

**MINUTES
SPECIAL MEETING
GORHAM TOWN BOARD
SEPTEMBER 3, 2008**

The Gorham Town Board held a regular meeting on Wednesday, September 3, 2008 at 7:30 PM at the Town Hall, Gorham, NY. Present were Supervisor Calabrese, Councilmembers Lightfoote, Busch, and Adam-Anderson, , Chief Operator Water/Wastewater Departments Erb, Jim Colacino, Michele Cutri-Bynoe and Deputy Town Clerk Trautman.

1. Call to Order/Pledge to the Flag:
2. Privilege of the floor: None requested.
3. Other:

a. Water Telemetry Presentation by Jim Colacino, Newark Electric. Mr. Colacino was asked to come in and talk about a control system technology that they are proposing for the water treatment facility. We have surveyed the situation that you are faced with as it relates to your pump stations and more importantly the water towers in trying to know what is going on when these sites have anomalies such as premature water level drops, pump failure, not just monitoring them for overall health, but to control the pumps based on water level. Right now you have a Turner Road pump station, tank #1 on County Road #1 and a second elevated storage tank on Lake to Lake Road. Basically what happens these systems are monitored and controlled manually. There is a connection with a radio link between the County Road #1 tank back to the treatment plant where guys will visually, based on the level of that tank, turn pumps on and off manually. Tank #2 (Lake to Lake Road) elevation is going to turn pumps on and off at Turner Road. Right now that operation is totally manual.

At one time there was a lease line telephone system. This is an old technology that has been around for many years. What has happened is that the phone company has done away with putting money into repair of copper lines, they are doing away with that and have elevated the monthly recurring costs of that technology. They don't want to maintain copper lines just for your telemetry system. The trend in the industry over the last 20 years has been to use some form of radio technology where each one of the sites would have a control panel with a small programmable controller. Inside that same cabinet is one of the many different radio technologies.

The most traditional method up until the last couple of years has been to license the frequency with the FCC, dedicated to the Town of Gorham, then that radio you have to set up a radio path study to make sure that these things can hit from point to point. The distances are not actually that great, but there is sometimes rolling terrains between the two. There has always been the option to go with licensed radio. The problem with that is it is very painful to get a license

through the FCC, it can take up to a year or more to obtain that license. Just the application and paperwork can cost over \$1,000. Once you obtain the license, you have to send that to Canada because we are so close to the so called imaginary line A, Lake Ontario, we need to get Canadian approval from their equivalent of the FCC, that can take another 6 months to a year. The problem some years ago, it was relatively simple to get a radio frequency dedicated to you. That is no longer the case. The reason is because of all of the cellular companies, data carriers, etc. are gobbling up these frequencies and not the FCC and the government actually bid them out. There is another technology that became prevalent about 10 years ago and that is license free radio, you don't need to get a license, but the limitations of it is that it is truly line of site. If you can't see it, you can't talk to it. That's great if you are water tower to water tower and are above the hills and trees and the foliage does not interfere. Town of Phelps tried this and had problems with foliage interference and eventually abandoned the technology.

We have a new option today using the cellular network as your carrier. You buy a radio modem that is about 25% of the cost of a conventional licensed radio. As an example, if you were to use one of the first two technologies licensed radio or license free, you are looking at a couple thousand dollars per radio just for the hardware costs, then you have all of the antennae work and elevated, sometimes the antennas need to go on top of the tanks and that can get very expensive. When you use the cellular network, you buy a radio that costs about \$675 on State Contract, that radio is already available on the State GIS contract. It is not a component that would have to be bid out. The pros to this are that the cellular network is built out so well that literally you could have a site on Lake to Lake Road and have one 200 miles away and you don't have to worry about repeaters and radio paths. As long as you are in the Verizon network or Singular or Sprint, you have radio signal.

One of the other advantages is that it is an Ethernet capable radio. You can do other things with it other than telemetry. Most importantly, we can remotely program and maintain this system without having to go to the sites in most cases. Why this is a big advantage, if Rick wants us to once a year calibrate the water towers, check the levels to make sure when he thinks it's 50 feet that there is truly 50 feet of water. That calibration we can do right from our office. We tell Rick go flood the tank, tell us when it is coming out the overflow, we make the changes remotely and you save all that time and travel, etc. You would be minimizing your maintenance costs. The down side to it is that it comes with a monthly recurring cost from Verizon.

The first two technologies, you go through the pain and expense you own the frequency and knock on wood you should not have any issues. This technology you are handing off the RF component of your system to Verizon and with it comes a monthly recurring fee that will not go away. The good news is

that as the technology gets more mainstreamed and there is more market saturation you should see the performance go up and the price will probably be fairly stable. Whereas if you buy your own radio system like a lot of municipalities have done over the years, sometimes the technology becomes obsolete. The monthly fee is available on State Contract, the service you subscribe to. A lot of municipalities have adopted the cellular technology, they see more benefit than they do downfall. That seems to be the more prevalent solution. When you go to a licensed system, we have found another municipality that encountered interference problems from a paging system. The FCC could not do much about it without legal intervention which would be very time consuming and costly.

