## Lost Lake Sewer Committee Minutes December 19, 2013

Present: Dr. Horowitz, Board of Health; Thomas D. Orcutt, Water/Sewer Superintendent; John G. Petropoulos, Selectman; Jay Prager, Finance Committee, Michael Rosa, At Large

Meeting was called to order at 6:30

Dan Wolf from Ross Associates was invited to the meeting to provide his expertise in the design and installation of septic systems. His knowledge of the Lost Lake area was seen as particularly valuable. The discussion was a free form question and answer format.

Mr. Wolf indicated that he was originally a member of the LLSCA but that he resigned as there was some concern that his participation could present the appearance of a conflict of interest. He noted that he was in favor of a sewer system if shown to be of benefit and financially viable.

Mr. Wolf indicated that he thought that the assertion presented at the 2012 Fall Town meeting that septic systems were particularly difficult to design at Lost Lake was something of a scare tactic. He indicated that certain areas of the Lake area are difficult to install septic systems for reasons such as ledge. He described the offset rules as planning guidelines and noted that the state provides the town with latitude on many of the offsets. He frequently works with the BOH to come up with the best proposal for a septic design. When he feels that there is no safe alternative and that only a tight tank will do, he will tell his customers so and will generally be reluctant to even propose a septic system to the BOH. He described the relationship with the BOH as highly effective and always managed with the health of residents and environment as the guiding principle.

Mr. Wolf noted that not all variances are even impacts to health. Variance to roads for instance are not necessarily a health issue. Variances to drinking water require much more consideration but Title V allows a 50' distance if need and suitable conditions can be proven. Variances may require a follow up testing regimen. At some point however too many variances may simply make a septic impractical.

Mr. Wolf described the CEI sketch showing required offsets as useful to understand the required offsets and the initial challenges of installing a system. It did not show the flexibility that the town and engineers like him are allowed and so may have been a bit of an exaggeration.

Mr. Wolf described the Title V water usage standard of 110 gallons per bedroom per day as a peak volume that is unrealistically high for understanding daily use. It is something that might be hit if a household was hosting a very large gathering of people for a long period of time. A more realistic volume is 40g/BR/D.

Mr. Rosa asked what advice Mr. Wolf could give.

Mr. Wolf described the offset to groundwater prescribed by Title V. He indicated that fast draining soils such as those around Lost Lake are recognized by Title V as needing special treatment. Title V requires septic systems in fast draining soils such as at Lost Lake to be an extra foot above groundwater.

Mr. Prager asked about alternative systems. Mr. Wolfe described the Presby System with which he has done a lot of work. The system requires less space than traditional systems and can be one foot closer to groundwater than traditional systems. Mr. Petropoulos asked about the Harold Davis system. Mr. Wolf indicated that he did not think that the system is approved in MA. He said that he has met with Mr. Davis and that he understood this and other (similar) systems to rely on mechanical processes to achieve their benefit including removing nitrogen. He expressed concerns about cost and maintenance of these systems. Mr. Wolf was familiar with these and indicated that they are generally appropriate for Nitrogen Sensitive areas. He thought that it would be a mistake to require these as it would not solve the problem as we do not know what the problem is.

Mr. Rosa asked about the implication of the large number of older systems at Lost Lake. Mr. Wolfe stated that many of the older systems may be directly in the groundwater and that these are likely the largest contributors to any groundwater problem around the lake. He stated that 'overzealous' regulation imposed by towns in the past created a disincentive for people to improve their systems. He stated that people are afraid of the BOH, ZBA and Conservation Commission. Mr. Rosa pointed out that a sewer would be a good answer to these older systems. Mr. Wolfe indicated that he did not agree with the CEI assessment of the inventory of older systems that they provided in their report (Page 22 of the CEI Report). He stated that his impression of the overall improvement activity around the lake implied a much 'younger' inventory. Records are Ross Associates alone show more upgraded systems than indicated in the CEI Report and that Ross is only one of many firms that do such work in the area.

Connie Sartini asked about grey water systems. Mr. Wolf indicated that there are some but that they require a special permit by the DEP.

Mr. Petropoulos asked what Mr. Wolf though of the CEI Report contention that systems have a 20 to 30 year lifespan. Mr. Wolf responded that systems fail in 2 ways. One is to fail to absorb effluent and this is generally manifested in visible signs. The other is that a system can become unable to treat effluent and this is only evidenced in the groundwater. Mr. Prager noted that old systems that may have been in the groundwater have been polluting since day one and that therefore had achieved status in terms of their contribution. Mr. Wolf agreed but noted that as the homes that use those systems are increasingly used, they produce more waste and therefore increase the contribution to groundwater.

Dr. Horowitz asked how we could answer the question of "how do we define our problem?" Mr. Prager asked how we could know what tests to do. Mr. Wolf suggested asking CEI (or another firm) but to assure that they understood that they could not receive the contract to do the work. Mr. Rosa asked if we should, for instance, ask 4 firms to provide recommendations and see if there are consistencies. Mr. Orcutt suggested that we should ask DEP. Mr. Wolf agreed that DEP could help to define the problem.

Mr. Orcutt left at 8:30

There was additional discussion on how to design a more comprehensive test than has been done to date. Mr. Petropoulos expressed his frustration with what he saw as the Committee's waste of taxpayer money by approving that recent testing. Dr. Horwitz pointed out that Town Meeting insisted that the '89 test be repeated and because results are not consistent, money was not wasted but indicated that other questions needed to need to be asked.

Dr. Horowitz asked if Mr. Wolf or Mr. Duger were worried about a threat to the public drinking water supply. Both indicated that they were not worried.

Mr. Petropoulos asked about the challenge of replacing a failed field when there is no room for a new field in a new location. Mr. Wolf indicated that it is feasible to install a new field in place of the old one at minimal incremental cost. The BOH is involved to assure sanitary practice.

The Committee approved the amended minutes of 11/26/2013 unanimously (Mr. Orcutt absent)

Dr. Horowitz indicated that she was not sure any more about exactly what our problem is relative to private waste water disposal around the lake.

The CEI invoice was provided for review by the Committee. Mr. Rosa noted that the bill was not constructed in a manner that made it easy to compare to the contract. We would have no way to know if certain 'phases' of the contract were complete and properly paid for. Mr. Petropoulos noted that CEI's testing methodology caused the phosphorous results to be incomparable to the '89 study and that comparison to the '89 study was the central objective of the testing. Mr. Prager suggested asking Mark to:

- Have the bill correspond to the contract
- Work with CEI to find a way to account for the lack of value in the phosphorous testing.

The next meeting is scheduled for Thursday January 9, 2014 at 6:30.

The meeting was adjourned at 9:15

## **Action Items**

Mr. Petropoulos to ask Mr. Haddad to work with CEI on the invoice as described above.