SEWER AUTHORITY WATER POLLUTION CONTROL AUTHORITY



TOWN HALL 238 Danbury Road Wilton, CT 06897

203-563-0100

WATER POLLUTION CONTROL AUTHORITY REGULAR MEETING HELD ELECTRONICALLY WEDNESDAY, April 10, 2024

PRESENT: Toni Boucher, Joshua Cole, Basam Nabulsi, Lori Bufano, Kimberley Healy, Ross

Tartell

OTHERS: Frank Smeriglio-PE, Christine Kurtz of Wright Pierce, Craig Flaherty of Redniss &

Mead

Call to Order

Ms. Boucher called the meeting to order at 7:30 pm.

Approve Special Meeting Minutes of March 14, 2024 and Special Meeting Minutes of March 27, 2024

Motion moved by Mr. Tartell, seconded by Ms. Bufano to approve the Special Meeting minutes of March 14, 2024. Motion carried 5-0.

Motion moved by Mr. Tartell, seconded by Mr. Nabulsi to approve the Special Meeting Minutes of March 27, 2024. Motion carried 5-0.

<u>Update of Infiltration & Inflow (I&I) Study and Update of Townwide Sewer Flows & Discussion of Appendix IV and Appendix V Priority Schedule</u>

Frank Smeriglio noted review of the I&I Study, Update of Townwide Sewer Flows and the Discussion of Appendix IV and Appendix V Priority Schedule will be discussed together. Ms. Kurtz began the review of the I&I Study with Mr. Smeriglio providing additional input. A plan was outlined for approximately \$1 million in repairs and rehabilitation that would reduce excess flow in the system. They reviewed how roughly 172,000 gallons per day could potentially be eliminated during peak flow (wet seasons), and significantly reduce the average annual gallons per day in sewer flow that is sent to Norwalk for treatment (see attached presentation). Mr. Smeriglio began the review of Townwide Sewer Flows and the Appendix IV and Appendix V Priority Schedule (see attached memo on the priority schedule). Discussion amongst the board with Mr. Smeriglio and Ms. Kurtz during the presentation. Mr. Smeriglio also indicated that he met with the City of Norwalk WPCA about submitted P&Z projects and potential increase of sewer allocation. Norwalk WPCA indicated that they want to see progress of Wilton's I&I program before continuing discussions about increasing sewer allocation. Mr. Smeriglio indicated to the commission that putting on hold the debate about 65 gallons/person verses 55 gallons per bedroom - that based on the list of repairs outlined by Wright Pierce, we felt that the repairs would reduce I&I flows in a manner that the proposed flows from 131 Danbury Rd would

*Minutes have not been reviewed by this Board and may be subject to revision in future minutes.

stay below the limit outlined by Norwalk/Wilton Interlocal Agreement. In addition, the Town will continue to attempt to estimate how long the "wet season" would last in order to determine a credit from Wright Pierce's estimate of 172,000 gallons per day (during wet season). This is needed to address the new applications submitted to Wilton WPCA in March.

131 Danbury Road – 131 Danbury Wilton Dev AMS – Request for Additional Capacity

Ms. Bufano recused herself from the discussion on 131 Danbury Road. Frank Smeriglio reviewed the request for additional capacity for 131 Danbury Road. Mr. Smeriglio reviewed the

reviewed the request for additional capacity for 131 Danbury Road. Mr. Smeriglio reviewed the attached memo dated 4-19-24 with the board. The memo outlined noted conditions for moving forward with approval for the request for additional capacity. After further review and discussion, motion moved by Mr. Nabulsi to approve 131 Danbury Road request for additional capacity subject to conditions outlined in the attached memo. Motion seconded by Ms. Healy and carried 5-0 with Ms. Bufano abstaining. Mr. Flaherty of Redniss & Mead thanked the WPCA for their moving forward with the approval for 131 Danbury Road.

