

**Town of Richmond  
Water and Sewer Commission Meeting  
Minutes of March 20, 2023**

**Members Present:** Bard Hill, David Sander, Erin Farr, Jay Furr, Morgan Wolaver

**Members Absent:** None

**Staff Present:** Josh Arneson, Town Manager; Duncan Wardwell, Assistant to the Town Manager; Linda Parent, Town Clerk; Connie Bona, Finance Director; Allen Carpenter, Interim Water Resources Superintendent; Brad Miller, Water Resources; Steve Cote, Water Resources

**Others Present:** The meeting was recorded for MMCTV, Angela Cote, Cara LaBounty, Heidi Bormann, Jeff Forward, Jennie Auster, Lisa Miller, Mary Houle, Nick Ponzio, Phil Laramie

**Call to Order:** 5:00 pm

**Welcome by:** Sander

**Public Comment:** None

**Additions or Deletions to the Agenda:** None

**Items for Presentation or Discussion with those present**

**Consideration of approval of agreement with Hoyle Tanner & Associates, Inc. for the 20 Year Wastewater Treatment Facility Evaluation**

Arneson: Jennie Auster from Hoyle Tanner will be the engineer conducting the study and could give us a more concise overview of the process.

Auster: I'm the wastewater treatment technical lead for Hoyle Tanner. I worked in Vermont for the last 12 years and have over 20 years of experience. The 20-year evaluation required for your permit is to be submitted by December 31 of this year. It is an assessment of the existing condition of the facility. Once the needs have been assessed, it will put together an array of solutions to address each of those needs and identify a recommended plan. Those reports follow the outline that's required for preliminary engineering report by the state of Vermont and USDA Rural Development. The 20-year evaluation covers not just the treatment facility but also your collection system, you're required to have each of the manholes and your pump station inspected as well. The total fee for this work is \$154,000.

Hill: How soon can you start and finish?

Auster: It will take close to the full remaining calendar year to put that together.

Miller: Is the plant allowed to embark or continue replacement maintenance or anything else?

Auster: Absolutely. This is a regulatory and a planning document. As needs arise, the Town should address those as they see fit. As we're looking at putting together recommendations, we're going to be reaching out to equipment manufacturers. That information can help drive moving that portion of some sort of replacement. Your wastewater blowers are your largest consumer. The innovation in blowers is constantly changing and becoming more energy efficient. Similarly, for pumps. There are opportunities to look at those to be more efficient.

Furr: How chaotic will it be if we're yanking things out as fast as you're recommending, we put them in and so forth?

Auster: That becomes your prerogative, and we can help guide that. You're going to have a sense of is this bigger than your capital budget. Or do you figure it out over the next five years.

*Furr moved to approve entering into an agreement with Hoyle Tanner & Associates, Inc. to perform the 20 Year Wastewater Treatment Facility Evaluation at a price not to exceed \$154,000 and to name Town Manager Josh Arneson as the duly authorized representative. Wolaver seconded.*

*Roll Call Vote: Farr, Furr, Hill, Sander, Wolaver in favor. Motion approved.*

### **Consideration of approval of purchase of influent pump**

Sander: There are two pumps at the entrance to the plant, not the physical entrance but where the stuff that gets treated comes in. One of those two pumps is not working.

Arneson: When the pump initially failed, we did get some quotes from the pump provider on three different options. I actually reached out to Jennie Auster to see what's the right pump to buy and how can we write an RFP. Simultaneously, we were working with Phil Laramie to see if he can help us figure out if he can repair the pump. Jennie needed some more information about why the plant isn't currently operating at peak flow capacity. That was going to take more time to dissect. The request is to move forward with one of the quotes in consultation with Phil. Once we had 20-year study in place, it might become something that we don't use, but it could at least become a backup. Phil said he has a pump that might work but would only last about a year. We need something to help us get through this situation. I know Phil was on site today.

Wolaver: We need something that will be peak and 800 gallons is peak.

Arneson: What we have right now might only be 400. We never really run it at peak. We might be able to get away with something lower.

Auster: From what I understood, your facility is designed for two pumps, each can move the peak flow. You're not able to run them at peak because of other issues downstream. We're going to end up with some sort of triplex pump recommendation. If they're

running at too low flows, you're going to have cavitation issues because the velocity isn't high enough through those pumps.

