



Waukesha Water Utility

SERVING WAUKESHA SINCE 1886

115 DELAFIELD STREET
WAUKESHA, WI 53188-3615

Telephone: (262) 521-5272 • Fax: (262) 521-5265 • E-mail: contactus@waukesha-water.com

MEMORANDUM

Date: December 13, 2019

To: Dan Duchniak, P.E.

From: Chris Walter, P.E.

Re: Barstow Water Main Lining

In 2020, the City of Waukesha will be reconstructing Barstow Street from Wisconsin Avenue to North Street. Waukesha Water Utility will be replacing water main within the project limits and bid is scheduled for mid-January 2020 with construction planned to begin in late February. Part of this work includes water main that crosses under the Fox River and bridge just north of Corina, which we are not able to replace via open cut.

Several alternatives were investigated to replace or rehabilitate this water main. The existing water main from 1957 runs under the bridge footings and the river, however the exact condition and alignment is not known. One alternative was to re-route the water main onto Riverfront to the west and directionally drill a new pipe under the river at that location. However, soil borings indicate the possibility of contaminated soils. Although this would be a trenchless installation and not disturb the river, the access pits, especially on the north side of the river, carry a significant risk for encountering poor and contaminated soils.

Thus, the decision was made to re-line the existing water main, which is a feasible solution because the diameter of the proposed pipe is not changing. Lining quotes were obtained from Michels, Suez Water Technologies and Fer-Pal Construction. The lowest cost quote was provided by Fer-Pal Construction, who we completed a similar lining project with in early 2019.

Normally this work would be completed under the primary Barstow Reconstruction contract, however in effort to take advantage of contractor availability and save time during the normal project schedule, it was decided to pursue completing the work over winter ahead of time. Waukesha Water Utility crews will be providing traffic control, access pit excavation and shoring for the lining contractor. This approach also avoids general contractor markup and will take approximately 1 to 2 weeks to complete, including pressure testing and safe water sampling.

The cost of this work is included in the 2020 capital water main replacement budget.

Recommended Motion: Move to approve a contract with Fer-Pal Construction in the amount of \$67,750.00 to reline existing water main on Barstow under the Fox River.

Enc.