20 Westport Road - ASML - B20 Cleanroom Expansion - Request for Additional Capacity

Ms. Boucher began review noting that ASML is requesting a de minimis amount of capacity (barely over 1000 gallons). Discussed with town counsel and it is appropriate for the town to make a motion to have Mr. Smeriglio deal with this request administratively going forward. After further review and discussion, motion made by Mr. Nabulsi to authorize town staff to move forward with ASML request on an administrative basis. Motion seconded by Ms. Bufano and carried 6-0.

General Discussion of Project Applications Submitted for 3-14-24 WPCA Meeting

Ms. Boucher began by noting the town is working very hard to move forward with a number of the applications put forth, but reminded all of the constraints the town is facing with regard to sewer capacity, but the town is working to rectify the situation. Mr. Smeriglio noted that he has a draft review of applications and will be sending information out to the applicants and will likely bring forth for discussion at a future WPCA meeting.

Ms. Boucher asked Mr. Smeriglio to invite Director Planning & Land Use Mgmt. to attend a WPCA meeting to discuss the Priority Areas.

Public Comment

 Barbara L. Geddis of Cannon Road commented thanking Mr. Smeriglio and Ms. Kurtz for their work on the I&I Study. Also spoke on the Priority Schedule.

Adjournment

There being no further business, motion to adjourn made by Mr. Cole, seconded by Mr. Tartell, and carried 6-0. Meeting adjourned at 8:50pm

Jacqueline Rochester Recording Secretary (taken from video)

