# Map, Plan, and Report

For The

# Town of Sparta Scottsburg Sewer District

# April 2022





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LCDOH LETTER OF SUPPORT

#### I. General

The Town of Sparta has received public interest in establishing a sewer district in the Hamlet of Scottsburg, along portions of Groveland-Scottsburg Road, Lake Street, West Swamp Road, Springwater-Scottsburg Road, Church Street and Sheppard Road as shown in Figure 1 at the end of this report. A sewer district is a special use district required by Town Law where a specific area of the town receives a specific benefit. The cost for receiving this benefit is borne solely by the property owners in that specific area.

The purpose of this project is to provide a safe and reliable sanitary sewer collection system and means of sanitary sewer treatment to residences in the proposed Town of Sparta Scottsburg Sewer District.

#### II. Project Planning Area

#### A. Location

The proposed Scottsburg Sewer District will include a total of approximately 21,600 linear feet of sanitary sewer main, including both gravity and force mains. The sewer mains will be located in the Hamlet of Scottsburg, located in the Northwest corner of the Town of Sparta.

#### B. Environmental Resources Present

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

There are Federally and State regulated wetlands, but they will not be impacted by the project as the water main will either be installed in the road right-of-way or directional drilled. In addition, several Class C streams will be crossed as part of the project either under a cross culvert or drilled.

There are no known endangered species in the project area, but the area does have the potential for Northern Long-eared bats. Tree removal, if any, will be limited between April and September.

Historical properties and cultural resources will be further evaluated during design when the precise location of the proposed main can be identified. Construction will not proceed until SHPO is consulted and their approval is obtained.

#### C. Growth Areas and Population Trends

According to the United States Census, the Town of Sparta has a population of 1,583 in 2020 and 1,624 in 2010. This number reflects a population change of less than 3%.

### D. Community Engagement

The Town will hold several public informational meetings with the public to gage public support and interest, and to provide the public with additional information throughout the process. There will be additional public meetings should the project move forward to advise the public of construction information and for the District formation.

### III. Existing Facilities

#### A. Location Map

The project area in the Town of Sparta is not currently served by any sewer district. The proposed facilities will connect the residents of the area in the Town of Sparta to the existing Town of Groveland sanitary sewer system. Refer to the project location map on Figure No. 1 at the end of this report.

#### B. Existing Systems

The entire area of the proposed sewer district is presently served by private septic systems. The Town of Sparta has received several complaints about the quality and quantity of the sewer treatment in the area. According to a letter issued by the Livingston County Department of Health, based on septic system repairs records, 19 of the properties in the project area have failed. The LCDOH has also identified the area as environmentally sensitive, as it is the confluence of three NYSDEC Class C streams, and a drinking water source for residents of Livingston County. The LCDOH letter can be found in Appendix C at the end of the report.

The Town of Groveland WWTP is located in the Hamlet of Groveland Station, approximately 2.5 miles from the Hamlet of Scottsburg. The WWTP is permitted for 65,000 gallons per day. According to NYSDEC SPDES permit requirements, annual average flows shall not exceed 95 percent of the design capacity, which would be 61,750 gpd. Existing flow data compiled by the Livingston County Water and Sewer Authority shows that over the last 3 years, the overall average flow at the WWTP is 9,899 gpd. Therefore the treatment plant has an effective additional capacity of 51,851 gpd.

#### C. Flows

The existing sanitary sewer flows can be attributed to the existing residential and commercial properties located within the proposed sewer district. The table below includes an evaluation of existing average daily flows and peak hourly flows for the sewer district. The residential average daily flows were determined using an estimated flow of 250 gpd per residence.

The peak hourly flows were estimated by applying a peaking factor of 4.0, based on the "Recommended Standards for Wastewater Facilities, 1997 Edition".

