JOINT WATER/SEWER BOARD OF THE CITY OF BUCHANAN AND BUCHANAN TOWNSHIP

MONDAY, FEBRUARY 02, 2026 – 7:00 AM

CHAMBER OF BUCHANAN CITY HALL - 302 N REDBUD TRAIL, BUCHANAN MI

AGENDA

THE JOINT WATER SEWER BOARD OF THE CITY OF BUCHANAN AND BUCHANAN TOWNSHIP, in compliance with the Open Meetings Act, hereby gives notice of a regular meeting to be held in the Chamber of Buchanan City Hall.

** Comments may be submitted in writing at least 72 hours in advance to the City Clerk at clerk@cityofbuchanan.com*

I. **Call to Order**

II. ***Pledge of Allegiance***

III. **Roll Call**

IV. **Approve Agenda**

V. ***Public Comment - Agenda Items Only***

VI. **Approve Minutes**

A. *Consider approving the Regular Meeting Minutes from November 17, 2025.*

VII. ***Unfinished Business***

VIII. ***New Business***

A. **Bertrand Crossing Extension Update**

B. **PFAS Mitigation Landfill Update**

C. **Water Reliablility Study Update**

D. **Water & Wastewater Department Reports**

IX. ***Public Comment - Non-Agenda Items Only***

X. **Adjournment**

JOINT WATER/SEWER BOARD OF THE CITY OF BUCHANAN AND BUCHANAN TOWNSHIP

MONDAY, NOVEMBER 17, 2025 – 7:00 AM

CHAMBER OF BUCHANAN CITY HALL - 302 N REDBUD TRAIL, BUCHANAN MI

MINUTES

I. Call to Order

The meeting was called to order by Chairman Gordon at 7:00 AM.

II. Pledge of Allegiance

The Pledge of Allegiance was recited.

III. Roll Call

PRESENT: Chairman/ Buchanan Twp Trustee Tomas Gordon, Buchanan Twp Supervisor Mindy Cole-Crocker, Mayor Pro Tem Patrick Swem, City Commissioner Larry Money

ABSENT: Brian Murphy

CITY STAFF: City Manager, Tony McGhee; City Clerk, Kalla Langston-Weiss; Director of Public Services, Mike Baker; Lead Water Operator, Craig Miller; Lead Wastewater Operator, Terry Burns; Wastewater Operator/Compliance, Zoey Martin

IV. Approve Agenda

Motion made by Cole-Crocker, seconded by Money, to approve the agenda as presented. Voice vote carried unanimously.

V. Public Comment - Agenda Items Only

None.

VI. Approve Minutes

A. Consider approving the minutes from August 11, 2025

Motion made by Swem, seconded by Money to approve the minutes as presented. Voice vote carried unanimously.

VII. Unfinished Business

A. <u>Jones and Henry Water and Sewer Feasibility Study Update</u>

Staff and consultants presented a feasibility study evaluating the extension of water and sewer service to the Bertrand Township Industrial Campus. The presentation included an overview of existing water and sewer infrastructure, projected current and future demand, and system capacity.

Key points discussed included:

- Current and projected water demand is based on partial and full development of the industrial campus.
- Confirmation that the City's water supply and storage capacity appear sufficient to serve anticipated demand, subject to additional modeling.

- Identification of infrastructure constraints, including booster pump limitations and sewer grade issues.
- Recommendations for installation of a new booster pump station, gravity sewer extensions, and pump station upgrades.
- Discussion of redirecting sanitary flow from the City of Niles to the City of Buchanan and associated benefits and considerations.
- Confirmation that the wastewater treatment plant has the capacity to accommodate projected additional flows.

Cost estimates, including contingency, were discussed. It was noted that improvements would be funded by the Townships, with the City potentially responsible for operation and maintenance, subject to agreement.

VIII. New Business

A. Water Department Report, Craig Miller

Miller provided an update on water system operations. Staff reported that downtown activity remains high and that operational issues have been minimal. Meter reading issues continue to be addressed, with approximately 30 meters remaining under review. Recent work included the repair of small water leaks, the installation of a new fire hydrant, and the completion of fall hydrant flushing.

Miller reported progress related to lead service line inventory and compliance. Grant-funded potholing work is approximately 80 percent complete. Data collected from potholing and in-home inspections is being compiled for submission to EGLE. Staff noted discovery of copper service lines connected to lead goosenecks, which required additional verification and adjustment to prior assumptions. An updated lead and copper sampling plan is being prepared based on the refined inventory.

Staff indicated that annual lead service notification letters will be sent, and advance public communication will be provided to explain the required language included by EGLE.

B. Wastewater Report, Terry Burns & Zoey Martin

Staff provided a detailed update regarding wastewater system operations. An electrical surge affected multiple facilities, including the Shirmer Parkway lift station and the wastewater treatment plant. The surge caused damage to pump drives, control boards, and components within the UV disinfection system. Emergency pumping was required to prevent overflow, and no discharges to the river occurred.

