



# **NORTHERN MORAIN WASTEWATER RECLAMATION DISTRICT**

113 Timber Trail, Island Lake, Illinois 60042

## **REGULAR MEETING MINUTES**

December 10, 2019

Present: Trustees: Ken Michaels, John Ragland, Timothy Brunn (by telephone), Dena Battaglia, Lydia Ryberg  
District Manager: Mohammed Haque; District Clerk: Deborah Martin  
Others: Superintendent: Luke Markko

President Michaels called the meeting to order at 7:32 p.m.

### **1. CALL TO ORDER:**

Roll Call: Timothy Brunn – by phone  
John Ragland - Present  
Dena Battaglia - Present  
Lydia Ryberg – Present  
Ken Michaels – Present

### **2. PLEDGE OF ALLEGIANCE:**

Those present stood and pledged allegiance to the flag.

Discussion concerning Trustee Timothy Brunn's participation in tonight's Board meeting via telephone conference call from Detroit Michigan. Because the District has not adopted a Resolution allowing video or telephonic participation in Board Meetings, the Board made a Special Motion.

Special Motion by President Michaels to allow Trustee Brunn to participate in tonight's Board meeting via telephone conference call, but to abstain from voting on motions.

2nd by Trustee Ragland

4 ayes 0 nays 1 abstain – Mr. Brunn **MOTION CARRIED**

### **3. PRESENTATION & APPROVAL OF MINUTES:**

#### **a. Regular Meeting, November 12, 2019**

Motion by Mr. Ragland to approve the Regular Meeting minutes of November 12, 2019 as presented.

2nd by Trustee Ryberg

4 ayes 0 nays 1 abstain – Mr. Brunn **MOTION CARRIED**

### **4. TREASURER'S REPORT:**

#### **a. Approval of the Monthly Treasurer's Report for month ending October 31, 2019**

Mrs. Ryberg presented the Monthly Treasurer's Report for month ending October 31, 2019 for Board approval. Motion by Trustee Battaglia to approve the Treasurer's Report for month ending October 31, 2019 as presented.

2nd by Mr. Ragland

4 ayes 0 nays 1 abstain – Mr. Brunn **MOTION CARRIED**

### **5. PUBLIC COMMENTS: none**



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**6. MANAGER'S REPORT:**

District Manager Haque stated that the Woodman's project should be ready soon to be signed off on and to accept the improvements made by the developers. He reported that an inspection of the site is scheduled for December 13<sup>th</sup>. Manager Haque reported that there have been no new developments concerning the projected Circle K in Island Lake. He also stated that there has been no further communication from Skipper Bud's in Volo. Manager Haque told the Board that he is in receipt of the covenant recorded by the Village of Lakemoor concerning the new Dunkin' Donuts, and that there are a few follow-up items pertaining to the covenant that District Attorney Vic Filippini would like addressed. Manager Haque briefly mentioned some of the projects that are on hold while the focus has been on North Clarifier assessment and repairs. Manager Haque informed the Board that he will be meeting soon with Representative Weber to present him with the plans for the Lift Stations Improvement project in Lakemoor. Manager Haque also relayed that he will be following up with Senator Wilcox also. Manager Haque stated that the User Rate Study presentation by Eric Rothstein from Galardi Rothstein Group that was to be on this month's agenda has been held off until a decision is made on the accounting for the disposition of the insurance claim for the North Clarifier. Mr. Rothstein is expected to have the presentation ready for the January Board Meeting. Concerning the North Clarifier, Manager Haque stated that he has been corresponding with President Michaels and the insurance company concerning the District's claim. Soil borings and monitoring wells will be installed, so that ground water levels can be monitored around the North Clarifier. He reported that once those are installed the District will move forward with the dewatering, if dewatering is needed. Manager Haque stated that the District is taking mostly planning and quoting steps until the disposition of the insurance claim is known. Mr. Haque informed the Board that the Debit Refinancing closed last week, and that the agenda shows an ordinance to abate the tax levy for the old bonds. The new bonds are with JPMorgan Chase Bank. Mr. Haque also reported that the Septage Receiving project is working well, and that the District has asked a third hauler, Gunderson Plumbing, to wait until repairs are complete on the North Clarifier, before approving their permit. Mr. Haque reported that new construction permits have slowed down and will likely remain slow until March of next year.

Superintendent Markko gave a synopsis of his Operations Report and included some of the work that is being done to prep for the repair of the North Clarifier. Mr. Markko reported that the sludge conveyer belt project is near completion and he is excited to see it in operation. He reported that final work is being done on the Control Building and updated the Board on the floodproofing project. Mr. Markko informed the Board of the District's UTV purchase; it is anticipated to be used heavily this winter, since this UTV has a cab and is heated, so it can be utilized in all weather. Mr. Markko told the Board of the problem last weekend with Rawson Bridge lift station, where the pump tipped over due to wear and tear on the 20 year-old clips that hold the pumps in place. During this repair it was noted that other issues need to be addressed with this lift station. Superintendent Markko is currently getting quotes on the needed repairs and parts replacement. He also spoke about the aging of the non-potable water pump skid, resulting in pump failure and a replacement skid has been selected. Mr. Markko reported on the Sanitary Sewer Overflow incident in Lakemoor on Thanksgiving morning, due to a power issue at the lift station. It was discovered that the automatic transfer switch that transfers power from Com Ed to generator power had become stuck in between positions and disabled power to the lift station. Subsequent testing has shown that this was an isolated incident and, as required, the IEPA was notified of the overflow. Superintendent Markko told the board that the District assisted the Wauconda Public Works with use of our Vactor in two separate incidents; and he briefly explained that the SCADA project and Waste Activated Sludge Pipe insulation projects are in the works.

**7. TRUSTEE REPORTS - none**

**8. LEGAL BUSINESS**

Manager Haque reminded the Board that the District continues to be engaged in the Rockwell Utilities/ICC case.



