

CITY OF MILFORD
SEWER COMMISSION REGULAR MEETING
September 27, 2023

The Sewer Commission of the City of Milford held a regular meeting on Wednesday, September 27, 2023, at 6 PM. This meeting was held by videoconference via Zoom.

The following Commissioners were in attendance:

Chairman Edmund Collier

Vice Chairman, Bradford Hubler

Commissioner Edward Abel

Commissioner Alexander J. Armstrong

Commissioner Tara Carroll

Others in attendance:

Lindsay King, Wastewater

Christopher Saley, Director of Public Works

Robert Tedeschi, Sewer Consultant, Weston & Sampson

Beverly Hayes, Recording Secretary

Michelle Parente, Aldermen Liaison

Commissioners and others not in attendance:

Scott Marlow, Alderman Liaison

Chairman Collier called the meeting to order at 6:00 pm.

1. **CITIZEN'S COMMENTS** - None

Statements limited to the legislative function of the Sewer Commission. The time limit granted to each speaker shall be three (3) minutes. Residents, taxpayers, or electors may address the Commission.

2. **APPLICATIONS (PETITIONS)**

3. **TABLED APPLICATIONS (PETITIONS)**

- a.) **470-488 Wheelers Farms Road** – proposed mixed use redevelopment.

Chairman Collier called for a motion to remove the item from the Table. Commissioner Carroll made a motion to approve with Commissioner Abel seconding the motion. The motion carried unanimously.

1. Weston & Sampson performed a capacity review of the wastewater collection and treatment system to confirm whether available capacity exists to support the anticipated wastewater flow from the proposed development.
2. The collection and pumping systems have adequate capacity to convey flow to the Housatonic WWTP.
3. The Housatonic wastewater treatment plant is designed to treat an average of 8.2 MGD of domestic wastewater. Weston & Sampson has reviewed the past 12 months of flow data from the Housatonic WWTP and found this to be approximately 6 MGD. So, the WWTP has the capacity to accept the proposed flow. However, during recent wet weather years, the 180-day moving average daily flow at the Housatonic WWTP has historically exceeded 90% of the design flow rate. Based upon the Housatonic WWTP NPDES permit requirements, the City is required by the CTDEEP to develop a plan to accommodate future increases in flow to the treatment plant. The City is moving forward with repairs to the collection system that will reduce infiltration and inflow (I&I) into the collection system. The City is also planning to implement a prioritized Sanitary Sewer Evaluation Survey (SSES) program to locate and remove I&I from the collection system allowing this, and future connections to the wastewater collection system.
4. Recommendation: The existing wastewater infrastructure has the available capacity to accept the anticipated flow. However, prior to approving the Application, the Sewer Commission should request that the Applicant submit a draft operation and maintenance Agreement for review and approval by the City. The Agreement should address, at a minimum, written documentation that the property owner will be responsible for all costs related to operating, maintaining, repairing, and upgrading the pumping station and force main, in perpetuity, including all related responsibilities. The agreement should include documentation of insurance requirements, funding sources, and inspection and reporting requirements. Note that any modifications to the on-site pumping station that would increase the capacity of the pumping station, must be approved by the Sewer Commission. The Sewer Commission should also have the ability to make periodic inspections of the pumping station to confirm operation.

Chairman Collier read into the record that the application to confirm available sewer capacity is approved, with the condition that this approval is for capacity only; and prior to the commencement of any construction and sewage discharge from such construction, the applicant will apply to the Sewer Commission for, and obtain, permission to connect the approved redevelopment to the public sewer system. As part of such connection approval, the applicant must submit an obtain approval of a maintenance agreement covering all items specified in the Weston & Sampson report dated September 26, 2023, Recommendations paragraph on page 2, a copy of which will be attached to the minutes of the Sewer Commission's September 25, 2023, meeting. Commissioner Abel made a motion to Approve the language from the Chairman with Commissioner Carroll seconding the motion. The motion carried unanimously.

4. CONSULTING ENGINEER'S REPORT – Weston & Sampson – Robert Tedeschi

On-Call Support Services

1. Sanitary Sewer Pump Station Upgrades #1 Various Locations:

- a. This project consists of proposed improvements to the following wastewater pumping stations: Sailors Lane, Old Gate Lane, New Haven Ave., Watrous Lane, and Live Oaks.
- b. Contract Documents between the City and VMS Construction have been executed.

- c. Pre-Construction meeting with VMS Construction was held on July 20, 2023. Preliminary schedule indicates majority of work will occur in 2024.
- d. Shop drawings review is underway.

