

Town of Lake Lure – Utilities Board

- Minutes of Special Meeting – January 15, 2020

The Utility Advisory Board held a special meeting at the Town of Lake Lure Municipal Center on Wednesday, January 15th, 2020.

Members Present:

Wayne Hyatt, Chairman
John Chapman
Richard Glassen
Don Cason

David Diorio – Liaison

Others Present:

Shannon Baldwin – Town Manager
Linda Ward – Board Clerk
Kurt Wright – In House Engineer
Carol Pritchett - Mayor
David Arrowood – Public Works Director
Don Byers – Byers Environmental

Members Absent: Clement Riddle

Also Present from LaBella:

Keith Garbrick, P.E., Vice President
Maurice (Reese) Walsh, P.E., Program Manager
Brian Houston, P.E., Senior Design Engineer for
Wastewater collection system

General Meeting Actions

Call to Order – Chairman Wayne Hyatt called the meeting to order at 10:00 am.

Consider Approval of the Special Meeting Agenda– Richard Glassen made a motion to approve the Special Meeting Agenda, John Chapman seconded and the motion carried 4- 0.

New Business

a. *Workshop with LaBella to discuss possible solution to sewer system -*

Chairman Wayne Hyatt and Town Manager Shannon Baldwin welcomed La Bella and told the board that Town Council had approved their contract.

Shannon talked a little about the financial box and the goals for the sewer project. He discussed through a visual aid the 20 and 30 year loan as follows:

30 year loan -

2% interest

12.5 million Borrowed

1.5 million Fund balance (already spent – Greenline, low pressure sewer system)

11 million Budget

*ER

*Design

*Construction – collection system and wastewater treatment plant

\$550,000 payment (per Finance Director Sam Karr)

20 year loan \$760,000

2% interest

5.3 Borrowed

1.5 Fund Balance

3.8 m. budget

*ER

*Design

*Construction (collection and WW)

\$760,000 payment (per Finance Director Sam Karr)

He mentioned that normally the State will give a 30 year loan for collection but only a 20 year loan for treatment plant. He said that the term will be very important to keep loan payment down, and that we will need to try to get as much as we can into the 30 year loan.

He determined that the goals for the 3.8 million to 11 million are to:

Stop I/I

Stop the NOV (Violations)

Once the I/I is reduced, modify the WWTP from Physical/Chemical to Biological (for environmental and economic reasons)

Kurt Wright told the board that he had a lengthy discussion concerning the 20 year vs. 30 year loan with Kim Colson. He was told the Town of Lake Lure was the only municipality in the State that was getting a 30 year loan. He said that 30 year loans are usually only for pipe because pipe will last that long. He said that was why they originally approved the 30 year loan for the Greenline project, which they then agreed to extend over to the low pressure system. Kurt mentioned that manholes around Lake Lure are one of the problems that will be fixed, and that they are like pipe and can last 40 to 50 years if put in properly so he feels good about that.

Kurt also told the board that Lake Lure's sewer system is like no other in the State of North Carolina so the state doesn't really have anything to go by, and he thinks that the Town is in good shape to get the 30 year loan. He thinks that Council/Engineers need to lay everything out to DEQ and let them make the decision, that we have good facts.

Shannon Baldwin said that we have to have standards, and that policy and placement of manholes will have to be strategically placed to help some of the connections that have spaghetti lines, ones hanging in trees, up in the air, etc. Some are like this because manholes are sparsely located around the lake right now.

Shannon talked a little bit about lake levels and the fact that it can only go down to 978.5 MSL, lowered 12 feet, as this is the bottom of the spillway which is concrete. He said that while Schnabel is looking at re-design of the spillway, it would be a good time to consider lowering the top of the

spillway to give the Town the ability to go lower than 978.5 MSL. This would give the Town more shoreline to work with. He mentioned that LaBella and Schnabel need to get together concerning this matter to come up with solutions for this. The Town normally hold the lake at 990.5 MSL.

