

Township of Lake

Huron County, Michigan
Minutes of April 21, 2008

Supervisor Kelterborn called the regular meeting of the Lake Township Board to order at 7:30 P.M. Present were Kelterborn, Fischer, McCallum, Hyzer and Remer along with 21 guests.

Supervisor Kelterborn suspended the regular order of business to allow Steve Roberts of Wade Trim to give an update and final presentation on the preliminary engineering study for a sewer system in Lake Township. The study was funded by a USDA Rural Development grant for the purpose of conducting a feasibility study for a township sewer system which included the type of system that would be most suitable and an estimate of costs involved. Mr. Roberts explained that based upon a sampling of the records received through a Freedom of Information request from the Huron County Health Department, he estimates that 80% of the septic systems currently being used within the Township do not comply with current health codes. Many systems are using dry wells. He has concerns for drinking water. Well records obtained from the DEQ reflect that most property owners have deep wells, at least 120' deep, which goes through a rock layer 17 to 25 feet in depth which does a good job of protecting the drinking water. Beach wells are very shallow and should be tested since they can be easily contaminated. Mr. Roberts stated that growth is hampered due to the need for adequate room for a septic system.

Bob Smith questioned the existence of beach wells in Lake Township. After some discussion it was clarified that Mr. Roberts was speaking about shallow wells which are still being used by some property owners.

Caseville and Hume Townships were also contacted to determine their interest in a sewer system, but both declined to be included in the study.

Mr. Roberts then went on to describe the types of systems, alternative options and potential costs. Costs are based on a unit of measurement called the residential equivalent unit, which is a way of measuring waste water (i.e., a 10 unit apartment = 10 units x .5 = 5 REU's). Lake Township has approximately 1,250 parcels within the proposed service area. The County campground has numerous sites and there are situations with multiple cottages on one parcel. The REU count for the service area is 1,600.

Mr. Roberts described the Aero-Mod treatment system with two compartments allowing one side to be shut down during winter months when population is low. This system has a small footprint and low odor.

Three types of collection systems were described as follows:

Conventional gravity is generally the first alternative, but in Lake Township this system becomes more difficult and requires a need for multiple pumping stations.

A vacuum system is newer and uses a vacuum to pull the waste water. This type of system would require one or two vacuum stations rather than multiple pumping stations.

Mr. Roberts is recommending the grinder and pressure main system. Each household would have a grinder that would grind up waste and by pressure force waste to the main located in the township's right of way. These systems are low maintenance, lower than septic systems, and there is no odor. There would be no need for additional pumping stations and the mains do not need to be as deep as in other systems, five foot rather than 12 feet. There are less initial costs, however all property owners would have to install a grinder system on their property which would cost approximately \$4,500 per property owner. Grants are available for low income or fixed income property owners at zero percent over 20 years. As far as the municipal system, itself, there are some grants available, also.

Questions followed as to: life span; whether the grinder/pressure system works for cottages below grade; type of piping from the grinder to the house; number of grinders on lots with multiple cottages; failure rate; discharge of softener salt into system; maintenance; costs and connection fees; reliability of both the collection and treatment system; how many townships have their own sewer collection and treatment system; whether this system is tested and proven; what happens to waste water after treatment and costs.

In response, Mr. Roberts stated that the life span is approximately 15 years, similar to a sump pump and would require pump replacement costing approximately \$200 to \$250. The grinder system does work for below grade dwellings and is the lowest risk system. Mr. Roberts expressed his confidence in this type of system. Piping would be PVC, four to six inch piping into grinder and one inch to 1-1/4" exiting grinder. In situations with multiple cottages on a lot, there is a duplex system with two pumps; one pump will operate if the other fails. Property owner costs for the duplex system grinder is estimated at \$6,000. Failure rate is low, short of improper usage. Mr. Roberts was unsure of the discharge of softener salt into the system and will follow up on the answer. Maintenance requirements are low. The original recommendation was for a vacuum system which is comparable in costs, but is not used as much. The

vacuum system is a very new technology and would be more complex with the local terrain, requiring vacuums located at certain points. Mr. Roberts is not as confident that the vacuum system would work as well as the pressure system.

As to how many townships have their own sewer systems, Mr. Roberts stated that a lot of township sewer collection and treatment systems were constructed in the 70's during the clean water era. He mentioned that the original sewer system report done for Lake Township was during that time period with a recommendation for more on site septic systems with more oversight.

With the proposed sewer system as a result of this study, the treated waste water would be discharged into the Musselman Drain. Mr. Roberts explained that overflows of waste water from municipal systems following storm events are due to combined sewer and storm water systems. The system proposed for Lake Township is strictly a sanitary sewer system without storm water collection. New municipal systems with storm water collection require a separate collection system for waste and storm water. The proposed system has been installed in Kingston Township and is working very well. The Kingston system discharges into Lake Michigan but communities can also choose to do land application of the waste water.

