

Public Works Memorandum
NO. 2017-02

DATE: January 3, 2017

TO: Honorable Mayor Moore Wolfe and City Council Members

FROM: Tim Gleason, City Manager
Richard G. Marley, P. E., Public Works Director

SUBJECT: Resolution Accepting Bid and Authorizing the Execution of a Contract with SAK Construction, LLC to perform 7th Ward Sewer Rehabilitation Project, City Project 2015-07

SUMMARY RECOMMENDATION:

It is recommended by staff that the City Council approve, that the Mayor be authorized to execute, and the City Clerk to attest to the attached resolution to approve a contract with SAK Construction, LLC, as the lowest, responsible bidder for the amount of \$7,746,486, to perform the 7th Ward Sewer Rehabilitation project, contingent on IEPA approval. The Resolution also authorizes an additional expenditure of up to \$231,627.12, which is the amount the IEPA recommends for project contingencies, for a total authorized expenditure of \$7,978,113.12 from the IEPA Water Pollution Control Loan Program for the 7th Ward Sewer Rehabilitation Project. After the contract is awarded by the City Council a “Notice of Intent to Award” will be signed by the City Manager and forwarded with loan documents to the IEPA.

PRIOR COUNCIL ACTION:

See Appendix B for prior council actions.

BACKGROUND:

Sanitary Sewer Priorities

Under the direction of the City Council, the Public Works Department has established four priorities to improve the City’s sanitary sewer collection system as defined in the Sanitary Sewer Master Plan.

1. Critical Large Diameter Sewer Rehabilitation.
2. Sanitary Sewer Overflows Due to Inflow and Infiltration.
3. System Operation and Maintenance
4. Small Diameter Sewer Rehabilitation

The 7th Ward Sewer Rehabilitation Project addresses the top priority identified for the City’s sewer system to assure that the large diameter sewers serving the City are maintained in a structurally sound condition. The 7th Ward Sewer is a critical sewer that serves the west side of the City (see map in Appendix A). The project will use cured-in-place-pipe (CIPP) lining.

Project Letting

The project scope and specifications were prepared by Bainbridge, Gee, Milanski & Associates, Inc. (BGM). The project includes the rehabilitation of approximately 22,350 feet of sewer and 100 manholes. The project was advertised on October 29, 2016, a pre-bid meeting was held on November 18, 2016, and bids were opened on December 13, 2016. The results of the letting are as follows (bid tabulation attached):

| <u>Bidder</u> | <u>Bid Price</u> | <u>Compared to Engineer's Estimate Over (-Under)</u> |
|--|-----------------------|--|
| SAK Construction, LLC | \$7,746,486.00 | (43.59%) |
| Insituform Technologies USA, LLC | \$8,391,660.20 | (38.89%) |
| Kenny Construction Company | \$9,475,740.00 | (30.99%) |
| Layne Inliner, LLC | \$9,517,305.40 | (30.69%) |
| Ric-Man Construction, LLC | \$9,622,799.00 | (29.92%) |
| Michels Pipe Services, A Division of Michels Corporation | \$13,118,308.00 | (4.46%) |
| Inland Waters Pollution Control, Inc. | \$13,334,539.00 | (2.89%) |
| Lanzo Trenchless Technologies North | \$14,426,657.40 | 5.06% |
| Engineer's Estimate | \$13,731,320.00 | ----- |

SAK Construction, LLC, provided the lowest responsible bid for the proposed work. SAK is a major national contractor located in O'Fallon, Missouri that specializes in cured in place sewer lining as described in Appendix B. SAK has completed several sewer lining projects in the City, including Contract A of the Lake Shore Drive Rehabilitation Project and the 2015 Trenchless Long Lining Repairs Project. BGM has investigated their work record and has provided a recommendation, (attached), stating that SAK Construction, LLC is able to complete the work as specified.

Contractors for City Projects shall comply with City Code Chapter 28, Article 10, "Minority Participation Goals for Public Works Contracts."