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**9. OLD BUSINESS**

a. Semi Annual Review and Approval of the revised District's Strategic Plan

The Board briefly reviewed the advancements made to date in achieving the District's Strategic Plan adopted in 2013.

Motion Mrs. Ryberg to approve the revisions made to the District's Strategic Plan.

2<sup>nd</sup> by Mrs. Battaglia

4 ayes 0 nays 1 abstain – Mr. Brunn **MOTION CARRIED**

**10. NEW BUSINESS**

a. Approval of 2020 Board Meeting Dates

The Board was presented with the proposed 2020 Board Meeting dates, to be posted and published in accordance with Open Meeting Act requirements.

Motion by Mr. Ragland to approve the 2020 Board Meeting dates as presented.

2<sup>nd</sup> Mrs. Ryberg

4 ayes 0 nays 1 abstain – Mr. Brunn **MOTION CARRIED**

b. Approval of 2020 NMWRD Holiday Dates

After discussion of the number of paid holidays Northern Moraine offers its full-time employees, the Board decided to approve the dates as presented, but to review the number of holidays the District recognizes again in October of 2020.

Motion by Mr. Ragland to approve the 2020 NMWRD Holiday dates as presented.

2<sup>nd</sup> by Mrs. Ryberg

4 ayes 0 nays 1 abstain – Mr. Brunn **MOTION CARRIED**

c. Adoption of Ordinance 19-09 Abating Future Taxes Levied on 2010 General Obligation Bonds

In November, the Board accepted JPMorgan Chase Bank to refund the 2010 General Obligation Bonds. The District's bond counsel has advised that the District should abate all remaining levies related to the old 2010 bonds.

Motion by Mrs. Battaglia to adopt Ordinance 19-09, abating future taxes levied on the 2010 General Obligation Bonds.

2<sup>nd</sup> by Mrs. Ryberg

Roll Call Vote:

Dena Battaglia - Aye

Timothy Brunn - Abstain

John Ragland - Aye

Lydia Ryberg – Aye

Ken Michaels - Aye

4 ayes 0 nays 1 abstain – Mr. Brunn **MOTION CARRIED**

d. Resolution to Adopt Change Order #1 for Headworks International

Motion by Mrs. Ragland to adopt the Resolution authorizing the District Manager to approve Change Order #1 from Headworks International for the Influent Bar Screen, increasing the original contract by \$5,305.00.

2<sup>nd</sup> Mr. Ragland

Roll Call Vote:

Dena Battaglia - Aye

Timothy Brunn - Abstain

John Ragland - Aye

Lydia Ryberg – Aye

Ken Michaels - Aye

4 ayes 0 nays 1 abstain – Mr. Brunn **MOTION CARRIED**



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**10. NEW BUSINESS, cont.**

e. Resolution to Approve Quickbooks Accounting Services

Motion by Mr. Ragland to approve a Resolution authorizing the District Manager to retain Lauterbach and Amen, LLP for Quickbooks Accounting Services to reduce the amount of District accounts at a rate of \$100 per hour, not to exceed 40 hours.

2<sup>nd</sup> Mrs. Ryberg

Roll Call Vote:           Dena Battaglia - Aye  
                                  Timothy Brunn - Abstain  
                                  John Ragland - Aye  
                                  Lydia Ryberg - Aye  
                                  Ken Michaels - Aye

4 ayes 0 nays 1 abstain – Mr. Brunn   **MOTION CARRIED**

f. Resolution to Approve a Service Agreement with Weston Solutions, Inc.

Motion by Mrs. Battaglia to adopt a Resolution authorizing the District Manager to enter into a service agreement with Weston Solutions, Inc. for consulting services related to the North Clarifier repair for an amount not to exceed \$20,000.

2<sup>nd</sup> by Mr. Ragland

Roll Call Vote:           Dena Battaglia - Aye  
                                  Timothy Brunn - Abstain  
                                  John Ragland - Aye  
                                  Lydia Ryberg - Aye  
                                  Ken Michaels - Aye

4 ayes 0 nays 1 abstain – Mr. Brunn   **MOTION CARRIED**

g. Review of Costs for Service to Northeast Service Area

The Board discussed the estimated costs for the District to service the Northeast Area along Route 120. It was agreed to continue the dialog concerning the Rockwell Utilities purchase by Aqua Illinois. The discussion included Darrell Road projected connection costs along with the costs for Rockwell to connect to Northern Moraine Wastewater Reclamation District.

**11. MISCELLANEOUS CORRESPONDENCE**

- a. MCCG December Holiday Dinner Meeting: Wednesday, December 11, 2019 at McHenry Country Club

**12. APPROVAL OF BILLS**

Motion by Mrs. Ryberg to approve payment of bills on the December 10, 2019 bill list as presented, in the amount of \$112,421.61.

2<sup>nd</sup> Mr. Ragland

Roll Call Vote:           Dena Battaglia - Aye  
                                  Timothy Brunn - Abstain  
                                  John Ragland - Aye  
                                  Lydia Ryberg - Aye  
                                  Ken Michaels - Aye

4 ayes 0 nays 1 abstain – Mr. Brunn   **MOTION CARRIED**

**13. OTHER BUSINESS – Executive Session**

Motion by Mr. Ragland to go into Executive Session at 8:40 pm to discuss personnel issues.

2<sup>nd</sup> Mrs. Battaglia

4 ayes 0 nays 1 abstain – Mr. Brunn   **MOTION CARRIED**



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The Regular meeting reconvened at 9:27 pm

President Michaels stated that the record should reflect that Mr. Brunn's telephone connection was lost and then restored, and that no Board action was taken at the Executive Session concerning personnel issues.

Motion by President Michaels to empower the District Manager to award End of Year Performance Bonuses to District Staff in the amounts of \$100 to \$500 per employee based on the Manager's determination of that employee's performance over the past year. Manager Haque is to be awarded a \$500 bonus.

