VILLAGE TRUSTEES MEETING NOTICE & AGENDA

Date: Monday, August 14, 2023
Time 6:00 p.m.

Johnson Municipal Building upstairs located at 293 Lower Main West, Johnson VT

Agenda: Please note; times are approximate.
6:00 p.m. Call to order
REVIEW OF AGENDA AND ANY ADJUSTMENTS, CHANGES AND ADDITIONS
6:03 p.m. Review and Approve Minutes of Trustee Meetings
Joint Meeting June 14, 2023, Special Meeting June 20, 2023, Special Meeting July 10, 2023, Emergency Meeting July 19, 2023.
6:05 p.m. Treasurer's Report: Review and approve bills and warrants.
Brief on bridge sewer crossing spending to date.
Budget Status Report and any Action Items. Signatures needed.
6:15 p.m. Fire Department Report and any action items
6:30 p.m. Water/Wastewater Report and action items
6:45 p.m. Electric/General Report and any action items
7:00 p.m. Village Manager's Report and any action items
7:15 p.m. Members of the Public
7:25 p.m. Any other discussion or action items

1. (D) Rob Moore from Lamoille County Planning Commission (LCPC) to update progress on the W&L Garage Project and Sidewalk extension Scoping Study, any other LCPC items of relevance. (15 Min)
2. (D) Donation Center update – Lynda Hill. (10 min)
3. (D/A) Discuss Emergency Management Coordinator (EMC) positions and appoint members to be nominated to the EMC 1 & EMC 2 positions. (15 min)
4. (D/A) Discuss/act on allowing the Town to negotiate with contractors and handle finances independently for repairs of the Municipal bld once both boards have decided how to configure the bld to mitigate flood impacts, agreeing to evenly split the uncovered costs of the muni bld and cold storage bld (Village lead) once all is finished and insurance/FEMA reimbursed.
5. (D) JVFD repair status update

Other Business
Adjourn

Johnson Fire Department Report

May 25 – June 29, 2023

Calls:

JFD responded to 7 calls.

1 call occurred during the daytime (6 am – 6 pm)

6 calls occurred during the nighttime (6 pm – 6 am)

The average duration was: 43 minutes

Nature:

Those calls were: 1 – vehicle fire, 2 – automatic alarms, 1 – vehicle crash, 2 – wilderness rescue, and 1 – water rescue

Staff:

The average number of firefighters that responded was: 13

Total hours of service was: 65

Other:

We'd like thank Dylan Morrill for allowing access into his property for training. An unused structure, which will eventually be removed, provided excellent opportunities for forcible entry, mayday & RIT, and water supply/apparatus pump training. We have more training evolutions planned for August.

Respectfully submitted, Arjay West, Fire Chief

Johnson Fire Department Report

June 30 – July 27, 2023

Calls:

JFD responded to 75 calls.

53 calls occurred during the daytime (6 am – 6 pm)

22 calls occurred during the nighttime (6 pm – 6 am)

The average duration was: n/a due to flood events

Nature:

Those calls were: 1 – structure fire, 2 – smoke conditions, 15 – automatic alarms, 3 – medical assist, 3 – vehicle crashes, 29 – water rescue, and 22 – other

Staff:

The average number of firefighters that responded was: 13 (note: may not be accurate due to flood events)

Total hours of service was: 806

Other:

Tanker 1 had a brake can failure. It has been repaired by Collinsville Repair and is back in service.

A flood summary is being provided as a separate document.

Respectfully submitted, Arjay West, Fire Chief

Johnson Fire Department

July 2023 Flood Report

as of 8/09/2023

Summary:

To date we've logged 56 calls/recorded incidents, directly related to the July flood. The day of the event, July 11, 2023, we were on duty for an 18 hour period. We had 43 calls/incidents during that period, and 13 calls/incidents in the days to follow.

Details & Specifics:

The 43 calls during the flood event were: 28 water rescue/evacuations, 5 hazardous material/propane, 3 medical assists, 2 welfare checks, and 5 other.

19 of those calls were handled before we evacuate the station, and 24 calls were handled after we evacuated the building.

Evacuations were accomplished mostly through boat & kayak deployment of water rescue staff. They were also supported, and in several instances accomplish by coordination with Town Highway equipment and crew. A typical evacuation removed 2 and up to 8 occupants. Many evacuations included animals. The total number of people and animals removed is uncertain, as record keeping became a challenge after leaving the station. Many evacuees took advantage of the Emergency Shelter, while others used their own arrangements/contacts once the evacuation was completed.

We did make a request for a mutual aid response from Stowe Hazardous Terrain Water Rescue assets, but they were not able to assemble/respond.

Preliminary Expense calculations:

All on-hand inventories of food and supplies have been used. Out of pocket expenses/receipts (mostly JFD Auxiliary) = $ 245.62

Labor expense to date = $ 8,200.00 ($ 7,600 payroll, $ 600 withholding)

Flood Inventory and Equipment Damage to date = $ 53,300. This is content inventory and does not include building damage/restoration.

These preliminary expense totals are expecting to increase before recovery is completed.

Equipment & Apparatus maintenance:

There is equipment service and apparatus maintenance which is not included in the above inventory that is still pending. They include vehicle services and fluid changes from operating in flood waters, on-board generator service/replace, rescue boat motor service, breathing air compressor & cascade service/replace, and final inspection/repairs to other small tools & equipment.

The Village of Johnson WWTF, WTF
Monthly Chief Operator's Report
August 10, 2023

1. Operational Status of Wastewater Plant and Callouts

- E-DMR and Wr-43 were submitted to the state
- We had a bad float on the lead pump at the E Johnson pump station. We replaced it and ordered a spare to have on hand.
- Replaced the rubber squeegees on the last of the belt press wash boxes.
- Tested the emergency generator under load in preparation for a scheduled power outage and it did not transfer power. Called Brookfield Services and they came out and found a faulty Exciter and wiring. Had to order the part. That meant we had to bring in a portable emergency generator. They replaced the part and a breaker that was faulty, and it transfers power and operates properly now. We feel the part failed due to a negligent repair previously by one of their technicians. Once we get a final invoice we will be discussing who should be paying for the rental of the generator and the Excitor repair.
- Woody sales installed the 2 heat pumps in the office and lab of the wastewater plant as part of the Efficiency VT grant. Both are operating great and has made a huge difference in the cooling of the facility. Goulds has ordered all of the lighting fixtures and will install them and the motion sensors when they come in.
- Elijah from Vermont Rural Water Association used our lab to show wastewater apprentices the microbiology of an SBR.
- We calibrated the D.O. Sensors in the SBR tanks
- Qual Cal calibrated and certified all of our lab equipment.
- We had a leak in an airline on our last press run. Did a quick repair to get us through. We will be replacing the line before our next run.
- We received our yearly load of 2000 gallons of liquid alum that we use for Phosphorus removal. We were able to split a load with Morrisville so we could get a price break at 3000 gallons. Our tank can only hold 2000 gallons. This saved the village $900. It is unknown at this point whether any of the alum is salvageable.
- Flooding highlights (Lowlights):

  As flood water rose we secured the facility and I left in knee deep water Monday night. Wednesday morning we walked into complete destruction of the facility. We lost everything. We immediately started bypass pumping to relieve the backup of sewer in the lines. We pumped down the headworks and influent wet well so we could start primary screening of rags and grit removal. This was done with an operator and pump from Burlington Watewater facilty. We used that for 2 days until we could get a rental pump onsite. The state approved every action that we took. Eventually they had us start drip chlorinating the influent to reduce the amount of pathogens, eColi, that was being pumped to the river. VRWA gave us the use of their emergency trailer to store 500 gallons of chlorine in. There was discussion about whether to work on setting up primary(non-biological) settling and chlorination. This would have been expensive and a lot of time spent for some treatment. It was agreed

upon to put those efforts into getting back up and running fully and producing effluent that will pass our permit requirements.

We got Manosh to start pumping out and hauling away the sludge from the SBR's and sludge holding tanks. Morrisville took what sludge they could and Manosh stored and brought the rest to Montpelier when they were up and running and able to handle it. They cleaned out accumulated rags and pressure washed both SBR's. Pratt and Smith electrical started sourcing VFD's and motors and pulling electricians off their scheduled jobs to start rewiring the entire facility to the critical components that we need to run. LCS Controls built us and installed a temporary SCADA system to operate the facility. The state did river sampling for eColi to see if our discharge was affecting the river much. I don't have the exact numbers but roughly, upstream of the plant was 30, upstream in the Lamoille was 89, Willow crossing was 359 and In Jeffersonville was over 800. This testing was done by the state and it was the belief of the sampler that other causes were causing the higher counts. Strong manure smell in the river etc….

We are rented a portable emergency generator from Milton Cat to take over power should we lose power at the plant. The emergency generator onsite is destroyed.

As of August 9 we are processing through the entire plant. We had to get some sludge seed, bugs, to help jump start the process. We are taking daily eColi samples Monday-Thursday until we can prove to the state that we are consistently meeting permit requirements.

We had damage to the new river road pump station. Hired Laramie Water Resources to take the lead on repair. Had to level the control panel and replace all electrical components as they were all compromised. Temporary control panel is running while we wait for the new control panel to arrive. 4-6 weeks.

Highland Heights pump station control panel took on some water. It didn't affect the capacitors and relays but the circuit boards went under water. It was up and running the day after the flood. We will use the temporary control panel at River Road to permanently replace the control panel at Highland once the new River Road panel is installed.