Contractors for City projects shall make a good faith effort to comply with the following minimum goals:

1. Ten (10) percent of the total dollar amount of the contract should be performed by Minority Business Enterprises if subcontracting opportunities are available; and,
2. Eighteen (18) percent of the total hours worked should be performed by minority workers.

Subcontracting is not required for a City project. SAK Construction, LLC will be using subcontractors however an insufficient number of MBE's responded to their invitation to bid. SAK has provided sufficient evidence of making a good faith effort.

This project will be completed in accordance with the Federal Davis Bacon Wage laws. Upon approval of the contract by the City Council, the contractor will receive a "Notice of Intent to Award." The contract will be forwarded to the IEPA for formal loan approval. Upon receiving approval for a loan from the IEPA, and a contract bond and insurance from the Contractor, the City will formally award the contract and issue a notice to proceed with the work. Staff recommends that the City

Council approve a contract with SAK Construction, LLC, to perform the 7th Ward Sewer Rehabilitation Project.

Project Funding Through the Water Pollution Control Loan Program

Awarding the 7th Ward Sewer Rehabilitation Project provides the IEPA with real costs to prepare the final documents that will secure a low interest loan through the Water Pollution Control Loan Program. The loan rate is expected to be 1.75% payable over a 20 year period beginning at the conclusion of the project. With the project bids in hand, the total loan request should be as summarized below:

| Work Item | Project Estimate |
|---|-------------------------|
| Design Engineering | \$297,000 |
| Loan Eligible Construction Cost | \$7,720,904 |
| 3% Construction Contingency | \$231,627.12 |
| Loan Ineligible Construction Costs* | \$25,582 |
| Construction Engineering | \$944,000 |
| Total Estimated Project Cost | \$9,219,113.12 |
| Total Estimated IEPA Loan Amount | \$9,193,531.12 |
| *Ineligible costs include resurfacing of entire intersection of Leafland Ave. and Monroe St. (IEPA only allows replacement of pavement removed for installation of utility) and allowances for railroad permit and flagging expenses. | |

As noted above, upon Council authorization of the contract, the City will issue a Notice of Intent to Award to the contractor. The IEPA will review and approve the contracts and authorize a loan to cover the project. Upon formal approval of the loan by the IEPA, the City will issue a Notice to Proceed to the contractor.

SCHEDULE:

| | |
|---|-------------------|
| Bids opened by the City | December 13, 2016 |
| City Council receives and approves bids | January 17, 2017 |
| Notice of Intent to Award issued to contractors | January 18, 2017 |
| IEPA approves bids and authorizes final award | January 2017 |
| The loan is authorized by the IEPA | February 2017 |
| Notice of Award issued to contractor | February 2017 |
| Notice to Proceed is issued to the contractor | March 2017 |
| Project completion | Fall 2018 |

BUDGET/TIME IMPLICATIONS:

Budget Impact: Financing for this project will be through the Water Pollution Control Loan Program. Repayment of the loan will be funded by the Sewer Fund which is supported by sewer user fees.

The recommended low bid amount is \$7,746,486 with a \$231,627.12 contingency. The total price includes \$25,582 which is loan ineligible and will be paid directly from the Sewer Fund.

Contractor Payment Process: On a monthly basis the Project Engineer and the contractor will agree on the work completed over the month and approve a payment estimate. Upon approving the pay estimate, the City forwards the estimate along with a payment request to the IEPA to cover the payment. The IEPA approves the request and issues the City a payment for the completed work. When the City receives the loan payment a check is then issued to the contractor.

Staffing Impact: Staff time has been allocated in the budget for this project. The City Council has approved an agreement with BGM to provide direct project oversight for this work.

POTENTIAL OBJECTIONS: There are no known objections to this resolution.

INPUT FROM OTHER SOURCES: Bainbridge, Gee, Milanski & Associates, Inc., and Illinois Environmental Protection Agency

STAFF REFERENCE: Richard Marley, Public Works Director, Matt Newell, City Engineer, and Paul Caswell, Assistant City Engineer. Richard Marley will be in attendance at the City Council meeting to answer any questions of the Council on this item. This memorandum was prepared by Paul Caswell, P.E., Assistant City Engineer.

