

**MERRIMACK VILLAGE DISTRICT
BOARD OF COMMISSIONERS
SEPTEMBER 21, 2020
MEETING MINUTES
(approved November 16, 2020)**

A regular meeting of the Board of Commissioners was conducted on September 21, 2020 at 5:08 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, (electronic participation)
 Paul McLaughlin, (electronic participation)

Members of the Board Absent:

Also in Attendance: Ron Miner, Superintendent
 Jill Lavoie, Business Manager
 Michele Holton, Finance/H.R. Director

FINANCIAL REVIEW

A. Analysis of Revenue and Expenditures Report

Finance/H.R. Director Michele Holton informed the commission that being through August, Merrimack Village District (MVD) is 16.67% through the fiscal year. The total income and revenues are at 19.9%. Account 40600 (System Development Charge) is slated to go to capital reserves, if factored out, the total income and revenues are at 17.53%. Director Holton noted that with unknowns due to the current drought, lower pumpage numbers, and COVID, she has adjusted the usual unbilled accrual for both Domestic and Mercantile Water sales (accounts 40100 and 40200) down by 20%. Director Holton noted that in the next few weeks she will be reviewing how the unbilled accruals will be figured going forward factoring in the upcoming rate increases. Director Holton informed the commission that due to the moratorium on late fees, account 40401 (fines and penalties) is lower than budgeted. November will be the first month of billing that does not involve any months that are part of the moratorium. Notices have been sent out regarding payment arrangement options for past due balances owed.

Director Holton informed the commissioners that account 50010 (Officers Salaries) is slightly high because the annual meeting was held so late, so we had prior and new commissioners in the month of July. She noted that account 60200 (Uniforms) is a matter of timing as the charges for field staff uniforms are paid upfront and preloaded onto individual accounts. Account 60300 (purchase of water) is slightly higher than budgeted. Account 60460 (Diesel Fuel) is higher than usual due to pump testing on Well 4 requiring use of a generator. Director Holton stated that the expenses are at 16.6% and the net ordinary income is at \$133K.

B. Bank Account Summary Review

Director Holton informed the commission that while wrapping up the Wells 4 & 5 treatment plant project, the funds are being drawn from MVD operating funds but will be reimbursed by Capital Reserves.

C. COLA discussion

Director Holton reminded the commissioners that in February it was voted to implement a 1.6% Cost Of Living Adjustment (COLA) once the annual meeting was held to approve the budget, which would include the budget funds for the second half of the calendar year. Historically, the COLA adjustment would be retro active to January 1st. With everything going on at present, including COVID and a drought, Director Holton stated that she wanted to discuss the COLA with the board before processing a retroactive check, which would be over \$10,000 for the January through June portion. It was stated that there has been discussion for the future that the COLA effective date would be either April 1st, after the annual meeting, or July 1st, for the start of the new budget year. Chairman D. Provencher noted that for the future it seems most reasonable to have the COLA coincide with the fiscal year, starting July 1st. Superintendent R. Miner and Vice Chairman W. von Schoen were in agreement.

Vice Chairman W. von Schoen asked Director Holton if MVD staff received hazard pay for being essential workers. Director Holton answered that the MVD staff was not technically qualified as essential workers. Vice Chairman W. von Schoen stated that it was his opinion that the retroactive pay be given due to a lack of hazard pay offered during the pandemic and the commitment to COLA for staff made in February. No motion is needed to change COLA to align with the fiscal year in the future as it is a change of practice.

D. Underwood funding

Director Holton stated that she was looking to confirm a funding source. For Wells 4 & 5, \$673,000 had been approved to come out of Capital Reserves and Superintendent R. Miner had authorization to approve change orders up to \$120,000. Director Holton informed the commissioners that she could not find where it was noted that the funding for the change orders was approved to come from Capital Reserves as well. P. Pitsas and Vice Chairman W. von Schoen stated in agreement that it was their belief that when the change order funding was increased from \$100,000 to \$120,000 it was also approved to come from Capital Reserves. Director Holton noted that she will investigate this.

