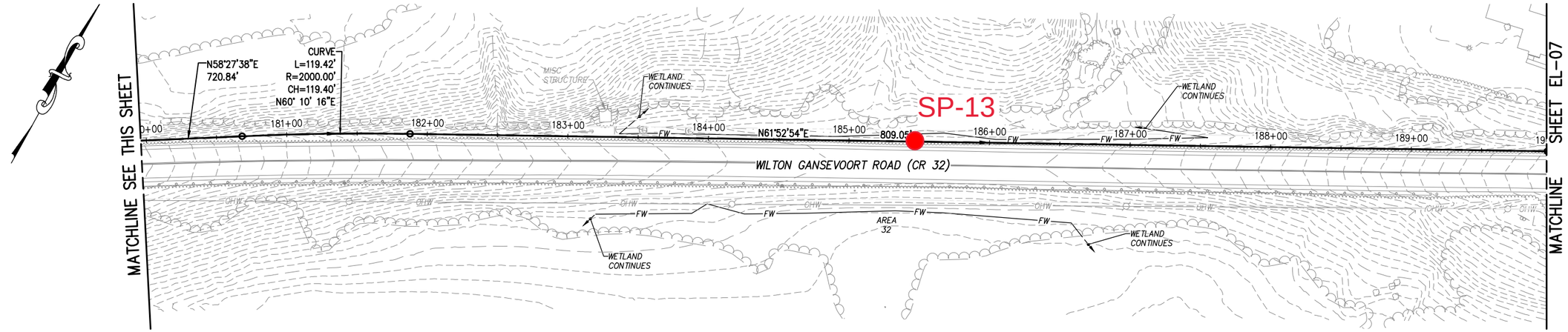

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REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 170+00 TO STA. 190+00)

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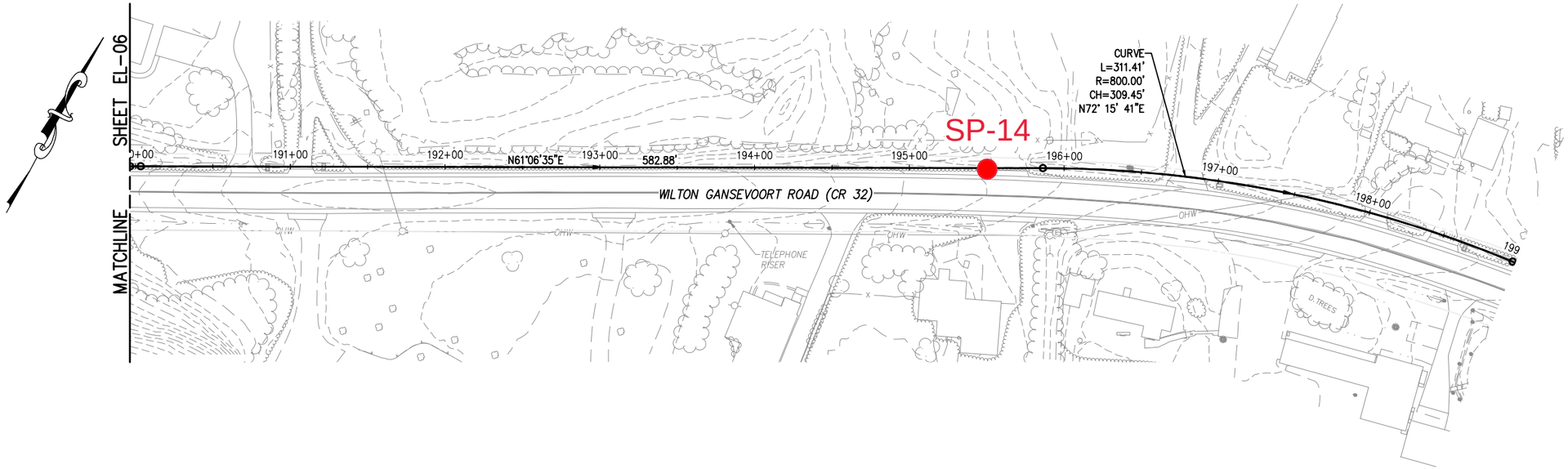

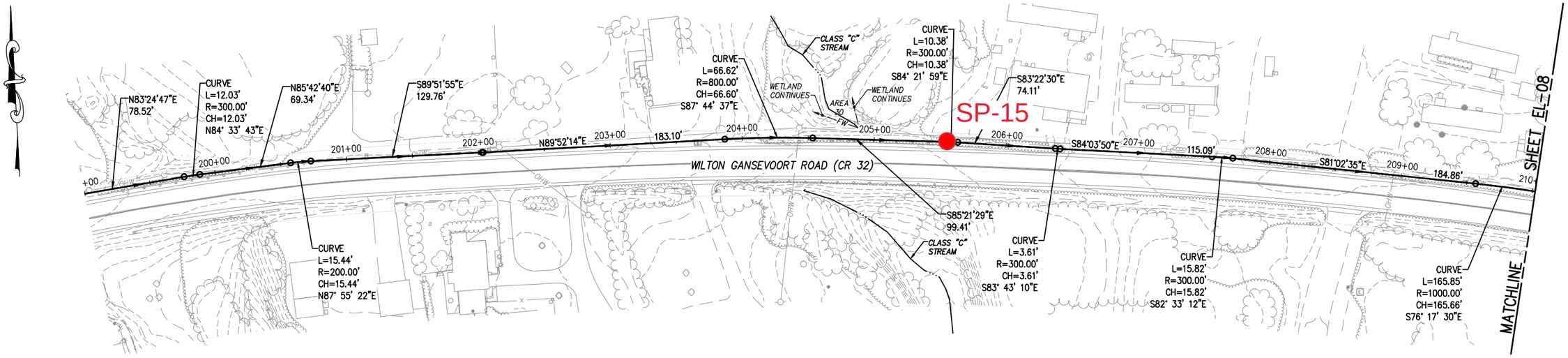

HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 190+00 TO STA. 210+00)

DESIGNED BY CDW
DRAWN BY WJB
REVIEWED BY

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DATE 08/16/22
SCALE 1"=40'
SHEET EL-07

MATCHLINE SEE THIS SHEET

MATCHLINE SHEET EL-07

CURVE
L=165.85'
R=1000.00'
CH=165.66'
S76° 17' 30"E

WETLAND CONTINUES

AREA 29

WETLAND CONTINUES

CURVE
L=3.53'
R=200.00'
CH=3.53'
S71° 02' 07"E

CONC. MON.

N64°28'12"E
86.20'

WASHBURN RD.

N19°28'12"E
103.43'

211+00 212+00 213+00 214+00 215+00 216+00 217+00 218

FW OHW

S71°32'26"E 327.83'

S70°31'48"E 192.07'

WILTON GANSEVOORT ROAD (CR 32)

CONC. MON.

IRF

N19°28'12"E
103.43'

MATCHLINE SEE THIS SHEET

219+00 220+00 221+00 222+00 223+00 224+00 225+00 226+00 227+00 228+00

N52°47'08"E
146.64'

WASHBURN ROAD

SP-16

CURVE
L=407.03'
R=700.00'
CH=401.32'
N36° 07' 40"E

WETLAND CONTINUES

100' BUFFER

AREA 28

SW

WETLAND CONTINUES

100' BUFFER

CURVE
L=355.89'
R=700.00'
CH=352.07'
N38° 13' 14"E

N23°39'20"E
1230.74'

MATCHLINE SHEET EL-09

HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 210+00 TO STA. 229+00)

DESIGNED BY CDW
DRAWN BY WJB
REVIEWED BY

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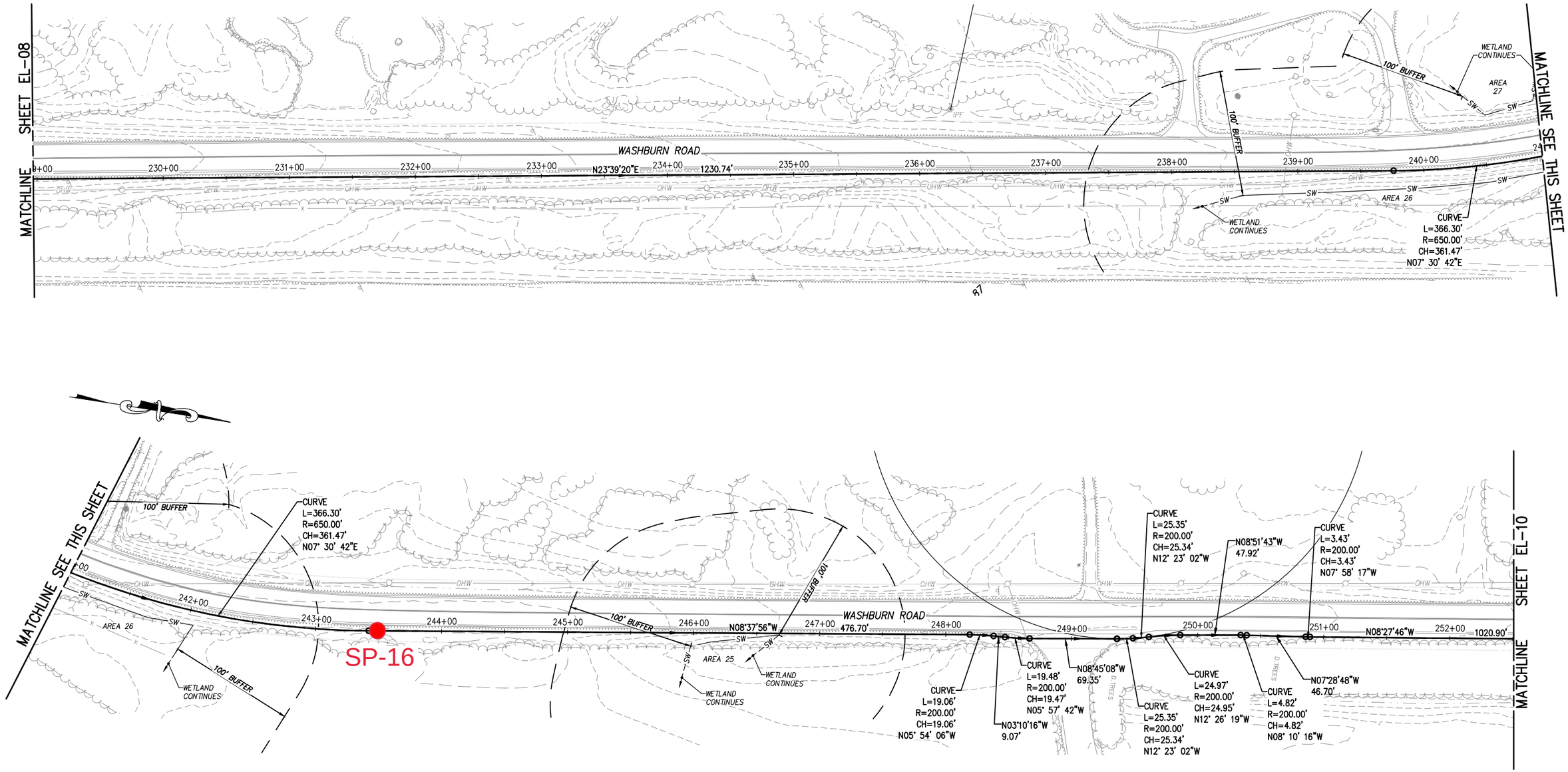
DATE 08/16/22
SCALE 1"=40'
SHEET EL-08



HALF SCALE

PRELIMINARY PLANS
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09/02/22

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REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 229+00 TO STA. 252+50)

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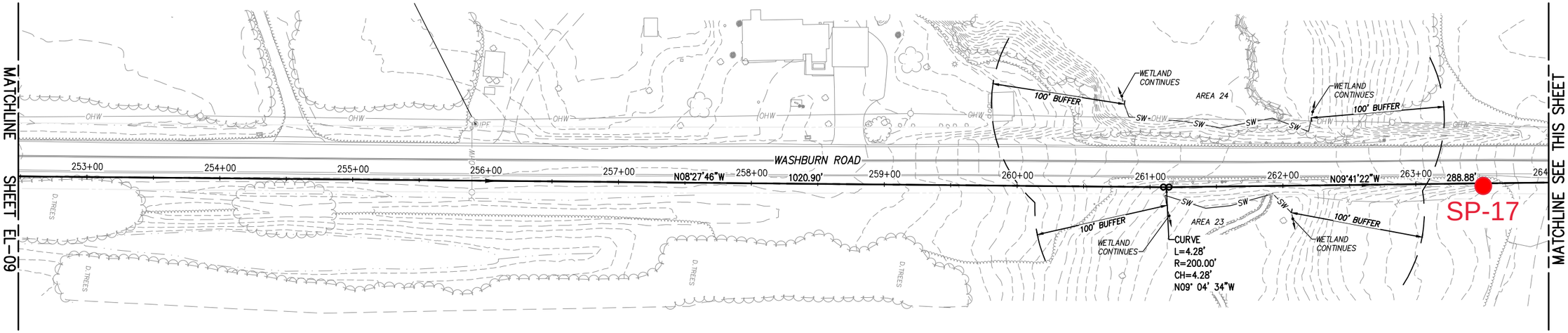
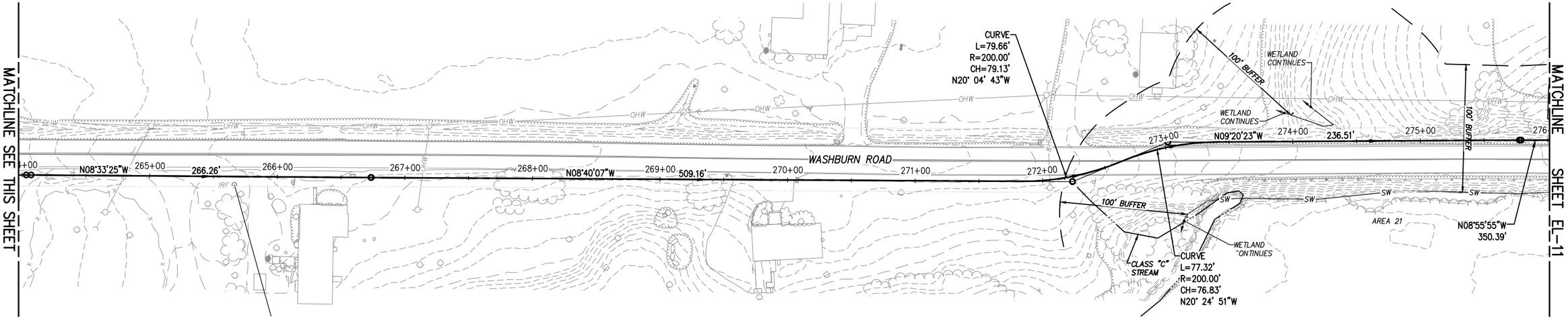
DATE 08/16/22
SCALE 1"=40'
SHEET EL-09





HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 252+50 TO STA. 276+00)