Staff reported that replacement parts for the UV system have been ordered and are pending installation. Corrosion within the UV system was identified as a contributing factor to ongoing issues. Claims have been filed related to the electrical surge.

Operational impacts from downtown sewer reconstruction were discussed. Staff reported that infiltration and inflow have been significantly reduced, resulting in plant flow being reduced by approximately half. While flow volumes have decreased, solids loading has remained consistent, requiring operational adjustments. Staff reported continued compliance with treatment standards.

IX. Public Comment - Non-Agenda Items Only

X. Adjournment

Chairman Gordon adjourned the meeting at 8:08 AM.

Prein&Newhof
Engineers ▪ Surveyors ▪ Environmental ▪ Laboratory

Sent via email: TMcGhee@cityofbuchanan.com

January 9, 2026

Mr. Tony McGhee, City Manager
City of Buchanan
302 N. Redbud Trail
Buchanan, MI 49107

RE: Professional Engineering Services
Water System Reliability Study Update

Dear Mr. McGhee:

Thank you for the opportunity to offer our engineering services related to an update of the City of Buchanan Water System Reliability Study. According to Part 12, Rule R325.11203 and R325.11604 promulgated under Michigan's Safe Drinking Water Act, 1976, P.A. 399, as amended, a Water System Reliability Study is required every 5 years. We completed your last Study in May of 2019 and will prepare this study to address current reliability issues and concerns.

The study must include an evaluation of the reliability of the City's existing water distribution system as well as the projected future supply to this service area. With this in mind, we have prepared a scope of services that will meet the overall request of the EGLE, as well as provide meaningful information for planning purposes. The following represents our intended scope of services to meet the EGLE requirements and the needs of the City:

1. Obtain recent water system data

   This task includes gathering data on recent changes to the system infrastructure and operation, and historical demands since 2018. This includes:

   - Monthly Operating Reports (MORs) for 2018 through 2025.
   - Annual billing volume totals for each customer class (residential, commercial, etc.) from 2018 to 2025.
   - Annual billing volume totals for the largest users from 2018 to 2025.
   - Annual water loss (accountability) data from 2018 to 2025.
   - System operational setting changes since the last water system reliability study such as for well operation.
   - Most recent EGLE Sanitary Survey.
   - Maintenance program description updates (hydrant flushing, valve turning, meter replacement, tank maintenance, cross-connection control, etc.) including frequency.
   - The current number of service connections or equivalent Residential Equivalent Units (REU).
   - Your current Water Shortage Response Plan.
   - Any Main Break data.
   - Water Quality Data: PFAS Sample results, Chlorine Residual Results, DBPs, lead service plan, etc.
   - Current Capital Improvements Plan.

2. Prepare 20-Year Demand Projections

   Demands will be projected through Year 2046 in five-year increments. The projections will be based on historic data, land use maps, available projections or other information provided regarding potential growth. Average day, maximum day and peak hour demands will be estimated based on this information.

3. Review Source

   The existing capacity of primary elements of the water source and treatment will be documented and compared with existing demands and demand projections. Shortcomings will be identified including lack of redundancy.

4. Evaluate Storage and Supply

   Based on the demand projections through Year 2046, the system supply and storage capacity will be analyzed. This analysis includes consideration for both non-emergency storage (equalization storage) and emergency storage. Shortcomings will be identified.

5. Perform Hydrant Flow Tests

   We plan to use hydrant flow tests to calibrate your hydraulic model. We will work with you to perform the tests. First, we will prepare a hydrant test plan that ensures representation of differing areas of your system as well as various distribution main sizes and ages. We propose one day of testing with our field engineer and will provide the testing equipment.

6. Review and Update Hydraulic Model

   The objective of this task is to verify the accuracy and update the computer model from which further hydraulic analysis can be performed. Water system information obtained from the City would be incorporated to update the model and improve the model accuracy. We propose to update the existing model to match current conditions.

7. Recalibrate the Model

   Calibration is a critical step for an accurate model, since results of a poorly calibrated model typically don't provide meaningful information. We will verify/calibrate your model using 10 to 12 hydrant test results, primarily by adjusting roughness factors and demands. The EGLE requires a calibration based on recent hydrant test results, as mentioned previously.

8. Determine Existing and Projected System Performance

   The calibrated model can accurately simulate the current system operation. Model simulations will be performed for existing average day demands, maximum day demands, and maximum day demands plus fire.

   With the demand projections, the model will also be used to simulate future conditions. Model simulations will be performed for projected average day demand, maximum day demand, and maximum day demand plus fire.

9. Identify Weaknesses and Evaluate Solutions

   System shortcomings will be identified for both existing and future demand conditions. These include areas of low pressure under emergency (<20 psi) or non-emergency (<35 psi) conditions, or other reliability concerns. These deficiencies will be tabulated and solutions to removing the deficiencies will be reported.

