

REPORT Information Technology Services

To: Mayor Johnstone and Members of **Date**: June 23, 2025

Council

From: Shehzad Somji, Chief Financial Officer File:

Item #: 2025-189

Subject: Distributed Antenna System to Improve Cellular Network Coverage

within Anvil Centre

RECOMMENDATION

- THAT the agreement between Rogers Communications Inc. and the City to supply and install a distributed antenna system within Anvil Centre to improve cellular network coverage within the facility at no cost to the City be approved; and
- 2. THAT the Chief Administrative Officer and Director, Finance be authorized to sign the agreement on behalf of the City.

PURPOSE

The purpose of this report is to seek Council approval of an agreement between Rogers Communications and the City to enable the installation and operation of a Distributed Antenna System (DAS) within the Anvil Centre facility in order to improve cellular network coverage.

SUMMARY

Anvil Centre currently has a distributed antenna system that was installed by Telus Communications several years ago, however it does not extend signal coverage to non-Telus or Bell Mobility customers, nor does it provide adequate coverage within the underground parking areas.

Rogers Communications has offered to install and maintain a carrier-neutral DAS system within Anvil Centre to address these gap at no cost to the City.

BACKGROUND AND DISCUSSION

Cellular network signals often do not extend adequately into many buildings due to various factors such as the types building materials used – dense concrete, metal and low-emissivity (Low-E) glass can weaken or block cellular signals, particularly those of higher frequency 5G networks.

To ensure reasonable cellular network access within these types of structures, it is common to have a DAS installed within the areas with poor coverage. This is typically comprised of a series of small antennas placed strategically throughout the building that all connect back to a central hub via coaxial or fiber optic cable.

The central hub then distributes the cellular signal evenly to all of the antennas in the system. This ensures that there is no loss of signal strength and that devices in the building or venue can receive a strong signal.

Anvil Centre was equipped with a Telus DAS system several years ago but it is a single-carrier system, meaning it only provides extended coverage for Telus Mobility and Bell Mobility devices which utilize shared infrastructure. The design of this system did not extend to the underground parking areas which presents a potential safety concern for staff and members of the public.

Rogers Communications approached the City in 2024 with an offer to install and operate a carrier-neutral DAS system that would extend network coverage for not only Rogers Wireless customers but also Telus and Bell Mobility (and their respective subsidiaries) with some minor equipment additions. Once installed, this system will provide cellular network coverage within the public areas of Anvil Centre to Rogers Wireless customers and also provide important coverage within the underground parking areas, addressing ongoing safety concerns.

The agreement presented by Rogers Communications stipulates there is no cost to the City for the equipment, installation and operation of the DAS system. The initial term of operation is for five years with the option to extend subsequently for another five years.

NEXT STEPS

Subsequent to the approval of the Rogers Communications agreement, IT Services, Civic Buildings and Properties and Anvil Centre staff will work with Rogers Communications to determine an approved installation date followed by the

operationalization of the system. This will be followed up with conversations with Telus Mobility regarding extending coverage of their existing DAS network to the underserviced parking areas, which will be feasible with the Rogers system in place.

FINANCIAL IMPLICATIONS

There is no cost to the City for the DAS equipment, installation or operation of the system. As per the proposed agreement, the City will charge Rogers Communications a monthly electrical usage fee based on an estimated continuous power draw of 460 Watts at \$0.1410 per kwh, equivalent to a rate of Forty-eight Dollars and Forty Cents (\$48.40) per month for the first year of the Term. The Utilities Fee shall be increased for each year of the five year Term by 3.5% per year.

Further, upon signing of the agreement there shall be a one-time License Fee of Ten Dollars (\$10) paid by the Rogers Communications to the City. In addition, Rogers Communications shall pay a License Fee of Twenty-five Dollars (\$25.00) per month for equipment rack space rental, payable on the first day of each month of the term, plus applicable taxes.

INTERDEPARTMENTAL LIAISON

This initiative will include some degree of interdepartmental collaboration between IT Services, Civic Buildings and Properties and Anvil Centre staff with respect to coordinating the installation dates so as to not impact any planned events taking place at Anvil Centre.

<u>OPTIONS</u>

The following options are presented for Council's consideration:

- THAT Council approve the agreement between Rogers Communications and the City to supply and install of a distributed antenna system within Anvil Centre to improve cellular network coverage at no cost to the City and that the CAO and CFO be authorized to sign for the City.
- 2. **THAT** Council provide alternate direction to staff.

Staff recommend Option 1.

CONCLUSION

Staff seek that Council approve the proposed agreement between Rogers Communications Inc. and the City for the installation and operation of a Distributed Antenna System within Anvil Centre, at no cost to the City to improve cellular network coverage within the public areas of the facility.

ATTACHMENTS

Attachment 1 – Proposed agreement between Rogers Communications Inc. and the City

Attachment 2 – Finalized engineering drawings of the DAS installation and antenna locations

APPROVALS

This report was prepared by:

Paul Taylor, Senior Manager IT/Chief Information Officer

This report was reviewed by:

Craig MacFarlane, Manager of Legal Services, City Solicitor

This report was approved by:

Shehzad Somji, Chief Financial Officer

Lisa Spitale, Chief Administrative Officer