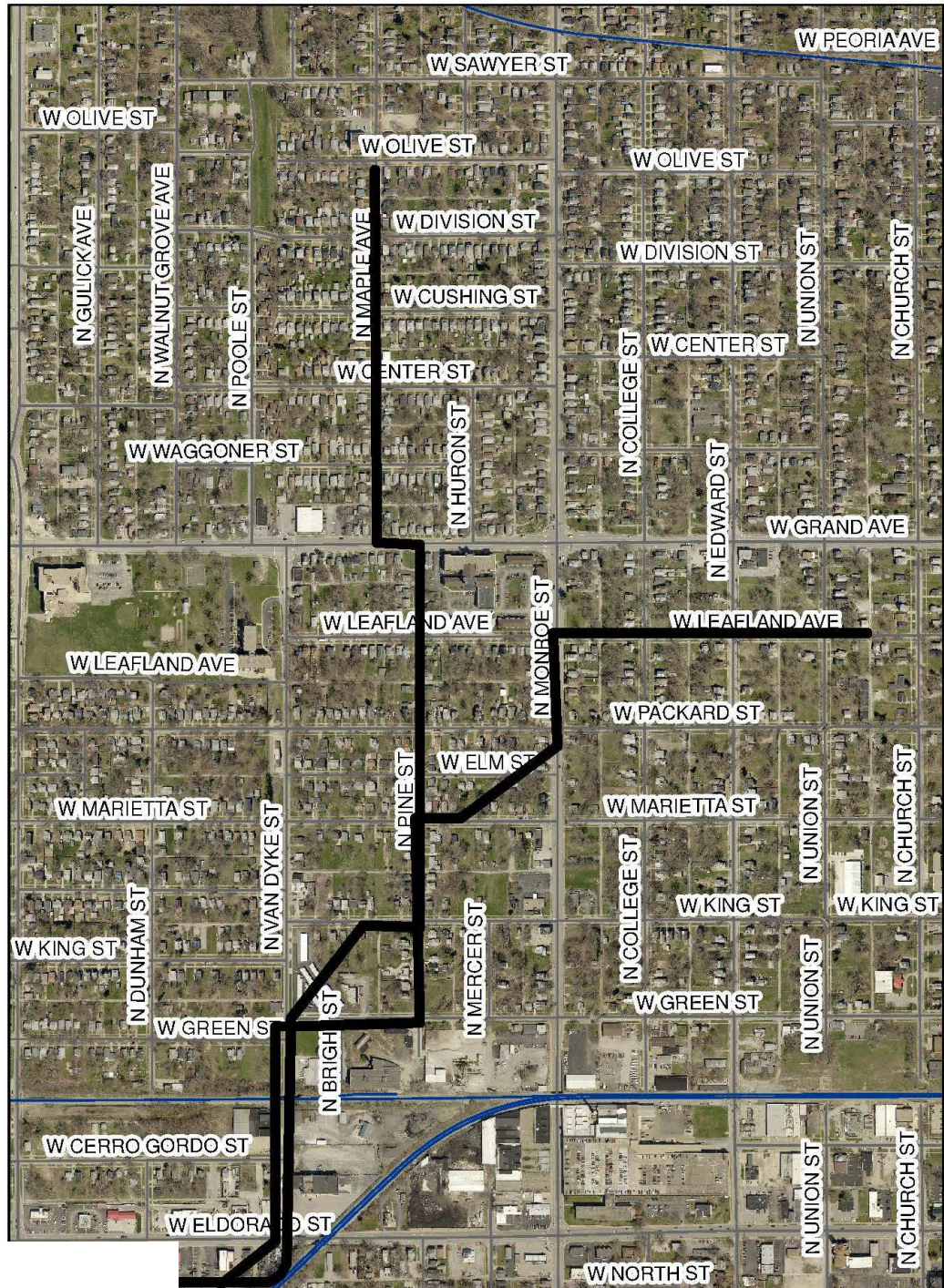
LEGAL REVIEW: The project plans and specifications were forwarded to Legal, reviewed by John Robinson and approved for bidding in November 2016.