Furr: Given the amount of ragging issues we've had, we don't currently have a filter in front of the pump. Is that something that we can be getting more or less at the same time or as soon as possible?

Arneson: Alan, do you know more about when Phil could install that filter? Or the screen?

Carpenter: I haven't heard back, he was ordering the parts.

Farr: Does anyone have a proposal of what a screen would cost so we can add that to these quotes we have.

Arneson: I don't know what the screen would cost. The screen is most likely not going to be \$10,000 and can be within my purchasing powers.

Wolaver: These are variable frequency drive motors. But even with that capability, you still have cavitation at lower volume.

Auster: The reports on taking a look at the pumps is that the impellers look like there was evidence of it. It appears that it has happened from what I understood from when they've taken apart the pumps.

Wolaver: The variable frequency drives are there to save energy, but normally, they would also reduce cavitation.

Auster: They should allow a greater range of operation without hitting those lower flows without creating cavitation issues within the pump.

Sander: Welcome to Phil and Steve, we were talking about influent pumps.

Laramie: You need a couple badly now. You are down to one, it was repaired by me a couple of years ago as a band aid fix to last six months. That is the only functional pump you have right now so there's zero redundancy. One that's not working is past its useful life in about 100 pieces in my shop right now. It is beyond repair.

Farr: We have a couple of different quotes. Do you have any idea what ones we could get here the fastest so that we would be in redundancy again?

Laramie: I haven't spent much time looking at them to pick them apart. I have a pump in my shop that is too big for your application that could be slowed down with your existing equipment that could get you by until you can get a pump in. Springtime at a wastewater plant is high stress for these guys. It could get you through a hard spot and emergency. I pulled it out of a different community who has a very aggressive replacement plan.

Sander: This pump is bigger than what we need, but it would certainly handle what we need it for, until we have a plan for replacement of the two pumps, one of which already died. You're proposing using this pump as a temporary pump.

Furr: We understood this pump would be good for most a year and that we should not plan on using it longer.

Laramie: The pump is scrapped so I would say here, take it, but it's going to cost to be installed and you're going to need to have piping modifications. The pump almost went to the scrap yard a month ago.

Cote, S: We are not trying to Band Aid stuff. We are trying to make things right here in Richmond.

Sander: This will get us back to where we were a couple of months ago.

Farr: We're doing this 20-year study. Could we study the influent pumps sooner so that we could get one ordered in June and have it here? Not a year from now?

Auster: Because those pumps hydraulically impact the whole facility. We need to understand the whole facility, in order to get the pumps that are the right size for going in there. I very much appreciate the urgency on this. As soon as we get reasonable design criteria identified for those pumps, we'll put that together and make that a priority for the recommended alternative. It's probably a couple of months to get all of the information together. I don't want to rush a decision versus go through and feel like we are making an informed decision.

Hill: As a member of both the Water Sewer Commission and Selectboard, we've been heavily reliant on Department Heads. I'm reluctant to have a personal opinion about what pumps should be in here. We need to figure out what makes sense and how to pay for it.

Farr: When you put in this pump, can we put in the filter screen?

Cote, S: That is really more of a 20-year upgrade.

Laramie: That should be looked at by somebody way smarter than me.

Miller: If there's any piping modifications that need to be done on the suction side of this pump or any of the pumps, it seems like a really opportune time to put a strainer in there too.

Auster: If it's true influent screening versus something that's on an intake pipe, that's likely to get clogged up anyway. I think the piping fix will create a maintenance issue. It would be my hunch. You have a very deep input sewer that complicates putting in screening. There are some hydraulic considerations that make it a bit more challenging for influent screening as well as the depth.

*Hill moved to approve the use of up to \$33,780.88 in the Wastewater Capital Reserves to replace the influent pump. Furr seconded.*

*Roll Call Vote: Farr, Furr, Hill, Sander, Wolaver in favor. Motion approved.*

Arneson: We're going to try to use Phil's pump, we're not going to buy a pump from Champlin. We're going to do the 20-year study and hopefully in a couple of months we will have a recommendation and go back to bid to get the proper pump.

Sander: But if that pump doesn't work, you have the authorization to spend up to that amount.

### **Review of list of water and wastewater items to be repaired or replaced**

Sander: Included in the packet is a list of items that are known to need replacement or repair as of now. Phil Laramie will conduct a walkthrough of the facility on Monday, March 20 and will provide an updated list.