2<sup>nd</sup> Mr. Ragland

Roll Call Vote:           Dena Battaglia - Aye  
                                  Timothy Brunn - Abstain  
                                  John Ragland - Aye  
                                  Lydia Ryberg - Aye  
                                  Ken Michaels - Aye

4 ayes 0 nays 1 abstain – Mr. Brunn   **MOTION CARRIED**

The telephone connection with Mr. Brunn was lost and restored.

Motion by President Michaels to revise District Manager's employment contract with the same terms and conditions and provisions as last year's contract except for renewing the contract for four years along with defined salary increments.

2<sup>nd</sup> Mrs. Ryberg

Roll Call Vote:           Dena Battaglia - Nay  
                                  Timothy Brunn - Abstain  
                                  John Ragland - Aye  
                                  Lydia Ryberg - Aye  
                                  Ken Michaels - Aye

3 ayes 1 nay 1 abstain – Mr. Brunn   **MOTION CARRIED**

**ADJOURNMENT**

Motion by Mrs. Ryberg to adjourn at 9:32 p.m.

2<sup>nd</sup> President Michaels

4 ayes 0 nays 1 abstain – Mr. Brunn   **MOTION CARRIED**



December 11, 2019

To: NMWRD Board of Trustees

From: Mohammed Haque, District Manager

Subject: Manager's Report

*All update items are in italics.*

### **Woodmans [Force Main + Gravity Sewer Extension + Lift Station]**

We continue to work with Lakemoor to ensure that startup was completed in time of the store opening. The District allowed temporary bypass pumping and operations without the permanent generator to avoid delays and to accommodate the Village's schedule. Since that time, the generator has been installed and tested. District board has approved the project improvements, contingent on punchlist item completion. *The final inspection is being scheduled this week. I expect that after that, we will accept the improvements per past board direction and action.*

### **Circle K**

Waiting on retained personnel fee. No contact has been made with the District for several months. We have reached out to inspector at Island Lake. *No update.*

### **Skipper Bud's**

Skipper Bud's request to connect to NMWRD did not garner the full support of all five parties. LRSD has requested that the matter be delayed until their dissolution/transfer to Lake County. *No update.*

### **Dunkin Donuts – Lakemoor**

The development has paid the permit fees. We are waiting for a recorded covenant / ordinance from the Village of Lakemoor. *The Village board has approved the covenant, and we have received it. This will no longer appear on the DM Report.*

### **Lift Station Controls**

The Hale control panel has been delivered and because of the 50<sup>th</sup> Anniversary, we have decided to use it at the Treatment Plant Lift Station. A new one will be ordered for Hale, as well as panels at additional locations in the next few months utilizing contributions from state legislature capital bill funding. Due to ongoing trouble with the Grundfos Remote Management system, we are looking into alternate alarming system for the new conversions. *Work will resume on this now that the Open House is complete. Quotes have been requested for control panel installation.*

### **Floodproofing of Control Building and Generator Modifications**

Since we have had considerable savings on this project, we are replacing the weathered and rusting doors on this building with extruded aluminum doors as well as the entire mansard to have a uniform look to the building. We are also having some landscaping work done around the building and replacing several linear



feet of damaged sidewalks and stoops. Some of the concrete work is necessary to allow for the flood barriers to work properly. *The coping is being installed and final touches are being completed. Floodproofing angles and supports have been ordered from Breur Metal. Coping and other architectural metals have been received and are currently being installed by District staff. Some metal trim installation work will be contracted out to ensure it is finished by end of the month.*

### **Phosphorus Removal**

Currently on hold due to other work and preparation for the 50<sup>th</sup> Anniversary, however, we know what we need to do for a long-term arrangement and expect to complete this project by spring. *We are working on ordering the permanent Hyper Ion storage tanks and getting it installed by a mechanical contractor.*

### **Influent Flowmeter and Raw Pump #4**

This is complete and working quite well. I anticipate a big reduction in our energy use is a result of the new pump. The only item remaining is the painting of the new piping. I anticipate that will be completed in the next 2 weeks. *Painter is scheduled to complete piping painting in the near future. Swapping out of Pump #1 due to issues with the existing pump has been scheduled.*

### **SCADA(Supervisory Control and Data Acquisition) and Telemetry**

Fiber optics backbone has been installed and most hardware components have been purchased. *A purchase order has been issued for installation and termination of fiber optics.*

### **Plant Process Automation – Phase 1**

Three control panels have been delivered and are currently awaiting installation in the Control Building, Oxidation Ditch and Chemical Building. *We are waiting on quotes for the installation. We expect to have the panels installed over the winter.*

### **Headworks / Screening Issues**

The influent grinder was installed and continues to work well after it was fixed under warranty. There is a need to change the motor stem height. In addition, some alignment issues will require us to move it slightly in conjunction with the installation of the new replacement screen and conveyor. I am waiting on Trotter & Associates to prepare some drawings for the installation of the new Headworks MS1 bar screen, conveyor, new gates and the repositioning of the grinder. *Submittal comments received with a request for change order on the bar screen in the amount of \$5,000. Currently on the agenda for approval. Once finalized, the screen will be put into production and scheduled for delivery. Also still waiting on plans from Trotter & Associates.*

### **Non-Potable Water Improvements**

Self-cleaning filter/strainer has been started up and is working quite well. In the process we have discovered that of the three existing NPW pumps, one does not work properly and another is showing





extreme age and corrosion. *Due to a failure of a second pump, an emergency repair was completed. A new pump skid has been selected and has been ordered from MP Pumps.*

### **Maintenance Garage**

CE Ltd has started the work for stormwater permitting by McHenry County. I am working with ADG Design on the architectural drawings and will submit to the board in late fall. *A revised set of drawings has been received and is currently pending review.*