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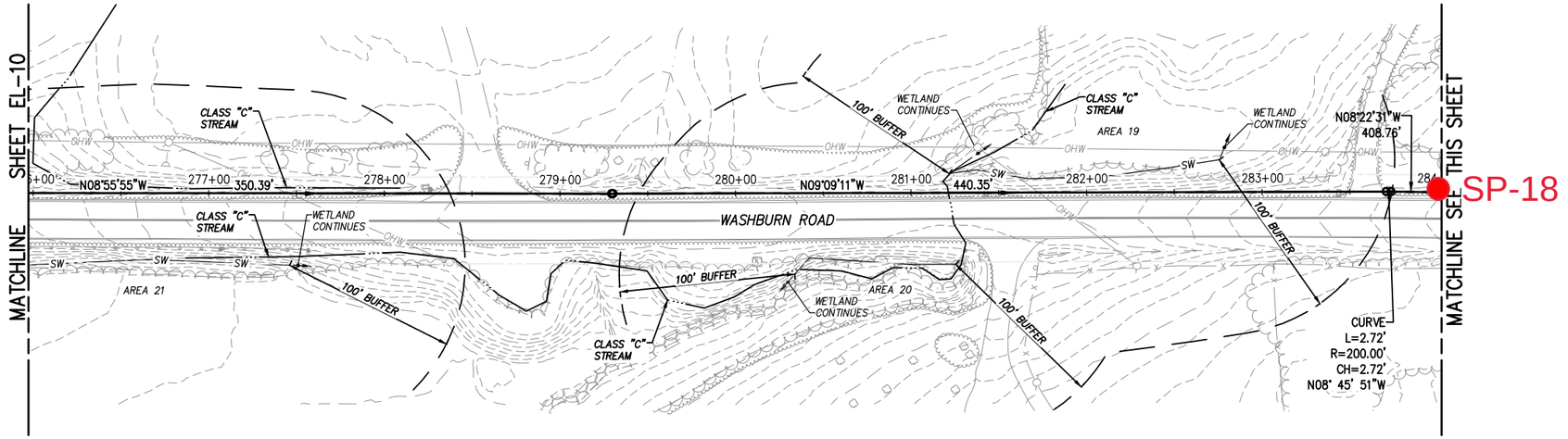
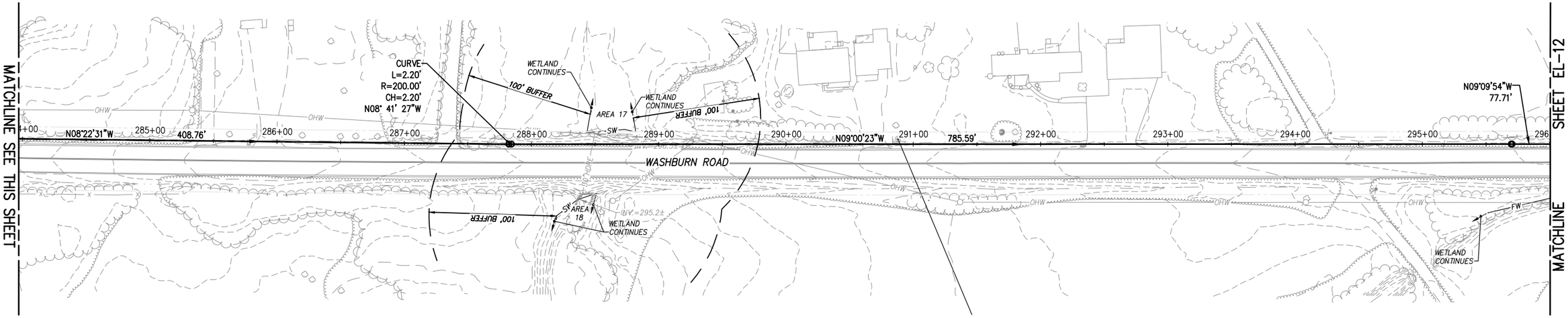
DATE 08/16/22
SCALE 1"=40'
SHEET EL-10





HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 276+00 TO STA. 296+00)

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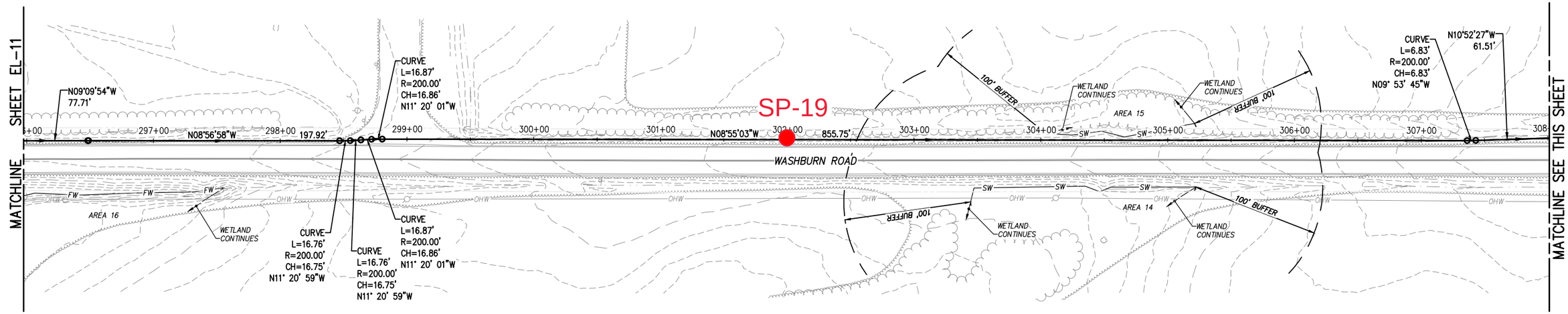
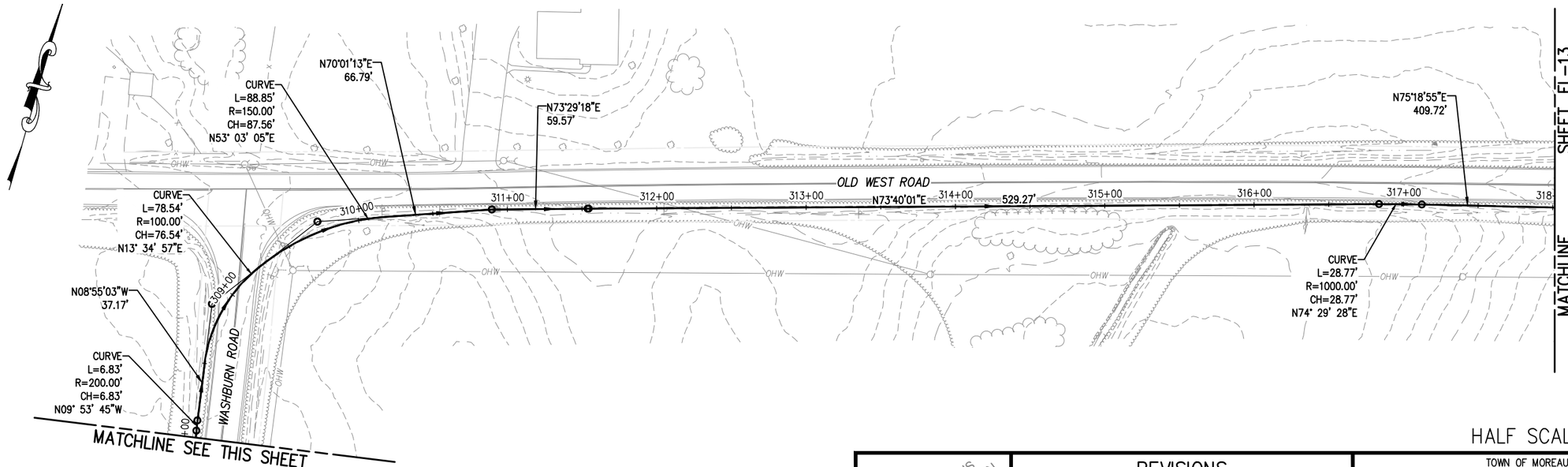
DATE 08/16/22
SCALE 1"=40'
SHEET EL-11





HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 296+00 TO STA. 318+00)

DESIGNED BY CDW
DRAWN BY WJB
REVIEWED BY

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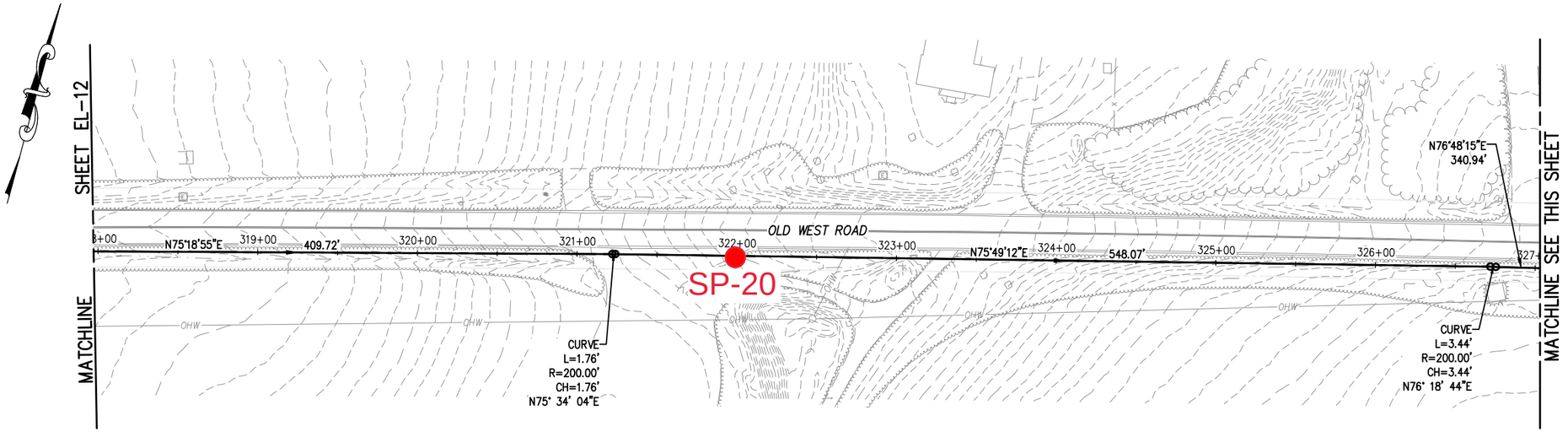
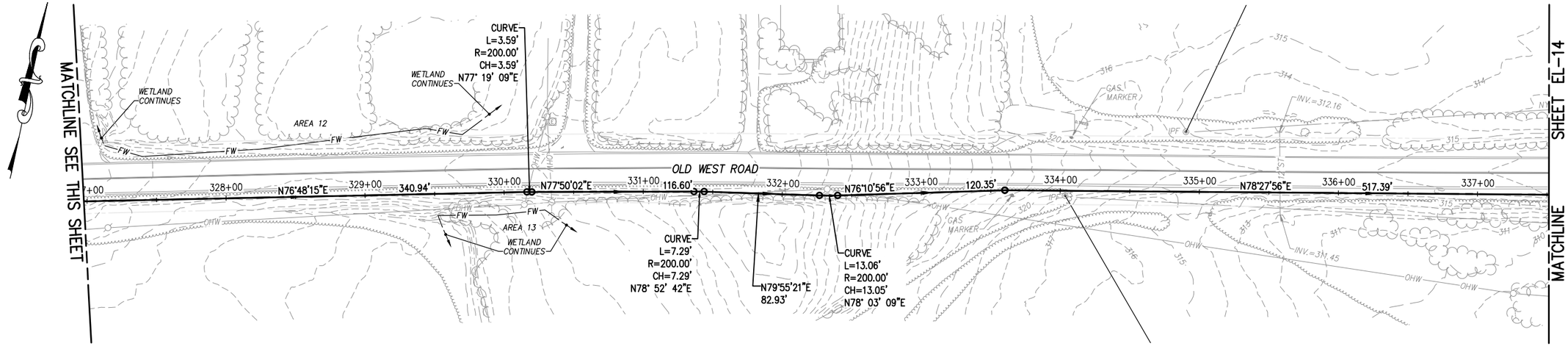
DATE 08/16/22
SCALE 1"=40'
SHEET EL-12





HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 318+00 TO STA. 337+50)

DESIGNED BY CDW
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REVIEWED BY

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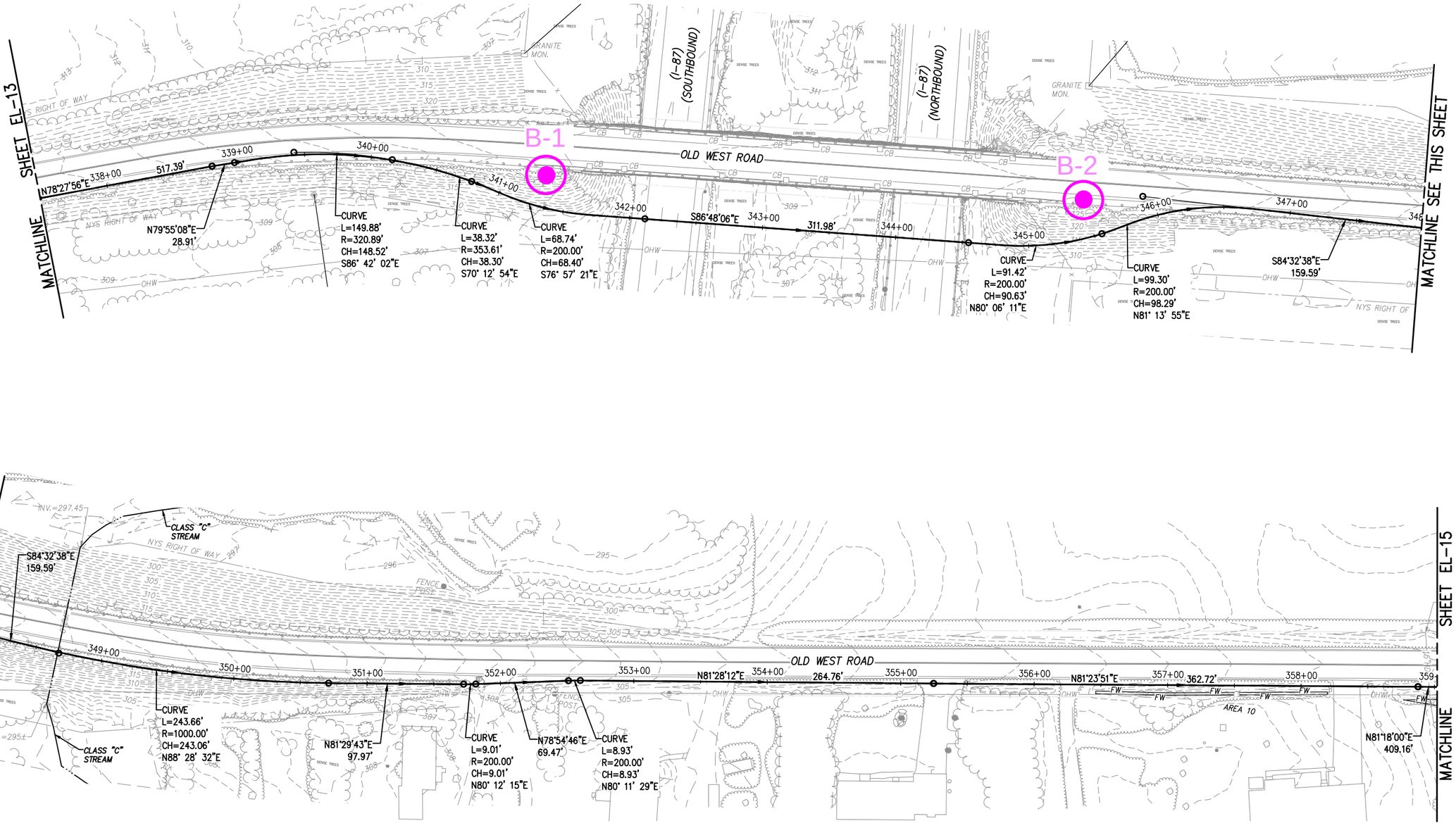
DATE 08/16/22
SCALE 1"=40'
SHEET EL-13



HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 337+50 TO STA. 359+00)