Costs for the average homeowner would be \$4,500 for the grinder, with additional costs if the house is set back from the road 200 feet or more. Monthly fees are approximately \$4.50 per thousand gallons with the typical homeowner with kids using approximately 5,000 gallons per month. The sewer lines for the collection system and the treatment facility would be financed through a special assessment district with property owners paying those costs over a 40 year period on their tax bill. The individual grinders are paid for by the property owner in the district. Total project cost without the grinders is approximately \$11,800,000 or approximately \$14,000 per household including the grinder. These costs are based upon the special assessment project which includes the forced main and the treatment plant. These costs are assessed to every property owner. The grinders can be separate or included. The property owner pays the connection costs, grinder installation and removal of the existing septic. Additional costs would be the monthly or quarterly service fees. Engineering costs are approximately 35% of the total project cost, which includes legal and administration costs, as well. Approximately one-half of the 35% is for surveying, design and construction oversight. All buildable lots would be assessed in the special assessment district but would not be subject to a monthly service fee until developed and would have to pay connection fees when developed. The township would maintain the system to the curb and from the curb to the house is the property owner's responsibility.

The purpose of the study was discussed. Kelterborn emphasized that this is just a study which is the initial requirement for any sewer project. In the event that lakefront communities are eventually required to install municipal waste treatment systems, Lake Township will have the preliminary study done and will be able to use this study to apply for any types of grants or other assistance that may be available.

Willard Cregeur asked whether two homes could share a grinder. This is possible however electrical usage is involved. Jeanne Henry stated it would be similar to a shared well.

Jim Simmons asked how the district is determined and whether property owners would be able to vote on it. Mr. Roberts replied that there are two ways on doing a special assessment district, (1) 50% or more of the property owners in the land area sign a petition or (2) the township board wishes to move forward and holds a public hearing for a special assessment district. If 20% object, that kills the project.

Kelterborn asked Mr. Roberts whether there was any correlation between failing septs and the beach muck. Mr. Roberts did not know but thought it may be a contributing factor. Kelterborn asked whether the rock shelf Mr. Roberts described earlier is acting as a barrier. Mr. Roberts stated that the rock could be acting as a barrier and allowing any surface water to run off into the lake but the shale is protecting the groundwater.

Kelterborn asked for an indication from those in attendance as to whether they would be in favor of such a project if 40% of the property owner's portion was paid by a grant. Responses ranged from one yes, some no's and others stated that it depended on how much it would cost.

(The presentation by Steve Roberts concluded at 9:20 P.M.)

Minutes of March 31, 2008 approved upon motion by Fischer, seconded by Remer. Motion carried. Treasurer's Report approved upon motion by Remer, seconded by Hyzer. Motion carried. Agenda approved upon motion by Fischer, seconded by Remer. Motion carried. Correspondence read, including letters from Pam Fischer and Deb McBride in support of wind energy. McCallum to check with Burnham and Flower regarding costs for increase in property coverage as recommended by township attorney.

Neil Rohner presented a petition to the township board signed by 135 property owners of Lake Township which included 17 agricultural properties. The purpose of the petition was to show support for a wind

ordinance overlay zone because of the negative comments on wind energy coming from the township hall and to reduce our dependence on foreign oil.

Kelterborn asked Mr. Rohner if he could explain the correlation between our dependence on foreign oil and electricity. Mr. Rohner stated whenever we do something to get rid of power we have to buy we will be reducing our dependence on foreign oil. Kelterborn stated that foreign oil is used for fuel and asked whether there is any correlation between fuel and wind? Yvonne Bushey responded by reading her statement used to solicit support for the petition which stated, in part, that wind is clean, renewable and free.

Lou Bushey asked about a letter sent to Kelterborn from Don Landerschier that was not read during correspondence. Kelterborn had no knowledge of the letter. Mr. Bushey gave Kelterborn a copy to read. Mr. Landerschier's letter regarding wind energy read.

Jeanne Henry addressed the board and guests regarding the electrical conveyance system throughout Lake Township following numerous power outages, the most recent being for 13 hours on April 20th and eight hours the previous week. Mrs. Henry stated that there have been daily outages for decades and in talking to a public relations person at DTE, it was his response that 55 MPH wind gusts coming off the shoreline, ice storms and residents cutting down trees has resulted in our area being a drain on their resources. Mrs. Henry stated that this is a serious matter, many residents being seniors who need reliable power. Power is needed to run wells and septics. Mrs. Henry suggested that we need underground lines which will not be subject to weather or other hazards and suggested putting more pressure on DTE to upgrade, repair or install underground power lines.

Lou Colletta stated that DTE knows there are problems and is working on correcting them by the end of this summer. Linda Alashmaly stated that DTE no longer employs their own tree trimmers and the subcontractors do the minimum required in order to ensure their job security. Larry Crews stated that underground service is very expensive, the township will not want to bear that cost so it would be best to get DTE to talk about it.

Property Insurance: Discussion on property coverage for township buildings based upon recommendation of Attorney Salens. McCallum to check with Burnham & Flower as to additional costs for increased coverage.

Payment of Bills: Motion by Remer to pay bills including additional \$50.00 to Paul Golsch for secretary fees on ZBA, seconded by Fischer. Motion carried.

Election Commission:

Election inspectors recommended by McCallum for the May 8th School Elections as follows: McCallum, Kathleen Bolton, Dorothy Colletta, RoseAnn Remer, Cheryl Gray, Brenda Heilig and Deb Hubbard. Motion by Fischer accepting recommendation, seconded by Kelterborn. Motion carried.

Motion by Hyzer to adjourn, seconded by Remer. Meeting adjourned at 9:55 P.M.

Valerie McCallum, Clerk

Approved at a Township Board meeting held on the ____ day of May, 2008.

Clay Kelterborn, Supervisor