

The Corporation of the City of Kawartha Lakes

Council Report

Report Number PUR2019-041

Date: **October 22, 2019**
Time: 1:00 p.m.
Place: Council Chambers

Ward Community Identifier: Various wards

Title: 2019-68-OP Asset Management of Current SCADA System

Author and Title: **Linda Lee, Buyer**
Robert MacPherson, Water/Wastewater Technician

Recommendation(s):

That Report PUR2019-041, 2019-68-OP Asset Management of Current SCADA System, be received;

That Cole Engineering Group Ltd. be selected, as the highest scoring proponent, for the award of Request for Proposal number 2019-68-OP Asset Management of Current SCADA System;

That subject to receipt of the required documents, the Mayor and Clerk be authorized to sign the agreement; and

That the Financial Services Division be authorized to issue a purchase order.

Department Head:_____

Financial/Legal/HR/Other:_____

Chief Administrative Officer:_____

Background:

The City of Kawartha Lakes (CKL) has twenty-one (21) Water and six (6) Wastewater facilities including respective distribution and collection systems that are presently operated with a Supervisory Control and Data Acquisition (SCADA). SCADA is a system that automates various electrical, chemical, and mechanical systems. These systems work in combination to aid in the production of potable drinking water and to treat the wastewater generated by the residents of Kawartha Lakes. The system is also instrumental in housing data used for trending information, process control, and compliance reporting with the Ministry of the Environmental, Conservation and Parks (MECP).

The CKL SCADA system project originated in 2005 and was implemented in the 2007-2010 timeframe. Over the last 14 years, parts of the system have effectively operated beyond their useful service life as various components of the systems hardware and software have changed as equipment has been repaired/replaced. As these changes were not always recorded and performed by multiple 3rd party vendors over the years, there have been a number of informational gaps identified by staff between the current equipment list and what is physically there. In order to create an updated SCADA equipment list and a SCADA Asset Management Plan (AMP) moving forward the Purchasing Division and the Water and Wastewater Division worked together to release a Request for Proposal in search of a qualified Process and Control Engineering Firm familiar with SCADA hardware and software.

The Request for Proposal (RFP) 2019-68-OP Asset Management of Current SCADA System was released and advertised in accordance with the Purchasing Policy.

The RFP closed on Thursday September 19, 2019 and was opened in a public meeting with Mayor Andy Letham and Linda Lee, Buyer. Proposals were received from the following:

Company Name
Cole Engineering Group Ltd.
ISN Technologies
WSP Canada Group Limited
EDIOM Group Inc.
Green PI Inc.

The submissions were evaluated by consensus, according to the criteria set out in the proposal document. Cole Engineering was found to be the highest scoring proponent.

References were checked and found to be favorable.

Rationale:

The SCADA system is essential equipment that supports the safe and efficient operation of processes at the Water and Wastewater Facilities. In recent years CKL has experienced issues with the equipment that requires significant time and resource to troubleshoot and resolve. There has also been concern from operations staff surrounding the outdated information in the current equipment list. It is due to these reasons that the Water and Wastewater Division wants to employ the services of a Process and Control Engineering Consultant to survey each of the Water and Wastewater Systems. The consultant will generate an up-to-date SCADA equipment inventory list, identify any gaps in information, compare the City equipment and maintenance plan to that of current industry standards and then create an Asset Management Plan (AMP) of the SCADA equipment moving forward. It is the Water and Wastewater Divisions goal to utilize this AMP as a blueprint for the necessary and vital upgrades the SCADA system will require over the next > 10 years in order for it to remain operational and compliant with provincial and federal regulations and standards.

Staff recommends Cole Engineering Group Ltd. be selected, as the highest scoring proponent, for the award of Request for Proposal number 2019-68-OP Asset Management of Current SCADA System;

Other Alternatives Considered:

No other alternative is being considered as a competitive procurement process was conducted, and the highest scoring proponent is being recommended.

Financial/Operation Impacts:

Funding for the creation of an Asset Management Plan for the City of Kawartha Lakes SCADA System is through the operating budget. Adequate funding has been provided in the 2019 Water and Wastewater operating budget.

The Department will ensure that funds for this service are included in future operating budgets, and that the costs do not exceed the approved budget.

Relationship of Recommendation(s) To The 2016-2019 Strategic Plan:

The Water and Wastewater Divisions goal to create an Asset Management Plan of the current SCADA equipment identifies with the 2016-2019 Strategic Plan of

creating and promoting a healthier environment (Goal 3). The creation of a proper asset plan and maintenance schedule for the SCADA equipment will ensure the protection and enhancement of the water quality, as well as aid in efficiency and of overall treatment process for both water and wastewater.

The proposal also supports many of the City Strategic Enablers:

- E1.1 (Responsible fiscal resource management) – The future planning and maintenance of the SCADA system will allow for improved budgeting and allow the City to manage the resource more efficiently
- E3.3 (Municipal Service Excellence) – Service excellence by reviewing and adopting best municipal practices (and continue to review operational efficiencies)
- All objectives of Enabler 4 (Efficient Infrastructure and Asset Management) are met because the AMP will ensure the facilities are using effective technology in the best manner, will increase the Division managing the municipal assets, and ensures that the technology is environmentally friendly and in compliance with federal and provincial regulations.

Consultations:

Supervisor, Water and Wastewater Operations, Public Works

Supervisor/ORO of Water Treatment, Public Works

Supervisor, Network Services and Client Support, IT Services

Department Head E-Mail: brobinson@kawarthalakes.ca

Department Head: Bryan Robinson

Department File: 2019-68-OP