BOARD OF COMMISSIONERS SPECIAL MEETING SEPTEMBER 10, 2020 MEETING MINUTES (approved September 21, 2020)

A special meeting of the Board of Commissioners was conducted on September 10, 2020 at 3:00 p.m. at 2 Greens Pond Road, Merrimack, NH.

Chairman, Donald Provencher presided:

Members of the Board present:	Wolfram von Schoen, Vice Chairman John Lyons, Personnel Liaison, (electronic participation) Kenneth Ayers Paul McLaughlin (electronic participation)
Members of the Board Absent:	
Also in Attendance:	Ron Miner, Superintendent Jill Lavoie, Business Manager

- 1. This Special Meeting is a work session regarding Well #2 treatment to include:
 - Design flow rate of Well 2.
 - How much future capacity to include in the Water Treatment Plant (WTP).
 - Further work on test wells 1D, 6, and 7 and how they may relate to the Well 2 WTP.
 - Well 2 WTP schedule

Mike Metcalf, of Underwood Engineers, informed the commission that in order to a gauge a better understanding of both quantity and quality of water that would come to a Well 2 Water Treatment Plant (WTP) it would require Emery and Garret to complete their portion of the work. He noted that each train is roughly 1,000 Gallons Per Minute (GPM), with a total permitted production volume of 1,500 GPM. Metcalf noted that it does not get used for 1,500 GPM but should be designed to treat the amount of permitted production volume. This would require two trains, totaling 2,000 GPM. Metcalf informed the commission that Underwood is on hold while waiting to hear the final determination on replacement Well 3, as Well 3 would go to the Well 2 WTP. He noted that Underwood could move forward at the direction of the commissioners, but there is the possibility that water quality could cause them to backtrack, which presents a financial risk.

Chairman D. Provencher asked what the output of Well 3 is. Superintendent R. Miner answered that it was currently around 650 GPM. M. Metcalf stated that Well 3 has always been treated as producing 800 GPM, but at times has pumped more. He noted that Well 2 was originally pumped at 1,100 GPM and Well 1 was pumped in the 400 GPM range when the screen collapsed, and the well was abandoned. Well 2 is permitted for 1,500 GPM.

Jamie Emery, of Emery & Garrett, stated that he would not recommend pumping more than 2,000 GPM from this system (Well 2 plus a future well). He noted that he believes the Merrimack Village District (MVD) should continue to look at the 1,000 - 1,100 range as the max daily output for Well 2. A Well 3

replacement will aid this. Emery informed the commission that he does not believe Well 3 can be replaced with one well and will require two. He noted that a large part of the cost of developing a water supply is contingent upon the cost of the property. The property being looked at for Well 3 replacement is already owned by MVD. Emery informed the commission that the test well should be pumped for days rather than hours to determine water quality. Emery noted that he has started a proposal for the commissioners to review at the next BOC meeting, scheduled for September 21, 2020. Chairman D. Provencher asked Emery how he concluded that Well 3 will require two wells. Emery answered that he believes the aquifer will limit the output at that location. He noted that this could be approached with one 8-inch test wells at both locations.

Vice Chairman W. von Schoen questioned the permitted pumping volume for Mitchell Woods. It was noted that the permitted pumping volume is 300 GPM, and sixty days in the summer.

Chairman D. Provencher noted that he would be in favor of a larger well to replace Well 3. Emery noted that he could present MVD with three options (8-inches, 12-inches, 18-inches).

At this time, Commissioner Lyons asked to be updated on historical information regarding the wells. Chairman D. Provencher informed him that a Water Treatment Plant is being developed at Well 2. This WTP is designed for 2,000 GPM of PFAS treatment. Well 2 yields 1,000 GPM. Initially, Well 3 was going to be piped to Well 2, however Well 3 would require \$6M worth of iron and manganese treatment. The option of a new well without iron and manganese is being investigated. Metcalf noted that well information could be found in the updated Master Plan.

J. Emery returned his attention to Chairman D. Provencher's statement and informed him that he would put together pricing information on different size wells. Chairman D. Provencher noted that MVD would also need the final cost on a production well, also. He stated that he would like the cost of a production well that could pump up to 1,000 GPM, not just 600 GPM. J. Emery noted that he does not know if the aquifer will be able to meet that intent without other issues arising.

Commissioner K. Ayers noted that Wells 4 & 5 will hopefully be up in running by summer 2021 and asked how many GPM they produce (combined). M. Metcalf answered that they produce 400 GPM at a sustainable rate but are used at 625 GPM through high demand periods and can peak at 870 GPM.

