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Map and Plan  
and  
Map, Plan and Report

Sleepy Hollow Water District (Increase to Maximum  
Amount to be Expended Pursuant to Town Law Section  
202-d and Section 196)

and

Establishment of Extension No. 1 of the Sleepy Hollow  
Water District (Pursuant to Article 12 of Town Law)

Prepared for  
**Town of Sullivan**

7507 Lakeport Road  
Chittenango, New York

Revision 1  
March 2020  
October 2018



**Barton & Loguidice**

Sleepy Hollow Water District (Increase to Maximum Amount to be Expended Pursuant to Town Law Section 202-d and Section 196) and Establishment of Extension No. 1 of the Sleepy Hollow Water District (Pursuant to Article 12 of Town Law)

Town of Sullivan, Madison County, New York

Map and Plan  
and  
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October 2018  
*Revised March 2020*

Prepared For:

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Chittenango, New York 13037

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## 1.0 Executive Summary

The Sleepy Hollow Water District and Sleepy Hollow Water District Extension No. 1 seek to provide municipal water from the Onondaga County Water Authority (OWCA) to residents within the Town of Sullivan along Sleepy Hollow Road and Salt Springs Road. Residents in the Sleepy Hollow Water District are currently served by a community well which is currently failing; residents in the proposed Sleepy Hollow Water District Extension No. 1 are served by individual private wells. Residents within the districts have expressed interest in receiving municipal water.

This project would provide individual water services to residents along Salt Springs Road and Sleepy Hollow Road, with a single supply main connecting to an existing OCWA water main located near Tobin Drive in the Village of Chittenango. Multiple iterations of this project have been developed, most recently in October 2018 with Town Board resolution and order approving the Sleepy Hollow Water District improvements and Extension No. 1, detailed herein.

In February 2020 a public bid was held for the Districts' construction contract. W.D. Malone Trucking and Excavating, Inc. was the low-bidder for the Town of Sullivan's Sleepy Hollow Water Project. Six (6) bids were received in total for the single General Contract. As a result of recent increases in ductile iron pipe prices and other external market factors, the total of W.D. Malone's low-bid of \$574,000 plus project soft costs exceeds the project's bond resolution of \$560,000. Should the residents of the water districts wish to have the Town Board move forward with the construction phase of the project on their behalf, then the Town Board must follow Town Law 202-d proceedings to increase the maximum amount to be expended by the Districts and, accordingly, increase the amount of the bond resolution.

The new total project cost estimate including W.D. Malone's Base Bid, Additive Bid Item No. 1, construction contingencies, engineering, legal, and administrative costs is \$817,300. This Map and Plan and Map, Plan and Report shall serve as the basis for increasing the maximum amount to be expended in accordance with NYS Town Law.

## 2.0 Authorization and Background

The existing Sleepy Hollow Water District is located within the Town of Sullivan at the eastern end of Salt Springs Road near its intersection with NYS Route 5. This existing unconstructed water district is comprised of 13 properties and was originally approved by the NYS Comptroller on February 26, 2015. Prior to this district formation, the area was served by a privately operated water system over 50 years in age. This system includes a single “community” well, submersible pump, 85 gallon below-grade pressure tank, and approximately 550 feet of water main. The private water system was able to obtain disinfection waivers from Madison County Department of Health until 2012 when four (4) of five (5) water samples tested positive for total coliform. Following these test results, the Town of Sullivan, on behalf of the Sleepy Hollow residents, investigated an improvement project to provide Onondaga County Water Authority (OCWA) water to replace the existing compromised well supply.

The proposed improvements project is detailed in the Map, Plan and Report for the Sleepy Hollow Water District Improvement Project dated November 12, 2013 and prepared by Dunn & Sgromo Engineers, PLLC. The proposed project would eliminate the current private well and connect the existing water main to OCWA facilities near NYS Route 5, where static pressures are in the range of 32 to 37 psi. This low static pressure would necessitate installing a booster pump and pressure tank system that must comply with Ten States Standards to secure NYSDOH and funding agency approvals prior to moving to bidding and construction, and short-term financing.

The proposed improvement project outlined in the November 2013 MPR does not fully comply with Ten States Standards. According to Section 6.0 of Ten States Standards, potable water booster pump stations shall be above-grade to avoid confined space entry. Also, according to Section 7.2.1, hydro-pneumatic tanks shall be located above-grade and be completely enclosed. Fire protection should also be provided in accordance with Ten States Standards. The project, as currently proposed, consists of installing a new duplex booster pumping system and

associated duplex pressure vessels within the existing buried well/pump/pressure tank vault. Also, the proposed 4-inch water main would not be equipped with fire hydrants. A minimum 6-inch diameter main equipped with fire hydrants is required by Ten States Standards.

In order to provide the existing Sleepy Hollow Water District with a sustainable public water system that is fully compliant with New York State Department of Health (NYSDOH) design standards, the Town of Sullivan is pursuing an improvement project that includes the replacement of the existing water main and appurtenances, as well as a new booster pump station and hydro-pneumatic tanks within an above-grade enclosure. The proposed project would abandon the existing private well and connect the district to OCWA's water system at the intersection of Salt Springs Road/Tobin Drive. This main connection would essentially comprise the suction side of the new booster pump station.

The Town of Sullivan, on behalf of the existing Sleepy Hollow Water District, was originally awarded a \$90,000 Water Infrastructure Improvement Act (WIIA) grant in 2015 through the New York State Environmental Facilities Corporation (NYSEFC) to address the district's water quality issues and to implement this improvements project. Subsequent to the 2015 WIIA grant award, the Town was awarded an additional \$1.91 Million in 2016 for the proposed Salt Springs Road Water District, a much larger project that proposed to extend public water to the Sleepy Hollow area from the Town of Manlius along Salt Springs Road. The larger project was narrowly voted down by proposed water district residents under a referendum vote held in accordance with Article 12-a of Town Law. The WIIA grant still remains available for use by the existing Sleepy Hollow Water District; however, in order to avoid losing the grant, the Town must revise the original improvement plan to comply with Ten States Standards and OCWA Standards, as well as extend the existing water district to include several parcels on Salt Springs Road who have expressed an interest in public water.

The Town of Sullivan retained Barton & Loguidice, D.P.C. in September of 2018 for preliminary engineering services related to this project, beginning with preparation of this Sleepy Hollow Water District Map and Plan and Sleepy Hollow Water District Extension No. 1 Map, Plan and Report to outline the proposed improvements, maximum capital cost to be expended by the districts, annual operation and maintenance costs, and estimated annual user costs to residents within the existing district and the proposed Water District Extension No.1.

Improvements to the existing Sleepy Hollow Water District and increase to the maximum amount to be expended will be undertaken in accordance with Town Law Section 196 and Section 202-d. The formation of the Sleepy Hollow Water District Extension No. 1 was completed in accordance with Town Law Article 12 and increase to the maximum amount to be expended will also be undertaken in accordance with Town Law Section 196 and Section 202-d.

### 3.0 Project Planning Area

#### 3.1 Location

The Town of Sullivan is located in the northwestern part of Madison County in the Central Region of New York State. The potential service area of this proposed public water project lies along Sleepy Hollow Road and that portion of Salt Springs Road generally east of Sleepy Hollow Road.

#### 3.2 Environmental Resources Present

##### 3.2.1 *Topography*

Topography of the area includes a steep incline along the eastern portion of Salt Springs Road in the Town of Sullivan as shown on Figure 1. Based on USGS mapping, elevations along the portion of Salt Springs Road and Sleepy Hollow Road range between approximately 580 near the NYS Route 5 intersection, and 640 feet above sea level at the highest elevation of Sleepy Hollow Road.

The hydraulic grade line within OCWA's water main on NYS Route 5 near the Sleepy Hollow Road intersection would provide a minimum static pressure of 35 psi up to approximate elevation of 518 USGS'. Public water service to dwellings above this elevation requires use of a booster pump/hydro pneumatic tanks system to maintain residual pressures above 35 psi.

##### 3.2.2 *Wetlands*

Based on NYS Freshwater Wetlands Maps and the National Wetlands Inventory, there is neither designated state nor federal wetlands located within the project area. A wetland field delineation will be conducted in order to verify that there are no wetlands in the vicinity of the proposed work. Should any wetlands be identified, it is anticipated that impacts would be minimal as the proposed water

main and services would be constructed within the existing road rights-of-way. A Nationwide Permit from the U.S. Army Corps of Engineers (USACE) would be obtained if necessary.