REGULAR SESSION

1. Board of Commissioners to discuss Capital Projects with Underwood Engineers to include:

a) Wells 4 & 5 treatment plant progress

Peter Pitsas informed the commission that Wells 4 & 5 are close to completion. The final SCADA confirmation testing will take place September 22-23, 2020. The SCADA integrator has installed and tested everything but has not yet proven it to Underwood. The final chemical feed testing is scheduled for September 22, 2020. The HVAC start up is scheduled for September 23, 2020. The water quality testing has been submitted to NHDES. Bacteria and nitrate samples are scheduled for September 22, 2020. Wells 4 & 5 treatment plant should be online by October 2, 2020.

At this time, Vice Chairman W. von Schoen mentioned the ribbon cutting. COVID was mentioned, and it was noted that it may be best to wait until Spring. Consideration will be given to both timing and guest list.

b) Wells 7 & 8 treatment plant progress

P. Pitsas informed the commission that the contractor has been progressing well. The back of the building has been excavated, the below slab piping has been installed and pressure tested, and the slab reinforcing is being installed with the goal of pouring the slab on September 23, 2020. The foundation walls will follow, followed by backfill and the mason. The current timeline is slightly ahead of schedule.

c) Wells 2 & 3 treatment plant progress

P. Pitsas reminded the commission that one thing that needed to be reviewed, based on discussion during the September 10, 2020, special meeting, was the electrical load going to the building, and the additional cost. Pitsas informed the commission that this information should be available after September 22, 2020. He asked the commissioners how they would like to proceed. Chairman D. Provencher stated that an email to the commissioners once the information was available or a report sent to Superintendent R. Miner would be helpful.

P. Pitsas also noted that Underwood had a preliminary design report for Wells 2 & 3 as a combined project, with a 30% design. He informed the commission that Underwood will do a supplement to this that will explain how they ended up at just Well 2.

d) Turkey Hill booster progress

K. Pratt informed the commission that he received an update from Tim Puls and Joel Moulton on the Turkey Hill booster progress. The pump station is getting ready for delivery and a factory test on the fabricated station is scheduled to take place on September 22, 2020. The shipment target for the pump station is October 9, 2020.

e) Zeolite

Chairman D. Provencher informed the commissioners that he reached out to Geoff Daly regarding Zeolite. Lou Niles returned the call. He does not have an RSSCT report for MVD but has given permission for MVD to contact XDD Labs. Chairman D. Provencher noted that he would like to have MVD samples tested using Zeolite. Underwood stated that they would reach out regarding Zeolite testing.

f) Water Supply Options

K. Pratt provided the board with a few graphs he will use to discuss water supply options. He noted that water supply options will play into the rate increase if a capital project is needed. Pratt informed the commissioners that he wanted to summarize the available sources and look at the long-term trends. The first chart shared was titled “MVD Source Production and Long-Term Needs.” K. Pratt explained that this chart shows the annual average daily flow as well as the

highest production day (by amount pumped) of each year from 2004 until present time 2020. The max days in 2007 and 2008 were around 5 Million gallons per day (MGD). Pratt also noted a downward trend in the max days. Pratt informed the commission that this graph helps establish what needs to be planned for. Pratt stated that if all MVD wells were pumping at full capacity, including wells 4 & 5, there is a system capacity of 5.4 MGD. This is based on permitted withdrawals. In previous master plans it had been identified that MVD may see maximum daily outputs as high as 5.9 MGD. Using this data, MVD would need to look to produce an extra 0.5 MGD.

At this time Vice Chairman W. von Schoen noted that roughly four- or five-months prior Underwood provided a chart that accumulated the billed quantity and compared it to the produced quantity. This chart noted some significant unaccounted-for volumes. Vice Chairman Business Manager J. Lavoie stated that there is a water balance sheet produced for NHDES and it is her belief that Vice Chairman W. von Schoen has seen the raw data, not the data that accounts for the water loss by things such as flushing, street sweeping, etc. Vice Chairman W. von Schoen noted that the chart he referenced included the flushing and still had unaccounted for water loss. K. Pratt informed the commission that the chart does include known consumed water (what is billed, flushing, street sweeping, etc.) compared to produced water. He noted that the gap is not small, especially in the summer. K. Pratt stated that this gap could be caused by a leak in a pipe or unauthorized usage. Vice Chairman W. von Schoen would like to see this investigated. K. Pratt informed the commission that the water loss has run at an annual average of 7-10% of the consumed numbers. Pratt noted that a cost avoidance exercise will investigate this. Commissioner J. Lyons asked what will be done to investigate the water loss. K. Pratt answered that leak detection and a lost water study (which includes looking into metering) are ways to investigate water loss. Pratt noted that roughly fifteen years prior a lost water study took place. There was no success in finding the source of lost water at that time. Chairman D. Provencher informed the board that NHDES allows up to 15% water loss before it becomes a concern. K. Pratt stated that most of MVD's water loss takes place in May, June, July, and August. Chairman D. Provencher asked how this would be investigated, logistically, with all the work already needing to be done. K. Pratt answered that Underwood is under contract to do a water supply option study, this will allow for a cost avoidance study, which will outline the worth and the value of searching for the lost water. Underwood would then provide recommendations.