Shannon said that the other thing we know while in talks with Schnabel, is that if we are going to pass through the dam with some sort of sewer line, now is the time to put in casing or conduit while they are working on the Dam. He said that now would be the time to do it cheapest. He mentioned that it is very important to our solution and that Labella needs to get up with Schnabel this week, quickly, as soon as possible.

David Diorio said that he isn't sure that we will need a lot of extra manholes because everyone should not have to go all the way to manhole, but to lines that drain into manholes. He said this is a different way of thinking and will be much cheaper than lift stations.

Kurt Wright asked David Arrowood to share the flow concerns from Chimney Rock. David said that it is very evident that when we get heavy rains the flows are increasing from Chimney Rock. He said that Don Byers has flow records to show this. He said that it shows up within 30 minutes at the plant, and has happened since the lake is down. David mentioned that they may not be the only one contributing to this, could also be some from Rumbling Bald Resort (RBR), but that we have flow numbers from RBR.

Shannon said that Chimney Rock lines are an ownership issue. He said that the Village did not replace collections system but that Rutherford County did. He said that Tim Heim, from the DEQ Regional Office, recognizes that it is not part of the Lake Lure Collection System. Shannon said that we cannot make Chimney Rock do anything but we could meter what is coming in and bill out according to how many gallons are coming into our lines. He said that this might help facilitate some energy which would help get this issue solved. Shannon said that it is his understanding that McGill is working with Chimney Rock on that system.

John Kilby asked if they were to change the treatment plant to biological would the I/I still matter. Per Wayne Hyatt, yes I/I still matters. Per Keith Garbrick with LaBella, right now with the current physical/chemical treatment it is always extremely diluted. But that it is not unusual for biological process to see intermittent spikes which would just be handled differently.

Shannon introduced the folks in the room to Don Byers. Don said that the plant is physical /chemical because it has so many gallons of lake water per day diluting the wastewater. He said that the BOD's are very weak, making him think that they are getting some kind of treatment coming down the pipes. But that it meets the BOD's, TSS's, Fecal's, but cannot meet the ammonium nitrogen as there is no biological activity or air stripping. He said that the plant does not have a good sludge management program, that we are full of sludge. He mentioned that we have approximately 250,000 gallons of 2 –5% solids, and that we are barely able to keep up with pumping off to keep the clarifier clear enough to make the TSS and the affluent. He said that the chemicals are the only thing keeping it going.

Don Byers said that he would go out after the meeting and test Chimney Rock, RBR, and real residential areas to check the BOD's and TSS's.

Kurt Wright mentioned that it is inevitable that we would have an SOC with all of the NOV's. Shannon said that at one point he and Mayor Cooley, and David Arrowood went to the Regional

Office and met with DEQ, and that they were fed up with the Town not taking care of the issue and letting the N.O.V. fines pile up. They were frustrated with the town going from Greenline and then low pressure system and not fixing the problem.

Shannon verified with the board that the goals are Financing, implementing policy on laterals from users, negotiating SOC's, develop and execute a communication plan, coordinate with Schnabel, size it for growth, develop a surcharge program, fix and test collection system, and to develop standards for bulk customers. He also said that Labella needs to read the agreement between Chimney Rock and Lake Lure to understand how we charge them. As of right now the agreement between the two has Chimney Rock sewer rates being charged as inside users.

It was mentioned that Landon Davidson, DEQ, and WithersRavenel should be at the meeting on the 29th. Shannon said that he would get up with them on that.

Kurt said that he doesn't know any key leaders at NCDEQ (Regional or Raleigh) that have gone from private engineering to the State except for Tim Heim who understands our needs, and that is why he is so supportive, as he has been there. Most of them have only reviewed other people's work, have never gone through a project including design/bid/build/start-up on their own personally.

Don Cason said to remember that the state has to have our system to protect their asset, Chimney Rock Park. He said that the Park just had their best year ever. Shannon said that we need to let folks know that when we get this issue taken care of, it will be helping the State also.

There was a short discussion on Industrial users and the pretreatment regulation we have in place to handle industries like breweries, saying that we still have more to do with that.

David Diorio said that we need to fix and test our collection system in order to find out how to design the treatment plant. This will help LaBella develop the design.

