A regular meeting of the Board of Water Commissioners was called to order by Chairperson Michael Caron at 12:00 noon. Commissioners present were, Paul Ingersoll, Paul Poulin, and via telephone Lucien Langlois. Also present for this meeting was ex-officio member Mayor Paul Grenier, Superintendent Craig Carrigan, General Foreman Steve Lefebvre and Lynne C. Lessard.

There was neither Public nor Board Comments.

It was moved by Commissioner Poulin, seconded by Mayor Grenier, with all in favor to accept and place on file, the Minutes of October 18, 2017.

Under the Berlin Water Works Monthly Status Report dated November 9, 2017, Superintendent Carrigan reviewed and discussed the following with the Board:

- 1. Treatment System Status:
 - a. The Brown Farm well ran for 2-days in October.
 - b. We received a chemical delivery for CL2 and NOAH and Bi-Carb.
 - c. There were electrical problems with the plant fork truck and it has since been repaired
- 2. Distribution System & Compliance Status:
 - a. Water Supplied into the distribution system for October averaged 1.24 MGD. The Ammonoosuc Plant produced 1.20 MGD and Brown Farm Well was 0.04(2 days). The October daily wasted sludge flow to the City Pollution Control Facility was 145,902 GPD.
 - b. The Burgess Bio-Mass water usage was 459,197 GPD for October. They were also off line for 15 days during the month for repairs.
 - c. There were no main line repairs, one service line repair on York Street and 3 curb stop repairs in the month of October.
 - d. Our crew tied in a new service line to the 12 inch cross lot line for the house that is being built at the dead end of Balsam Street. At that same time, we installed a hydrant on the 12" line which will aid us in flushing the cross lot line.
 - e. The crew also located and turned on the old service line for the demolished property next to the Caron Building Center. When looking for the gate box, for the center's service line and curb box for the demolished building, it was found that when the walkway was constructed on Union Street, both items were torn out by the contractor for the City project. Mike Perreault, for the Public Works Department was contacted so they can re-concrete the walk.
 - f. Propane heaters in the pump stations have been started for preparation of the winter season and the plow trucks and sander are also in place.
- 3. Water Meter Replacements & Backflow Project Status: Two backflow preventers, three radio read and three iperl meters were installed.
- 4. Office System/Building Upgrades & Personnel Training Status: An article was published in the NH Water Works Association Newsletter "Green Energy & the City of Berlin Water Works. It discussed our use of the 2010 State Revolving Loan Fund (SRL #09) for our green energy solar and hydro projects.

- 5. Cost Reduction/New Income/Improvements/New Customer Status: A total from our 47 monthly accounts for water was \$106,710.
- 6. Safety/Personnel/Other Status:
 - a. For the Asset Management Grant, we have expended \$40k and will be submitting a pay request to NHDES for the 50% matching grant share in the amount of \$20k.
 - b. Peter Chapel of Health Trust NH has informed us that our 2018 GMR rates have come at a projected not to exceed 0.6% increase.
 - c. BWW has not had a Lost Time Accident in the last 1,133 days.

It was moved by Commissioner Langlois, seconded by Commissioner Ingersoll, with all in favor, to accept and place on file, the Berlin Water Works Monthly Status Report dated November 9th, 2017.

It was moved by Commissioner Poulin, seconded by Commissioner Ingersoll, with all in favor, to accept and place on file, the Cashier's Report for the month of October, 2017.

Under Old Business:

- a. Project Status: We have installed 2,531 feet of main line and 894 feet of service lines this year.
 - 1. Brown Farm Back-up Well Status: Superintendent Carrigan handed the Board a copy our letter dated November 14, 2017 in response to Kelsey Vaughn, NHDES-DWGB dated e-mail October 17, 2017 regarding the Water Conservation Plan. The Superintendent said that the water conservation plan is necessary to receive the Large Ground Water Permit. Superintendent referred to his letter's conclusion and read that the City of Berlin Water Works is in the final stages of 25-year water system improvements program. During that time, we have replaced a water treatment facility, replaced over 29 miles of our 50-mile water distribution system; replaced three wood stave tanks; encouraged 1,700 of our 3,400 customers' to replace their shallow service lines and get off the winter running water program; performed regular leak detection; assessed customer water meters to ensure that they are sized correctly; and improved the overall operations of the BWW. The BWW efforts have resulted in reducing our unaccounted for water from 35% in 2003 to less than 8% today. This is proof positive that the City of Berlin Water Works is aggressively and effectively managing its water resources. Therefore, we see no compelling reason to radically change our current operating practices since they already result in the desired outcome, namely water balance less than 15% of water input to the system. However; as discussed above, we will take appropriate and reasonable actions to access our meter replacement program so that meters will be replaced when their accuracy falls below 90%, regardless of how long they have been in service. We will wait for their response. We are hopeful that they may waive some of their issues. Superintendent Carrigan also handed the Board the Brown Farm Well Schedule for Project Completion and that that he would be having a conference call this afternoon with all parties involved; Andy Sharpe, Dave Maclean and David Harwood of GeoInsight, Lee Carroll and Chad Poulin, Charles Crook and Art Reinheimer of Layne Christensen, Charlie Fritz, Steve Lefebvre and Donny Labrecque to discuss three different Scenarios.

