

WATER POLLUTION CONTROL AUTHORITY  
**Town of Trumbull**  
CONNECTICUT

TOWN HALL  
(203) 452-5048



5866 MAIN STREET  
TRUMBULL, CT 06611

**JULY 14, 2021  
MINUTES**

Call to Order: The Chair called the meeting to order at 7:05 p.m.

Roll Call: The clerk called the roll and recorded it as follows:

Present: Chairman Richard Boggs, Vice-Chairman Jon Greene, Frank Regnery, Andrew Palo and Tom Kelly

Absent: Scott Thornton, Alternate

Also Present: William Maurer, Town Engineer/Sewer Administrator, Town Attorney James Nugent, Christine Kurtz of Wright Pierce, Vanessa McPhearson of Arcadis

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Approval of Minutes: Moved by Palo, seconded by Regnery to approve the June 23, 2021 regular meeting minutes as presented. Vote: Motion CARRIED 4-0-1 (Abstention: Greene)

Public Hearings: The Chair OPENED the 2021 Assessment Public Hearing at 7:08 p.m.

**TRUMBULL WPCA July 14, 2021 PUBLIC HEARING  
2021 ASSESSMENT TRUMBULL, CONNECTICUT**

The Trumbull Water Pollution Control Authority will hold a Public Hearing, on Wednesday, July 14, 2021 at 7:00 p.m. via Zoom teleconference in accordance with the provisions of an Ordinance of the Town entitled, "Sewer Ordinance of the Town of Trumbull" adopted by the Town Council of the Town of Trumbull effective July 1, 1969 and Section 7 249 and Section 7-249A of the Connecticut General Statutes, Revision of 1958 as amended. Notice is hereby given that a Sewer Assessment is proposed to be levied by the Town of Trumbull on the following property:

<u>NAME</u>	<u>LOCATION</u>	<u>NUMBER</u>	<u>MAP</u>	<u>PARCEL</u>
Von R. Moody (Or current owner)	Pam Bar Road, Shelton, CT	8	44 4	28

Link to join the public hearing:

July 14, 2021 7:00 PM

<https://zoom.us/j/99309384580?pwd=WEU0V3pGWkprdDN0SVhBM3pFb0IwUT09>

Webinar ID: 993 0938 4580

Password: 076490

Join by telephone: (929) 205-6099 or (833) 548-0276 (Toll Free) / Webinar ID: 993 0938 4580

Dated this 3<sup>rd</sup> day of July, 2021 Trumbull Water Pollution Control Authority

Mr. Von Moody, owner of the property was present, he had no comment.

The Chair CLOSED the Public Hearing at 7:09 p.m.

Moved by Regnery, seconded by Palo to approve the 8 Pam Bar Road Shelton property assessment in the amount of \$21,203.56. Attorney Nugent confirmed he would take care of the filing of the sewer assessment lien in Shelton. VOTE: Motion CARRIED 4-0-1 (ABSTENTION: Greene)

The Chair OPENED the Proposed Sewer User Rates Public Hearing at 7:11 p.m.

**TOWN OF TRUMBULL WPCA NOTICE OF PUBLIC HEARING/PROPOSED SEWER USER RATES  
JULY 14, 2021**

Pursuant to section 7-255 of the Connecticut General Statutes, the Trumbull Water Pollution Control Authority hereby gives notice of a Public Hearing via zoom videoconference, Wednesday, July 14, 2021 at 7:00 p.m.  
 Water Pollution Control Authority Public Hearing  
 Jul 14, 2021 7:00 PM  
<https://zoom.us/j/99309384580?pwd=WEU0V3pGWkprdDN0SVhBM3pFb0IwUT09>  
 Webinar ID: 993 0938 4580  
 Password: 076490  
 Join by telephone: (929) 205-6099 or (833) 548-0276 (Toll Free) / Webinar ID: 993 0938 4580