#### SERVICE AREA ESTIMATED EXISTING FLOWS

Location	Estimated Average Daily Design Flows (gpd)	Estimated Peak Hourly Flow (gpd)		
51 Residential Homes	13,000	52,000		
5 Commercial Business	1,000	4,000		
TOTAL	14,000	56,000		

## IV. Need for Project

#### A. Health and Safety

The proposed sewer district will provide a reliable sanitary sewer collection system for the properties in the district. Many of the existing individual septic systems in the proposed district area are inadequate or failing. The elimination of these systems will reduce concerns that these failing systems will cause harmful environmental conditions.

#### B. System O & M

The Town of Sparta will contract with the Livingston County Water and Sewer Authority to provide reliable wastewater disposal to the property owners in the Hamlet of Scottsburg in accordance with state and federal guidelines.

#### C. Growth

The project area is both residential and agricultural. The project area has a potential for some growth being that it is located along a portion of NYS Route 256.

#### V. Alternatives Considered

#### A. Description

#### 1. Alternative 1 – Null Alternative

Estimated Capital Cost: \$ 0

This alternative proposes to "do nothing". The residents of the Town of Sparta Scottsburg Sewer District would continue using their existing septic systems, some of which are inadequate or failing. This could mean escalating health problems and environmental harm for the residents.

#### 2. Alternative 2 – New Sanitary Sewer Collection System

Estimated Capital Cost: \$3,400,000

The proposed action includes the installation of approximately 5,300 linear feet of 8-inch gravity sewer main in the Hamlet of Scottsburg, complete with manholes located every 400 feet, as per 10 State Standards. Residents would connect to the public gravity system with gravity lateral pipes redirected from their existing septic systems.

In the easterly most area of the Hamlet, a handful of residents would be required to utilize residential grinder pump systems in order to pump their sanitary flow past an existing stream flowing through the area. These pumps would flow into a shared 2-inch force main that would discharge directly into the 8-inch gravity main serving the rest of the residents.

The gravity sewer system would flow to a main pump station located at the north end of the Hamlet, the area with the lowest elevation. The pump station will convey the entirety of the flow from the Hamlet approximately 14,500 linear feet through a 6-inch force main to the Groveland Station sewer system, where it will be treated at the existing Groveland Wastewater Treatment Facility.

A map detailing the proposed sewer system can be found on Figure 1.

A cost estimate for the Alternative can be found in Appendix B.

#### B. Design Criteria

The Town of Sparta Scottsburg Sewer District will be designed to provide safe sanitary sewer collection to the residents within the proposed service area and provide the opportunity to for safe effective treatment of the sanitary waste.

#### C. Map

The proposed Town of Sparta Scottsburg Sewer District map and description are included in Appendix A.

#### D. Environmental Impacts

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

#### E. Advantages/Disadvantages

Although there are significant costs associated with Alternative 2, it is the most viable alternative as it is consistent with the goals and meets the needs of the Town of Sparta more effectively than the other alternatives. The advantages of Alternative 2 are as follows:

- 1. It will eliminate the ongoing health and environmental risks associated with the existing septic systems in the area.
- 2. Will provide consistent and reliable treatment for the residents of the Hamlet of Scottsburg and provide the potential for targeted economic growth in the area.

#### VI. Recommended Alternative

The recommended alternative is Alternative 2: New Sanitary Sewer Collection System.

#### A. Proposed Water District Unit Costs

The residents of the Town of Sparta will assume the cost for the project. The estimated project unit costs are based on financing at a 0% interest rate for a 30-year term. Multiple methods of funding have been investigated, and the opportunity to combine grants and loans will provide the Town of Sparta the ability to complete project while keeping annual costs viable for residents

1. The below table shows the possible funding scenario to get the project to an affordable level for the residents of the project area.

Total Capital Cost	\$3,400,000
Total Grant	\$2,394,650
Total Local Share	\$1,005,350
Annual Local Payment	\$33,512
Annual Debt Service/EDU	\$568
Annual Sewer Rate	\$332
Annual Estimated Unit Cost	\$900

<sup>\*</sup>Grant funding includes multiple sources to make project affordable for residents of the area

The Town of Sparta will apply for funding for this project, in order to achieve an affordable unit cost for the residents of the area. A combination of funding sources will be necessary to make the project viable, and keep the annual cost to the home owners below \$900 per year.