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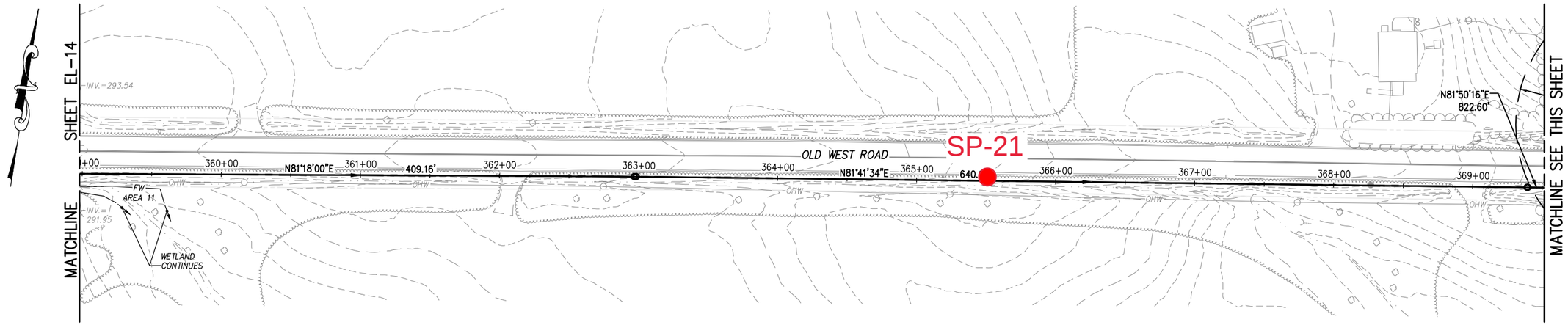
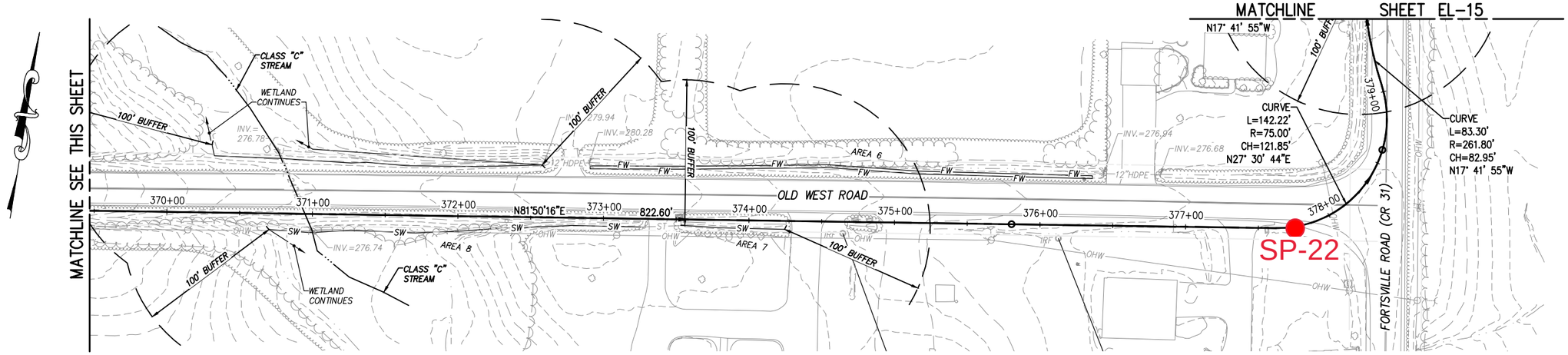
DATE 08/16/22
SCALE 1"=40'
SHEET EL-14





HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK
DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 359+00 TO STA. 379+50)

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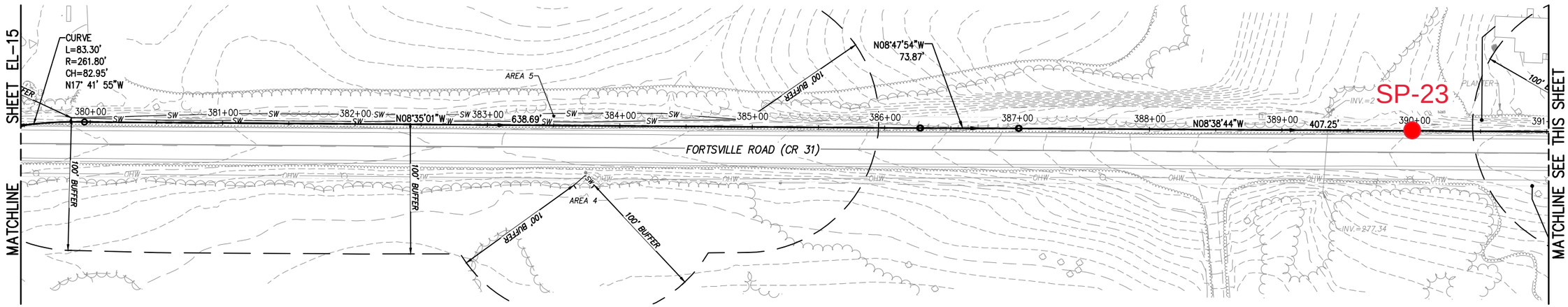
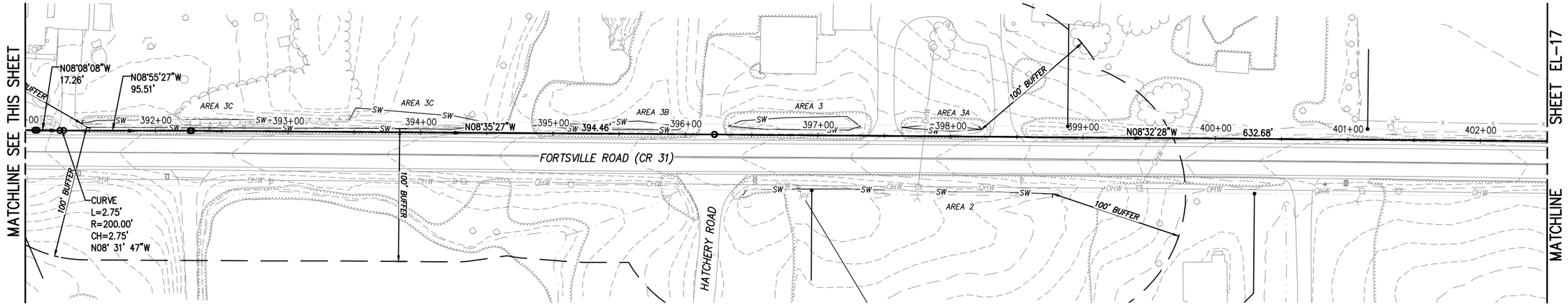
DATE 08/16/22
SCALE 1"=40'
SHEET EL-15





HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK
DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 379+50 TO STA. 402+50)

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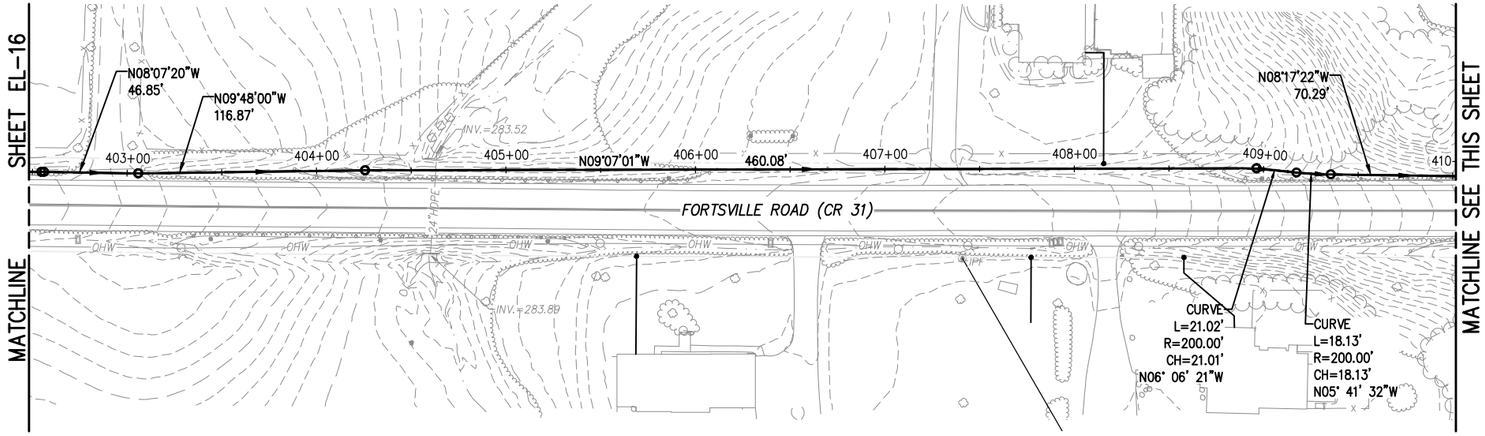
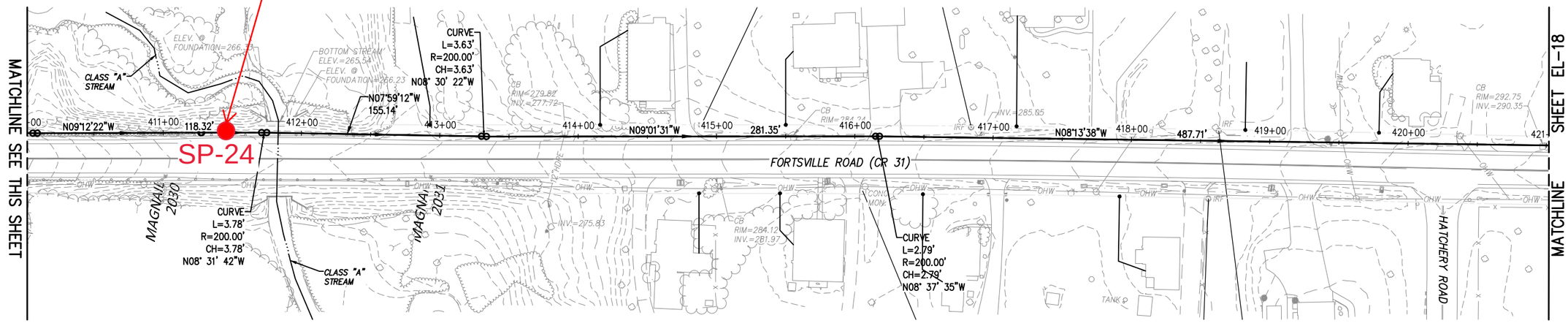
DATE 08/16/22
SCALE 1"=40'
SHEET EL-16



ADVANCE PROBE TO 20' IN THIS LOCATION



HALF SCALE

PRELIMINARY PLANS NOT FOR CONSTRUCTION 09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 402+50 TO STA. 421+00)

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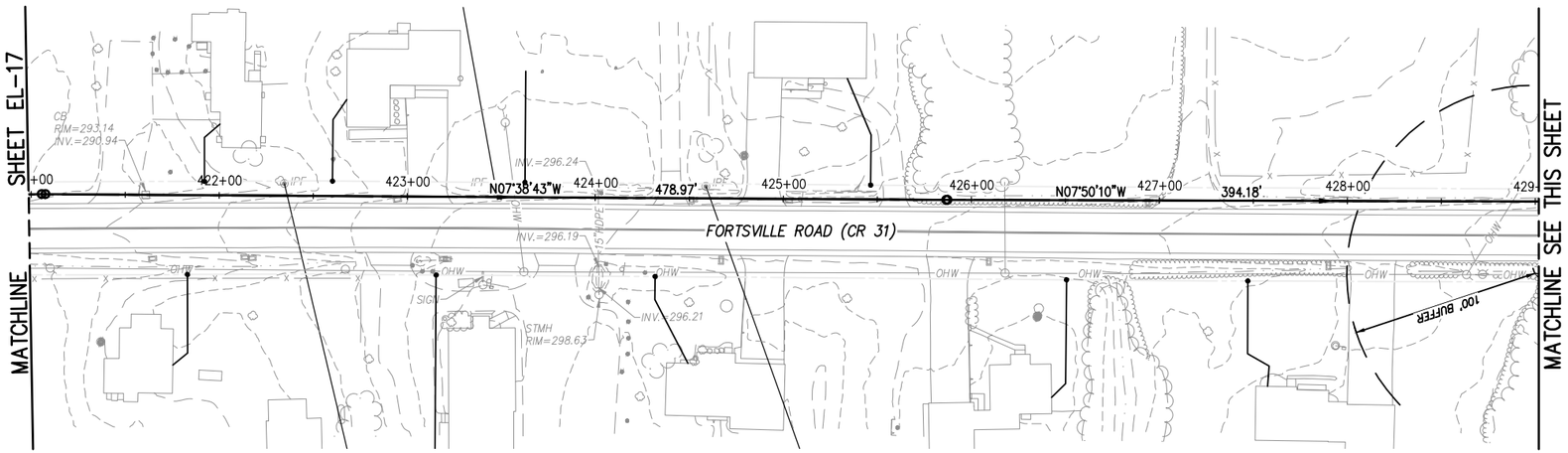
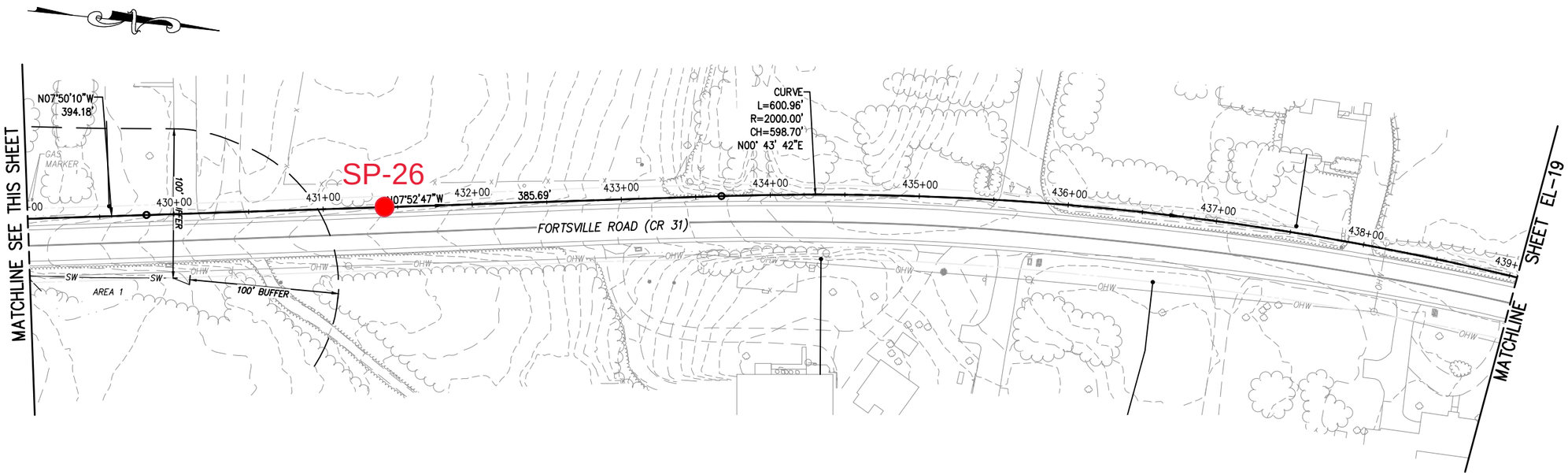
DATE 08/16/22
SCALE 1"=40'
SHEET EL-17





HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK
DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 421+00 TO STA. 439+00)

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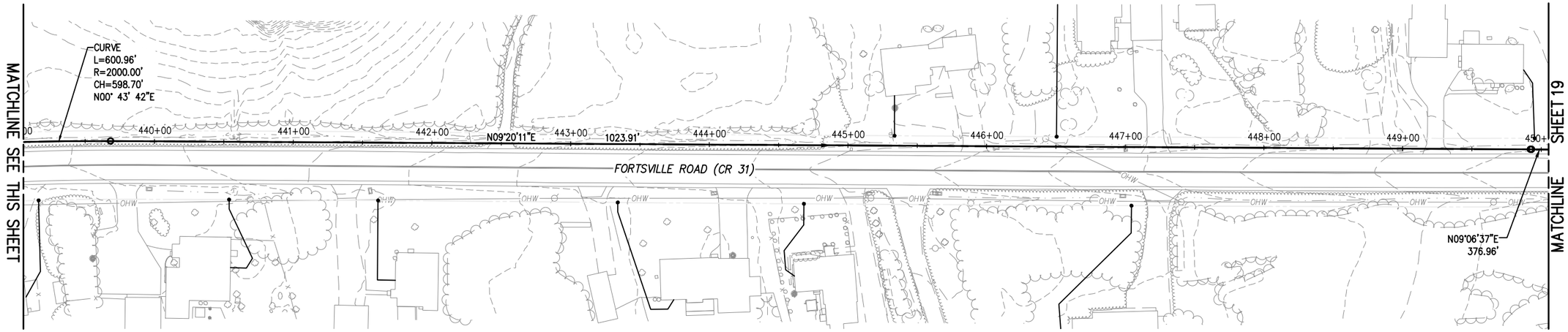
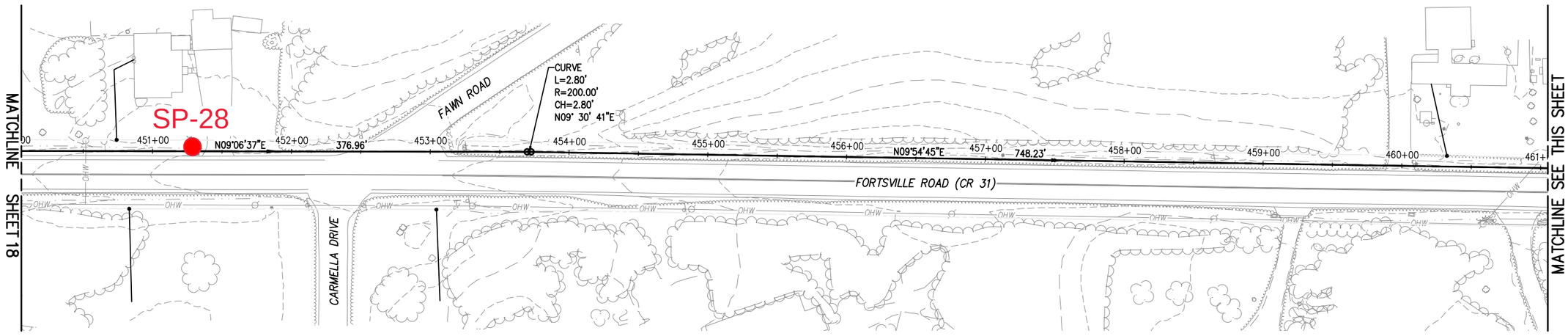
DATE 08/16/22
SCALE 1"=40'
SHEET EL-18