Sewage Treatment Fees:	<u>Current</u>	<u>Proposed</u>
Residential Sewage Treatment per CCF	\$5.904	\$6.080
Industrial/Commercial Sewage Treatment per CCF	\$6.490	\$6.685
Flat Rate Treatment per quarter	\$171.000	\$171.000
 Unit Charges:	 <u>Current</u>	 <u>Proposed</u>
Residential Maintenance Fee per unit, per quarter	\$33.00	\$33.00
Industrial/Commercial Maintenance Fee per unit, per quarter	\$34.00	\$34.00
Developer Installed Unit Charge	\$2500.00	\$2500.00
Sewer Permit Fee	\$25.00	\$25.00

The proposed rates and potential modifications thereof will be discussed by the Trumbull Water Pollution Control Authority Commission upon completion of the public hearing.

The final rates will be reflected on the next quarterly billing cycle mailed in August, 2021 covering the billing period through September, 2021.

Dated this 3<sup>rd</sup> day of July 2021  
 Richard Boggs, Chairman Trumbull Water Pollution Control Authority

There was no one present from the public to speak. The Chair CLOSED the Public Hearing at 7:12 p.m.

Moved by Greene, seconded by Regnery to approve the rate modifications as published. VOTE: Motion CARRIED by unanimous consent.

Mr. Maurer confirmed the published rates are net of the discount.

By unanimous consent the WPCA took Old Business out of order.

Old Business:

- 48 Monroe Turnpike (Continued from June 2021)

Mr. Mark Lancor of Dymar Engineers was present and shared his screen showing the illustration of the property known as The River's Edge, (Illustration included with the agenda), a 252,000 sf office building to be converted into an assisted living, independent living facility with an active adult component. The project required a text change, zone change and going to court with their adjoining neighbor. They won every case along the way and have the IWWC approval and are planning on submitting to P&Z at the end of this month for a hearing in August.

They are seeking a capacity allocation of 34,200 gallons per day. Wright Pierce has reviewed the information and has sent a memorandum to the WPCA, (See attached). Wright Pierce looked at both this project and the 7182 Main Street project because they both affect the same trunk sewer collection system. Wright Pierce has acknowledged the average daily flow of 34,200 gallons per day is reasonable and does not see an issue with allowing these flows to enter into the sewer system. There are housekeeping items identified in the report, nothing that can't be worked out, most of which they are affecting, some of it is upstream of them and other areas are associated with the other project.

Ms. Kurtz of Wright Pierce explained in the big picture they do not have concerns, but are suggesting the piping system downstream of each of these sections be looked at to make sure nothing has happened over time that would restrict capacity. That is a straight forward process and the town already has people in place to do so. The commission will have to consider the situation with Monroe. The other project has a pump station on site. Wright Pierce would assist the Town and/or Town Engineer to make sure it's constructed in accordance with the town standards, any approvals would need to be conditional of that. This property does not have a pump station and is all by gravity.

There is an existing connection that ties across RT. 111. Commissioner Greene noted this a dramatically different use. The pitches on this property to the trunk has areas that are flat. Ms. Kurtz indicated the slope of the pipe does play into the capacity and suggested they camera these areas to make sure nothing has settled over the years and for excessive leaking. Mr. Maurer explained this is something they do routinely. The Whitney Avenue pump station is on their radar to be upgraded.

Ms. Kurtz noted these are relatively small flows in the big picture, and this property had a connection previously. When this was United Healthcare there was approximately 21,000 gallons of flow per day. Ms. Kurtz confirmed this would not push them to capacity at the Whitney Avenue pump station. Commissioner Greene noted this was not a significant change in flow. Mr. Lancor stated there will be a full kitchen. They will provide exterior grease traps and are very familiar with their sizing and what is necessary. Laundry will also be on site for some of the facilities.