At this time K. Pratt referred to a table titled "MVD Source Capacities." This table breaks down each well, showing the max yield in both gallons per minute (gpm) and million gallons per day (MGD). It also shows what each well is actually producing in MGD. Wells 2, 3, 7 & 8 are producing below their max yield, at a combined average of 78%. Pratt noted that cleaning and maintenance will help improve production. The chart also shows production in MGD for June 2020, September 2020, and the upcoming production for October 2020. K. Pratt informed the commission that this information is best represented in the chart labeled "DRAFT MVD Historical 5-Day Running Average Compared to 2020 Available Sources." This draft was shared with the commissioners and to the public. K. Pratt informed the commissioners that in mid-June there was an average of 4.5 MGD, which is higher than the MVD production capabilities, and resulted in tank drawdowns. When MVD implemented a water ban production dropped to the typical annual average of 2 MGD. K. Pratt noted the 34% decrease in consumption sales, as mentioned earlier, is demonstrated by this graph. K. Pratt informed the commissioners that there were two days in June 2020 when output demand was at 5 MGD. The charts presented by Underwood help determine what is needed when looking for a source. The current source options are Well 3 replacement, Mitchell Woods, Artificial Recharge (AR) at Wells 4 & 5, and

Manchester Water Works (MWW). K. Pratt also noted that Pennichuck Water Works (PWW) should also be investigated as a wholesale agreement.

g) Water Rates

At this point in time Keith Pratt reminded the board that the last rate update from Underwood Engineers took place two years prior and the last rate increase MVD put in place was in July of 2019. The rate adjustment was in accordance with the upcoming Capital Projects. He informed the new commissioners that there were three steps to the rate adjustments, including the 13% rate adjustment in July of 2019, a projected 13% rate increase in 2020, and a projected 40% rate increase for 2021. Vice Chairmen W. von Schoen informed the commissioners that MVD implemented a 19% rate adjustment, not the 13% adjustment as noted. This had been decided on after the original rate study. K. Pratt stated that it is likely time for MVD to do an updated five-year projection. He noted that this is not imminent but should be done in a timely fashion so MVD is prepared with what action to take come July of 2021. Vice Chairman W. von Schoen noted that the 40% increase was due to Wells 2 & 3, and the iron and manganese treatment plant. Now that MVD is pursuing other options he does not feel the 40% is valid. K. Pratt responded that an updated five-year projection would take that into consideration. It was clarified that the second rate increase, scheduled initially for July of 2020, has not yet occurred. K. Pratt noted that a debt service of roughly \$100,000 has been delayed about one year due to a change with the substantial completion date of the Turkey Hill Booster Station. Underwood would like to target a draft rate recommendation around February 2021.

At this time K. Pratt asked about the 34% reduction in water sales mentioned by Chairman D. Provencher. Pratt stated that 34% was not a small reduction. Chairman D. Provencher noted that this was during the summer months, which is typically the time of peak usage and highest revenue. Director Holton stated that in July 2020 the pumpage numbers were off by roughly ten figures compared to July of 2019. August 2020 pumpage numbers were down by 2 or 3 million compared to August of 2019. September pumpage numbers were not currently available. Vice Chairman W. von Schoen noted that the -34.7%, as shown on the Profit & Loss Previous Year Comparison sheet for July – August 2020 (compared to July – August 2019), includes accrual. Director Holton noted that there are sales from August that have not yet been billed. A three-year analysis is used to show what those numbers have historically been. The information from the three-year analysis had been steady, however, with recent fluctuations and unknowns (drought, COVID, etc.) Director Holton chose to be conservative and took 20% off the estimated amounts for both domestic and mercantile water sales. Director Holton informed the commissioners that she is in the process of trying out the actual numbers.