2. Operational status of Water Plant and Callouts

- Monthly reports were submitted to the state.
- Coliform samples were negative
- Luke assisted the Village crew with hydrant flushing
- Rotated pumps at Katy Win Booster stations

- The water system faired well during the flood. The plant and well head stayed above water and we didn't have any leaks in the system. There were line breaks in residents basement that were shut off or repaired quickly. We had very high usage for the 2 days after the flood but then returned to close to normal usage after that.

- A contractor was here Wednesday to perform a free leak detection survey on our system. We will get a written report of any leaks that were found.

- Water loss for June was ____%

VERMONT

State of Vermont
Department of Environmental Conservation
Watershed Management Division
One National Life Drive, Davis 3
Montpelier VT 05620-3522

Agency of Natural Resources

JOHNSON VILLAGE WASTEWATER POST JULY 2023 FLOOD TREATMENT PLANT ASSESSMENT LAMOILLE COUNTY, VERMONT

NPDES PERMIT NUMBER VT0100901
STATE OF VERMONT PERMIT NUMBER 3-1149

August 9, 2023

This report was prepared based on observations made during July 13th, 17th and 18th site visits by Heather Collins, VT DEC, WSMD, WWMP in conjunction with Army Corps of Engineers and US EPA Region 1 representatives.

REPORT LIMITATIONS

This report was prepared from visual observations and operator conversations during site visits. No testing of equipment or measuring of components was performed.

MAIN PLANT

FACILITY DESCRIPTION

The facility is a conventional two-basin Sequential Batch Reactor (SBR) treatment plant. Influent flows by gravity through a manually a set of bar racks, then through the girt channel with multiple pitchforks for further solids removal. From the grit channel influent flows via gravity to the wet well where two submersible pumps pump influent to the SBR tanks, which then decant to an open channel ultra-violet (UV) disinfection system. The sludge is pumped from the SBR tanks to a belt filter press located on the top floor of the main building. The main building also houses a lab and a motor control center (MCC) with nearly all pump and motor starters, variable frequency drives (VFDs), and branch circuit breakers. The plant's automatic transfer switch (ATS), main SBR control panel, lab, spare pump and motor storage, grinder hydraulic power pack, chemical feed (alum and polymer), backup generator, mechanical room, maintenance area and staff break room are also located on the main level of the main plant building. The main building's basement houses sludge transfer pumps including an in-line grinder and two 20,000-gallon sludge holding tanks.

OBSERVATIONS

Except for the SBR actuators and belt filter press, the entire plant was inundated and submerged with flood water. High water marks were observed near the top of the ceiling mounted headworks ventilation blower, near the top of the top buckets of the MCC, near the top of the SBR control panel, and over halfway up the wall mounted lab cabinets (approximately 7-8ft)

The motor control center (MCC) including nearly all pump and motor starters, variable frequency drives (VFDs), branch circuit breakers, and electrical conduits were inundated and likely destroyed. The same is true for the plant's heating and hot water system, meters, analytical monitors, recorders, laboratory equipment and supplies, and automatic samplers. The UV system is obsolete and repair parts are not able to be sourced. It is likely a complete loss. The plant's automatic transfer

switch (ATS), main SBR control panel, grinder hydraulic power pack, chemical feed pumps and tanks (alum and polymer), decant motors, and backup generator will also require complete re-build or replacement. The plant's lawn tractor with snow blowing attachments was also submerged in flood waters. The sludge press room (elevated) received minor inundation; high water mark was roughly one foot above the finished floor. Impact to the sludge press and its MCC is undetermined.

No physical damage to structures was visually observed.

The plant was inoperable; at the time of the site visits and flow was being pumped from the wet well to the outfall with a portable pump thus only providing primary screening.

PUMP STATIONS

RIVER ROAD WEST PUMP STATION

FACILITY DESCRIPTION

The River Road West Pump station (Formerly Railroad St. Pump Station) was recently reconstructed in 2022 and consists of a conventional, duplex, submersible wastewater pump station with precast wet well, precast valve vault, control panel, and remote monitoring panel.

OBSERVATIONS

The main components of the wastewater pump station were left unharmed. Damage was limited to the partially submerged control panel, partially submerged remote monitoring system, electrical components, silt and debris accumulation, erosion around the site, tilting control panel mounting rack (due to erosion around post foundations), and likely damaged conduits. The wet well interior appeared unimpacted. The pump station was not operable during the site visits. A portable pump was in place and staff were manually operating the pump to pump off the decant to the Lamoille River while allowing solids to settle in the tank.

HIGHLAND HEIGHTS PUMP STATION

FACILITY DESCRIPTION

The Highland Heights Pump Station consists of a conventional, duplex, submersible wastewater pump station with precast wet well, precast valve vault, and control panel.

OBSERVATIONS

The main components of the wastewater pump station were left unharmed. Damage was limited to the partially submerged control panel, electrical components, silt and debris accumulation, and likely damaged conduits. The wet well interior appeared unimpacted. The pump station was back online and operable during the July 13, 2023, site visit.

COLLECTION SYSTEM

RAILROAD STREET BRIDGE CROSSING

FACILITY DESCRIPTION

The facility consisted of an insulated, 8" ductile iron, wastewater transmission main, installed at grade for gravity flow, suspended below the Railroad Street Bridge.

OBSERVATIONS

During the peak of the flooding a car floated down the Lamoille River and almost completely tore off the Railroad St Bridge 8" ductile iron sewer crossing. Most of the piping had been destroyed and was no longer present and most of the supports were significantly bent or missing. Flow was running directly into the Lamoille River.

Overall, the collection system received a large amount of grit/silt/debris.

RECOMMENDATIONS

IMMEDIATE

- Continue using the wet well to provide some settling of solids. Set up temporary disinfection provided by chlorination while working on short term recommendations below.
- Pump and truck waste from the River Rd. West Pumpstation until temporary/permanent repairs can be made so that untreated waste is no longer discharged.
- Straightening / supporting of the control panel mounting rack, conduit & wiring check, panel, or component replacement.
- Perform temporary/permanent repairs to the Railroad St Bridge Crossing so that

untreated waste is no longer discharged.

SHORT TERM

- Clean/remove debris from SBR chambers and inspect components for damage.
- Attempt to restore power to at least SBR actuators and blower(s) and apply a near full level of treatment, utilizing temporary chlorination for disinfection. This option would be contingent on the ongoing cleaning, testing, and replacement of key mechanical and electrical components.
- Evaluate electrical components, wiring and conduits. All may need replacing.
- Complete replacement or professional rehabilitation of all electrical and mechanical equipment and instrumentation below the high-water mark which show evidence of water intrusion. Even equipment quickly brought back into operation may suffer shortened life due to silt and containments in flood waters. This is a significant amount of equipment including all control panel and MCC components (complete panel replacement may be more economical), meters, analytical monitors and recorders, chemical feed pumps, all motors, generator, UV disinfection system, decant motors, automatic samplers, and likely blowers. Pumps which show evidence of water intrusion in bearing grease or oil should be replaced or reconditioned.
- Replacement of remote monitoring transmitter, fill replacement & compaction, possible foundation reinforcement (additional concrete) of control panel mounting rack at the River Rd. West Pump Station.
- An appreciable amount of grit and sediment from the upstream collection system inundation was likely conveyed into the wet well. Subsequently, pump performance should be checked for accelerated wear. Replace or recondition if found for both the River Rd. West and Highland Heights Pump Stations.
- Replacement of Railroad St. Bridge Crossing with in-kind pipe. Install more substantial pipe supports which would be more impact resistant.
- Jetting and camera inspection of low-lying collection system areas as the collection system received an appreciable about of Grit/silt/debris. Camera inspections should be explored to ascertain collection system damages.
- Have Reduced Pressure Zone Backflow Preventers (RPZBP) at the facility inspected and tested to ensure they are properly functioning.

LONG TERM

Long term recommendations to potentially mitigate future flooding impacts include:

- Due to the low site elevation, the treatment plant has been and will continue to be subjected to repeated flooding during severe events. Conduct a cost and life cycle analysis to determine if relocation is a better option than reconstruction. Repair/reconstruction costs could exceed $2M or more. If the plant were to be

located at a higher elevation, the current plant could be converted to a flood proofed pumping station with appurtenant storage. Elevating the MCC / control panels, blowers, and generator. This would require a significant undertaking as an additional building floor or new elevated building would be required. Replace sludge pumps with either immersible units in their existing location or add submersible pumps directly to the SBR basins.

- Investigate possibility of replacing river crossing pipe with a depressed sewer / siphon type crossing. Installation of such an alignment may be difficult. It is questionable if sufficient horizontal setback is present to allow horizontal directional drill installation. The riverbed appeared rocky which would make open cut excavation slow and difficult. Furthermore, the appreciable vertical difference in the alignment could present regular maintenance problems due to solids accumulation if sufficient regular flow isn't present. This option requires further detailed investigation and consideration to determine feasibility.