HALF SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 439+00 TO STA. 461+00)

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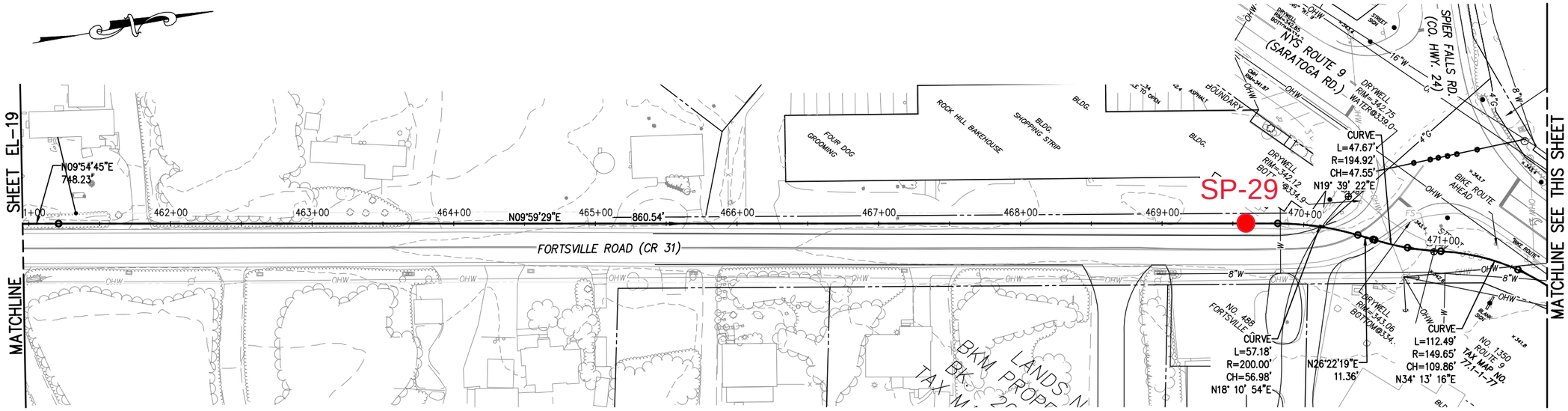
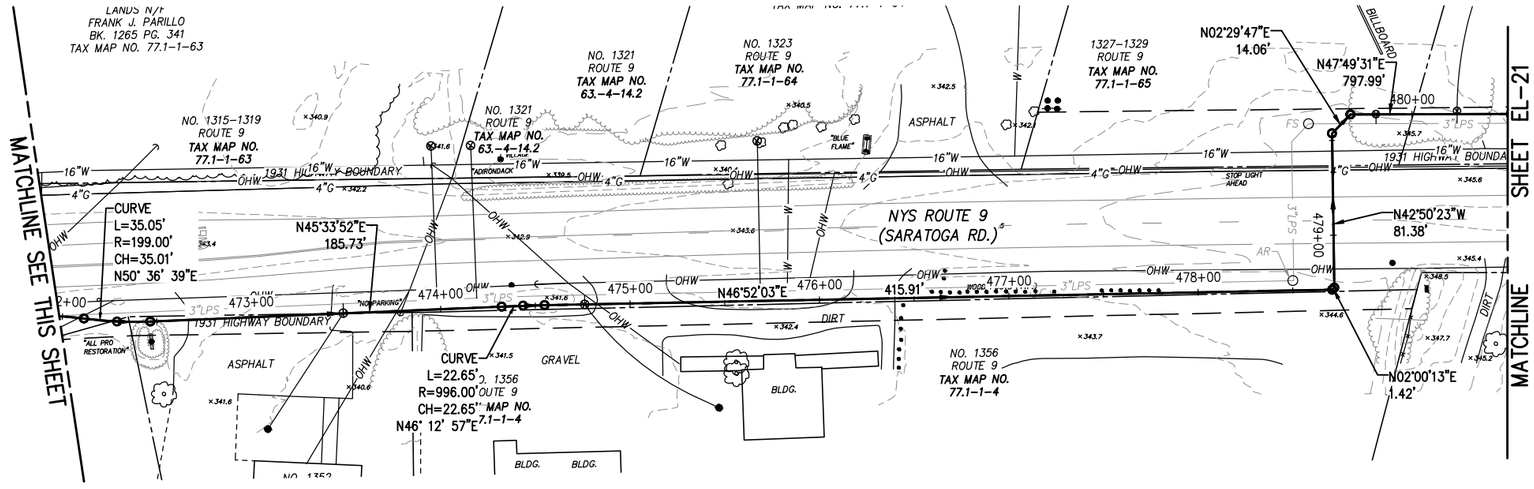
DATE 08/16/22
SCALE 1"=40'
SHEET EL-19





HALF SCALE

PRELIMINARY PLANS NOT FOR CONSTRUCTION 09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 461+00 TO STA. 480+50)

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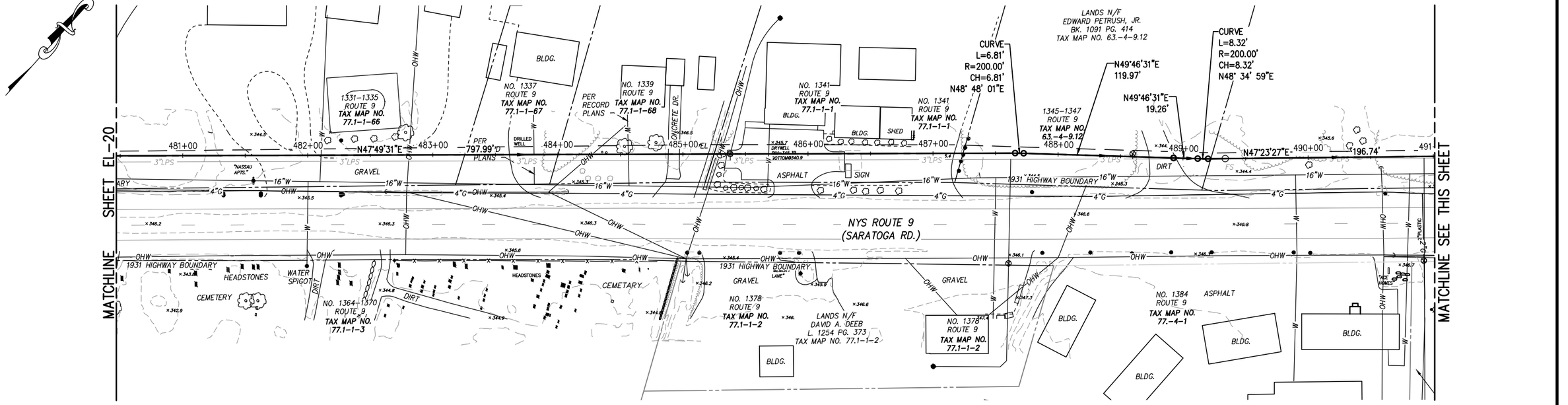
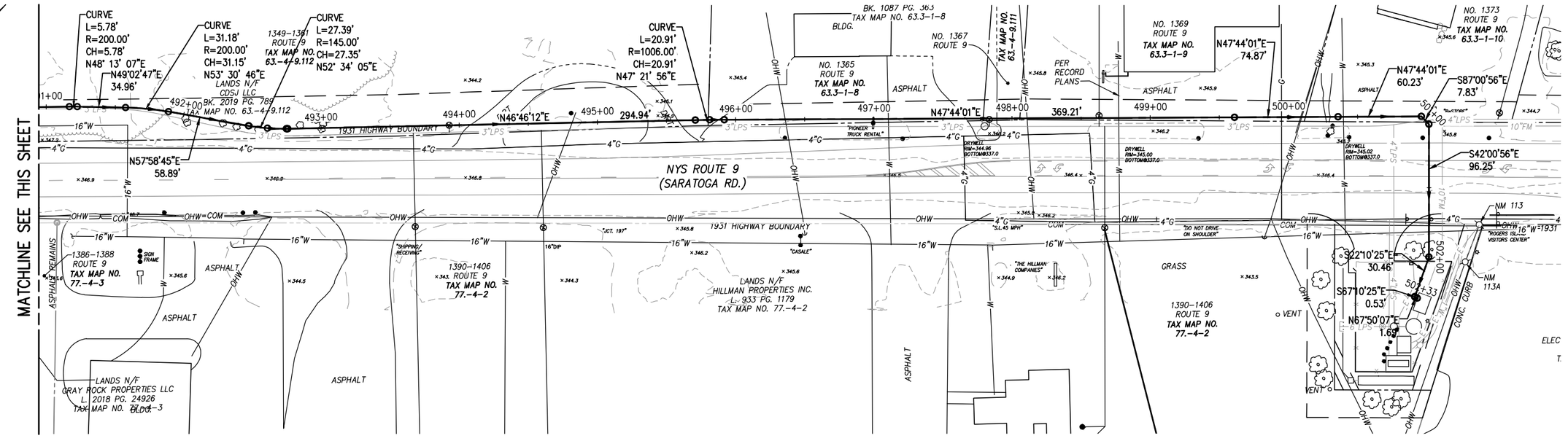
DATE 08/16/22
SCALE 1"=40'
SHEET EL-20





HALF SCALE

PRELIMINARY PLANS NOT FOR CONSTRUCTION 09/02/22

REVISIONS

NO.	DATE	DESCRIPTION	BY

HORIZONTAL SCALE
40 20 0 40 80 120
1" = 40'

TOWN OF MOREAU
SARATOGA COUNTY * NEW YORK

DISTRICT 1 EXTENSION 5
COUNTY FORCEMAIN CONNECTION
EXISTING CONDITIONS AND LAYOUT
(STA. 480+50 TO STA. 502+33)

DESIGNED BY CDW
DRAWN BY WJB
REVIEWED BY

Laberge Group
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SURVEYING PLANNING
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(518) 458-7112 • www.labergegroup.com

DATE 08/16/22
SCALE 1"=40'
SHEET EL-21

ATTACHMENT B

SUBSURFACE INVESTIGATION LOGS

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Report No.: **CD10363D-01-10-22**

Client: **LaBerge Group**

Boring Location: **See Boring Location Plan**

Project: **Subsurface Investigation**
County Forcemain Connection
Moreau & Wilton, New York

Start Date: **9/26/2022** Finish Date: **9/26/2022**

Boring No.: **B-1** Sheet **1** of **2**

Groundwater Observations

Date	Time	Depth	Casing

Coordinates
Latitude
Longitude

Sampler Hammer
Weight: **140** lbs.
Fall: **30** in.
Hammer Type: **Automatic**

Ground Elev.:

Boring Advance By:
NW (3") Casing

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine; m - medium; c - coarse; and - 35-50%; some - 20-35%; little - 10-20%; trace - 0-10%)	Recovery (Inches)
1	CASING	1	0.0	2.0	SS	2 5 11 20		Brown cmf SAND; trace f GRAVEL; trace SILT; trace ORGANIC MATERIAL (roots) (moist, non-plastic)	6
4		2	4.0	6.0	SS	17 22 25 40		Brown cmf SAND; trace mf GRAVEL; trace SILT (wet, non-plastic)	8
9		3	9.0	11.0	SS	13 30 50 25		Brown cmf SAND; trace f GRAVEL; trace SILT (wet, non-plastic)	6
12							12.0		
14		4	14.0	16.0	SS	5 5 5 6		Brown SILT; trace f SAND; trace CLAY (wet, very slightly plastic)	20
19		5	19.0	21.0	SS	10 11 13 15		Grey SILT; little CLAY; trace f SAND (wet, slightly plastic)	6
22							22.0		
24		6	24.0	26.0	SS	13 15 11 10		Grey CLAY; trace SILT (wet, plastic)	16

SS Split Spoon Sample
NX Rock Core
SH Undisturbed Sample (Shelby Tube)
Estimated Groundwater

Drillers: **Robert Drake; Chase Bertrand**

Inspector:

ATL-LOG1 LL CD10363 LABERGE GROUP - MOREAU & WILTON, NEW YORK.GPJ ATL4-08.GDT 10/14/22

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: **B-1** Report No.: **CD10363D-01-10-22** Sheet **2** of **2**

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	RECOVERY (inches)
								f - fine; m - medium; c - course; and - 35-50%; some - 20-35%; little - 10-20%; trace - 0-10%	
26									
27							27.0		
28									
29		7	29.0	31.0	SS	14 5 7 6		Grey f SAND; trace SILT (saturated, non-plastic)	18
30									
31									
32									
33									
34		8	34.0	36.0	SS	5 5 6 7		Grey f SAND; trace CLAY; trace SILT (saturated, very slightly plastic)	12
35									
36									
37									
38									
39		9	39.0	41.0	SS	6 8 4 3		Grey f SAND; little CLAY; trace SILT (wet, slightly plastic)	10
40									
41							41.0	Boring terminated at 41.0 feet.	
42									
43								Notes:	
44								1. Borehole backfilled with on-site soils.	
45									
46									
47									
48									
49									
50									
51									
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58									
59									
60									
61									
62									

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Report No.: **CD10363D-01-10-22**

Client: **LaBerge Group**

Boring Location: **See Boring Location Plan**

Project: **Subsurface Investigation**
County Forcemain Connection
Moreau & Wilton, New York

Start Date: **9/27/2022** Finish Date: **9/27/2022**

Boring No.: **B-2** Sheet **1** of **2**

Groundwater Observations

Date	Time	Depth	Casing

Coordinates
Latitude
Longitude

Sampler Hammer
Weight: **140** lbs.
Fall: **30** in.
Hammer Type: **Automatic**

Ground Elev.:

Boring Advance By:
NW (3") Casing

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine; m - medium; c - coarse; and - 35-50%; some - 20-35%; little - 10-20%; trace - 0-10%)	Recovery (Inches)
1	CASING	1	0.0	2.0	SS	WH 3 5 5		Brown f SAND; trace mf GRAVEL; trace SILT; trace ORGANIC MATERIAL (roots) (moist, non-plastic)	6
4		2	4.0	6.0	SS	6 6 12 20		Brown cmf SAND; trace SILT (moist, non-plastic)	12
7							7.0		
9		3	9.0	11.0	SS	12 8 13 13		Brown SILT; trace CLAY (wet, very slightly plastic)	12
12							12.0		
14		4	14.0	16.0	SS	12 15 17 20		Brown and Grey f SAND; little CLAY; trace SILT (moist, slightly plastic)	16
17							17.0		
19		5	19.0	21.0	SS	18 24 33 35		Brown f SAND; trace f GRAVEL; trace SILT (moist, non-plastic)	18
24		6	24.0	26.0	SS	10 13 12 11		Similar Soil (moist, non-plastic)	8