2. Rogers Avenue Sanitary Pump Station Upgrade:

- a. Bids were received from the pre-qualified contractors on June 6, 2023. One (1) bid was received from Kovacs Construction Corp of Oxford, CT in the amount of \$3,444,900. The Project will be funded by City Bond funds (\$3,811,500). Two (2) Purchase Orders have been set up by the city to fund the project.
- b. Sewer Commission awarded the project to Kovacs Construction. Weston and Sampson issued contract documents to Kovac for execution. Kovac is assembling the bonds and insurance certificates. Expect documents from Kovacs week of 9/27. Once received, documents will be forwarded to the City for signature and a preconstruction meeting will be scheduled.

3. Housatonic WWTP Upgrades: Athletic Brewing Co.:

- a. Solids Handling:
 - i. Pilot Testing has been completed on July 20, 2023. Results show that the proposed dewatering equipment (Rotary Press) will provide the desired 20% dryness.
 - ii. Equipment has been selected (Rotary Press) and final design drawings are underway. The installation of the Rotary Press is not on the critical path for approving the discharge from the brewery. Until the new press is installed and operational, the City can operate the existing belt filter presses for extended hours, as needed to handle any additional solids.
- b. Enhanced Primary Settling with chemical addition:
 - iii. Bench scale testing (Jar Testing) regarding enhanced primary settling with chemical treatment has been completed. The chemical and approximate dosing rate have been selected. Weston & Sampson has designed, and the City has installed, a temporary chemical feed system that will remain in place until the permanent system is in place.
 - iv. The City is currently collecting actual effluent TSS and BOD data post chemical addition. That data collection will continue over the next several weeks. We will compare that data to the data the City collected PRE chemical addition and make adjustments to the dosing rate, if needed.
- c. Final design documents will be submitted to the City for review end of September. Anticipate bidding the project late October 2023.

4. Collection System Flow Evaluation:

- a. Report submitted on January 24, 2022, which included a prioritized schedule for future Sanitary Sewer Evaluation Surveys (SSES) that would identify sources of Infiltration and Inflow (I/I) and other defects in the wastewater collection system.
- b. The 180 day moving average daily flow at the Housatonic WWTP had previously exceeded 90% of the design flow rate requiring the City to develop a plan to accommodate future increases in flow to the plant. Met with CTDEEP on March 29, 2023 to discuss options for addressing the need to reduce infiltration and inflow to both treatment plants to reduce the 180 day moving average daily flow.

- c. City is moving forward with CIPP lining of sewers within the Boston Post Road Area and plans to implement a prioritized SSES program.

5. 2023 – 2028 Capital Improvement Program

Weston & Sampson developed a memo dated September 25, 2023, summarizing the 2023-2028 Sewer Commission Capital Projects. He added there is only one new project added and the costs for the others have been updated. The memo is submitted for review by the Sewer Commission. The items are listed in priority.

Chairman Collier called for a motion to approve the submission of the Projects for the Capital Improvement Budget. Commissioner Abel made a motion to approve with Carroll seconding the motion. The motion carried unanimously.

5. WASTEWATER REPORT – Lindsay King

Wastewater Treatment Plants

Both Wastewater Plants performed well in the month of August, producing a high-quality effluent. 192 million gallons were treated at the Housatonic Plant and 54 million gallons at the Beaver Brook Plant for a total of 246 million gallons. The Housatonic plants monthly average effluent nitrogen was 98 lbs./day (annual average for 2023 is 198 lbs./day and is under the 307 lb./day permit limit). The Beaverbrook Plants monthly average effluent nitrogen was 48 lbs./day (annual average for 2023 is 60 lbs./day and is under the permit limit of 94 lbs./day).

At the Housatonic Plant normal monthly maintenance was performed:

1. Installed 4 new rollers on belt filter press #2 as well as new belts. Replaced two hydraulic lines on press #1
2. Built a spill containment box for totes of Aluminum Chlorohydrate (ACH). Set up a metering pump and hoses for feeding ACH into the primary clarifier to improve primary capture as part of the Housatonic upgrades.
3. Replaced aeration blower #4 with a new blower, installed belts, added oil, and put online.

At the Beaverbrook Plant normal monthly maintenance was performed:

1. Installed new plant water motor and drive for the plant water system.
2. Replaced leaking valve on polymer make-down machine.
3. Replaced leaking hydraulic lines on ultraviolet system.

Pump Stations

Scheduled maintenance was performed at the following pump stations: Cascade, and Roses Mill.

