Selectmen's Meeting Minutes Monday, January 30, 2017

At the Selectmen's Meeting held on Monday, January 30, 2017 at 6:00 p.m. the following people were in attendance: Mark Lufkin, Wendy Hersom, and Peter Corey.

At 7:00 p.m. the Public Hearing was called to order by Chairperson Wendy Hersom. Wendy read the posting notice for the public hearing:

The Whitefield Board of Selectmen will hold a Public Hearing on Monday, January 30, 2017 at 7:00 p.m. at the Whitefield Town Office, 56 Littleton Road, Whitefield, N.H., 03598 to discuss and receive public input on two bond votes that will be voted on at town meeting. The first bond will be for a Water Improvement Project in the approximate amount of \$6.5 million dollars and the second bond will be for a Sewer Treatment Plant Upgrade in the approximate amount of \$6.5 million dollars.

For persons with special needs, provisions can be made by contacting the Selectmen's office via telephone (873-2551) or mail, at least five days prior to the public hearing.

Whitefield Board of Selectmen 56 Littleton Road Whitefield, NH 03598 603-837-2551

Dexter Lefavour and Jon Warzocha from Horizons Engineering attended the meeting. Horizons Engineering is the engineer for the project.

The following members of the public were in attendance: Fred Ingerson, Water Superintendent; Josh Welch, Treatment Plant Operator; Marty & Mina Adamovage; Richard Harris, Jr.; Richard Harris, Sr.; Rick Wright; Sam Chase; Scott Burns; Bill Robinson; Roy Birard; Lewis Gooden; Claire Houghton; Robert Stevens; Sondra Brekke; Edie Worcester; Marsha Lombardi, Tina Wright, Edward Piatek; Frank Lombardi; Kate Lombardi; Paula Harris.

Dexter said he will review the Water System Improvements Project first. This goes back to 2013/14 when a study was done to identify issues with the Whitefield water system. Some progress has been made but there is a lot of work that remains. As recently as last year, the State of N.H. DES came to town for their regular sanitary survey and they identified a list of 7 items that need improvement. At least one of the times has been corrected. The list of Sanitary Survey Action Items is: Upgrade the Route 3 booster station that feeds the Bray Hill pressure zone – this was taken care of in 2016 with a CDBG emergency grant; Upgrade or abandon the Bray Hill well; Complete the permitting process for reactivation of Dodge Well #1; Complete the permitting process for reactivation of Dodge Well #1; Replace the Dodge pump house; Abandon the Cherry Mountain well and water main; Investigate unaccounted for water and take steps to bring unaccounted for water below the industry standard of 15 percent. There are a lot of water leaks that need to be repaired. Implement a program to address needed water main replacement.

The Dodge well house is a casual structure, a shed out in the woods, it is really a building that is not worker-friendly and does not contain the usual equipment you need. The Bray Hill well house needs improvements as well. Cherry Mountain well house is very close to the highway and there is a need to do something with this building. There was a new booster pump station built this past summer by the liquor store and has temporary disinfection and a line that repressurizes the town.

Dexter reviewed the list that came from the 2013-14 report. The total cost for all these is \$10 million. We have prioritized the list of projects with the Board of Selectmen. The first priority items are to replace AC pipe in the Bray Hill Area. There has been frequent water main breaks up there. Louis Gooden asked about the pipe that runs up Bray Hill through the swamp. Bill Robinson said it doesn't run in the swamp anymore, it runs in the road. Dexter said we are looking at repairing this as part of the project. There is some water main replacement on Brown Street, from Brown Street from Main Street to Pine Street and from Water Street from Brown Street to Laurel Street. They are intending to replace the water meters system-wise and upgrade the Dodge well and Bray Hill well sites. These 1<sup>st</sup> priority items total \$4.5 million. The project cost summary figures out to be about \$190 per user, per year.

Sondra asked about the timing of the priorities. Dexter said there is no immediate plan to deal with the second and remaining priority items. The Town intends to continue to maintain a capital improvement fund. Edith Worcester asked about plans to fix the line from Route 3 south, just past the elementary school, that water line has problems with it. They have had brown water for years. Is the brown water going to go away? Edith always asks and nothing ever gets done. They have brown water all the time.

