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Item No. 12.2.2
Audit & Finance Standing Committee
June 21, 2023

TO: Chair and Members of Audit & Finance Standing Committee

SUBMITTED BY:

-Original Signed-

Cathie O'Toole, Chief Administrative Officer

DATE: June 14, 2023

SUBJECT: Fire Station and Volunteer Firefighter Paging System Upgrades

ORIGIN

This report originates from a need to identify funding to complete the work to upgrade the paging system for alerting fire stations and volunteer firefighters of an emergency.

LEGISLATIVE AUTHORITY

Halifax Charter, section 93(1) - The Council shall make estimates of the sums that are required by the Municipality for the fiscal year; Halifax Charter, section 79A – The Municipality may spend money for municipal purposes in accordance with this section; Halifax Charter, section 35(2)(d)(i) - The CAO can only authorize budgeted expenditures or within the amount determined by Council by policy; Halifax Charter, section 120(6) - The Municipality may maintain other reserve funds for such purposes as the Council may determine; Halifax Regional Municipality policy on Changes to Cost Sharing for Capital Projects - Changes requiring Council approval; and the Halifax Regional Municipality Reserve Policy - No reserve funds will be expended without the CAO's recommendation and Council approval.

Administrative Order 2022-012- ADM, the *Procurement Policy*, section 32, Contract Amendments:

32. (1) All contract amendments must comply with the requirements of section 79A of the Halifax Regional Municipality Charter regarding municipal expenditures. . .

(7) The approval and signing authority limits for cumulative contract amendments are as follows:

Position	Approval Authority
Council	Any amount

Administrative Order One – Schedule 2, Audit and Finance Standing Committee Terms of Reference

RECOMMENDATION

It is recommended that the Audit & Finance Standing Committee recommend that Regional Council:

1. Approve a budget increase to Project Account No. CI210020 – HRFE Power & Backhaul Upgrades in the amount of \$52,585 (net HST included) to fund upgrades to six paging transmission tower sites outlined in this report;
2. Approve an unbudgeted withdrawal in the amount of \$52,585 (net HST included) from the Capital Fund Reserve, Q526 to fund this budget increase; and
3. Authorize the Chief Administrative Officer to negotiate and enter into an amending agreement with Bell Mobility Inc. for \$52,585 (net HST included) to complete upgrades to six paging transmission tower sites outlined in this report.

BACKGROUND

The site equipment used in the fire station and volunteer firefighter paging system has not been upgraded since its installation in 2002. Staff and the vendor have identified components that are at high risk of failure and may be beyond repair should they fail. Failure of the fire paging system will compromise the municipalities' ability to alert fire stations and volunteer firefighters of an emergency requiring their response.

DISCUSSION

Voice paging is the primary method used to alert fire stations and volunteer firefighters when there is an emergency in the community to which their response is required. This form of communication is highly reliable.

The fire station and volunteer firefighter paging system is composed of two main functions:

1. Primary paging (paging to individual fire stations and/or volunteer firefighters).
2. Backup paging (paging to a zone or group of sites). Backup paging uses the same consoles and transmitters as primary paging but a different backhaul path that is not at the same high risk of failure.

The paging system is supported by a system of 18 transmission tower sites (Marinette, Chaplin, Geizer Hill, Chaswood, Maritime Centre, Preston, Sackville, Lively Road, Ecum Secum, Tangier, Musquodoboit Harbour, Upper Musquodoboit, Sheet Harbour, Prospect (White's Lake), Shubenacadie, Harrietsfield, Hammonds Plains, and Queensland).

Prior to work which is underway and almost completed, these sites had legacy 24V power plants and were connected to the network (backhaul) via aging and legacy T1 lines. This system had not been upgraded since its installation in 2002. Project CI210020 was initiated by staff due to identified concerns with reliability and the ability to repair these systems should a failure occur.

The site powerplants and primary backhaul facilities are at risk of failure. They are past their serviceable life and are difficult or impossible to repair. Failure of these systems would impair or prevent our ability to alert fire stations and volunteer firefighters of an emergency.

The upgrades will improve reliability and repairability. The upgrades would also allow for better system performance monitoring at Bell's network operations centre.

In 2021-22, HRFE requested funding from reserves to improve the reliability of the paging system used to alert firefighters of an emergency. The amount requested was \$559,374 based on a quotation from Bell Mobility Inc. The funding was approved by Regional Council on November 9, 2021.

Due to the time between the issuance of the Bell quotation and the award of a contract, Bell indicated that their costs had risen by 16% and the total project cost would be \$576,900.30. This left the project underfunded.

Staff removed 6 of the paging towers from the scope of work to enable upgrades to proceed within the approved funding:

1. Prospect (White's Lake)
2. Queensland
3. Musquodoboit Harbour
4. Tangier
5. Harrietsfield
6. Sheet Harbour

The contract was signed with Bell in September of 2022, and the work is almost complete.

Bell has quoted \$50,424 to complete the work at the six remaining sites. Inclusive of taxes, the project cost would be \$52,585.

The recommendation is to secure funding from capital reserves to upgrade the remaining site power and primary backhaul facilities as soon as possible to mitigate the risk of equipment failure and a resulting loss of emergency service to our communities.

FINANCIAL IMPLICATIONS

The recommended upgrade involves a capital expenditure of an estimated \$52,585 (net HST included) and the current funding in CI210020 (HRFE Power & Backhaul Upgrades) is insufficient. The recommendation would be a withdrawal from the Capital Fund Reserve Q526 for \$52,585 (net HST included) in the current fiscal year to fund the remaining work required for project CI210020 (HRFE Power & Backhaul Upgrades)

Budget Summary: Project Account No. CI210020 – HRFE Power & Backhaul Upgrades

Cumulative Uncommitted Budget	\$7,225.52
Less: Quoted work from Bell (Net HST)	\$52,585
Add: Funding provided from Reserve Q526	\$52,585
Balance	\$7,225.52

Budget Summary: Capital Fund Reserve, Q526

Projected Balances in Reserve, April 1, 2023	\$24,311,330
Less: Unbudgeted withdrawal per recommendation	\$52,585
Revised projected net available balance	\$24,258,745

The balance of funds remaining in CI210020 will be used for contingency costs.

RISK CONSIDERATION

There are no significant risks associated with the recommendation in this report. The risks considered rate low. To reach this conclusion, consideration was given to financial, legal and compliance, and service delivery risks.

COMMUNITY ENGAGEMENT

There are no community engagements required or implications.

ENVIRONMENTAL IMPLICATIONS

Implications not identified.

ALTERNATIVES

1. Audit & Finance Standing Committee may recommend that Regional Council direct the upgrades to the six paging tower transmission sites to be funded through the regular capital budgeting process and address the risk in future years. This would result in serious risks exposure until the work is complete. If the funding amount requested is unavailable or delayed, the cost to complete the upgraded could rise above the current estimate.
2. Audit & Finance Standing Committee may recommend that Regional Council decline to fund the upgrades to the six paging tower transmission sites. Power plant failure would result in complete failure for both primary and backup paging for that site. Failure of the existing T1 backhaul facilities would cause a primary paging failure. Backup paging would continue to be available. Halifax Regional Fire & Emergency is the only user of the equipment. No other services would be affected.

ATTACHMENTS

N/A

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

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