### **106 E. State, Island Lake (Dentists Office) Expansion**

The property owner is in the process of televising the service tie-in. A follow-up will be done with the Village of Island Lake's new building inspector to ensure that we have better coordination going forward. *We have requested videos of the inspection, but only been provided photos. I have informed the Island Lake inspector that the photos are not sufficient.*

### **Capital Bill**

I have been working with the staff at Representative Weber's office to get them information on the member initiative funding for Lakemoor Lift Station improvements. I continue to work with Mike Tryon to identify other sources of funding for Darrell Road Interceptor. *Plans for the lift station work in Lakemoor have been finalized and will be shared with Representative Tom Weber. I am working with Mike Tryon to speak to Senator Craig Wilcox regarding funding efforts.*

### **Personnel**

*We are still weighing what to do with the part-time office clerk position and the operator in training position that were previously discussed and put on hold. Recent operator concerns are necessitating the need for the Operator-In-Training position and we will advertise for it in the near future.*

### **User Rate Study**

Now that the picture regarding the capital bill is more certain, the rate study should be completed soon and we will incorporate information from a new capital improvement plan and anticipated construction for Darrell Road and it's related timing. We will also discuss the special connection fee concept that we had previously briefly looked at a few months back. *Eric Rothstein has finalized the rate study and will present at the January meeting.*





### **Ordinance Review**

Currently the District has Sewer rates, usage, construction details and specifications in seven (7) different documents. There is some duplication (and related confusion) as a result. I am currently working with our attorney Vic Filippini to streamline this into 2-3 ordinances, which is the standard for agencies such as ours. This will make things easier for staff and for the public. *Awaiting receipt of draft from Vic Filippini.*

### **Sludge Bed Cover and Conveyor**

Greenfield Contractors was awarded the bid for the Sludge bed covers. We are currently in the process of submittal review and finalization. *Once submittal is approved, we expect that it will be installed in 60-90 days. We have moved the sludge conveyor to directly discharge to the sludge bed to the east of the Dewatering building and are currently setting up the conveyor to dump into the bed. Once the system works and the covers are installed, we expect to order a full stainless conveyor with cleated belts that should function well long-term.*

### **North Clarifier Issue**

*A lot of time in November has been spent on this issue. We are waiting on insurance approval on the claim. In the meantime, we have gotten quotes for the installation of monitoring wells, soil borings, dewatering and dome removal. We are also starting the process of getting companies familiar with the scope of concrete removal and replacement that may be needed. To date, SRN Testing has been contracted to install 4 monitoring wells and take 3 soil borings for a total cost of \$12,300. Future steps are as follows:*

- *Finalize Dewatering Plan and Quotes*
- *Televis the line from Oxidation Ditch to Clarifier for Damage*
- *Obtain soil borings*
- *Dewater and survey floor of clarifier after dewatering*
- *Obtain Insurance Next Steps*
- *Determine extent of repairs needed*
- *Research and start process of getting quotes/bids.*

### **Debt Refinance**

*We successfully closed the debt refunding with JP Morgan Chase and our new interest rate is 2.02%, which even our rate study consultant was extremely impressed with.*

## Northern Moraine WRD - Septage Receiving Tracking

Month	Loads	Gallons	Revenue	YTD
May-19	9	21000	\$1,260.00	\$1,260.00
Jun-19	10	22000	\$1,320.00	\$2,580.00
Jul-19	5	11850	\$711.00	\$3,291.00
Aug-19	9	22250	\$1,335.00	\$4,626.00
Sep-19	5	12950	\$777.00	\$5,403.00
Oct-19	16	38400	\$2,304.00	\$7,707.00
Nov-19	14	40100	\$2,406.00	\$10,113.00
Dec-19				
Jan-20				
Feb-20				
Mar-20				
Apr-20				
May-20				