10. Review Operation and Maintenance Procedures

    Operation and Maintenance procedures will be reviewed including hydrant flushing, valve exercising, meter replacement and calibration, leak detection and water accountability, cross-connection program, etc. Recommendations will be made as necessary.

11. Review Reliability Issues

    System redundancy, system looping, maintenance programs, aging infrastructure, and various water quality parameters will be reviewed, among others.

12. Prepare Recommendations/CIP

    Based on the hydraulic analysis, improvements to the transmission and distribution mains and other facilities will be prepared. Recommendations will consider the cost-effectiveness of the various improvement options. A phasing plan will be developed to prioritize the improvements to the system. Recommendations will be summarized and will also include new and updated cost estimates. These can be incorporated into your Capital Improvements Plan.

13. Provide Water System Maps

    Part 16 of the Michigan Safe Drinking Water Act requires the development of a General Plan Map. The map will show water mains, sizes, and storage facilities (with capacities of each). The General Plan Map will also provide information on system deficiencies and recommended improvements.

    We will use your GIS system data to develop the maps for the report. Other maps to be provided include an existing water system map with future service boundary, water main material map, water main age map, and two pressure contour maps/results for high demand conditions will be provided.

14. Prepare Report

    We will prepare a report summarizing the findings of the reliability study. This report will include a description of the system, results of the analyses, recommendations, and cost estimates as described in this scope of services. The report will also include color maps as described previously.

15. Submit Final Draft Report

    Following your review of the draft report and modifications to meet your needs, we will provide a final draft copy of the report to the EGLE. With EGLE's acceptance of the Reliability Study, we will then submit copies of the final report to you.

A water quality analysis is not a regulatory requirement, and therefore we have not included this in the scope. However, it is a critical aspect of your water supply. We can provide a cost to incorporate modeling and identify locations of the system that may have lesser water quality such as lower chlorine residuals, high disinfection byproducts, water age, etc.

We can also provide a fee estimate for any additional tasks you would like included in the water system reliability study.

Fees and Schedule

We propose to perform the services described above for a lump sum fee of $14,500. We can complete the work and submit the draft report to EGLE by November 2026. If this proposal meets with your approval, please sign and return the Professional Services Agreement as authorization to proceed. If you have any questions, please contact our office.

Sincerely,

Prein&Newhof

Michael Schwartz, P.E. Thomas A Smith, P.E.

TS/tas

Enclosures: Professional Services Agreement (2 pg.) Terms & Conditions (3 pg.)

Prein&Newhof
Engineers ▪ Surveyors ▪ Environmental ▪ Laboratory

Project No. 226

Professional Services Agreement

This Professional Services Agreement is made this ___ day of January, 2026 ("Agreement") by and between Prein & Newhof, Inc. ("P&N"), of 1707 South Park Street, Ste 200, Kalamazoo, MI 49001, and City of Buchanan ("Client"), of 302 N. Redbud Trail, Buchanan, MI 49107.

WHEREAS Client intends to:
Complete a Water System Reliability Study Update

NOW THEREFORE, for and in consideration of the terms and conditions contained herein, the parties agree as follows:

ARTICLE 1 – DESIGNATED REPRESENTATIVES

Client and P&N each designate the following individuals as their representatives with respect to the Project.

For P&N	**For Client**
Name: Thomas A. Smith, P.E.	Name: Tony McGhee
Title: Project Manager	Title: City Manager
Phone Number: (616) 364-8491	Phone Number: (269) 695-3844
E-mail: tsmith@preinnewhof.com	E-mail: tmcghee@cityofbuchanan.com

ARTICLE 2 – GENERAL CONDITIONS_

This Agreement consists of this Professional Services Agreement and the following documents which by this reference are incorporated into and made a part of this Agreement.

☒ P&N Standard Terms and Conditions for Professional Services

☒ P&N Proposal dated January 9, 2026

☐ P&N Standard Rate Schedule

☐ P&N Supplemental Terms and Conditions

☐ Other:

ARTICLE 3 – ENGINEERING SERVICES PROVIDED UNDER THIS AGREEMENT:

Client hereby requests, and P&N hereby agrees to provide, the following services:

☒ P&N Scope of Services per Proposal dated January 9, 2026,

Prein&Newhof
Engineers ▪ Surveyors ▪ Environmental ▪ Laboratory

☐ Scope of Services defined as follows:

ARTICLE 4 – COMPENSATION:

☒ Lump Sum for Services Described in Article 3 above - $14,500

Additional services to be billed per P&N's Standard Rate Schedule in effect on the date the additional services are performed.

☐ Hourly Billing Rates plus Reimbursable Expenses per P&N's Standard Rate Schedule in effect on the date services are performed.

☐ Other:

ARTICLE 5 – ADDITIONAL TERMS (If any)

none

This Agreement constitutes the entire Agreement between P&N and Client and supersedes all prior written or oral understandings. This Agreement may not be altered, modified, or amended, except in writing properly executed by authorized representatives of P&N and Client.

