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July 21, 2025

RE: SEH Proposal for Professional Services
New Prague Filter Rehabilitation Project
City of New Prague, MN

Bruce Reimers
General Manager
New Prague Utilities
118 Central Avenue North
New Prague, MN 56071

Dear Mr. Scheffler:

This letter provides our proposal for engineering services associated with design and construction administration for filter rehabilitation at the New Prague Water Treatment Plant No. 3 (WTP) and feasibility for WTP expansion. This proposal includes engineering services for the:

- Pilot study to determine maximum filtration rates
- Design of filter rehabilitation to address leaks.
- Bidding and Construction Administration services for the filter rehabilitation project.
- Feasibility study for expansion of WTP and addition of softening to reduce chlorides at the wastewater treatment plant.

BACKGROUND

The City of New Prague (City) owns and operates a conventional iron and manganese removal water treatment plant No. 3 (WTP) that provides drinking water to the residents and businesses of New Prague. The WTP Includes a Dualator III Filter that is original to construction of the plant. Operators have noticed multiple leak locations along the base of the steel filter. This City has also indicated the desire to increase capacity of the WTP through expansion if needed.

During a cursory review of the WTP drawings to aid in preparation of this proposal, SEH has identified that the filters are sized for 1,000 gallons per minute (gpm) at filtration rate of 2.9 gpm per square foot (gpm/sf). Ten State Standards allows for a filtration rate of 4 gpm/sf this would bring total filter production of up to 1,300 gpm. This project will identify options for expansion of the WTP.

SCOPE OF SERVICES

For this project, the SEH team proposes to work closely with WTP staff. SEH has prepared this proposal with a scope of services that is divided into four (4) primary tasks as listed below. In addition, SEH will provide ongoing management, administration, and coordination of the project. This will include development of an internal project management plan to convey the requirements of the project to the SEH team.

SEH will also require quality assurance and quality controls (QA/QC) reviews throughout the project. All deliverables of the project will go through a QA/QC review.

Task 1 – Project Kickoff and Pilot Study

This task consists of a kickoff meeting (Meeting No. 1), in which City staff and key SEH team members will come together to discuss the project followed by completion of the Pilot Study. The task will proceed as follows:

- Meeting No. 1 with City staff and SEH team:
  - Initiate data collection on existing facilities and operations information.
  - Review Communications Plan.
  - Discuss future needs of the WTP
- Pilot Study – the goal of the pilot study is to determine if a filtration rate of up to 7 gallons per minute per square foot (gpm/sf) of filter media can be achieved with pyrolusite or manganese filter media can be achieved.
  - Prepare Pre-Pilot Plan.
  - Submit Pre-Pilot Plan to Minnesota Department of Health (MDH).
  - Meet with individuals from MDH to review and approve the pilot plan.
  - Pilot Study:
    - Provide a fully contained mobile water treatment pilot trailer and laboratory to confirm the following pressure or gravity treatment processes and components:
      - Filter Media: The pilot study will also confirm which is the most effective media for high-rate filtration: (1) pyrolusite, and (2) manganese greensand. Each of the media selections comes with different cost elements that can be vetted through the pilot study, allowing SEH to fine-tune its cost estimate.
  - Pilot Operation and Water Quality Testing:
    - Set up and run a pilot at WTP-3.
    - SEH staff will provide complete set up, operation and removal of the pilot equipment.
    - SEH staff will collect and maintain records of the operation and performance of the pilot equipment. The data from the pilot study will aid in identifying the most efficient treatment process and filter media based on the City's actual well water quality.
    - SEH staff will perform in-house iron and manganese testing as needed to demonstrate the effectiveness of the contemplated treatment processes.
- Prepare a written report on the pilot results, findings, recommendations, and system costs.
- Submit Pilot report to City staff.

Task 2 – Filtration Rehabilitation Design

This task consists of preliminary and final design of the filter rehabilitation. The task will proceed as follows:

- Preliminary Design
  - Prepare preliminary background drawings off existing pdfs and field measurements.
  - Update drawings to include filter rehabilitation.
  - Prepare the initial Opinion of Probable Cost (OPC)
  - Update the preliminary drawings and deliver them to City staff.
- Meeting No. 2:
  - Review preliminary drawings and OPC.

