



MEMORANDUM

TO: WLSD Planning Committee
FROM: Paul Dombrowski
DATE: July 15, 2011
RE: Periodic Update – Facilities Plan
Woodridge Lake Sewer District

Recent Work Completed from June 13 through July 15, 2011

Task 1 – Project Development and Management

- Follow up with Kim Forbes of DEP Clean Water Fund with regard to completion of the Grant Agreement

Task 2 – Meetings and Coordination

- Prepare info and attend Planning Committee meeting on June 13th.
- Prepare email update on project status for Planning Committee to update WLSD Board on June 27th.
- Prepare periodic update for Planning Committee Meeting scheduled for July 18th.

Task 3 – Define Service Area, Flows and Pollutant Loadings

- Initiated gathering GIS mapping of District service and treatment plant areas.

Task 4 - Collection System Capacity Management (Infiltration and Inflow Evaluation)

- CCTV Inspections were conducted on 2.5 miles of pipeline during the 2nd half of June. We are still reviewing the video documentation provided but the following summarizes the preliminary results:
 - Most of the pipe inspected was plastic pipe and was in good to fair condition. Infiltration was mainly observed at the joints and at service connections.
 - Approximately 57 segments of pipe were inspected and evidence of cracks, breaks, obstructions, and leaks were observed in 25 of those segments (44%).
 - There were a few locations observed where significant amounts of I/I (3-5 gpm) are possible due to breaks, open joints, and other pipe defects.
 - Although several pipe segments were not exhibiting active infiltration during inspection, evidence of previous infiltration (stains, open joints, mineral deposits) was observed.
 - Several capped service connection stubs were observed in the pipe segments inspected. These unused services are a potential source of I/I and sealing of these should be considered to prevent future I/I.
- Building Inspections have been conducted at approximately 200 locations through the 1st half of July. An exterior inspection was completed at all locations visited and 104 had an interior inspection completed as well. The data is still being compiled, but the following general observations were made:
 - 10 sump pumps were observed but none of those pumps appear to discharge to the sewer system.
 - Several properties were observed with yard drains or driveway drains.
 - Sewer lateral cleanouts could not be located for several properties, indicating buried cleanouts which may be inflow sources.



- Several cleanouts were observed to be loose, have evidence of uplift of the pipe, or to be capped at grade in a low area; these may be sources of inflow. At one location, the cap was broken off.
- Inspectors were told by the homeowner at 218 E. Hyerdale St. that the house is served by a septic system.
- 12 grinder pump chambers were noted as being in low areas that collect runoff or were actively leaking.
- At one location, the grinder pump in the yard was covered with a tarp.
- Several homes had foundation drains.

Task 5 – Collection System SCADA System Evaluation

- Performed radio path study between the treatment plant and pump stations on June 21st. Results indicate that excellent communication is possible between the various system components provided that a repeater station and antenna is added at the Clubhouse.

Task 6 – Groundwater Disposal System Evaluation

- Received review comments from DEP on the groundwater testing plan on June 23rd and provided response on July 1st.
- Received a call from Joe Wettemann conveying DEP's preliminary comments to testing plan responses. These comments have been summarized and forwarded to the Planning Committee. Written comments from DEP are expected once Joe Wettemann returns from vacation.

Work Planned for July 17 through August 15, 2011

Task 1 – Project Development and Management

- Follow up with DEP CWF on grant agreement and submit initial request for reimbursement once agreement is received by WLSO.

Task 3 – Define Service Area, Flows and Pollutant Loadings

- Review and compile property info from WLSO.
- Gather GIS information available from State OPM and UConn MAGIC websites.
- Visit Town of Goshen Land Use offices to gather additional data not available from other locations.
- Prepare letter to Town of Goshen and OPM relative to State C&D map modifications.

Task 4 - Collection System Capacity Management (Infiltration and Inflow Evaluation)

- Upcoming I/I work will include a more detailed analysis of the house inspections and CCTV data to focus remaining I/I work on the most likely sources. Based on our preliminary review of the house inspections, there are very few identified sources of I/I inside of buildings. However, external sources appear to be more frequent and have a much higher potential for I/I entering the system. Our proposed course of work moving forward includes:
 - Convert the originally proposed 200 additional external/internal house inspections to external only house inspections. This will allow a greater number to be inspected.
 - Conduct dye testing of a number of yard and driveway drains that have been identified during the external house inspections.



- Re-inspect properties that have cleanouts or pump chambers that could not be located.
- Use the combination of external house inspections and dye testing to refine the areas where smoke testing will be conducted.

Task 5 – Collection System SCADA System Evaluation

- Receive and review the radio path study report and advance evaluation of SCADA system evaluation.

Task 6 – Groundwater Disposal System Evaluation

- Activities will commence and be dependent on DEP approval of testing plan.

Task 7 – Treatment Facility Evaluation

- Activities will commence once Task 6 is sufficiently advanced.

Task 8 – Regionalization Alternatives Evaluation

- Activities will commence following completion of Task 3.

Task 9 – Financial Evaluation

- Activities will commence following completion of Tasks 7 and 8.

Task 10 – Public Participation Program

- Provide assistance to Planning Committee for scheduled August 27th Taxpayers Meeting.