Frank asked about the well sites, is this construction of just the building? Dexter said that we want to replace the buildings and get routine equipment inside, electrical controls. Frank said the Town upgraded the Cherry Mountain well building itself with the town carpenter this summer.

It was asked why the State wants to Town to abandon the Bray Hill well. Dexter and Jon replied that the Town does not have complete ownership control of the protection area around the well. The requirement is to have a 200 foot radius of ownership or control. It is a good producing well, and it provides water to that end of town. From the town side, it is a functional well. To give up a water source is not a good idea. There is a cost to maintain a water supply. It is probably \$1,000 to sample a well and keep it active. The state has been pushing to abandon that well. The town doesn't own that land around the well. There is no ownership or easement of that radius. There is nothing the State can do to make the town abandon that well. Horizons does not believe we should abandon that well.

Mr. Gooden asked how much water can we pump out the wells we have now? Dexter said you can pump about 500,000 gallons a day out of those systems. On an average day we use  $\frac{1}{4}$  of that and on a summer day you use about  $\frac{1}{2}$  of that. Dexter said you lose a lot of that in leakage. If we can get that leakage to 15% or less, then we could more easily abandon that well. It is important for the time being to maintain the water sources you have. Lee Hallquist asked about those shed-like buildings you can buy at Home Depot could those be used. Dexter replied we

need buildings like the pump house we built this summer up by the liquor store. Horizons is not recommending abandoning any wells. Why do we want to give up a good water source? If these wells are grandfathered in, they can't require you to get rid of them. You have access capability right now system-wide. We don't need all the sources we have. We have an additional source available so we don't necessarily need additional wells. The Bray Hill system well is not enough to handle the hotel and Bray Hill system itself. Water has to come from town to supplement that well. That was the purpose of that new water pump system. The Town can monitor what is going up to the Bray Hill system. There is a lot of leakage on the Bray Hill system. That became the highest priority with the leakage.

Dick Harris said he feels if we can cut back the leakage up at Bray Hill we would have enough water up there to serve that area. Dexter said we have a pump station to send water up there to supplement that. The discussion becomes that we keep Bray Hill if we can as long as the town can keep it maintained. We have to put money in to the pump station up there. It is not a good idea to abandon the well.

Mr. Gooden asked Iif we do this whole project, what percentage will the leakage be cut down? Is the only leakage just in the pipes or is there leakage in other areas?

We don't have a good handle on that. Dexter's gut feeling is about 25%. Frequently systems have less than 10% leakage. Jon said they did a project for another community, their leakage was 40% and doing a couple of projects, they got their leakage down under 10%. There are probably a lot of small leaks.

There is no plan to do anything with Cherry Mountain, just the Dodge well. The cherry mountain line is not that good. You can see the line going through the brook. That is somewhat of a luxury of a well. It is not an easy job to replace that main. The nice thing if that pump station is upgraded, it is a great well with good water quality and good flow. It doesn't really pass muster to replace that water main.

Edith Worcester asked Fred where her water was coming from, and Fred said from the Colby tank. The Colby tank is getting filled by Dodge wells and Cherry Mountain wells. Edith said they used to be able to run their water, but they can't do it anymore because the water is so expensive. Fred said we would like to do more flushing, but when they flush some residences run out of water when they do it. Edith was wondering if this would be fixed as part of this project. There is no work proposed out at the Colby tanks. There is little control over that. Dodge has a lot of iron in it. Cherry Mountain is the good one. You could inject some chemicals there if you have a system to do it with. Edith said her husband has a high iron count, and she is wondering about that. No one knows why he has a high iron count. Could it be something to do with the cast iron pipe? Mr. Gooden said it would probably be cheaper to put in an artesian well. Edith said people on this line has had problems for years and years. Edith said as her bills keep going up, she feels she needs to speak up. Jon said this is something we need to take a look at. It sounds like a relatively small amount of users. Jon said he will work with the town on this issue.

Dexter said another part of this proposed project is to Loop 116 – we intend to bring a water line down 116 from the Bray Hill area and tie it to the village system and it will relieve low system

issues and provide increased liability up on Bray Hill so it can be filled on both sides. There is a pressure sustaining valve to bring water back down.