- Final Design
  - Prepare final drawings
  - Prepare the Technical Specifications
  - Update the OPC
  - Prepare a construction project schedule.
  - Submit 95% level documents to the City and hold review meeting (Meeting No. 3) with City staff, City Building Official and SEH Team members.
  - Prepare Final Documents
  - Complete SEH Team QA/QC

Task 3 – Filtration Rehabilitation Bidding and Construction Administration

In this task, SEH will provide bidding and construction administration services.

- Bidding
  - Upload bidding documents
  - Provide bidding documents to City staff and Team
  - Respond to question from prospective bidders
  - Issue necessary addenda to Project Bid Documents
  - Attend Bid opening to receive bids – Meeting No. 4
  - Analyze bids, prepare bid tabulation, research bidders, and prepare bid summary letter.
- Construction Administration
  - Prepare and issues conformed project documents to City staff, City Building Official, SEH Team members and Awarded Contractor.
  - Prepare EJCDC construction contracts to deliver to Awarded Contractor.
  - Prepare Pre-Construction Agenda, Attend Meeting & Prepare Post-Meeting Notes.
  - Conduct regular construction progress meetings
  - Review shop drawings.
  - Provide a complete, organized set of final shop drawings at completion of project.
  - Respond to contractor RFI's coordinate questions with City staff.
  - Review and act upon contractor request for contract changes as approved by City staff and Council.
  - Provide final project start-up, punch list and project closeout services.

Task 4 – Feasibility Study

This task consists of a feasibility study to determine options for expansion of the WTP. The task will proceed as follows:

- Feasibility Study
  - Meet with City staff to discuss feasibility study goals
  - Conduct an analysis of the current Water Treatment Plant (WTP) operations.
  - Identify areas where efficiency and effectiveness can be enhanced.
  - Gather data on current performance metrics and compare them with industry standards.
  - Prepare draft memorandum for expansion of the WTP
  - Review draft memorandum with City personnel
- Feasibility Study
  - Incorporate feedback and revisions into the memorandum.

- Prepare the final version of the memorandum for expansion of the WTP

PROJECT TEAM
SEH and New Prague staff will come together to form the project team. The SEH team includes the following members:

- **Christopher Larson, PE** will serve as project manager. Chris will be responsible for coordinating the overall work efforts for the project.
- **McKenzie Hunt, PE** will serve as the process engineer and will be responsible for preparation of the project drawings and specifications.
- **John Thom** – John will operate the pilot study. John is a Class A water operator with more than 60 years of experience.
- **Kurt Karns** will serve as process technician to compile the project drawings.
- **Bradlee Sipe** will serve as coatings specialist for review of the coating and welding of filter.
- **Miles Jensen, PE**, SEH's Enterprise Water Market Leader with more than 40 years of experience in the water industry will provide quality assurance/quality control reviews during the project.

COMPENSATION
We propose to complete the scope of services identified above on a lump sum basis for a total fee of **$116,000**. We understand this total value of proposal cannot increase without further authorization from you. The fee is broken down by task as follows:

- **Task 1:** Pilot Study: $20,000
- **Task 2:** Filtration Rehabilitation Design: $37,000
- **Task 3:** Filtration Rehabilitation Bidding and Construction Administration: $40,000
- **Task 4:** Feasibility Study: $19,000

PROJECT SCHEDULE
Our team is available to begin work on the Project upon receipt of a Notice to Proceed (NTP) from the City of New Prague. SEH proposes to perform the work according to the following schedule:

Task	Completion Date
Kickoff Meeting	Within 2 weeks from NTP
Pilot Study	September 2025
Preliminary Design	September 2025
Final Design	October 2025
Bidding	November 2025
Construction Start	December 2025
Construction Complete	March 2026

CLOSING

We want to thank you for the opportunity to provide the City of New Prague with this proposal. If this proposal is acceptable, please let me know and I will begin preparation of SEH's standard Professional Services Agreement to be signed by authorized representatives of both organizations. If you have any questions or if you would like to discuss this proposal or the proposed project in general, please do not hesitate to contact me directly at clarson@sehinc.com or by phone at 952-905-1212.

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.

Christopher Larson, PE
Principal | Project Manager

cc: Travis Scheffler, City of New Prague
McKenzie Hunt, SEH
John Thom, SEH

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