

February 10, 2025

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

Subject: City of Buchana, MI

Water & Sewer Utility Extension Feasibility Study

Dear Mr. McGhee:

Jones & Henry Engineers (J&H) is pleased to submit this proposal to the City of Buchanan (City) to produce a study to review the challenges, opportunities, and likely costs associated with providing water and sewer services to areas outside of the City limits currently served by the City of Niles, Michigan.

The City of Buchanan wishes to provide water and sewer service to an area to the south and east of the City limits. Currently, the area includes quarry parcels and the Bertrand Crossing Industrial Campus. The areas of interest, particularly the industrial park, are serviced by the neighboring City of Niles, Michigan. The City would like a perfunctory review of the challenges, opportunities, and costs associated with the extension of utilities to these areas to provide water and sanitary sewerage services. To achieve that goal, J&H proposes the following tasks.

Scope of Services

- J&H will hold a project kickoff meeting with City staff to review project goals and timelines.
 - o Information will be requested in advance of this meeting and this information will be discussed.
 - o A visit to the areas to be served will be performed.
- J&H will evaluate the service goals of the City and determine the likely water system flow demand to the proposed service areas.
- J&H will determine the likely sanitary sewerage flows based on current and proposed land usage for the parcels/areas to be served.
 - The current zoning plan will be used to determine likely flow contributions per parcel.
- J&H will review the existing water distribution and sewerage collection system maps to establish the most likely system connection points and routes.



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- The review will include system maps, record drawings, and discussions with City staff regarding likely areas of connection.
 - No survey is included in this proposal. Should a formal survey be necessary it can be provided under separate proposal.
- J&H will review existing water distribution system general hydraulics to identify system suitability to deliver water to the existing onsite water tower at the Bertrand Crossing Campus.
 - The review will be limited to available information related to elevated storage elevations and any pressure-boosting pumping equipment.
 - Booster pumping equipment pump curves will be reviewed if available. If not, J&H will contact the manufacturer to retrieve a copy of the test curve for the equipment onsite.
- J&H will review the existing sanitary sewer collection system elevations to ensure suitability for gravity flow. If gravity flow is not possible, J&H will develop baseline pump station requirement and likely siting.
- J&H will produce a feasibility study outlining the findings of our reviews as outlined above. Feasibility Study will include the following:
 - Proposed service area maps.
 - o Proposed water demand and likely sanitary sewerage flows.
 - Review of existing systems related to suitability to provide and/or receive the proposed flows.
 - o General hydraulic limitations of the water and sewerage systems.
 - Most advantageous routing of piping, including constructability review.
 - Anticipated construction costs for extension of water and sewerage systems.
- Review Meeting A review meeting will be held with the City to review the findings of our investigation
 as detailed in the Feasibility Study. Should edits be necessary, they will be made following the review
 meeting.
- J&H will deliver three (3) hard copies and one digital (pdf) copy of the final Study for City use.

Fee

The fee for providing the scope of services described above is estimated to be \$20,000.00 based on man-hour estimates and Jones & Henry's current rates (attached). This fee includes all reimbursable expenses including travel, printing costs, etc. The City will be invoiced on a time and materials basis. Any unused budget at the end of the project will not be charged to the City.

Engineering services will be performed by or under the direct supervision of a professional engineer. The standard of care for all professional engineering performed by Jones & Henry Engineers, Ltd. will be the care and skill ordinarily used by members of the profession practicing under similar circumstances at the same time and in the same locality. Jones & Henry makes no warranties, express or implied, in connection with the services described in our agreement.



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Please feel free to contact me regarding any aspect of the project and/or our submittal. Thank you for your consideration and we look forward to working with the City of Buchanan on this project. The City can authorize this proposal by countersigning below.

JONES & HENRY ENGINEERS, LTD.

Aaron J. Davenport, PE

Senior Vice President, Kalamazoo Office Director

Printed Name

Signature

Title

Date

Jake Meinsdeig

Digitally signed by Jakob Meinerding, PE DN: C=US, E=jmeinerding@jheng.com, O=Jones & Henry Engineers, OU=Principal, CN="Jakob Meinerding, PE" Date: 2025.02.12 07:14:07-05'00'

Copy: Rick Eshlaman, PE - Jones & Henry



Typical Hourly fee, including overhead – 2025

Schedule of Charges

For expenses incurred in the work for travel, subsistence, subcontractors, toll telephone calls, fax, printing, copying, etc., the actual cost plus ten percent (10%) thereof.

Computer modeling and CAD charges are based on \$10.00 per hour of use.

For services and supplies furnished by others at the expense of the Engineers beyond typical services, the actual cost plus thirty percent (30%) thereof.

The time and expense fees shall be payable monthly, each payment being equal to the amount earned during the preceding month.

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