Keith Garbrick said that the State is taking the stance that they are no longer in the business of bailing out municipalities in trouble. They are changing their dynamics and we will need to start banking up money to work on improvements and maintenance. This will need to be clear when WithersRavenel works on the rates.

Shannon said that a study showed that our economy is based on tourism like no other in the nation that they have studied. He said the Park, who has over 260,000 visitors a year and who is a huge part of this, is thinking of dropping its entrance inside Lake Lure town limits which is in the RFQ sent to LaBella. He said that our tax base is heavily skewed residential which does not pay like

commercial. He said this Park entrance may give us an opportunity for commercial growth, as could the Hwy 9 corridor. He also mentioned that every time the State buys property we are losing tax base growth potential.

David Arrowood said that we need to talk with DEQ about the bulk customers outside of our jurisdiction dumping into our system. To let them know that we have no control over what they are doing. That there is nothing being done by the State to regulate that as it is not maintained by anyone. So, every time we get rain, we get the NOV's because of what they are contributing to our system and they are not helping to pay for that. The board discussed having meters set for Chimney Rock and how there are two meters from the flow coming in from Rumbling Bald Resort. Don Byers reiterated that he will be going out to monitor different places to see what is coming in from both places.

Keith Garbrick said that even with lake level down BOD still under 60. If we go around perimeter of lake and can't get it down to biological it will not satisfy the state. Kurt said some treatment may be going on in the pipes, as Don Byers suggested. If so, then that is a fact that we and DEQ need to recognize. If it is necessary to bring in a specialist to prove that, we should consider it. We could, for example, partner with Dr. Bill Saunders, P.E., Professor of Civil Engineering at UNCC to work with the town to run an analysis to determine if this can be proven. If proven, we should submit the findings to the State as it will change the dynamic of how the plant is designed.

Richard explained that what we need to go in and let the state know is that Labella needs more time to find out what they are dealing with to be able to come up with a solution. Let them know that we do not want to spend more money on things that are not going to work. That we need more facts to define the problem. Shannon mentioned at this time that we need to allow Labella to ask the questions at the meeting on the 29th. He asked LaBella to tell the board what types of information they need to fill the holes before the 29th meeting.

Keith Garbrick said that one thing he wanted to be clear on is the initial trigger of the NOV's at plant. He asked if we hadn't received those we would be looking for solutions. David Arrowood said that catastrophic failure and flow was what the State was most concerned about. He said that a \$75,000 automatic valve was installed in our trunk line below the dam which made the State very happy. He said that we can now contain issues in the lake until divers could come in and fix it. David said that it is now the flow and strength that is most worrisome with the State.

Keith said that he also understands that the pipe has been in for 100 years and that will be something that needs to be looked at also, but that we need to eliminate the I/I. He understands that in or out of lake, if we solve the problem it shouldn't matter to state. He said that we need to meet the criteria of the Town's permit. To simplify – we need to correct the flow to a reasonable level.

Shannon confirmed that laterals at the 12 foot level being fixed helps identify the I/I. That we are showing that the I/I is coming from outside the lake.

Keith said that he understands that LaBella's focus needs to be getting the flow down and manageable at the plant and is what they need to discuss with DEQ. He said the wastewater characteristics and how we treat the wastewater plant will be second.

LaBella said that the main goal is to get the town of Lake Lure out from under the radar of the state, and that we will need to stop the NOV's to do that. That their message to DEQ on 29th, will be to focus on facts:

- *Down 12ft can reduce flow to X

- *Lake water coming into manhole is considered inflow, but rain event water coming in through leaking pipes is considered I/I, which they will be looking for as they go around to manholes.

- *Plan strategies to reduce I/I with this information, including smoke testing.

- *Lower Ammonia

Per Don Byers, NOV's in the summer time are all ammonia related. Brian Houston, LaBella, asked if they were able to come up with something that would fix this short term, so that the we can then focus on the problems, would that be what we want? Yes, per Don Byers and David Arrowood.