Mr. Maurer explained the connection charges are based on the number of units, beds in a hospital or assisted living & individual living units. The charge is \$2,500 per unit. Mr. Lancor explained it is not an adult daycare. Mr. Lancor stated the units for active adults is 157, 94 assisted living, 99 independent, 63 assisted and 29 for memory care. Added together there are almost 400 units, \$2,500 per unit is a huge number. Mr Maurer indicated they would have to pay for the delta, the original building had a certain number of units and they would get credit for that. The office units were based on square footage. There is a significant increase. Mr. Lancor asked the commission to approve based on the flow and he would come back after he works out the details with Mr. Maurer on the charges. Mr. Lancor explained P&Z needs to know that the WPCA has looked at this and does not have an objection to the use based on the 34,200 gallons per day, the details on how everything is paid for is a separate matter.

Moved by Regnery, seconded by Greene to approve the 48 Monroe Turnpike sewer connection based on 34,200 gallons of flow per day conditional upon review and approval of the final plan by the Town Engineer with a connection fee to be voted on at a subsequent meeting. VOTE: Motion CARRIED by unanimous consent.

- 7182-7192 Main Street Sewer Connection (Continued from May 2021)

There was no one present to speak to this. Mr. Maurer explained the Wright Pierce report only includes flow from this project and not the potential flow from the spurs that could come into it. The design also has to be updated. Ms. Kurtz added the developer should be asked to look at generally what could happen with regards to Monroe (i.e. houses on the Monroe border that could potentially connect). Whether the commission allows it or not is a separate issue, but that potential flow should be accounted for.

Mr. Maurer is concerned about Amazon, a big facility and the residents on the two roads could throw some of the capacity off.

The commission questioned how many units are in Monroe and how many are in Trumbull?

Mr. Maurer explained the site plan shows the town line going through the building but it is not known what it encompasses going through the building, whether it is five, ten or some other number of units. Attorney Nugent remembers the number of 16-19 units in Monroe.

Attorney Nugent stated Trumbull can only tax property that is in Trumbull. Mr. Maurer noted there is a business on RT. 111 where the town line goes through the building and is connected to the sewers.

Commissioner Regnery is concerned with precedent based on other residents on the border. Attorney Nugent noted he had expressed his concern about setting precedent before. Commissioner Regnery stated all Trumbull residents have paid a sewer assessment. Mr. Maurer noted the developer has to install the main. The assessments are based on the amount of frontage near the main, this developer will be laying the main which is a little over a 1/2 mile long. Commissioner Regnery noted this would allow 18 abutting town owners to come in with no assessment, noting that is a bad precedent and suggested waiting until after the moratorium. Attorney Nugent confirmed there is a moratorium in effect for new apartments, this location

does not have an exception. Commissioner Greene explained they would not be overriding the moratorium, they cannot build the property, but that does not mean they should stop planning for post-moratorium activities. This is a Trumbull property and the taxpayer should be listened to. All agreed with the Trumbull side of the equation. Commissioner Regnery stated this would give the appearance of an approval. Commissioner Greene explained an approval would still be contingent upon other departmental approvals. Attorney Nugent stated this is a legitimate issue for discussion and consideration by the commissioner.

Commissioner Greene stated the WPCA could act within their purview. Commissioner Greene stated the current zoning is for commercial, not multi-family. The commissioners cautioned setting a precedent, allowing other town residences to connect for free and also that a half of mile of a main could benefit Trumbull residents. Commissioner Regnery stated this would give the appearance of a commission giving approval for another apartment complex. There is a moratorium in place.

It was discussed since there is no specific order of approvals that the commission could elect to make their decision after P&Z. The commission noted since there was no one here to speak to this they would table. All agreed.

The Chair asked for constructive advice for the developer. Attorney Nugent stated there is no prescribed sequence, moratoriums are uncommon in our history. If they are not allowed to build it why would the commission approve the connection, it doesn't make sense that they would start with WPCA. He will find out if they had spoken with P&Z regarding the order of approvals. The commission needs to be forward thinking for what could possibly happen in the future, that future is not just residential. If there is a pipe, it may be very attractive to a lot of businesses. Ms. Kurtz indicated they need to know what possible Monroe properties could connect by gravity if the main is put in. The commission discussed how this could be bad precedent. The commission discussed if it was possible to charge a non-resident more to connect. This could open up more Monroe commercial property that competes with Trumbull. Attorney Nugent stated that is a consideration for this commission. Commissioner Greene noted this is a Trumbull taxpayer with the issue of a divided property who wants to develop a property that is at least half in Trumbull. Commissioner Regnery noted they don't know how many residents are from Monroe and should probably have that answer and exactly what the breakdown is. Attorney Nugent stated it was on one of the maps. The commission noted they believed it was a slim majority in Trumbull. The moratorium is up for renewal in January 2022.