Accepted for: **Prein&Newhof, Inc.**	**Accepted for:** **City of Buchanan**
By: [signature]	By: _____
Printed Name: Anthony C. McGhee	Printed Name: _____
Title: City Manager	Title: _____
Date: 1/26/26	Date: _____

Standard Terms & Conditions

A. General - As used in this Prein&Newhof Standard Terms and Conditions for Professional Services (hereinafter "Terms and Conditions"), unless the context otherwise indicates: the term "Agreement" means the Professional Services Agreement inclusive of all documents incorporated by reference including but not limited to this P&N Standard Terms and Conditions for Professional Services; the term "Engineer" refers to Prein & Newhof, Inc.; and the term "Client" refers to the other party to the Professional Services Agreement.

These Terms and Conditions shall be governed in all respects by the laws of the United States of America and by the laws of the State of Michigan.

B. Standard of Care - The standard of care for all professional and related services performed or furnished by Engineer under the Agreement will be the care and skill ordinarily used by members of Engineer's profession of ordinary learning, judgment or skill practicing under the same or similar circumstances in the same or similar community, at the time the services are provided.

C. Disclaimer of Warranties - Engineer makes no warranties, expressed or implied, under the Agreement or otherwise.

D. Construction/Field Observation - If Client elects to have Engineer provide construction/field observation, client understands that construction/field observation is conducted to reduce, not eliminate the risk of problems arising during construction, and that provision of the service does not create a warranty or guarantee of any type. In all cases, the contractors, subcontractors, and/or any other persons performing any of the construction work, shall retain responsibility for the quality and completeness of the construction work and for adhering to the plans, specifications and other contract documents.

E. Construction Means and Methods - Engineer shall not have control or charge of and shall not be responsible for construction means, methods, techniques, sequences, or procedures, or for any safety precautions and programs in connection with the construction work, for the acts or omissions of the Contractor, Subcontractors, or any other persons performing any of the construction work, or for the failure of any of them to carry out the construction work in accordance with the plans, specifications or other contract documents.

F. Opinions of Probable Costs - Client acknowledges that Engineer has no control over market or contracting conditions and that Engineer's opinions of costs are based on experience, judgment, and information available at a specific period of time. Client agrees that Engineer makes no guarantees or warranties, express or implied, that costs will not vary from such opinions.

G. Client Responsibilities

1. Client shall provide all criteria, Client Standards, and full information as to the requirements necessary for Engineer to provide the professional services. Client shall designate in writing a person with authority to act on Client's behalf on all matters related to the Engineer's services. Client shall assume all responsibility for interpretation of contract documents and construction observation/field observation during times when Engineer has not been contracted to provide such services and shall waive any and all claims against Engineer that may be connected thereto.
2. In the event the project site is not owned by the Client, the Client must obtain all necessary permission for Engineer to enter and conduct investigations on the project site. It is assumed that the Client possesses all necessary permits and licenses required for conducting the scope of services. Access negotiations may be performed at additional costs. Engineer will take reasonable precaution to minimize damage to land and structures with field equipment. Client assumes responsibility for all costs associated with protection and restoration of project site to conditions existing prior to Engineer's performance of services.
3. The Client, on behalf of all owners of the subject project site, hereby grants permission to the Engineer to utilize a small unmanned aerial system (sUAS) for purposes of aerial mapping data acquisition. The Client is responsible to provide required notifications to the property owners of the subject project site and affected properties where the sUAS services will be performed. The Engineer will operate the sUAS in accordance with applicable State and Federal Laws.

H. Hazardous or Contaminated Materials/Conditions

1. Client will advise Engineer, in writing and prior to the commencement of its services, of all known or suspected Hazardous or Contaminated Materials/Conditions present at the site.
2. Engineer and Client agree that the discovery of unknown or unconfirmed Hazardous or Contaminated Materials/Conditions constitutes a changed condition that may require Engineer to renegotiate the scope of or terminate its services. Engineer and Client also agree that the discovery of said Materials/Conditions may make it necessary for Engineer to take immediate measures to protect health, safety, and welfare of those performing Engineer's services. Client agrees to compensate Engineer for any costs incident to the discovery of said Materials/Conditions.
3. Client acknowledges that Engineer cannot guarantee that contaminants do not exist at a project site. Similarly, a site

which is in fact unaffected by contaminants at the time of Engineer's surface or subsurface exploration may later, due to natural phenomena or human intervention, become contaminated. The Client waives any claim against Engineer, and agrees to defend, indemnify and hold Engineer harmless from any claims or liability for injury or loss in the event that Engineer does not detect the presence of contaminants through techniques commonly employed.

4. The Client recognizes that although Engineer is required by the nature of the services to have an understanding of the laws pertaining to environmental issues, Engineer cannot offer legal advice to the Client. Engineer urges that the Client seek legal assistance from a qualified attorney when such assistance is required. Furthermore, the Client is cautioned to not construe or assume that any representations made by Engineer in written or conversational settings constitute a legal representation of environmental law or practice.
5. Unless otherwise agreed to in writing, the scope of services does not include the analysis, characterization or disposal of wastes generated during investigation procedures. Should such wastes be generated during this investigation, the Client will contract directly with a qualified waste hauler and disposal facility.

