

Item:



Committee of the Whole Report

DATE: Tuesday, March 05, 2019

WARD(S): 1

**TITLE: MASTER LICENCE AGREEMENT
INSTALLATION OF BELL MICRO-CELL TECHNOLOGY ON
CITY STREETLIGHTS POLES – PILOT PROJECT
BLOCK 55 – KLEINBURG SUMMIT**

FROM:

Jason Schmidt-Shoukri, Deputy City Manager, Planning and Growth Management

ACTION: DECISION

Purpose

This report recommends the execution of a standard master joint use License Agreement with Bell Mobility Inc. to formalize the installation and maintenance of micro-cell technology on thirty-one city streetlight poles in the Block 55 residential development area – Kleinburg Summit.

Report Highlights

- Bell Mobility's new low power micro-cell technology can be attached to streetlight poles to help improve wireless service to specific geographic areas.
- The micro-cell unit is a single box solution that integrates both antenna and electronics in one small assembly.
- The use of micro-cell technology can reduce the number and density of traditional telecommunication towers.
- The micro-cell technology has been installed on thirty-one city streetlights in the residential community in Block 55 – Kleinburg Summit as a pilot project.
- The execution of a Master License Agreement between Bell Mobility and the City is required.

Recommendations

1. THAT the necessary by-law be enacted authorizing the Mayor and Clerk to execute a License Agreement with Bell Mobility Inc. to permit the placement, maintenance, repair and replacement of micro-cell telecommunication equipment on city streetlight poles in the Block 55 development area. The form and substance of the License Agreement shall be satisfactory to the City Solicitor, or its designate.

Background

The demand and usage of Wireless technology is increasing at a considerable rate. Wireless technology is traditionally provided by telecommunication towers and roof top units. This type of infrastructure, however, is not able to deliver high-quality coverage in certain geographic pockets due to topography and other factors. Bell Mobility has developed a new low powered micro-cell technology that can be attached to streetlight poles to help improve wireless service to these underserved areas.

Previous Reports/Authority

None

Analysis and Options

The micro-cell technology has been designed to deliver more focused cellular service (voice and data) to an area approximately 100 metres away from the unit with radiofrequency levels well below Health Canada exposure limits. The small cell unit is a single box solution that integrates both antenna and electronics in one assembly. The unit is approximately the size of shoe box and can be affixed to the top of a streetlight pole as shown on Attachment 1. While micro-cell will not replace the traditional tower or roof top infrastructure, it will help improve service and reduce the number, size and density of new cell towers.

Micro-cell Technology has been installed in Block 55

The City was approached several years ago by Bell Mobility and the Block 55 landowners with the proposal to incorporate the microcell units into the design of the development area. The proposal included the installation of thirty-one units evenly spaced across the development area. Given the units are small, unobtrusive and are not expected to impede the operation and maintenance of the City's streetlight system, staff approved the installation as a pilot project. The micro-cell units have been installed in conjunction with the phasing of the development.

A Micro-Cell Master License Agreement is required to facilitate equipment placement and maintenance

The micro-cell units are fastened to the top of thirty-one streetlight poles in Block 55. Given this joint use arrangement, Bell Mobility and the City will need to execute a Master License Agreement for the placement, maintenance, repair and replacement of the microcell units. The Master License Agreement has been drafted based on the existing agreement related to the joint-use (Trafalgar) streetlight pole, which houses multiple telecommunication utilities in the base of the pole. The joint-use Trafalgar streetlight poles has been used across the city and in many other municipalities in the GTA.

The License Agreement will not give Bell Mobility exclusive use that would prevent other telecommunication providers from installing similar technologies on other streetlight poles in the area.

The use of micro-cell technology could be expanded in the future

As the telecommunication industry moves forward with the next generation “5G” mobility network, the use and reliance on cellular network will significantly increase to service smart technology such as autonomous vehicles and smart home devices (alarms, thermostats and appliances). To enable these applications, it is important that the City has robust high-speed wireless infrastructure. The use of micro-cell technology in proximity to the user will directly enable the evolution to a “Smart City” environment. If the Block 55 pilot project is successful, the use of micro-cell technology could be expanded city wide.

Financial Impact

Under the draft Master License Agreement, Bell Mobility is proposing to pay the city a one-time application fee of \$50 per unit and an annual fee of \$75 per unit for the joint use of the City’s streetlight pole. These rates were established by Bell based on other similar joint-use agreements.

The streetlight power supply will be used to power the micro-cell units. Streetlighting is unmetered and Alectra bills the City based on estimated power consumption. Under this service set up, Alectra is unable to bill Bell Mobility directly for the micro-cell power usage. A memorandum of understanding has been drafted between the City, Alectra and Bell Mobility that would have Alectra bill the City separately for the power consumption related to the micro-cell units on a fixed rate per unit basis. The City would in-turn recover from Bell Mobility the cost of the power consumption charged from Alectra plus an administration charge.

Broader Regional Impacts/Considerations

This micro-cell technology could be used in other areas of the City to improve telecommunication service and to support smart city applications.

Conclusion

Bell Mobility has affixed micro-cell technology to the top of thirty-one streetlight poles in the Block 55 development area to help improve wireless service and to reduce the need for additional telecommunication towers in the area. Bell Mobility and the City now need to execute a Master License Agreement to support the placement, maintenance, repair and replacement of the micro-cell units.

For more information, please contact: Andrew Pearce, Director, Development Engineering.

This report has been prepared in consultation with Transportation Services, Parks and Forestry Operations Department and the Legal Services Department.

Attachments

1. Micro-cell Streetlight Pole Installation Detail

Prepared by

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