J. Emery informed the commission that NHDES wants municipalities to plan for their best well to be out of service, and MVD can not currently accommodate that. He noted that there are multiple areas on MVD property with high producing, high quality capabilities, specifically noting test well locations 1b and 1d.

At this time, P. Pitsas noted that he wanted to discuss the electrical feed to Well 2. Ideally there would be a generator near the plant with a main feed line running from the plant down to Well 2. The VFDs for Well 2 and either 1b or 1d would be at Well 2. Pitsas asked the commission if they would like to see each well have a capacity of 1,100 GPM, despite the WTP having a capacity of 2,000 GPM. This would allow relief if one well were down. The electrical component would need to be fitted for a higher capacity.

Commissioner J. Lyons asked when deciding between one location or the other (1b or 1d) if proximity to the wetlands effects the wetlands permitting process. J. Emery answered that 1d is in a flood area and flood plain issues will need to be dealt with.

Vice Chairman W. von Schoen asked Underwood whether or not they thought they could wait for the results from Emery & Garret and still be able to get to 100% design by spring 2021 in order to bid out the project at that time. Pitsas noted that the schedule originally had the 90% design submitted at the end of September 2020, 100% design submitted at the end of November 2020, comments addressed, and out to bid in January 2021. He stated that the current hold while waiting for results from Emery & Garrett has pushed this roughly one month behind. Emery & Garrett may not be able to provide results by the end of 2020. It was also noted that pending Emery & Garret's data, Emery & Garrett and the MVD may require additional time. Superintendent R. Miner, Chairman D. Provencher, and Vice Chairman W. von Schoen noted their agreement that Underwood should continue to move forward.

M. Metcalf reviewed, for clarification purposes, what MVD would like, noting that Underwood should continue to move ahead with the design of Well 2, based on PFAS treatment for Well 2, keep two trains, totaling 2,000 GPM, with as much provision as possible for potential water quality issues such as iron and manganese. Without increasing the storage area for chemicals, to be assumed that if water quality issues needed to be treated, it would be included in the Well 2 WTP addition.

J. Emery informed the commission that he will put together proposals for MVD with varying well sizes.

As mentioned earlier, Pitsas noted the convenience of upgrading the electrical for additional pump capacity. He also noted that the cost of upgrading at a later time would be significantly higher. Pitsas was unable to provide a dollar amount. At this time, Chairman D. Provencher asked the commissioners their opinion on upgrading the electrical for additional pump capacity. Vice Chairman W. von Schoen noted that MVD will continue to actively look for a water supply in that area and it would be shortsighted not to plan for that. Chairman D. Provencher asked if the design could be trimmed down in the future if the cost came back overly high when it went to bid. Pitsas answered that it could be trimmed down to save costs. Lynnette Carney and P. Pitsas informed the commission that they would work to gather a preliminary cost given the available information. It was also noted that the backup generator is no longer in assignment and could be used in an emergency.

• Wells 4 & 5 update

P. Pitsas informed the commission that Underwood had a project meeting with Penta on September 10, 2020. He noted that Penta is making decent progress and has started up the GAC, loaded with the GAC media. The chem feed systems have been started, the load bank test for the generator has been scheduled for the week of September 13, 2020, HVAC will be scheduled shortly. The last big component is to start the SCADA. The SCADA has been tested, but Underwood also likes to witness the SCADA test. A full SDWA on Well 5 came back good. Chairman D. Provencher asked if the backwash was sampled for arsenic. Pitsas noted that it was tested, and the highest number was 4. Pitsas noted the substantial completion date for the end of September 2020 and will be online shortly after.

• Wells 7 & 8 update

P. Pitsas informed the commission that the contractor is moving along nicely on Wells 7 & 8. The contractor had informed Underwood that he is slightly ahead of schedule.

ADJOURNMENT

MOTION BY COMMISSIONER J. LYONS TO ADJOURN MOTION SECONDED BY COMMISSIONER P. MCLAUGHLIN

A Viva Voce Roll Call was conducted, which resulted as follows:

Yea: Donald Provencher, Wolfram von Schoen, John Lyons, Paul McLaughlin

Nay:

MOTION CARRIED

The September 10, 2020 meeting of the Board of Commissioners was adjourned at 5:45 p.m.

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Submitted by Amanda McKenna, Recording Secretary