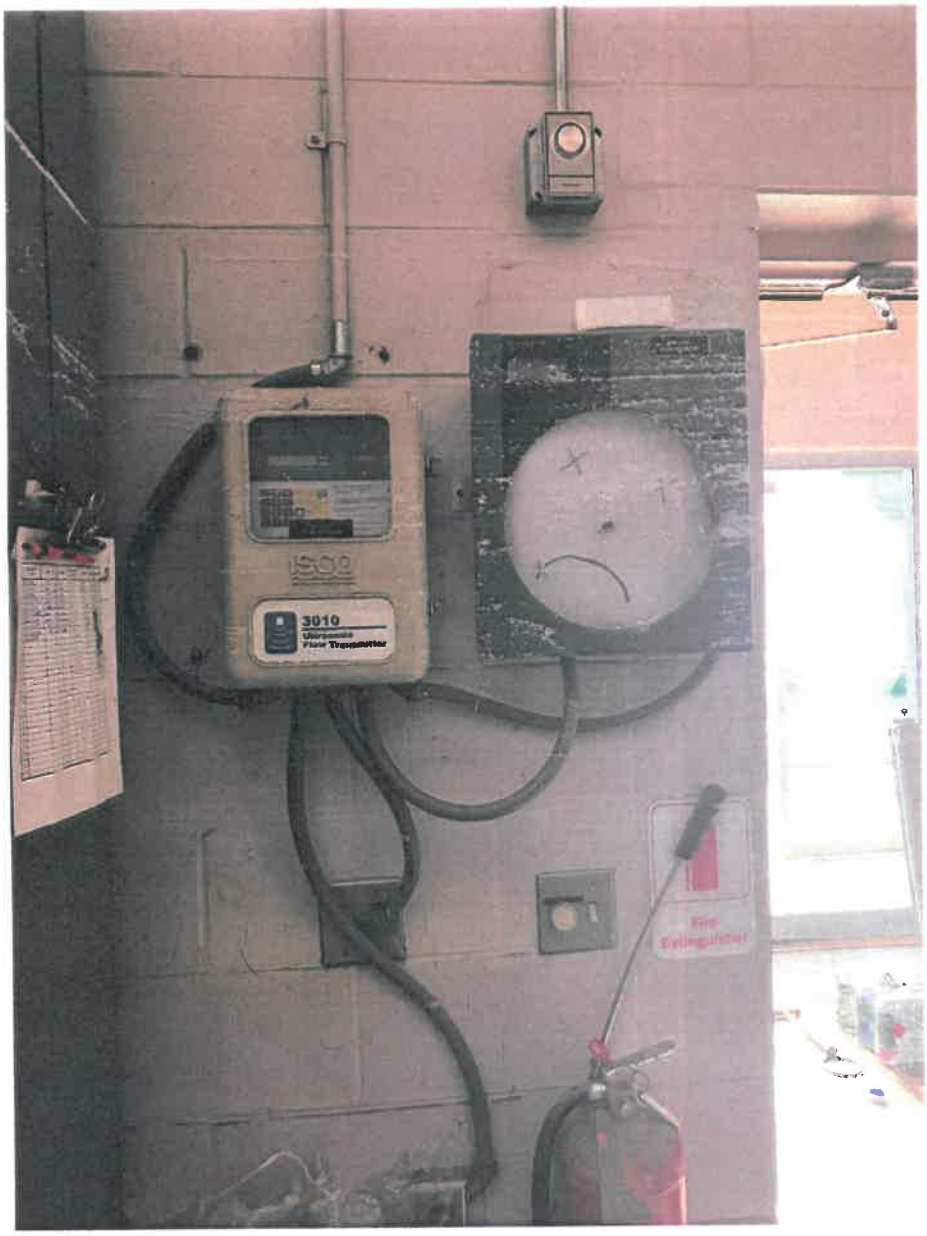
- Investigate possibility of replacing the gravity line with a pump station and force main, with the force main suspended closer to road grade elevation, similar to the intact water main, thereby offering protection from the bridge structure. Adding a pump station to the system would however create an additional O&M expense and itself could be equally prone to flood damages. This option requires further detailed investigation and consideration to determine feasibility.