#### 2. Equivalent Dwelling Units

Any facility will be considered as a minimum of one (1) unit.

Each single-family residential dwelling shall be considered to be one (1) unit. Included in this category will be single family houses and mobile homes.

Multiple single family dwellings on the same parcel of land will each be considered an individual unit.

Vacant developable land not within the certified agricultural district will be assessed one-half (0.5) of a unit.

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

The Average Daily Use for year 1 will be based on the Design Standards for Wastewater Treatment Works – Intermediate Sized Sewerage Facilities (New York State Department of Environmental Conservation, 1988), Table 3 – Expected Hydraulic Loading Rates.

<u>Number</u>	Total Number of Units		
Single Family Residential	51	51 units	
Vacant Developable Parcel	6	3 units	
Commercial	5	5 units	
	Total = 59 units		

#### B. Short Lived Assets

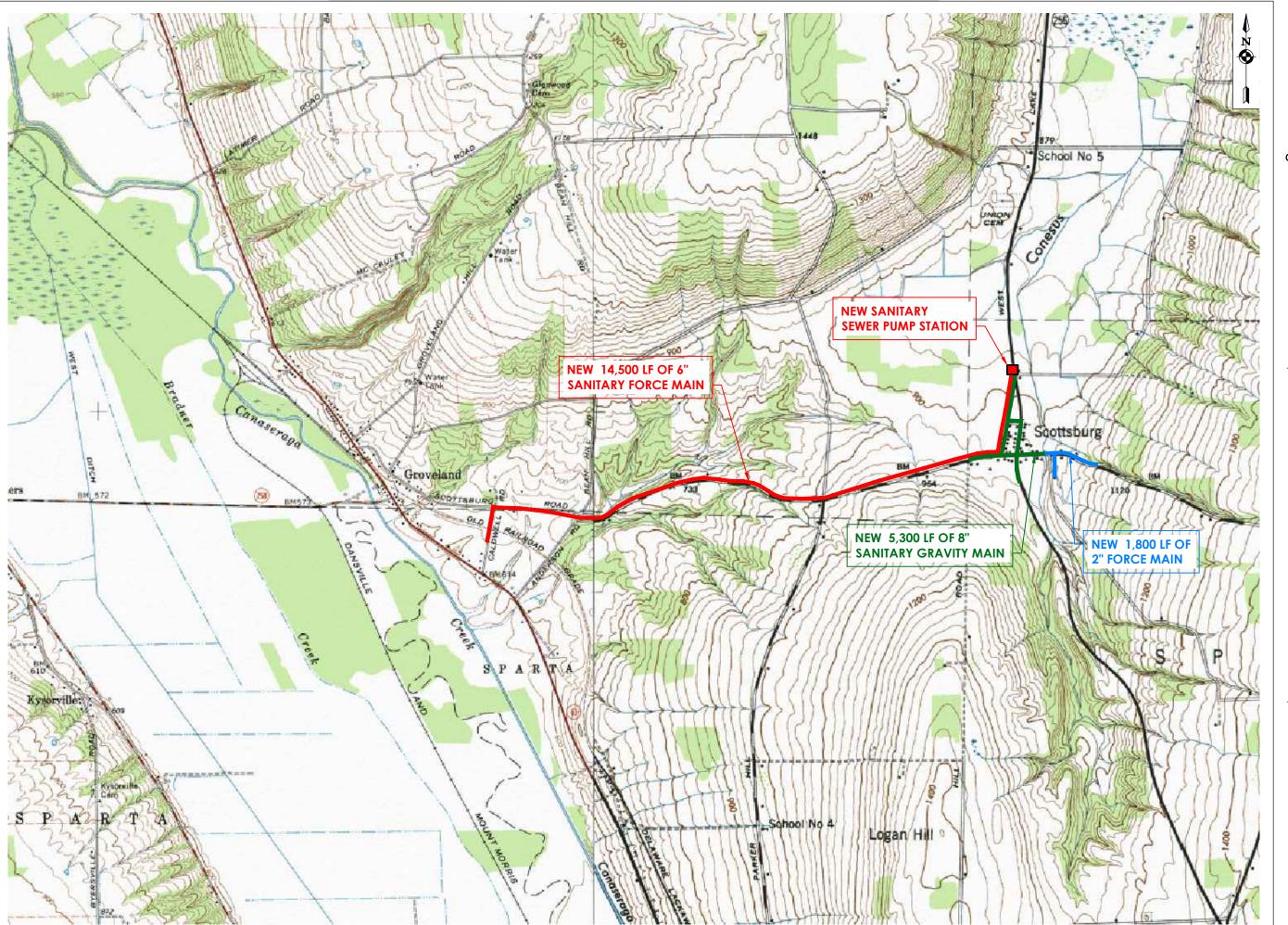
The sewer main, force main and manholes should have a useful life of approximately 50 years with routine maintenance. Manholes and covers will need to be maintained with traffic and plows contributing to wear and tear.

