

COMMISSION FILE NO: 21-078-6 **DATE INTRODUCED:** June 14, 2021

INTRODUCED BY: Executive Director (Signature on File in the Office of the Commission)

REFERRED BY COMMISSION CHAIRPERSON TO: Operations Committee

RELATING TO: Award of Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost

SUMMARY:

The Commission is requested to award and to direct the Executive Director to execute on behalf of the District Contract J04061C03, Programmable Logic Control (PLC) 5 Upgrade in the Dewatering and Drying (D&D) Facility (Rebid), to Allan Integrated Control Systems, Inc., (AICS) in the amount of \$2,744,900. AICS was the lowest responsible, responsive bidder between two bids received.

Further, the Commission is requested to decrease the total project cost (TPC) for Project J04061, D&D PLC 5 Upgrades, by \$1,158,039 for an amended TPC of \$6,740,000 and to make a corresponding change to the TPC for Project M99001, Allowance for Cost and Schedule Changes.

The District's D&D Facility houses equipment utilized to produce Milorganite®. Twenty-four belt filter presses dewater plant sludges, and 12 rotary dryers dry the dewatered sludge. Dried solids are classified using screens and mills to create a consistent Milorganite® product size. Product is cooled and placed into storage bins to await transport to the Milorganite® Storage Building. The D&D Facility also contains conveyors, bucket elevators, holding tanks, air emissions equipment, and other supporting systems. The D&D Facility has been in use since 1994.

ATTACHMENTS: **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒
FISCAL NOTE ☒ **S/W/MBE** ☒ **OTHER** ☐ _____

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COMMITTEE ACTION: _____ **DATE:** _____

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SUMMARY (Cont'd)

Award of Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost

Approximately 66 PLC's distributed throughout the D&D Facility provide localized control of equipment. A PLC is an industrial computer designed specifically for the control of manufacturing processes in challenging environments. The existing set of PLC's (Allen Bradley PLC5) were installed in 1994. Rockwell Automation, the parent company of Allen Bradley, announced that the PLC5 product line has reached its end of life; they have discontinued manufacturing new parts, and equipment repair depends solely upon existing parts inventory. This creates a situation where, without replacement, the District's D&D control system will ultimately be unable to control the D&D Facility.

It is critical that PLC control equipment be functional and maintainable for the continued operation of the D&D Facility. The purpose of this project is to replace the existing PLC5 control platform and accompanying control equipment with a modern, serviceable control platform and equipment. The improved functionality of the new control equipment will provide enhanced performance, fault tolerance, and safety.

Under Contract J04061C03, the contractor will:

- Upgrade 60 PLC5s to Allen Bradley ControlLogix PLC's.
- Upgrade network switches and cabling to improve the capability of the existing PLC communication network.
- Replace existing alarm annunciators with human/machine interface panels.
- Provide hardware and programming enhancements to improve operator control, visibility, fault tolerance, and safety.
- Provide control system integration, testing, commissioning, startup, training, and documentation.

Upgrades to the remaining six PLC's in the D&D Facility are included with other contracts that are replacing their PLC controlled equipment.

The duration of this contract is 3.75 years.

The low bid received by the District is less than budgeted, and staff requests to decrease the TPC accordingly.

In March 2021, District staff requested the Operations Committee to award Contract J04061C01 to AICS. This contract consisted of generally the same scope of services as proposed contract J04061C03. After Committee approval, AICS notified District staff that they were unable to obtain a performance bond for J04061C01. Subsequently, the Commission did not award this contract, and, in April 2021, the Commission rejected all bids for this contract.

SUMMARY (Cont'd)

Award of Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost

Staff revised the J04061C01 bid documents to create the J04061C03 bid documents. After the J04061C03 bid opening, staff questioned AICS about their ability to obtain a performance bond for this proposed contract. AICS's bond surety has provided a written statement indicating that they will issue the required performance bond.

RESOLUTION

Award of Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost

RESOLVED, by the Milwaukee Metropolitan Sewerage Commission, that Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), is awarded to Allan Integrated Control Systems, Inc., in the amount of \$2,744,900, and that the Executive Director is directed to execute a contract on behalf of the District.

FURTHER RESOLVED, by the Milwaukee Metropolitan Sewerage Commission, that the total project cost for Project J04061, Dewatering and Drying Programmable Logic Control 5 Upgrades, is decreased by \$1,158,039 for an amended total project cost of \$6,740,000, and that a corresponding change is made to the total project cost for Project M99001, Allowance for Cost and Schedule Changes.