Inflow and Infiltration Evaluation Summary Sanitary Sewer Evaluation Study

April 2024

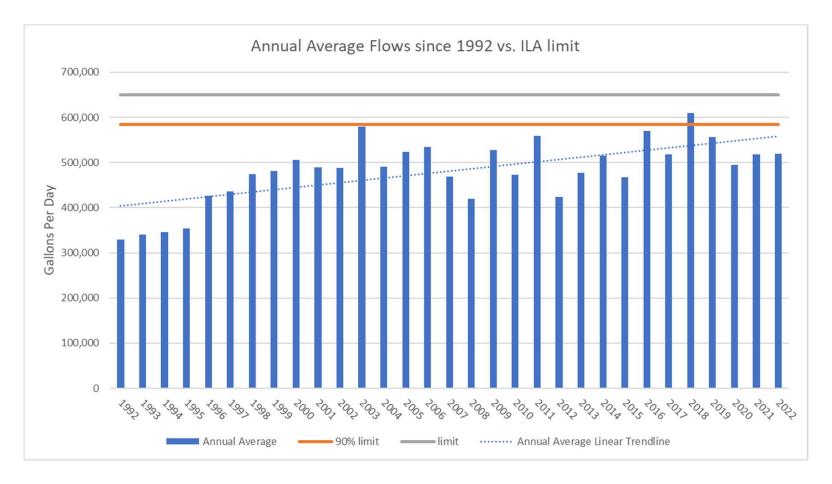
Christine Kurtz, PE





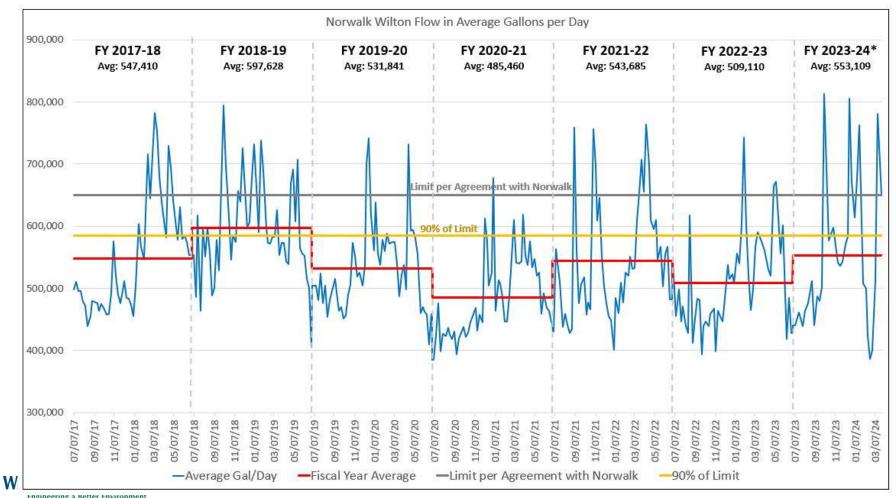


Annual Wastewater Totals





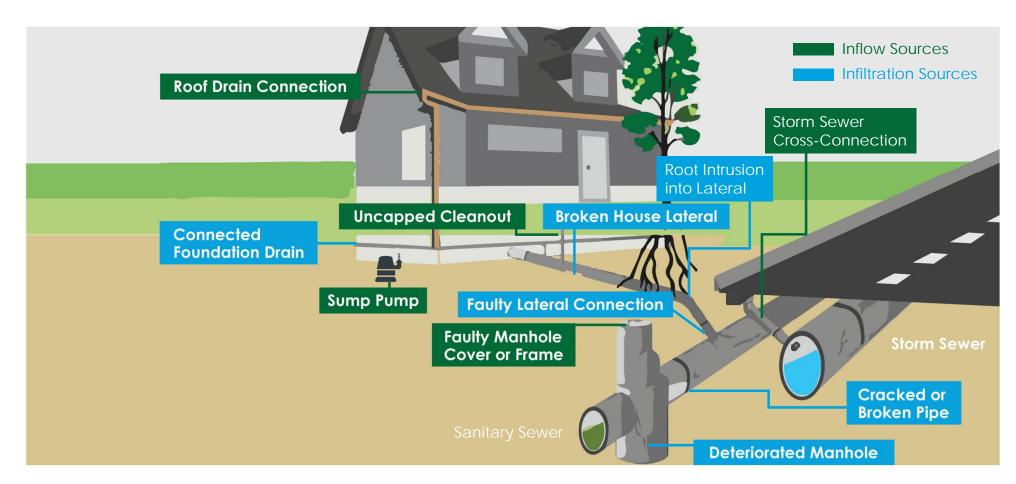
Monthly Wastewater Totals



Engineering a Better Environment

3

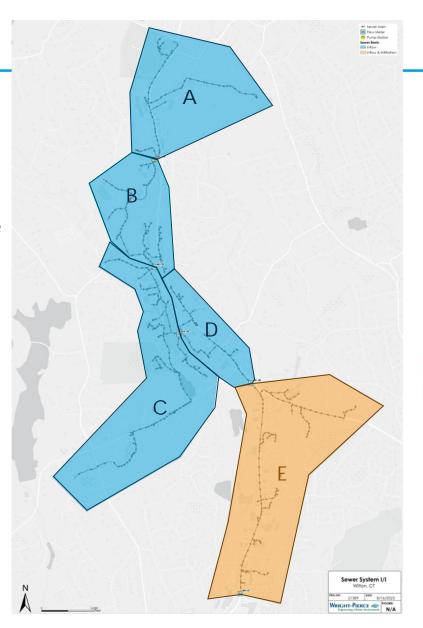
I/I Sources





Sewer Sub-Areas

- Orange sub-areas have excessive inflow & infiltration
- Blue sub-areas have excessive inflow



> Sewer Main

M Flow Meter

Sewer Basin

Inflow

PS Pump Station

Inflow & Infiltration



Dry Weather Results - Based on Spring Season

Net Base Infiltration (BI)