Cote, S: Number one on his list was the influent box that has to be addressed. If for any reason a State official ended up coming into our plant right now, we're in violation as we've lost the redundancy. One of the other things that Phil thought needed to be addressed is our wet well is filling up with solids. That's where all of the Town's solids come in. It was cleaned in October, and he was mortified at the number of solids deposited in there. I had cleaned it in April when I started. He feels that the influent pumps are not properly working. It should pump out all the solids. That's not happening because our pump is weak and it's not keeping up. He feels that that we really need to start by cleaning that out. Don't do it all in one day, you're going to kill the plant. Don't do it until you have another backup pump. On June 6 of 2022, Phil gave an estimate to fix that head works building screen that's in there. He gave Kendall an estimate of \$126,000 for parts and labor alone to fix that one unit. His suggestion is get your 20-year study done as soon as you can. There are enough problems with it, that it needs to be upgraded. We had the discussion with him over cleaning all the solids out of the tanks. Every tank is supposed to be cleaned once a year and inspected for cracks and leaks. All of those are supposed to be cleaned once a year. That's something that we desperately need to do. He feels that the operation of the plant is vintage operation. They were technology that stopped being used before he became a water operator in 2000. The backwash pump that he's rebuilding, and we have one ordered. He was on board for building the other one when we get done. That way, we have two operational pumps, and another one that's been rebuilt and ready to go into place at any breakdown. There was also the discussion about our UV lights. The intensity thing on the UV lights has not worked for since I've been there. Brad takes an E.coli sample of our effluent twice a month. He's being instructed to state that there is a UV intensity. Phil has told us that that jeopardizes our licenses, and that we should no longer do that. The proper thing to do is to put UV intensity meters broke and leave it at that.

Hill: It seems to me we have to prioritize those things that could become fatal errors in the processing. I would say also there are things that may be life safety for staff that we have to prioritize those. We talked about septic receipts an impact intermittently through my entire time on this Commission. I think we may come to a point where you have to try a slowing down or stopping. Septage is nice to have not a got to have. The customers who are hooked up to the plant need it to work. Septic haulers represent a source of revenue. There have been on-going questions on cost of septage and associated rocks

and grit. Since we now are reliant on the truck operators to tell us how many gallons they dropped off, it is very clear to me that that is not an acceptable business practice.

Furr: The other thing is we've got a lot of alarms to share with the panel. Half the lights are red because they're turned off. I feel like the air quality in that one building is beyond a safe level.

Cote, S: I called around to a couple of their treatment plants and found out who they use for air handlers and Avonda air came up. I had them come out to fix the dewatering plant the way it should be. He would not even enter the plant because of the ammonia. It will be \$250,000 for the air handling system. A lot of the other facilities that he's handling. they are making their own methane for heat.

Wolaver: We want to get the solids at a great level in that one thing.

Cote, S: We need to take some septage to make the process of the plant work. When Kendall resigned, he told us to take no more than 20,000 gallons a day of septic. We were routinely taking 17,000 a day. Towards the beginning of December, we immediately started taking as much as we could take again.

Furr: Josh has already started to schedule, what dates we won't take septage in order to fix the auger.

Cote, S: We can take two days of 20,000.

Furr: Josh sent out notes to Brad and Steve and Alan to work out a schedule for that maintenance.

Hill: Absent a meter we're not entirely sure the exact gallons we're getting.

Cote, S: We know when we get 20,000 because a tank is full. We know there's a certain amount of solids underneath it. Other plants who have put in meters have increased their revenue without increasing their prices.

Hill: It seems clear to me that there could be two reasons why haulers would choose to come to Richmond. It is a combination of a low rate and an honesty system for an estimated number of gallons. I think this is not the highest priority item. One of my suspicions is that our rates are not covering all these associated costs of running the septage.

Cote, S: Phil at the Newport treatment plant says they just went from 15 to 18 cents.

Furr: I agree with Bard, I think we should raise the rates.

Cote, S: I know that Middlebury is in the 18 to 19 cent range. Everybody I talked to tells us that Richmond cannot be making any money at the price we're charging for septage.

LaBounty: It almost sounds like putting a moratorium on accepting septage, is there a minimum around needing to have a certain quantity of septage to allow the plant to

process how it needs to process. What is the minimum gallons of septage per day that you need?