PHOTOS

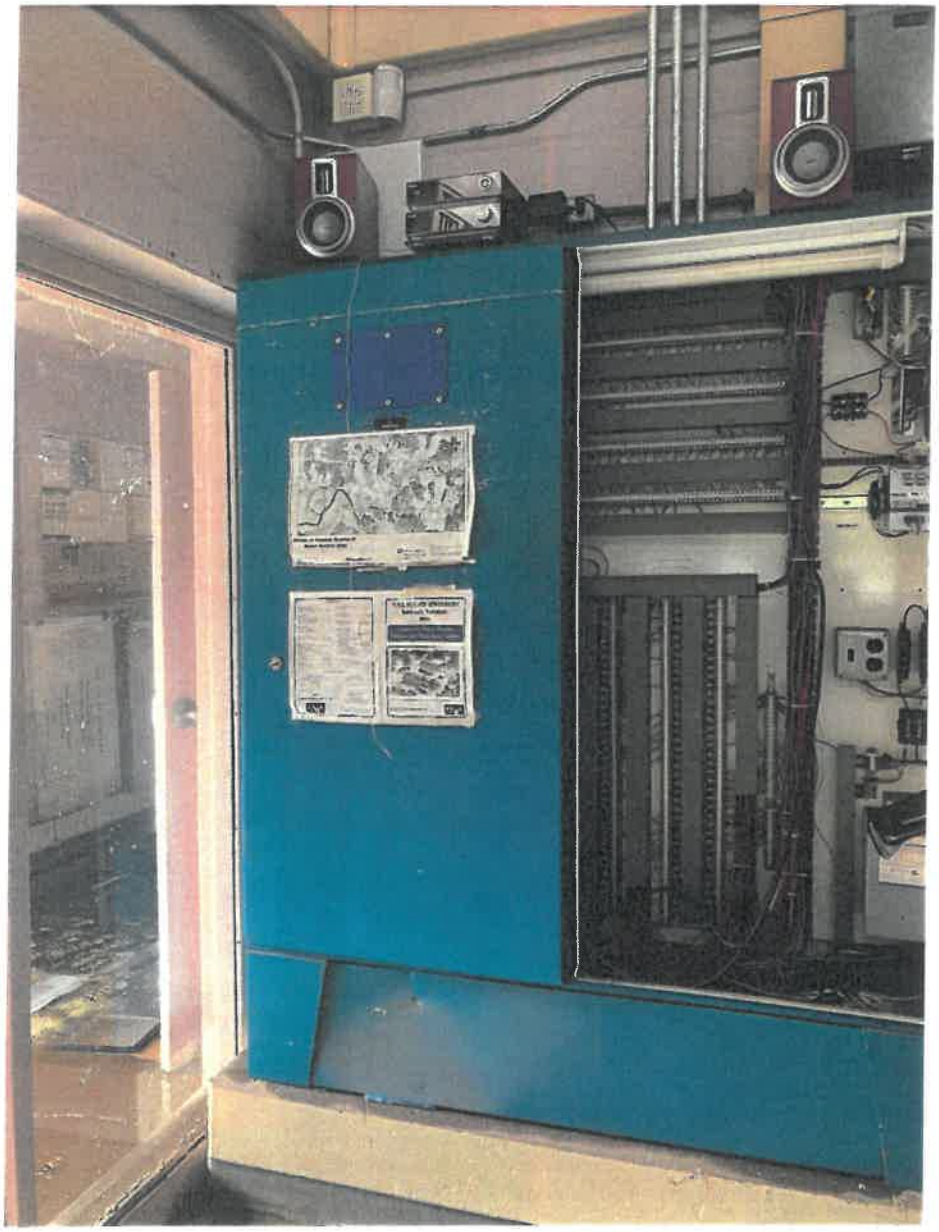
1 - High Water Mark on MCC

2- High Water Mark in Laboratory Area

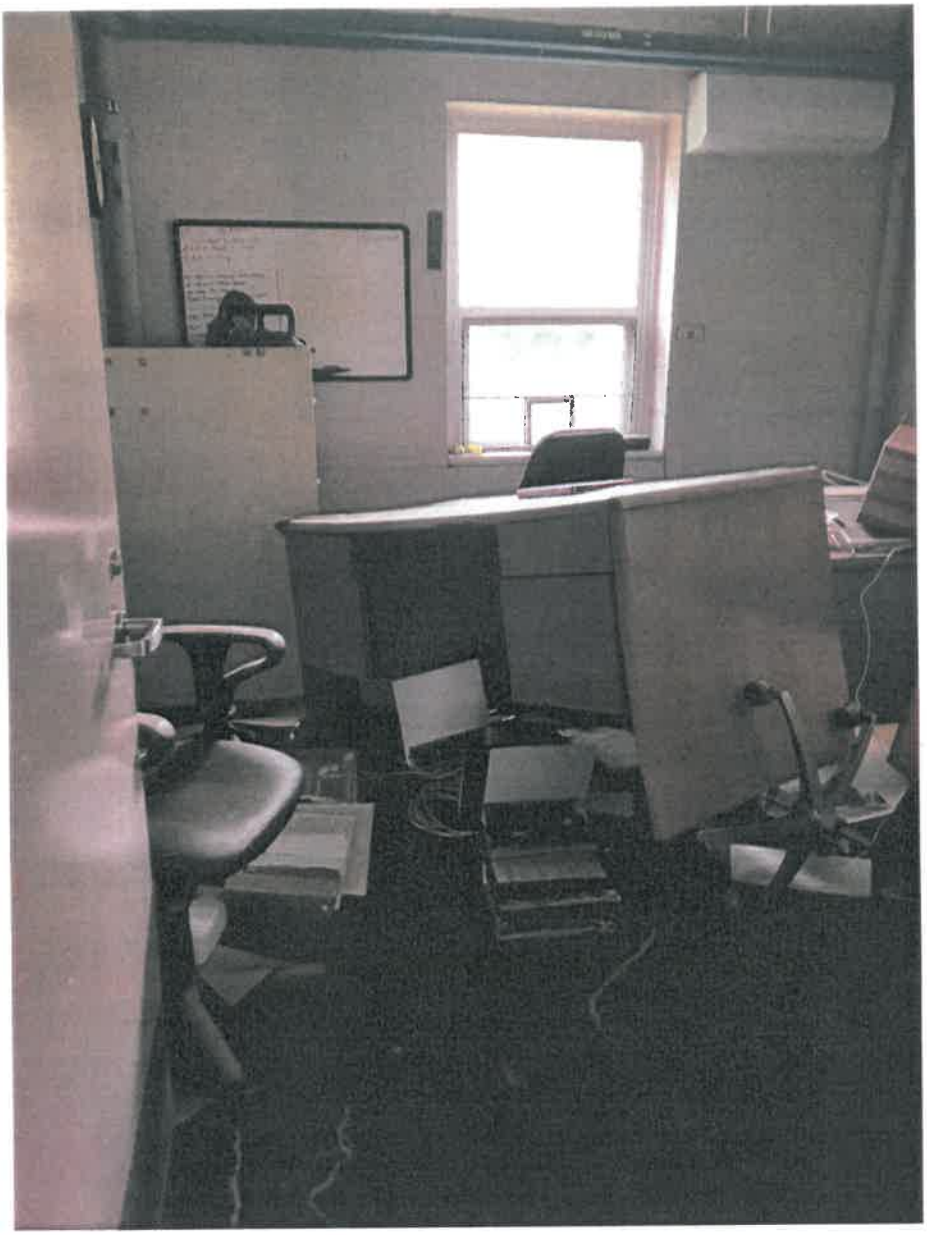
3- Post Flood Debris in Control Room



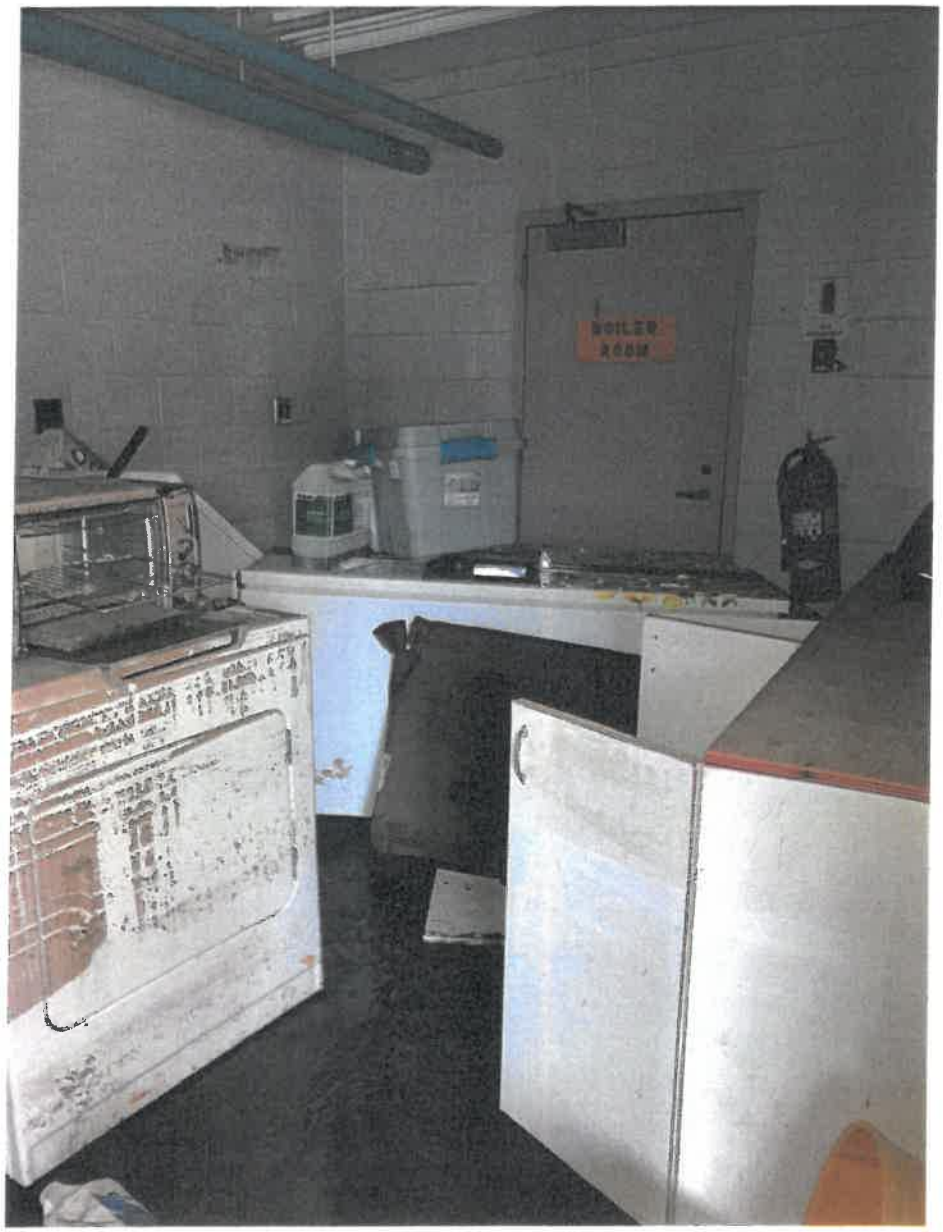
4- High Water Mark on Flow Meter and Chart Recorder



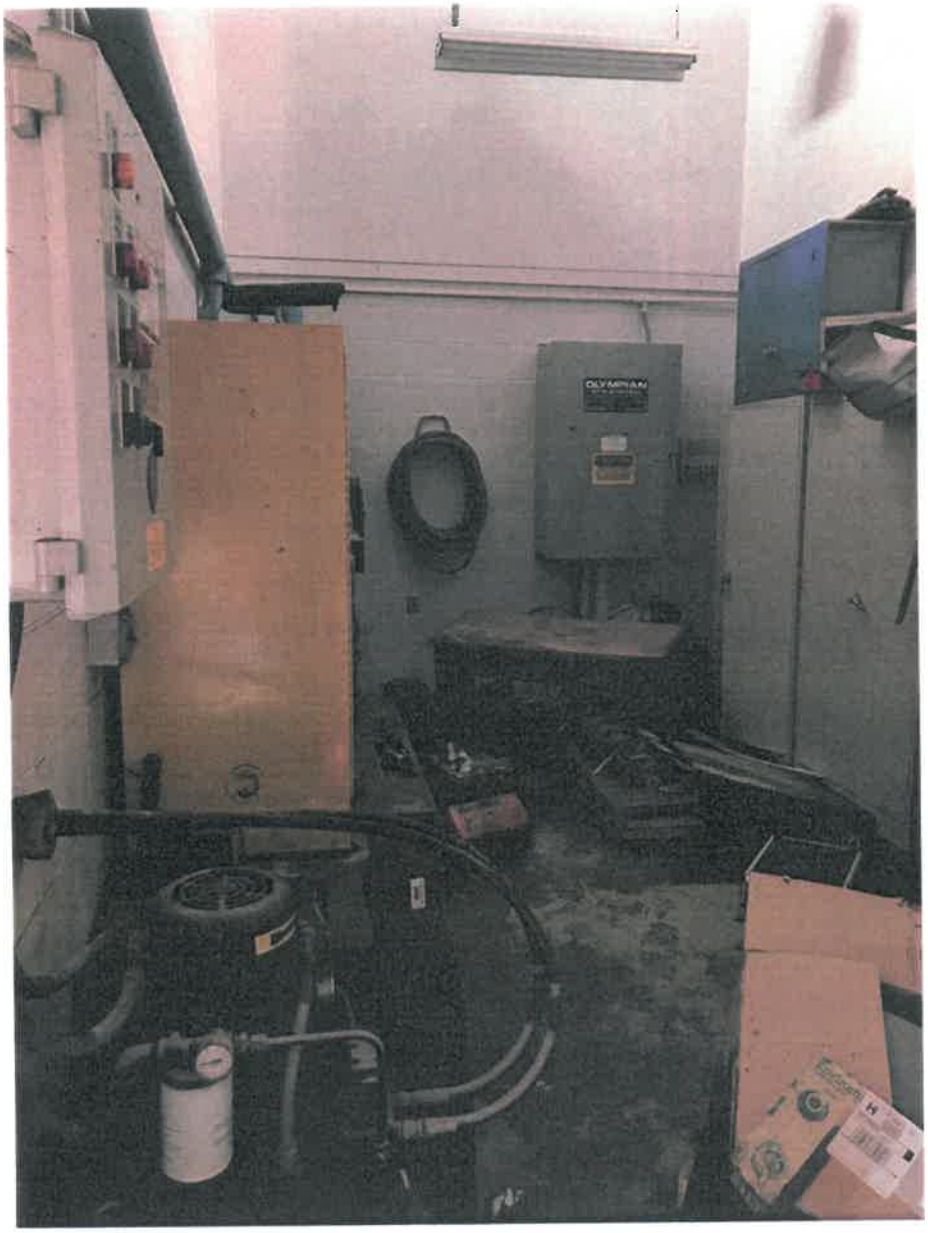
5- High Water Mark on Programmable Logic Controller (PLC) Cabinet