Superintendent Carrigan went into detail to discuss three different draft scenarios for project completion such as having to get a temporary discharge permit from the original 5-day to a 10-day permit, delivery schedule for the VFD panel and installation which controls the well or possibly using a temporary motor starter and the flow control for the testing. He also said that due to unforeseen circumstances such as having to have more test wells drilled in the beginning, changes in scope & engineering cost, we will be going over the original budgeted amount.

- 2. Second Avenue Status: The project is completed, base paved and waiting on the sidewalk to be paved.
- 3. Howard Street Status: We installed 618' of pipe and a new hydrant for this year. The remaining 300' will be completed next construction season. Base paving will be on Thursday.
- 4. Hillside Avenue Status: Final paving was done from Hillside on Spring Street all the way up to Portland Street.
- b. Application for NH State Revolving Loan Status: Our contact person at NHDES did not submit our application in time for the Governor and Council approval during their November 8th, 2017 meeting and was submitted for their next meeting.
- c. Our Auditors were on site on Monday, October 23, 2017 thru Thursday.
- d. There was no other old business.

New Business:

- a. It was moved by Mayor Grenier, seconded by Commissioner Ingersoll, with all in favor to approve the 2018 Chemical Bids. Out of eight bids, only three responded. Univar USA Inc. of Morrisville, PA received the award for Sodium Hydroxide 25% and Harcross Chemicals Inc. of Nashua, NH for Filtered Sodium Hypochlorite 15%.
- b. The Board agreed to hold its annual Christmas Luncheon on December 15th, 2017.
- c. Storm Damage from October 29th, 2017: Superintendent Carrigan reviewed with the Board the time-line of how the storm affected the Water Works. We had a low water level at Lancaster. The news was calling for bad weather so we started the well on Sunday 10/29 at 12:30 pm. On 10/30, we lost telemetry all over the City at 2:00 am Monday morning and restarted the well on generator power and lost power will into late Monday night. Burgess Bio-Mass tripped out Monday afternoon. We also lost pressure on the transmission line which took several hours to brush cut so we could get into the dam. 10/31, when we started losing pressure our original though was a major break on the transmission line. We saw that the bladder was lower and we let it go overnight, also we would have had to contact Burgess Biopower to stop their water usage so it was a buffer that the Biopower was already down, but fortunately the main was not broken. We lifted the bladder 4 feet which stopped the water over the river crossing. We thought then the headers were plugged, which they were plugged solid. We emptied the dam overnight, the next day we used a little boat and used a pressure washer to clean the header. At that time, crews tightened up loose bolts and re-torqued the bladder. Then we found the raw water flow meter, (a DP) cell was showing A FLOW OF 450 GPM when there was no flow, possibly giving us a false reading. All of our chemicals are paced off with this reading except for caustic. We had a new DP Cell overnighted to Donny's house on Saturday and

Donny and Chad from Androscoggin Electric installed the unit on Sunday morning, November 5th, 2017. The Berlin Water Works faired very well considering the damages around the City and we also have used this event to schedule additional maintenance at the dam. Superintendent Carrigan informed the Board that BWW helped the PWD with the Enman Hill culvert backup and also received an e-mail from the City Manager to say "thank you for the support we received from BWW during the big storm. Your team didn't hesitate to jump in with resources during an event of the likes we've never seen." Pollution Control and the Public Works Department also thanked BWW for our efforts.

- d. Approve Other & Communications:
 - Bryan Lamirande from the School System called Superintendent Carrigan and wanted to know if they could put a small antenna on our Ramsey Hill pump house as they are having communications issues. This would be a good place because it has a back-up generator. It was approved by the Board, but the School would be responsible for any inadvertent damage due to installation.
 - 2. Jay Poulin and his associate from HEB Engineer's stopped by this am to see the Superintendent to say that they may be doing a project to add a parking lot at the middle school building along the gym to have a separate entrance for the younger students. He also said that the Fire Department recommends the installation of a fire hydrant. They reviewed the water service connections in that area.
- e. Superintendent Carrigan said that someone was interested in purchasing the old generator at the Ammonosuc Plant for \$5k and would remove the generator. It was suggested that the Superintendent check out the value of the generator and if the value is \$5k, then it would have to be put out to bid. The Mayor suggested that BWW remove the item and include delivery within a 10-mile radius for an additional cost. In the event of any damages to the building, BWW would be responsible rather than to have an individual remove the unit.

There was no other New Business to come before the Board.

The Board agreed to hold their next regularly scheduled meeting on December 20th, 2017 at noon at their 55 Willow Street location.

There were no Public-Board comments.

The Board did not enter into a non-public session.

There being no further business to come before this meeting at this time, it was moved by Mayor Grenier, seconded by Commissioner Poulin, with all in favor to adjourn this meeting.

The meeting did so adjourn at 1:00 pm.

A True Record:

Paul Poulin, Clerk of the Board