Attach: 5

Cc: SAK Construction, LLC
Insituform Technologies USA, LLC
Kenny Construction Company
Layne Inliner, LLC
Ric-Man Construction, Inc.
Michels Pipe Services, A Division of Michels Corporation
Inland Waters Pollution Control, Inc.
Lanzo Trenchless Technologies
Bainbridge, Gee, Milanski & Associates, Inc.

APPENDIX A
PROJECT LOCATION MAP

7th WARD SEWER - NORTH OF ELDORADO STREET



7th WARD SEWER - SOUTH OF ELDORADO STREET



APPENDIX B

PRIOR COUNCIL ACTIONS REGARDING 7TH WARD SEWER REHABILITATION

October 6, 2008 – The City Council approved resolution R2008-160 authorizing Bainbridge, Gee, Milanski & Associates (BGM) to prepare a master plan for the sanitary sewer system.

October 26, 2009 – The City Council received Council Memorandum 2009-102 that provided an update to the work being done on the Sanitary and Stormwater Master Plans.

June 3, 2010 – The City Council received Council Memorandum 2010-31 that provided an update on when the Stormwater Master Plan Funding Supplement, Sanitary Sewer Master Plan and Water Main Tapping Fee Update would be presented to council.

November 1, 2010 – The City Council met in Study Session to discuss the Big Four Projects; Water Infrastructure, Sanitary Sewer Infrastructure, Stormwater Infrastructure and the Police Department Space Needs. The Sanitary Sewer Master Plan discusses the need for rehabilitation of the City's Large Diameter Critical Sewers.

January 18, 2011 – The City Council approved resolution R2011-03 authorizing an Engineering Services Agreement for \$166,250 to BGM to prepare the Critical Sewers Facilities Plan for Illinois Environmental Protection Agency (IEPA) approval. IEPA requires a Facility Plan to receive state administered loan program funds.

February 7, 2011 – The City Council approved Ordinance 2011-07 amending City Code Chapter 72 "Sewer User Charge" to increase the sewer user charge 12 cents per one hundred cubic feet of water used per year for 5 years beginning May 1, 2011.

May 7, 2012 – The City Council approved resolution R2012-96 authorizing \$390,471 to Bainbridge, Gee, Milanski and Associates, Inc. to Design the Lake Shore Drive Sewer Rehabilitation Project.

April 15, 2013 – The City Council approved Ordinance 2013-28 authorizing the City of Decatur to borrow funds from the Water Pollution Control Revolving Loan Fund.

April 15, 2013 – The City Council approved resolution R2013-36 authorizing an agreement with Bainbridge, Gee, Milanski and Associates, Inc. for a fee of \$550,000 to provide construction inspection services for the Lake Shore Drive Sewer Rehabilitation Project.

April 15, 2013 – The City Council approved resolution R2013-37 exempting the Lake Shore Drive Sewer Rehabilitation project from the hours of construction limitation required by Chapter 48, Section 12 of the City Code.

May 20, 2013 – The City Council approved resolution R2013-50 authorizing a Professional Engineering Services Agreement between the City of Decatur and BGM to Design the Union Street Sewer Rehabilitation Project for a fee not to exceed \$198,700.

April 21, 2014 – The City Council approved resolution R2014-16 authorizing a loan agreement to borrow up to \$2,608,700 from the Water Pollution Control Loan Program which is administered by the Illinois Environmental Protection Agency (I-EPA). The proposed loan covers engineering and construction costs associated with the rehabilitation of the Lake Shore Drive Sewer.

April 21, 2014 – The City Council approved resolution R2014-26 authorizing an Engineering Services Agreement between the City of Decatur and Bainbridge, Gee, Milanski, and Associates, Inc. (BGM) to provide construction engineering and resident inspection services for the rehabilitation of the Lake Shore Drive Sewer for a fee not to exceed \$204,000.

September 2, 2014 – The City Council approved resolution R2014-104 accepting the bid and authorizing a contract with Insituform Technologies USA, LLC for the Union Street Sewer Rehabilitation project contingent upon approval of award and loan offer from the Illinois Environmental Protection Agency. The awarded amount with contingencies was for a fee not to exceed \$2,133,811.09.