Moved by Greene, seconded by Regnery to TABLE until the September meeting.

Vote: Motion CARRIED by unanimous consent.

- Old Town and Reservoir Avenue Pump Stations Update  
Mr. Maurer reported they have awarded the contract to Kovacs, they are submitting their submittals and plan on doing the pipe upgrade at Reservoir Avenue starting in August.
- Beardsley Force Main Update

Ms. McPhearson of Arcadis shared her screen with the commission showing a map of RT. 8 & 25 and a basic profile of the pipe in the area. They had earmarked Seltsam for additional testing,

they did a desktop study of the initial failure that happened in Beardsley Park to look for sections that might have a similar configuration, a long, shallow slope where there are opportunities for settlement of solids with inside out corrosion. They decided to do two (2) test pits and nondestructive testing in the test pits. Before they dug the full test pit they did vacuum excavation to identify the precise location of the pipe. The force main is located in the side of Seltsam in the median. They employed two (2) different techniques, ultrasound thickness testing and side by side broadband electromagnetic testing. Two very different ways to look for the same information. Corrosion Probe came on site to do the UT testing and Arcadis did the BEM testing with the analysis done by the Rock Solid firm. In the UT testing the surface of the pipe is ground down and use a gel outside the wall of the pipe to gauge the thickness. The BEM is a complete wrap with a grid pattern where they use a sensor and antennae to get a full wrap of the pipe.

The BEM results in general showed consistent readings around the entire pipe circumference, there were some localized areas where they saw potential pitting, but everything else looked really good. At Eric Street there are some thinner sections towards the invert of the pipe which is something they want to keep an eye on, but nothing concerning or drastic there. The UT analysis coincided well with the BEM results, so they have confidence with this data. What they saw in Beardsley Park was the fracture was at the very bottom of the pipe. No immediate issues were identified in either the BEM or the UT testing. No signs of significant wall loss and saw consistent thicknesses on the circumference. Arcadis is not recommending any rehabilitation for this section of the pipe at this time. They would say it would be a good plan to come back and monitor the two (2) locations in about five (5) years. Arcadis does recommend proceeding with the replacement of the pipe in Beardsley Park. They are putting a cover sheet on the report and once they send it to Mr. Maurer he will distribute to the commission.

The first reason Arcadis decided to do UT was for continuity, because that was the tool used for testing at the release valves in the park and wanted to validate those prior results. The full Corrosion Probe report will show they did additional calibrations. They struggled a little because UT testing can be tricky on ductal iron pipe due to the composition of the pipe but wanted the continuity from the prior results. It was interesting to see the UT tech and the BEM tech bounce things off of each other. The testing balanced each other really well and didn't add a lot of cost. The results are reassuring. There is no other areas identified to test at this time. They will not be recommending more targeted investigation areas at this time. The exterior of the pipe is in pristine condition. They did soil testing and there are no concerns there either.

Mr. Maurer indicated the Beardsley Park area is probably the lowest and flattest portion. Ms. McPhearson stated she was surprised by the results because the location closest to Sylvan Avenue is the end of the flat slope and then goes up gradient again, she wouldn't have been surprised to see something happening at the invert of that pipe.

Mr. Maurer noted there are twelve other pump stations with twelve other force mains. There should be a program to evaluate the condition of these. The commission noted it is a budgetary issue and this year's budget has already been set. Ms. McPhearson explained just the BEM analysis was approximately \$4,800 and the additional was the expense of having someone travel here and the tool rental, approximately \$7,000-\$10,000 with another \$3,000-\$4,000 for the UT. The commission noted it is something to consider, allocating a certain amount for testing on an annual basis. The costs did not include excavation which exceeds the testing costs. Ms.