### 3.2.3 *Agricultural Districts*

Land use along the proposed project corridor is primarily rural residential and agricultural. The agricultural portions of the project area lie within Agricultural District No. 3 in Madison County as shown in Figure 2. The Town recognizes that this project could potentially have adverse impacts on the agricultural community and will make every effort to minimize these impacts. If necessary, the Town will file a Preliminary and Final Notice of Intent (NOI) with the New York State Agriculture and Markets (NYSDAM). The proposed facilities would be constructed in accordance with NYSDAM guideline entitled "Guidelines/Special Conditions for Water/Sewer Transmission Mains Located Wholly or Partially in an Agricultural District."

### 3.2.4 *Historic Sites*

According to the NYS Office of Parks, Recreation and Historic Preservation (NYSOPRHP) State Historic Preservation Office (SHPO), there are no sites on the state or national register within the proposed project's area of potential effect (APE), and the project area is not within a designated archaeological sensitive area. A letter from SHPO, dated October 4, 2018, stated that SHPO determined that no historic properties will be affected by the project.

### 3.2.5 *Endangered/Threatened Species*

According to the U.S. Fish and Wildlife Service (USFWS) there is one (1) federally-listed endangered species and one (1) federally-listed threatened species in the proposed project area. The Indiana bat is an endangered species that has been documented in the area. The northern long-eared bat is a threatened species

documented in the proposed project area. Prior to design of facilities, a habitat assessment will be conducted to check for the presence of threatened or endangered species habitat within the area of proposed work. Observations of protected species or other rare plant and animal species would also be noted. Correspondence with NYSDEC National Heritage Program would be conducted to inquire about state-listed threatened or endangered species that are known to inhabit the proposed project area.

### *3.2.6 Floodplain Considerations*

FEMA Flood Zone Mapping along Sleepy Hollow Road and Salt Springs Road in the Town of Sullivan, indicate that the proposed project area is outside of both the 100-year and the 500-year floodplain.

#### 4.0 Sleepy Hollow Water District Existing Boundary and Facilities

According to the 2013 Map, Plan and Report for the Sleepy Hollow Water District Improvement Project prepared by Dunn & Sgromo, the existing Sleepy Hollow Water District includes 13 properties within the Town of Sullivan, Madison County, generally along Sleepy Hollow Road. A Map and Plan of the boundary of the existing Sleepy Hollow Water District is shown on Figure 3. A written legal description of the existing district boundary is included in Appendix A.

The existing Sleepy Hollow Water District consists of approximately 12.5 equivalent dwelling units (EDUs) according to the Map, Plan and Report prepared by Dunn & Sgromo. An EDU is the unit of measure by which a user is charged for public water service based on property class codes, water usage records as necessary and when available, and Real Property usage code. Appendix B includes a table summary of the unit assessment for each of the 13 tax parcels within the existing water district.

The existing private water infrastructure serving the Sleepy Hollow Water District is shown in Figure 4, and generally includes a single “community” well, a submersible well pump, an 85 gallon below-grade pressure tank, approximately 550 feet of small diameter water main and appurtenances, and 13 water services. This infrastructure is over 50 years old and does not meet current NYSDOH design standards. There is no redundancy for critical system components such as pumps and the system does not provide fire protection. In addition, there is a public health concern with the presence of total coliform in samples taken and documented by the Madison County DOH. Based on this, it is evident that the private water system has reached the end of its useful design life and is in desperate need of replacement to achieve compliance with current public water system design standards.

## 5.0 Proposed Sleepy Hollow Water District Extension No. 1 District Boundary and Benefitting Users

The proposed Sleepy Hollow Water District Extension No. 1 includes eight (8) properties within the Town of Sullivan, Madison County, generally along Salt Springs Road, east of Sleepy Hollow Road. A Map and Plan of the boundary of the proposed Sleepy Hollow Water District Extension No. 1 is shown on Figure 5. A written legal description of the proposed district extension boundary is included in Appendix A.

The proposed Sleepy Hollow Water District Extension No. 1 consists of approximately 6.5 EDUs. Appendix B includes a table summary of the proposed unit assessment for each of the eight (8) tax parcels within the proposed water district extension, and includes the following information:

- Owner's Name
- Owner's Address
- Tax ID Number
- Parcel Address
- Property Class
- Property Assessed Value - 2019
- Proposed Number of EDUs, generally assessed as follows:
  - Single-Family Residence (Class 210, 240): 1 unit
  - Vacant (Class 312): 0.5 units
  - Cemetery (Class 695): 0.5 units

As shown on Figure 3 and described in Appendix A, the district extension boundary is limited to 500 feet from the right-of-way boundary for the single large vacant parcel on the south side of Salt Springs Road in an effort to meet "smart growth" requirements set forth by potential project funding agencies, and to mitigate potential impacts to agricultural land use.

## 6.0 Proposed Improvements

### 6.1 Proposed Improvements

The proposed improvements which include mutually beneficial infrastructure and separate benefits for the existing Sleepy Hollow Water District and Sleepy Hollow Water District Extension No. 1 can be seen in Table 6-1 below.

Table 6-1: Proposed Improvements and Benefitting Districts

Proposed Improvement	Benefit to Existing Sleepy Hollow WD	Benefit to Sleepy Hollow WD Extension No. 1
2,840 LF water main	X	X
8 mainline valves	X	X
Grundfos booster pump station and water service	X	X
2 hydro-pneumatic tanks	X	X
Water Meter supplied by OCWA	X	X
10 water service transfers (and 2 new water services extended to house)	X	
7 new water services extended to the right-of-way		X
20 water meters	X	X
Decommissioning of existing infrastructure	X	

The improvements that benefit users across both districts are the new water main and appurtenances, Grundfos booster pump station, two (2) hydro-pneumatic tanks, and water meter supplied by OCWA. Each district will be responsible for paying for their own water service connections and their own water meters. Additionally, the existing Sleepy Hollow Water District will be responsible for the cost of decommissioning and abandoning the existing private water system infrastructure. The Sleepy Hollow Water District and Sleepy Hollow Water District Extension No. 1 proposed improvements are shown in Figure 6.

## 6.2 Land Acquisition

The proposed location for the booster pump station and hydro-pneumatic tank enclosure is currently owned by St. Agnes Cemetery. An approximately 65' x 70' parcel is proposed to be subdivided from the existing parcel at the northeastern corner of the Cemetery's property located on the south side of Salt Springs Road, near the main entrance to the cemetery. The Town of Sullivan on behalf of the Sleepy Hollow Water District and Sleepy Hollow Water District Extension No. 1 intends to purchase the subdivided parcel from the cemetery. The terms of this subdivision and sale will be negotiated as the project moves forward.

## 6.3 Fire Protection

Fire protection is not included in this project since the booster pump station will not be capable of meeting fire flow demands. Should a new transmission main be constructed along Salt Springs Road from the OCWA system on North Eagle Village Road in the Town of Manlius, Onondaga County, to the proposed Sleepy Hollow distribution main, then hydrants could be installed at that time at the district's expense.

## 6.4 Estimated Water Usage

The anticipated water usage for the existing Sleepy Hollow Water District and the proposed Sleepy Hollow Water District Extension No. 1 is summarized in Table 6-2 below.

Table 6-2: Estimated Annual Water Usage (GPD)

Service Area	EDUs	Avg. Daily Demand (ADD)*	Max Daily Demand (MDD)**	Peak Hourly Demand (PHD)***
Sleepy Hollow Water District	12.5	2,063	4,125	8,250
Sleepy Hollow Water District Extension No. 1	6.5	1,073	2,145	4,290
*ADD = 165 gallons per day per EDU **MDD = ADD x 2 ***PHD = ADD x 4				

## 7.0 Maximum Amount to Be Expended

The estimated total probable project cost for the existing Sleepy Hollow Water District, as amended, and the proposed Sleepy Hollow Water District Extension No. 1 project is \$817,300. Of that total project cost, \$744,910 of the work will benefit all customers in both the new and existing districts, \$50,140 of the work will benefit customers in the existing district only, and the remaining \$22,250 of the project cost will benefit users in the proposed Sleepy Hollow Water District Extension No. 1 only. The existing Sleepy Hollow Water District contains 12.5 EDUs. The proposed Sleepy Hollow Water District Extension No. 1 will add an estimated 6.5 EDUs that, when added to the existing districts EDUs, will result in a total of 19 EDUs.

### 7.1 Existing Sleepy Hollow Water District

The portion of the project benefitting all customers with a cost of \$744,910, as stated above, shall be distributed evenly among all 19 EDUs in the new and existing district. Based on the proportion of units in the existing district, approximately 66-percent, the portion of that cost to be levied on the existing district is \$490,072, in addition to the \$50,140 of the project cost that will solely benefit them, as mentioned above. Therefore, the maximum amount to be expended by the existing Sleepy Hollow Water District is \$540,212, representing approximately 66-percent of the estimated total probable project cost. See Appendix C for an itemized cost estimate.