Other Duties Performed:

1. Ran generators on full load at Viscount, Mathew, Crowley, Naugatuck, Sailors, Flax Mill, Zion Hill, Cascade, Captains Walk, Welch's Point, Rock, Old Gate, Anderson, Watrous, Buckingham, Ford, Concord, and Post Road pump stations.
2. Cleared clogs at Rogers Avenue (2x) and Watrous (3x) Pump Stations
3. Replaced generator alternator at Viscount Drive

4. Replaced voltage regulator on the generator at Rose's Mill
5. Replaced the failing automatic transfer switch at Carriage Drive
6. A faulty uninterruptible power supply (UPS) caused Concord to lose control power. The station was run by hand until the faulty UPS was identified and removed.

There were 4 alarms at the pump stations:

- 1 for High Water
- 2 for Power Outage
- 1 Oxygen pump fail – Gulf Pond

Sewer Maintenance

Sewer Maintenance answered 3 complaints.

Sewer Maintenance crews performed scheduled maintenance at the following T-sites:

T-04, T-05, T-16, T-39, T-40, T-41, T-55, T-06, T-23, T-21, T-51, T-42, T-20, and T-29

There was a sewer excavation at the following location:

Exploratory excavation to locate buried chamber on Concord Avenue

Other duties performed were:

1. Root cutting at Wells Drive and Revere Place Easement
2. Foaming Root Control of 15,545' of sanitary sewer
3. Jet flushed Concord interceptor.
4. Friday T-sites

A total of 24,595 ft. was jet flushed, 6,110 ft. televised, 1,425 ft. spy TV 'ed, 730 ft. hand rodded, 3,475 ft. hydraulically root cut, 0 ft. smoke tested, 185 ft. root treated, and 0 ft. dye tested.

American Rescue Plan Act – Wastewater Pump Station Emergency Generators:

1. This ARPA funded project consists of replacing emergency generators at multiple wastewater pump stations.
2. \$1,504,000 is approved for this project.
3. Gulf Pond and West Avenue generators have gone out to bid and received a low bid of \$492,600.
4. The new generator is being installed at West Ave Pump Station. A temporary backup generator is connected during construction. The Gulf Pond generator replacement will start after West Ave. is installed and tested in about 2-3 weeks.
5. A second bid was opened on March 8th for generators at Wanda, Post Road, White Oaks, Matthew, Anderson, Mayflower, Milford Point, and a portable generator. L. Holzner Electric Company has been selected as the low bidder for \$656,555.00. We are currently waiting on the long lead time for the generators; no delivery date has been set yet.

Adams Avenue Generator Replacement

1. The 60-kw generator and transfer switch will be replacing the existing failed generator.
2. The project has gone out to bid and received a low bid of \$49,735.
3. We currently have a soft delivery date of November for the generator (60-week lead time).

4. FEMA and insurance money have already been received.
5. FEMA requires the project to be completed by July 2024
6. **INFLOW/INFILTRATION UPDATE** - Lindsay King
 1. A Wet Weather SOP aimed at minimizing potential effluent violations triggered by high flow conditions at the plant has been submitted to DEEP.
 2. Weston and Sampson previously completed a Flow Evaluation of all the Cities pump stations and identified the Post Road Pump Station service area as one of the subareas having a large amount of inflow and infiltration (I&I). We are using closed circuit television inspection to identify leaks and propose a pipe lining project to eliminate them. Specifications, mapping, closed circuit television inspection and associated reports have been submitted to purchasing to prepare a bid package. Additional engineering work may be needed to complete the process.
 3. The Department of Energy and Environmental Protection is asking us to start an SSES study in the spring of 2024. The SSES work would qualify for a CTDEEP Clean Water Fund Grant (55% Grant 45% local share). Wastewater is currently working with the purchasing department to prepare a bid requesting qualifications for engineering services related to SSES work.
7. **COMMITTEE REPORTS** – *None and the Chairman will have the Secretary remove this agenda item until there are committees.*
8. **OLD BUSINESS** - *None*
9. **NEW BUSINESS** - *None*
10. **VOTING**
 - a.) Regular Meeting Minutes of August 30, 2023

Chairman Collier called for motion to approve the Regular Meeting minutes of August 30, 2023. Commissioner Hubler made a motion to approve with Commissioner Abel seconding the motion. The motion was carried with Commissioner Carroll abstaining from the vote.
 - b.) Approval of Payments

Chairman Collier called for a motion to approve the payments in the amount of \$14,211.02. Commissioner Hubler made a motion to approve the payments in the amount of \$14,211.02 with Commissioner Carroll seconding the motion. The motion carried unanimously.
11. **CHAIRMAN'S REPORT**
 - a.) Administrative Approvals

Chairman Collier stated there were 11 Administrative Approvals through September 27, 2023.

12. **ADJOURN**

Chairman Collier called for a motion to adjourn at 6:30 p.m. Commissioner Hubler made a motion to adjourn with Commissioner Carroll seconding the motion. The motion carried unanimously.