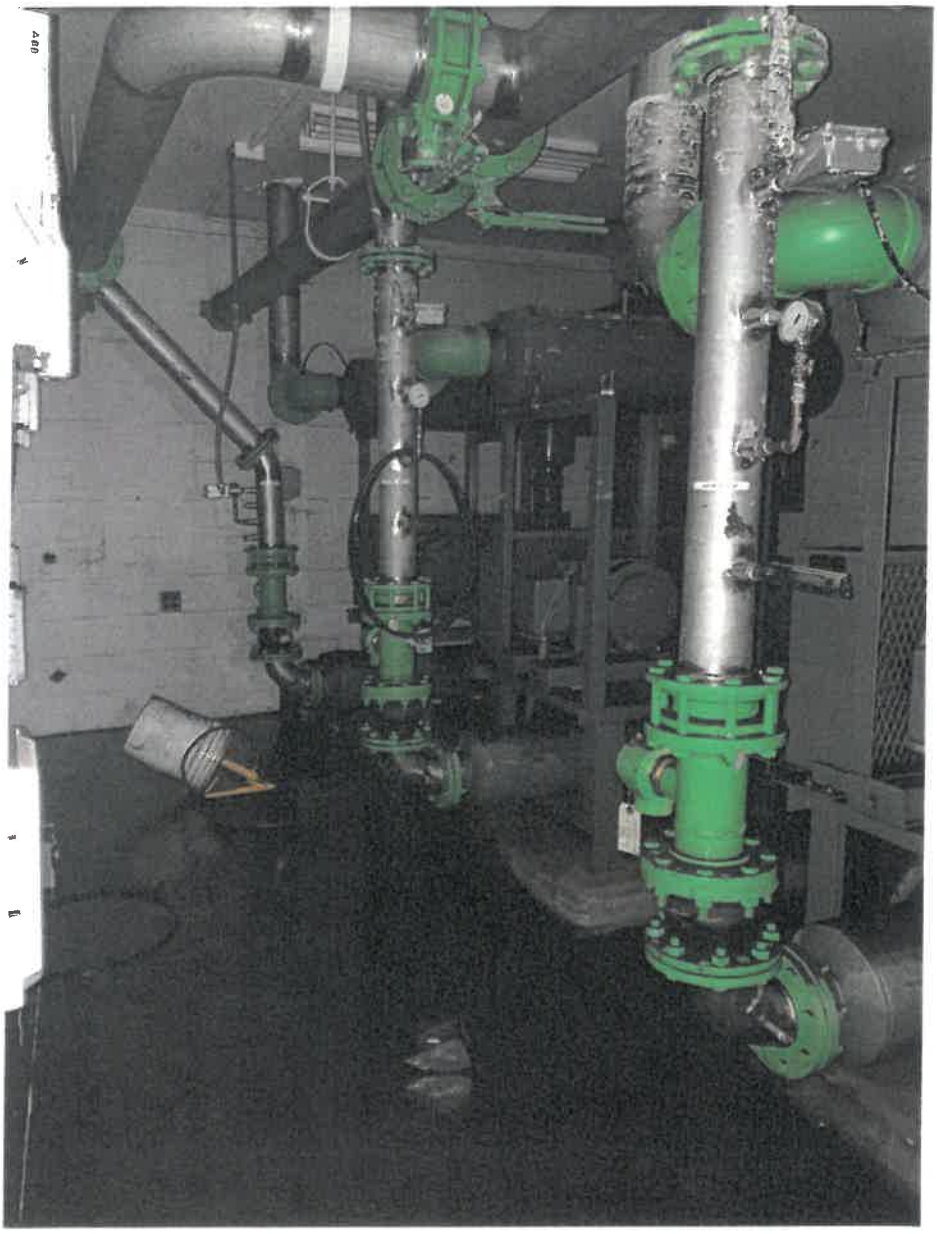
6- Office



7- Breakroom

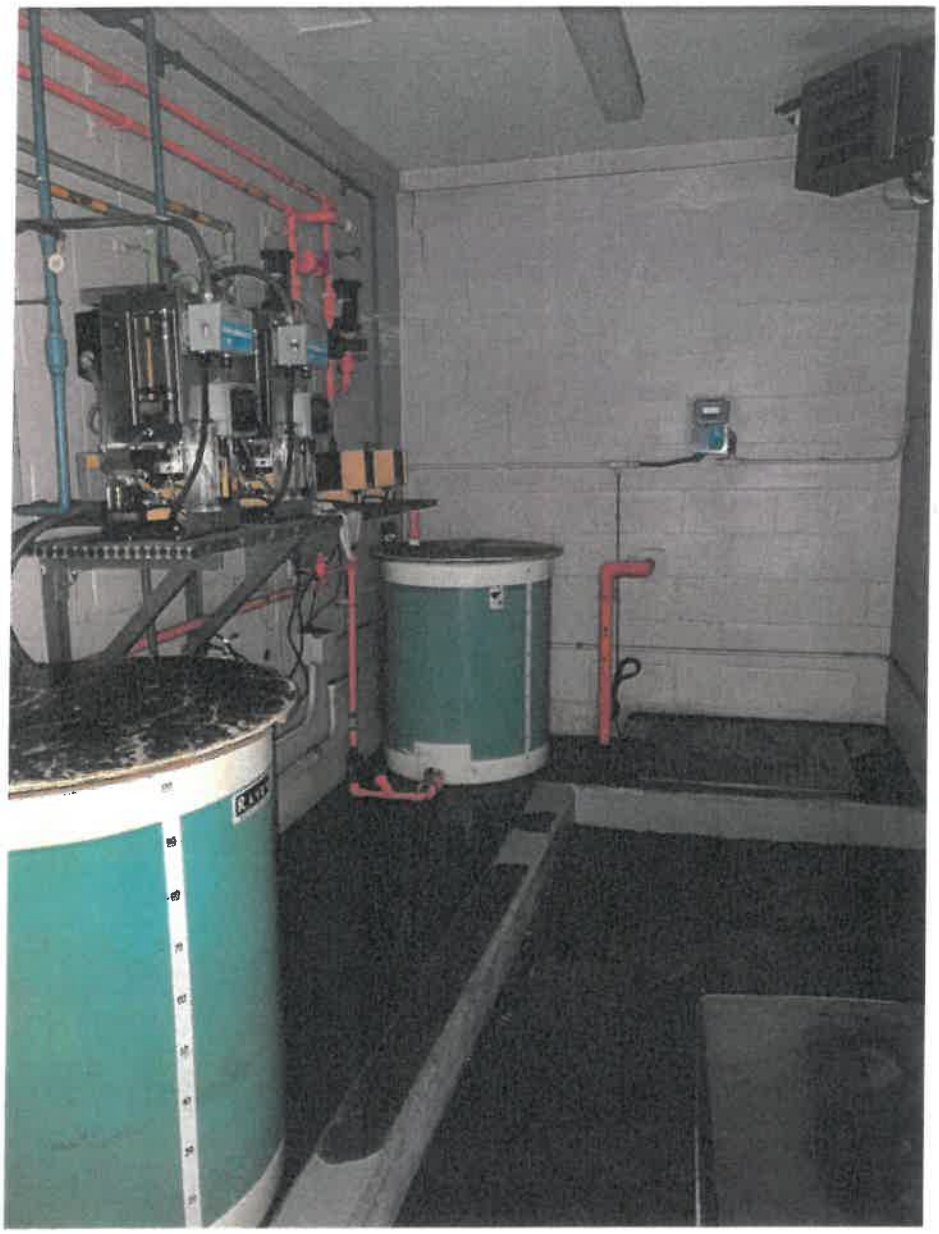


8- Maintenance Room

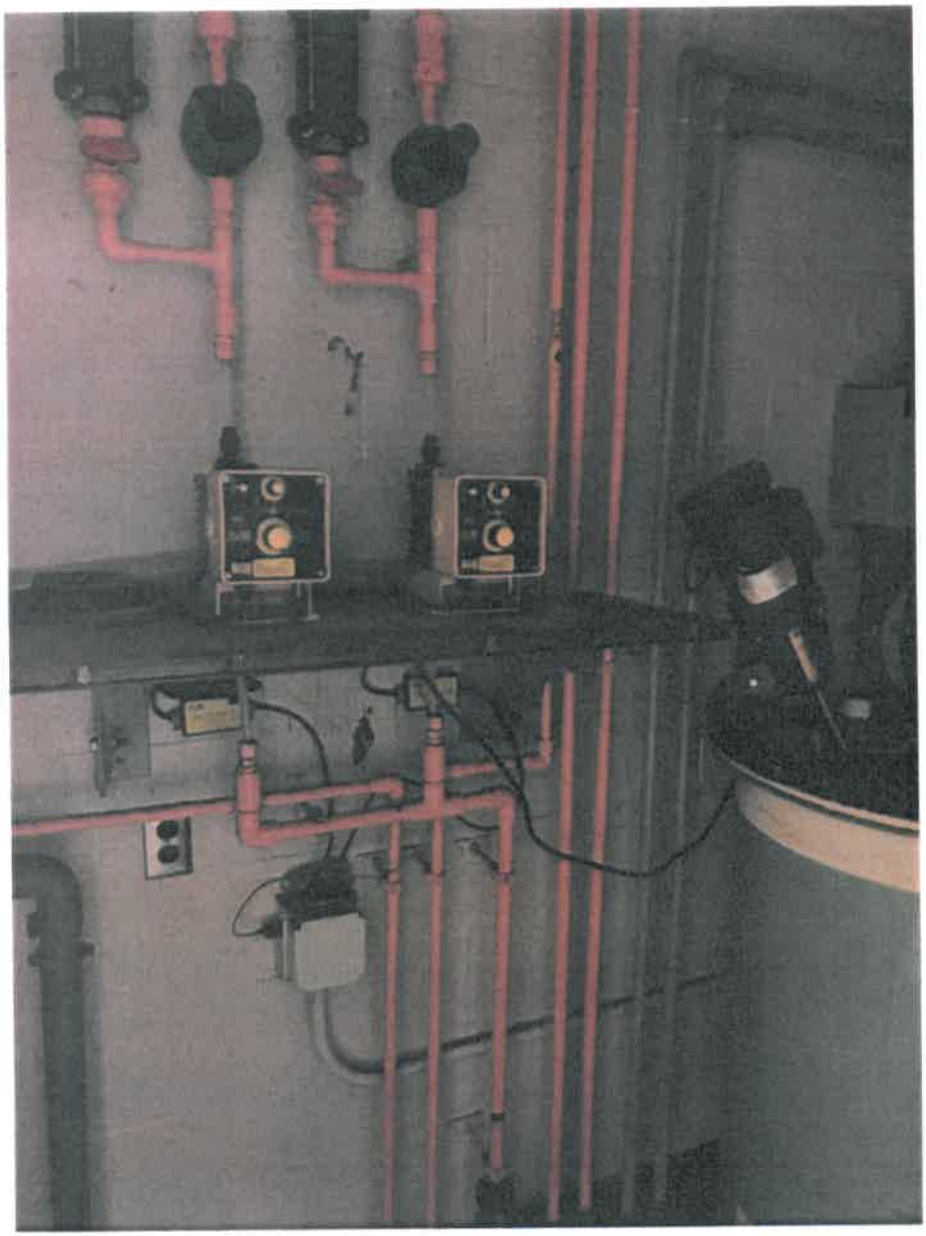


9- Blower Room

