



Committee Report

To:	Warden McQueen and Members of Grey County Council
Committee Date:	May 28, 2020
Subject / Report No:	CAOR-CW-07-20
Title:	Enhanced Fire Radio Communications RFP Results
Prepared by:	Kim Wingrove, CAO
Reviewed by:	Kevin Weppler
Lower Tier(s) Affected:	County-wide
Status:	Recommendation adopted by Committee as presented per Resolution CW104-20; Adopted by Council per Resolution CC58-20 June 11, 2020;

Recommendation

1. That Report CAOR-CW-07-20 Enhanced Fire Radio Communications RFP Results be received for information; and
2. That Council support the award of the project to Telequip Systems Ltd. in the amount of \$1,619,685 + HST; and
3. That \$713,437 of the project costs be funded from Municipal Modernization Funding Reserve and the remainder of the project costs be funded from the Connected County Reserve; and
4. That participating member municipalities be requested to confirm their support for the ongoing administration and maintenance costs of the system; and
5. That upon confirmation of support from the member municipalities, staff be directed to negotiate an agreement with Telequip Systems Ltd. to complete the project and the Warden and Clerk be authorized to execute the agreement.

Executive Summary

As per direction in CAOR-CW-12-19, this report provides the outcome of RFP-CAO-01-20 Fire Communications. The recommended proposal will provide the requested radio and paging infrastructure and maintenance for a 10-year period at a cost of \$1,619,685. Grey County has \$713,437 in provincial municipal modernization funding in reserve, with the remainder of the funding required, or approximately \$934,755, in the Connected County Reserve that could be applied to this project.

The ongoing annual operating costs of the system are estimated at \$120,000 per year and are to be allocated to the participating municipalities.

Background and Discussion

Grey County was asked by the Grey County Fire Chiefs to assist with finding a solution to paging and radio communications shortcomings which were interfering with firefighter's ability to communicate with dispatch and each other on scene, creating a life safety issue and hampering interoperability and coordinated incident management during mutual aid situations. Project requirements are:

1. Optimize paging to get firefighters to the scene: implement a Paging System with a coverage footprint of 95% of the county including low-rise buildings, private homes, one story plazas, etc.
2. Enable improved communication with dispatch, and with other Fire Services during mutual aid events: To implement a system that will deliver a mobile radio coverage footprint to 95% of the county, 95% of the time.
6. Bring all equipment to the same standard: To acquire mobile radios, portable radios and vehicular repeaters (VRs) to replace existing subscriber equipment that is not compatible with the scope of the project.
7. Provide cost effective, efficient system operation and administration: To secure the provision of support, maintenance, management and administration for a period of minimum 10 years, including a two (2)-year warranty period for all the delivered goods (see definitions on next slide).

In addition, the option to cost effectively improve Grey County Transportation and Emergency Operations Centre communications capability by leveraging fire project investments was identified.

Grey County retained consultant Dan Perlstein to assess the situation and provide recommendations. These were summarized in report CAOR-CW-12-19 as follows:

- The Grey County fire departments are presently operating many different systems for paging and communication using low-frequency radio channels in the VHF range.
- There are gaps in coverage, communication conflicts and inconsistent processes. This could result in response delays, missed communications, injuries to fire personnel or the public. Municipalities are exposed to increased liability.
- As these systems do not adequately serve the operational needs of the fire departments they need to be replaced with a modern, unified paging infrastructure and a modern voice radio infrastructure, complemented by the required subscriber equipment (mobile & portable radios, vehicular repeaters, etc.).

RFP-CAO-01-20 was posted on the Grey County purchasing portal on February 12, 2020 until April 14, 2020. The evaluation criteria, as guided by Dan Perlstein, included the following criteria:

<i>Evaluation Criteria</i>	Weight
Understanding of the Requirements	5
Business Continuity During Transition/Migration	5
Proposed Technical Solution	35
System Life Expectancy	5
Project Approach and Contract Project Management Plan	5
Experience: Contract Project Manager, Contract Project Engineer and Contract Project Team	5
Provision of System Maintenance and Support	10
Bid Price	30
Total	100

Submissions were received from the following companies: BearCom Canada Corp. and Telequip Systems Ltd. After careful review of each proposal and scores accumulated against the stated criteria, the recommendation is to award this project to Telequip Systems Ltd.

Telequip's Solution

Voice communication – Complete and uninterrupted radio coverage for each municipal fire department plus two county-wide response channels (DMR simulcast) for large scale emergencies. This eliminates the risk of outages and gaps currently experienced due to reliance on cell phone communication.

Pager communication – With the county's Ceylon tower acting as a central hub, sixteen pager transmitter sites and simulcast VHF technology will provide the ability to page or alert a volunteer fire fighter anywhere in the County including low rise buildings, private homes and one-storey plazas. Dispatch (Owen Sound and Tillsonburg) connect directly to the hub. This is the system architecture that Wellington County has used successfully for many years.

Voice Radio Infrastructure – Four tower sites will provide required 98% coverage of the county. Two DMR repeaters to be installed at towers in Owen Sound, Walkerton, Ceylon and Meaford East. IP microwave links connect the towers to each other.

Seventy VHF mobile radios, 280 new VHF portable radios and 17 vehicle repeaters will be purchased, programmed, installed and tested.

Licensed Frequencies and Frequency Availability – Telequip will deliver properly coordinated (across the County and province) and licensed radio frequencies for the fire departments' use with Industry, Science and Economic Development Canada to eliminate interference.

The project will use the existing county common frequency for paging. This eliminates the need to reprogram all the pagers or to buy new pagers. One new input frequency would be required to link all of the pager transmitter sites together. The voice communication system requires 5 VHF pairs of frequencies. Preliminary discussions have taken place with ISED to secure these frequencies.

Ongoing Operational Costs

The ongoing operational costs of the system, estimated at \$120,000 include system administration (moves, adds, changes) and rental costs for tower sites. Telequip Systems Ltd. has identified the necessary tower sites and confirmed availability of space on the towers to support the new fire communications equipment.

Legal and Legislated Requirements

None with this report.

Financial and Resource Implications

The total expenditure for the Enhanced Fire Communications project, based on RFP-CAO-01-20, will require (including the unrecoverable portion of HST) \$1,648,192 in funding. It is being recommended that this expenditure be funded utilizing the Municipal Modernization Funding Reserve and the Connected County Reserve.

Any ongoing administration and maintenance costs of the system are to be supported by the local member municipalities participating in the project.

Relevant Consultation

- Internal – Grey County purchasing and finance
- External – Lower tier CAOs and Fire Chiefs, Owen Sound Police Dispatch

Appendices and Attachments

None