There will be short lived assets associated with the new sanitary sewer pump station and the grinder pumps within the district. The associated costs for operation and maintenance, including replacement of short-lived assets will be included in the sewer cost from the LCWSA per the pending agreement with the Town of Sparta. The only exception is related to the grinder pumps, as after the installation the property owners will be responsible for O&M. A spare pump will be provided for each station.

## **VIII. Conclusions**

The Town of Sparta is committed to providing safe and reliable sanitary sewer conveyance to its residents. This specific project will be instrumental in achieving that goal.

# Figure 1 Project Location Map





CPL | Architecture Engineering Planning

205 ST. PAUL STREET, SUITE 500 ROCHESTER NY

CPLteam.com

#### PROJECT INFORMATION

Project Number

##########

Client Name

# **HAMLET OF SCOTTSBURG**

Project Name

## PROPOSED SANITARY **SEWER**

Project Address

SCOTTSBURG, LIVINGSTON COUNTY, NEW YORK

#### SHEET INFORMATION

1/31/2021

1''=2000' Drawn By Checked By

**ECW** DGI

Drawing Title

OVERALL SEWER PLAN

Drawing Number

S-01

# Appendix A

# Water District Boundary Map and Legal Description



186 N. Water St. Rochester, NY 14604

CPLteam.com

1" = 600'

SANITARY SEWER DISTRICT

#### TOWN OF SPARTA SCOTTSBURG SANITARY SEWER DISTRICT

All that tract or parcel of land situate in the Town of Sparta, County of Livingston, State of New York, being described as follows:

Beginning at a point on the westerly municipal boundary line of the Town of Sparta/Town of Groveland, on the center line of Scottsburg Road (49.5 feet wide right-of-way) at the intersection of Logan Road (49.5 feet wide right-of-way); thence,

