

APRIL 2023

MASSENA TOWN HALL  
60 MAIN ST.  
MASSENA, N.Y. 13662

MASSENA WASTEWATER TREATMENT PLANT  
302 E. ORVIS ST.  
MASSENA, N.Y. 13662



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## 1. SUMMARY INFORMATION

The purpose of this document is to comply with the E.P.A. requirement entitled Public Notification Requirements for Combined Sewer Overflows to the Great Lakes Basins 40 CFR Parts 122 and 123.

The Village of Massena’s publicly operated treatment works (POTW) State Pollution Discharge Elimination System (SPDES) permit no. NY0031194. The Massena Wastewater Treatment Plant (WWTP) shall be capable of receiving a minimum of 12.4 MGD through the plant headworks; a minimum of 6.8 MGD through the secondary treatment works during wet weather. The Massena wastewater collection system is a combined system (60%), which collects both wastewater and stormwater. During normal conditions (dry weather and typical wet weather events), all wastewater and stormwater from the Village flow to the wastewater treatment plant for full secondary treatment. Based on hydraulic stress testing conducted by the plant staff and the DEC, the secondary treatment process can handle a peak hydraulic capacity of 9.5 MGD.

If the influent flow to the treatment plant exceeds 9.5 MGD, the excess flow is directed to the Overflow Retention Facility (ORF) (01B) for storage and treatment by sedimentation and chlorination/de-chlorination, in accordance with the combined sewer overflow regulations. The WWTP is also equipped with an emergency bypass intended to operate in extreme emergency conditions only (01A).

During the facility planning and design of the above treatment facilities, a CSO study was conducted by Stearns & Wheeler Engineers to determine the collection system capacity for conveying maximum wet weather flows to the treatment plant. Based on the CSO study the village of Massena’s collection system now contains 8 Combined Sewer Overflows (CSO’s), ORF (0.26 MG capacity) (01B), and Emergency Bypass (01A).

The Massena WWTP discharges its treated effluent to the Grasse River, which is classified as a Class B receiving stream. The current SPDES permit has typical secondary treatment limits on biochemical oxygen demand (BOD), Total Suspended Solids (TSS), Fecal Coliform, and Total Phenolics. Disinfection is required from May 1 to October 1. The current permit includes a 30-day average flow limit of 4.8 MGD.

Details on the facility:

Village of Massena Wastewater Treatment Plant  
302 East Orvis St.  
Massena, N.Y. 13662

**SPDES Permit Number: NY0031194**

## 2. COMBINED SEWER OVERFLOW LOCATIONS

### Massena Wastewater Treatment Plant

Outfalls

SPDES Permit No. 0031194

Outfall #	Description	Receiving Water	Class	Lat./ Long.
01A	Emergency Bypass	Grasse River	B	Internal
01B	Overflow Retention Facility	Grasse River	B	Internal
003	Pump Station #1 E. Hatfield St.	Raquette River	B	44-55'10" 74-53'03"
004	Pump Station #2 E. Hatfield St.	Raquette River	B	44-55'21" 74-52'26"
005	37C/B WEST	Grasse River	B	44-56'05" 74-52'27"
006	Liberty Ave. @ Richards St.	Grasse River	B	44-56'18" 74-52'35"
007	Center St.	<del>Grasse River</del>	B	<del>44-56'10" 74-53'28"</del>
008	George St.	Grasse River	B	44-55'55" 74-53'50"
009	W. Hatfield	<del>Grasse River</del>	B	<del>44-54'55" 74-53'40"</del>
010	Church St./ ELM ST.	Grasse River	B	44-55'55" 74-53'40"
011	W. Hatfield	Raquette River	B	44-54'55" 74-53'50"
012	Pump Station #3 Cook St.	Raquette River	B	44-54'52" 74-53'35"
Outfall #	Description	Receiving Waters	Class	Lat./ Long.

TABLE 1: Summary of relevant information for each CSO within the village of Massena's collection system. A map of these locations is contained within Appendix A.

The Village of Massena has identification signs at all outfalls to surface waters as required by the current SPDES permit. All CSO signs are placed in as close proximity to the point of discharge as reasonably possible. These signs are maintained by the operators who are employed by the Massena WWTP. The signs are inspected on a monthly (at minimum) basis. The CSO outfall signs are always inspected when the CSO's are checked for signs of overflow. These signs are checked for legibility, and overall condition. Outfalls inside the village are identified by the following sign:



Picture 1: Discharge point signs for the outfall 01A and 01B, located at the Village of Massena Wastewater Treatment Facility. These discharge signs are at all discharge points around the village and are inspected monthly at the minimum.