10- Alum Tank



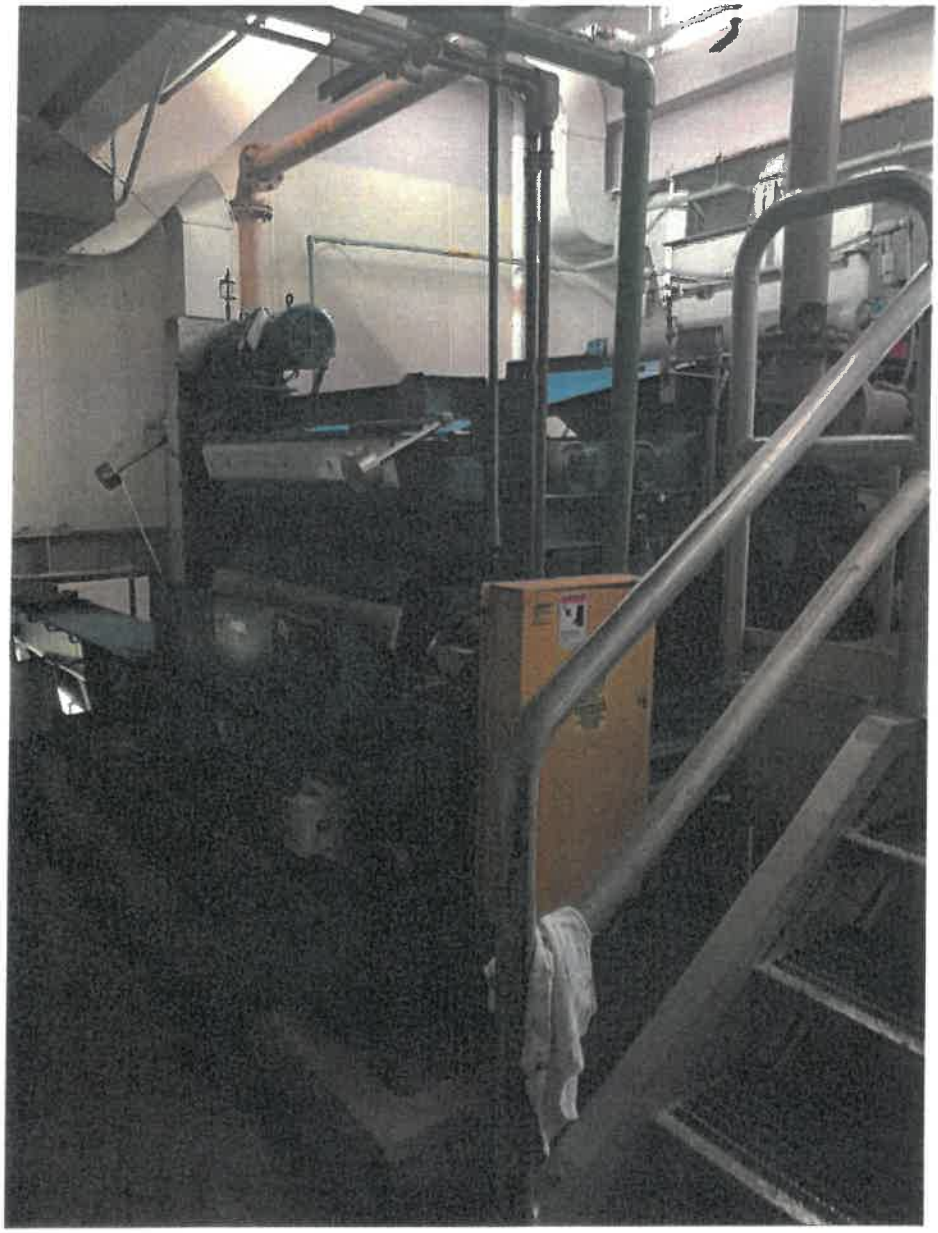
11- Chemical Feed Room with Tanks and Pumps



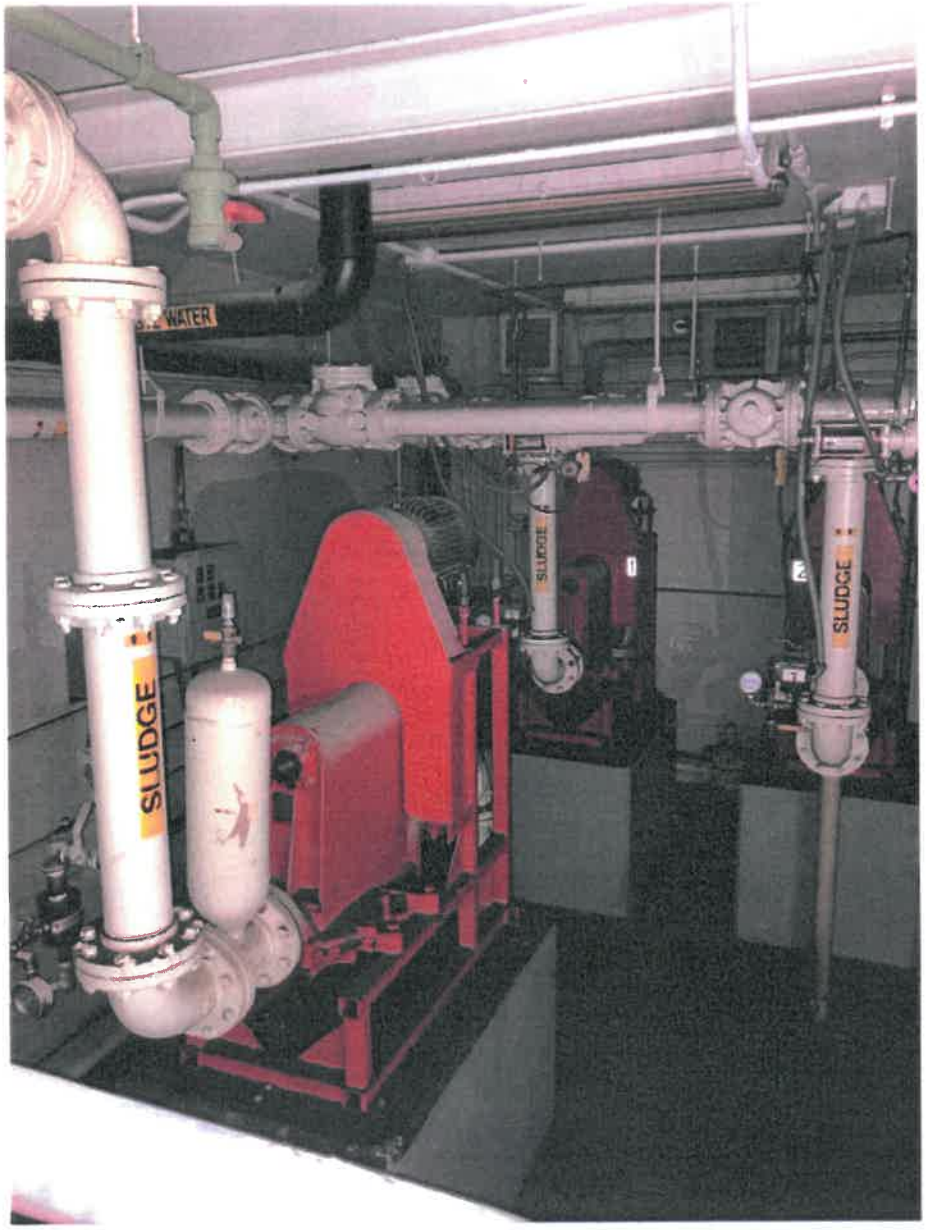
12- Chemical Feed Room with Additional Pumps and Feed Lines