- 1. Westerly, along the center line of Scottsburg Road, a distance of 354 feet, more or less, to the southerly extension of the westerly line of tax account number 137.9-1-1; thence,
- 2. Northerly, along the southerly extension of the westerly line of tax account number 137.9-1-1, and the westerly line of tax account 137.9-1-1, a distance of 522 feet, more or less, to the northerly line of tax account number 137.9-1-1; thence,
- 3. Northeasterly, along the northerly line of tax account number 137.9-1-1, a distance of 354 feet, more or less, to the municipal boundary line of the Town of Sparta/Town of Groveland, and the easterly line of tax account number 137.9-1-1; thence,
- 4. Southerly, along the municipal boundary line of the Town of Sparta/Town of Groveland, and the easterly line of tax account number 137.9-1-1, a distance of 55 feet, more or less, to the northerly line of tax account number 137.9-1-2; thence,
- 5. Easterly, along the northerly lines of tax account numbers 137.9-1-2, 137.9-1-5.1, and 137.9-1-6, a distance of 610 feet, more or less, to the westerly line of tax account number 137.9-1-12; thence,
- 6. Northerly, along the westerly lines of tax account numbers 137.9-1-12, 137.9-1-11, and 137.9-1-13, a distance of 503 feet, more or less, to the northerly line of tax account number 137.9-1-13; thence,
- 7. Easterly, along the northerly line of tax account number 137.9-1-13, a distance of 88 feet, more or less, to a westerly line of tax account number 137.9-1-14.1; thence,
- 8. Northeasterly, along a westerly line of tax account number 137.9-1-14.1, a distance of 193 feet, more or less, to a southerly line of tax account number 137.9-1-14.1; thence,
- 9. Westerly, along a southerly line of tax account number 137.9-1-14.1, a distance of 21 feet, more or less, to a westerly line of tax account number 137.9-1-14.1; thence,
- 10. Northeasterly, along a westerly line of tax account number 137.9-1-14.1, a distance of 68 feet, more or less, to the northerly line of tax account number 137.9-1-14.1; thence,
- 11. Southeasterly, along the northerly line of tax account number 137.9-1-14.1, and the easterly extension of the northerly line of tax account number 137.9-1-14.1, a distance of 195 feet, more or less, to the center line of Lake Street (49.5 feet wide right-of-way); thence,
- 12. Northeasterly, along the center line of Lake Street, a distance of 665 feet, more or less, to the center line of Route 256 (66 feet wide right-of-way); thence,

- 13. Southerly, along the center line of Route 256, a distance of 985 feet, more or less, to the westerly extension of the northerly line of tax account number 137.9-1-33; thence,
- 14. Easterly, along the westerly extension of the northerly line of tax account number 137.9-1-33.1, and the northerly line of tax account number 137.9-1-33.1, a distance of 139 feet, more or less, to an easterly line of tax account number 137.9-1-33.1; thence,
- 15. Southerly, along an easterly line of tax account number 137.9-1-33.1, a distance of 11 feet, more or less, to a northerly line of tax account number 137.9-1-33.1; thence,
- 16. Easterly, along a northerly line of tax account number 137.9-1-33.1, a distance of 62 feet, more or less, to an easterly line of tax account number 137.9-1-33.1; thence,
- 17. Southwesterly, along an easterly line of tax account number 137.9-1-33.1, a distance of 92 feet, more or less, to the northerly line of tax account number 137.9-1-35; thence,
- 18. Easterly, along the northerly lines of tax account numbers 137.9-1-35, 137.9-1-49.1, 137.9-1-49.2, 137.9-1-50.11, a distance of 765 feet, more or less, to the easterly line of tax account number 137.9-1-50.11; thence,
- 19. Southerly along the easterly line of tax account number 137.9-1-50.11, a distance of 303 feet, more or less, to the northerly line of tax account number 137.-1-6.2; thence,
- 20. Easterly, along the northerly line of tax account number 137.-1-6.2, a distance of 605 feet, more or less, to the easterly line of tax account number 137.-1-6.2; thence,
- 21. Southerly, along the easterly lines of tax account number 137.-1-6.2, through the lands of tax account number 137.-1-5.119, along the southerly extension of the easterly line of tax account number 137.-1-6.2, a distance of 453 feet, more or less, to the westerly extension of the northerly line of tax account number 137.-1-53.211; thence,
- 22. Easterly, along the westerly extension of the northerly line of tax account number 137.-1-53.211, and a northerly line of tax account number 137.-1-53.211, a distance of 710 feet, more or less, to an easterly line of tax account number 137.-1-53.211; thence,
- 23. Southerly, along an easterly line of tax account number 137.-1-53.211, a distance of 277 feet, more or less, to a northerly line of tax account number 137.-1-53.211; thence,
- 24. Southeasterly, along a northerly line of tax account number 137.-1-53.211, a distance of 213 feet, more or less, to an easterly line of tax account number 137.-1-53.211; thence,
- 25. Southerly, along an easterly line of tax account number 137.-1-53.211, and the southerly extension of an easterly line of tax account number 137.-1-53.211, a distance of 101 feet, more or less, to the center line of Springwater Road (49.5 feet wide right-of-way); thence,
- 26. Northwesterly, along the center line of Springwater Road, a distance of 190 feet, more or less, to the northeasterly extension of the easterly line of tax account number 137.-1-53.221; thence,
- 27. Southwesterly, along the northeasterly extension of the easterly line of tax account number 137.-1-53.221, and the easterly line of tax account number 137.-1-53.221, a distance of 321 feet, more or less, to the southerly line of tax account number 137.-1-53.221; thence,