### 3. MUNICIPALITIES/CONTACTS

#### Department of Public Works (DPW)

- Marty Miller, DPW Superintendent
- [dpwsuper@village.massena.ny.us](mailto:dpwsuper@village.massena.ny.us)
- 315-769-6823

#### Village of Massena Wastewater Treatment Plant/ Village of Massena Water Treatment Plant

- Taylor Zappia, Plant Superintendent
- [plantsuper@village.massena.ny.us](mailto:plantsuper@village.massena.ny.us)
- 315-764-0653

### 4. SENSITIVE AREAS

The Village of Massena's Intake is located approximately 2.5 miles upstream of the closest CSO outfall (CSO outfall #006). The Village of Massena's water supply is safe from any and all CSO discharges.

There are no beaches, or other areas set up for recreational swimming within the Village of Massena. All beaches in the Town of Massena are located upstream (on the St. Lawrence River) of any and all CSO outfall locations and are safe from discharge.

There are no beaches or other recreational swimming areas downstream of CSO discharges for the length of both the Raquette and Grasse River.

### 5. SIGNIFICANT COMMENTS AND RECOMMENDATIONS

*Local Public Health Department:* The Department of Health (DOH) is notified of any and all discharges from CSO's via NY-Alert. Section 6 of the Village of Massena's PNP will note the procedure of notification to the public as well as the DOH.

*Potentially affected Public Entities:*

- *The Village of Massena does not believe there are any public entities that will be affected by any/all CSO outfall discharges.*
- There are no beaches or other recreational swimming areas downstream of CSO discharges for the length of both the Raquette and Grasse River.
- *“The village performs a monthly sewer jetting-flushing of one thousand feet per month. The village also had another three thousand feet that were cleaned, flushed, and camera for backups. That gives the village a total of 15,000 feet of line cleaned and inspected. The village repaired and cleaned two hundred manholes and one hundred catch basins.”*

*-Marty G. Miller, DPW SUPT. (for 2022)*

## **6. NOTIFICATION PROTOCOLS**

### **INITIAL NOTIFICATION:**

- Within 4 hours upon discovery of a CSO overflow, the Plant Superintendent will post an alert through the NY- Alert system. This alert will serve as the electronic initial notification to the DOH, municipalities, and public. At minimum the alert will contain the following:
  - The waterbody that received discharge
  - The location of the CSO discharge
  - The date and time the discharge started, or the time the permittee became aware of the discharge, or if a discharge is expected to occur.
  - If the discharge (s) is (are) ongoing, or have ended
  - The initial notification will only be delayed beyond 4 hours from discovery of CSO discharge in the event that all available staff are physically working on containing the discharge in order to limit the harm to public health. In such an event, the initial notification will be posted as soon as it is feasible.
    - This is extremely rare to occur as the Plant Supt.’s initial responsibility is to notify the public.

### **FOLLOW UP NOTIFICATION**

- Within 7 days after becoming aware that the CSO discharge (s) has ended, the Plant Superintendent will post the following additional information to the NY Alert system, unless already provided:
  - Measured or estimated volume of discharge (s)
  - Approximate time that the discharge (s) ended

- Posted on Village of Massena Website via :
  - <https://massena.us/166/Village-of-Massena>

#### DETERMINATION OF VOLUME AND DURATION OF DISCHARGE AT CSO'S

- At the Massena WWTP our Bypass (01A) and Overflow Retention Facility (01B) are equipped with flow meters to measure the volume of discharge. These meters are calibrated on an annual basis.
- No other CSO's in the Village of Massena's collection system are equipped with electronic flow metering devices. The other CSO's are measured by cup-stick method and corresponding equations. Operators will note how many cups are full on the measuring stick (how high up the outfall pipe the water was), and then use the findings, and Manning's equation to determine the volume of water that exited the outfall pipe to a receiving body of water. Determining the length, in minutes, the water was overflowing is essential to define volume. At outfall #003 we can accurately conclude how long the wet well was higher than the outfall pipe, and in turn, the length of time that the outfall was active. We can estimate outfall #004 with the data gathered at #003 very closely, as both outfalls are very similar. At our other outfalls we cannot monitor exact duration of activity. We must use the data collected at 003, volume of rain, duration of wet weather, and past LTCP data to estimate the amount of time discharge occurred at specific outfalls.

