

Telecommunications - Authority to Permit the Installation of Stand-Alone Antenna Poles

Date:	October 11, 2013
To:	Public Works and Infrastructure Committee
From:	General Manager, Transportation Services
Wards:	All Wards
Reference Number:	p:\2013\ClusterB\Tra\NorthYork\pw13111

SUMMARY

Rogers Communications Inc. ("Rogers") has requested permission to install stand-alone utility poles with associated cabinets (the "Poles"), within the public right-of-way. Private pole installations of this nature are currently not permitted within the public right-of-way, however, consideration may be given, subject to strict compliance with the proposed Telecommunication Antenna Placement and Design Criteria (Attachment 2), developed by Transportation services and any other applicable Codes and/or City Policies/Guidelines.

This report seeks standing delegated authority for (i) the General Manager of Transportation Services to approve locations for the proposed Poles to be installed by Rogers and any other telecommunications carriers authorized by applicable agencies to operate telecommunications systems (the "Other Carriers"), subject to certain conditions listed below; and (ii) for the Chief Corporate Officer or designate (the "CCO") to negotiate and enter into licence agreements for the Poles on the conditions set out herein.

RECOMMENDATIONS

The General Manager, Transportation Services recommends that:

1. City Council delegate to the General Manager of Transportation Services, authority to approve locations for the Poles to be installed by Rogers on the City's public right-of-way subject to the conditions listed in recommendation 3 below.

2. City Council delegate to the General Manager of Transportation Services standing authority to approve locations for any Pole within the City's public right-of-way as proposed to be installed by Other Carriers within the City's public right-of-way subject to the conditions listed in recommendation 3 below.
3. The following conditions apply to the authority provided to the General Manager of Transportation Services by recommendations 1 and 2 above.
 - a. Rogers and/or any of the Other Carriers (the "Licensees") shall enter into a licence agreement in accordance with recommendations 4 and 5 below;
 - b. the Licensees shall develop, in consultation with City Planning Urban Design staff and Transportation Services Public Realm staff design aesthetics for proposed pole attachments that are satisfactory to the City's Director of Urban Design and Transportation Services Director of Public Realm;
 - c. Proposed Pole locations must comply with the "Telecommunication Antenna Placement and Design Guidelines", established by the General Manager of Transportation Services, as attached to this report; and
 - d. the Licensees must pay an application fee for each location reviewed to ensure compliance with the placement criteria.
4. City Council delegate to the Chief Corporate Officer (CCO) authority to negotiate, enter into and execute, on behalf of the City, a licence agreement (the "Licence"), including any amendment or extension as necessary to permit the installation of the Poles by Rogers on the City's public right-of-way, substantially on the terms and conditions set out in Attachment 1, and on such other terms and conditions as may be acceptable to the CCO, in a form satisfactory to the City Solicitor.
5. City Council delegate to the Chief Corporate Officer (CCO) standing authority to negotiate, enter into and execute, on behalf of the City, the Licence as necessary to permit the installation of the Poles by any Other Carrier(s) on the City's public right-of-way, substantially on the terms and conditions set out in Attachment 1, and on such other terms and conditions as may be acceptable to the CCO, in a form satisfactory to the City Solicitor.

FINANCIAL IMPACTS

Additional revenues will be expected, which will offset all costs associated with preliminary review, approval and installation of antenna poles.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial implications.

BACKGROUND

The City of Toronto and Rogers Communications Inc. entered into a comprehensive Municipal Access Agreement (the "Rogers MAA") dated January 1, 2006 and terminating January 1, 2021 enabling Rogers to install and maintain fibre optic and other cable, conduit, and ancillary plant in the public streets. The Rogers MAA was authorized by Clause No 17 of Report No. 6 of the Works Committee, adopted as amended by City Council at its meeting of September 25, 26, 27 and 28, 2006. Among the terms, Rogers is specifically prevented from installing above ground structures.

Rogers is proposing to install 100 antennas on modified streetlight poles and 40 antenna poles on private property. In addition, Rogers is seeking permission to install up to 50 stand-alone antenna poles within the City right-of-way to enable deployment of its upgraded wireless networks (Long Term Evolution or LTE). This report outlines the issues related to this request and seeks standing delegated authority for approving the placement of such installations within the right-of-way by Other Carriers. If approved, this delegated authority would be subject to certain conditions including that the Carrier proposing the installation of these poles enter into a licence agreement. If Council approves the recommendations in this report, then the CCO will have authority to negotiate, enter into and execute such licence agreements that must include certain terms and conditions that are listed in Attachment 1.

In conjunction with the conditions respecting the Poles discussed herein, Rogers has been working with Real Estate Services Staff to pursue the possibility of extending its existing overholding licence sites on non-right-of-way City-owned lands (the "Renewal Sites"). After lengthy negotiations with City Staff, Rogers has agreed to adhere to the City's Prudent Avoidance Policy (discussed below) and other terms for the Renewal Sites. Real Estate Services has submitted a report to Government Management Committee to seek authority for the Renewal Sites, scheduled for City Council consideration concurrently with this Staff Report.

COMMENTS

Rogers has submitted a proposal to the City advising that in recent years the demand for bandwidth to satisfy users (due to uses such as data transmission, high definition video streaming, gaming, media, and increased use of mobile applications, smart phone, tablet and laptop devices), has increased dramatically in the City of Toronto. To satisfy these public and business requirements, new high speed wireless networks are needed and will operate on higher radiofrequencies. At these radiofrequencies, signals lose their strength faster. In order to maintain adequate strength Rogers requires each cell site to operate with a smaller coverage radius, and thus a denser network operating closer to the ground.

