

AGENDA REPORT

TO: Mayor Pat Humphrey & the Clare City Commission
FROM: Jeremy Howard, City Manager
DATE: June 12, 2025
RE: Sole Source Contract – Engineering Support and Groundwater Resource Evaluation for Well 8 Replacement – Williams and Works, Inc.

For the Agenda of June 16, 2025

Background. As you are aware, the City has been working towards adding additional well sites to allow us to add additional capacity to our water system and start to replace some of our existing wells that are 50 plus years old. Dale Clark, Water/Wastewater Superintendent, has requested the City enter a proposed contract (*att'd*) with Williams and Works, Inc. as a sole source contract in the amount of \$26,700 for the two phases to complete the Engineering Support and Groundwater Resource Evaluation for Well 8 Replacement. Williams and Works, Inc. (Dan Whalen) has been used by the City of Clare for many years, and we have been very happy with their work. This work will guide our efforts toward the replacement of Well 8, which is currently inoperable and unrepairable. Pending EGLE approval, which is looking promising, this new replacement well will be next to the existing well 8.

Issues & Questions Specified. Should the City Commission approve the request to contract with Williams and Works, Inc. for the completion of Engineering Support and Groundwater Resource Evaluation for Well 8 Replacement?

Alternatives.

1. Approve the request to contract with Williams and Works, Inc. for the completion of Engineering Support and Groundwater Resource Evaluation for Well 8 Replacement.
2. Disapprove of the request to contract with Williams and Works, Inc. for the completion of Engineering Support and Groundwater Resource Evaluation for Well 8 Replacement.
3. Set aside decision regarding this matter to a later date.

Financial Impact. As reflected on the attached proposal, the cost will be \$26,700 and this cost will be shared equally by both the city and the PRPs.

Recommendation. I recommend that the City Commission approve the requested sole source contract as requested with Williams and Works, Inc. for the completion of Engineering Support and Groundwater Resource Evaluation for Well 8 Replacement by adoption of Resolution 2025-046 (*att'd*).

Attachments.

1. Williams and Works, Inc. Proposal.
2. Resolution 2025-046.

williams&works

engineers | surveyors | planners

May 15, 2025

Dale Clark, Water Treatment Superintendent
Jeremy Howard, City Manager
City of Clare
202 W 5th St
Clare, MI 48617

**Re: Proposal - Engineering Support and Groundwater Resource Evaluation
for the Well No. 8 Replacement**

Dear Mr. Howard and Mr. Clark:

Thank you for the opportunity to continue providing groundwater engineering service to the city. This proposal is to provide you with our scope of work and fees associated with the groundwater resource evaluation for the replacement of Well No. 8. This proposal also includes the design engineering and EGLE permitting for the connection from the new well to the City water system.

Our approach and scope of work will involve two phases of work; Phase 1 will be the development and testing of the replacement well for Well No. 8 – this work will fulfill the EGLE requirements for construction and testing of new Type I water wells, and eventually lead to an approved Type I water well. Phase 2 of this project will be to provide you with engineering plans and specifications, and the Act-399 Construction Permit Application for the well and pump equipment and connection of the new well into the City water system. We will anticipate that both construction phases will be publicly bid – either two separate bids or one all-encompassing bid - and we will assist the City with construction observation during both phases of work.

The water well work will fulfill the EGLE requirements for construction and testing of new Type I water wells¹. This project, however, will involve challenges associated with placement and testing which have not been resolved with EGLE at the time of this letter. Our scope and fees presented below, therefore, address what we expect EGLE will require to fulfill the permitting requirements for this project.

Phase 1

The scope of work for all proposed Type I production well sites follow the same basic approach from site selection to the eventual development of a test-production

¹ Aquifer Test Requirements for Public Water Supply Wells, revised April 14, 2004, reformatted January 14, 2013, Michigan Department of Environmental Quality – ODWMA - Field Operations Section and Environmental Health Section, Policy/Procedure ODWMA-399-003.

Part 127 of the Public Health Code Act 368 of 1978, Water Supply and Sewer Systems, and Administrative Rules, which are collectively known as the "Michigan Water Well Construction and Pump Installation Code."

