



CITY OF APPLETON

MEMORANDUM

Date: 05/14/2024
To: Utilities Committee
From: Danielle Block, Director of Public Works
Pete Neuberger, Deputy Director of Public Works
Subject: Request to Award Single Source Contract with Brown & Caldwell for Badger Ave Design and Modeling Support, and for DPW Staff Software Training, in an Amount Not to Exceed \$41,400.

The Department of Public Works (DPW) recommends award of the single source contract with Brown & Caldwell (BC) for Badger Avenue design and modeling support, and for DPW staff software training, in an amount not to exceed \$41,400. This request is consistent with the 2024 Stormwater Consulting budget. The proposed contract includes the following scope of services:

Badger Avenue Design and Modeling Support (\$22,900)

Provide support to the City related to evaluating the City's Badger Avenue storm sewer design which is included in the previously provided Spencer-Locust XPSWMM stormwater modeling, including:

- Identify the base (existing conditions model at the time of the original analysis) and selected alternative model.
- Update the XPSWMM models to current software version.
- Meet with the City to identify storm sewer projects that have been completed in the watershed since the model was created.
- Review the model in the vicinity of the Badger Avenue design project against the City's GIS and relevant design record drawings for projects completed in the watershed since original model creation, as guided by discussions with City staff.
- Update the model for the currently identified storm sewer improvements.
- Update the model for up to 4 iterations of storm sewer design related to the Badger Avenue design project (e.g. changes to storm sewer sizes, inverts etc.)
- Provide a technical memorandum summarizing model updates for City records
- Integrate the above tasks with City staff XPSWMM software training.

XPSWMM Stormwater Software Training (\$18,500)

Provide XPSWMM training services to City of Appleton staff in the areas:

- Overview of development of XPSWMM 1D hydrologic and hydraulic (H&H) models.
- User Interface for XPSWMM model software.
- Finding and modifying basic H&H components (drainage basin, pipe/channel/overland flow paths, roughness coefficients, curve numbers, etc.)
- Viewing plan and profile information.
- Viewing and interpretation of output information (tables, plan and profiles, hydrographs, ponding information, etc.)
- Interpretation and Calculation of Hydraulic Curve Numbers for a given property.
- Includes 16 hours of staff time to prepare for the training using actual City data.

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- Includes 16 hours of on-site training and associated costs.
- Includes up to 40 hours of follow-up support via phone/virtual meetings/emails to answer questions and provide additional model navigation or support.

BC is uniquely qualified to perform this work based on their extensive XPSWMM modeling to date on various City projects, their past and ongoing work reviewing Stormwater Management Plans and related SWMM modeling on Stormwater Permit applications. BC will set up customized training using actual drainage network conditions, this will make the training more effective for City staff than using generic training that may be provided by other services, and better equip City staff to be proficient in use of existing models and development of new models for City projects.