SS Split Spoon Sample
NX Rock Core
SH Undisturbed Sample (Shelby Tube)
Estimated Groundwater

Drillers: **Robert Drake; Chase Bertrand**

Inspector:

ATL-LOG1 LL CD10363 LABERGE GROUP - MOREAU & WILTON, NEW YORK.GPJ ATL4-08.GDT 10/14/22

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: **B-2** Report No.: **CD10363D-01-10-22** Sheet **2** of **2**

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine, m - medium, c - course; and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%)	RECOVERY (inches)
26									
27							27.0		
28									
29		7	29.0	31.0	SS	2 2 2 2		Grey CLAY; little SILT (moist, plastic)	24
30									
31									
32									
33									
34		8	34.0	36.0	SS	3 9 9 10		Grey CLAY; trace SILT (wet, plastic)	20
35									
36									
37									
38									
39		9	39.0	41.0	SS	16 21 18 22		Similar Soil (wet, plastic)	20
40									
41							41.0	Boring terminated at 41.0 feet.	
42									
43								Notes:	
44								1. Borehole backfilled with on-site soils.	
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									
57									
58									
59									
60									
61									
62									

ATTACHMENT C

TABLE OF PROBE TERMINATION DEPTHS

Table of Probe Termination Depths

LaBerge Group

County Forcemain Connection - Moreau & Wilton, New York

CD10363D-01-10-22

Probe ID	Depth to Refusal (ft.)
SP-1	10.0 (No Refusal)
SP-2	10.0 (No Refusal)
SP-3	10.0 (No Refusal)
SP-4	10.0 (No Refusal)
SP-5	10.0 (No Refusal)
SP-6	10.0 (No Refusal)
SP-7	10.0 (No Refusal)
SP-8	10.0 (No Refusal)
SP-9	10.0 (No Refusal)
SP-10	10.0 (No Refusal)
SP-11	10.0 (No Refusal)
SP-12	10.0 (No Refusal)
SP-13	10.0 (No Refusal)
SP-14	10.0 (No Refusal)
SP-15	10.0 (No Refusal)
SP-16	10.0 (No Refusal)
SP-17	10.0 (No Refusal)
SP-18	10.0 (No Refusal)
SP-19	10.0 (No Refusal)
SP-20	10.0 (No Refusal)
SP-21	10.0 (No Refusal)
SP-22	10.0 (No Refusal)
SP-23	10.0 (No Refusal)
SP-24	20.0 (No Refusal)
SP-25	10.0 (No Refusal)
SP-26	10.0 (No Refusal)
SP-27	10.0 (No Refusal)

APPENDIX E: FEMA MAPS

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas. The community map repository should be consulted for possible updated flood hazard information prior to use of this map for property purchase or construction purposes.

Coastal base flood elevations apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NVGD), and include the effects of wave action; these elevations may also differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

Areas of special flood hazard (100-year flood) include Zones A, AE, AH, AO, A99, V, and VE.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Floodway widths are provided in the Flood Insurance Study Report.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

For community map revision history prior to countywide mapping, see section 6.0 of the Flood Insurance Study Report.

For adjoining map panels see separately printed Map Index.

NOTE: The coordinate system used for the production of this Flood Insurance Rate Map (FIRM) is Universal Transverse Mercator (UTM), North American Datum of 1927 (NAD27), Clarke 1866 spheroid. Corner coordinates shown on the FIRM are in latitude and longitude referenced to the Transverse Mercator projection, NAD27. Differences in the datum and spheroid used in the production of FIRMs for adjacent counties may result in slight positional differences in map features at the county boundaries. These differences do not affect the accuracy of the information shown on the FIRM.

ATTENTION: Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, contact the National Geodetic Survey at the following address:

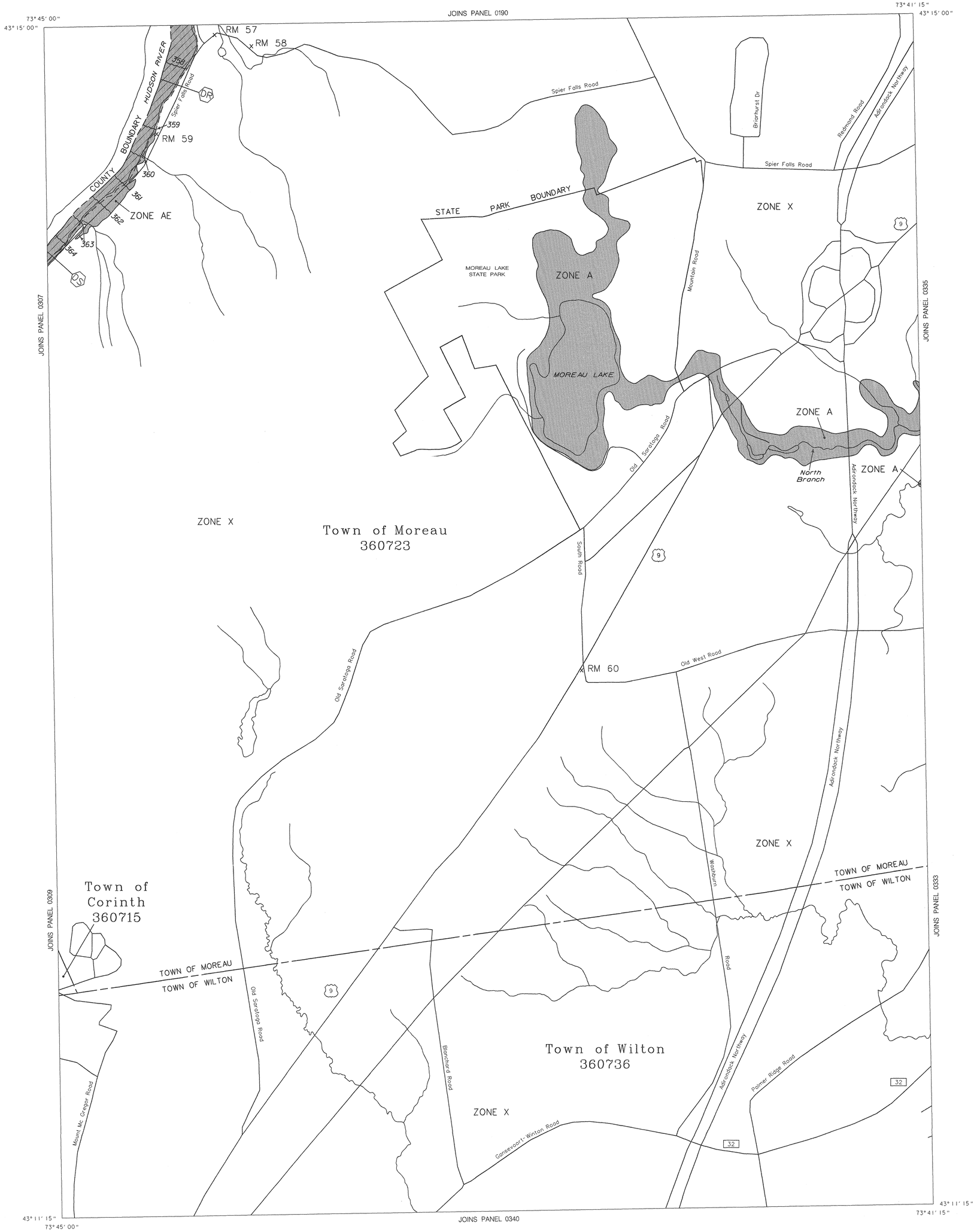
Vertical Network Branch, N/CG13
National Geodetic Survey, NOAA
Silver Spring Metro Center 3
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

Base Map Source: 1:100,000 USGS Digital Line Graphs. Map users should be aware that this base map source causes road alignment distortions at and near road intersections. These alignment problems have been corrected in the vicinity of identified floodplains.

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FT. (NGVD)[1]	DESCRIPTION OF LOCATION
RM 57	364.95	Standard tablet stamped TT.56-D-1934-365. in concrete post, approximately 1.4 miles northeast of Spier Falls Hydro Station on Spier Falls Road, along east bank of Hudson River, approximately 35 feet west and approximately 30 feet north of dirt road at foot of mountain, approximately 173 feet west of spring along Spier Falls Road. In cleared field and approximately 8 feet west of 18-inch Apple tree stump.
RM 58	422.77	Chiseled X on bolt of west leg on west side of dual transmission power pole, approximately 240 feet north of centerline of Spier Falls Road and approximately 2.0 miles northeast of Spier Falls Dam.
RM 59	375.67	Lag bolt set in pole NYT 49, approximately 20 feet west of Spier Falls Road and approximately 1.0 mile north of Spier Falls Dam.
RM 60	365.59	Chiseled square cut in concrete headwall at west end of cast iron pipe culvert, located approximately 80 feet southwest of intersection of South Road and U.S. Route 9.

[1]National Geodetic Vertical Datum of 1929.



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A — No base flood elevations determined.
- ZONE AE — Base flood elevations determined.
- ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99 — To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE — Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE X — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 100-year flood.

OTHER AREAS

- ZONE X — Areas determined to be outside 500-year floodplain.
- ZONE D — Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS*

Identified 1983 | Identified 1990 | Otherwise Protected Areas

*Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain Boundary
- Floodway Boundary
- Zone D Boundary
- Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.
- 513 — Base Flood Elevation Line; Elevation in Feet**
- A — A — Cross Section Line
- (EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone**
- RM7x — Elevation Reference Mark
- M1.5 — River Mile

**Referenced to the National Geodetic Vertical Datum of 1929

MAP REPOSITORY

Refer to Repository Listing on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

AUGUST 16, 1995

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

Refer to the FLOOD INSURANCE RATE MAP effective date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE
1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SARATOGA COUNTY, NEW YORK (ALL JURISDICTIONS)

PANEL 330 OF 693

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CORINTH, TOWN OF	360715	0330	E
MOREAU, TOWN OF	360723	0330	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
36091C0330 E

EFFECTIVE DATE:
AUGUST 16, 1995

Federal Emergency Management Agency

NOTES TO USERS

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Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Floodway widths are provided in the Flood Insurance Study Report.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

For community map revision history prior to countywide mapping, see section 6.0 of the Flood Insurance Study Report.

For adjoining map panels see separately printed Map Index.

NOTE: The coordinate system used for the production of this Flood Insurance Rate Map (FIRM) is Universal Transverse Mercator (UTM), North American Datum of 1927 (NAD27), Clarke 1866 spheroid. Corner coordinates shown on the FIRM are in latitude and longitude referenced to the Transverse Mercator projection, NAD27. Differences in the datum and spheroid used in the production of FIRMs for adjacent counties may result in slight positional differences in map features at the county boundaries. These differences do not affect the accuracy of the information shown on the FIRM.

ATTENTION: Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, contact the National Geodetic Survey at the following address:

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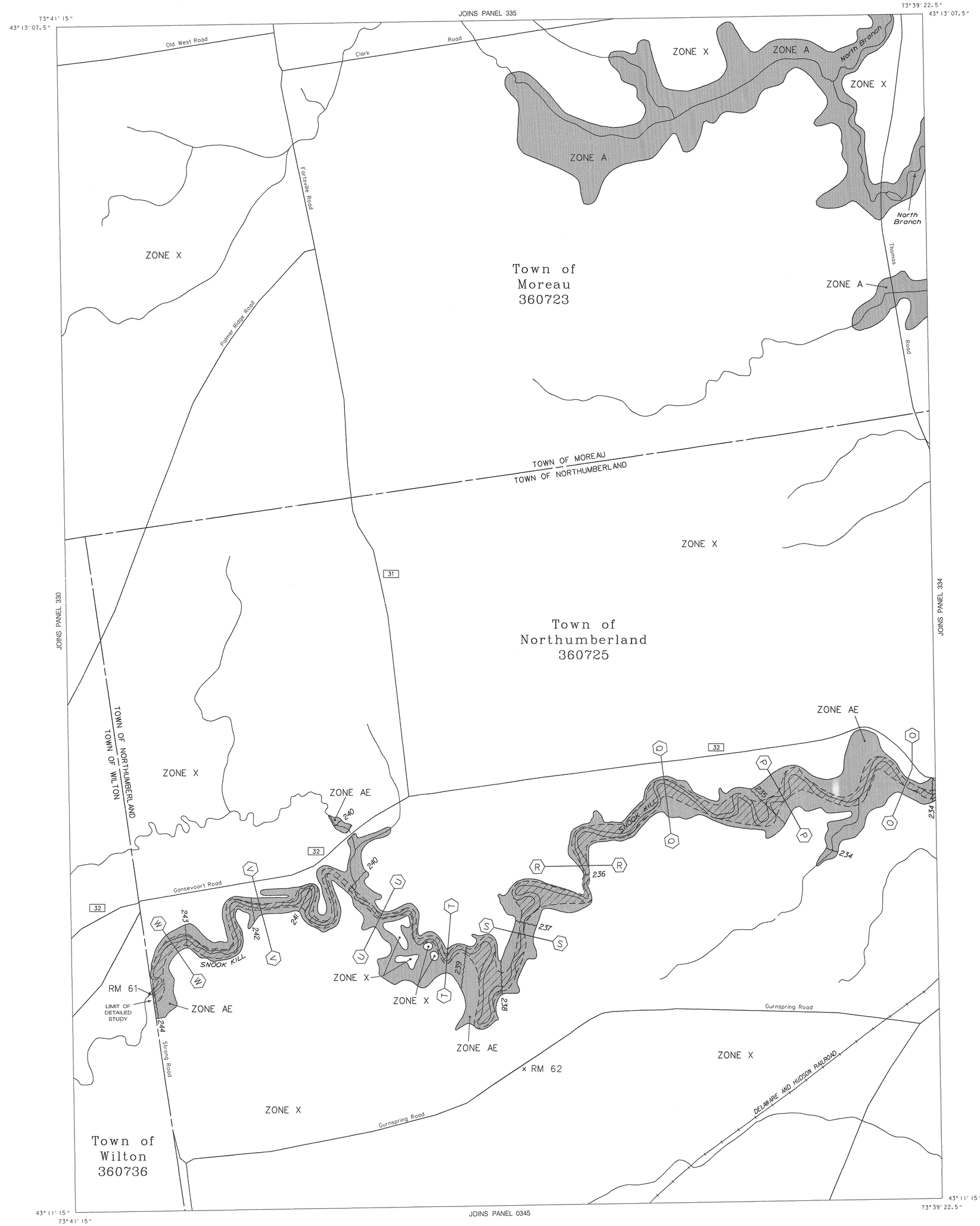
National Geodetic Survey, NOAA
Silver Spring Metro Center 3
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

Base Map Source: 1:100,000 USGS Digital Line Graphs. Map users should be aware that this base map source causes road alignment distortions at and near road intersections. These alignment problems have been corrected in the vicinity of identified floodplains.

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FT. (NGVD)[1]	DESCRIPTION OF LOCATION
RM 61	243.20	Square cut set on top of the concrete bridge abutment located on south side of Snook Kill and east side of Strong Road, approximately 0.1 mile south of Gansevoort-Strong Road intersection.
RM 62	253.04	Railroad spike set 0.2 feet above ground in utility pole No. 6. Pole is located on south side of Gurnspring Road, approximately 0.5 mile east of Strong Road-Gurnspring Road intersection.

[1]National Geodetic Vertical Datum of 1929.



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

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- ZONE V — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE — Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE X — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 100-year flood.