## **7. ANNUAL NOTICE PROTOCOLS**

The village of Massena will compile a written annual notice containing the following:

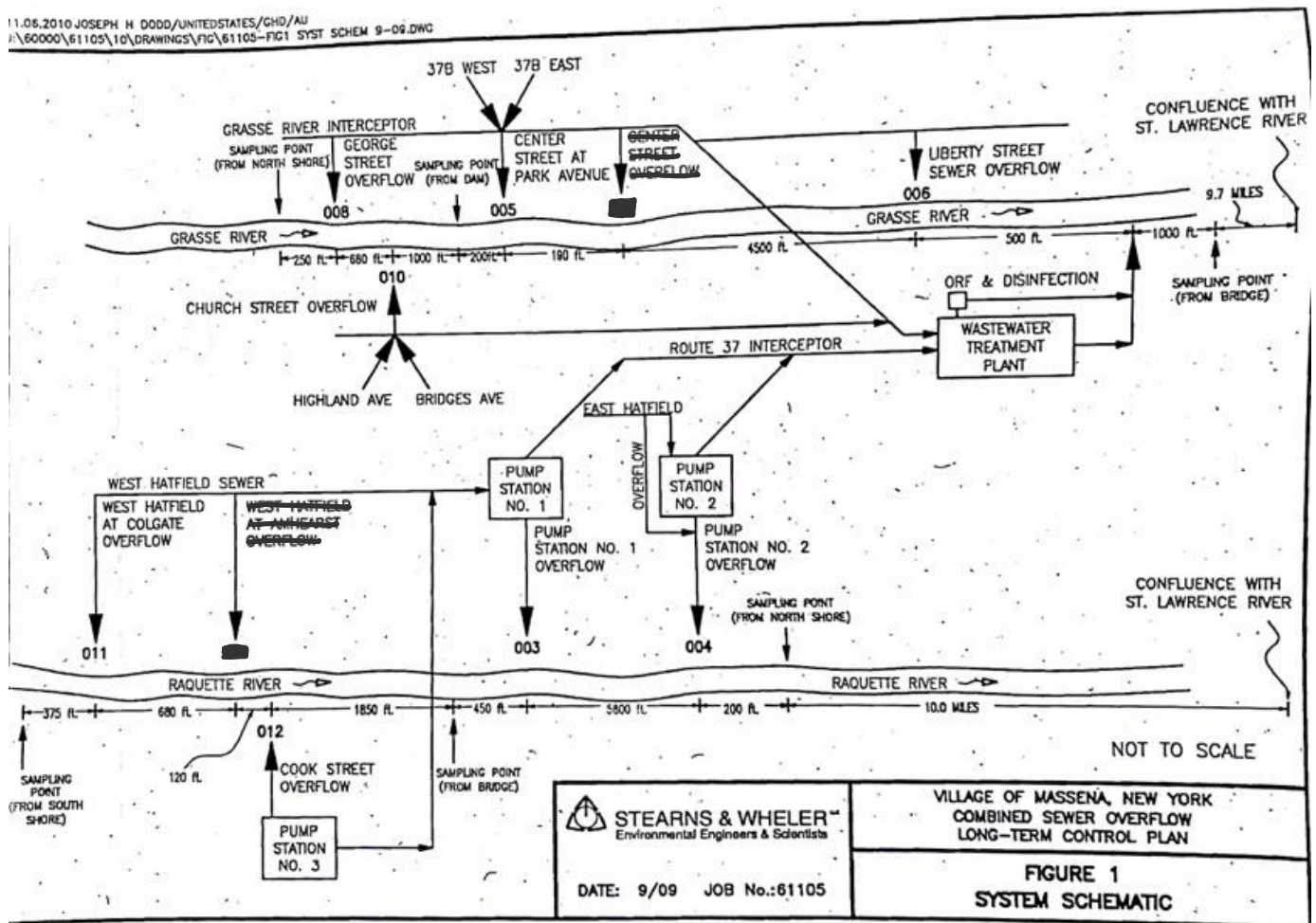
- A description of location and the receiving water for each CSO discharge point, and any treatment provided
- The date, location, estimated duration, estimated volume, and cause of event for each CSO discharge that occurred (wet and dry weather CSO discharges)
- A summary of available monitoring data for CSO discharges from the past calendar year
- A description of any public access areas potentially impacted by each CSO
- Precipitation data in a total inch to the nearest 0.1 inch that resulted in a CSO discharge, if in fact, caused by high precipitation
- A summary including descriptions of key milestones remaining to complete for the Village of Massena's LTCP, and a description of the average annual number of CSO discharges anticipated after implantation of the Long-Term Control Plan.
- This notice will be made aware to the public via Village of Massena website.



