Woodridge Lake Sewer District Update

Since our last update, the Woodridge Lake Sewer District (WLSD) Board, its committees, staff and consulting engineers have continued work on developing a new Facilities Plan for our sewage system as required by the Connecticut Department of Energy and Environmental Protection (DEEP).

A Scope of Work for a new Facilities Plan was developed. The DEEP funded 55% of this work through the Connecticut Clean Water Fund, with the remainder of the cost funded by the taxpayers of the District. The Board expects to present an interim report on the development of a new Facilities Plan at the District's annual meeting in April. We urge all taxpayers to attend the annual meeting so that they may fully understand the implications of the new plan for the District. We know the costs will be significant.

In 1989, the WLSD entered into a Consent Order with the State. Our system has operated under the Consent Order since that time. Environmental regulations have become more stringent over the years and, at a minimum, we will be required to upgrade our treatment plant.

Since we are in an AA watershed, CT's highest water quality level, the Consent Order authorized the WLSD to treat and dispose of a maximum of 100,000 gallons of wastewater per day. The "base" flow of wastewater to the plant is now estimated at 80,000 to 100,000 gallons per day. However, this flow varies considerably from "base" after precipitation, during periods of high groundwater and seasonally since many homes are occupied on a seasonal basis.

The DEEP has resisted the idea of increasing the 100,000 gallon limit, and has been particularly concerned that we show that our groundwater disposal system (a ridge and furrow system of filter beds next to the treatment plant) is capable of absorbing the wastewater from our treatment plant and holding it underground as required by the DEEP. If we cannot demonstrate this capacity, the DEEP is likely to require that we construct a pipeline and pumping stations to send our sewage to Torrington's treatment plant, an expensive proposition.

As a result of the DEEP's concern over this issue, many months of effort have gone into negotiating an agreement with the DEEP over appropriate tests of the groundwater disposal system. Early in December, we prepared several of our filter beds for testing and demonstrated to DEEP staff how we plan to test the system this spring. The DEEP requires that the tests take place at seasonal high water and we plan to conduct the agreed upon tests in March or April. As a result of the protracted negotiations we expect to exceed the approved budget in this area of the Scope of Work by the time the tests are actually completed. All other tasks included within the Scope of Work appear to be on budget.

Another major effort has gone into identifying sources of Inflow and Infiltration (I/I) of water into the District's collection system, so that we may reduce the volume of effluent flowing to our treatment plant. Not only do we want to get as close to (or under) the 100,000 gallons per day currently permitted, but we also do not want to be required to construct a treatment plant with a larger capacity then necessary. To that end, the Scope of Work includes a plan to find and minimize I/I into the system, by a variety of means.

Thus far we have identified an estimated excess of 60,000 to 100,000 gallons per day of potential I/I in the system based on 368 manhole inspections, physical inspections on 193 properties, interior inspections of 104 homes, smoke and dye testing along 22,500 linear feet of sewer lines, flow isolation testing of 5.5

miles of sewer line and 2.2 miles of CCTV inspections.

We have followed the advice of our staff and consultants in searching for I/I, in order to find areas of the greatest potential reduction at lowest cost. The most successful part of our search thus far involved flow isolation of 5.5 miles of selected 1,000 foot segments of the 16 miles of sewage pipe in our system and CCTV inspection of segments of pipe in that area with disproportionate flow. As a result of this process a contractor installed new liners in pipe in the Paxton Court area and fixed joints and leaks. This resulted in an immediate reduction of I/I of over 10,000 gallons per day at this location at a cost of \$21,000.

The Board plans to continue performing flow isolation testing and CCTV tests where advisable in the high flow areas identified and will take remedial action to minimize I/I while being sensitive to our budget constraints. We all need to recognize that going forward we need an efficient collection system no matter what. As you will recall, from time to time we experience spikes of much greater that 100,000 gallons per day because of the I/I problems. The Board has voted to spend \$110,750 to complete the inspection of the collection system. It has been estimated that to repair the identified I/I will cost substantially more. We hope to be able to present more detailed estimates at the annual meeting. For a variety of reasons, it is unlikely the State will share this cost with us.

As many taxpayers know, during the last few months, we cleared the rights of way belonging to the WLSD around the lake to expose all of our manholes and conducted a manual examination of all but 6 of our 373 manholes. A number of these manholes are significant sources of I/I and where it was within their competence, our own Plant staff patched, fixed and sealed these sources. Again, we plan to have estimated costs available at the annual meeting to hire a contractor to perform more difficult remedial work on the manholes.

Manual inspections of hook-ups to the system, broken connections or sump pumps, smoke and dye testing have thus far not revealed major sources of I/I. We do expect that broken pump chambers, broken or missing chamber covers and broken clean-outs for the pipes from homes to the collection system will likely be significant sources of I/I. Thus far letters have been sent to some thirty property owners explaining that they must fix these problems and laying out options for resolving them.

Our consultants will soon begin work on the evaluation of our treatment plant (recommending necessary upgrades), explore the Torrington alternative and develop a comparison of the costs of these options.

The WLSD Board remains committed to developing an environmentally sound and financially acceptable solution for our sewage disposal.

We look forward to seeing you at the Annual Meeting of the District on April 21, 2012 at 9:30 am at the Woodridge Lake Property Owners' clubhouse and at the Budget Meeting on May 26, 2012 at 9:30 am also at the Woodridge Lake Property Owners' clubhouse.

The Woodridge Lake Sewer District Board