City Council Memorandum

To: Mayor Fasbender & City Council Members
From: Ryan Stempski – Public Works Director/City Engineer
Date: March 29, 2023
Item: Approve WSB & Associates, Inc. Professional Services Agreement for a PFAS Water Treatment Feasibility Study

Council Action Requested:
The Council is requested to approve WSB & Associates, Inc. to complete a feasibility study to develop recommended solutions and estimated costs to address the PFAS and nitrate issues on a long-term basis in the City of Hastings.

Background Information:
The Environmental Protection Agency (EPA) recently released draft PFAS values lowering them to the lowest level that can be reliably measured at this time. The Minnesota Department of Health (MDH) provides guidance for our wells and will be revising their PFAS health-based values in 2023. It is anticipated that the new guidance will result in drinking water advisories for many or all wells in Hastings. To continue our commitment to providing safe drinking water to our residents, staff recommends approval of this Feasibility Study to position the City for funding opportunities and further knowledge of how to best mitigate PFAS and nitrates in our drinking water supply. WSB provides a team of expertise and modeling competency to complete the work in a reasonable time frame.

Financial Impact:
The estimated total cost to complete this investigation and feasibility study is $37,406. It is our intention to track all costs related to this study and seek reimbursement if possible.

Attachments:
- WSB Proposal for Professional Services Proposal for Feasibility Study, Water Supply and Treatment Options for PFAS and Nitrate Removal

March 28, 2023

Mr. Ryan Stempski, PE
Public Works Director, City Engineer
City of Hastings
1225 Progress Drive
Hastings, MN 55033

RE: Proposal for Feasibility Study
Water Supply and Treatment Options for PFAS and Nitrate Removal
City of Hastings, Minnesota

Dear Mr. Stempski,

We appreciate the opportunity to submit this letter proposal to study alternative water supply and treatment options to address the Per- and Polyfluoroalkyl Substances (PFAS) and nitrate that have been detected in the City's wells. The Minnesota Department of Health (MDH) has established a recommended Health Index (HI) guidance limit of 1.0 for six types of PFAS contaminants that are tested and monitored by MDH. The six types of PFAS include PFBS, PFBA, PFHxS, PFHxA, PFOS, and PFOA. The recent test results provided by the MDH indicate that certain City wells are approaching the Health Index guidance limit while other wells have PFAS levels that have increased over time. In addition to PFAS, the City's nitrate levels have increased over time in which certain wells are also approaching the allowed Maximum Contaminant Level (MCL) of 10 mg/L.

We recommend completing a feasibility study to develop recommended solutions and estimated costs to address the PFAS and nitrate issues on a long-term basis. For studying and developing potential long-term solutions, we will evaluate each of the following proposed water supply and treatment options and estimate the capital and long-term operational costs for each option.

Option 1 – Blend City wells to dilute the PFAS to below the MDH guidance limit and dilute the nitrate to below the MCL. This option is not anticipated to be feasible but should be studied to demonstrate to MDH and MPCA that it was discussed.

Option 2 – Construct deeper Mount Simon-Hinckley wells. This option also is not anticipated to be feasible but should be studied to demonstrate to MDH and MPCA that it was discussed.

Option 3 – Construct a transmission watermain to purchase treated water from St. Paul Regional Water Services (SPRWS). This option also is not anticipated to be feasible but should be studied to demonstrate to MDH and MPCA that it was discussed.

Option 4 – Implement up to four municipal water treatment facilities to treat both PFAS and nitrate in each of the City's wells.

Proposed Engineering Services

The feasibility study will include the following tasks:

1. Provide project management and coordination with City Staff.

2. Coordinate and attend up to four (4) meetings with City Staff, including a kick-off meeting, progress meetings as needed, and a draft review meeting.

3. Discuss possible pumping scenarios for blending the City's existing wells to dilute and lower the concentrations of PFAS and nitrate that are currently being detected in each of the City's wells.

4. Discuss constructing deeper Mount Simon-Hinckley wells. This task will include having discussions with the Minnesota Department of Natural Resources as it relates to using the Mount Simon-Hinckley aquifer and providing estimated capital and long-term operational costs.

5. Discuss constructing transmission watermains and purchasing treated water from St. Paul Regional Water Services (SPRWS). This task will include confirmation with SPRWS of the nearest existing trunk watermain.

6. Review and compare proven and effective water treatment technologies for treating PFAS and nitrate in each of the City's wells. We will also study potential sites to construct the water treatment facilities in further detail, complete water distribution system computer modeling using the City's existing model to identify the required watermain improvements, and provide estimated capital and long-term operational costs for implementing multiple water treatment facilities.

7. Summarize the findings of the feasibility study in a report along with GIS figures and present the report to City Staff and the City Council if requested.

Proposed Fees

We propose to complete the feasibility study for an hourly, not-to-exceed fee of **$37,406** as summarized below.

Task	**Estimated Fee**
1. Provide project management and coordination	$1,556
2. Meetings	$2,220
3. Discuss possible pumping scenarios for blending the City's existing wells	$1,110
4. Discuss constructing deeper Mount-Simon Hinckley wells	$1,110
5. Discuss conveying and purchasing water from SPRWS	$1,110
6. Review and compare proven and effective water treatment technologies for PFAS and nitrate and study implementing a water treatment facility	$21,060
7. Summarize the findings of the feasibility study in a report and present it to City Staff and the City Council	$9,240
Total Estimated Fee	**$37,406**

The estimated hours for each task and individual hourly billing rates are summarized in the attached spreadsheet for services provided in 2023. We will invoice the City of Hastings based on the basis of actual hours spent at current billing rates. Additional services, if requested by the client, will be invoiced on the basis of actual hours spent at current billing rates. All services will be invoiced monthly.

Proposed Schedule

WSB will complete the tasks detailed above within 10 to 12 weeks of receipt of a written authorization to proceed.

This proposal represents our total understanding of the project and the proposed scope of services to complete the Feasibility Study for Water Supply and Treatment Options for PFAS and Nitrate Removal. This proposal does not include pilot study of treatment technologies, although that may be the recommended next step to implement treatment. If you are in agreement with the scope of services, please sign the bottom of this letter and return a copy to WSB. Our receipt of an executed copy will be WSB's authorization to proceed. Should the City of Hastings request additional services outside of the above scope of services, we will work with you to establish a revised scope and fee. Please contact us at your convenience if you have any questions or concerns related to this proposal as presented. We appreciate the opportunity to assist you and your staff with the completion of this study.

Respectfully Submitted,

WSB

Justin Messner, PE
Director of Municipal Operations

Jon Christensen, PE
Professional Engineer

ACCEPTED BY:
City of Hastings, Minnesota

Name _____

Title _____

Date _____