OTHER AREAS

- ZONE X — Areas determined to be outside 500-year floodplain.
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Identified 1983 | Identified 1990 | Otherwise Protected Areas

*Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

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- Zone D Boundary
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- 513 — Base Flood Elevation Line; Elevation in Feet**
- A — A — Cross Section Line
- (EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone**
- RM7x — Elevation Reference Mark
- •M1.5 — River Mile

**Referenced to the National Geodetic Vertical Datum of 1929

MAP REPOSITORY

Refer to Repository Listing on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

AUGUST 16, 1995

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

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APPROXIMATE SCALE
500 0 500 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SARATOGA COUNTY, NEW YORK (ALL JURISDICTIONS)

PANEL 333 OF 693

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MOREAU, TOWN OF	360723	0333	E
NORTHUMBERLAND, TOWN OF	360725	0333	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
36091C0333 E

EFFECTIVE DATE:
AUGUST 16, 1995

Federal Emergency Management Agency

NOTES TO USERS

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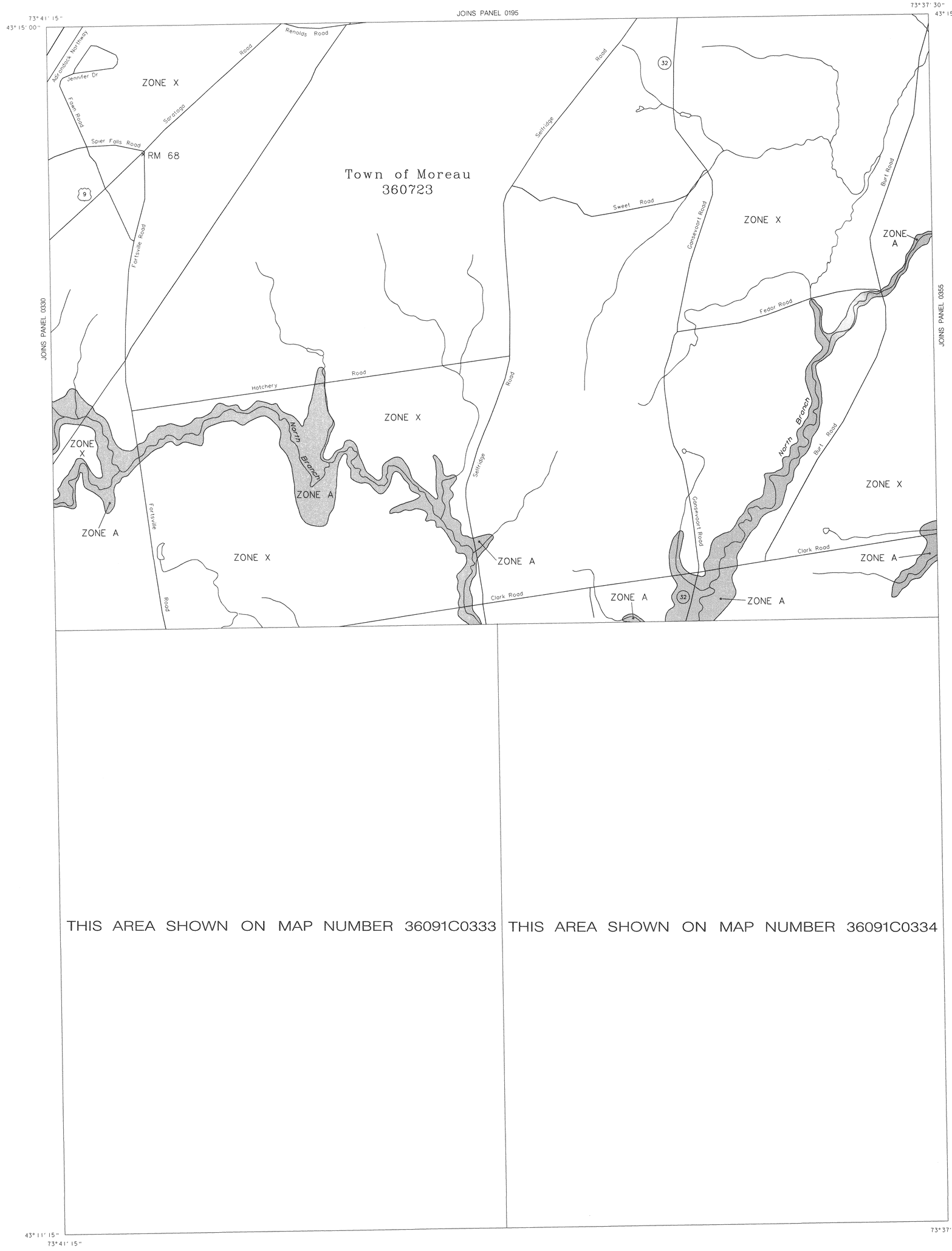
National Geodetic Survey, NOAA
Silver Spring Metro Center 3
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

Base Map Source: 1:100,000 USGS Digital Line Graphs. Map users should be aware that this base map source causes road alignment distortions at and near road intersections. These alignment problems have been corrected in the vicinity of identified floodplains.

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FT. (NGVD)[1]	DESCRIPTION OF LOCATION
RM 68	343.52	Standard USGS tablet stamped TR53 D 1934 344 set in concrete post located approximately 10 feet east of centerline of U.S. Route 9 approximately 36 feet south of intersection of Fortsville Road and U.S. Route 9.

[1]National Geodetic Vertical Datum of 1929.



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A — No base flood elevations determined.
- ZONE AE — Base flood elevations determined.
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- ZONE A99 — To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE — Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE X — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 100-year flood.

OTHER AREAS

- ZONE X — Areas determined to be outside 500-year floodplain.
- ZONE D — Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS*

Identified 1983 | Identified 1990 | Otherwise Protected Areas

*Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain Boundary
- Floodway Boundary
- Zone D Boundary
- Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.
- 513 — Base Flood Elevation Line; Elevation in Feet**
- A — A — Cross Section Line
- (EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone**
- RM7 x — Elevation Reference Mark
- M1.5 — River Mile

**Referenced to the National Geodetic Vertical Datum of 1929

MAP REPOSITORY

Refer to Repository Listing on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

AUGUST 16, 1995

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

Refer to the FLOOD INSURANCE RATE MAP effective date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE
1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SARATOGA COUNTY, NEW YORK (ALL JURISDICTIONS)

PANEL 335 OF 693

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MOREAU, TOWN OF	360723	0335	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
36091C0335 E

EFFECTIVE DATE:
AUGUST 16, 1995

Federal Emergency Management Agency

APPENDIX F: PRELIMINARY OPINION OF PROBABLE COSTS

Moreau District 1, Extension 5
City of Glens Falls Treatment - Alternative 2
Preliminary Opinion of Probable Costs
October 2022

Description	QTY	UNIT	UNIT COST	TOTAL
Air Release Manholes	12	EA	$15,150.00	$181,800.00
Flushing Stations	15	EA	$12,250.00	$183,750.00
Type "D" Bedding and Backfill	15	CY	$115.00	$1,725.00
10" Sewer Forcemain (Directional Drill)	9,250	LF	$125.00	$1,156,250.00
10" Pressurized Sewer, through Rock	100	LF	$175.00	$17,500.00
Equalization Tank - Rt. 9 Pump Station	1	EA	$350,000.00	$350,000.00
Equalization Tank - MIP	1	EA	$465,000.00	$465,000.00
Upgraded Pumps - Industrial Park	1	LS	$440,000.00	$440,000.00
Generator MIP	1	EA	$115,000.00	$115,000.00
Workzone Traffic Control	1	LS	$60,000.00	$60,000.00
			CONSTRUCTION SUBTOTAL*	**$2,971,025.00**
Reserve Capacity Purchase	200000	GPD	$4.80	$960,000.00
			RESERVE CAPACITY SUBTOTAL	**$960,000.00**
Construction Costs Contingency			20%	$594,000.00
Geotechnical				$19,000.00
Cultural Resources/Ecological				$25,000.00
Permitting				$40,000.00
Survey Mapping				$75,000.00
Engineering				$200,000.00
Bidding and Award				$55,000.00
Construction Administration (6 Months)*				$90,000.00
Construction Observation (6 Months)*				$165,000.00
Legal Counsel				$25,000.00
Bond Counsel				$25,000.00
Fiscal Services				$25,000.00
			NON-CONSTRUCTION SUBTOTAL	**$1,338,000.00**
Land Acquisition Costs				$120,000.00
Survey, Easement Maps & Descriptions (Assume 20 Maps)				$90,000.00
Legal Services For Land Acquisition				$20,000.00
			LAND ACQUISITION SUBTOTAL	**$230,000.00**
			TOTAL	$5,499,025.00
			SAY TOTAL	**$5,500,000.00**

*Assumes construction during 2025

Moreau District 1, Extension 5
County Forcemain Connection - Alternatives 3 & 4
Preliminary Opinion of Probable Costs
October 2022

Description	QTY	UNIT	UNIT COST	TOTAL
Forcemain to Wilton				
Air Release Manholes	9	EA	$13,000.00	$117,000.00
Flushing Stations	22	EA	$10,500.00	$231,000.00
Type “D” Bedding and Backfill	100	CY	$100.00	$10,000.00
10” Sewer Forcemain (Directional Drill)	30,000	LF	$105.00	$3,150,000.00
10” Sewer Forcemain, through Rock	100	LF	$150.00	$15,000.00
20" Sleeve Under I-87	770	LF	$250.00	$192,500.00
Workzone Traffic Control	1	LS	$80,000.00	$80,000.00
			Forcemain to Wilton Subtotal	**$3,795,500.00**
Central (Route 9) Pump Station Improvements				
Equalization Tank	1	LS	$300,000.00	$300,000.00
Lift Station Site Piping Modifications	1	LS	$50,000.00	$50,000.00
Pump Impeller Upgrades	1	LS	$15,000.00	$15,000.00
Odor Control System	1	LS	$50,000.00	$50,000.00
			Central (Route 9) Pump Station Improvements Subtotal	**$415,000.00**
Bluebird Terrace Improvements				
Connection Manhole	1	EA	$10,000.00	$10,000.00
Piping & Valves	1	LS	$35,000.00	$35,000.00
			Bluebird Terrace Improvements Subtotal	**$45,000.00**
			Construction Subtotal	$4,255,500.00
			Construction Contingency Budget (20%)	$851,100.00
Legal & Fiscal				
Legal Costs	1	LS	$25,000.00	$25,000.00
Fiscal Advisor Costs	1	LS	$25,000.00	$25,000.00
			Total	$5,156,600.00
			Say Total	**$5,200,000.00**
			Less SAM Grant	$500,000.00
			TOTAL FINANCING NEEDED	**$4,700,000.00**

APPENDIX G: ESTIMATED FIRST YEAR USER COSTS

User Rates - Map, Plan & Report Rates NO LONGER APPLICABLE			Market Rate 5% Financing			Hardship 0% Financing			Hardship 0% Financing with Remaining NYWIIA		
Debt Service	Assessed Value (per $1,000 of AV)	$6.78	Debt Service	Assessed Value (per $1,000 of AV)	$9.02	Debt Service	Assessed Value (per $1,000 of AV)	$6.93	Debt Service	Assessed Value (per $1,000 of AV)	$6.64
	Acreage Rate (per acre)	$74.77		Acreage Rate (per acre)	$119.46		Acreage Rate (per acre)	$91.76		Acreage Rate (per acre)	$87.88
Treatment O&M	O&M (per $1,000 of AV)	$1.22	Treatment O&M	O&M (per $1,000 of AV)	$1.02	Treatment O&M	O&M (per $1,000 of AV)	$1.02	Treatment O&M	O&M (per $1,000 of AV)	$1.02
	Use Rate (per 1,000 gallons)	$4.61		Use Rate (per 1,000 gallons)	$5.04		Use Rate (per 1,000 gallons)	$5.04		Use Rate (per 1,000 gallons)	$5.04