	Date	Company Name	Gallons	Cost/Gal	Revenue	Time	Type
May	5/1/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	11:15AM	Septic/Multiflo
	5/3/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	10:00AM	Septic/Multiflo
	5/6/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:15AM	Septic/Holding Tank
	5/9/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	12:35PM	Septic
	5/10/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	9:35AM	Septic/Lift Station
	5/10/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	3:10PM	Septic/Jet-Rodding
	5/22/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:40AM	Septic
	5/24/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	11:15AM	Holding Tank
	5/30/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	10:00AM	Septic
June	6/3/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:45AM	Septic/Jet-Rodding
	6/5/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:20AM	Septic
	6/5/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	11:15AM	Septic
	6/10/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	9:55AM	Septic
	6/12/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	8:15AM	Septic
	6/14/2019	Comm. Sewer & Septic	2500	\$0.06	\$150.00	7:55AM	Septic/Jet-Rodding/Aeration Tank
	6/17/2019	Comm. Sewer & Septic	1000	\$0.06	\$60.00	1:40PM	Septic
	6/24/2019	Comm. Sewer & Septic	2750	\$0.06	\$165.00	10:55AM	-
	6/25/2019	Comm. Sewer & Septic	1000	\$0.06	\$60.00	-	-
July	6/27/2019	Comm. Sewer & Septic	2250	\$0.06	\$135.00	-	-
	7/8/2019	Comm. Sewer & Septic	2850	\$0.06	\$171.00	-	-
	7/9/2019	Comm. Sewer & Septic	2250	\$0.06	\$135.00	-	-
	7/11/2019	Comm. Sewer & Septic	1200	\$0.06	\$72.00	-	-
	7/17/2019	Comm. Sewer & Septic	2550	\$0.06	\$153.00	-	-
August	7/18/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	-	-
	8/12/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	-	Septic
	8/14/2019	Comm. Sewer & Septic	3500	\$0.06	\$210.00	10:05AM	Septic
	8/14/2019	Comm. Sewer & Septic	2100	\$0.06	\$126.00	2:05PM	Septic
	8/16/2019	Comm. Sewer & Septic	2750	\$0.06	\$165.00	1:00PM	Septic
	8/19/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:40AM	Septic
	8/21/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	2:10PM	Septic
	8/23/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	-	Septic
	8/26/2019	Comm. Sewer & Septic	1950	\$0.06	\$117.00	8:30AM	Septic
September	8/29/2019	Comm. Sewer & Septic	1950	\$0.06	\$117.00	8:10AM	Septic
	9/3/2019	Comm. Sewer & Septic	2200	\$0.06	\$132.00	10:00AM	Septic
	9/4/2019	Comm. Sewer & Septic	3500	\$0.06	\$210.00	2:45PM	Septic
	9/5/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	11:05AM	Septic
	9/6/2019	Comm. Sewer & Septic	2500	\$0.06	\$150.00	1:55PM	Septic
October	9/22/2019	Comm. Sewer & Septic	3250	\$0.06	\$195.00	9:00AM	Septic
	10/7/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	10:05AM	Septic
	10/7/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	2:55PM	Septic
	10/9/2019	Comm. Sewer & Septic	3100	\$0.06	\$186.00	2:45PM	Septic
	10/11/2019	Comm. Sewer & Septic	3100	\$0.06	\$186.00	2:30PM	Septic
	10/17/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:05AM	Septic
	10/17/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	3:10PM	Septic
	10/25/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	2:00PM	Septic
	10/25/2019	Weidner' Septic Service	3100	\$0.06	\$186.00	4:30PM	Septic
	10/28/2019	Weidner' Septic Service	3500	\$0.06	\$210.00	AM	Septic
	10/29/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	1:35PM	Septic
November	10/29/2019	Weidner' Septic Service	3300	\$0.06	\$198.00	9:30AM	Septic
	10/31/2019	Weidner' Septic Service	3400	\$0.06	\$204.00	9:45AM	Septic
	10/31/2019	Weidner' Septic Service	2900	\$0.06	\$174.00	12:05PM	Septic
	11/6/2019	Weidner' Septic Service	2850	\$0.06	\$171.00	12:45PM	Septic
	11/7/2019	Weidner' Septic Service	3000	\$0.06	\$180.00	9:10AM	Septic
	11/7/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	12:20PM	Septic
	11/7/2019	Weidner' Septic Service	2500	\$0.06	\$150.00	2:25PM	Septic
	11/8/2019	Weidner' Septic Service	3200	\$0.06	\$192.00	-	Septic
	11/8/2019	Weidner' Septic Service	3000	\$0.06	\$180.00	12:50PM	Septic
	11/15/2019	Weidner' Septic Service	2500	\$0.06	\$150.00	9:00AM	Septic
	11/19/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	11:40AM	Septic
	11/21/2019	Weidner' Septic Service	2500	\$0.06	\$150.00	3:05PM	Septic
	11/22/2019	Weidner' Septic Service	3000	\$0.06	\$180.00	12:05PM	Septic
	11/22/2019	Weidner' Septic Service	2750	\$0.06	\$165.00	1:25PM	Septic
	11/25/2019	Weidner' Septic Service	2800	\$0.06	\$168.00	10:00AM	Septic
	11/25/2019	Weidner' Septic Service	3000	\$0.06	\$180.00	2:05PM	Septic
	11/27/2019	Weidner' Septic Service	3000	\$0.06	\$180.00	11:15AM	Septic

# **NMWRD Sewer Connection Permit Tracking**

FY 2019-20



Permit Date	Address	City	Re-Connect, Repair or New Connection	Permit Owner	Permit No.	Amount Paid
2/4/2019	3524 Hale Lane	IL	Repair	Speciale	1544-A	\$ -
4/29/2019	31002 Savannah Drive	LM	New Connection	William Ryan Homes	5635	\$ 7,674.00
5/22/2019	1245 Noble Drive	PB	New Connection	Deer Grove II Partners	5637	\$ 7,674.00
6/3/2019	204 Eastwood Avenue	PB	Re-Connect	Dariusz Urban	5637	\$ 100.00
6/11/2019	1990 Fox Ridge Drive	IL	New Connection	William Ryan Homes	5299-A	\$ 7,674.00
6/17/2019	316 Richard Court	IL	Repair	Manuel Sosa	5638	\$ -
6/19/2019	106 E. State Road	IL	New Connection	Kaya Properties	214-A	\$ 11,757.67
8/1/2019	205 Rand Road	LM	New Connection	FNC RE Entity - Dunkin Donuts	5639	\$ 32,565.00
11/5/2019	1241 Noble Drive	PB	New Connection	Jarvis	5640	\$ 7,674.00
11/5/2019	1237 Noble Drive	PB	New Connection	Jarvis	5641	\$ 7,674.00
11/7/2019	804 W Sheridan Road	LM	Repair	Pearson	214-A	\$ -
11/13/2019	316 Richard Court	IL	Repair	Manuel Sosa	214-B	\$ -
11/27/2019	2170 Walnut Glen Blvd	IL	New Connection	William Ryan Homes	5642	\$ 7,674.00

**2019 Total:** \$ 67,444.67



## NMWRD November 2019 Operations Report

As of December 5th, 2019

Prepared by: Luke Markko, Superintendent

**North Secondary Clarifier** - District Staff are currently evaluating plans to install dewatering and monitoring wells in the vicinity of the clarifier to bring the surrounding groundwater level down. Several estimates have been provided for drilling of the wells, as well as for pumps to be installed in the dewatering well. Options are being evaluated for either a full or partial removal of the fiberglass dome covering the clarifier. This will be dictated by the size of any machinery that may need to move in and out of the clarifier, as well as any internal structures that may need to be temporarily moved. Staff have also been in touch with contractors that can provide televising of the 24" pipe that normally carries flow from the Oxidation Ditch to the North Clarifier so that it can be inspected for damage.