2. Board of Commissioners to discuss Capital Projects with Emery & Garret Groundwater to include:

a) Exploratory drilling along Naticook Brook

Jamie Emery informed the commission that he put together a proposal for the exploratory drilling along Naticook Brook. At the request of the commissioners, the proposal includes prices for drilling an 8-inch, 12-inch, and 18-inch diameter test/production well. J. Emery provided the commissioners with a table summarizing the budget to complete the work described in the Scope of Services.

TASK DESCRIPTION	COST
Task 1- Installation/testing of Shallow Piezometers	\$5,000
Task 2- A) Installation, Development, and Preliminary testing of an 8-inch Diameter Test Well, B) of a 12-inch Diameter Test Well, or C) of an 18-inch Diameter Production Well – Task includes Project Management and obtaining appropriate permits.	A) \$77,500 B) \$118,000 C) \$177,500
Task 3- Preliminary Long-Term, Constant-Rate Pumping Test- includes water quality assessments, long term monitoring, preliminary environmental impact assessments	\$62,500
Task 4- Submittal of Preliminary Application to NHDES (In accordance with NHDES Env-Dw 302 and Env-Wq 403)	\$24,800
COST (Range is based upon variations in test/production well diameter):	\$169,800 - \$269,800*

*Cost for a public hearing and subsequent meetings will be charged on a time and expense basis at a later date. If 600-800 gpm is to be pumped from the test well, add \$10,000 to Task 3 for larger pump, power source and pumping appurtenances.

Emery noted that with 18-inch diameter well, there is a risk involved with getting through the permitting process with the State of New Hampshire without issues. The 12-inch diameter well lowers that risk. Emery informed the commissioners that the preliminary water quality is excellent, the saturated thickness is excellent, and the property, aside from a small portion, is owned by MVD. He stated that he does not believe this presents a high risk, but the State of New Hampshire has the authority to implement restrictions. Emery stated that if the commissioners feel confident that there is minimal risk, an 18-inch well would be acceptable. A 12-inch well would split the risk factors but would limit the well to 600-700 GPM. It was noted that the State will not step in until actual data is available. The difference in cost between an 8-inch diameter test well and an 18-inch diameter test well is \$100,000. Vice Chairman W. von Schoen asked J. Emery whether the increase would be \$100,000 if MVD chose to start with an 8-inch diameter test well and later move to the 18-inch diameter production well. J. Emery informed the commissioners that the cost increase would exceed \$100,000 in that situation. He noted it would be an additional \$177,000. It was noted once more that NHDES will not step in until actual data is available, but Emery stated that he does find value in submitting the report to NHDES and asking them to come view the site. NHDES requires a preliminary review and approval as well as a final review and approval. Emery informed the commission that the preliminary pump test he put in the Scope of Services is 120-hours compared to the typical 48-hour pump test. This will provide more thorough results. The final pump test is required to be a minimum of 120-hours.

Commissioner J. Lyons asked J. Emery if there was a difference in likelihood of getting an 8-inch test well or an 18-inch test well in place before the end of 2020. J. Emery answered that he did not know. He stated could likely get an 8-inch test well in before the end of 2020, but he was unsure if he could get an 18-inch test well in before the end of 2020. The concern of high prices

for winter drilling was mentioned and J. Emery informed the commissioners that he received a fixed price for drilling.