March 16, 2015 – The City Council approved Resolution R2015-28 authorizing a Professional Engineering Services Agreement between the City of Decatur and Bainbridge, Gee, Milanski, and Associates, Inc. to Design the McKinley / 7th Ward Sewer Rehabilitation Project for a fee not to exceed \$297,000.

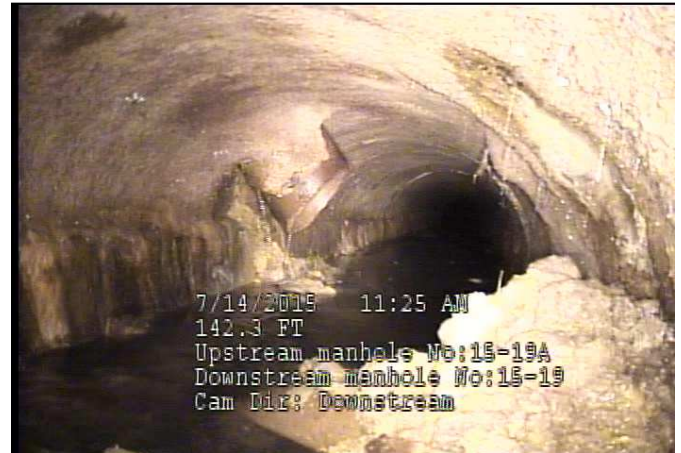
May 18, 2016 – The City Council approved Loan Ordinance 2016-30 authorizing the City to borrow up to \$15,296,000 for construction from the Water Pollution Control Loan Program and Resolution 2016-64 authorizing a Professional Services Agreement between the City of Decatur and Bainbridge, Gee, Milanski, and Associates, Inc. for construction related services for the rehabilitation of the 7th Ward Sewer for a fee not to exceed \$944,000.

APPENDIX C

Inspection Photos of the 7th Ward Sewer



1. Pipe wall deterioration with reinforcement exposed. East of Oakland south of Eldorado.



2. Area of heavy debris, infiltration and pipe damage. Near Edward / Leafland.



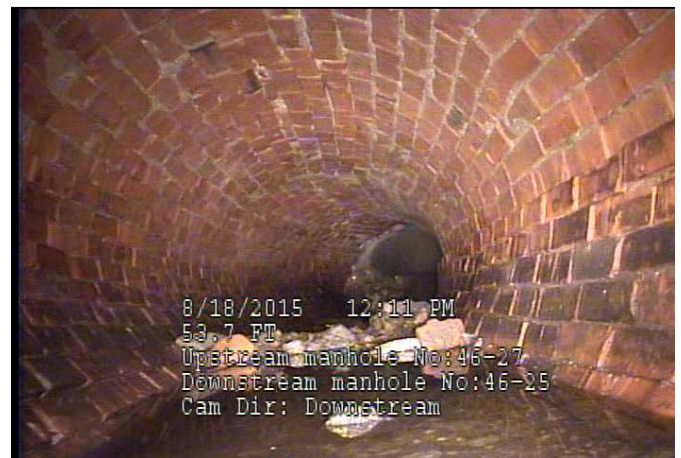
3. Infiltration at a deteriorated joint. Fairview Park.



4. Section of pipe showing a near collapse condition. Fairview Park.



5. Failed section with bricks and backfill visible. Near Pine / Marietta.



6. Brick section with heavy debris and fallen bricks. Near Fairview / Eldorado.

The 7th Ward sewer rehabilitation design employs trenchless construction methods that include lining manholes and installing a cured-in-place pipe CIPP the length of the sewer.

CIPP lining can be used on nearly any size of pipe. The process involves inflating a felt tube soaked with resin into the sewer pipe. Once the felt tube has been inflated throughout the length of pipe, heated water or steam fills the tube and is kept at a high temperature until the resin cures and hardens to form a new pipe inside of the deteriorated pipe.



Heat curing of felt tube liner.



Inserting the liner into the pipe.

The CIPP process has been used with good results by the City in many locations. The photos above show cured-in-place lining installation work completed on past City projects.