						Ad Valorem Method Map, Plan & Report					Flow Based Treatment Non-Consolidated District					Flow Based Treatment Non-Consolidated District					Flow Based Treatment Non-Consolidated District				
TAX MAP ID	ADDRESS	OWNER	2021 Assessed Value	Acreage	2019 WATER USE (Gallons)	Debt Service 90% AV	Debt Service 10% AC	O&M - AV	USE - AV	TOTAL	Debt Service 90% AV4	Debt Service 10% AC5	O&M - AV6	USE - AV7	TOTAL8	Debt Service 90% AV43	Debt Service 10% AC54	O&M - AV65	USE - AV76	TOTAL87	Debt Service 90% AV432	Debt Service 10% AC543	O&M - AV654	USE - AV765	TOTAL876
63.3-1-21.22	ROUTE 9	ROGGE, DAVID D	$25,000	0.3	0	$170	$25	$31	$0	$225	$226	$39	$26	$0	$290	$173	$30	$26	$0	$229	$166	$29	$26	$0	$221
50.-3-4.1	116 BLUEBIRD RD	CANNONE VENTURES INC	$1,035,900	6.4	2,230,000	$7,023	$476	$1,264	$10,280	$19,044	$9,344	$761	$1,057	$11,239	$22,401	$7,179	$585	$1,057	$11,239	$20,059	$6,878	$560	$1,057	$11,239	$19,734
76.-3-20	1255 ROUTE 9	STATE OF NEW YORK[1]	$309,000	3.5	229,300	$2,095	$258	$0	$1,057	$3,410	$2,787	$412	$315	$1,156	$4,670	$2,141	$317	$315	$1,156	$3,929	$2,052	$303	$315	$1,156	$3,826
76.-3-91	1265 ROUTE 9	BCR ROUTE 9 LLC	$275,500	5.0	0	$1,868	$374	$336	$0	$2,578	$2,485	$597	$281	$0	$3,363	$1,909	$459	$281	$0	$2,649	$1,829	$439	$281	$0	$2,550
76.-3-90	1267 ROUTE 9	MUNTER LAND HOLDINGS LLC	$385,500	12.0	0	$2,614	$896	$470	$0	$3,980	$3,477	$1,432	$393	$0	$5,303	$2,672	$1,100	$393	$0	$4,165	$2,560	$1,054	$393	$0	$4,007
77.1-1-43.1	1269-1275 ROUTE 9	KILMER, JANE D	$346,000	9.8	0	$2,346	$735	$422	$0	$3,503	$3,121	$1,174	$353	$0	$4,648	$2,398	$902	$353	$0	$3,653	$2,297	$864	$353	$0	$3,514
76.-3-22	1270-1272 ROUTE 9	NAJA, JOHN A	$100,000	2.3	0	$678	$168	$122	$0	$968	$902	$269	$102	$0	$1,273	$693	$206	$102	$0	$1,001	$664	$198	$102	$0	$964
77.1-1-79	1277-1283 ROUTE 9	FINKE ENTERPRISES LLC	$600,000	2.3	28,430	$4,068	$168	$732	$131	$5,099	$5,412	$269	$612	$143	$6,436	$4,158	$206	$612	$143	$5,120	$3,984	$198	$612	$143	$4,937
76.-3-21.2	1280 ROUTE 9	GUTHEIL, HARRY G	$8,700	0.9	21,730	$59	$64	$11	$100	$234	$78	$103	$9	$110	$300	$60	$79	$9	$110	$258	$58	$76	$9	$110	$252
77.1-1-74	1284 ROUTE 9	MACS RETAIL LLC	$1,180,000	2.6	393,500	$8,000	$197	$1,440	$1,814	$11,451	$10,644	$314	$1,204	$1,983	$14,145	$8,177	$241	$1,204	$1,983	$11,606	$7,835	$231	$1,204	$1,983	$11,253
77.1-1-48	1287 ROUTE 9	BHATTI, ELISHBA	$216,000	1.4	455,740	$1,464	$102	$264	$2,101	$3,931	$1,948	$164	$220	$2,297	$4,629	$1,497	$126	$220	$2,297	$4,140	$1,434	$120	$220	$2,297	$4,072
77.1-1-80	1288 ROUTE 9	MACS RETAIL LLC	$550,000	1.7	0	$3,729	$128	$671	$0	$4,528	$4,961	$204	$561	$0	$5,726	$3,812	$157	$561	$0	$4,529	$3,652	$150	$561	$0	$4,363
77.1-1-56	1289 ROUTE 9	ROLAND, MADELINE E	$160,000	0.5	96,210	$1,085	$34	$195	$444	$1,757	$1,443	$54	$163	$485	$2,145	$1,109	$41	$163	$485	$1,798	$1,062	$40	$163	$485	$1,750
77.1-1-55	1291-1293 ROUTE 9	ROLAND, MADELINE E	$337,000	2.7	4,750	$2,285	$201	$411	$22	$2,919	$3,040	$321	$344	$24	$3,729	$2,335	$247	$344	$24	$2,950	$2,238	$236	$344	$24	$2,842
77.1-1-39.1	1292 ROUTE 9	GUTHEIL, HARRY G	$16,000	10.7	0	$108	$797	$20	$0	$925	$144	$1,273	$16	$0	$1,434	$111	$978	$16	$0	$1,105	$106	$937	$16	$0	$1,059
77.1-1-38.1	1294 ROUTE 9	GUTHEIL, HARRY G	$95,900	1.6	0	$650	$117	$117	$0	$885	$865	$188	$98	$0	$1,150	$665	$144	$98	$0	$906	$637	$138	$98	$0	$873
77.1-1-37	1296-1300 ROUTE 9	P & M ENTERPRISES SGF LLC	$215,000	2.0	39,650	$1,458	$146	$262	$183	$2,049	$1,939	$233	$219	$200	$2,591	$1,490	$179	$219	$200	$2,088	$1,428	$171	$219	$200	$2,018
77.1-1-75.2	1297 ROUTE 9	BURKE, THOMAS J	$550,000	1.2	363,970	$3,729	$92	$671	$1,678	$6,170	$4,961	$147	$561	$1,834	$7,503	$3,812	$113	$561	$1,834	$6,320	$3,652	$108	$561	$1,834	$6,156
77.1-1-85	1299 ROUTE 9	HUDSON HEADWATERS HEALTH	$8,900,000	5.3	11,180	$60,342	$395	$10,858	$52	$71,646	$80,278	$631	$9,078	$56	$90,043	$61,677	$484	$9,078	$56	$71,296	$59,096	$464	$9,078	$56	$68,694
77.1-1-35	1304 ROUTE 9	GROMA LLC	$228,000	3.2	26,270	$1,546	$241	$278	$121	$2,186	$2,057	$385	$233	$132	$2,806	$1,580	$295	$233	$132	$2,240	$1,514	$283	$233	$132	$2,162
77.1-1-61	1311 ROUTE 9	STEWARTS SHOPS CORP	$1,500,000	1.4	60,490	$10,170	$104	$1,830	$279	$12,383	$13,530	$166	$1,530	$305	$15,531	$10,395	$128	$1,530	$305	$12,357	$9,960	$122	$1,530	$305	$11,917
77.1-1-70.2	1312 ROUTE 9	BAKHRU, DEEPAK H	$260,000	0.2	34,460	$1,763	$18	$317	$159	$2,257	$2,345	$29	$265	$174	$2,813	$1,802	$22	$265	$174	$2,263	$1,726	$21	$265	$174	$2,186
77.1-1-71	1314-1316 ROUTE 9	DANICO PROPERTIES LLC	$167,000	0.3	23,610	$1,132	$22	$204	$109	$1,467	$1,506	$36	$170	$119	$1,832	$1,157	$28	$170	$119	$1,474	$1,109	$26	$170	$119	$1,425
77.1-1-63	1315-1319 ROUTE 9	PARILLO, FRANK J	$291,500	6.1	0	$1,976	$456	$356	$0	$2,788	$2,629	$729	$297	$0	$3,655	$2,020	$560	$297	$0	$2,877	$1,936	$536	$297	$0	$2,769
77.1-1-73.2	1318 ROUTE 9	GROMA LLC	$32,000	0.2	0	$217	$16	$39	$0	$272	$289	$25	$33	$0	$346	$222	$19	$33	$0	$274	$212	$18	$33	$0	$264
77.1-1-24	1320-1322 ROUTE 9	GROMA LLC	$190,000	1.7	0	$1,288	$126	$232	$0	$1,646	$1,714	$201	$194	$0	$2,108	$1,317	$154	$194	$0	$1,665	$1,262	$148	$194	$0	$1,603
63.-4-14.2	1321 ROUTE 9	ENGLISH VILLAGE LLC	$240,900	45.0	0	$1,633	$3,362	$294	$0	$5,289	$2,173	$5,371	$246	$0	$7,790	$1,669	$4,126	$246	$0	$6,041	$1,600	$3,951	$246	$0	$5,796
77.1-1-64	1323 ROUTE 9	BLUE FLAME GAS CO INC	$350,300	2.0	16,160	$2,375	$150	$427	$74	$3,027	$3,160	$240	$357	$81	$3,839	$2,428	$184	$357	$81	$3,051	$2,326	$177	$357	$81	$2,941
77.1-1-22	1324-1328 ROUTE 9	CACCAVO, DEBRA J	$290,000	1.2	219,080	$1,966	$86	$354	$1,010	$3,416	$2,616	$137	$296	$1,104	$4,153	$2,010	$106	$296	$1,104	$3,515	$1,926	$101	$296	$1,104	$3,427
77.1-1-65	1327-1329 ROUTE 9	BUCK, JAY	$65,400	2.1	0	$443	$157	$80	$0	$680	$590	$251	$67	$0	$907	$453	$193	$67	$0	$713	$434	$185	$67	$0	$686
77.1-1-21	1330 ROUTE 9	EXECUTIVE PROPERTY SERV LLC	$483,900	0.7	39,090	$3,281	$52	$590	$180	$4,103	$4,365	$82	$494	$197	$5,138	$3,353	$63	$494	$197	$4,107	$3,213	$61	$494	$197	$3,964
77.1-1-66	1331-1335 ROUTE 9	SUTPHIN, ROSALIE M	$405,000	4.1	76,560	$2,746	$310	$494	$353	$3,902	$3,653	$495	$413	$386	$4,947	$2,807	$380	$413	$386	$3,985	$2,689	$364	$413	$386	$3,852
77.1-1-20	1332-1348 ROUTE 9	STONE, TARA	$700,000	1.4	255,500	$4,746	$101	$854	$1,178	$6,879	$6,314	$161	$714	$1,288	$8,477	$4,851	$124	$714	$1,288	$6,977	$4,648	$119	$714	$1,288	$6,768
77.1-1-1	1341 ROUTE 9	BRAIDWOODS HOLDING CO LLC	$525,000	1.9	0	$3,560	$145	$641	$0	$4,345	$4,736	$232	$536	$0	$5,503	$3,638	$178	$536	$0	$4,352	$3,486	$170	$536	$0	$4,192
63.-4-9.12	1345-1347 ROUTE 9	PETRUSH, EDWARD	$282,300	32.8	0	$1,914	$2,456	$344	$0	$4,715	$2,546	$3,924	$288	$0	$6,759	$1,956	$3,014	$288	$0	$5,259	$1,874	$2,887	$288	$0	$5,049
63.-4-9.112	1349-1361 ROUTE 9	CDSJ LLC	$343,900	58.5	0	$2,332	$4,375	$420	$0	$7,126	$3,102	$6,990	$351	$0	$10,442	$2,383	$5,369	$351	$0	$8,103	$2,283	$5,142	$351	$0	$7,776
77.1-1-77	1350 ROUTE 9	BKM PROPERTIES LLC	$175,000	0.9	5,370	$1,187	$70	$214	$25	$1,495	$1,579	$112	$179	$27	$1,896	$1,213	$86	$179	$27	$1,505	$1,162	$83	$179	$27	$1,450
77.1-1-76	1352 ROUTE 9	NOFTLE ENTERPRISES INC	$300,000	0.6	36,470	$2,034	$45	$366	$168	$2,613	$2,706	$72	$306	$184	$3,267	$2,079	$55	$306	$184	$2,624	$1,992	$53	$306	$184	$2,535
77.1-1-4	1356 ROUTE 9	KLOSS, EDWARD M	$150,000	2.2	0	$1,017	$163	$183	$0	$1,363	$1,353	$260	$153	$0	$1,766	$1,040	$200	$153	$0	$1,393	$996	$192	$153	$0	$1,341
63.3-1-8	1365 ROUTE 9	PETRUSH, EDWARD	$110,000	0.5	1,680	$746	$34	$134	$8	$922	$992	$55	$112	$8	$1,168	$762	$42	$112	$8	$925	$730	$40	$112	$8	$891
63.-4-9.111	1367 ROUTE 9	CDSJ LLC	$110,800	33.3	0	$751	$2,491	$135	$0	$3,377	$999	$3,979	$113	$0	$5,092	$768	$3,057	$113	$0	$3,937	$736	$2,927	$113	$0	$3,776
63.3-1-9	1369 ROUTE 9	EMERICH, KEVIN A	$692,000	1.8	101,760	$4,692	$138	$844	$469	$6,143	$6,242	$220	$706	$513	$7,680	$4,796	$169	$706	$513	$6,183	$4,595	$162	$706	$513	$5,975
63.3-1-10	1373 ROUTE 9	GLENS FALLS AREA HABITAT FOR, HUM	$458,000	1.2	0	$3,105	$92	$559	$0	$3,756	$4,131	$147	$467	$0	$4,745	$3,174	$113	$467	$0	$3,754	$3,041	$108	$467	$0	$3,616
63.3-1-13.1	1377-1387 ROUTE 9	ROUTE 9 AUTOWORLD INC	$650,000	5.9	0	$4,407	$442	$793	$0	$5,642	$5,863	$706	$663	$0	$7,232	$4,505	$542	$663	$0	$5,710	$4,316	$519	$663	$0	$5,498
77.1-1-2	1378 ROUTE 9	DEEB, DAVID A	$145,000	0.6	8,070	$983	$45	$177	$37	$1,242	$1,308	$72	$148	$41	$1,568	$1,005	$55	$148	$41	$1,248	$963	$53	$148	$41	$1,204
77.-4-3	1386-1388 ROUTE 9	GRAY ROCK PROPERTIES LLC	$650,000	24.7	95,460	$4,407	$1,845	$793	$440	$7,485	$5,863	$2,948	$663	$481	$9,955	$4,505	$2,265	$663	$481	$7,913	$4,316	$2,169	$663	$481	$7,629
77.-4-2	1390-1406 ROUTE 9	HILLMAN PROPERTIES INC*	$2,045,000	17.4	1,679,000	$13,865	$1,302	$2,495	$7,740	$25,402	$18,446	$2,080	$2,086	$8,462	$31,074	$14,172	$1,598	$2,086	$8,462	$26,317	$13,579	$1,530	$2,086	$8,462	$25,657
63.3-1-13.2	1391 ROUTE 9	NORTH TRACT PROPERTIES LLC	$510,000	2.3	792,760	$3,458	$172	$622	$3,655	$7,907	$4,600	$275	$520	$3,996	$9,391	$3,534	$211	$520	$3,996	$8,261	$3,386	$202	$520	$3,996	$8,104
63.3-1-14	1393 ROUTE 9	SEAN KAM & LOGAN REALTY INC	$300,000	0.3	0	$2,034	$25	$366	$0	$2,425	$2,706	$41	$306	$0	$3,053	$2,079	$31	$306	$0	$2,416	$1,992	$30	$306	$0	$2,328
63.3-1-15.1	1397 ROUTE 9	SEAN KAM & LOGAN REALTY INC	$282,000	3.1	7,760	$1,912	$229	$344	$36	$2,521	$2,544	$366	$288	$39	$3,236	$1,954	$281	$288	$39	$2,562	$1,872	$269	$288	$39	$2,468
63.3-1-15.2	1401 ROUTE 9	FISH, PHYLLIS R	$600,000	2.6	7,490	$4,068	$193	$732	$35	$5,027	$5,412	$308	$612	$38	$6,370	$4,158	$237	$612	$38	$5,044	$3,984	$227	$612	$38	$4,860
63.-4-2	1403 ROUTE 9	RDDC DEVELOPMENT CORP[2]	$17,033,321	80.0	13,524,000	$115,486	$5,984	$20,781	$62,346	$204,596	$153,641	$9,560	$17,374	$68,161	$248,736	$118,041	$7,344	$17,374	$68,161	$210,919	$113,101	$7,033	$17,374	$68,161	$205,669
63.3-1-16	1405 ROUTE 9	RDDC DEVELOPMENT CORP	$155,000	0.6	0	$1,051	$43	$189	$0	$1,283	$1,398	$68	$158	$0	$1,624	$1,074	$52	$158	$0	$1,285	$1,029	$50	$158	$0	$1,237
77.-4-37	1408 ROUTE 9	ELECTRO-MED EXTRUSION INC	$410,000	1.3	35,000	$2,780	$93	$500	$161	$3,535	$3,698	$149	$418	$176	$4,442	$2,841	$115	$418	$176	$3,551	$2,722	$110	$418	$176	$3,427
63.3-1-22	1411 ROUTE 9	CROSS, CHERYL	$1,099,400	7.8	25,360	$7,454	$584	$1,341	$117	$9,496	$9,917	$933	$1,121	$128	$12,099	$7,619	$717	$1,121	$128	$9,585	$7,300	$686	$1,121	$128	$9,236
63.3-1-7	1416 ROUTE 9	SPEEDWAY LLC	$1,100,000	2.2	235,050	$7,458	$162	$1,342	$1,084	$10,046	$9,922	$259	$1,122	$1,185	$12,488	$7,623	$199	$1,122	$1,185	$10,129	$7,304	$191	$1,122	$1,185	$9,801
63.3-1-20.1	1417-1419 ROUTE 9	HEWLETT, GREGORY	$196,000	1.8	0	$1,329	$138	$239	$0	$1,706	$1,768	$220	$200	$0	$2,188	$1,358	$169	$200	$0	$1,727	$1,301	$162	$200	$0	$1,663
63.3-1-6.1	1418 ROUTE 9	NADEEM LODGING, CORPORATION*	$2,170,000	5.9	3,431,000	$14,713	$445	$2,647	$15,817	$33,622	$19,573	$711	$2,213	$17,292	$39,790	$15,038	$546	$2,213	$17,292	$35,090	$14,409	$523	$2,213	$17,292	$34,437
63.3-1-21.1	1421-1423 ROUTE 9	HEWLETT, GREGORY T	$276,300	2.3	156,910	$1,873	$171	$337	$723	$3,105	$2,492	$274	$282	$791	$3,838	$1,915	$210	$282	$791	$3,198	$1,835	$201	$282	$791	$3,109
63.3-1-20.2	1425 ROUTE 9	ROGGE, BERNARD C	$35,000	3.3	0	$237	$248	$43	$0	$528	$316	$397	$36	$0	$748	$243	$305	$36	$0	$583	$232	$292	$36	$0	$560
63.3-1-21.21	1427-1429 ROUTE 9	ROGGE, DAVID D	$196,500	1.8	0	$1,332	$138	$240	$0	$1,710	$1,772	$220	$200	$0	$2,193	$1,362	$169	$200	$0	$1,731	$1,305	$162	$200	$0	$1,667
63.3-1-3.21	1428-1432 ROUTE 9	NADEEM LODGING CORPORATION	$187,300	1.5	0	$1,270	$111	$229	$0	$1,610	$1,689	$178	$191	$0	$2,058	$1,298	$137	$191	$0	$1,626	$1,244	$131	$191	$0	$1,566
63.3-1-2.1	1431 ROUTE 9	RIDGE STREET YOGI MART INC	$250,000	0.7	0	$1,695	$52	$305	$0	$2,052	$2,255	$82	$255	$0	$2,592	$1,733	$63	$255	$0	$2,051	$1,660	$61	$255	$0	$1,976
63.3-1-1	1433 ROUTE 9	DMMH CORP	$1,750,000	7.3	0	$11,865	$545	$2,135	$0	$14,545	$15,785	$871	$1,785	$0	$18,441	$12,128	$669	$1,785	$0	$14,581	$11,620	$641	$1,785	$0	$14,046
63.3-1-3.12	1434 ROUTE 9	PJM 612 ENTERPRISES LLC	$1,825,000	3.2	6,130	$12,374	$236	$2,227	$28	$14,865	$16,462	$377	$1,862	$31	$18,731	$12,647	$290	$1,862	$31	$14,830	$12,118	$278	$1,862	$31	$14,288
63.3-1-2.2	1435 ROUTE 9	DMMH CORP	$1,523,750	1.7	0	$10,331	$130	$1,859	$0	$12,320	$13,744	$208	$1,554	$0	$15,506	$10,560	$160	$1,554	$0	$12,273	$10,118	$153	$1,554	$0	$11,825
63.3-1-26	1438-1440 ROUTE 9	MOFFITT, PATRICIA A	$1,100,000	3.2	27,390	$7,458	$241	$1,342	$126	$9,167	$9,922	$385	$1,122	$138	$11,567	$7,623	$295	$1,122	$138	$9,179	$7,304	$283	$1,122	$138	$8,847
63.4-1-1	1439 ROUTE 9	STONE, GARY E	$450,000	1.9	42,790	$3,051	$141	$549	$197	$3,939	$4,059	$226	$459	$216	$4,959	$3,119	$173	$459	$216	$3,967	$2,988	$166	$459	$216	$3,829
63.4-1-75	1441-1443 ROUTE 9	TIERNEY, THOMAS J	$605,000	4.5	25,150	$4,102	$339	$738	$116	$5,295	$5,457	$541	$617	$127	$6,742	$4,193	$416	$617	$127	$5,352	$4,017	$398	$617	$127	$5,159
63.3-1-25	1442-1444 ROUTE 9	OPPENHEIM, MOIRA	$225,000	3.0	0	$1,526	$224	$275	$0	$2,024	$2,030	$358	$230	$0	$2,617	$1,559	$275	$230	$0	$2,064	$1,494	$264	$230	$0	$1,987
63.4-1-76	1445-1447 ROUTE 9	SAUNDERS, RUSTY R	$600,000	3.8	77,970	$4,068	$284	$732	$359	$5,444	$5,412	$454	$612	$393	$6,871	$4,158	$349	$612	$393	$5,512	$3,984	$334	$612	$393	$5,323