13- Plant Generator

14- Plant Generator Top View Showing Residual Floodwater and Silt on Top

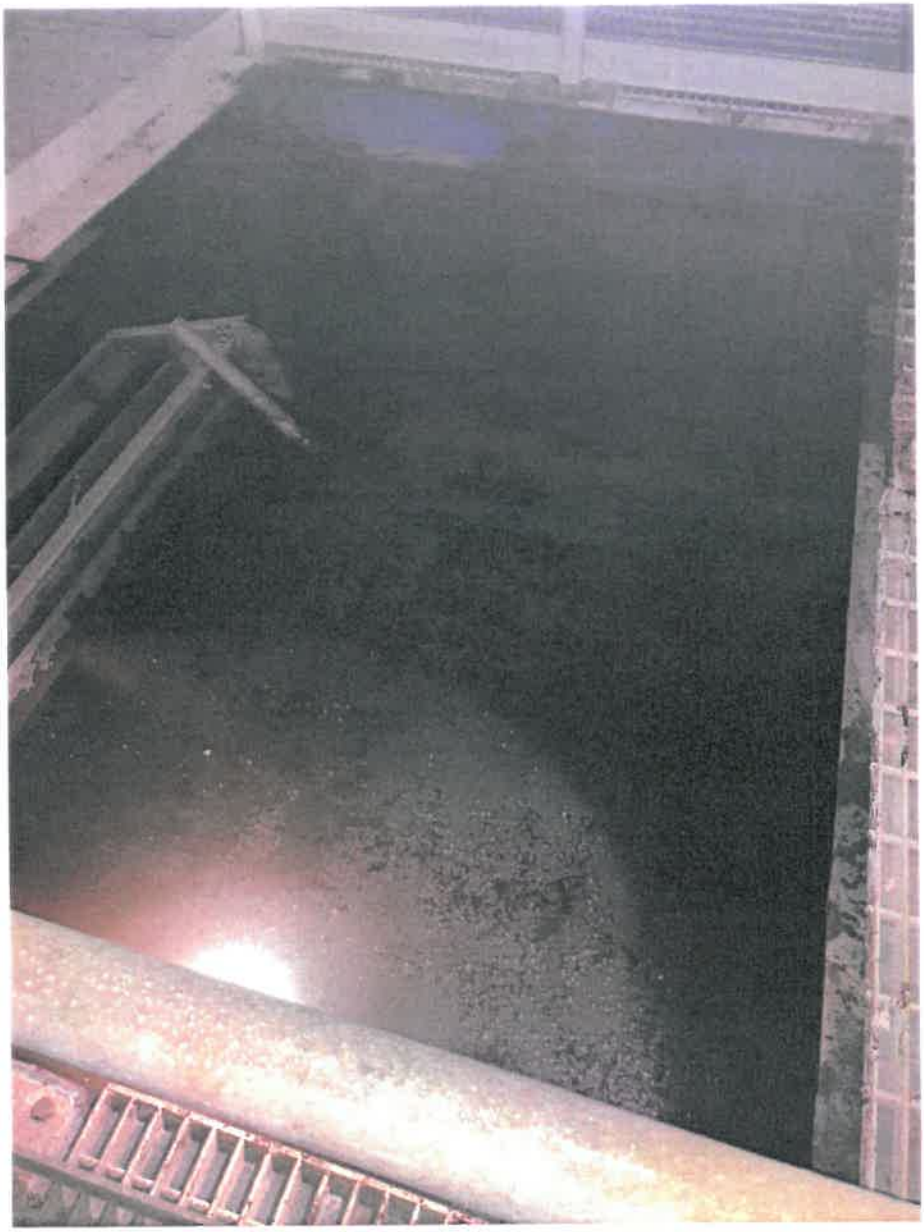


15- Sludge Filter Press



16- Sludge Pump Room

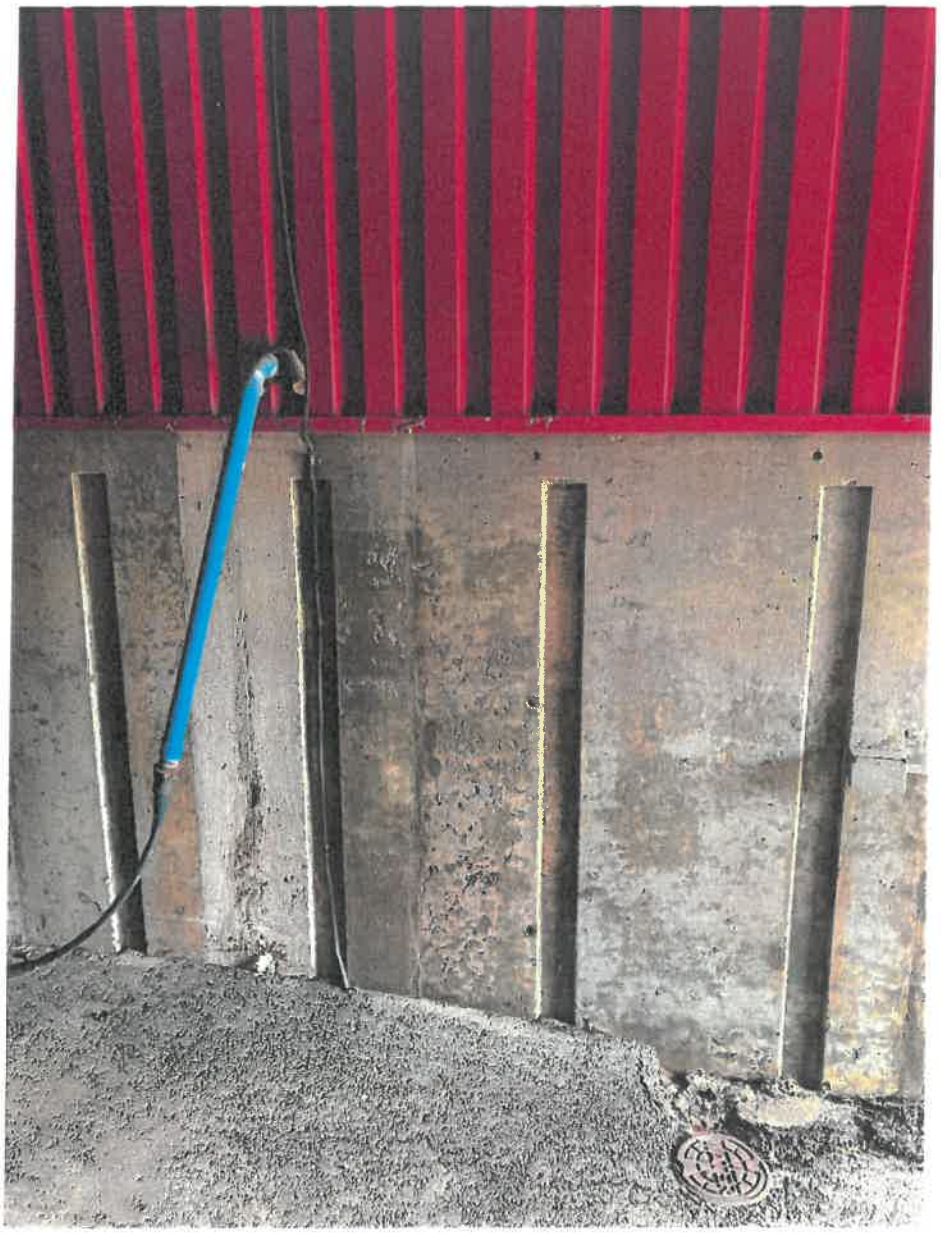
17-Influent Dry Well Piping with Influent Pumps Below Water Level



18- Sequencing Batch Reactor (SBR) Chamber with Decanter

19- SBR Chamber After Pumping Out Flood Waters

20- UV Chamber



21- UV Building High Water Mark (Almost Even with Blue Pipe)

22- Lawn Tractor Stored in UV Building (Snow blowing Equipment in Front of Lawn Tractor Out of View) Note Silt on Top of Engine Cover From Being Completely Submerged