### 7.2 Sleepy Hollow Water District Extension No. 1

Based on the proportion of units in the proposed Sleepy Hollow Water District Extension No. 1, approximately 34-percent, the portion of that cost to be levied on the proposed district extension is \$254,838, in addition to the \$22,250 of the project cost that will solely benefit the extension, as mentioned above. Therefore, the maximum amount to be expended by the Sleepy Hollow Water District Extension No. 1 is \$277,088, representing approximately 34-percent of the estimated total probable project cost. See Appendix C for an itemized cost estimate.

## 8.0 Project Financing and User Costs

The estimated total probable project cost for the Sleepy Hollow Water District and the Sleepy Hollow Water District Extension No. 1 Project is \$817,300 (in 2020 dollars). The maximum allowable portion of the two (2) WIIA grants awarded to the Town on behalf of the Sleepy Hollow Water District is 60% of the project cost, or \$490,380. This effectively reduces the total project cost and amount to be financed to \$326,920.

It is anticipated that the Town will be eligible for a 30-year, subsidized interest rate DWSRF loan<sup>1</sup>. NYSEFC has recently reported the current market rate financing interest rate to be 3.3%. The corresponding subsidized interest rate is 2.2%<sup>1</sup>. Based on the parameters listed above, the Town's annual debt service payment is estimated to be \$15,002. Any supplemental grants pursued by the Town may further reduce this annual debt service payment; however, they would also reduce the amount of WIIA grant applied to the resulting net total project cost.

### 8.1 Existing Sleepy Hollow Water District

#### 8.1.1 *Debt Service*

As discussed in the previous Section, it is estimated that \$540,212 of the total project cost will benefit customers in the existing water district. This cost includes the existing district's proportionate share of the water main and appurtenances, booster pump station, and hydro-pneumatic tanks based on EDUs, and the services and meters for residents in the existing district only. The debt service which will be levied to all users in the existing Sleepy Hollow Water District is therefore estimated to be \$799 per EDU.

#### 8.1.2 *Existing Debt*

There is no existing debt for the Sleepy Hollow Water District since the existing water system is privately owned and operated.

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<sup>1</sup> Market rate financing terms will be determined by NYSEFC at the end of the project during long-term loan closing. The Subsidized Rate is 66.7% of the market rate per the NYSEFC DWSRF Intended Use Plan, October 1, 2019-September 30, 2020.

### 8.1.3 *Water Use Rates*

Water district customers will be charged by OCWA for metered water use. Based on OCWA's water purchase Rate Schedule No. 7 (for calendar year 2020), the estimated annual water purchase rate per household is \$244 annually. Estimated annual water usage costs are summarized in Appendix D.

### 8.1.4 *Operation and Maintenance Charges*

Operation and maintenance of the proposed public water infrastructure is proposed to be performed by the Town of Sullivan. The cost of operation and maintenance, inclusive of utility, labor and equipment costs, is financed through an annual O&M charge levied to each connected (metered) customer. The O&M performed annually is estimated to be \$4,000, equating to an average annual O&M charge of \$211 per connected single-family home. This estimated O&M charge is reflective of no change in the O&M charge currently being paid by the Sleepy Hollow Water District.

### 8.1.5 *Cost to a Typical Property (Estimated Annual User Cost)*

Based on information presented in this section, the estimated total annual user cost to a typical single-family household in the existing Sleepy Hollow Water District is \$1,306. The estimated cost to a typical property and annual user costs are included in Appendix E.

## 8.2 Sleepy Hollow Water District Extension No. 1

### 8.2.1 *Debt Service*

It is estimated that \$277,088 of the total project cost will benefit customers in the proposed Sleepy Hollow Water District Extension No. 1 only. This cost includes the new district's proportionate share of the water main and appurtenances, booster pump station, and hydro-pneumatic tanks based on

EDUs, and the services for residents in the new district only. The debt service which will be levied to all users in the proposed district extension is estimated to be \$772 per EDU.

#### *8.2.2 Existing Debt*

There is no existing debt for the proposed Sleepy Hollow Water District Extension No. 1.

#### *8.2.3 Water Use Rates*

Water district customers will be charged by OCWA for metered water use. Based on OCWA's water purchase Rate Schedule No. 7 (for calendar year 2020), the estimated annual water purchase rate per household is \$244 annually. Estimated annual water usage costs are summarized in Appendix D.

#### *8.2.4 Operation and Maintenance Charges*

Operation and maintenance of the proposed public water infrastructure is proposed to be performed by the Town of Sullivan. The cost of operation and maintenance, inclusive of utility, labor and equipment costs, is financed through an annual O&M charge levied to each connected (metered) customer. The O&M performed annually is estimated to be \$4,000, equating to an average annual O&M charge of \$211 per connected single-family home.

#### *8.2.5 Cost to a Typical Property (Estimated Annual User Cost)*

Based on information presented in this section, the estimated total annual user cost to a typical single-family household in the proposed Sleepy Hollow Water District Extension No. 1 will be \$1,279. The estimated cost to a typical property and annual user costs are included in Appendix E.

### 8.2.6 *Estimated One-Time Connection Cost for New Water System Users*

Residents in the Sleepy Hollow Water District Extension No. 1 would be responsible for installing their own water service laterals from the curb valve located at the roadway right-of-way boundary line to their point of connection at their home. This work is typically performed by a private contractor or plumber hired by the homeowner. Connection to the water main, service lateral installation to the roadway right-of-way line, curb valve with valve box, and water meter purchase are included in the Sleepy Hollow Water District Extension No. 1 project cost estimate.

Additional costs that may be incurred by the homeowner are meter pit installations (properties where the meter would be installed more than 150-feet from the right-of-way or curb stop) and interior pressure reducing valve (PRV) on all service connections having 80 psi static pressure and above. Projected estimated aforementioned one-time connection costs are summarized below:

Pressure Reducing Valve (Not Anticipated): -

Service Lateral Installation (3/4"): \$1,000 (base fee) + \$25 per LF

Meter Pit Installation (if necessary, furnish and install): \$1,300

Assuming a meter pit installation will be required for a typical property per OCWA requirements, and based on an average service lateral length of approximately 60 linear feet and assuming the typical property within the water district will not require a PRV, the estimated water service connection costs to the typical property in the Sleepy Hollow Water District Extension No. 1 will be in the average range of \$3,800.

## 9.0 Recommended Steps to Proceed

It is recommended that the Town of Sullivan Town Board accept this revised Map and Plan and revised Map, Plan, and Report for the proposed improvements to the Sleepy Hollow Water District and for the proposed Sleepy Hollow Water District Extension No. 1, respectively. Following Board acceptance of these plans, steps to increase the bond resolution should proceed pursuant to Town Law and as recommended by the Town's legal counsel.