American Water Works Association (AWWA) Section A100 Deep Wells.

well. In all cases, EGLE has specific requirements for the siting, construction and testing of new Type I water wells. These steps beginning with site selection leading to well development are as follows;

1. **Initial Site Evaluation and Engagement of EGLE.** Once a replacement location has been identified (this has yet to be done), there are specific regulatory requirements that must be met and demonstrated. The most important are; i) isolation from existing or potential sources of contamination - *this cannot be avoided*, ii) isolation from surface water or wetlands - *this cannot be avoided*, iii) ownership or control of an approved isolation area, iv) proximity to nearby private wells, v) regional groundwater flow patterns with respect to the proposed site, vi) isolation from storm and sanitary sewers, and vii) receipt of a passing groundwater withdrawal score from the EGLE Water Use Unit (*this step will not be needed since the replacement well is a one-for-one capacity replacement*). At minimum if these main factors can be resolved with EGLE, we can begin the well site development process.

A package with supporting documentation will be prepared requesting EGLE to visually inspect the site and surrounding area. The package will include;

- a) The overall project work plan and technical approach – part of this task will include a meeting with the EGLE Source Water Unit to reach a consensus regarding overall scope and policy requirements,
- b) A map showing the property site boundaries,
- c) A map showing EGLE Environmental Mapper details,
- d) A map showing the exact proposed well location with coordinates,
- e) A detailed engineering specification section for the proposed well construction and pumping testing – this specification will become part of the bid package,
- f) *This package will not include an Adverse Resource Impact (ARI) pre-screening request since the new well will be “in-kind” replacement and will not increase the city’s baseline capacity.*

If the site meets all EGLE requirements including any deviations as necessary, the District Engineer will issue a letter approving test well drilling.

2. **Well Construction and Testing Bid Documents.** At this point, we will prepare bidding documents and assist the city with advertisement for bids for drilling contractors to perform the drilling and pumping testing work.

The geological engineering fees for Task Nos. 1 and 2 will be \$5,200.00 and will also include the site inspection meeting with EGLE and the City. Once EGLE has signaled approval for test well drilling, we will assist the City with bidding and procurement of a drilling contractor, and then the project can proceed.

3. **Test-Production Well Installation.** The test-production well construction is assumed to be in-kind with the construction characteristics of the Milham Well No. 1 - between 145-180 feet in depth (available records are conflicting), but its construction will depend entirely on the observed conditions during the initial drilling and formation sampling work. **Our work during this task will involve at least three days of field inspection during the drilling, construction and development of the test-production well. The drilling contractor will construct and develop the well in accordance with our engineering specification as provided to EGLE in Task 1e.**
4. **Aquifer Testing.** Upon completion of the test-production well, the well will be equipped with the contractor's test pump and a brief stepped rate pumping test will be performed to determine the aquifer test pumping rate. Once the aquifer test pumping rate is determined, the well will be pumped at this rate for a minimum duration of 24 hours or whatever deemed necessary during our scoping discussions with EGLE (Task 1a). The water levels in the pumping well, any available observation well(s) will be monitored using our electronic monitoring equipment throughout the pumping and recovery phases of the test. **Our work during this task will involve at least four days of field work including monitoring the aquifer and providing coordination with the driller.**

At the end of the pumping phase, groundwater samples will be collected and analyzed for Unit 37 parameters including; general minerals, metals, VOC's, SOC's (herbicides and pesticides), radionuclides (gross alpha, radium 223/226), PFAS compounds, and corrosivity indices (these are all required for all new Type I water wells).

The data from the aquifer test will be analyzed to calculate the hydraulic properties of the pumped aquifer, and a report will be prepared which will address the following required items;

- a. A full description of the local hydrogeology and the assumed hydraulic inter-relationships between local geological units and(or) hydraulic boundaries.
- b. Geologic cross-sections which depict the local and regional geology. These will be based upon our well log database for the area, and the local wells at the site.
- c. A description of the aquifer test, and a full analysis of the aquifer test data using appropriate analytical techniques.
- d. A description of the groundwater quality and an analysis of the corrosivity of the groundwater.
- e. The determination of the drawdown that would occur within the test-production well after pumping for 100 days without the benefit of recharge.
- f. An analysis of the long-term production capability of the aquifer.