I. Underground Utilities – To the extent that the Engineer, in performing its services, may impact underground utilities, Engineer shall make a reasonable effort to contact the owners of identified underground utilities that may be affected by the services for which Engineer has been contracted, including contacting the appropriate underground utility locating entities and reviewing utility drawings provided by others. Engineer will take reasonable precautions to avoid damage or injury to **underground** utilities and other underground structures. Client agrees to hold Engineer harmless for any damages to below ground utilities and structures not brought to Engineers attention and/or accurately shown or described on documents provided to Engineer.

J. Insurance

1. Engineer will maintain insurance for professional liability, general liability, worker's compensation, auto liability, and property damage in the amounts deemed appropriate by Engineer. Client will maintain insurance for general liability, worker's compensation, auto liability, and property damage in the amounts deemed appropriate by Client. Upon request, Client and Engineer shall each deliver certificates of insurance to the other evidencing their coverages.
2. Client shall require Contractors to purchase and maintain commercial general liability insurance and other insurance as specified in project contract documents. Client shall cause Engineer, Engineer's consultants, employees, and agents to be listed as additional insureds with respect to any Client or Contractor insurances related to projects for which Engineer provides services. Client agrees and must have Contractors agree to have their insurers endorse these policies to reflect that, in the event of payment of any loss or damages, subrogation rights under these Terms and Conditions are hereby waived by the insurer with respect to claims against Engineer.

K. Limitation of Liability - The total liability, in the aggregate, of Engineer and Engineer's officers, directors, partners, employees, agents, and consultants, whether jointly, severally or individually, to Client and anyone claiming by, through, or under Client, for any and all injuries, losses, damages and expenses, whatsoever, arising out of, resulting from, or in any way related to the Project or the Agreement, including but not limited to the performance of services under the Agreement, from any cause or causes whatsoever, including but not limited to the negligence, professional errors or omissions, strict liability or breach of contract or warranty, expressed or implied, of Engineer or Engineer's officers, directors, partners, employees, agents, consultants, or any of them, shall not exceed the amount of the compensation paid to Engineer under this Agreement, or the sum of fifty thousand dollars and no cents ($50,000.00), whichever is less. Recoverable damages shall be limited to those that are direct damages. Engineer shall not be responsible for or held liable for special, indirect or consequential losses or damages, including but not limited to loss of use of equipment or facility, and loss of profits or revenue.

Client acknowledges that Engineer is a corporation and agrees that any claim made by Client arising out of any act or omission of any director, officer, or employee of Engineer, in the execution or performance of the Agreement, shall be made against Engineer and not against such director, officer, or employee.

L. Documents and Data

1. All documents prepared or furnished by Engineer under the Agreement are Engineer's instruments of service, and are and shall remain the property of Engineer.
2. Hard copies of any documents provided by Engineer shall control over documents furnished in electronic format. Client recognizes that data provided in electronic format can be corrupted or modified by the Client or others, unintentionally or otherwise. Consequently, the use of any data, conclusions or information obtained or derived from electronic media provided by Engineer will be at the Client's sole risk and without any liability, risk or legal exposure to Engineer, its employees, officers or consultants.
3. Any extrapolations, conclusions or assumptions derived by the Client or others from the data provided to the Client, either in hard copy or electronic format, will be at the Client's sole risk and full legal responsibility.

M. **Differing Site Conditions** - Client recognizes that actual site conditions may vary from the assumed site conditions or test locations used by Engineer as the basis of its design. Consequently, Engineer does not guarantee or warrant that actual site conditions will not vary from those used as the basis of Engineer's design, interpretations and recommendations. Engineer is not responsible for any costs or delays attributable to differing site conditions..

N. **Terms of Payment** - Unless alternate terms are included in the Agreement, Client will be invoiced on a monthly basis until the completion of the **Project**. All monthly invoices are payable within 30 days of the date of the invoice. Should full payment of any invoice not be received within 30 days, the amount due shall bear a service charge of 1.5 percent per month or 18 percent per year plus the cost of collection, including reasonable attorney's fees. If Client has any objections to any invoice submitted by Engineer, Client must so advise Engineer in writing within fourteen (14) days of receipt of the invoice. Unless otherwise agreed, Engineer shall invoice Client based on hourly billing rates and direct costs current at the time of service performance. Outside costs such as, but not limited to, equipment, meals, lodging, fees, and subconsultants shall be actual costs plus 10 percent. In addition to any other remedies Engineer may have, Engineer shall have the absolute right to cease performing any services in the event payment has not been made on a current basis.