Cote, S: I think it's in the 15 to 20,000 gallons a day to make the processes work right. It's a benefit to processing our sludge that we produce with the septage. 100,000 gallons a day is not needed.

LaBounty: When you evaluated the rates the last time the question was posed, what does it cost you to process septage. I did believe back then that you were too low a rate. I believed back then that your current users on the system were subsidizing the people bringing in septage. I do encourage you to increase your rates and to drop down to a very minimum of processing while you get your plant up and running. Also have an understanding of what your septage costs you.

Hill: We can return to the septic rate issue at our next meeting because it's not on the agenda.

Sander: We will have more estimates on what it is costing us to process, minimum/maximum flows, capacities, and other information that we don't have in front of us tonight.

Farr: We have some numbers from December.

Hill: I list those things which present a risk of life safety or health to staff, getting those things that if they fail, without redundancy represent a fatal error for the system, and if the license were operational violation. There might be more.

Wolaver: I add to the third one that we are transparent even if you get in trouble with the State.

Cote, S: We want to do our best for the Town, no matter what. We're just in the position of not being able to even function because we're in crisis mode every minute of every day. Not knowing how. We have two pumps that are now operational and have been fixed. Phil has the estimate to repair the rest of the pump station, the re-plumbing and the new foot valves. He did a quick hour, he didn't get through the whole thing, because we wanted to come over here. We now have 50% of a staircase.

Furr: The tours we got in the past, we were basically told this thing runs on hamsters, cool.

Cote, S: I got an estimate for remote door openers on the dewatering plants, so you don't have to enter it. He'll have an exact estimate, but it's less than \$500. The pump station is fixed now and operational, both pumps. There's still more that needs to be done in there. Phil thinks once we get the check valves installed and the replumbing done, that the pump station is functional. On Phil's cell phone, he could access and show us everything taking place in the Newport plant in real time. You can't leave a plant unattended.

Wolaver: Maybe that's something that Jennie would include in the report.

Cote, S: He has more information on his cell phone than we have looking at our computer in the plan.

Farr: Do we need to make any more motions to let you spend money? Or authorized sorry, you have to spend money between now and our next meeting, if they come back with like, we need this for the UV lights or,

Sander: Anything less than \$10,000 Josh would be able to authorize. Are there any big-ticket items that you foresee needing money for in the next few weeks?

Cote, S: The backwash pump has ordered, and Phil is getting one repaired for us. That would bring our filter system back on to redundancy. Phil's going give you an influent pump and just get it in play.

Hill: If something came up that we needed to respond to we could do it in a brief focused meeting with a couple of days' notice.

Arneson: 24 hours for a Special Meeting.

Cote, S: The biggest thing is the influent pumps. Phil said drain the fish tank because you're not using it now. Clean it, fix the valve, and switch over so you can drain the other one as you need to clean it and have it inspected.

LaBounty: He has the go ahead with repairing as much as he can on this list. Is that what I'm hearing? I just wanted to make sure that there's no other motions that need to be made.

Sander: Thank you for coming in. Please help yourself to some, if I do say so myself, the pie was good.

Cote, S: I just want to thank you for all coming down and taking a tour. I know for myself it made me feel like you really do care and that you really want the best for Richmond.

Sander: I don't want you to ever think we don't want to hear it or we shouldn't hear it. We didn't know as what we were told doesn't line up with what we're now seeing. I apologize for that. I don't have any excuses. I don't have any answers. We do appreciate you bringing this to our attention. We'd rather know what we don't want to know then assume everything's fine.

Cote, A: Do you have the previous 20-year study? I'm assuming that was done in 2003.

Arneson: I don't, but I'll look for it.

Cote, A: Who was the consultant that did that previous 20-year study?

Cote, S: Don't hold me to it, but I believe it was done by Green Mountain Engineering.



Cote, A: As you're digitizing stuff, maybe we can get that old one digitized and immortalized anyway.

Sander: If we spend this much to acquire the information, I want to make sure we keep it.