- g. An analysis of the mutual interfering effects of all three Milham Production Wells running simultaneously based on the demands of the water system.
- h. Appendices which will include our mapping, aquifer test data, well logs, groundwater chemistry and any other pertinent data.

The draft report will be submitted to the City of Clare for review prior to submittal to EGLE. Upon EGLE approval of the report, the test-production well will be approved as a Type I well, and at that point the Act 399 permitting of the well, pump, appurtenances, interconnecting watermain, etc. can be pursued.

The geological engineering fees for Task 3 through 5 will be \$15,300.00, and will include all field inspection work, all aquifer testing work and data collection, contractor coordination, technical reporting, laboratory fees, and all related correspondence with EGLE. The engineering fees for the complete work scope as described above in Task Nos. 1 through 5 will be a not to exceed total of \$20,500.00.

Phase 2

We will assume the new replacement well will be located within reasonable distance from the existing Well No. 8 (this is tentative and yet be confirmed with EGLE). The new production well will be equipped similarly as Well No. 8 - with a submersible pump and pitless adaptor. We will further assume the electrical infrastructure, existing pump controls, and related equipment will be adequate and remain in place. The revised inter-connecting watermain will allow reasonably straightforward tie-in to the new well.

1. **Plans and Specifications.** Phase 2 will involve preparation of engineering plans and specifications – all of which will meet the Ten States Standards - for the following components;
 - a) Production well pump (if needed), pump riser and conductors and ancillary pump appurtenances, and pitless adaptor.
 - b) The interconnecting watermain from the new well the existing water system piping - the location and connection method to be determined during the design phase.
 - c) The electrical infrastructure equipment including pump controls and connection to the available power source are assumed to be adequate for this design.
 - d) Preparation of an Act 399 Construction Permit Application and submittal to the MiEHDWIS system for EGLE review and approval.

The engineering fees for Phase 2 engineering design and preparation of plans and specifications will be \$6,200.00

Dale Clark, Water Treatment Superintendent
Jeremy Howard, City Manager
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The Phase 2 work will include all engineering and technical reporting including basis of design, all related correspondence with EGLE, Act 399 submittal to MIEHDWIS and preparation of construction plans and specifications for EGLE review and approval.

Once again, we appreciate this opportunity to continue working with the City of Clare. If you have any questions or comments regarding this proposal, please contact me.

Respectfully Submitted,

Williams & Works, Inc.

A handwritten signature in black ink, appearing to read "Daniel Whalen", written in a cursive style.

Daniel Whalen, P.E.
Principal

RESOLUTION 2025-046

A RESOLUTION OF THE CLARE CITY COMMISSION APPROVING THE SOLE SOURCE CONTRACT WITH WILLIAMS AND WORKS, INC. FOR THE COMPLETION OF ENGINEERING SUPPORT AND GROUNDWATER RESOURCE EVALUATION FOR WELL 8 REPLACEMENT.

WHEREAS, the City of Clare finds it necessary and prudent to add additional capacity to our water system and start to replace some of our existing wells that are 50 plus years old; and

WHEREAS, City Staff has recommended that the city enter into a sole source contract with Williams and Works, Inc. for the completion of Engineering Support and Groundwater Resource Evaluation for Well 8 Replacement; and

WHEREAS, the City of Clare has successfully worked this company for many years; and

WHEREAS, the City Commission has reviewed and considered said recommendations and determined approval of sole source contracts with Williams and Works, Inc. for the completion of Engineering Support and Groundwater Resource Evaluation for Well 8 Replacement is reasonable, and in the best interests of the City.

NOW THEREFORE BE IT RESOLVED THAT the City Commission of the City of Clare hereby approves the sole-source contract for the completion of Engineering Support and Groundwater Resource Evaluation for Well 8 Replacement to be conducted by Williams and Works, Inc. for a cost of \$26,700.

ALL RESOLUTIONS AND PARTS OF RESOLUTIONS INSOFAR AS THEY CONFLICT WITH THE PROVISIONS OF THIS RESOLUTION BE AND THE SAME ARE HEREBY RESCINDED.

The Resolution was introduced by Commissioner _____ and supported by Commissioner _____. The Resolution declared adopted by the following roll call vote:

YEAS:

NAYS:

ABSENT:

Resolution approved for adoption on this 16th day of June 2025.

Diane M. Lyon, City Clerk