O. **Termination** - Either party may terminate services, either in part or in whole, by providing 10 calendar days written notice thereof to the other party. In such an event, Client shall pay Engineer for all services performed prior to receipt of such notice of **termination**, including reimbursable expenses, and for any shut–down costs incurred. Shut–down costs may, at Engineer's discretion, include expenses incurred for completion of analysis and records necessary to document Engineer's files and to protect its professional reputation.

P. **Severability and Waiver of Provisions** - Any provision or part of the Agreement held to be void or unenforceable under any laws or regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Client and P&N, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable **provision** that comes as close as possible to expressing the intention of the stricken provision. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of the Agreement.

Q. **Dispute Resolution** - If a dispute arises between the parties relating to the Agreement, the parties agree to use the following procedure prior to either party pursuing other available remedies:

1. Prior to commencing a lawsuit, the parties must attempt mediation to resolve any dispute. The parties will jointly appoint a mutually acceptable person not affiliated with either of the parties to act as mediator. If the parties are unable to agree on the mediator within twenty (20) calendar days, they shall seek assistance in such regard from the Circuit Court of the State and County wherein the Project is located, who shall appoint a mediator. Each party shall be responsible for paying all costs and expenses incurred by it, but shall split equally the fees and expenses of the mediator. The mediation shall proceed in accordance with the procedures established by the mediator.

2. The parties shall pursue mediation in good faith and in a timely manner. In the event the mediation does not result in resolution of the dispute within thirty (30) calendar days, then, upon seven (7) calendar days' written notice to the other party, either party may pursue any other available remedy.

3. In the event of any litigation arising from the Agreement, including without limitation any action to enforce or interpret any terms or conditions or performance of services under the Agreement, Engineer and Client agree that such action will be brought in the District or Circuit Court for the County of Kent, State of Michigan (or, if the federal courts have exclusive jurisdiction over the subject matter of the dispute, in the U.S. District Court for the Western District of Michigan), and the parties hereby submit to the exclusive jurisdiction of said court.

R. **Force Majeure** - Engineer shall not be liable for any loss or damage due to failure or delay in rendering any services called for under the Agreement resulting from any cause beyond Engineer's reasonable control.

S. **Assignment** - Neither party shall assign its rights, interests or obligations under this Agreement without the express written consent of the other party.

T. **Modification** - The Agreement may not be modified except in writing signed by the party against whom a modification is sought to be enforced.

U. **Survival** - All express representations, indemnifications, or limitations of liability included in the Agreement shall survive its completion or termination for any reason.

V. **Third-Party Beneficiary** - Client and Engineer agree that it is not intended that any provision of this Agreement establishes a third-party beneficiary giving or allowing any claim or right of action whatsoever by a third party.

W. **Fee Escalation** - Engineer's fees are based on its billing rates, which are adjusted annually. For multi-year projects, Engineer's fees incorporate an estimate of future billing rates. If inflation causes actual billing rates to exceed these estimates, Engineer reserves the right to adjust its fees accordingly.

302 Redbud Trail N
Buchanan, MI 49107
Tel: (269) 695-3844
Fax: (269) 695-4330

February 2026 JWSB Meeting

Water Department Report

I am happy to report that Ryan passed his S-4 and D-4 water exams. He will be taking the S-3 and D-3 exams this fall.

The Water Department completed all monthly EGLE requirements, including MOR and bacteriological (Bacti) reports and sampling. I also completed the 2026 SARA Title II report. The 2025 Water Quality Report has been approved and is ready to be posted on the website.

Work is ongoing to bring our Lead and Copper Plan up to date. The plan includes 40 homes that must meet EGLE requirements. Sampling of 20 of these homes is scheduled for June.

MISS DIG activity has been high over the past few months. We have been marking water, sewer, and storm infrastructure and completing a report for each location.

I attended a cybersecurity training hosted by MSP and EGLE.

Six fire hydrants that froze during cold temperatures were repaired. Multiple work orders have been completed over the past few months. A new water service was installed for the Fire Department. The previous water service ran through the Ross Sanders Building.

Buchanan Water Department JWSB Report

Water MG

November Total 9.11 Day Average .29

December Total 9.03 Day Average .29

Chlorine Gas in lbs.

November Total 64.2 Day Average 3.2

December Total 75.8 Day Average 3.3

Fluoride 23% in lbs.