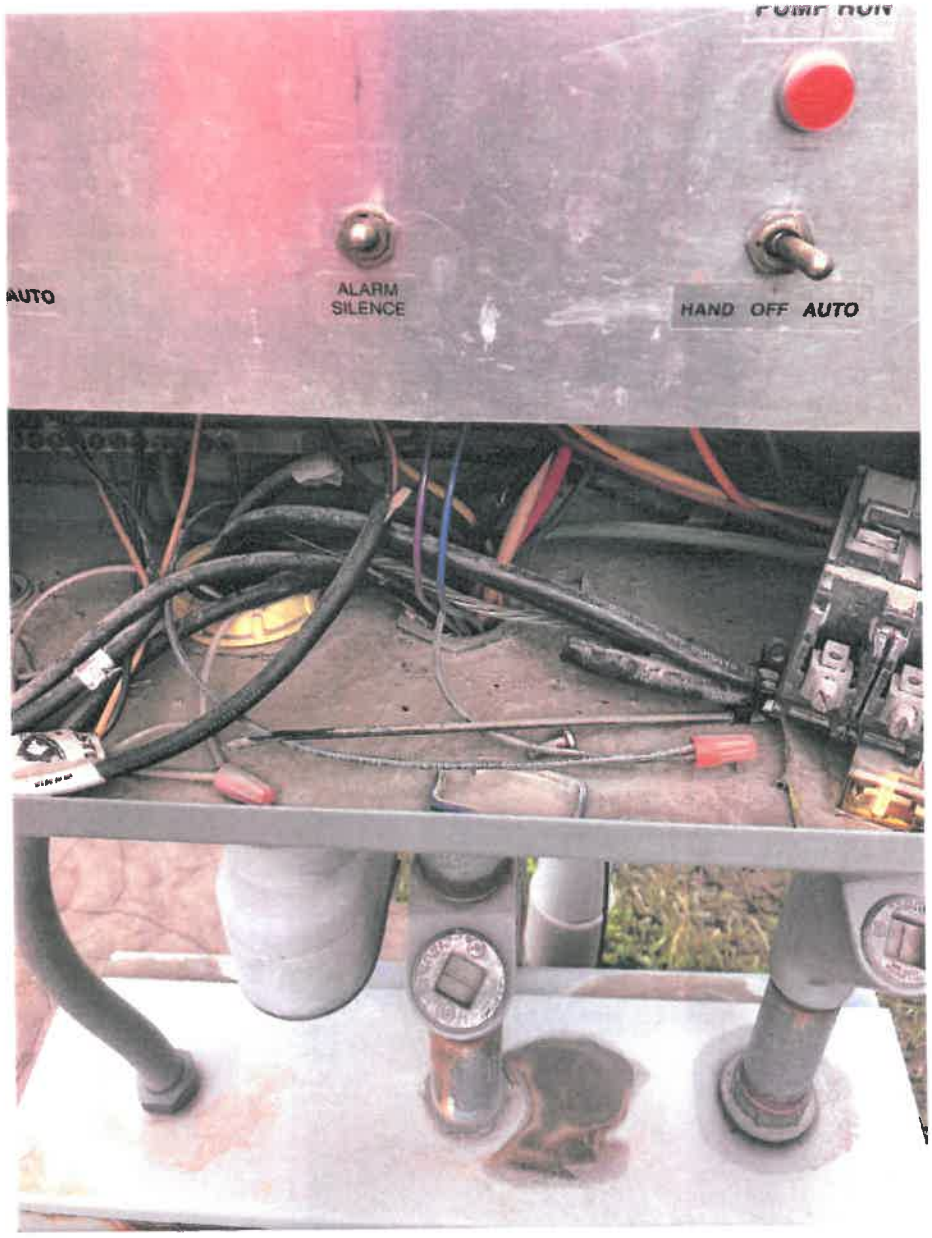
23- River Road West Pump Station

24- River Road West Pump Station Back of Electrical/Control Panel Mount

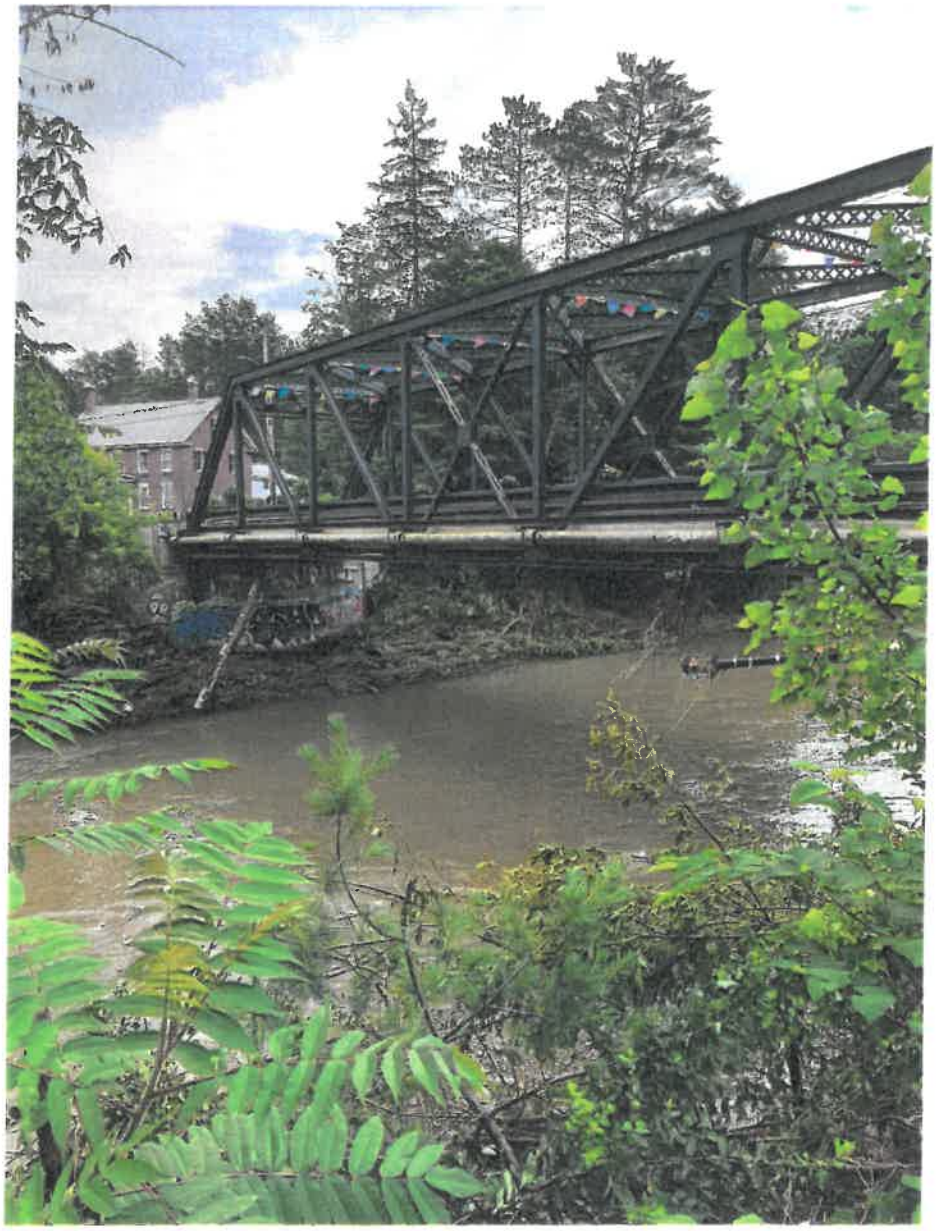
25- Interior View of River Road West Pump Station Wet Well

26- Highland Heights Pump Station

27- Highland Heights Pump Station Control Panel High Water Mark



28- Highland Heights Pump Station Interior View with Residual Flood Water Silt



29- Railroad Street Bridge Severed 8" DI Sewer Crossing

Village of Johnson Water and Light report – July/August 2023

Prepared by Nate Brigham and Anne Crocket

Electric Dept. –

Mutual aid to Hyde Park 21hrs.

Shut down for substation maintenance on 6-19 and 6-20. The first outage went smoothly and the spare transformer's oil was de-watered and de-gassed. The main transformer was scheduled for a leak investigation and the work was not completed due to issues with the pressure gauge. We should schedule TSI to come back in the fall to replace the valve and locate the leak. In addition, the transformer oil should be dried out.

792 Clay Hill Rd, Curtis did a ledge set 40' pole

Changed Transformer out at 1775 Clay Hill Rd for solar upgrade

Changed transformer at 860 Footebrook Rd

Hung/changed out led st.lights on Park st

Installed New LED St. light at the Woolen Mill

Right way cutting

Picked FR clothing for Johnson Farm and Yard/return uniforms to unifirst, as ended contract

Completed monthly meter reading, high/low checks, substation check, and dig safes

Met with a representative of Consolidated Telephone to discuss Joint Use issues. He provided me with all of the contractual paperwork that he had, which was not much,

and very outdated. We will want to prepare a list of things to clarify with them and produce a new agreement.

Water and Sewer -

Preformed Hydrant flushing

Helped Jetting out Syphon Chamber

General Dept. –

Pressured washed the Town Clerks building – 2 guys 12 hrs

1 employee out for arm surgery 6-27 to present

Safety –

Safety meeting with NEPPA on June 14th was System Protection

July 11th Flood power shut off to western half of Village majority were turned back on by 9:30 that night. We had a tree on the line near the Skate Park and was removed on the 12th with the help of Enosburg Electric. VEC wouldn't help. Also on the 12th we pulled meters and re-energized transformers to be able to give individual customers power as they got electrician's inspections. We still have 20 electric customers off and 4 water customers off at this time. We have Replaced 50 electric meters due to the Flood so far, thanks to Wallingford Electric in CT. We relocated the Pole pile, which was flooded out, to higher ground on Lendway Lane.

Claims were filed with the VLCT for insurance on damaged Village Property. This includes:

Sewer Plant

Two Sewage pumping stations

Lower storage building

Village offices

Village Manager's Report August 14, 2023

The $824,000.00 CDS Grant through Senator Welch made it out of committee and is officially part of the Congressional Spending Package (Budget Bill). Now we just wait for the budget to pass.

The sewer bridge crossing temporary pipe has been in place for a while and running well, the cable bridge for the workers to install the permanent pipe is nearly finished, and they expect to be done and dismantled by early October or sooner.

Tomorrow morning staff will be meeting with Perry Plummer of MRI to get all on the same page. Also attending will be Tim Baker, the area FEMA Public Assistance Supervisor, and Heather Collins who has been placed in charge of Wastewater Flood Recovery Tech Assistance for VT ANR.

And now Ken can step in an assist with the Fire House repair update.