**MOTION BY COMMISSIONER J. LYONS TO MOVE FORWARD WITH THE EMERY & GARRET PROPOSAL DATED SEPTEMBER 15, 2020, FILE NUMBER 33.P000058.21, IN THE AMOUNT OF \$269,800 TO COME FROM NEW SOURCE FUNDS
MOTION SECONDED BY COMMISSIONER D. PROVENCHER**

A Viva Voce was conducted, which resulted as follows:

Yea: Donald Provencher, Wolf von Schoen, John Lyons, Kenneth Ayers, Paul McLaughlin

5

Nay:

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MOTION CARRIED

5-0-0

b) Replacement Well #4R

Emery informed the commission that Replacement Well #4R report will be submitted the week of September 27, 2020. He also noted that the State has responded to an inquiry, their response stating that NHDES understands the urgency of the approval for the replacement well and is hopeful they will review the final report and issue the final approval of the well within two – three weeks of its receipt. J. Emery asked if the treatment plant was ready to go online with Well 4R. Business Manager J. Lavoie answered that the last set of results, received September 18, 2020, needed to be compiled and submitted. It was noted that it will take roughly two weeks for the treatment plant to be ready for Well 4R. J. Emery informed the commissioners that the approval to pump Well 4R will likely be two weeks behind that (final activation approval).

c) Critical Water Levels

At this time, J. Emery referenced a table named “Benchmark Water Levels for Groundwater Management.” He brought the commissioners’ attention to Well MW-12-2B, in the area of MVD Well 2. Emery informed the commissioners that the chart shows different alert levels. This includes Level 1 (Key Word: Alert, Magnitude: Incipient), Level 2 (Key Word: Warning, Magnitude: Moderate), Level 3 (Key Word: Emergency, Magnitude: Severe), and Level 4 (Key Word: Disaster, Magnitude: Extreme). J. Emery noted that in the drought of 2016 Well 2 water levels got down to roughly 34 feet, putting it between a Level 2 and Level 3 concern. Currently, the water level is still above a Level 1 concern. Emery stated that this indicates there is still a significant amount of available drawdown. Well 3 is currently at a Level 3, which J. Emery noted to be problematic. Well 7 is of great concern as water levels, at times, drop as low as the screen. Well 7 hit Level 4 (Emergency level) during the drought of 2016 and is currently at Level 4 in 2020. Well 8 is currently above a Level 1 concern. J. Emery stated that this data suggests more water should be pumped from Well 8 while pumping is reduced at Well 7.

Chairman D. Provencher asked J. Emery if the monitoring wells in the area of Well 7 were also reading at Level 4 or if this could be an indication that the well screen needs to be cleaned. J. Emery stated that typically wells are cleaned every other year. Superintendent R. Miner informed J. Emery that Well 7 gets cleaned annually. J. Emery stated that he would have that information plotted. He noted that pumping should be reduced at Well 7 regardless.

d) Pennichuck PFAS Data

In response to the request made by the commissioners, J. Emery gathered data on Pennichuck Water Works (PWW) PFAS levels. This information was plotted and presented to the commissioners. The data shows that PFHxS, PFNA, and PFOS are at 0 parts per trillion (ppt), and PFOA levels are at almost 0 ppt. This represents data up to the end of August 2020.

Chairman D. Provencher stated that he would like to see the PFAS data for Manchester Water Works (MWW) graphed in a similar fashion. Superintendent R. Miner stated that he would call K. Pratt, of Underwood Engineers, to coordinate who would be tasked with this.

3. Board of Commissioners to review the minutes from the August 17, 2020 Public Session, the August 17, 2020 Non-Public Session, and the September 10, 2020 Special Meeting.

APPROVAL OF MINUTES

Board of Commissioners Non-Public Session August 17, 2020

No amendments were offered.

MOTION BY COMMISSIONER W. VON SCHOEN TO ACCEPT THE MEETING MINUTES OF THE AUGUST 17, 2020 NON-PUBLIC BOARD OF COMMISSIONERS MEETING AS PRESENTED

MOTION SECONDED BY COMMISSIONER J. LYONS

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

Yea: Donald Provencher, Wolfram von Schoen, John Lyons, Kenneth Ayers,

4

Nay:

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Commissioner P. McLaughlin abstained

MOTION CARRIED

4-0-1

Board of Commissioners Public Session August 17, 2020

The following amendments were offered:

Page 6, line 17, the word “source” was omitted from the end of the sentence and it should read, “. . . an existing water source.”