McPhearson suggested using opportunities when close to the pipe to reduce the excavation cost. Mr. Maurer suggested looking at it for Reservoir. It could be done when the pump station is down and on bypass, early spring. The commission suggested putting a proposal together for the commission to consider and find a way to consider it in this fiscal year.

Ms. McPhearson explained they did the same ph testing on the soil when they did the UT testing in Beardsley Park, the failure was clearly from the inside out. Soil was not at play at Beardsley.

Old Business & New Business:

- Alternate Flow & EIE (Environmental Impact Evaluation) Comments:

Moved by Palo, seconded by Regnery to ENTER into Executive Session based on CGS 1-210b-7 to present engineering or feasibility estimates relative to the public supply construction costs and to discuss the EIE comments.

Vote: Motion CARRIED by unanimous consent:

The WPCA entered into Executive Session at 8:28 p.m. with the following people present: Chairman Richard Boggs, Vice-Chairman Jon Greene, WPCA commissioners Frank Regnery, Andrew Palo and Tom Kelly, Town Engineer/Sewer Administrator William Maurer, Town Attorney James Nugent, Christine Kurtz of Wright Pierce.

Moved by Regnery, seconded by Kelly to END Executive Session at 9:28 p.m.

Vote: Motion CARRIED by unanimous consent.

Adjournment – There being no further business to discuss and upon motion made by Kelly, seconded by Regnery the WPCA adjourned by unanimous consent at 9:23 p.m.

Respectfully Submitted,

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Margaret D. Mastroni, Clerk

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<b>TO:</b>	William Maurer	<b>DATE:</b>	7/13/2021
<b>FROM:</b>	Joe Hausmann & Christine Kurtz	<b>PROJECT NO.:</b>	
<b>SUBJECT:</b>	Trumbull, CT WPCA – Capacity Reviews Developments at 7182 Main St and 48 Monroe Turnpike		

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**BACKGROUND**

There are 2 proposed developments requesting capacity determinations for potential connections to the Trumbull WPCA. This memo reviews both the requests from Spath-Bjorklund for the multi-use building at 7182 Main St (and other addresses), as well as the request by DyMar for the River’s Edge Assisted and Independent Living Facility at 48 Monroe Turnpike. These requests are being handled in the same memo because they are relatively close in location and are both currently in review by the WPCA and other Town Boards.

Although there are areas of possible concern, it appears that the system does have capacity for both developments. Several open questions and items that should be reviewed and confirmed as part of the approval process are mentioned at the end of this memorandum.

We also suggest a technical review to confirm the infrastructure meets the Town’s standards.

**7182 MAIN ST**

We are in receipt of the following documents for this review:

- A one-page letter from Spath-Bjorklund dated March 16, 2021 with the flow estimate
- A 5 page PDF from Spath-Bjorklund consisting of a cover letter, site images and sewer plan and profiles dated January 19, 2020 (the Trumbull receipt stamp says January 2021)

This facility has requested a capacity of approximately 17,000 GPD based on a mixed-use development which includes some land within Trumbull and other land within Monroe. The estimated flows include factors for restaurants (30 gpd/seat), retail, office and storage space (0.1 gpd/sf), and apartments (150 gpd/bedroom). These rates and factors are reasonable for an estimate of the wastewater flows originating from the site and are consistent with the means used to estimate flows from previous capacity reviews.

However, the proposed sewer should also be designed for a few other factors:

- There should be an infiltration allowance added for all gravity piping of 500 gpd/inch-mile of pipe.
- The figure shows red and white proposed sewer lines and manholes, but the plan and profile sheets that have been provided only show some of the sewer extension in red. The

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extension should be designed and sized based on all the potential flows that could be connected to the sewer, accounting for the other nearby homes that could reasonably connect to the extended system in the future.