## Figures

Figure 1

Project Location Map - Topography

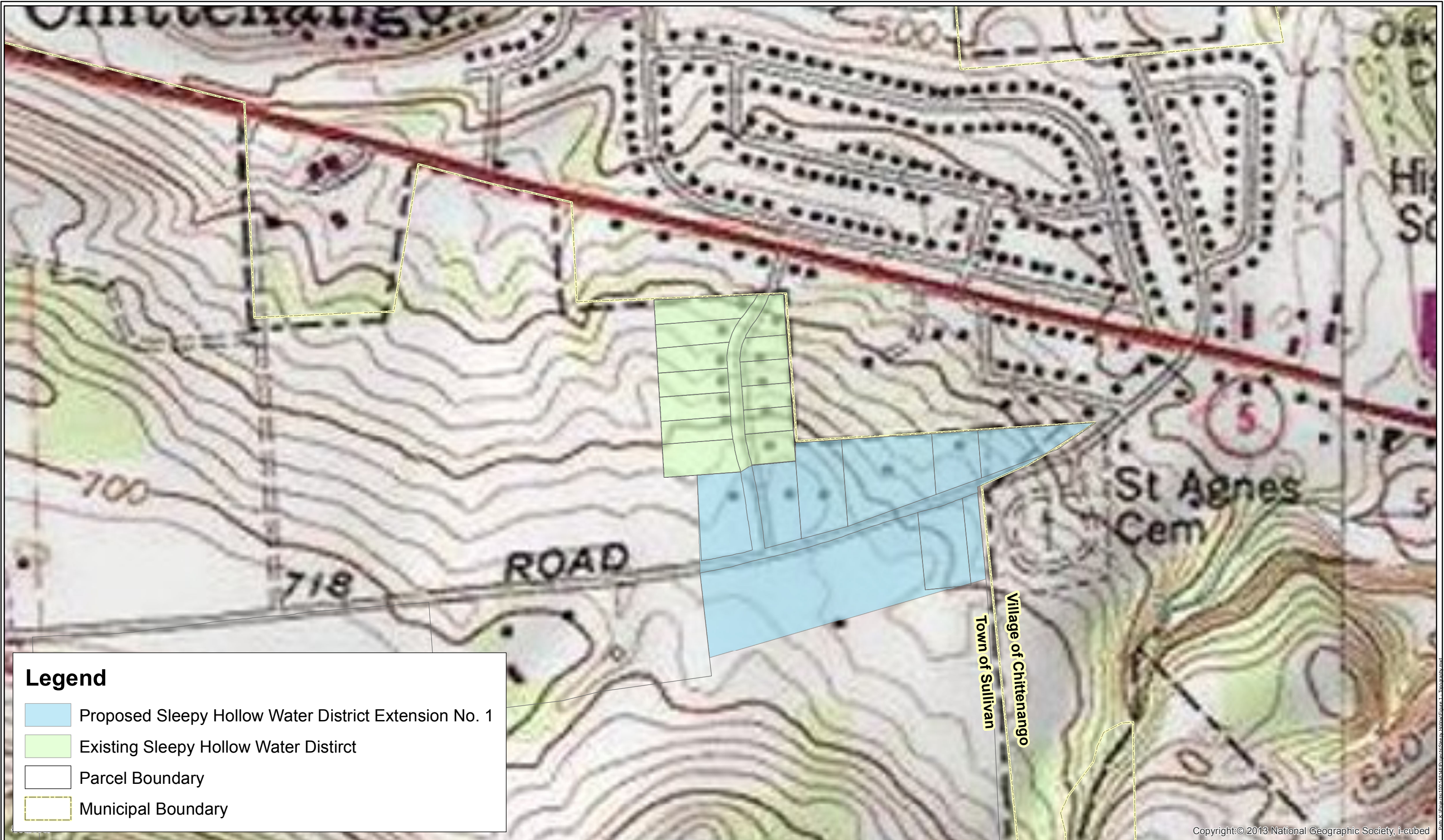


Figure 2

Project Location Map – Agricultural Districts

