ITEM # <u>31</u> DATE: <u>02-28-17</u>

COUNCIL ACTION FORM

SUBJECT: 2014/15 SANITARY SEWER REHABILITATION (MANHOLE REHABILITATION – BASINS 1 & 5)

BACKGROUND:

The ability of the sanitary sewer system to convey wastewater well into the future is dependent on the removal of the current large amount of infiltration and inflow (I&I, or I/I) in the system that occurs during wet weather. In order to minimize the need for costly expansions to the City's Water Pollution Control (WPC) facility, as well as to convey flows from new development as the City grows, the City must work to reduce the overall I/I in the system.

In 2012 the City began a Sanitary Sewer System Evaluation that included a comprehensive and systematic evaluation for identifying the defects that could contribute I/I across the entire, City-wide sanitary sewer system. This evaluation data collection is complete and it is evident that there are over \$25 million worth of immediate structural improvements needed in the sanitary sewer system. Current and future CIP projects for the sanitary sewer system are based on the results of this evaluation. Work includes rehabilitation such as the lining of existing mains or spray lining of existing structures, as well as complete removal and replacement of structures and sanitary sewer mains.

These projects were shown in the CIP beginning in 2014/15. Funding comes from the State Revolving Fund (SRF) in the amount of \$3,470,000 for each year with an annual increase of 5% for inflation. Repayment of the SRF loans will be from revenues generated in the Sanitary Sewer Fund.

A SRF Planning and Design Loan for \$375,000 was approved by City Council in March 2014. This loan was secured in order to hire a consultant to help determine the best action plan for implementation of system repairs, as well as for design services for the first two years of projects. At the September 23, 2014 meeting, City Council approved the engineering services agreement with V&K along with WHKS & Company of Mason City, Iowa to assist in the evaluation of the data.

This was the first project to come out of the study, and was selected to have an immediate impact by removing Inflow & Infiltration (I&I) to regain some capacity in the existing sewer mains. Items of work in the contract included replacement of existing manhole castings and installation of new external seals, chemical grouting of and cemtentitious lining of existing manholes. These rehabilitation methods reduce the amount of clean water that enters the system, thus reducing the amount of water required to be treated at the plant.

On July 28, 2015, City Council awarded the project to Save Our Sewers of Cedar Rapids, Iowa in the amount of \$1,622,502.06. Change order No. 1 in the amount of \$27,933.39 for manholes that required additional rehabilitation outside of the project's original scope was administratively approved by Staff. Change order No. 2 (balancing) was a deduct of \$25,490.49 to adjust the plan quantities to reflect actual field quantities which brings the total change order amounts to \$2,442.90 and total construction costs to \$1,624,944.96.

Project Revenue and Expenses are shown below

	Available Revenue	Estimated Expenses
State Revolving Funds	\$3,270,000	
2014/15 Sanitary Sewer Rehab (Manhole Rehab -		
Basins 1 & 5) (This Project)		\$1,624,944.96
2014/15 Sanitary Sewer Rehab (Manhole Rehab –		
Flood Prone Manholes) (Under Contract)		\$1,032,105.23
Engineering/Administration (Est. for Both Projects)		\$ 600,000
	\$3,270,000	\$3,257,050.19

ALTERNATIVES:

- 1. Approve Change Order No. 2 (balancing) and accept the 2014/15 Sanitary Sewer Rehabilitation (Manhole Rehabilitation Basin 1 & 5) as completed by Save Our Sewers of Cedar Rapids, Iowa in the amount of \$1,624,944.96.
- 2. Direct staff to pursue modifications to this project.

MANAGER'S RECOMMENDED ACTION:

This project represents City Council's commitment to improve the sanitary sewer system. This is the first of several large projects which had an immediate impact by removing Inflow & Infiltration to regain valuable capacity in existing sanitary sewer mains. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as described above.