November Total 233.6 Day Average 11.7

December Total 278.0 Day Average 12.1

City of Buchanan
Water & Sewer Enterprise
Water Gallons Pumped Compared to Gallons Billed Monthly

		2025		
Starting Date	Ending Date	Gallons Pumped	Gallons Billed	% Lost
Jan 12/27/2024	1/28/2025	8.1979	7.188	12%
Feb 1/29/2025	2/25/2025	10.57	8.094	23%
March 2/26/2025	3/27/2025	10.4	6.855	34%
April 3/28/2025	4/28/2025	11.67	6.97	40%
May 4/29/2025	5/28/2025	11.921	7.361	38%
June 5/29/2025	6/26/2025	11.142	7.675	31%
July6/27/2025	7/29/2025	13.152	8.498	35%
August 7/30/2025	8/27/2025	11.117	10.392	7%
September 8/28/2025	9/26/2025	9.818	8.086	18%
October 9/27/2025	10/28/2025	9.481	8.18	14%
November 10/29/2025	11/25/2025	7.916	8.584	-8%
December 11/26/25	12/29/2025	10.246	6.545	36%
	Total	125.6309	94.428	25%

Main breaks/constuction
Main breaks/constuction
Main breaks/constuction

Main breaks/constuction

302 Redbud
Buchanan, MI 49107
Tel: (269) 695-3844
Fax: (269) 695-4330

WASTEWATER TREATMENT ACTIVITY BRIEFING OCTOBER 2025

- A call alarm at Millpond indicated a low battery. Terry responded and replaced the battery; the system is now functioning properly.
- A call alarm was received after hours from the Millpond lift station, indicating a low battery and a high float condition. The situation was monitored overnight. The following day, Terry and Joe responded to the site to pull the pump and prepare for the installation of a new grinder pump that is currently on order. Upon inspection, both pumps were found to be clogged, and the water level had risen to less than 5 feet from overflow. Mike Baker was called in to assist with lowering the water level and gaining access to the pumps. Once the pumps were cleaned, they were reinstalled, and the system is now operating normally.
- Cummins completed all necessary repairs on the generator. It is now fully operational.
- Parts arrived for the UVT channel, including flex boards and fuses, which were installed into the Xylem system. Initially, only one bank was functioning and showing low dosage. The second bank appeared to have underlying issues following a power surge. A Wedeco technician was scheduled to assess the damage. Upon inspection, the technician noted availability only at the end of November. A new flex board and fuses were installed, resolving the immediate issue. However, further inspection revealed corrosion in the paneling due to moisture. A quote is being prepared for a future technician to address the repairs.
- Due to ongoing UVT issues, the plant has been using chlorine and bleach to maintain permit compliance. Unfortunately, a violation occurred when the 7-day average for fecal coliform exceeded 400. Since then, the team has maintained regular orders of 12.5% sodium hypochlorite (chlorine) and 40% sodium bisulfite (bleach) to ensure continued compliance until the UVT channel is fully repaired.
- With downtown construction nearing completion and flows significantly reduced, the plant transitioned to operating with one ditch and one clarifier. The clarifier had become clogged due to low flow failing to push solids through. On October 4th, Terry began draining the south ditch and transferring flow to the north side. After nearly two weeks and with about two feet left to drain, solids settled at the bottom below the aeration flappers. Fresh water has been added to help loosen the solids.
- Polymer for the sludge press was ordered, delivered, and properly stored.
- During preventive maintenance, the air release valve on the T10 in the headworks building was found to be malfunctioning. The issue was traced to the flapper valve on pump two. No spare valves were available, so two were ordered—one for immediate replacement and one for inventory.
- Annual calibrations were completed for both influent and effluent meters. All readings were within expected parameters.
- The facility completed 144 preventive maintenance work orders. These ranged from routine equipment checks to complex repairs requiring significant labor.

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WASTEWATER TREATMENT ACTIVITY BRIEFING NOVEMBER 2025

- On November 6, Terry and Zoey completed the D License Certification Test in Grand Rapids at the DoubleTree by Hilton, administered by Environment Great Lakes and Energy (EGLE).
- On November 12, Zoey attended a lab practice seminar at Eagle Eye in East Lansing, hosted by the Michigan Water Environmental Association (MWEA).
- All lift stations were cleaned of debris, as well as fat, oil, and grease.
- The south clarifier has been mostly drained. Additional cleaning was performed to remove scum from the arms and bottom in preparation for colder months.
- Terry obtained quotes for plow supplies to address several necessary repairs and ensure the current equipment remains operational. These repairs will be completed early next month, ahead of the winter season. By prioritizing maintenance now, the existing plow can continue to serve effectively for the next few years before a new purchase is considered.
- At the Millpond Lift Station on the 13th, Terry and Joe pulled Pump 2 to remove bolts and nuts, making adjustments to assist with the installation of the new grinder pump.
- The lift stations were cleaned of fats, oil and grease (FOG) to maintain the integrity of the wet wells and ensure they remain fully functional.
- Parts for the UVT channel were ordered and successfully delivered to the plant a few weeks ago. Upon arrival, it was discovered that the shipment did not include instructions. To ensure proper assembly and avoid potential issues, Mike Baker contacted Xylem directly to request more comprehensive guidance. The company has since provided the necessary instructions, and with this information now available, the installation of the new UVT channel components is scheduled for early next month.
- An issue arose with the BOD probe, which was taking a long time to stabilize even after some parts were replaced. Fortunately, a spare probe was available in storage and could be used. During this time, Zoey worked with Hach technical support to troubleshoot the problem. It was determined that the program needed to be reset, and once that was completed, the system returned to normal operation.
- The PFAS POTW Effluent Monitoring Report was submitted this month, as PFAS testing is conducted quarterly through MiEnviro.
- Groundskeeping was completed with leaf removal across the property.
- Driveway markers were installed to prepare for winter snow plowing.
- The yard was mowed one final time for the season.
- A quote was obtained with parts ordered to repair the plow in advance of winter operations, ensuring readiness before eventually replacing it with a new one.
- Conducted preventive maintenance at the lift station, including replacement of the annual mouse repellent to ensure animals do not enter the cabinets.
- Cleaned and sprayed down the headworks wet well to support ongoing maintenance and operational efficiency.
- The facility completed 157 preventive maintenance work orders. These ranged from routine equipment checks to complex repairs requiring significant labor.