**Sludge Conveyance** – The recently purchased belt conveyor was recently dropped off at a machine shop so that it can be retrofitted with an electric motor. Upon purchase, the conveyor was equipped with a hydraulic motor that had been energized by connecting hydraulic hoses to a tractor PTO. Equipping the conveyor with an electric motor will allow for integration into the Centrifuge control panel. A Variable Frequency Drive (VFD) is being installed to control the speed of the belt conveyor. The retrofit is expected to be completed the week of 12/9. The existing sections of original conveyor have been protected against the cold weather with heat trace and an insulating wrap.



Heat trace cable and an insulating wrap to protect against freezing.

### Control Building Upgrades

- **Coping** – As part of the exterior improvements to the Control Building, new coping is being installed on top of the parapet wall. The coping protects against water and ice infiltrating the roof.
- **Floodproofing** – New thresholds were installed in preparation for floodproofing hardware installation. Fiberglass stoplogs have been purchased to provide a physical barrier at each exterior door against any floodwaters. Metal brackets have been ordered to provide a mounting surface for the stoplogs. Anchor points for the metal brackets will be concealed beneath the thresholds to maintain pleasing aesthetics.





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New coping installed on top of perimeter wall.



New thresholds installed at exterior doors.

**Headworks Winterization** – Insulating rubber mats were purchased and installed on the new metal grating over the headworks. This will guard against freezing in the wet well. Typically, wastewater entering the facility is between 50 and 60 degrees Fahrenheit. The rubber mats will allow retention of this heat and help keep critical equipment warm in the winter months.

**UTV Purchase** – A preowned John Deer High Performance HPX 4x4 UTV was purchased at a cost of \$5,995.00. The unit came with 1,000 hrs. of use on it and appears to be in very good shape. Considering the District had budgeted \$26,000 for a UTV to replace the aging 4x6 John Deer Gator, this has provided some significant savings compared to what the anticipated expense would have been. Basic models without a cab were being quoted at \$18,000 - \$22,000.



What a deal!

**Rawson Bridge Lift Station** – A guide rail that facilitates lowering a pump into the proper orientation in the wet well came loose and tipped out of position. Kresmery Construction, a contractor familiar with lift station work, was contacted to assist with repairing the rail. As repairs began, it became



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apparent that there are more items that need to be addressed at the Rawson Bridge Lift Station. Flow was seeping backwards from one pump to the other, indicating that both check valves that prevent this sort of backflow are faulty. Upon pulling the pumps, it was apparent that both need new sealing flanges that facilitate a tight fit to the discharge piping. Most all of the lift station equipment at Rawson Bridge dates back to 1998. Many of these mechanical components are reaching their end of serviceable life. At the end of the day, the guide rail was fixed, but now replacement parts are being priced and sourced. Quotes to install the replacement components are in the works.

**Non-Potable Water Pump Skid** – The non-potable water (NPW) pump has been scheduled to be replaced this budget year. The NPW is treated effluent that is pressurized and redistributed throughout the wastewater treatment plant. The NPW is utilized at the headworks by the screeners to facilitate automatic cleaning, in the clarifiers to feed sprayers that control surface scum, and to a number of yard hydrants to provide water for cleaning tanks and for filling the Vector. The replacement project has been fast-tracked due to a pump failure. The pump was replaced to keep the NPW system operational, but the pump skid is in need of attention. To clarify, a pump skid consists of a set of pumps mounted to a plate with intake and discharge piping branching into separate manifolds. Typically, there is a control panel for the pumps mounted to the skid as well. Various quotes were considered, and a replacement skid has been selected.



20 years and exposure to highly chlorinated water have taken their toll.

**Sludge Hauling** - Sludge hauling occurred mid-November. This is consistent with past practices of having sludge hauled in the spring and fall. The District's contracted sludge hauler, Dahm Enterprises, loads the sludge into semi-trailers and hauls it to regional farm fields where it is spread over the ground, and then tilled into the soil. It provides both Nitrogen and Phosphorous as fertilizer aids.

**Sanitary Sewer Overflow** – On Thanksgiving morning, the District was contacted by Lakemoor Public Works. A resident at 306 Sheridan in Lakemoor reported that sewage was coming out of the service line cleanout in their yard. On-call staff responded and found the cause to be a power issue at Lift Station #3 located on Venice Rd. The preceding day brought high winds and several power outages in the District service area, including Lift Station #3. This station is equipped with a backup generator and automatic transfer switch (ATS) that switches power from ComEd to Generator in the event of a power loss. In this instance, the ATS became stuck in between both positions and disabled power to the station. The ATS was manually operated, and power was restored. The ATS and Generator have been tested with increased frequency to ensure that this is an isolated incident. As regulations require, the Illinois Environmental Protection was notified of the overflow and a report will be filed





with them. Approximately 40 gallons of water overflowed and was absorbed into the soil in this instance.

**Mutual Aid** – On 12/2 & 12/3 assistance was provided to Wauconda Public Works while their Vector was out of service. On 12/2, the District assisted with a sanitary sewer backup, and on 12/3 assisted with hydro-excavating a water main break.

**Fiber Optic Cable** – The District is close to selecting a contractor to pull fiber optic cable and terminate the ends at locations where SCADA panels are going to be installed. In preparation for the SCADA system, a conduit loop has been installed throughout the treatment plant to provide a communications network for the SCADA system as panels are installed and brought online. The end result will allow all of the information collected at each panel in the facility to be routed back to a server where the data can then be accessed locally or from a remote location. Fiber optic cable was selected as a high-speed data transmitter.

**Waste Activated Sludge Pipe Insulation** - Plans are underway to install heat trace cable, insulation, and a protective fiberglass jacket over exposed piping that conveys Waste Activated Sludge (WAS) to the digesters from the clarifiers. In the past, this piping has been subject to freezing. There was some old heat trace and insulation installed, but it has seen better days. The preexisting materials have been removed, and the piping is being prepared for the new hardware.



