



Board of Aldermen Request for Action

MEETING DATE: 5/6/2025

DEPARTMENT: Public Works

AGENDA ITEM: Resolution 1468, authorize payment to R.W. Vaught for the purchase of a new SCADA and PLC system at the water treatment plant.

REQUESTED BOARD ACTION:

A motion to approve Resolution 1468, authorizing the payment to R.W. Vaught for the purchase of a new SCADA (Supervisory Control and Data Acquisition) and PLC (public logic control) system at the water treatment plant in the amount of \$20,750.

SUMMARY:

The water treatment facility uses real-time radio technology, SCADA, to monitor distribution system assets and to remotely control distribution system pumps and isolation valves. This allows operators to turn pumps on and off and fill towers from the water treatment facility without having to do so manually in the distribution system.

With the addition of the new raw water pump station, the SCADA network was a mixed system of cellular technology and the original radio technology. Under normal circumstances, this would not be an issue, but the outdated PLC equipment that was installed in 2006 cannot handle the additional information load placed on it. This resulted in the failure of the SCADA system with communication errors and the inability to run the raw water pump or the chemical feed system at the raw water pump station and will require replacement. Additionally, the system alarms were not responding, and we were having to manually go to the raw water pump station to regulate chemicals and control pumps. This system controls the pumps that feed the water towers and provides water levels of the towers.

This work was approved by the Board October 17, 2023, Resolution 1276. The work was completed with the new water intake coming online. RW Vaught is also completing work at the water plant with the Water Treatment Plant improvements project and invoicing for the SCADA system was overlooked.

PREVIOUS ACTION:

Board approved Resolution 1276, October 17, 2025

POLICY ISSUE:

Infrastructure maintenance

FINANCIAL CONSIDERATIONS:

The 2025 CWWS operations budget includes \$100,000 for a water intake totalizer which will not be acquired this year and will be included when the expansion project moves forward, therefore sufficient funds are available to pay this invoice.

ATTACHMENTS:

- | | |
|--|-----------------------------------|
| <input type="checkbox"/> Ordinance | <input type="checkbox"/> Contract |
| <input checked="" type="checkbox"/> Resolution | <input type="checkbox"/> Plans |
| <input type="checkbox"/> Staff Report | <input type="checkbox"/> Minutes |
| <input checked="" type="checkbox"/> Other: Quote | |

RESOLUTION 1468

A RESOLUTION AUTHORIZING PAYMENT TO R.W. VAUGHT FOR THE PURCHASE OF A NEW SCADA AND PLC SYSTEM AT THE WATER TREATMENT PLANT

WHEREAS, the SCADA (Supervisory Control and Data Acquisition) and PLC (Public Logic Control) System at the water treatment plant was installed in 2006; and

WHEREAS, with the addition the new raw water pump station, the SCADA network was a mixed system of cellular and the original dial up technologies; and

WHEREAS, the outdated PLC could not handle the additional information and the SCADA system was failing to communicate with the systems necessary to run the water treatment and distribution system; and

WHEREAS, R.W. Vaught completed the work in 2024 with the completion of the raw water intake project in an amount of \$25,250.

NOW THEREFORE BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF SMITHVILLE, MISSOURI, AS FOLLOWS:

THAT the Board authorizes the payment to RW Vaught for the purchase of a new SCADA and PLC system at the water treatment plant in the amount of \$25,250.

PASSED AND ADOPTED by the Board of Aldermen and **APPROVED** by the Mayor of the City of Smithville, Missouri, the 6th day of May, 2025.

Damien Boley, Mayor

ATTEST:

Brandi Schuerger, Assistant City Clerk

RW Vaught
PO Box 837
Yellville, AR 72687
870-656-2030



Invoice

DATE	INVOICE NO.
2/23/2025	25-5

BILL TO	JOB DESCRIPTION
City of Smithville, MO Scott Davis 107 W. Main St Smithville, MO 64089	Upgrade the malfunctioning PLC at the WTP Scada system

P.O. NO.

ITEM	DESCRIPTION	QTY	AMOUNT
Quote	Per price quote, install new brand of PLC, to replace the obsolete malfunctioning PLC in the WTP Scada System		20,750.00
Time	Time and travel per day, additional days on site beyond the new PLC quote, to try to fix the problem with no success (including Saturday and Sunday on site at the WTP).	5	4,500.00
Total			\$25,250.00