- 28. Northwesterly, along the southerly lines of tax account numbers 137.-1-53.221 and 137.-1-53.212, a distance of 526 feet, more or less, to an easterly line of tax account number 137.-1-61.1; thence,
- 29. Southerly, along an easterly line of tax account number 137.-1-61.1, a distance of 590 feet, more or less, to the southerly line of tax account number 137.-1-61.1; thence,
- 30. Northwesterly, along the southerly line of tax account number 137.-1-61.1, a distance of 625 feet, more or less, to the westerly line of tax account number 137.-1-61.1; thence,
- 31. Northerly, along the westerly line of tax account number 137.-1-61.1, a distance of 108 feet, more or less, to a southerly line of tax account number 137.-1-62; thence,
- 32. Westerly, along the southerly line of tax account number 137.-1-62, and the westerly extension of the southerly line of tax account number 137.-1-62, a distance of 373 feet, more or less, to the center line of Sheppard Road (49.5 feet wide right-of-way); thence,
- 33. Northerly, along the center line of Sheppard Road, a distance of 75 feet, more or less, to the easterly extension of the southerly line of tax account number 137.-1- 63.12; thence,
- 34. Westerly, along the easterly extension of the southerly line of tax account number 137.-1-63.12, the southerly line of tax account number 137.-1-63.12, and the westerly extension of the southerly line of tax account number 137.-1-63.12, a distance of 624 feet, more or less, to the center line of Route 256; thence,
- 35. Northwesterly, along the center line of Route 256, a distance of 619 feet, more or less, to the easterly extension of the southerly line of tax account number 137.9-1-32; thence,
- 36. Westerly, along the easterly extension of the southerly line of tax account number 137.9-1-32, and the southerly line of tax account number 137.9-1-32, a distance of 141 feet, more or less, to an easterly line of tax account number 137.9-1-31; thence,
- 37. Southerly, along an easterly line of tax account number 137.9-1-31, a distance of 98 feet, more or less, to a southerly line of tax account number 137.9-1-31; thence,
- 38. Westerly, along a southerly line of tax account number 137.9-1-31, and through the lands of tax account number 137.-1-72.1, along the westerly extension of the southerly line of tax account number 137.9-1-31, a distance of 678 feet, more or less, to the easterly line of tax account number 137.-1-70; thence,
- 39. Southerly, along an easterly line of tax account number 137.-1-70, a distance of 552 feet, more or less, to the southerly line of tax account number 137.-1-70; thence,
- 40. Westerly, along the southerly lines of tax account numbers 137.-1-70 and 137.-1-71.1, and the westerly extension of the southerly line of tax account number 137.-1-71.1, a distance of 296 feet, more or less, to the westerly municipal boundary line of the Town of Sparta/Town of Groveland, and the center line of Logan Road; thence,
- 41. Northerly, along the municipal boundary line of the Town of Sparta/Town of Groveland and the center line of Logan Road, a distance of 815 feet, more or less, to the center line of Scottsburg Road and the point of beginning.

Scottsburg Sanitary Sewer District, as described above, contains approximately 100.85 acres of land.

All as shown on a map prepared by CPL, entitled "Proposed Scottsburg Sanitary Sewer District", dated April 13, 2022.