- The figure showing the red and white sewer extensions notes a pumping station will be installed for the property. The pumping rate of that station, assuming a peaking factor to account for future adjacent residential or commercial connections that could be connected to the new sewer, should be used for the sizing of the sewer extension, rather than the average daily flow of the new development.
- This pumping station should be discussed prior to approval or as a condition of approval, in terms of the future ownership of the station, the standards to which the station needs to be built, and other related aspects of the design.
- Based on the topography, there are other areas in the adjacent Town of Monroe that could connect by gravity to this sewer, if installed. Although this may or may not be allowed by the Trumbull WPCA or Monroe in the future, it is prudent during design to consider the extent of the possible flows that could connect and determine how much capacity may be required to convey those flows.

### **7182 Main St Capacity Review**

Although it is unclear the exact flow to be generated by the proposed development and the potential future connections to the proposed sewer extension, we provided a cursory review of the available capacity in the sewer between the proposed connection point and Old Mine Road. At Old Mine Road, the flows from this development will join the flows from the 48 Monroe development, also reviewed in this memo, and the capacity from that point and continuing downstream is reviewed in a later section of this memo.

The existing sewer at the connection point behind the Regency Circle development is a 12-inch PVC sewer installed around 2005. The sewer is relatively flat, with sections near minimum slope. The minimum capacity of this line at its flattest sections should be approximately 1 MGD. Even accounting for an increase of pumping rates, additional connections, and the existing flows from the Regency Circle development, it is expected that this 12-inch sewer has sufficient capacity for this additional flow request, unless there are known problems with the sewer.

**Therefore, the 12-inch line be cleaned and inspected from the terminus point to Monroe Turnpike prior to approval of the extension, to ensure there are no defects in the line that could reduce capacity and to ensure that access to that sewer is available.** The 12-inch sewer appears to run along a walkway adjacent to the Pequannock River, so there could be possible I/I concern and / or access issues along the main depending on the sewer alignment versus the walkway.

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## **48 MONROE TURPNPIKE**

We are in receipt of the following documents for this review:

- River's Edge illustrated plan (1 sheet) dated June 1, 2021, by DyMar
- 2-page Letter from DyMar dated June 15, 2021 requesting capacity and providing flow estimation
- 6-page PDF of water meter reading records for the site
- 30 sheet PDF of the Project Drawings for the Riverview project by DyMar (and others)

### **48 Monroe Turnpike Capacity Review**

The proposed facility has requested a review of capacity for an estimated flow of 34,500 gpd average daily flow, split between three types of living units, based on the assistance needs of the future residents. There is no need for an I/I allotment to be added to the capacity, since they are utilizing existing piping for the connection (i.e. this is not a new sewer extension. The units used to estimate these flows were based on both typical engineering values as well as water use data from other similar facilities. The average daily flow requested is reasonable for the proposed facility.

The flows are proposed to be conveyed to the sewer utilizing the existing sewer service connection from the site to the 8-inch sewer in Monroe Turnpike. The 8-inch sewer is steep (approximately 3% slope), and the sewer connection occurs at a drop manhole. The 8-inch sewer was installed around 1986. The 8-inch sewer connects with the flows from the other proposed development near Old Mine Road. The capacity of the sewers downstream of this point will be discussed below.

The 8-inch sewer that the proposed development will tie into has a capacity of about 1.35 MGD, due to the slope on the pipe. As was noted by the developer, this facility was a former corporate headquarters building and would have had a significant flow capacity assigned to the facility when the sewers were designed. Although this area has a high commercial development density, it is not anticipated that the increase in the flows from this facility will cause undue capacity impacts to the 8-inch sewer.

The record plans are unclear near the intersection of Old Mine Road and Monroe Turnpike. The sewer connectivity in some of the record plans are hard to follow and does not match the GIS system. Because of this, it is unclear if the DyMar design plans show the sewer connections around that intersection properly (although that may not be an issue for their development as they do not plan to modify those sewers or connect in that area).