We do not know the exact funding yet. We expect somewhere between 35 to 65% grant.

## Wastewater Facilities Improvements Project

This project is initiated by EPA. Wastewater ammonia, phosphorous, aluminum and copper are all things the plant is not required to treat. The town has been in violation of those parameters due to age of the plant. In May, 2016, the Town was ordered by EPA to complete certain specific actions to address and correct violations of its National Pollution Discharge elimination Survey (NPDES) permit. Within 12 months of the order (May 26, 2017) the Town needs to hire a licensed professional engineer to evaluate the current WWTF system and options to eliminate the discharge. This has been done. Within 18 months of the order (November 26, 2017) the Town needs to submit a detailed report addressing the evaluations to the NHDES and USEPA. This has also been done. Within 30 months (November 26, 2018) complete the design of WWTF improvements or design of the improvements necessary to eliminate the discharge. Within 36 months (May 26, 2019) initiate construction of the project. Within 54 months (November 26, 2020) achieve substantial completion of the project and full compliance with NPDES permit requirements. The Town has four years to get their treatment plant up to speed.

The scope of the study includes: facilities evaluation; update sewer system base mapping; limited inflow/infiltration study, we are looking at leakage into the sewage plant; evaluation of the treatment processes; development of alternatives and costs; reports, attendance at meetings; define scope of water system improvements project; bond vote assistance; environmental report, and USDA grant application submission.

The existing treatment plant was built in 1983. It is an aerated lagoon, the lowest, simplest technology for secondary level treatment. It is equipped with a headworks facility, ultra-violet disinfection and an outfall to the John's River. The lagoons are two big ponds with aeration system. Solids that float in the ponds settle in the ponds and remain. It goes through ultraviolet treatment and the water passes through that system intended to kill e-coli before it is discharged to the John's River. The inside of the headworks building has the grit channel. There is a rack that is designed to catch anything big, ideally it would be located at the other end. The walls are right adjacent to the walls of the grit channel. There is no place for the operator to work. It is manually removed by the operator. The operator has to straddle the channel to make it work. That is a difficult location to work in. Low tech, peaceful process in the lagoons. There is a floating aerator. There are soil stability issues with this site. This facility was to be maintained, there will be some extensive site work to correct that problem. There is horn pout in there. The UV tank is in a below-grade area. It is a confined space hazard. The control building is in pretty good shape. It is 30 years old, needs a paint job and new trim.

They are looking at a design flow of 115,000 gallons per day, maximum flow. The plant was not designed to treat the NH3-N; TP, Recoverable Copper and Aluminum.

With the lagoons, they just about make it for the permit requirements – it is not easy. We have been way over on phosphorous and slightly over on TP. The phosphorus is the real shortcoming of the existing plant.

We have to do something to get the phosphorus out and the ammonia. The water is too cold in the winter to treat the ammonia. We look at the same biological processes to remove the ammonia. We have to provide a separate process to take the phosphorus out. We looked at oxidation ditches, activated sludge processes. The oxidation ditch is a circular flow, like a racetrack. Sequencing Batch reactor is all the treatment is done in one tank. It fills up and gets aerated and flushes down. Rotating Biological Contractor and Trickling Filter is a process where the water is sprayed on a plastic media and it grows in the media. The bacteria do their thing. The aeration system has been taken good care of. The system is functioning well. They are doing it with the floating aerators.

They have ruled out the option for the covered aerated lagoons. The town has issues with the Hydrogeology and if the site would actually work. It would be difficult to follow that path. It would be difficult to have it happen within four years. That option has been ruled out.

The process the Town has decided to go with is the oxidation ditch process. It is a stable process. It is Simpler to operate with the exception of the lagoons. It is really expandable, and it can be upgraded to 4 to 5 times the capacity. That option exists with only that option. There is groundwater wells, no major red flags.

There has been a Release detection program that looks for leakage, suspect results, but nothing that really raises a red flag. Both lagoons have rubber liners and with the liners, they have a finite life span. The current liners are at the end of that life span. Mr. Gooden asked about clay liners, and they don't allow the clay ones any longer. If you are going to build new lagoons, you are required to line them. To stick with these existing lagoons, there is slope stability issues to deal with. You would have to take the liners out and reshape the lagoons. There are holes in the bottom of the lagoon. Josh said we don't use the tubing in the bottom of the lagoon.

