ITEM #:	30	
DATE:	05-13-25	
DEPT:	PW	

COUNCIL ACTION FORM

SUBJECT:CONTRACT FOR THE PURCHASE AND INSTALLATION OF FLOW
MONITORS FOR THE SANITARY SEWER SYSTEM

BACKGROUND:

The City of Ames utilizes sanitary sewer flow monitors to collect data on flow, level, and velocity within the collection system. This information is essential for both system maintenance and calibration of sewer flow models.

In 2012, eight permanent flow monitors were installed as part of a system-wide sanitary sewer evaluation. These monitors, located inside sanitary sewer manholes, have been expensive to repair and have presented increasing maintenance challenges. Issues include housing durability, battery life, installation brackets, and programming reliability. Although the City has maintained the monitors since installation, their age has led to reduced reliability and escalating repair costs.

To enhance data collection and improve system coverage, staff is recommending the replacement of the existing monitors and adding four new units, increasing the total to twelve. This expanded monitoring capability will strengthen sanitary sewer capacity modeling and improve real-time awareness of the system, particularly in relation to potential development projects.

On March 24, 2025, a Request for Proposals (RFP) was issued for the purchase and installation of flow monitors. Proposals were due on April 15, 2025. Four vendors submitted proposals. An evaluation committee consisting of Public Works staff reviewed the proposals based on several criteria:

- 1. System Functionality and Features
- 2. Installation Plan
- 3. Maintenance and Power
- 4. Cost Proposal

The following table summarizes the overall rankings and cost proposals:

Rank	Company	Cost Proposal	Cost Proposal
	(8 Flow Monitors)	(12 Flow Monitors)	
1	Electric Pump, LLC (Des Moines, IA)	\$161,426.00	\$243,201.00
2	ADS, LLC (Huntsville, AL) GPM Environmental Solutions, LLC	\$100,551.04	\$146,051.04
3	(Blair, NE)	\$196,426.00	\$299,938.00
4	McCrometer, Inc. (Hemet, CA)	\$125,864.00	\$193,532.00

Electric Pump, LLC received the highest overall evaluation score. Their proposal included several operational advantages. The monitor housing is composed of a more durable material, which is expected to reduce downtime and repair needs. Battery lifespan can be extended up to 48 months, compared to the 2 to 4 months typical of the City's current units. The monitors can be easily adjusted using a moveable knuckle, and the system includes a web-based dashboard compatible with existing water distribution monitoring software for real-time data access and alert management.

Although ADS, LLC submitted the lowest cost proposal, their fixed monitor-based system lacks the flexibility and battery life offered by other options. McCrometer, Inc., the second-lowest cost proposal, lacked Bluetooth connectivity in their data loggers, requiring physical connections for monitor programming. Their proposal also offered significantly lower battery life and included hardware identical to the City's current monitors, which have proven unreliable and expensive to maintain.

The total cost of Electric Pump's monitors for Year 1 is \$243,201. This includes all hardware for 12 flow monitors, installation, and the first year of software licensing. Beginning in Year 2, the system will require an ongoing annual software licensing fee of \$3,600.

Funding has been identified in the FY 2024/25 Sanitary Sewer Improvements Program, which has an available balance of \$544,520. The remaining funding will be utilized for other Sanitary Sewer improvement priorities.

ALTERNATIVES:

- 1. Award a contract to Electric Pump, LLC of Des Moines, Iowa, in the amount of \$243,201 for Year 1 costs (inclusive of hardware, installation, and first-year software licensing).
- 2. Award a contract to one of the other vendors.
- 3. Reject all proposals and rebid the project.

CITY MANAGER'S RECOMMENDED ACTION:

Electric Pump's proposal presents the best overall value to the City. The solution offers substantial long-term benefits including reduced labor, improved reliability, and lower maintenance needs. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.