Rogers indicates that it will be enhancing and augmenting its wireless network in major urban areas so that it can deploy the next generation LTE of high-speed data services.

The first step in upgrading its network is the modification of its existing tower sites to intensify and focus coverage inward. This will introduce gaps that will be filled by the smaller "densification" sites. Therefore, as an additional element to its existing wireless infrastructure of large communications towers and antennas mounted on high-rise rooftops, Rogers plans to employ a series of smaller antennas at lower heights, under 15 metres in height.

Rogers' intent is to mount most of these antennas (estimated to be in the order of 200 City-wide) on private property (about 50) and existing utility poles (about 100). In addition, representatives indicate that there is a need to erect approximately 25-50 stand-alone antenna poles including utility cabinets on City boulevards (sketches of these are provided in Attachment 2). Each site would be interconnected to the rest of the Rogers network with buried fibre optic cable (this aspect is currently permitted under the MAA).

Regulatory Context

The Rogers antennas are to be designed, constructed and operated in full compliance with national standards for radiofrequency exposure established by Health Canada known as Safety Code 6, as well as antenna siting procedures established by Industry Canada. Since the proposed installations are less than 15 metres in height, Industry Canada guidelines do not require consultation with the City or the public. However, since Rogers is requesting permission to install antenna systems within the public right-of-way, the City is asking that its conditions in respect of radiofrequency and siting issues for these systems be addressed through a licence agreement, where Rogers will contractually be held to the City of Toronto's Prudent Avoidance Policy, discussed below.

City Concerns

In August 2009, City Council authorized a Municipal Access Agreement with another carrier, DAScom Inc., (the "DAS MAA"). Municipal Access Agreements are entered into to provide municipal consent for the placement of transmission lines in City roads. This consent is required in order for telecommunications companies to exercise their qualified right to install this infrastructure as contemplated in the *Telecommunications Act*.

While telecommunications companies do not have a similar statutory right to place stand-alone antennas on City lands, the City may consent to such installations. The City provided such consent under the terms of the DAS MAA to allow for the deployment of a similar "distributed antenna system" of pole mounted antenna. However, unlike Roger's proposal to install stand-alone antenna poles, DAScom is required, pursuant to the terms negotiated in the DAS MAA, to mount its antenna only on existing utility poles whose owners are already permitted under Provincial or Federal law to grant permission for pole attachments. DAScom also committed to abide by the City's Prudent Avoidance Policy, as discussed in more detail below, and make satisfactory design provisions in terms of aesthetics of its proposed pole attachments.

In contrast to telecommunications companies' qualified right to install transmission lines in City roads, there is no similar statutory right to install stand-alone antenna poles on municipal lands as proposed by Rogers. Rather, such installation will follow Industry Canada's process and requires the City's permission as owner of the lands.

1. Proliferation and Aesthetic of Above-ground Utility Infrastructure

As noted, the current Rogers MAA specifically prevents above-ground installations such as poles. Staff will treat this request as individual installations within the public right-of-way, to be kept separate and distinct from the infrastructure allowed under the Rogers MAA.

It should also be noted that while this application may in and of itself not have significant impacts with only 25-50 stand-alone poles envisaged at this time, Other Carriers, as well as other agencies, could well be interested in deploying similar infrastructure. Staff estimates there are well over 200,000 utility and street lighting poles in City road allowances. Staff has encouraged Rogers to negotiate appropriate support structure agreements with Toronto Hydro and other utilities to accommodate all of their proposed antennas.

To ensure control over placement and maintain the integrity of the City's streetscape, the General Manager, Transportation Services, with input from other divisions, has established "Telecommunication Antenna Placement and Design Guidelines" (Attachment 3), which must be satisfied prior to approving any stand-alone antenna pole locations. Further, applicants will be required to work with staff from Urban Design and Public Realm to develop design aesthetics for any proposed pole attachments.

2. City of Toronto Prudent Avoidance Policy

Regulation of the cell phone industry, including the location of cell phone towers and antennas, is within federal jurisdiction, specifically under the purview of Industry Canada. Industry Canada ensures compliance with Health Canada's Safety Code 6 which determines the level at which radiofrequency electromagnetic radiation in the frequency range from 3 kHz to 300 GHz is safe. City Council, in March 2008, on recommendation of the Board of Health, adopted a "Prudent Avoidance Policy" for the location of new telecommunications towers and antennas. This policy recommends that exposures to radiofrequencies for the general public be kept 100 times below Health Canada's Safety Code 6 guideline. It encourages telecommunications carriers to voluntarily observe the radiofrequency limits outlined in the City's Prudent Avoidance Policy, and requires that such a standard be met on City-owned property.

Since the Poles proposed in this report are to be installed on City-owned lands, the City will require that Rogers comply with the City's Prudent Avoidance Policy as applicable. Rogers has provided information on the radiofrequency emissions that are expected after all of the installations have been erected and activated. It is reported that in all scenarios the radiofrequency emissions would be below Safety Code 6. Rogers has also advised

City staff in writing that it will ensure full compliance with the City's Prudent Avoidance levels.

CONTACTS

Kyp Perikleous, Director
Transportation Services
North York District
Telephone: 416-395-7480
Email: kperikle@toronto.ca

SIGNATURE

Stephen Buckley
General Manager
Transportation Services

ATTACHMENTS

Attachment 1: Major Terms and Conditions for Pole Licences
Attachment 2: Antenna Pole and Utility Cabinet Sketches
Attachment 3: Telecommunication Antenna Placement and Design Guidelines