Keith said that they know we have to address the inflow, that it is not sustainable to treat lake water. Brian asked if getting NOV's off our back the number 1 priority or can we tolerate that so that we can get relief while trying to figure out the I/I. Richard said that he thinks that is our question, that they are both a problem.

Keith said the State's role is to protect the waterway, to be sure that we aren't putting anything in that would be a problem downstream. He said that if we fix that problem for them, insure that we are on track, taking measures long term, they would consider that a win.

At this point Don Byers had to excuse himself from the meeting. But before he left, David Diorio asked if there were other things we could do to stop the ammonia nitrogen. Don said that there are other ways to stop the ammonia levels but they are not cheap. There was a short discussion about the plant beginning as a biological plant but now being run as a physical /chemical plant.

Reese Walsh, with LaBella, mentioned that the economic and social /environmental effects need to be made known to the State. He said that this is something that will be mentioned to them. He said that they will have to let them know that the unknowns will be taken care of. He said that they will need to let them know the effects that a lake drawdown will have on the economics of the Town. They will need to establish a timeframe to get this done. Let the State know that this will effect Lake Lure, Chimney Rock Village, Rumbling Bald and the State Park.

Richard Glassen said that we want DEQ to leave here with the notion that we are really looking at fixing the solution. There was a short discussion and it was said that we need to be sure that the

State knows that we want them on our side and that we want to work with them on what is everyone's highest priorities.

12:00 – 12:35 broke for lunch

After Wayne brought the meeting back to order, the lake level needs with correcting these problems was discussed as was the need to have some type of proactive communication. Keith said they will work on what is a realistic design time for the perimeter of the lake drawdowns and how to get that back in draft form for the board to look at. He said that this is something that he thinks the State will want to look at for the SOC. He also said that we will need to have contractors set up, ready to be to come at the down times to minimize that down time. It was mentioned that Schnabel may need to have it down at a certain time also. John Kilby mentioned that at some point, it may have to go down at a 'bad' time for someone. That it will not always be good for everyone and hopefully everyone will see the value of putting it down as needed. Good communication will be key.

Keith said that the Technical Memorandum will be in draft form when given to DEQ and will give the current situation and solutions to solve. It will also have a high level construction cost to complete each solution because they will not have time to get actual costs from Contractors. The final solution will have detailed costs and be formally submitted to Town and DEQ. The technical memorandum will be the prelude to the engineering report, which is what the State really wants.

Keith said that we need to get to a point where it is all agreeable. His thought is that we need to have specs in by July which should give enough time to be able to work winter of next year. David Arrowood mentioned that we will have to drawdown this next winter for the one year inspection of the recent work completed at the dam.

John Kilby asked if it was possible to use sonar to show lines under the lake. Per Reese Walsh, yes it is possible. He knows of one company that uses certain equipment to do this type of work, but he would need to talk with them about this. He said that this would give accurate coordinates which would also help with dredging to keep from hitting sewer lines when dredging. Said he will be looking at the limitations and costs of doing this. He said that want they want the best approach which would be best for economic, social, and environmental status of Lake Lure.

Shannon said that we need to keep the rates as close to the same as possible as our rates are near the highest in the state now. He said that we could service the \$12.5 million loan with the rates set at 2% with where the rates are right now. LaBella said that they understand the interest rate is very important to our loan payments. He said that they would like to bring up the possibility of still getting the 0% with the State.

Shannon said that there are three different divisions of DEQ that the Town is working with. One with the Dam Bridge which we are working with DOT with.. Keith said that he thought they could have a project list so that all of them would know what was going on with each other project.

Don Cason asked if the UAB needs to be at the meeting on the 29th. Shannon said that LaBella would be meeting with DEQ. Board members could come if they would like to, but that we need to keep the conversation between LaBella and DEQ, no side comments. That meeting will be held at 10:00 am after a quick trip on the lake.

Open Comments – none

Public Comments – none

Adjournment - There being no further business, Richard Glassen made a motion to adjourn, Don Cason seconded and the meeting adjourned at 1:15 p.m.

ATTEST

Linda Ward, Clerk

Wayne Hyatt, Chairman