



Town of Pittsboro, North Carolina

Engineering Department

Memorandum

To: Mayor Cindy Perry and the Town Board of Commissioners

From: Fred Royal, PE, Town Engineer

Re: Sanitary Sewer Inflow and Infiltration (I&I) Rehabilitation Project Up-date

Date: February 22, 2016

Background and Discussion

This is a brief project up-date. As previously described, the project continues proceeding well and as planned. As you may recall, the initial approved project area did not expend the total loan amount, therefore we obtained approval to proceed with an expanded scope and time schedule. We have located many areas in need of rehabilitation. However, we can only choose a very limited amount of rehabilitation due to the approved project budget. We also have a very tight time window to produce this work for delivery to the Revolving Loan Fund.

This project has multiple benefits for the Town which may be summed up to more effectively manage, maintain and operate the gravity collection system (pipes and manholes) and to minimize emergency operations the wastewater treatment plant.

The recent rain events have caused the WWTP staff again to work diligently and late into the night and early in the morning to manage the wet weather high flows at the plant. The plant operators reported the following:

Plant Flow (from 11 PM Monday, February 15 until 8 PM Tuesday, February 16): 425 GPM

Plant Flow: increased to 521 GPM Tuesday night

Plant Flow: increased again to 678 GPM over the next 24 hours

Current Flow decreasing (Thursday) to 587 GPM and reducing

This type of rapid flow increase continues to be a problem for staff and the WWTP on many fronts. In response to this, we believe that an ongoing and programmatic SSES (Sanitary Sewer Evaluation and Survey) and Asset Management Plan are important in addressing this chronic

water management issue at the WWTP. It is therefore recommended that the Capital Improvement Program (CIP) budget include SSES work on an annual and on-going basis.

Note: The WWTP staff managed to avoid by-passing the sand filters and were able to continue selling reclaimed water to 3M!

The project elements completed to-date are listed below:

1. Revolving Loan Program approval
2. Planning, cost analysis, preliminary engineering report and Environmental Documentation (ER/EID) submittal and approval
3. Develop a plan to investigate, identify and repair defective sanitary sewer pipes, junctions and manholes
4. Smoke testing, video camera detection
5. Video camera work
6. Analysis of videos and development of prioritized rehabilitation projects
7. Project expansion approval
8. Repeat Items 3. – 6. above

Next Steps

The project is proceeding on schedule, where the final specifications and details and the revised Engineering Report and Environmental Information Documentation (ER/EID) are being finalized. Within the next ten days, the project will be delivered to DEQ for review on or before March 1, 2016. Upon submittal to DEQ, the following actions will take place:

1. DEQ review and assumed approval of bid and design package for the construction loan
2. LGC approval of the construction loan amount
3. Bid documents and contractor selection
4. Contract for rehabilitation and repairs

A fee of two percent (2%) of the construction loan amount will be required upon construction plan approval.

We currently anticipate that the construction project will begin July/August 2016.

Please see the attached project repair area map and table describing the project elements.