Most of these treatment processes have secondary clarifiers. That comes after the oxidation ditch. The treatment processes generate sludge that need to be taken off almost daily. There would be a need to dewater with a centrifuge, belt filter press or fan press. There is a septage receiving station in the plant, which has not been used for a number of years. We are looking to open that up again and receive sludge from the area. If we can operate it a couple days a week, it would give the plant the opportunity to bring in sludge from other areas. Mr. Gooden said the Town of Whitefield could collect the fees instead of the Town of Littleton.

The improvements project would include: new mechanically cleaned screen, new headworks building, oxidation ditches, secondary clarifiers, sludge return and waste pumping facility, 30,000 sludge storage tank, sludge dewatering facility, new ultraviolet disinfection facility, Brown Street pumping station building repairs, rehab the control building at the treatment plant, Brown Street pumping station mechanical upgrade. The construction cost are \$5.1 million along with engineering, contingencies, etc. for a total of \$6.5 million project.

It is a 20-30 year life span. We have gotten a lot of life out of those existing lagoons, since 1983 to now.

There was a lot of questions and discussion regarding taking the sludge from other areas.

Where does the sludge go? It goes off site. The most popular site is the Bethlehem landfill and the cost is about \$60 a ton for disposal. That is built in to the project operating costs. If we get in to being a septage receiver and there could be more use in town. The highest level is a class A sludge. Dexter said he is not sure we would meet Class B with what we have. It would be not suitable for use without sludge.

Edith said we have had the sludge fight in this town, and people did not want that. Hauling it to Bethlehem is the current plan.

Mr. Gooden said that the Mountain View does not send their solids to the treatment plant, and Josh Welch said that is not correct. The Mountain View pumps everything to the treatment plant now. The design flow for the plant has additional capacity included to take what we currently have and any projects that are in the discussion process. There is plenty of excess capacity. If for some reason the town experiences a high level of growth, this plant technology is capable of being expanded. It will have the hardware capability. Dexter is not sure the town has made the decision on taking in the sludge. They are looking for additional grant money from the state. They want to achieve some level of assurances. If you plan on building excess sludge availability, are people going to come with it? Is there enough demand out there? The state has suggested they believe there is enough demand in this area. DES asked if they would consider being a sludge receiving facility. We need to get to that level before the town invests in to this.

The difference is not the process, but it is what you do with it. The plant will generate sludge. You either get rid of it in a liquid from in Littleton or Franklin to be dewater or spend some money on your own equipment to dewater it ourselves. It is far cheaper to get rid of it in solid form. It doesn't quite pay for itself if it is just the town's sludge. It becomes a revenue stream to offset the costs if we take in other town's sludge.

Where is that break point, how much sludge is out there to be hauled in to Whitefield? Dick Harris said he understands Lisbon and Littleton are not accepting anymore, and Jon said that is why DES is asking if we would contemplate doing this. We have been trying to pursue grant funds for the sludge receiving. We are in active discussions with the State. We have a meeting coming up to meet with some grant folks

Edith asked if this is a sludge plant. This facility has the capacity to handle sludge. The Town is pursuing the possibility to accept grant funds to receive sludge, but a decision has not been made. This project builds in capacity to accept this sludge, but the decision needs to be made at the town level.

This would be within the limit of the existing wastewater plant. You probably wouldn't know much different was going on. It would be a small building handling dewatering of this sludge. It doesn't really change the impact of the plant on the community. It would generate hauling traffic.

Littleton just expanded their system. A lot of plants are limiting the sludge coming in because their treatment plants can't handle the volume. All the communities are in the same boat they just don't have the capacity. The state is putting the clamp on a lot of these plants. The state is out trying to encourage plants to take this sludge.

The issue is the cost of the process. The cheapest thing to do is take it to Littleton to be dewatered. All those options cost more. We are building a plant that will dewater its own sludge one day a week, and you could run it 1 extra day a week to take in septic from other areas.

