

REGION OF OTTAWA CARLETON

RÉGION D'OTTAWA CARLETON

REPORTRAPPORT

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Your File/V/Réf.

DATE 22 June 2000

TO/DEST. A/Co-ordinator
Corporate Services and Economic Development Committee

FROM/EXP. Environment and Transportation Commissioner

SUBJECT/OBJET **ENGINEERING SERVICES FOR WASTEWATER TREATMENT
SCADA NETWORK CONVERSION TO
FIBER-OPTIC TECHNOLOGY, CONTRACT WEPD00-42**

DEPARTMENTAL RECOMMENDATION

That the Corporate Services and Economic Development Committee approve the award of Contract WEPD00-42 to Avalanche Information and Control Systems, Ajax, Ontario, for the detailed design of the wastewater treatment SCADA network conversion to fiber-optic technology, for a total contract provision of \$86,627.

BACKGROUND

A large part of the operations at the Robert O. Pickard Environmental Centre wastewater treatment facility is controlled by a Supervisory Control and Data Acquisition (SCADA) system that was installed in 1990. The SCADA system is a critical component in the daily operations of the wastewater treatment process, as it is used to control and operate the treatment process and is essential for meeting and reporting on regulatory requirements.

A broadband network was recommended and put into service at installation as the communications backbone for the entire SCADA network. This network utilizes a coaxial cable network with communications hardware components that are becoming increasingly difficult to operate and maintain. They are no longer reliable, are not supported by equipment manufacturers, and cannot be bought off the shelf. As a result, the decision was made to migrate this obsolescent equipment to fiber-optic technology and allow for expansion of additional processing such as that required for the South Ottawa Tunnel.

DISCUSSION

The scope of this contract is to provide the engineering services for the detailed design of the wastewater treatment SCADA network conversion to fiber-optic technology.

A Request for Proposal (RFP) was posted on the Merx electronic-based bid distribution site 19 May 2000 with a due date of 08 June 2000. Four submissions from engineering firms were received. The proposals were evaluated according to a ranking system outlined in the RFP. The Selection Committee, consisting of staff from the Water Environment Protection Division, evaluated the proposals on the basis of:

- Resources and experience of firm;
- Experience, qualifications and availability of team members;
- Understanding of objectives;
- Quality of approach and methodology;
- Proposed work plan, schedule and level of effort.

Based on the review of the proposals submitted, the Department recommends the award of Contract WEPD00-42 to Avalanche Information and Control Systems, Ajax, Ontario, since their proposal received the highest ranking overall and provides the best value to the Region. The contract provision consists of \$73,600, a contingency allowance of \$7,360, plus 7% GST in the amount of \$5,667, bringing the total contract amount to \$86,627.

CONSULTATION

The public consultation process is not applicable.

EXPENDITURE JUSTIFICATION

The SCADA network conversion to fiber-optic technology is required to replace unsupported and unreliable communications equipment. Failure to convert the SCADA network to fiber-optic technology at this time will risk failure of the SCADA system and ultimately treatment of the wastewater.

FINANCIAL STATEMENT AND APPROVAL

	\$
Approved Budget to Date	4,022,874
Total Paid and Committed	<u>(2,659,654)</u>
Balance Available	1,363,220
THIS REQUEST	<u>(86,627)</u>
Balance Remaining	<u>1,276,593</u>

Funds are available in the 2000 Capital Budget, Account No. 900250, Pickard Centre - Miscellaneous Plant and Equipment (reference page 469), Purchase Requisition No. 10064775.

Approved by
M. J. E. Sheflin, P.Eng.

ML/mlb/lb