MOTION BY COMMISSIONER W. VON SCHOEN TO ACCEPT THE MEETING MINUTES OF THE AUGUST 17, 2020 PUBLIC BOARD OF COMMISSIONERS MEETING AS AMENDED

MOTION SECONDED BY COMMISSIONER K. AYERS

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

Yea: Donald Provencher, Wolfram von Schoen, John Lyons, Kenneth Ayers,

4

Nay:

0

Commissioner P. McLaughlin abstained

MOTION CARRIED

4-0-1

Board of Commissioners Special Meeting September 10, 2020

The following amendments were offered:

Page 1, line 44 reads, “...pumped at **11,000** GPM...” and should read, “...pumped at **1,100** GPM...”

Page 1, line 49 reads, “... from this system.” And should read, “...from this system (**Well 2 plus a future well**).”

Page 1, line 50 reads, “...as the max daily output.” And should read, “...as the max daily output **for Well 2.**”

Page 2, line 2 reads, “...looked at for Well 3 is already...” and should read, “...looked at for Well 3’s **replacement** is already...”

Page 2, line 13 reads, “...in favor of a larger well.” And should read, “...in favor of a larger well **to replace Well 3.**”

Page 2, line 18 reads, “...WTP is **approved** for 2,000 GPM...” and should read, “...WTP is **designed** for 2,000 GPM...”

Page 2, line 23 reads, “...informed him that would put...” and should read, “informed him that **he** would put...”

Page 2, line 35 reads, “...specifically noting locations 1b and 1d.” and should read, “...specifically noting **test well** locations 1b and 1d.”

Page 3, line 12 reads, “...it would be included in an addition.” And should read, “...it would be included in a **Well 2 WTP** addition.”

MOTION BY COMMISSIONER W. VON SCHOEN TO ACCEPT THE MEETING MINUTES OF THE SEPTEMBER 10, 2020 PUBLIC BOARD OF COMMISSIONERS SPECIAL MEETING AS AMENDED

MOTION SECONDED BY COMMISSIONER D. PROVENCHER

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

Yea: Donald Provencher, Wolfram von Schoen, John Lyons, Kenneth Ayers, Paul McLaughlin
5
Nay: 0

MOTION CARRIED
5-0-0

4. Board of Commissioners to review Action Items from previous meetings and those to be added from this meeting.

The Commissioners reviewed the list of Action Items, removing tasks that have been completed.

5. Old Business

Chairman D. Provencher noted that in the commissioner's packets was a letter from Emery & Garrett to Superintendent R. Miner regarding Parker Village. The letter has gone out to Parker Village. Information will go to NHDES to make any decisions.

6. New Business

At this time, Vice Chairman W. von Schoen informed the public that he has been volunteering as the PR Officer for MVD. He noted that since roughly September 16, 2020, he had been fielding comments regarding high water bills. He was informed that some members of the community had a large increase in the dollar amount of their bills while others reported no increase for the same billing period as last year. Business Manager J. Lavoie informed the commissioners that there are three quarterly billing routes. July 1 of 2019 MVD did a town-wide reading to implement the rate increase. Depending on the route, customers received a bill for their full 3 months of usage, 2 months of usage or one month of usage. Their normal billing date would reflect the balance. In order to compare 2019 to 2020 customers would need to add their 2 partial bills together. She noted that MVD also provides red dye tablets for those who feel they may have a leaky toilet. These tablets can be placed in the back of the toilet to determine if there is water leaking through. The public was encouraged to reach out to the MVD office. It was also noted that due to COVID, many people are spending more time at home which increases usage.

7. Superintendent's Report

Superintendent R. Miner informed the commission that the letter regarding salt mitigation will go out during the week of September 20, 2020. The graphs included in the mailing will be the most current available graphs.

Vice Chairman W. von Schoen asked what the timeline for the Old Blood Road extension is. Superintendent R. Miner stated that he did not know but would find out.

8. Questions from the Public

None

9. Questions from the Press

None

ADJOURNMENT

MOTION BY COMMISSIONER W. VON SCHOEN TO ADJOURN

MOTION SECONDED BY COMMISSIONER J. LYONS

A Viva Voce was conducted, which resulted as follows:

Yea: Donald Provencher, Wolf von Schoen, John Lyons, Kenneth Ayers, Paul McLaughlin

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Nay:

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MOTION CARRIED

The September 21, 2020 meeting of the Board of Commissioners was adjourned at 9:03 p.m.

Submitted by Amanda McKenna, Recording Secretary