There is more labor involved in this plant than the existing plant. If we brought in more sludge, it would be more work. If we took in septage from other areas, it would lower user costs.

The Capital costs would be more, but it would cost you more to process it in Littleton.

Mark said we have to have a place to dispose of our own resident's septic systems. You take the water out of it and once it is dewatered the dry product goes to the landfill in Bethlehem.

If we do this, Joel White pumps a resident's septic system right now he can't take it to the Whitefield plant. Will it be cheaper to have my septic tank pumped and delivered here? It would be cheaper for him to drive 3 miles than 60 miles to Franklin.

The dewatered sludge receiving from other towns that Whitefield would have to get rid of in Bethlehem would be \$65 per wet ton to dispose of it. We would charge more to take it in—it would cover that cost plus your labor, etc.

Sondra Brekke asked on the warrant article being put out, who is paying for this project? Wendy said that has not been completely decided. We have been saying our rates are too low. As long as our rates stay too low we get less grant. It looks like the water/sewer bills has to be \$500— that gets it the most grant revenue. If we put it back on the taxpayers, our grant funding goes down. Although it gets spread over a wider base, the grant funds would be less. We don't have exact numbers. The women from Rural Development sent us some numbers that are not accurate. We are not sure is the short answer. We are leaning towards doing it on the users because that gets us more grant funds.

Wendy said we have to weigh some different factors. If we get 65% grant funds and the town pays 35% there will be enough money to pay for the projects out of the user rates—can we still get the grant money by supplementing it? Can we put aside some of that money so we are not in this boat 20 to 30 years from now. We want to avoid that. Do we do it on the users and start an infrastructure capital improvement fund?

Sondra said that is important to know before we vote on it. Wendy said we will know at town meeting, which route we are going.

If there is a 65% grant, the Bond payment will be about \$200,000 per year if we get 65% grant on both projects. If that number goes down 50% puts it up to \$300,000 per year. Rural Development gave us numbers 4.225 is a 208,000 per year repayment per year for 30 years. We may qualify for a poverty rate, which could come in at around 2.00%. Frank Lombardi said looking at the future, if EPA rules change, with what is happening with Trump and his focus on infrastructure is there a chance we could get a higher grant or some of these regulations lower. We are under an administrative order with EPA.

Jon said we have had this discussion. We don't know if our world with design and permitting is going to be turned upside town. The law that backs up the standards we have been issued with has been in existence since 1969. The requirements change as time goes on. Something like this, Jon doesn't foresee any relief for this specific order. There is absolutely a chance. On the grant side, we have heard rumblings there is supposed to be infrastructure money thrown around. Nothing tangible. We are talking about 65% grant at a 2% interest rate. On water and wastewater, the highest project he has worked on has been 75%. It is out there, but it is possible. If something is going to happen, it is going to happen relatively quickly. USDA said we have to rely on them to get us the best deal. There are not any other sources of significant funding to come close to this USDA deal. As of today, this is the best deal.

Sondra Brekke asked when do we have to start paying this back? Wendy said at the project completion, which is anticipated to be three years. Jon Warzocha said there is usually a ramp-up period. If you are on the user rates, it ramps up over time. Wendy said in order to qualify for the grant, there has to be a plan to get there. The rate has to be at the \$500 before the project is done. We have to get that up there because the tax rate is going to be up there so much more. If we don't have that 65% grant, then the tax rate will go up even more. It is going to be kind of a balance where we get the most benefit from. If the users absorb this project, at least for the future there will be a plan in place so this doesn't happen again. If we put it on the tax base, the price the town pays for the project, we lose a lot of the grant money. \$10 million project, and we get 65%, we are paying \$3.5 million. If we have to say we don't get the 65% that changes the amount of your tax rate. Whether you put it on the users or the taxes. The people who are using the system are not really saving by putting it on the tax base.

They are separate projects. We may not get the same deal for each project. They may say we only have enough money to do one of the projects. Wendy said there will be two separate warrant articles, and if we only get 10% grant, we may not even do the project. We do have a number of years with the EPA order, which we were able to negotiate. Originally when they came in they wanted everything done by the end of 2018.

The public hearing adjourned at 8:35 p.m.