Existing insulation and heat trace.



Piping being prepped for new freeze protection.

**Woodmans' Lift Station Panel** – See Engineers Report.

**Lakemoor Lift Stations** – Nothing new to report at this time. District staff are currently working with Trotter and Associates along with Automation Systems and Design to develop a plan to upgrade lift stations in Lakemoor with the funding that the District received through the state Capital Bill.







## **NMWRD Engineering Report**

Date: December 5<sup>th</sup>, 2019

Prepared by: Joe Lapastora, Staff Engineer

### **Woodman's Lift Station and Sanitary Sewer Additions:**

*[Project Update]* – R.A. Mancini completed the mainline construction and testing in July and shifted their focus to the remaining items associated with the lift station in late August. Mary Schorr informed the District on December 2<sup>nd</sup> that Grundfos reps were on site to address a few issues related to the pumps in the Woodman's Lift Station. After some investigation, Grundfos discovered damage on the connector for Pump 2 as well as cable damage for Pump 1. Grundfos made the repairs and both pumps are now in working order. The District should see an invite for an inspection in early December. The District is doing its due diligence to ensure that the lift station and all associated components are in working condition before acceptance. Note that the access road to the lift station has not been paved but aggregate has been laid to allow for winter access.

### **Right turn lane at the intersection of Route 176 and Roberts:**

*[Project Update]* – This project is nearing completion as the road has officially been paved. I expect that the project will not be completed until after the winter as electrical work still needs to be wrapped up.

### **NMWRD Plant Projects:**

*[Project Update]* – The floodproofing hardware that will complete the marriage of the panels to the control building have been ordered through Breuer Metals and we expect to have the hardware by the end of December. Other plant project updates include; control building coping is installed, sludge conveyor has been reconfigured so that the sludge is now leaving the dewatering building towards the permanent resting place in the Southwest drying bed, two (2) actuators were installed on the Oxidation Ditch and RAS station, and various painting projects have been completed. There were several other plant projects, both new and continued projects, during the month of November. In preparation for the Sludge Drying Bed Cover bid, prep work on the Southwestern most drying beds has been completed while some block foundation blocks have been positioned for the sludge drying bed cover. The endwall design for the Greenfield sludge drying bed cover has been sent to Craig White with Greenfield. Additionally, the District is still waiting for a quote from Fisher Bros for the remaining foundation blocks. Other plant projects completed in the month of November include; obtained quotes for soil borings, monitoring wells and dewatering wells while we are also actively searching for quotes for dome removal of the North Clarifier.





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### **NMWRD SCADA & Telemetry:**

*[Project Update]* – Completed aspects of the SCADA & Telemetry project include; underground conduit with tracer wire installed at the plant, most of the hardware has been ordered for SCADA system (recommended by ASD), one (1) actuator installed on a RAS line, one (1) actuator installed on the Oxidation Ditch, fiber cable ordered, and new concrete pads poured. Allan-ICS was awarded the bid regarding the SCADA Control Panels. The three (3) panels include; Control Building C.P., Oxidation Ditch C.P. and Chemical Building C.P. The first panel (Oxidation Ditch Panel) was delivered during the last week of August while the second and third panels (Control Building & Chemical Building Panels) were delivered in October. The District is seeking quotes for pulling and terminating fiber and we expect that work to be performed in December.

### **Septage Receiving:**

*[Project Update]* – The District has been exploring the option of septage receiving at the treatment plant and intends to move forward with a permanent septage receiving station. Preliminary designs have been examined and District staff are close to finalizing plans. A new manhole was placed near the Southeast corner of the drying beds in anticipation for septage receiving. The new manhole is now connected to the headworks wet well but is currently not in use. In preparation for the next phase of septage receiving, the District is searching for revised quotes for new gate hardware that will allow haulers to enter only if they receive a District issued RFID card that will both track proximity of haulers entering the treatment plant and allows for complete control on who does and does not have access to the plant. This program will provide the District with another revenue stream with a short-term payback period.

### **Deer Grove Sanitary Sewer Extension:**

*[Project Update]* – The District has officially entered the maintenance period of the project for the next three (3) years.

### **Savannah's of Lakemoor Residential Subdivision:**

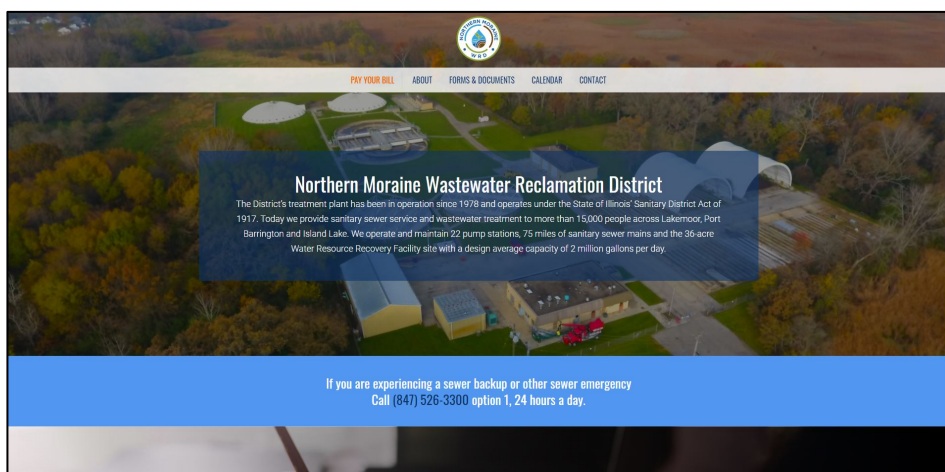
*[Project Update]* – The District Board of Trustees voted to conditionally approve the sewer extension for Savannah's of Lakemoor at the June 11<sup>th</sup> Board Meeting. As of December 5<sup>th</sup>, William Ryan Homes has yet to exchange bonds, so the District will be issuing John Rushin of William Ryan Homes a reminder via certified mail. The District has officially entered the maintenance period of the project for the next three (3) years.