Sewer Sub- Area	Net Average Dry Day Flow (MGD)	Net Average Minimum Night Flow (MGD)	Net Base Infiltration (MGD)	Inch- diameter- mile (IDM)	Net BI Unit Rate (GPD/IDM)	Excessive Threshold (GPD/IDM)
A+B	0.152	0.101	0.090	54.91	1,639	< 4,000
C+D	0.203	0.140	0.123	75.70	1,625	< 4,000
E	0.602	0.431	0.344	58.32	5,898	> 4,000



Wet Weather Results - Based on Spring Season

Inflow for 1-Year, 6-Hour Design Storm (2.02")

Sewer Sub-Area	Net Total Inflow Volume (MG)	Net Direct Inflow Volume (MG)	Net Delayed Inflow Volume (MG)	Percent Total Inflow
A+B	0.229	0.054	0.175	26%
C+D	0.211	0.064	0.147	24%
E	0.457	0.123	0.334	51%
Total	0.897	0.241	0.656	100%



<u>Iypical Recommendations</u> → <u>Inspection Scope of Work</u>

Infiltration

 Excessive if infiltration unit rate ≥ 4,000 GPD/IDM

Sanitary Sewer Evaluation Survey (SSES)

- Manhole inspections
- Closed-circuit television (CCTV) pipe inspections
- Night flow isolations and/or micrometering

Inflow

- Excessive if sub-area contributes to large percent of total inflow volume (for 1-year, 6-hour design storm)
- All inflow should be eliminated

Sanitary Sewer Evaluation Survey (SSES)

- Manhole inspections (top portion only; focus on cover, frame, and chimney)
- Smoke testing
- Dye testing



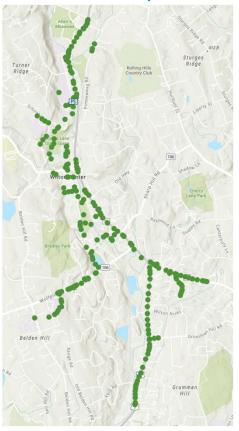
Manhole Inspections Completed

Rehabilitation

Improvement Type	Number of MHs	
Grout	64	
Chimney Seal	59	
Line Manhole	34	
Fix Pipe Seal(s)	19	
Patch	18	
Replace Frame & Cover	17	
Line Chimney	5	
Light Clean	3	
Point Repair	1	

Approximately \$400,000

220 MHs Inspected





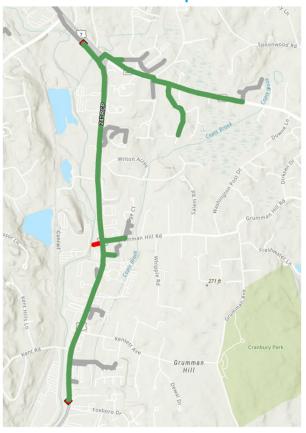
Pipe Inspections Completed

Rehabilitation

Improvement Type	Number of Pipe Segments (MH to MH)	Approximate LF
Test & Seal	33	6,300
Clean	7	1,700
Lining	2	400
Point Repair	1	100
No Action	28	5,200

Approximately \$200,000

14,000 LF Inspected





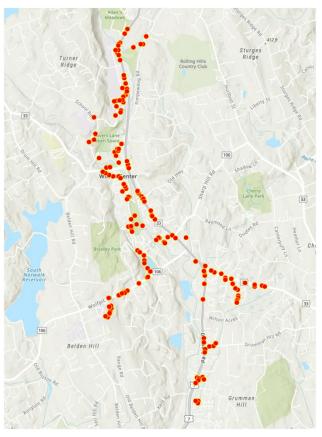
Smoke Testing Completed

Observations - Potential Repairs

- 51 defective manhole frames (~\$100,000)
- 3 vented manhole cover
- 3 cleanout caps missing
- 2 potential illicit building connections
- 1 potential broken lateral
- 1 potential defective grease trap

Town can do some of this work. Unknown cost until further investigation.