# Appendix B Opinion of Probable Costs

#### TOWN OF SPARTA SCOTTSBURG SEWER SYSTEM PRELIMINARY COST ESTIMATE 4/18/2022

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	STIMATED INIT PRICE	ESTIMATED TOTAL
1	Mobilization (2% of Construction Costs)	LS	1	\$ 49,280.00	\$ 49,280.00
2	Furnish and Install 8" Diameter PVC Gravity Sewer Main		5,300	\$ 180.00	\$ 954,000.00
3	Furnish and Install 4' Precast Manholes	EA	20	\$ 6,000.00	\$ 120,000.00
4	Furnish and Install 6" Diameter Force Main	LF	14,500	\$ 40.00	\$ 580,000.00
5	Furnish and Install Domestic Grinder Pump Station	EA	10	\$ 15,000.00	\$ 150,000.00
6	Furnish and Install 2" Diameter Force Main	LF	1,800	\$ 20.00	\$ 36,000.00
7	Furnish and Install 4-Inch Laterals	EA	54	\$ 6,000.00	\$ 324,000.00
8	New Sanitary Sewer Pump Station	EA	1	\$ 300,000.00	\$ 300,000.00

Subtotal = \$ 2,513,280.00

Contingency (10%) = \$ 251,328.00

Legal, Engineering, Administration (25%) = \$ 628,320.00

Total Estimated Capital Cost= \$ 3,392,928.00

# $\begin{array}{c} \textbf{Appendix} \ \textbf{C} \\ \textbf{LCDOH Letter of Support} \end{array}$

## LIVINGSTON COUNTY DEPARTMENT OF HEALTH

2 Murray Hill Drive Mt. Morris, New York 14510-1691

Jennifer Rodriguez, M.S. Public Health Director

Phone (585) 243-7270 Fax (585) 243-7287 dept-of-health@co.livingston.ny.us www.livingstoncounty.us/doh.htm





#### Mark Grove, P.E., Director Center for Environmental Health

(585) 243-7280/(585) 335-1717 Fax: (585) 243-6793 Dog Control: (585) 243-6740/(585) 335-1720/ Fax: (585) 243-6751

"Commitment to Leading The Community for a Healthier and Safer Tomorrow"

January 27, 2022

Jason Molino, Executive Director Livingston County Water and Sewer Authority 1997 D'Angelo Drive Lakeville, NY 14480 *via email* 

Subject: <u>LETTER OF SUPPORT FOR SANITARY IMPROVEMENTS</u>

Livingston County Sewer & Water Authority Proposed Scottsburg Sewer District – Town of Sparta

Dear Mr. Molino:

The Livingston County Department of Health (LCDOH) supports the Livingston County Water & Sewer Authority (LCWSA) in seeking a sanitary sewer district for the Hamlet of Scottsburg located in the Town of Sparta. The project would provide a municipally operated public sewer to properties in the district, thereby abandoning individual septic systems.

Scottsburg is located in an environmentally sensitive area within Livingston County. It is situated at the confluence of three NYSDEC Class C streams including the Conesus Inlet that is tributary to Conesus Lake and a drinking water source for approximately 20,000 residents of Livingston County. Recognizing the potential impacts to the lake, the NYSDEC began a program under the NYS Environmental Facilities Corporation in 2018 (the Septic System Replacement Program, or SSRP) to fund septic system replacement projects adjacent to streams that feed Conesus Lake in addition to other similar conditions across New York State. A sewer district would have the benefit of potentially reserving NYS SSRP funding ,while available, in lieu of other perhaps more sustainable funded initiatives.

It is our understanding that the proposed sewer district would service 64 properties in the Hamlet of Scottsburg. The LCDOH is the permitting official for individual septic systems and has septic system repair records for 19 of these 64 properties on file; this translates to a 30% failure rate. A sewer district also has the benefit of mitigating environmental impacts commonly associated with septic systems. This is imperative for this environmentally sensitive area in order to protect groundwater and reduce surface water runoff impacts. Failing septic systems can also expose homeowners to E. coli, cryptosporidium, giardia, and hepatitis A, which may cause severe illness and lead to long term health concerns

Please let me know if I can provide any additional assistance towards this important regional project.

Sincerely,

Mark Grove, P.E., Director, Center for Environmental Health

May 12 roug