

REQUEST FOR COUNCIL ACTION

Date: 12/10/12

Item No.: 12.a

Department Approval



City Manager Approval



Item Description: Approve Resolution Awarding Bid for Watermain Rehabilitation Project

BACKGROUND

The majority of the city's water main pipes were originally constructed in the 1950's and 1960's, utilizing cast iron pipe. In the 1970's, the pipe materials used in construction changed from cast iron to ductile iron. This older infrastructure is nearing the end of its useful life. The aging pipe is becoming more brittle and prone to water main breaks. There is an average of 30 water main breaks in Roseville every year. As the pipes continue to age, this number will continue to increase. Watermain breaks are a disruption to service and are inconvenient to residents and potentially costly to area businesses.

New technologies in the industry have allowed cities to begin evaluating trenchless methods of water main pipe rehabilitation as a viable alternative to open-cut pipe replacement for some projects. This technology essentially installs a new pipe inside the existing water main without digging up city streets, which results in minimal disruption to residents and the traveling public during construction. The new pipe is a structural improvement that can extend the service life of the water main by 50 years. We expect that this will eventually become an annual project for the foreseeable future as our infrastructure continues to age.

The 2012 and 2013 Capital Improvement Plans include funding for a water main rehabilitation program to extend the life of our water mains. Staff has identified two segments in the system that have a significant history of watermain breaks to include in this rehabilitation project. Transit Avenue, from Western Avenue to Rice Street, has had 10 watermain breaks since 2000, and Rice Street, from south of Transit Avenue to County Road C-2, has had 8 watermain breaks since 2000.

Plans and specifications were prepared in October 2012 for a watermain rehabilitation project including these two segments. Contractors bid two different types of trenchless technologies on this project. One is a cured in place pipe (CIPP) liner, which is similar to the liners used on sanitary sewer lining projects. The other is a spray-on liner produced by 3M. Both methods are National Sanitation Foundation (NSF) 61 approved for potable water systems. The NSF is an independent, not for profit organization that certifies products that come into contact with drinking water. The NSF has led the development of the American National Standards for all materials and products that treat or come in contact with drinking water to help protect public health and the environment and minimize adverse health effects. Both methods also meet American Water Works Association (AWWA) Class IV specifications as fully structural pipe.

Based on past practice, the City Council has awarded contracts to the lowest responsible bidder. For this project, the apparent low bid is Veit & Company, Inc. of Rogers, Minnesota. The following is a summary of bids received for this project:

Bidder, lining method	Base Bid Subtotal Segment 1 + Segment 2	Alternate 1 Temporary Watermain- Segment 1	Alternate 2 Additional Access Pits
Fer-Pal Construction USA LLC (CIPP)	\$1,141,337.00	\$26,450.00	\$21,000.00
Michels Corporation (CIPP)	\$1,136,488.00	\$59,000.00	\$98,266.00
Veit & Company, Inc. (Spray-on)	\$ 621,886.10	\$102,870.00	\$0.00

Segment 1 is the cost to complete lining on Transit Avenue; Segment 2 is the cost to complete lining on Rice Street.

Using the spray-on lining technology, it is possible to complete the project without using a temporary watermain system; however, temporary water is needed when the CIPP method is used. City staff reviewed the project areas, and felt that it is possible to complete the segment on Transit Avenue without temporary watermain. Temporary watermain on Segment 1 was included as Alternate 1 so that staff could evaluate several options with the bids. If temporary water is not used, boil notices would be required to property owners affected by the project until disinfection tests pass, which is typically 48 hours. The City would provide bottled water to affected properties for consumption during this period. The cost of the temporary water system submitted by Veit would add significant costs to the project. Staff recommends pursuing the project without a temporary water system; however, if it is determined that temporary water system is needed, staff will seek quotes from other contractors.

During the bidding process, some of the bidders indicated they would need to dig more access pits than staff had identified on the plans. In order to best understand the additional costs, staff issued an addendum adding Alternate 2, allowing contractors to indicate the number of additional pits they would need and the cost of each pit.

Veit & Company, Inc. submitted their bid based on using the spray-on liner produced by 3M. This is a newer technology that has been applied in several other states in the U.S., including Maine, New York, and Pennsylvania, as well as Canada and Europe, but has not yet been applied in Minnesota. Staff has been working with 3M to learn about and understand the process used with the spray-on method. The projects 3M has completed to date have been successful, without issues arising post-construction on the watermain or services. However, since this is a newer technology, 3M has offered to provide the City an additional warranty over and above the standard contract warranty to assure the City of 3M's commitment to their product and process of watermain lining.

POLICY OBJECTIVE

It is city policy to keep utility infrastructure in good operating condition, utilizing current construction technologies that keep service disruption during construction to a minimum.

FINANCIAL IMPACTS

We received three bids for the Watermain Rehabilitation Project. The low bid submitted by Veit & Company, Inc., \$621,866.10 is within the budgeted amount for this project and within the watermain budget for 2012 and 2013. This work is funded by Watermain Infrastructure Funds.

67 **STAFF RECOMMENDATION**

68 Staff recommends approval of a resolution awarding the base bid for the Watermain Rehabilitation
69 Project in the amount of \$621,886.10 to Veit & Company, Inc., of Rogers, Minnesota, contingent
70 upon receiving an additional warranty from 3M that is reviewed and approved by the City Attorney.

71 **REQUESTED COUNCIL ACTION**

72 Approve resolution awarding the base bid for the Watermain Rehabilitation Project in the amount of
73 \$621,886.10 to Veit & Company, Inc., of Rogers, Minnesota, contingent upon receiving an
74 additional warranty from 3M that is reviewed and approved by the City Attorney.

Prepared by: Kristine Giga, Civil Engineer
Attachment A: Resolution

33 next lowest bidder shall be retained until contracts have been signed.

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35 NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Roseville,
36 Minnesota:

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38 The motion for the adoption of the foregoing resolution was duly seconded by Member ,
39 and upon vote being taken thereon, the following voted in favor thereof:

40 and the following voted against the same: .

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42 WHEREUPON said resolution was declared duly passed and adopted.

STATE OF MINNESOTA)
) ss
COUNTY OF RAMSEY)

I, the undersigned, being the duly qualified City Manager of the City of Roseville, County of Ramsey, State of Minnesota, do hereby certify that I have carefully compared the attached and foregoing extract of minutes of a regular meeting of said City Council held on the 10th day of December, 2012, with the original thereof on file in my office.

WITNESS MY HAND officially as such Manager this 10th day of December, 2012.

William J. Malinen, City Manager

(SEAL)