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WASTEWATER TREATMENT ACTIVITY BRIEFING DECEMBER 2025

- On December 1st, the polymer pump head was replaced and a cracked rubber hose was repaired.
- The plow assembly also received attention, with repairs made to the broken A-frame and pivot bar.
- The landfill underwent its annual quality-assurance inspection. Looking ahead, a pilot program to reduce PFAS will begin in January, which will support a review of the Industrial Pretreatment Program to ensure regulatory limits continue to be met.
- On December 3rd, Mike Baker, Terry, and Joe shut down the UVT system to repair damage caused by the September 21st power surge. They replaced a board and several bulbs, restored the system to full operation, and cleaned the bulbs after months of buildup. A routine cleaning schedule will now be followed to extend bulb life. While cleaning Bank A, a worn wiper blade was discovered and is being replaced.
- Both Post lift station pumps defaulted due to low water levels in the well. Joe responded and shut the system down until water levels recovered, allowing normal operation to resume.
- On December 11th, the empty chlorine drum was removed from the dosage feed system now that the UVT system is fully operational.
- The Health Department completed its annual inspection to verify compliance with EGLE regulations for septage receiving.
- During recent sub-zero nights, operators have been checking the plant after hours to prevent freezing issues.
- Due to low levels in the ferrous holding tank, 4,500 gallons were ordered from PVS Technology, with delivery on the 19th of December.
- As part of annual documentation updates, Safety Data Sheets and the Storm Water Pollution Prevention Plan were revised, and the SWPPP was finalized ahead of the January 10th deadline. Quarterly visual assessments were also completed.
- Terry successfully completed his Department of Transportation physical, confirming his ability to operate required equipment
- Terry been coming in early to plow the parking lot and drive to maintain cleanliness and ensure truck access.
- Additional UV channel issues were identified later in the month. After consulting with Wedeco, they recommended performing a deep clean, even though the system had been cleaned just a week earlier. At that point, Terry recalled that the bulbs had accumulated more than 14,000 operating hours. As a result, the team began replacing the bulbs in Bank B, which had exceeded the recommended service life and were losing effectiveness. Only 20 replacement bulbs were available in inventory, though 24 are required for a full changeout. During the replacement process, two broken bulbs were discovered in Section 3 of Bank B. Additional bulbs will need to be ordered both to complete the replacement and to ensure an adequate stock is maintained moving forward.
- The facility completed 162 preventive maintenance work orders. These ranged from routine equipment checks to complex repairs requiring significant labor.

City of Buchanan
Wastewater Reporting
February 2026

	December 2025	November 2025	October 2025	December 2024	
PLANT FLOW					
DAILY AVERAGE (MG)	0.500	0.428	0.462	0.733	
MAXIMUM DAY (MG)	0.703	0.529	0.714	1.207	
GAL/CAP/DAY	114	97	105	167	
FINAL EFFLUENT					**Regulatory Limit**
CARB-BOD (mg/l)	3	3	3	2	25 mg/l
SUSPENDED SOLIDS (mg/l)	6	6	6	6	30 mg/l
VOLATILE SOLIDS (mg/l)	5	4	5	5	
PHOSPHORUS (mg/l)	0.79	0.81	0.95	0.74	1.0 mg/l
FECAL COLIFORM / 100 ML	52	39	50	7	200 ct/100 ml
pH	7.1	7.2	7.1	7.3	6.5 - 9.0
DISSOLVED OXYGEN (DO) in mg/l	5.4	5.5	5.4	6.6	3.0 mg/l min.
PRIMARY INFLUENT					
FLOW(MG)	0.5679	0.5242	0.5370	0.8770	
SUSPENDED SOLIDS (mg/l)	257.0	304.0	441.0	229.0	
VOLATILE SOLIDS (mg/l)	222.0	252.0	311.0	205.0	
POWER AND GAS					
POWER KWH/MG	3,195	3,211	2,606	2,164	
KWH / #CBOD	3.08	2.94	2.05	3.90	
NATURAL GAS (100 CU. FT.)	468	119	64	472	

MG	17.605	15.725	16.649	27.191	influent
KWH	56,256	50,496	43,392	58,848	X96
Inf # CBOD	18,263	17,163	21,218	17,747	