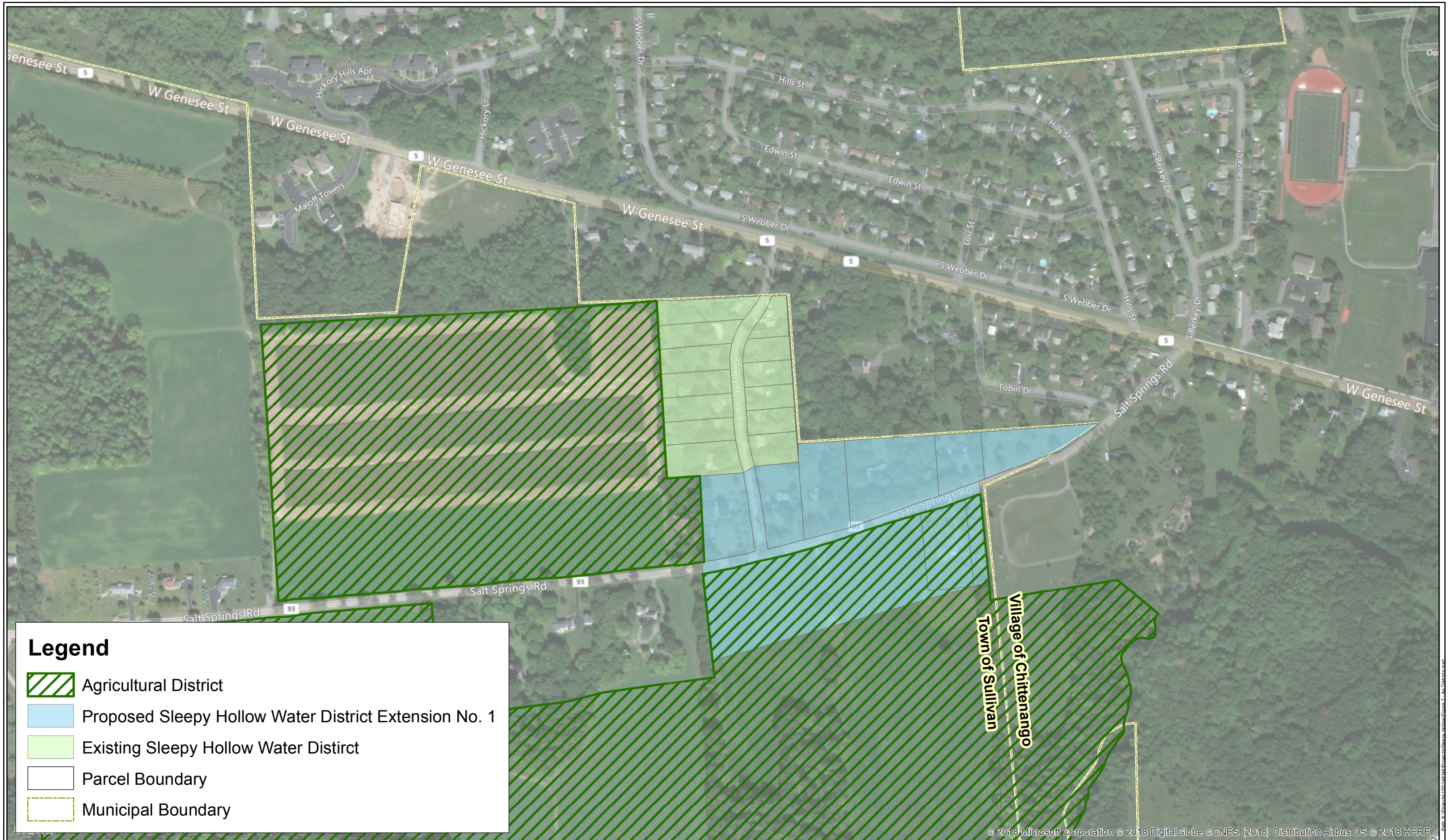


Figure 3

Existing Sleep Hollow Water District Boundary

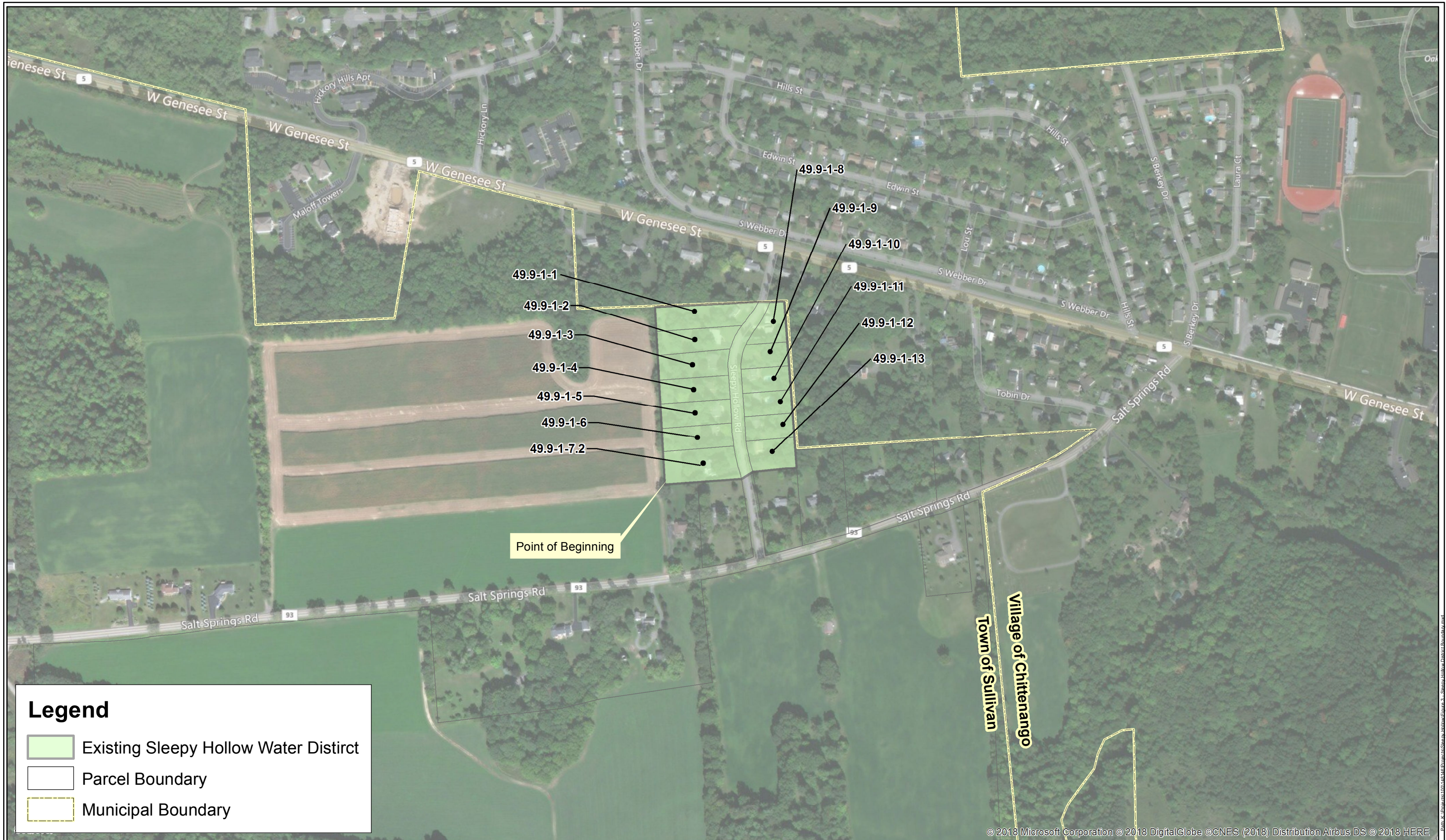
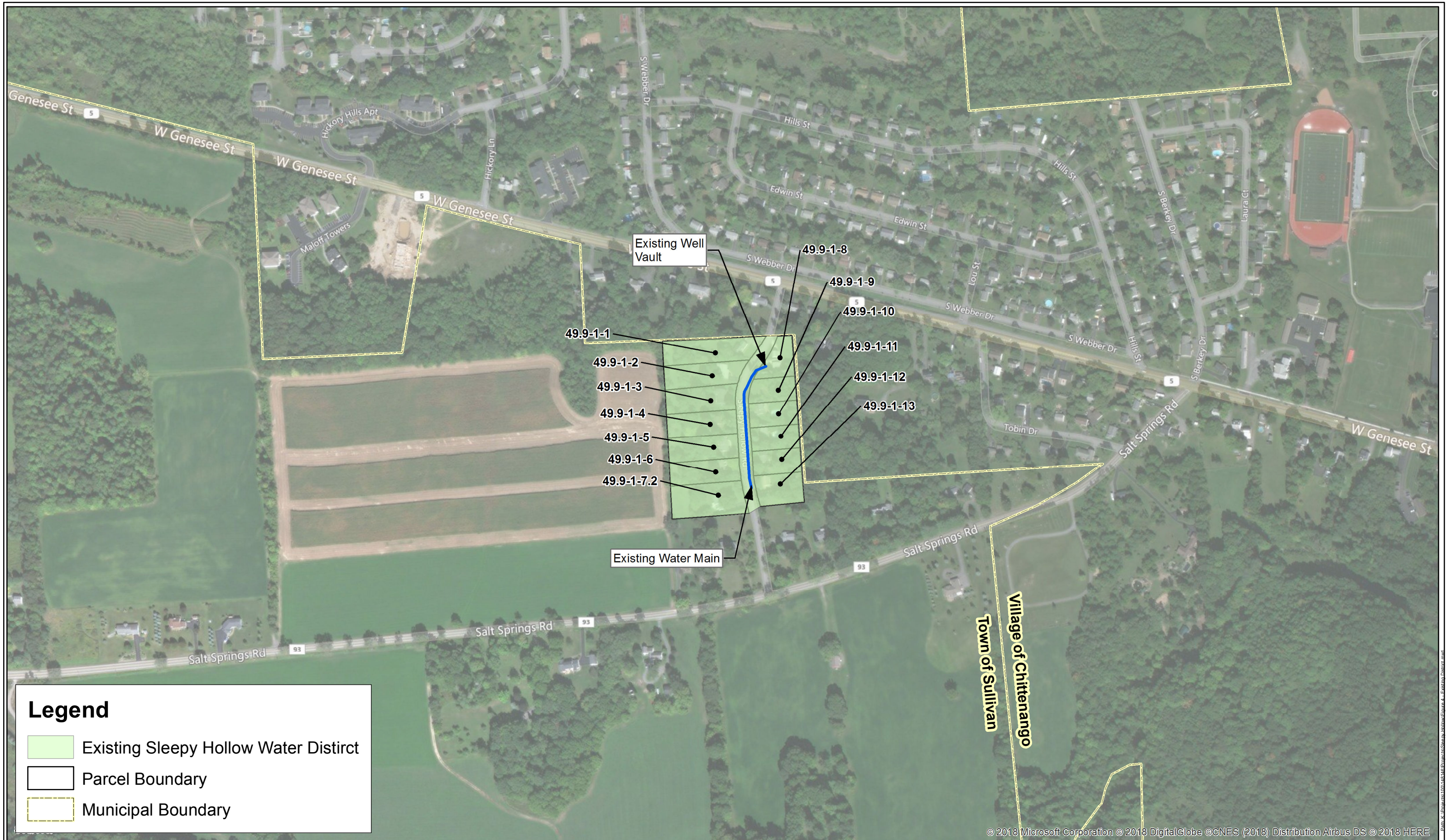