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## **JOINED FLOWS / INTERCEPTOR AND SYSTEM CAPACITY REVIEW**

The flows from the two proposed developments would merge near the interception of Monroe Turnpike (Route 111) and Old Mine Road. At that interception, there is a small section of 15-inch sewer that may carry the combined flow in the intersection, however, the sewer is labeled as 18-inches on Old Mine Road. From that intersection, the flow travels along Old Mine Road adjacent to the Pequannock River, then crosses under Route 25 and across Parlor Rock Park (roughly following a paved path), before reaching the Whitney Avenue Pump Station.

The Whitney Avenue Pumping Station pumps flows to the intersection of Main Street (Route 111) Clemens, and John Street. At the discharge manhole, flow enters a 21-inch sewer flowing along Main Street and eventually down through the Gravity side meter at Sunnydale and Lealand and into Bridgeport. The Sewer Model created by Wright-Pierce for Trumbull models the 21-inch sewer from the Whitney point discharge and refers to this line as the “gravity trunk line – east spur.”

The 18-inch sewer along Old Mine Road and down to the Whitney Ave PS has some sections with a ‘flat’ slope - near 0.004 ft/ft. The capacity of this limiting section is about 1.36 MGD. This section, immediately after the box culvert crossing on Old Mine Road, could be a long-term capacity restriction in the line and may cause surcharging during peak flows. The remaining sections of the 18-inch pipe have a slope of more than 0.0019 ft/ft, for a minimum capacity of 3 MGD. **The restrictive section of 18-inch pipe should be inspected and cleaned to verify it is in good operating condition.**

For the modeled section of the sewers, none of those pipes are shown to be a full pipe under the modeled “peak” condition, which corresponds to a flow of approximately 4.6 MGD at the Sunnydale and Lealand Gravity meter. For most, if not all the eastern spur, the pipe is shown to be approximately half full at the peak flow model conditions, indicating there is available capacity in the lines.

We also reviewed the Town’s website that logs the pump station run times to check the capacity of the Whitney Avenue Pump Station. The available data was approximately four months of run times (back to March 16, 2021). For most of those days, the records indicate there is excess capacity within the Pumping Station because a pump only runs on average just under 5 hours per day.

However, there are occasions when the station records times when both pumps are operating. This is a possible indication of a capacity concern, however, none of these instances are more than approximately a half hour of total time when both are in operation. None of these instances also appear to be related to heavy rainfall events. We are aware that the Whitney Avenue Pump Station is due for upgrading soon and has had some operation issues. Therefore, it is possible that these

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occurrences are due to pump failure or instances when a pump may be partially clogged instead of actual capacity concerns. This should be confirmed. If it is a high flow condition not associated with rainfall or wet weather, then further investigations into the source of the flow should be considered.

Regardless, during the upgrade of the Whitney Avenue Pump Station, these additional new flows should be accounted for in the design flow estimate. These additional flows (including potential future extensions and increased connections along Main Street) are likely to be a minimal increase in pump sizing at the upgraded station.

## **CONCLUSIONS AND RECOMMENDATIONS**

Although there are areas of possible concern, it appears that the system does have capacity for both developments. The open questions and items that should be reviewed and confirmed as part of the approval process are:

- Confirm the design of the pump station details for the Main Street Development site;
- Confirm the design flow and pipe sizing of the proposed 8-inch sewer extension for the Main Street Development site;
- Inspect and clean the collector sewers downstream of the proposed connections for potential defects that could impact capacity or operation;
- Confirm the capacity of Whitney Avenue Pump Station relative to the multiple pumps running scenarios;
- Include the additional flows into the future design of the Whitney Avenue Pump Station;
- Confirm the connectivity of the sewer system at the Monroe Turnpike and Old Mine Road intersection; and
- Inspect and clean the potentially restrictive pipe segment on Old Mine Road (the section of 18-inch sewer just downstream of the multiple box culverts conveying the Pequannock beneath Old Mine Road).