**In addition to the work relating to these projects, the following engineering related work is also being performed;**

- The District successfully installed LED fixtures in the main office of the Control Building. The District has ordered enough bulbs to exchange all bulbs types for LEDs in the Control Building, Maintenance Garage and Dewatering Building. Lighting upgrades are tentatively on hold.
- Idea Marketing is nearing completion with the new NMWRD website. The District has entered the final phase and a launch has been scheduled for early December.



Screenshot from the new NMWRD website.

- District Superintendent, Luke Markko, and District Engineer, Joe Lapastora, attended the CSWEA Biosolids, Energy and Environmental Recovery (B.E.E.R.) seminar on November 19<sup>th</sup> in Glen Ellyn, IL. The District will benefit from the topics covered at the seminar, as Luke and Joe came back with plenty of ideas.
- While in Glen Ellyn, Luke and Joe picked up the newly acquired Gator. The District has been in the market for a new gator for plant operations and we finally found the right one. The new gator has a fully enclosed cab that will help our operators in the winter months.
- As we prepare for the (hopefully, not so brutal) winter season, we will be re-insulating some pipes that are exposed near the digesters. Each digester has an exposed portion of a WAS pipe that will be re-insulated in an aesthetically pleasing manner. We received a great quote from Nelson Insulation out of Lake Zurich and the project has been tentatively placed on hold to perform some prep work involving running power to the pipes so that there are no exposed cables. We expect Nelson Insulation to be out in early December to complete the insulation process.





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- The District purchased a new Auto Level to do some in-house surveying. This equipment can be used in various applications and will give us the ability to review the clarifier repairs and monitoring of water levels so that we are not reliant on outside surveyors for spot checking elevations.
- I have gathered geospatial data relating to all of our recent major projects (Dowell Roundabout, Deer Grove, Savannahs and Woodmans) as the District prepares to update its atlas and expect to get all the new infrastructure into our GIS by the end of December.



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## DELINQUENT ACCOUNTS RECAP FOR November 2019

Revised: 12/04/19 by Debi Martin, District Clerk

### \$200-\$300

#### 61 Active Accounts

Island Lake – 46 customers  
46 Water Shut Off Notices  
Lakemoor – 10 customers  
5 Water Shut Off Notices, 2 Final Notices of Delinquency, 3 Sewer Disconnection Notices  
Port Barrington – 5 customers  
5 Final Notices of Delinquency

### \$301-500

#### 13 Active Accounts

Island Lake – 1 customer  
1 Final Notice of Delinquency  
Lakemoor – 7 customers  
7 Sewer Disconnection Notices  
Port Barrington – 5 customers  
5 Sewer Disconnection Notices

### \$501-\$1000

#### 15 Active Accounts

Island Lake – 5 customers  
5 liens – 4 with water off, 1 to be disconnected from sewer  
Lakemoor – 7 customers  
7 liens – 5 to be disconnected, 1 Final Notice of Delinquency, 1 sold with no notification  
Port Barrington – 3 customers  
3 liens – 2 to be disconnected, with 1 now bank owned

### \$1001 and up

#### 9 Active Accounts

Island Lake – 4 customers  
4 liens – 3 with water off, 1 to be disconnected from sewer  
Lakemoor – 5 customers  
5 liens – 3 sold for delinquent taxes; with 1 to be demolished, 2 to be disconnected

Delinquent Accounts total (active and inactive customers): **\$55,883.90** (\$9,613.65 inactive accts)

November 2018's report: **\$51,574.25**

November 2017's report: **\$49,447.42**

#### MONTHLY ACTIVITY:

4835	Monthly Bills mailed on 12/02/19 (for November service)	151	Notices of Delinquency mailed on 12/02/19
354	Bills <u>not</u> mailed – customers prepaid on their accounts	26	Real Estate closings for November 2019
51	Water Shut Off Notices mailed on 12/02/19	3	Liens filed in November
9	Final Notices of Delinquency mailed on 12/02/19	2	Liens released in November
15	Sewer Disconnection Notices mailed on 12/02/19		



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## **AGENDA REGULAR MEETING**

**7:30 P.M. – December 11, 2019**

- 1. CALL TO ORDER & ROLL CALL**
- 2. PLEDGE OF ALLEGIANCE**
- 3. PRESENTATION & APPROVAL OF MINUTES**
  - a. Regular Meeting Minutes – November 12, 2019
- 4. TREASURER'S REPORT**
- 5. PUBLIC COMMENTS**
- 6. MANAGER'S REPORT**
  - a. Operations Report
  - b. Engineering Report
  - c. Delinquent Accounts Report
- 7. TRUSTEE REPORTS**
- 8. LEGAL BUSINESS**
- 9. OLD BUSINESS**
  - a. Semi Annual Review of Strategic Plan
- 10. NEW BUSINESS**
  - a. Approval of 2020 NMWRD Board Meeting Dates
  - b. Approval of 2020 Holiday Schedule
  - c. Approve Ordinance 19-09 Abating Future Taxes Levied on the 2010 General Obligation Bonds
  - d. Approve Change Order #1 for the Influent Bar Screen
  - e. Approve Quickbooks Accounting Services with Lauterbach & Amen, LLP
  - f. Approve Services Agreement for Clarifier Repair
  - g. Review Costs for Service to Northeast Area
- 11. MISCELLANEOUS CORRESPONDENCE**
  - a. MCCG Holiday Dinner – Wednesday, December 11, 2019 – McHenry Country Club, McHenry, Illinois
- 12. APPROVAL OF BILLS**
- 13. OTHER BUSINESS**
  - a. Executive Session – Personnel

Posted to [www.nmwrld.org](http://www.nmwrld.org) December 6, 2019



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