Figure 4

Existing Sleepy Hollow Water District Facilities



## Legend

- Existing Sleepy Hollow Water Distirct
- Parcel Boundary
- Municipal Boundary



Figure 5

Proposed Sleepy Hollow Water District Extension No.1 Boundary

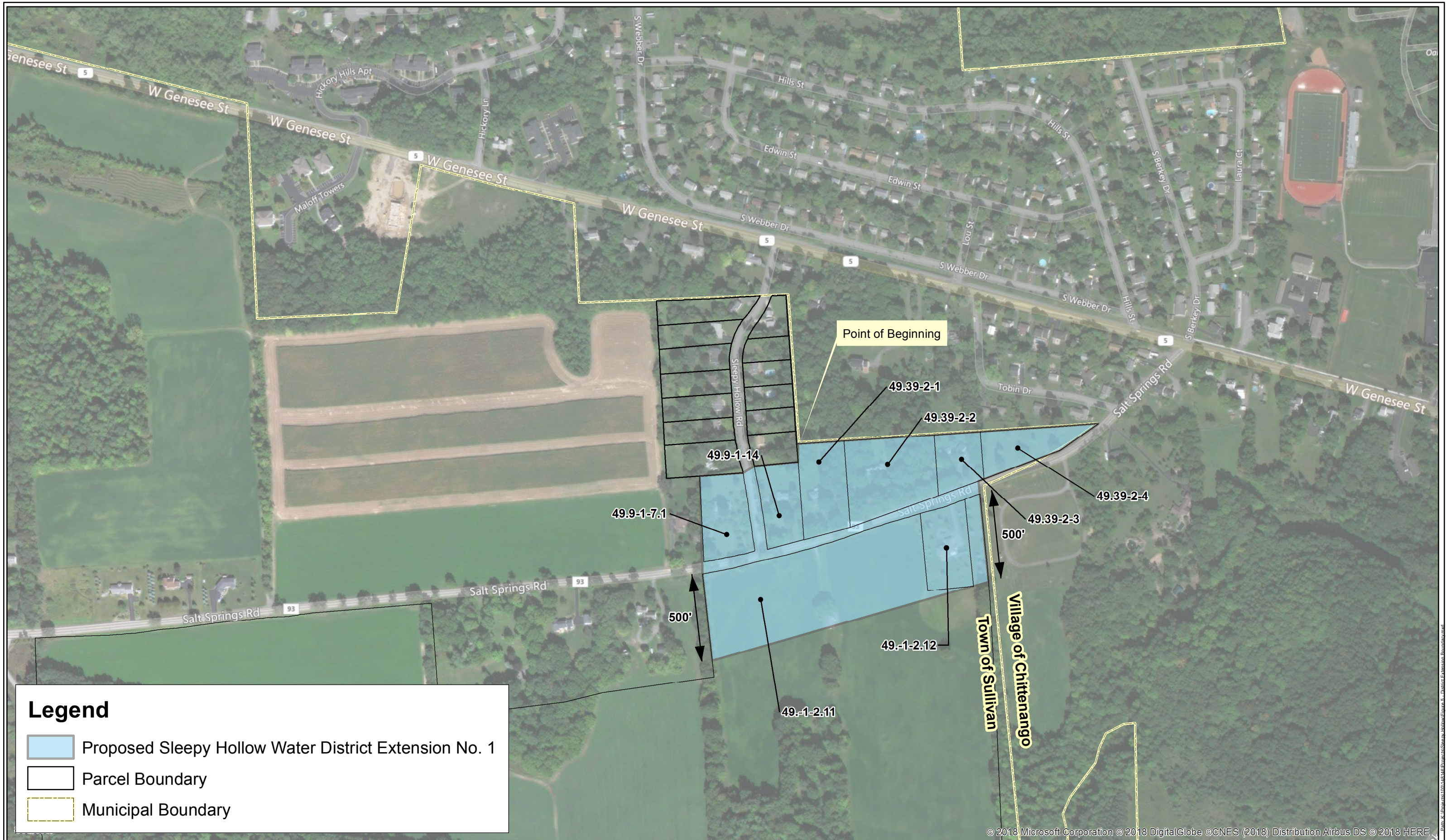
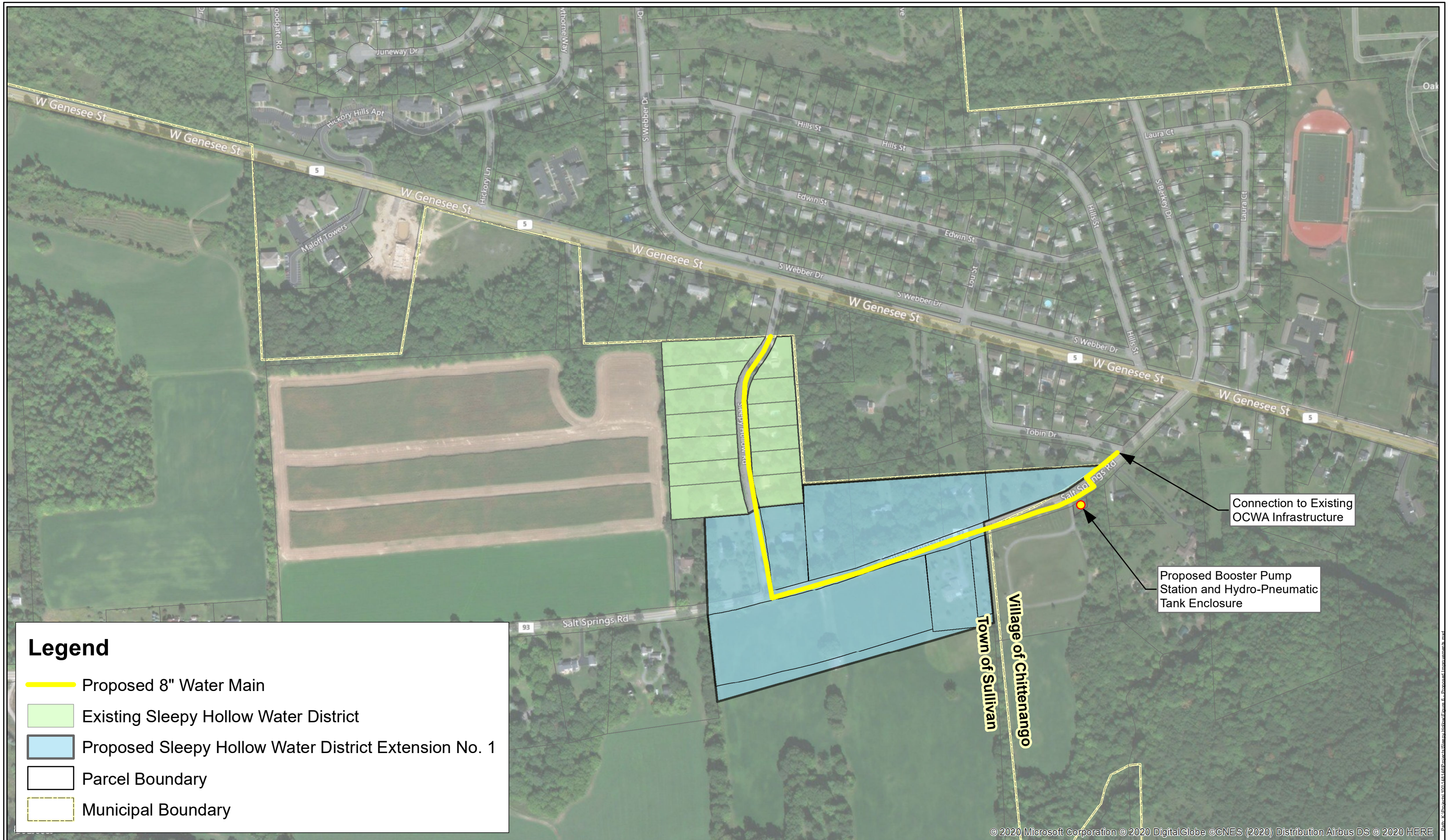


Figure 6

Proposed Water Infrastructure Improvements



## Appendices

## Appendix A

### Boundary Descriptions

**Boundary Description**  
**Existing Sleepy Hollow Water District Boundary**

The Existing Sleepy Hollow Water District Boundary, situated in the Town of Sullivan, County of Madison, State of New York, being more particularly described as follows:

Commencing at the Point of Beginning located at the southwestern corner of Parcel 49.9-1-7.2 as shown on the Town of Sullivan Tax Map; thence proceeding northerly along the western property boundary of Parcel 49.9-1-7.2 to the southwestern property corner of Parcel 49.9-1-6; thence continuing northerly along the western boundary of Parcel 49.9-1-6 to the southwestern property corner of Parcel 49.9-1-5; thence continuing northerly along the western boundary of Parcel 49.9-1-5 to the southwestern property corner of Parcel 49.9-1-4; thence continuing northerly along the western boundary of Parcel 49.9-1-4 to the southwestern property corner of Parcel 49.9-1-3; thence continuing northerly along the western boundary of Parcel 49.9-1-3 to the southwestern property corner of Parcel 49.9-1-2; thence continuing northerly along the western property boundary of Parcel 49.9-1-2 to the northwestern property corner of Parcel 49.9-1-1; thence proceeding easterly along the northern boundary of Parcel 49.9-1-1 to the northeastern property corner of said Parcel; thence continuing easterly across Sleepy Hollow Road to the northwestern property corner of Parcel 49.9-1-8; thence continuing easterly along the northern boundary of Parcel 49.9-1-8 to the northeastern property corner of said Parcel; thence proceeding southerly along the eastern boundary of Parcel 49.9-1-8 to the northeastern property corner of Parcel 49.9-1-9; thence continuing southerly along the eastern boundary of Parcel 49.9-1-9 to the northeastern property corner of Parcel 49.9-1-10; thence continuing southerly along the eastern boundary of Parcel 49.9-1-10 to the northeastern property corner of Parcel 49.9-1-11; thence continuing southerly along the eastern boundary of Parcel 49.9-1-11 to the northeastern property corner of Parcel 49.9-1-12; thence continuing southerly along the eastern boundary of Parcel 49.9-1-12 to the northeastern property corner of

Parcel 49.9-1-13; thence continuing southerly along the eastern boundary of Parcel 49.9-1-13 to the southeastern property corner of said Parcel; thence proceeding westerly along the southern boundary of Parcel 49.9-1-13 to the southwestern property corner of said Parcel; thence continuing westerly across Sleepy Hollow Road to the southeastern property corner of Parcel 49.9-1-7.2; thence continuing westerly along the southern boundary of Parcel 49.9-1-7.2 to the southwestern property corner of said Parcel, where the point is also the Point of Beginning, and encompassing all parcels contained within.

The above-described boundary is in accordance with the map entitled "Existing Sleepy Hollow Water District Boundary" prepared by Barton & Loguidice, D.P.C. dated October 2018 and having Project No. 148.155.001.

## **Boundary Description**

### **Proposed Sleepy Hollow Water District Extension No. 1 Boundary**

The Proposed Sleepy Hollow Water District Extension No. 1 Boundary, situated in the Town of Sullivan, County of Madison, State of New York, being more particularly described as follows:

Commencing at the Point of Beginning located at the northwestern corner of Parcel 49.39-2-1 as shown on the Town of Sullivan Tax Map; thence proceeding easterly along the northern property boundary of Parcel 49.39-2-1 to the northwestern corner of Parcel 49.39-2-2; thence continuing easterly along the northern property boundary of Parcel 49.39-2-2 to the northwestern corner of Parcel 49.39-2-3; thence continuing easterly along the northern property boundary of Parcel 49.39-2-3 to the northwestern corner of Parcel 49.39-2-4; thence continuing easterly along the northern boundary of Parcel 49.39-2-4 to the northeastern corner of said Parcel; thence proceeding southwesterly along the southern boundary of Parcel 49.39-2-4 to the southwestern corner of said Parcel; thence proceeding southerly across Salt Spring Road to the northeastern property corner of parcel 49.-1-2.11; thence continuing southerly for 500-ft along the eastern boundary of Parcel 49.-1-2.11; thence proceeding westerly along the offset 500 feet south of the northern boundary of Parcel 49.-1-2.11 to the southeastern property corner of Parcel 49.-1-2.12; thence continuing westerly along the offset 500 feet south of the northern boundary of Parcel 49.-1-2.11 to a point 500 feet south of the northwestern property corner of said Parcel; thence proceeding northerly for 500-ft along the western boundary of Parcel 49.-1-2.11 to the northwestern corner of said Parcel; thence continuing northerly across Salt Springs Road to the southwestern property corner of Parcel 49.9-1-7.1; thence continuing northerly along the western boundary of Parcel 49.9-1-7.1 to the northwestern corner of said Parcel; thence proceeding easterly along the northern boundary of Parcel 49.9-1-7.1 to the northeastern property corner of said Parcel; thence continuing easterly across Sleepy Hollow Road to the northwestern property corner of Parcel 49.9-1-14; thence continuing

easterly along the northern boundary of Parcel 49.9-1-14 to the northeastern corner of said Parcel; thence proceeding northerly along the western boundary of Parcel 49.39-2-1 to the northwestern corner of said Parcel, said point also being the Point of Beginning, and encompassing all parcels within.