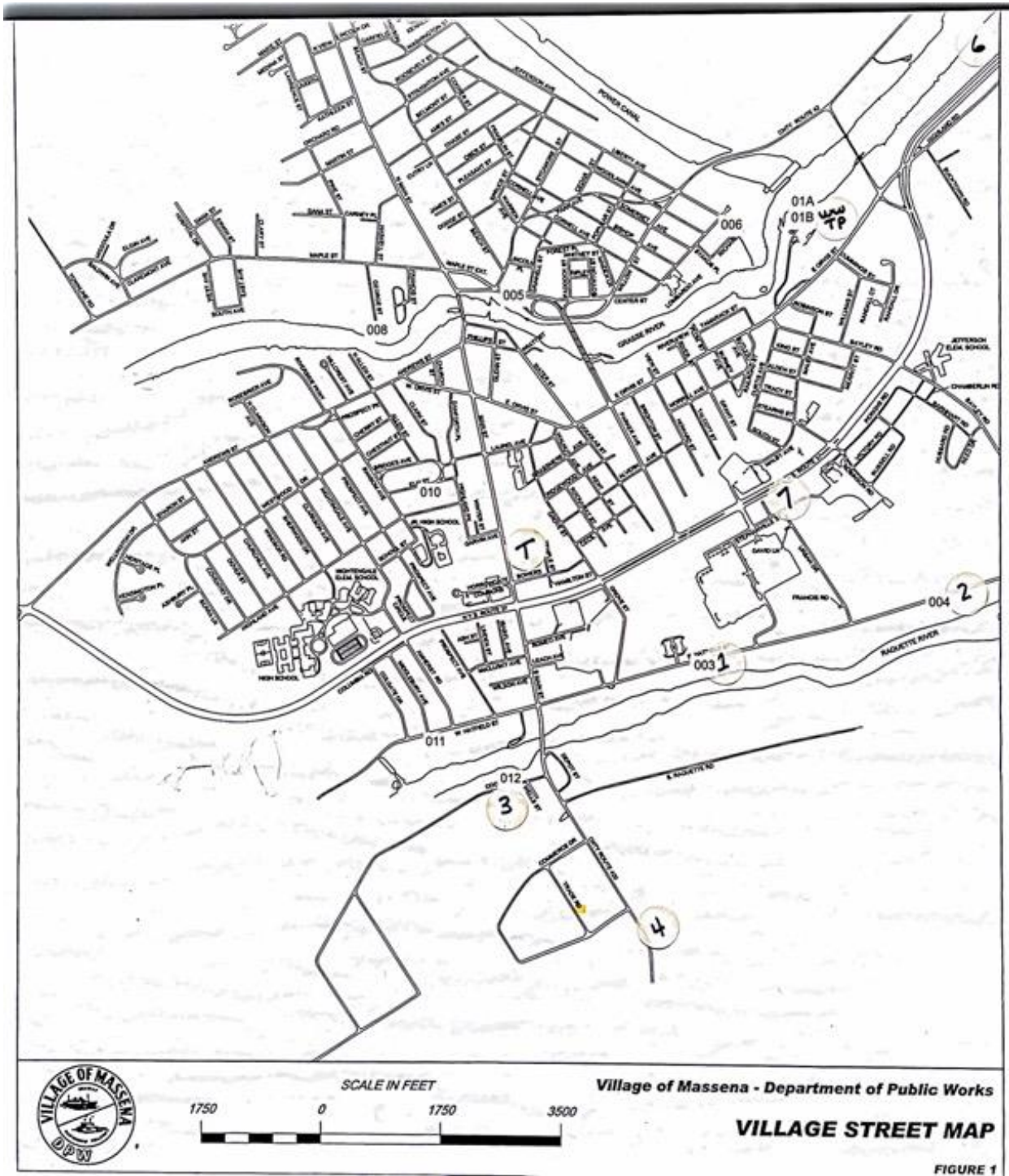
### 8. SIGNIFICANT MODIFICATIONS

- Continuous cleaning and maintenance are scheduled and inspected to manholes, sewer lines and catch basins.
- A large sewer line west of the plant was cleaned this fall and we have noticed a difference in a couple of our CSO's not showing any overflows, as the line is not restricted anymore.

### APPENDIX A



Picture 2: Rough drawings of CSO discharges and their discharge points, as well as rough sewer line schematics.



Picture 3: Village of Massena Street map with Pump stations 1,2,3,4,6,7, and Elevated Tank on Bowers St. CSO outfall locations numbered and labeled at locations.