61 Defective Results





Report Deliverable

Evaluation

- Identification of structural and O&M issues
- Location of I/I sources
- Estimated quantification of I/I
- Cost-effective analysis (assumes 50% I/I removal)
- Rehabilitation recommendations (follow up meter)
- Estimated costs and schedule (~\$1,000,000)

Format

- Draft and final
- GIS submittal



Next Steps (Proposed Dates)

Design proposal/approval (May 2024)

Design package (July-September 2024)

> Bidding (October 2024)

> > Construction Start (~January 2025)

Post-construction flow monitoring (~Spring or Fall 2025)



WILTON PUBLIC WORKS DEPARTMENT

(203) 563-0153



TOWN HALL ANNEX 238 Danbury Road Wilton, Connecticut 06897

TO: WPCA Commission

FROM: Frank Smeriglio, PE –

Director of Public Works/ Town Engineer

DATE: April 9, 2024

Cc:

RE: Priority Areas

This memo is written to assist in summarizing the priority areas discussed in previous meetings.

Pursuant to WPCA meeting October 30, 2023, the following priority areas were discussed and adopted.

APPENDIX IV

On October 11, 2023, the Water Pollution Control Authority ("WPCA") reviewed data that established that potential future development (that is development that has either been approved by the Planning and Zoning Commission or has been allocated capacity by the WPCA or is in pre-application discussions with Lane Use Boards), will result in sewerage gallonage that will exceed the maximum daily flow permitted under the agreement between the Town of Wilton and the City of Norwalk.

In light of such increased flow and the limits on available capacity, it is necessary to adopt a priority schedule for the allocation of capacity for any potential development, but shall be guided by the following order of priority:

First priority is Danbury Road Transit Oriented Development Overlay District (TOD)*. Second priority is Wilton Center Overlay District*. Third priority is Danbury Road.

*As shown on the Wilton Zoning Map approved on October 23, 2023

The map referenced in the discussions is on page 2. In regards to the Third priority area, it was discussed that Priority #3 is "Anything on Danbury Road".

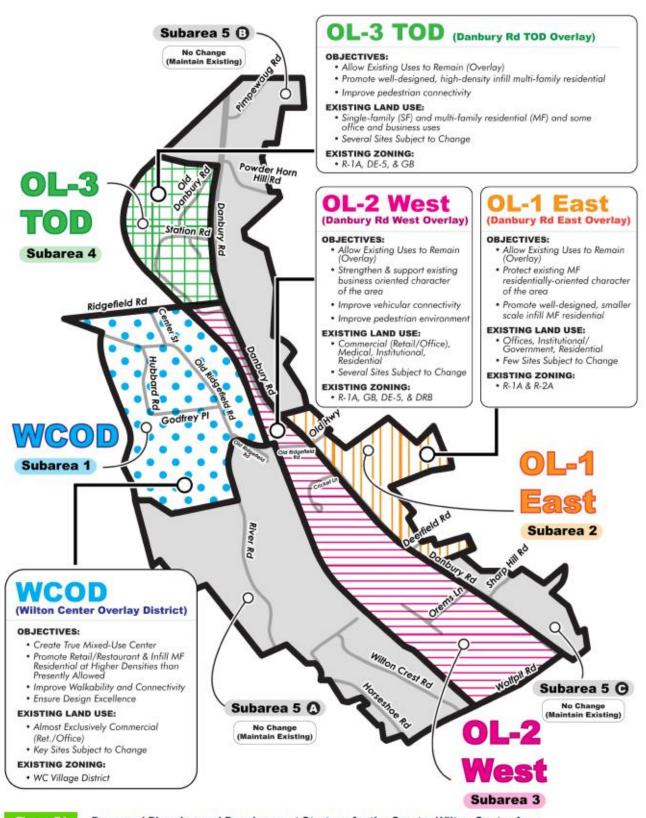


Figure 51

Proposed Planning and Development Strategy for the Greater Wilton Center Area

Source: CT DEEP, US Census Bureau, WestCOG, Town of Wilton, BFJ Planning, 2023.