### **Review of Sanitary Survey letter**

Arneson: Every couple of years, the State comes in and does a sanitary survey to see how its operating and make suggestions and needed changes. There were five items on the letter that need to be addressed. I believe we're in the process or have already addressed most of these. First item is the sampling locations. We've been taking most of our samples for water quality at the tap at the wastewater treatment facility. They would like to see that sampling location change to just after the water is pumped, treated with chemicals, go through the current contact time sample it there before it gets into the system. This is where the proper location is for sampling. They talked about screens for the air intake on the water tank needs to be changed and replaced. We've got those ordered and we'll get those changed as soon as they get here. We also need to increase the number of coliform samples that we take per month. It's based on population that you serve. Now we are on the two per month schedule. They also noted that our chlorine levels were very, very low. A lot of this goes back to the fluoride issue. Since October our chlorine levels have been increased. The chlorine levels are much more aligned with where they want us to be. The last one is we need to update Stephen Cote contact information with the State.

### **Review of draft FY24 Water and Wastewater Budget**

Hill: We are 25 minutes behind, and this is a 20-minute item. We might postpone the budget as it might be informed by other things.

Wolaver: Maybe push it to the beginning of the next meeting.

Sander: We're going to move the discussion of the Fiscal Year 24 Water and Wastewater Budget to next meeting. We expect to have live Excel spreadsheets to show data.

### **Review of monthly water data**

Arneson: The first thing to note in the monthly water data ([https://www.richmondvt.gov/fileadmin/files/Water\\_Sewer\\_Commission/Meetings/2023/03/3f\\_Monthly\\_Water\\_Report\\_for\\_February\\_2023.pdf](https://www.richmondvt.gov/fileadmin/files/Water_Sewer_Commission/Meetings/2023/03/3f_Monthly_Water_Report_for_February_2023.pdf)) is you'll see a horizontal line right after February 14. That represents the change in sampling locations. On February 15, we started sampling those at the at Waterhouse before it enters the main drinking water system. That data allows us to understand what the chemical makeup of the water is as it enters the drinking system.

Cote, S: You are going to see higher numbers because chlorine has to be higher when you go into the system to get a residual at the end of the lines. The other thing the State guy explained to us was, the numbers that we were seeing at the end of the line, by State standards are not acceptable. They're too low. A .8 to 1.2 for the next few months. The

State only cares about free chlorine, we also monitor total chlorine. We monitor the chlorine as it comes out of our clear well.

Arneson: That ties back to the letter from the State talks about taking a sample at the end of the line until the end of June. We are going to reconfigure this sheet so that we're giving the State exactly what they want.

Cote, S: The way it was being done it was almost impossible for us to maintain the numbers that you guys wanted, or the State wanted. If you look at our numbers, they've been pretty rock solid, right in the ballpark.

### **Update on Chittenden Solid Waste District biosolids agreement**

Furr: CSWD held a meeting with different operators and there is nothing I like better than talking about sludge. The other operators on the call thought the rate increase was very reasonable, and that it could have been a lot worse ([https://www.richmondvt.gov/fileadmin/files/Water\\_Sewer\\_Commission/Meetings/2023/03/3g1\\_CSWD\\_5\\_yr\\_\\_Extension\\_Proposed\\_Pricing.pdf](https://www.richmondvt.gov/fileadmin/files/Water_Sewer_Commission/Meetings/2023/03/3g1_CSWD_5_yr__Extension_Proposed_Pricing.pdf)).

Wolaver: It's about a 5% annual increase, because this is fixed rates for five years.

Arneson: I think they have a CPI option increase every year. This one in February 24, there'll be a CPI increase.

Furr: Canada's not going to keep taking this. The PFAS levels in American stuff are way beyond what they're willing to take.

Arneson: There is a management fee and a trucking fee that is added on to this.

### **Approval of Minutes, Warrants and Purchase Orders**

#### **Minutes**

*Furr moved to approve the Minutes of 3/13/23 as presented. Wolaver seconded. Roll Call Vote: Farr, Furr, Hill, Sander, Wolaver in favor. Motion approved.*

#### **Warrants**

*Furr moved to approve the warrants of 3/20/23 as presented. Hill seconded. Roll Call Vote: Farr, Furr, Hill, Sander, Wolaver in favor. Motion approved.*

**Purchase Orders:** None

#### **Discuss Items for Next Agenda**

- \*Septage Rates
- \*Budget
- \*Update on Pumps & Repairs
- \*Start at 5 pm

## **Adjournment**

*Wolaver moved to adjourn. Hill seconded.*

*Roll Call Vote: Farr, Furr, Hill, Sander, Wolaver in favor. Motion approved.*

Meeting adjourned at: 6:54 pm

**Chat file from Zoom:** None