

REPORT TO COUNTY COUNCIL

Contract Award – SCADA Masterplan Upgrade for Oxford South Drinking Water System and Norwich Collection System

To: Warden and Members of County Council

From: Director of Public Works

RECOMMENDATIONS

1. That County Council award a contract to the highest ranked qualified bidder, Valley Integration Inc., in the amount of \$1,280,140 (excluding HST), for the design and construction of Supervisory Control and Data Acquisition upgrades in accordance with the County's Supervisory Control and Data Acquisition Master Plan, and authorize the Chief Administrative Officer and Director of Public Works to sign all documents related thereto;
2. And further that County Council authorize the transfer of \$15,695 from the Development Charges – Wastewater – Norwich reserve and \$207,464 from the Wastewater – Norwich reserve for a total of \$223,159, to fund the budget shortfall for the Norwich Collection System upgrades portion of this project.

REPORT HIGHLIGHTS

- The purpose of this report is to obtain County Council approval to award the above-noted project to Valley Integration Inc., in accordance with the County's Purchasing Policy.
- The project is part of a multi-year Supervisory Control and Data Acquisition (SCADA) Master Plan (MP) to upgrade, replace, and standardize aging and obsolete hardware and software across the County's SCADA system, improving cybersecurity, enabling seamless interconnection between remote sites, and enhancing data collection, storage, and reporting for both water and wastewater systems.
- The proposed work will ensure that the Oxford South Drinking Water System (which includes the Pitcher Street, Main Street, and Otterville and Springford Water Treatment facilities, seven associated wells, and two water towers) and the Norwich Collection System (which includes

four Sewage Pumping Stations) meet the newly established SCADA Standards.

- This project is anticipated to begin in April 2025 and is targeted for completion in September 2026.

IMPLEMENTATION POINTS

Upon County Council approval, a contract will be executed with the highest ranked qualified bidder, Valley Integration Inc. to undertake SCADA upgrades at Oxford South Drinking Water System (including four water treatment facilities, seven wells, and two water towers) and the Norwich Collection System (four sewage pumping stations).

Following contract award, Valley Integration Inc. will proceed with the design and implementation of the SCADA upgrades. The scope of work includes developing Process Control Narratives (PCNs), PLC logic, and OMI graphics to ensure compliance with newly developed County SCADA standards. Additionally, the project involves configuring Win-911 alarms to enhance system monitoring and response capabilities, the removal of outdated SCADAPacks, new PLC Panels (or backplane replacements depending on site), and additional site-specific needs outlined in the Request for Proposal (RFP). As part of the reporting framework, daily, monthly, and annual reports will be created for each location.

Financial Impact

This work was approved as part of the 2025 Business Plan and Budget. The project costs and other associated costs and capital accounts for this project are summarized in Table 1 below:

Table 1: Funding Summary for Oxford South Drinking Water Systems and Norwich Collection Systems SCADA Upgrades

2025 Budget Summary Account / Description	Available 2025 Budget	Bid Amount (Excluding HST)	Non-Refundable HST, Contract Admin, Staff Time	Subtotal	Budget Surplus (Deficit)
900016 – Oxford South Drinking Water System (Approved budget: \$3,388,000) (Less other projects: \$2,547,000)	\$841,000	\$732,617	\$12,894	\$745,511	\$95,489
900016 – Norwich Collection System (Approved budget: \$3,388,000) (Less other projects: \$3,054,000)	334,000	547,523	9,636	557,159	(223,159)
2025 EXPENDITURES TOTAL	\$1,175,000	\$1,280,140	\$22,530	\$1,302,670	

Based on the information provided in Table 1, there is sufficient available approved funding in the 2025 Business Plan and Budget for the Oxford South Drinking Water system portion of this award.

The Norwich Collection portion of the project is funded 7% by development charges (DCs) with the remaining 93% funded by the Wastewater - Norwich reserve. The 2025 budgeted closing balance of the Development Charges – Wastewater - Norwich reserve is approximately \$5.1 million, which is sufficient to fund the additional \$15,695 required DC funding. If DC revenue collections are below projections and there are insufficient funds at year end to cover the additional need, the costs would be funded by DC revenue in a future year. The 2025 budgeted closing balance of the Wastewater - Norwich reserve is approximately \$4.1 million, which is sufficient to fund the additional requirement of \$207,464.