The above-described boundary is in accordance with the map entitled "Proposed Sleepy Hollow Water District Extension Boundary" prepared by Barton & Loguidice, D.P.C. dated October 2018 and having Project No. 148.155.001.

Appendix B

EDU Assessment

TAX ID #	HOUSE #	STREET		PROPERTY CLASS	OWNER	OWNER ADDRESS	CITY, STATE, ZIP	EDU	Comments	Assessed Value 2019
49.9-1-1	115	Sleepy Hollow	Rd	210	Dygert, James T	115 Sleepy Hollow Rd	Chittenango, NY 13037	1		\$144,500
49.9-1-10	110	Sleepy Hollow	Rd	210	Leonard, Kim	110 Sleepy Hollow Rd	Chittenango, NY 13037	1		\$133,900
49.9-1-11	108	Sleepy Hollow	Rd	210	Toscano , Kenneth W	108 Sleepy Hollow Rd	Chittenango, NY 13037	1		\$121,200
49.9-1-12	106	Sleepy Hollow	Rd	210	Ferguson, Warren R	106 Sleepy Hollow Rd	Chittenango, NY 13037	1		\$127,900
49.9-1-13	104	Sleepy Hollow	Rd	210	Roberts, Diane J	104 Sleepy Hollow Rd	Chittenango, NY 13037	1		\$130,200
49.9-1-2	113	Sleepy Hollow	Rd	210	DiChristina, Joan E	2534 Forest Way	Atlanta, GA 30305	1		\$153,600
49.9-1-3	111	Sleepy Hollow	Rd	210	Phillips, James E	111 Sleepy Hollow Rd	Chittenango, NY 13037	1		\$161,700
49.9-1-4	109	Sleepy Hollow	Rd	210	Riley, Richard	109 Sleepy Hollow Rd	Chittenango, NY 13037	1		\$135,600
49.9-1-5	107	Sleepy Hollow	Rd	210	May, Lucas H	107 Sleepy Hollow Rd	Chittenango, NY 13037	1		\$158,900
49.9-1-6	105	Sleepy Hollow	Rd	210	Wallace, Kara E	105 Sleepy Hollow Rd	Chittenango, NY 13037	1		\$155,500
49.9-1-7.2	103	Sleepy Hollow	Rd	210	Kieffer, Peter J	103 Sleepy Hollow Rd	Chittenango, NY 13037	1		\$187,000
49.9-1-8	114	Sleepy Hollow	Rd	210	Schiralli, Charles M	114 Sleepy Hollow Rd	Chittenango, NY 13037	1		\$128,700
49.9-1-9	112	Sleepy Hollow	Rd	314	Charde, Gerald	315 Genesee St	Chittenango, NY 13037	0.5		\$12,800
TOTAL EDUs								12.5		

\*Per 2019 Madison County Tax Parcel Data

TAX ID #	HOUSE #	STREET		PROPERTY CLASS	OWNER	OWNER ADDRESS	CITY, STATE, ZIP	EDU	Comments	Assessed Value 2019
49.9-1-7.1	1427	Salt Springs	Rd	210	Cashman, Richard E	1427 Salt Springs Rd	Chittenango, NY 13037	1		\$191,200
49.9-1-14	102	Sleepy Hollow	Rd	210	Karpinski, Nancy B	22 Eastern Parkway	Auburn, NY 13021	1		\$157,500
49.-1-2.11	1460	Salt Springs	Rd	312	Sundance, LLC	8383 Salt Springs Rd	Manlius, NY 13104	0	Ag. District, vacant	\$162,800
49.-1-2.12	1450	Salt Springs	Rd	210	Sundance, LLC	8383 Salt Springs Rd	Manlius, NY 13104	1		\$251,200
49.39-2-1	1439	Salt Springs	Rd	210	Greco, Mary	1439 Salt Springs Rd	Chittenango, NY 13037	1		\$149,000
49.39-2-2	1445	Salt Springs	Rd	210	Diehl, Marion F	1445 Salt Springs Rd	Chittenango, NY 13037	1		\$191,500
49.39-2-3	1453	Salt Springs	Rd	210	Dennee, Pamela	1453 Salt Springs Rd	Chittenango, NY 13037	1		\$139,000
49.39-2-4		Salt Springs	Rd	695	St. Agnes Cemetery	Salt Spring Road	Chittenango, NY 13037	0.5	Cemetery	\$30,000
<b>TOTAL EDUs</b>								6.5		

\*Per 2019 Madison County Tax Parcel Data

## Appendix C

### Estimate of Probable Project Cost

Sleepy Hollow Water Project Estimated Project Cost					
Item	Description	Quantity	Units	Unit Cost	Total
1	Mobilization/Demobilization	Nec.	LS	\$20,000.00	\$20,000.00
2	Clearing	Nec.	LS	\$20,000.00	\$20,000.00
3	Work Zone Traffic Control	Nec.	LS	\$5,000.00	\$5,000.00
4	Furnish and Install Erosion and Sediment Control	Nec.	LS	\$10,000.00	\$10,000.00
5	Furnish and Install 8-Inch Ductile Iron Water Main	2845	LF	\$50.00	\$142,250.00
6	Furnish and Install 8-Inch Gate Valve with Valve Box	8	EA	\$1,550.00	\$12,400.00
7	Furnish and Install 2" Permanent Blowoff	2	EA	\$2,800.00	\$5,600.00
8	Furnish and Install Water Service to House	2	EA	\$800.00	\$1,600.00
9	Furnish and Install Water Service to Right of Way	18	EA	\$250.00	\$4,500.00
10	Furnish and Install 3/4-Inch Type K Copper Tubing	723	LF	\$40.00	\$28,920.00
11	Furnish and Install Connection to OCWA Water Main	1	LS	\$6,500.00	\$6,500.00
12	Excavation Below Subgrade	200	CY	\$5.00	\$1,000.00
13	Lining	520	CY	\$15.00	\$7,800.00
14	Special Backfill	540	CY	\$15.00	\$8,100.00
15	Restoration	2845	LF	\$5.00	\$14,225.00
16	Asphalt	25	CY	\$485.00	\$12,125.00
17	Furnish and Install Packaged Pumping Systems for Water Utility Service	1	LS	\$224,578.00	\$224,578.00
18	Furnish and Install Neptune T-10 Water Meter	20	EA	\$900.00	\$18,000.00
19	Furnish and Install Corporation Stop	20	EA	\$20.00	\$400.00
20	Furnish and Install Open Cut Road Crossings	2	LS	\$1.00	\$2.00
21	Decommissioning of existing Water Well and Vault	1	LS	\$9,000.00	\$9,000.00
22	Furnish and Install 8-Inch Ductile Iron Cap and Thrust Block	2	EA	\$1,000.00	\$2,000.00
23	Miscellaneous Work Allowance	Nec.	EA	\$20,000.00	\$20,000.00
1A	Furnish and Install Meter Pits at Rights-of-Way	19	EA	\$700.00	\$13,300.00
				Subtotal	\$587,300
			Contingency	10%	\$58,800
			Subtotal Construction Costs		\$646,100
			Engineering	Lump Sum	\$124,200
			Legal	Lump Sum	\$42,000
			Bond Counsel	Lump Sum	\$5,000
				Total	\$817,300