Mr. Colacino stated that he is a proponent of the Verizon solution for the Town of Gorham. It is painless, quick, its benefits outweigh any negatives. One of the things I think you will see in the near future are other opportunities to use that same radio. For example, if you wanted to put cameras at your water towers, you could use the same Ethernet radio and bring that video imagery back here, to the water plant, the Sheriff's office, wherever you want to send that data, that option is available to you. If Rick wants to put in an in line chlorine residual meter to track chlorine and bring the data back here, you can use that technology. Whereas if you put in a dedicated radio system it is much more painful. Once you have the radio and have a control at these sites, the radios can talk from the single locations to Rick's office and also pier to pier. The water tower when it gets to a specific level instead of just telling Rick it is at 43 feet, it can send a signal back to the pump station to automatically turn pumps on or off. What it does is affords you the opportunity to record and alarm the levels so you have them for the Health Department, but it exercises your water and typically will do it on a more consistent basis than you could ever do it manually. If something happens, a control system failure, we design the controls to fail in whatever method Rick tells us is the most benign to the community. If a pump station's job is to fill a water tower and it automatically talks back and forth and the water level were to drop and yet it couldn't get its signal to the pump station, let's say it lost communication, maybe kids broke the antenna off the roof, what do you want those pumps to do if they can not talk to the water tower. The way I program these is that I want the pump to come on. The worst thing that will happen is that you may flood a water reservoir and get a complaint from a neighbor that you are flooding their yard, but you are not going to run the community out of water. You do not have that capability right now. It is a fail safe control logic that gets built into everything that we do as it relates to water and wastewater. If the system senses an anomaly, high water, low water, power failure, anything else that we monitor it is going to call Rick or however many people we program it to call or text message. They can program different severities of alarms and notify as many people as you want. All that functionality is built into the core control system that is being proposed.

There are several communities around us that have embraced this same technology over the years. The only variable has been the radio technology which is the method they have chosen.

Only in the past couple of years have the cellular solutions taken off and become cost effective. He brought with him his laptop and logged on to the Wayne County Water Authority system so you can see what it looks like. Basically you have a map of Wayne County, in your case what we would probably do, the system proposes a new computer at Rick's office with a 24 inch screen. That screen would be a map of the water district. What Rick could do at a glance he could see the water levels and what the status is of this over view screen. If he clicks on any one of the sites it will bring him into a specific stream for that site. When you click on the Lake to Lake Road water tank you will see an actual photograph of the tank with a cut away and see how much water is in it. You will have the ability to set high and low alarms for water level. Rick will have the ability to set when the pumps are turned on and off and it will be done automatically. If there are any system anomalies the system will call him 24 hours a day. The Water Treatment Plant itself on East Lake Road, there are a series of chart recorders and meters that are in various degrees of functionality. What we are going to do as part of this project is to put a lot of those into this system. Not only will it give the ability to trend, record and better control it, but he will have historical data if you should ever need it for the DOH, etc. The original intent of the system was to get a better handle on your water pumping sites. At the same time we can monitor those other loose ends at the plant too.

Board members looked at the laptop computer with the Wayne County system. Mr. Colacino explained.

User names and passwords will be used with the system. Only those who are authorized will be able to make any changes to the system. Some staff will be able to view only. If you have internet at home and have the correct user name, password and address you can log onto the system from home. Wayne County set a policy that the on call person would, after receiving a call, log onto the computer and see what is going on. He will still be paid for his time, but it would minimize a lot of the calls. Many times he would not need to go out, it could be handled in the morning.

Board members discussed the system further, Mr. Colacino answered questions. Rick stated that the system will allow them to comply with forthcoming requirements for electronic reporting to DEC and DOH and will be used for that as well.

Councilmember Lightfoote moved to start the process for purchasing the telemetry system from Newark Electric not to exceed \$65,000. A resolution from Newark Electric that the system will not exceed \$65,000 is required. Councilmember Adam-Anderson seconded the motion. Motion carried unanimously. (4-0).

081-2008

b. Budget Review – The 2009 Tentative Budget has been presented to the Town Board and the Town Clerk. Board members reviewed and discussed the proposed budget and Fire District Contracts at length. Supervisor Calabrese talked about the sales tax history, etc.

On the motion by Councilmember Adam-Anderson, seconded by Councilmember Lightfoote, the budgeted amounts for the 2009 budget for libraries are increased as follows: Gorham +\$3,000; Wood +\$2,000 and Rushville +\$500. Motion carried. (3 AYE – 1 Abstain (Councilmember Busch)**082-2008**

On the motion by Councilmember Adam-Anderson seconded by Councilmember Busch, a public hearing on the 2009 budget, fire and ambulance district contracts is set for Wednesday, October 8, 2008 at 7:30 PM. Motion carried unanimously. (4-0). **083-2008**

4. Set next meeting date: The next meeting will be the regular meeting on Wednesday, September 10, 2008.

5. Privilege of the Floor: None requested.

6. Adjournment: On the motion of Councilmember Busch, seconded by Councilmember Lightfoote, the meeting was adjourned at 9:04 PM.

Respectfully submitted,

Nancy Hollenbeck
Town Clerk

Minutes of this meeting were taken by Barb Trautman, transcribed by Nancy Hollenbeck. Thanks Barb!!!