Communications

Staff will continue to work with key internal stakeholders (County Management staff, Water and Wastewater staff) during the execution of this project as required to ensure the appropriate level of communication and outreach is maintained, further ensuring all parties involved are updated on project status and outcomes.

2023-2026 STRATEGIC PLAN

Oxford County Council approved the [2023-2026 Strategic Plan](#) on September 13, 2023. The Plan outlines 39 goals across three strategic pillars that advance Council's vision of "Working together for a healthy, vibrant, and sustainable future." These pillars are: (1) *Promoting community vitality*, (2) *Enhancing environmental sustainability*, and (3) *Fostering progressive government*.

The recommendations in this report support the following Strategic Plan pillars and goals:

		
Promoting community vitality	Enhancing environmental sustainability	Fostering progressive government
		Goal 3.1 – Continuous improvement and results-driven solutions

See: [Oxford County 2023-2026 Strategic Plan](#)

DISCUSSION

Background

The SCADA systems play a critical role in the management and operation of water and wastewater systems. These systems provide real-time monitoring and control of various operational parameters, ensuring the efficient and safe delivery of water services and the effective treatment of wastewater. The recently developed SCADA MP highlights the necessity for additional human resources to manage the growing volume of SCADA enhancement projects and to support the ongoing maintenance, asset management, and improvement of these essential systems.

SCADA systems are indispensable in modern water and wastewater operations for several reasons, as they provide:

- Operational Efficiency: SCADA systems automate many processes, reducing the need for manual intervention and increasing the overall efficiency of water and wastewater operations.
- Real-Time Monitoring: These systems provide real-time data on various operational parameters, allowing for timely detection and resolution of issues.
- Enhanced Safety: By monitoring critical parameters continuously, SCADA systems help ensure compliance with regulatory requirements.
- Data Management and Analysis: SCADA systems collect and store data.

The County's current SCADA system is fragmented and has components that are nearing their end of life. The SCADA MP was undertaken to determine the workplan to implement a modern, robust, financially responsible County-wide SCADA system, to standardize and optimize operations and to improve system reliability.

The County endorsed the implementation of the SCADA MP through report [PW 2019-43](#) and approved an additional dedicated SCADA Technician to support the roll out of the MP as part of the 2025 Business Plan and Budget (FTE 2025-05). To date, the County has completed SCADA upgrades on the Thamesford Wastewater Treatment Plant, and the Beachville, Hickson, Dereham Centre and Lakeside Drinking Water Systems. Over the next seven years, the County will continue to manage an average of \$2.6 million in additional capital budget for the SCADA MP as the project team targets full implementation by 2031.

Comments

A prequalification process (Letter of Interest) was undertaken and completed prior to publishing the request for proposal (RFP) in November 2024. Staff reviewed the prequalification submissions and recommended that four Contractors be prequalified and invited to submit a bid for this project. The evaluation of submissions was based on a number of factors including Contractors' previous project experience with projects of similar scope and certification on AVEVA System Platform (new Software for County SCADA Systems).

After the prequalification process was completed, the eligible Contractors were invited to the RFP opportunity and a mandatory site walk through at the specific locations which undergo

SCADA upgrades for this contract. The RFP was tendered through a competitive invite-only bidding process on Bids and Tenders which opened on February 11, 2025. The tendering process closed on March 21, 2025 at 2 p.m. and four bids were received in total. Submissions were received from:

1. Brock Solutions Inc
2. McRae Integration Ltd
3. Ulteig Canada Inc
4. Valley Integration Inc

The project team, consisting of staff and technical advisors, evaluated the Technical Submissions based on several key factors, including the Contractor's understanding of the project scope, methodology for maintaining compliance and minimizing downtime during SCADA transitions, risk assessment, proposed work plan, and schedule. Each submission received a technical score out of 80 points before the financial component was assessed.

The financial submission was then evaluated, with the lowest bid receiving the maximum 20 points. This approach ensures that both technical qualifications and cost competitiveness are considered when selecting the most qualified bidder. Based on this evaluation rubric, County staff confirm that the selected qualified bidder is Valley Integration Inc.

As this project has the possible risks that would be associated with any project of this scale and scope, the successful Contractor has included a 2-year warranty and project contingency in their submission.

CONCLUSIONS

A review of the competitive bid submissions confirms that it is appropriate to award the Oxford South and Norwich Collection System SCADA Upgrade project to Valley Integration Inc.

SIGNATURES

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Original signed by

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Departmental approval:

Original signed by

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