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Sleepy Hollow Water Project Estimated Project Cost of Mutually Beneficial Infrastructure					
Item	Description	Quantity	Units	Unit Cost	Total
1	Mobilization/Demobilization	Nec.	LS	\$20,000.00	\$20,000.00
2	Clearing	Nec.	LS	\$20,000.00	\$20,000.00
3	Work Zone Traffic Control	Nec	LS	\$5,000.00	\$5,000.00
4	Furnish and Install Erosion and Sediment Control	Nec.	LS	\$10,000.00	\$10,000.00
5	Furnish and Install 8-Inch Ductile Iron Water Main	2845	LF	\$50.00	\$142,250.00
6	Furnish and Install 8-Inch Gate Valve with Valve Box	8	EA	\$1,550.00	\$12,400.00
7	Furnish and Install 2" Permanent Blowoff	2	EA	\$2,800.00	\$5,600.00
8	Furnish and Install Water Service to Right of Way	1	EA	\$250.00	\$250.00
9	Furnish and Install 3/4-Inch Type K Copper Tubing	54	LF	\$40.00	\$2,160.00
10	Furnish and Install Connection to OCWA Water Main	1	LS	\$6,500.00	\$6,500.00
11	Excavation Below Subgrade	200	CY	\$5.00	\$1,000.00
12	Lining	520	CY	\$15.00	\$7,800.00
13	Special Backfill	540	CY	\$15.00	\$8,100.00
14	Restoration	2845	LF	\$5.00	\$14,225.00
15	Asphalt	25	CY	\$485.00	\$12,125.00
16	Furnish and Install Packaged Pumping Systems for Water Utility Service	1	LS	\$224,578.00	\$224,578.00
17	Furnish and Install Neptune T-10 Water Meter	1	EA	\$900.00	\$900.00
18	Furnish and Install Corporation Stop	1	EA	\$20.00	\$20.00
19	Furnish and Install Open Cut Road Crossings	2	LS	\$1.00	\$2.00
20	Furnish and Install 8-Inch Ductile Iron Cap and Thrust Block	2	EA	\$1,000.00	\$2,000.00
21	Miscellaneous Work Allowance	Nec.	EA	\$20,000.00	\$20,000.00
				Subtotal	\$514,910
			Contingency (Total Project Cost)	10%	\$58,800
				<b>Subtotal Construction Costs</b>	<b>\$573,710</b>
			Engineering	Lump Sum	\$124,200
			Legal	Lump Sum	\$42,000
			Bond Counsel	Lump Sum	\$5,000
				<b>Total</b>	<b>\$744,910</b>

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Sleepy Hollow Water Project					
Estimated Project Cost of Infrastructure Benefitting Existing District					
Item	Description	Quantity	Units	Unit Cost	Total
1	Furnish and Install Water Service to House	2	EA	\$800.00	\$1,600.00
2	Furnish and Install Water Service to Right of Way	10	EA	\$250.00	\$2,500.00
3	Furnish and Install 3/4-Inch Type K Copper Tubing	440	LF	\$40.00	\$17,600.00
4	Furnish and Install Neptune T-10 Water Meter	12	EA	\$900.00	\$10,800.00
5	Furnish and Install Corporation Stop	12	EA	\$20.00	\$240.00
6	Decommissioning of existing Water Well and Vault	1	LS	\$9,000.00	\$9,000.00
1A	Furnish and Install Meter Pits at Rights-of-Way	12	EA	\$700.00	\$8,400.00
				Subtotal	\$50,140
				<b>Total Construction Costs</b>	<b>\$50,140</b>

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Sleepy Hollow Water Project					
Estimated Project Cost of Infrastructure Benefitting Proposed Extension					
Item	Description	Quantity	Units	Unit Cost	Total
1	Furnish and Install Water Service to Right of Way	7	EA	\$250.00	\$1,750.00
2	Furnish and Install 3/4-Inch Type K Copper Tubing	229	LF	\$40.00	\$9,160.00
3	Furnish and Install Neptune T-10 Water Meter	7	EA	\$900.00	\$6,300.00
4	Furnish and Install Corporation Stop	7	EA	\$20.00	\$140.00
1A	Furnish and Install Meter Pits at Rights-of-Way	7	EA	\$700.00	\$4,900.00
				Subtotal	\$22,250
			<b>Total Construction Costs</b>		<b>\$22,250</b>

## Appendix D

### OCWA 2020 Rate Schedule



## ARTICLE X CLASSIFICATIONS, RATES & CHARGES

Classification of services rendered or facilities furnished, and rates and charges therefore are hereby established as follows:

### RATE SCHEDULE NO. 7 General Municipal Wholesale Service – Monthly

**AVAILABILITY:** Service under this rate schedule is available to any municipal customer within the Authority's service area regularly receiving and using less than 500,000 gallons per month and similar customers when supplied pursuant to special contract providing for use of this rate schedule.

within the Authority's service area receiving and using

**APPLICABILITY:** Wholesale municipal metered purpose

**BASE SYSTEM FEE:** The base system fee for services hereunder shall be:

<b><u>Size of Meter:</u></b>	<b><u>Base System Fee:</u></b>
1"	\$ 29.25
1-1/2"	\$ 58.50
2"	\$ 93.60
3"	\$ 187.20
4"	\$ 292.50
6"	\$ 585.00
8"	\$ 936.00
10"	\$ 2,457.00

### **WATER USE RATE:**

First	200,000 gallons per month @	\$3.07 per 1,000 gallons
Next	2,500,000 gallons per month @	\$2.51 per 1,000 gallons
Over	2,700,000 gallons per month @	\$2.37 per 1,000 gallons

**BILLING:** Based on the total of the Base System fee plus the applicable usage rate for all water used during the billing cycle.

**PAYMENT:** Bills are rendered net and are payable within fifteen (15) days after presentation, in accordance with Article VIII of the Customer Rules of the Authority.

**TERMS AND CONDITIONS:** Service hereunder is subject to the Customer Rules of the Authority.

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**Estimated OCWA Water Purchase Cost**

(Based on 2020 water rates included in OCWA's Rate Schedule 7) (1)

	Monthly	Annual
OCWA Base System Fee (Assuming 2" Meter at Booster Pump Station)	\$93.60	\$1,123.20
OCWA Water Use Rate (Estimated Annual Water Use - 3,135 GPD)	\$292.61	\$3,511.30
$\$3.07 \text{ per } 1,000 \text{ gal}$		
$3,135 \text{ GPD} * \$3.07/1000 \text{ gal} = \$9.62/\text{day}$		
$\$9.62/\text{day} * 365 \text{ days/yr} = \$3,511.30$		
<b>TOTAL</b>	<b>\$386.21</b>	<b>\$4,634.50</b>
Total Cost per EDU	\$20.33	\$243.92

(1) OCWA charges are billed directly to the Town; the Town will be responsible for charging individual homeowners within the Water District.

## Appendix E

### User Cost Estimates

## Sleepy Hollow Water District

### User Cost Estimate

DESCRIPTION	EFC, 30 year, 2.2% (subsidized)*
Project Capital Cost Mutual Benefit	\$744,910
Pro rata Mutual Benefit (12.5 EDU/ 19 EDU)	\$490,072
Project Capital Cost Sleepy Hollow WD	\$50,140
Total Estimated Capital Project Cost	<b>\$817,300</b>
<i>Additional Grant Funding Targeted (WIIA)</i>	\$490,380
Net Project Cost to be Financed	<b>\$326,920</b>
<i>Estimated Debt Service (Existing Customers):</i>	
Pro rata max grant (12.5 EDU/ 19 EDU)	\$322,618
Total Estimated Project Cost	\$217,594
Annualized Project Cost	\$9,985
Number of EDU's in Existing District	12.5
Capital Debt per EDU	\$799
Estimated Annual OCWA Water Bill	\$244
Estimated Town of Sullivan O&M	\$211
Estimated Capital Reserve	\$53
Cost to a Typical Property (Total Annual Cost per EDU) Existing District	<b>\$1,306</b>

\*Based on current DWSRF market interest rates.

The Subsidized Rate is 66.7% of the market rate per the NYSEFC DWSRF Intended Use Plan, October 1, 2019-September 30, 2020.

## Sleepy Hollow Water District Extension No. 1

### User Cost Estimate

DESCRIPTION	EFC, 30 year, 2.2% (subsidized)*
Project Capital Cost Mutual Benefit	\$744,910
Pro rata Mutual Benefit (6.5 EDU/ 19 EDU)	\$254,838
Project Capital Cost Sleepy Hollow WD Ext. 1	\$22,250
Total Estimated Capital Project Cost	<b>\$817,300</b>
<i>Additional Grant Funding Targeted (WIIA)</i>	\$490,380
Net Project Cost to be Financed	<b>\$326,920</b>
<i>Estimated Debt Service (New Customers):</i>	
Pro rata max grant (6.5 EDU/ 19 EDU)	\$167,762
Total Estimated Project Cost	\$109,326
Annualized Project Cost	\$5,017
Number of EDU's in New District	6.5
Capital Debt per EDU	\$772
Estimated Annual OCWA Water Bill	\$244
Estimated Town of Sullivan O&M	\$211
Estimated Capital Reserve	\$53
Cost to a Typical Property (Total Annual Cost per EDU) Extension No. 1	<b>\$1,279 (1)</b>

\*Based on current DWSRF market interest rates.

The Subsidized Rate is 66.7% of the market rate per the NYSEFC DWSRF Intended Use Plan, October 1, 2019-September 30, 2020.

(1) Annual cost does not include one-time cost for installing new water service between Town's shut-off at highway R.O.W. and dwelling's interior plumbing.

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