Respectfully submitted,

Beverly A. Hayes, BS
Recording Secretary

TECHNICAL MEMORANDUM

TO: Mr. Chris Saley, City of Milford, Director of Public Works

FROM: Robert G. Tedeschi, P.E.

DATE: September 26, 2023

SUBJECT: Wastewater Collection and Treatment Systems Capacity Availability Analysis:
470 Wheelers Farm Road Development

At the City of Milford Sewer Commission meeting on August 30, 2023, Weston & Sampson Engineers, Inc. was requested to perform a sewer capacity analysis to confirm whether available capacity exists to support the anticipated wastewater flow from the proposed development. This Technical Memorandum provides a summary of our analysis and findings.

Flow Estimation:

Our understanding is that Wheelers Farm Partners, LLC (Applicant) has submitted an application for sewer capacity confirmation to the City of Milford Sewer Commission for the referenced development. The Applicant is proposing mixed use redevelopment of the property. Along with the application, the Applicant has submitted an estimation of sewer flows (55,590 GPD, or 38.6 GPM) which we have summarized below. Peak flow rate would be approximately 4 times average daily flow or approximately 155 GPM.

Estimated Wastewater Flow

Type	Unit	Bedroom Count	Flow per Bedroom / Staff (GPD)	Estimated flow (GPD)
1-bedroom units	Each	237	75	17,775
2-bedroom units	Each	177	115	20,355
3-bedroom units	Each	30	155	4,650
Restaurant	seats	150	21	3,150
Club house	people	300	20	6,000
Office Space	SF	122,000	.03	3,660
Total				55,590 GPD (38.6 GPM)

Based on information provided by the Applicant, it appears that there was an onsite wastewater treatment system in place beginning circa 1970's to circa late 1990's. The treatment system design capacity was estimated to be between 42,000 and 96,000 gallons per day. In the late 1990's the treatment system was eliminated and the wastewater from the area pumped via a force main to the City of Milford gravity sewer system. The historical pumping rate was approximately 200 GPM.

In September 2023, the Applicant conducted testing of the existing on-site pumping station and found the flow rate to be just under 180 GPM, which is adequate for the proposed development. The Applicant will own, operate, and maintain the on-site wastewater pumping station.

Gravity Sewer Capacity Review

Utilizing the information obtained as described above, Weston & Sampson evaluated the adequacy of the existing wastewater collection system to convey the proposed wastewater flow from the Development. We utilized existing GIS information to analyze the existing sanitary sewer conveyance route (gravity sewers and pumping stations) that will be utilized to convey wastewater from the proposed development to the wastewater treatment facility.

We found that the collection system has adequate capacity to convey the proposed wastewater at the flow rates proposed.

Pumping Station Capacity Review

The proposed development would discharge into the City of Milford gravity sewer system. The gravity sewer system will convey flow from the Development to the West Ave wastewater pumping station. The West Ave pumping station has a design capacity of 21.7 MGD. The flow from the proposed development would represent less than 0.3% of the capacity of the pumping station. Therefore, there would be a negligible impact to the West Ave. pumping station.

Housatonic Treatment Plant Design Capacity Availability Review

The Housatonic wastewater treatment plant is designed to treat an average of 8.2 MGD of domestic wastewater. Weston & Sampson has reviewed the past 12 months of flow data from the Housatonic WWTP and found this to be approximately 6 MGD. However, during recent wet weather years, the 180-day moving average daily flow at the Housatonic WWTP has historically exceeded 90% of the design flow rate. Based upon the Housatonic WWTP NPDES permit requirements, the City is required by the CTDEEP to develop a plan to accommodate future increases in flow to the treatment plant. The City is moving forward with repairs to the collection system that will reduce infiltration and inflow (I&I) into the collection system. The City is also planning to implement a prioritized Sanitary Sewer Evaluation Survey (SSES) program to locate and remove I&I from the collection system allowing this, and future connections to the wastewater collection system.

Recommendations:

The existing wastewater infrastructure has the available capacity to accept the anticipated flow. However, prior to approving the Application, the Sewer Commission should request that the Applicant submit a draft operation and maintenance Agreement for review and approval by the City. The Agreement should address, at a minimum, written documentation that the property owner will be responsible for all costs related to operating, maintaining, repairing, and upgrading the pumping station and force main, in perpetuity, including all related responsibilities. The agreement should include documentation of insurance requirements, funding sources, and inspection and reporting requirements. Note that any modifications to the on-site pumping station, that would increase the capacity of the pumping station, must be approved by the Sewer Commission. The Sewer Commission should also have the ability to make periodic inspections of the pumping station to confirm operation.