TAX MAP ID	ADDRESS	OWNER	2021 Assessed Value	Acreage	2019 WATER USE (Gallons)	Debt Service 90% AV	Debt Service 10% AC	O&M - AV	USE - AV	TOTAL	Debt Service 90% AV4	Debt Service 10% AC5	O&M - AV6	USE - AV7	TOTAL8	Debt Service 90% AV43	Debt Service 10% AC54	O&M - AV65	USE - AV76	TOTAL87	Debt Service 90% AV432	Debt Service 10% AC543	O&M - AV654	USE - AV765	TOTAL876
63.3-1-23	1446 ROUTE 9	STEPMAR DEVELOPMENT INC	$425,000	1.4	0	$2,882	$105	$519	$0	$3,505	$3,834	$167	$434	$0	$4,434	$2,945	$128	$434	$0	$3,507	$2,822	$123	$434	$0	$3,379
63.3-1-24	1448 ROUTE 9	HUDSON HEADWATERS HEALTH NET	$532,000	1.4	0	$3,607	$102	$649	$0	$4,358	$4,799	$162	$543	$0	$5,504	$3,687	$125	$543	$0	$4,354	$3,532	$120	$543	$0	$4,195
63.3-1-3.111	1450 ROUTE 9	MAOKIN LLC	$550,000	2.6	17,100	$3,729	$194	$671	$79	$4,672	$4,961	$309	$561	$86	$5,918	$3,812	$238	$561	$86	$4,696	$3,652	$228	$561	$86	$4,527
63.3-1-3.14	1454-1456 ROUTE 9	BATKAY, WILLIAM	$209,800	2.4	0	$1,422	$179	$256	$0	$1,857	$1,892	$286	$214	$0	$2,392	$1,454	$219	$214	$0	$1,887	$1,393	$210	$214	$0	$1,817
63.3-1-3.13	1458 ROUTE 9	DESANTIS ENTERPRISES INC	$68,000	0.6	0	$461	$42	$83	$0	$586	$613	$67	$69	$0	$750	$471	$51	$69	$0	$592	$452	$49	$69	$0	$570
63.4-1-71	1462 ROUTE 9	BHATTI, ELISHBA	$300,000	2.9	328,840	$2,034	$216	$366	$1,516	$4,132	$2,706	$345	$306	$1,657	$5,015	$2,079	$265	$306	$1,657	$4,308	$1,992	$254	$306	$1,657	$4,209
63.4-1-69.1	1470 ROUTE 9	BUHRMASTER PROPANE LLC	$410,000	2.1	11,930	$2,780	$153	$500	$55	$3,488	$3,698	$245	$418	$60	$4,421	$2,841	$188	$418	$60	$3,508	$2,722	$180	$418	$60	$3,381
77.1-1-57	35 FAWN RD	NAEC FOR PETS LLC	$500,000	1.5	234,190	$3,390	$109	$610	$1,080	$5,189	$4,510	$174	$510	$1,180	$6,375	$3,465	$134	$510	$1,180	$5,289	$3,320	$128	$510	$1,180	$5,139
77.-4-36.11	416-422 REYNOLDS RD	THE ADIRONDACK TRUST CO	$354,200	10.5	0	$2,401	$787	$432	$0	$3,620	$3,195	$1,257	$361	$0	$4,813	$2,455	$965	$361	$0	$3,781	$2,352	$924	$361	$0	$3,638
77.-4-36.12	428 REYNOLDS RD	JENSEN-BURNHAM, EILEEN	$5,400	3.6	0	$37	$268	$7	$0	$312	$49	$429	$6	$0	$483	$37	$329	$6	$0	$372	$36	$315	$6	$0	$357
77.-4-36.2	430 REYNOLDS RD	HILLMAN PROPERTIES INC	$11,400	8.8	0	$77	$661	$14	$0	$752	$103	$1,056	$12	$0	$1,170	$79	$811	$12	$0	$902	$76	$777	$12	$0	$864
77.1-1-78	488 FORTSVILLE RD	BKM PROPERTIES LLC	$130,000	0.6	0	$881	$43	$159	$0	$1,083	$1,173	$69	$133	$0	$1,374	$901	$53	$133	$0	$1,087	$863	$51	$133	$0	$1,047
76.-3-16	51 SPIER FALLS RD	MUNTER LAND HOLDINGS LLC	$50,000	0.8	0	$339	$59	$61	$0	$459	$451	$94	$51	$0	$596	$347	$72	$51	$0	$470	$332	$69	$51	$0	$452
76.-3-17.2	53-59 SPIER FALLS RD	MUNTER LAND HOLDINGS LLC	$171,300	8.0	0	$1,161	$598	$209	$0	$1,969	$1,545	$956	$175	$0	$2,676	$1,187	$734	$175	$0	$2,096	$1,137	$703	$175	$0	$2,015
77.1-1-62.1	6-22 SPIER FALLS RD	PARILLO FRANK J	$411,000	21.1	0	$2,787	$1,578	$501	$0	$4,866	$3,707	$2,521	$419	$0	$6,647	$2,848	$1,936	$419	$0	$5,204	$2,729	$1,854	$419	$0	$5,003
76.-3-23	ROUTE 9	CONGDON, GARDNER R	$600	0.4	0	$4	$30	$1	$0	$35	$5	$48	$1	$0	$54	$4	$37	$1	$0	$41	$4	$35	$1	$0	$40

APPENDIX H: TOWN OF MOREAU DISTRICT 1, EXTENSION 5

Town of Moreau
Sewer District No. 1
Extension 5
November, 2021

Legend

- Parcels
- Sewer District 1, Extension 5

N
W E
S

0 1,000 2,000 4,000 6,000 Feet

1 inch = 2,500 feet

Note: The property lines shown on this drawingare from County tax maps and may not be truly accurate.

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APPENDIX I: BOND RESOLUTION

SERIAL BOND RESOLUTION DATED JUNE 26, 2018

A RESOLUTION AUTHORIZING THE ISSUANCE OF $16,000,000 SERIAL BONDS OF THE TOWN OF MOREAU, SARATOGA COUNTY, NEW YORK FOR THE CONSTRUCTION OF SEWER DISTRICT NO. 1 EXTENSION NO. 5 IN THE TOWN OF MOREAU, AND ALL NECESSARY INFRASTRUCTURE, EQUIPMENT, APPARATUS, SITE WORK, AND RELATED SITE WORK.

WHEREAS, on June 26, 2018, the Town Board of the Town of Moreau adopted a resolution authorizing the construction of Sewer District No. 1, Extension No. 5 in the Town of Moreau, and all necessary infrastructure, equipment, apparatus, site work, and related site work and to provide for the financing thereof, at a maximum cost of $16,000,000, or so much thereof as may be necessary to be paid from the proceeds of the obligations issued pursuant to the Local Finance Law; and

WHEREAS, the Town Board intends to apply for funding for the project through the New York Clean Water and State Revolving Fund ("CWSRF") and the New York State Environmental Facilities Corporation ("EFC"); and

WHEREAS, in order to fulfill the requirements of the CWSRF application, the Town is required to pass a bond resolution authorizing the issuance of serial bonds to finance the project through CWSRF and EFC; and

WHEREAS, the maximum cost of the project is estimated to be $16,000,000, with the sum of $16,000,000 to be paid from the proceeds of grants and/or obligations issued pursuant to the Local Finance Law; and

WHEREAS, the Town Board desires to authorize such payment and to provide for the financing thereof through the CWSRF and EFC;

NOW, THEREFORE, BE IT RESOLVED:

1. The Town Board of the Town of Moreau, Saratoga County, New York, hereby authorizes the construction of Sewer District No. 1, Extension No. 5 in the Town of Moreau and all

necessary infrastructure, equipment, apparatus, site work, and related site work located in the Town of Moreau at a maximum cost of $16,000,000, subject to the results of the referendum on the establishment of the district to be held on August 27, 2018.

2. The specific object or purpose for which obligations are to be issued pursuant to this resolution is the construction of Sewer District No. 1, Extension No. 5 in the Town of Moreau and all necessary infrastructure, equipment, apparatus, site work, and related site work located in the Town of Moreau, New York.

3. The current maximum cost of the aforesaid specific object or purpose is $16,000,000, and shall be financed by grants and/or the issuance of a maximum of $16,000,000 serial bonds. The issuance of serial bonds of the Town of Moreau in the amount of $16,000,000 is hereby authorized to be issued pursuant to the Local Finance Law. Such serial bonds are to be payable from amounts which shall be paid from the users of Sewer District No. 1 in the Town of Moreau and/or ad valorem rates and/or amounts which shall be annually levied on all of the taxable real property in said Town, subject to the exceptions provided in Section 305(5) of the Agriculture and Markets Law, and the faith and credit of the Town of Moreau, Saratoga County, New York, are hereby pledged for the payment of said bonds and the interest thereon.

4. It is hereby determined that the period of probable usefulness of the aforesaid specific object or purpose is forty (40) years, pursuant to subdivision 4 of Paragraph a of Section 11.00 of the Local Finance Law of the State of New York.

5. Subject to the provisions of the Local Finance Law, the power to authorize the issuance of and to sell bond anticipation notes in anticipation of the issuance and sale of the serial bonds herein authorized, including renewals of such notes, is hereby delegated to the Town Supervisor of the Town of Moreau, the chief fiscal officer, or in his absence, the Deputy Town

Supervisor, who is the substituted chief fiscal officer. Such notes shall be of such terms, form and contents, and shall be sold in such manner, as may be determined by said Town Supervisor or Deputy Town Supervisor pursuant to and consistent with the provisions of the Local Finance Law.

6. This resolution is not subject to a permissive referendum pursuant to Section 35 of the Local Finance Law and Article 7 of the Town Law of the State of New York, but is subject to the referendum scheduled for August 27, 2018.

7 . The validity of such bonds and bond anticipation notes may be contested only if:

a. Such obligations are authorized for an object or purpose for which said Town Board is not authorized to spend money; or

b. The provisions of law which should be complied with as of the date of publication of this resolution are not substantially complied with, and an action, suit or proceeding contesting such validity is commenced within twenty (20) days after the date of such publication; or

c. Such obligations are authorized in violation of the provisions of the Constitution.

8. This notice and resolution shall be published in full within ten (10) days after its adoption in the Post Star, which is hereby designated as the official newspaper of the Town for such purpose, together with a notice of the Town Clerk substantially in the form provided in Section 81.00 of the Local Finance Law.

The question of the adoption of the foregoing resolution was duly put to a vote on roll call, which resulted as follows:

John Hogan	Y
Gina LeClair	Y
Kyle Noonan	Y
Alan Van Tassel	Y
Supervisor Theodore Kusnierz	Y

The resolution was thereupon declared duly adopted.

I, the undersigned Clerk of the Town of Moreau, Saratoga County, New York, DO HEREBY CERTIFY

That I have compared the annexed extract of the minutes of the meeting of the Town Board, including the resolution contained therein, held on the 26th day of June, 2018 with the original thereof as recorded in the minute book of said Town, and that same is a true and correct copy of said resolution and of the whole thereof.

I FURTHER CERTIFY that all members of said Town had due notice of said meeting, and that, pursuant to Section 104 of the Public Officers Law (Open Meetings Law), said meeting was open to the general public, and that I duly caused a public notice of the time and place of said meeting to be given to the following newspaper and/or other news media as follows:

Newspaper and/or other News Media	Date Given
Post Star	June 14, 2018

and that I further duly caused public notice of the time and place of said meeting to be conspicuously posted in the following designated public location on the following date:

Designated Location of Posted Notice	Date of Posting
Town of Moreau -	June 13, 2018
Clerk's Office	June 13, 2018

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said Town this 26th day of June, 2018.

Leeann McCabe

(SEAL)

Leeann McCabe, Town Clerk

349373

LEGAL NOTICE

NOTICE IS HEREBY GIVEN that the resolution published herewith has been adopted by the Town Board of the Town of Moreau, Saratoga County, New York, on the 26th day of June, 2018, and the validity of the obligations authorized by such resolution may be hereafter contested only if such obligations were authorized for an object or purpose for which said Town is not authorized to expend money, or if the provisions of law which should have been complied with as of the date of publication of this notice were not substantially complied with, and an action, suit or proceeding contesting such validity is commenced within twenty days after the date of publication of this notice, or such obligations were authorized in violation of the provisions of the Constitution.

DATED: Moreau, New York
June 26, 2018

Leeann McCabe, Town Clerk

APPENDIX J: SMART GROWTH FORM

NEW YORK STATE OF OPPORTUNITY. | Department of Health | Environmental Facilities Corporation

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 Moreau Project No.:

Project Name: Town of Moreau - Saratoga County Sewer Transmission

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:

The proposed project will service the existing Town of Moreau Sewer District 1, Extension 5. This district consists of the Town's commercial district on Rt. 9 near the I-87 Exit 17 Interchange in addition to three mobile home parks in the area.

Section 2 – Screening Questions

A. Prior Approvals

1. Has the project been previously approved for Environmental Facilities Corporation (EFC) financial assistance? ☐ Yes ☑ No
2. If yes to A(1), what is the project number(s) for the prior approval(s)? Project No.:
3. 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

1. 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 project will the utilize District 1, Extension 5 low pressure sewer collection system and sewer pump station.

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:

   The proposed project is a linear utility project which will provide a sewer connection between the Town of Moreau's sewer District 1, Ext. 5, and hte Saratoga County Sewer collection system. The pipeline will be installed primarily along rural roadways which are not located in a municipal center, area adjacent to a municipal center, or area designated as a future municipal center.

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:

The project serves a developed commercial area as well as densely populated mobile home parks. The forcemain will connect this existing sewer district to the Saratoga County sewer collection system.

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 intends to protect groundwater resources by providing public sewer to an area with excessively well drained soils which allow sanitary sewer flow to rapidly infiltrate without adequate treatment.

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:

The project will allow the existing commercial district to further develop with public water and sewer sources thereby fostering mixed land use and compact development within the area. Public sewer will allow the mobile home parks to increase density, thus providing more affordable housing within close proximity to commercial development and employment.

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

☑Yes ☐No ☐N/A

Explain your response:

Although public transportation is beyond the scope of this project, by fostering the development of the Town's commercial district will provide residents a centralized location for housing, employment, shopping, healthcare and recreation opportunities thereby potentially reducing automobile dependency.

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 project will require permitting and coordination with NYSDOT, Saratoga County Sewer District, Saratoga County Public Works and the Town of Wilton for the installation of the sewer forcemain and its appurtenances.

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

   ☑Yes ☐No

   Explain your response and reference any applicable plans:

   The project was identified in the Town's Comprehensive Plan as an important goal which was developed with input from the community.

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

   ☑Yes ☐No ☐N/A

   Explain your response:

   The project will continue to allow development to occur with public sewer and water, thereby eliminating the unpredictable permitting associated with on-site septic systems.

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:

    The project utilizes high efficiency pumps with variable frequency drives (VFD) within the District 1, Extension 5 lift station.

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:

    Not Applicable

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 Moreau	Phone Number: (518) 792-1030
Name and Title of Signatory: Theodore T. Kusnierz Jr.	
Signature:	Date: