TOWN OF WESTFORD

SELECTBOARD & PLANNING COMMISSION MINUTES

Minutes for October 20, 2015 Meeting

Approved on November 4, 2015

Commission/Board Members Present: David Adams, Jeremy Berger, Wendy Doane, Gordon Gebauer, Seth Jensen, Mark Letorney and Casey Mathieu.

Absent: Alex Weinhagen

Also present: Melissa Manka (Planning Coordinator), Amy Macrellis (Stone Environmental), Kevin Camara (Green Mountain Engineering), Thomas Orfeo, Steve Knight, David Gauthier, Lynn Gauthier, Christopher Friesen, Pat Haller, Heather Armata, Sarah Pinto and Jeff Hutchins.

The meeting began at 6:06 p.m.

Site Investigation, Capacity, and Preliminary Cost Estimates for a Shared Wastewater System at the Jackson Farm Property, Westford, VT with Stone Environmental Inc.

Amy Macrellis of Stone Environmental Inc. and Kevin Camara of Green Mountain Engineering Inc. presented their findings.

Kevin C. began by noting that the cost estimates included in the report were informal at this stage and will be clarified and refined as further information is gathered.

Amy M. began by stating that the maximum hydraulic capacity of the site is 18,000 gal/day, but the in-ground trench design allows for 16,920 gal/day.

Seth Jensen asked if more capacity was necessary to allow the system rest.

Amy M. said the 16,920 gal/day already takes the bi-annual leach field rest time into account. Therefore, the total actual capacity of the leach field is 33,840 gal/day with 16,920 gal/day being actively used in any given year to allow half of the system to rejuvenate on alternating years. She stated that this is a State requirement for all systems exceeding 6,500 gal/day and requiring an Indirect Discharge Permit.

Seth J. asked if pretreatment was an option to further increase capacity.

Amy M. said the maximum hydrologic capacity (Maximum soil loading of treated effluent) is 18,000 gal/day. She said since the trench design maximum and hydrologic maximum are so close she would not suggest pretreatment. She said the cost of pretreatment given the small amount of capacity it would offer does not appear to be advisable at this juncture.

David Adams asked Amy to clarify whether pretreatment would bring the system from 16,920 gal/day to 18,000 gal/day.

Amy M. answered that in theory it would increase the capacity from 1 gal/ft./day to 1.8 gal/ft./day.

David A. asked what the 18,000 gal/day limit was.

Amy M. said the in ground leach field system could handle cleaning effluent at 1 gal/ft./day and a pretreatment system could bring that to 1.8 gal/ft./day. However, based on the size of the proposed system 1.8 gal/ft./day would allow more than 18,000 gal/day of treated water to leach into the surrounding soils. This could overload the lands ability to move treated water off site, which is not good for the longevity of the system.

Kevin C. said the cost of an advanced treatment system is significant and unnecessary at this point given the hydrologic capacity and the capacity of the in-ground wastewater system design.

Amy M. and Kevin C. noted that the proposed service area includes all properties along the road from the point of the system headed north and ends at the point where roads meet the Browns River or a class 2 wetlands. He added that the Town can and will revise the service area at a later date as more information becomes available.
Amy said the proposed service area encompasses the proposed T5 through T3 transects indicted as higher density commercial and residential areas in the proposed regulations.
Seth J. asked how much capacity would be left if the system served the 39 homes within the proposed service area.
Amy M. said approximately 7,500 gal/day would be left or capacity for 30 more homes.
She noted that most businesses require less than the 245 gal/day, which is what a dwelling connected to a community system requires.
Kevin C. noted that after the system has been functioning for two years and two years of flow data has been collected if the average daily flow is less than 245 gal/day/dwelling then the lower number can be utilized for future connections and the town can get more capacity.
Tom Orfeo noted that it might not be wise to use a lower daily flow rate due to the fact that more housing in the Center would likely bring more children who use more water than the majority of individuals currently living in the Center.
Kevin C. stated that the Town of Warren increased their capcity by 20% after collecting their 2 years of flow data.
Kevin C. noted that the project will change over time due to the fact that this is the initial stages of a large scale project. He added that in looking for the best most cost effective system for a smaller number of users with ledge present in the area of service he chose to propose a STEP system in which the septic tanks serving each dwelling/business would have a built in pump to move effluent (not solids) up to the leach field.
He said the tanks would be checked on an annual basis to determine whether solids needed to be pumped from a tank. He said the Town would decide whether the property owner would pay directly for the cost or through a maintenance and operation fee.
Tom O. asked who would manage and maintain the system.
Kevin C. said typically the Town Administrator manages the system, the Treasurer pays the bills for the system and a contractor maintains the system. He said the State Permit would outline how the system would need to be maintained and who is required to maintain it.
Wendy Doane asked what would happened if a tank wasn't pumped when necessary.
Kevin C. said that solids could get into the distribution pipes, but more likely the sewage would back up into the home as would occur with an on-site system. He added that the good thing about the STEP system is that it only has to be inspected once a year as opposed to a municipal pump station which needs to be inspected once a day.
Steve Knight asked if construction of the system could be scalable and Kevin C. said yes.
Pat H. asked about the cost difference between constructing a system on the Jackson property and constructing one on the White Church property.
Kevin C. said the White Church would have a lower overall cost but he couldn't say whether the cost/unit would be lower. Amy M. noted that the White Church property could only serve the Library, Town Office, Brick Meeting house, Church and one or two others uses.
Steve K. asked what the life of the system would be.
Amy M. said tanks have a 40-50 year useful life, in ground and mound systems have a 20-25 year useful life (if maintained properly), dual alternative leach fields have a 50-60 year life cycle and the piping has a 100-200 year useful life.

Tom O. asked what happens when the system fails.
Kevin C. answered the system would have to be rejuvenated.
Pat H. asked if that meant the system was a permanent long-term solution.
Kevin C. said yes.
David Gauthier stated that the Town doesn't need to build the system in the immediate but once the soils are gone they are gone forever.
Amy M. agreed that regardless of the timeframe for construction the Town first needs to retain possession of the soils. She noted that she has been working with the Town since 2008 searching for suitable soils to serve the Center and they have investigated almost every site from the initial 2008 study. She believes the Town is fortunate to have this opportunity. She said without these specific soils nothing will be able to happen within the Center in the future, especially given the fact that it is extremely difficult to receive a State Surface Water Discharge Permit.
Kevin C. stated that due to the new Lake Champlain TDML requirements, which prohibits an increase of phosphorus into Lake Champlain, Surface Water Discharge Permits will not be issued in the foreseeable future.
Pat H. stated that it sounds like without the land there is no plan.
Kevin C. said that without a community system in the Center most failed systems will require a "best Fix" replacement system meaning properties will be locked into exising flows, the use of the property can't be changed and bedrooms can't be added.
Amy M. said it is an exciting and important opportunity to have the ability to retain this resource for the future.
Seth J. said that future funding opportunities, beyond the known grants, typically become available on a 10 year cycle, such as the most recent federal program to fund shovel ready projects. He said securing the land is the first step and funding opportunities will arise in the future.
Tom O. agreed that the first step is to take possession of the land until such time as a reasonable plan for financing is in place and the resources necessary are available.
Amy M. stated that the need to answer the harder questions involved in this project are not critical now and will take time. The question right now is do residents want to have options for the Town Center Area in the future and, if so, should the Town pursue ownership of the land.
Kevin C. stated that the proposed leach field can be farmed prior to the system being built.
Amy M. stated that the lifecycle cost is not a lot different between individual and community systems. However, the cost is spread out over time and there is more room for growth, development and changes of use.
Pat H. noted that a community system serving the Center would also allow more flexibility of design concerning placement of building envelopes while maintaining well isolation distances from wastewater systems on small lots.
Seth stated that senior housing requires less than 245 gal/day which could boost the number of uses and individuals the system could serve.
David A. asked what would happen if the Town pursued this project but the municipal buildings' wastewater system failed prior to construction.
Melissa Manka said the Town could connect to the leach field on the Spiller Property as a temporary solution.
Kevin C. said that the quickest he's seen a project like this go from initial planning to construction is 2 years and Warren took 5 years.
Amy M. added that Towns that have pursued municipal wastewater have found it to be beneficial and successful.

Kevin C. and Amy M. mentioned that Westford recently applied for a Municipal Planning Grant to confirm the extent of soils and dive into financing options. However, the Town must vote on when to secure the land this coming Town Meeting so securing the land should be the first objective and main focus at this point.
Wendy asked if there are any studies available that touch on the economic benefits of a municipal wastewater system in Centers.
Amy M. didn't know of any studies touching on the economic benefits of community wastewater.
Kevin C. added that as engineers they typically focus on user costs not the broader economic benefit.
Steve K. reiterated that this opportunity has a time limit and the main decision is do residents want to retain opportunities for the future or not.
Tom O. stated that its likely property values in the Center will increase due to the installation of a municipal system.
Melissa M. asked if Amy and Kevin could return to present this information to the boarder public and answer questions.
Amy M. said yes and this type of project often takes a number public forums over a period time.

Citizens to be Heard, Announcements & Other Business
There were no citizens to be heard and/or other business to be discussed.

The meeting adjourned at approximately 8:57 pm.

Submitted by,
Melissa Manka, Westford Planning Coordinator