Pursuant to WPCA meeting on February 14, 2024, WPCA added a priority area as described below referring to existing business. Refer to attached Appendix V dated 2-14-24 item #1.

APPENDIX V to the Wilton WPCA Regulations 2-14-2024

The following standards, policies and procedures are hereby adopted by the Wilton Water Pollution Control Authority ("WPCA") to be effective upon passage.

1. The WPCA recognizes that where possible, it is important to the Town of Wilton to keep existing businesses in Wilton. Businesses that seek to expand operations in Wilton may require additional sewer capacity as a condition of being able to remain in Wilton. When such expansion requires a request for additional capacity, and such capacity is limited, then it is the policy of the WPCA to make such a request a priority.

WILTON PUBLIC WORKS DEPARTMENT

(203) 563-0153



TOWN HALL ANNEX 238 Danbury Road Wilton, Connecticut 06897

TO:

WPCA Commission

FROM:

Frank Smeriglio, PE -5.5.

Director of Public Works/ Town Engineer

DATE:

April 9, 2024

Cc:

Michael Wrinn – Director of Planning & Zoning

Craig Flaherty, PE - Redniss & Mead Consulting

RE:

131 Danbury Road, Wilton CT – 131 Danbury Wilton Dev AMS, LLC

This letter is written in response to the review of the submission by Redniss & Mead dated November 17, 2023 for the proposed development on 131 Danbury Road and other miscellaneous items submitted. Based on the review of the above mentioned application at this time, the items listed below shall be addressed:

- 1) The project is subject to obtaining approvals from Wilton's WPCA Commission to connect additional units into the sanitary sewer system. The WPCA is currently evaluating all flows from proposed development projects to determine if proposed flows at the Town line will remain below whats allowed in the Interlocal Agreement between Norwalk and Wilton. The Town is also evaluating Infiltration and Inflow (I&I) values to determine what flows can be reduced in a 3 year timeframe as part of a continued I&I program.
- Project is subject to comments set by the City of Norwalk WPCA.
- 3) Engineer indicates that on average, 55 gallons/bedroom is realized for an annual daily average. Refer to item #7 below regarding Aquarion water readings.
- 4) For the proposed pool:
 - No pool discharge shall be permitted without a General Permit for the discharge of Swimming Pool Wastewater.
 - b. Miscellanous discharge permit shall also be obtained prior to any discharge.
 - c. Pump discharge times may be restricted.

- 5) Final construction drawing/details shall be submitted for final review prior to the issucance of a building permit. Details to submit include, but are not limited to the following:
 - a. sewer lateral shall be connected to a new manhole along the existing sewer main within Route 7. Manhole detail shall be submitted.
 - b. Garage drains on the lower level subject to the 100-year flood limits shall tie to an oil separator and not discharge into the sanitary system. Engineer to evaluate other discharge locations (i.e. storm infiltrators).
 - c. All proposed sewer lines shall be air tested and video inspected prior to sign off of certificate of occupancy.
- 6) Sewer Capital Assessment in accordance with WPCA regulations shall be levied on the property.
- 7) Please note, Wilton WPCA is coordinating with Aquarion Water Company to obtain water readings directly to monitor flows from the site and/or to change billing format. Further information on this will follow.
- 8) Please note, Property owner shall be responsible for maintenance and any potential clogs in the lateral and/or sewer main connection points up to the main sewer line on Route 7.
- 9) All proposed work in the State Right of Way shall be subject to the State Encroachment Permit approval.
- 10) Prior to the issuance of a Certificate of Occupancy, a certified as-built drawing and certified letter signed by a Professional Engineer indicating that all work was completed in accordance with the design plans shall be submitted to the Town of Wilton.

Based on the items above, this list shall be considered preliminary. Additional items shall be requested depending on responses to the above.

If you have any questions, please do not hesitate to call.