

NO: R233

COUNCIL DATE: November 19, 2018

REGULAR COUNCIL

TO: **Mayor & Council** DATE: **November 15, 2018**

FROM: **Fire Chief** FILE: **3900-20**
General Manager, Planning & Development

SUBJECT: **Proposed Text Amendments to Public Safety Radio Building Amplification System Bylaw, 2017, No. 19108**

RECOMMENDATION

The Surrey Fire Service and Planning & Development Department recommend that Council:

1. Receive this report for information;
2. Approve amendments to the "Public Safety Radio Building Amplification System Bylaw, 2017, No. 19108" as documented in Appendix "I" of this report; and
3. Authorize the City Clerk to bring forward the necessary amendment bylaw for the required readings.

INTENT

The purpose of this report is to seek Council approval of amendments to the *Public Safety Radio Building Amplification System Bylaw, 2017, No. 19108* (the "Bylaw") as documented in Appendix "I" of this report. The proposed amendments are intended to clarify the exemptions to the Bylaw for Buildings that do not need the Bi-Directional Amplifier, and to make minor text amendments.

BACKGROUND

In 2004 the Surrey Fire Service, RCMP and Ambulance services migrated onto the E-Comm wide area network to provide radio communications for all the emergency responders in the City of Surrey. One of the natural limitations identified regarding a radio network was the ability of the system to provide adequate radio signals in larger densely constructed buildings, to ensure first responders have good communication.

As a city grows, buildings can effectively shadow or block radio signals in certain types of buildings and may degrade radio communications for first responders. To address this, the City of Surrey engaged a radio engineer to research and recommend best practices to provide alternatives to prevent radio signal degradation.

This resulted in the creation of the Public Safety E-Comm Radio Building Amplification System By-law, 2005, No. 15740 (the "2005 Bylaw") that required many new buildings to undergo an

assessment to determine if communications will be reliable in the proposed buildings. Where required, buildings had to be equipped with an internal Bi-Directional Amplifier (“BDA”) as part of the construction. The purpose of the 2005 Bylaw was to ensure large buildings that blocked or impaired radio signals have a BDA installed that would rebroadcast radio signals from the outside to the inside and vice-versa.

In 2017, the 2005 Bylaw was repealed and replaced with the *Public Safety Radio Building Amplification System Bylaw, 2017, No. 19108*. The purpose of the Bylaw repeal and replacement was to reflect changes in technology and radio frequency such that first responders had adequate radio communication.

DISCUSSION

Through recent experience in the implementation of the Bylaw and in consultation with industry experts, staff has learned that the exemptions to the Bylaw require fine tuning. This is to ensure that the exemptions in the Bylaw properly capture the buildings which do not require a BDA. Some buildings do not require the installation of a BDA to rebroadcast radio signals as they do not sufficiently block such signals. The proposed amendments, if adopted, would exempt such buildings if they meet a specific set of criteria. For example, a building or structure that meets the following criteria will be exempt from the Bylaw:

- i) is constructed entirely of wood frame;
- ii) does not have any metal cladding;
- iii) does not have any Low-E reflective glass;
- iv) does not have any portion of the building or structure with a floor level that is partially or wholly underground, including basements, cellars and crawlspaces;
- v) the area of all the floors of the building or structure is less than 5000 square metres, as measured to the lesser of the outside edge of the exterior walls or sheathing; and
- vi) is less than 12 metres in height, as measured from the lowest ground elevation of the building or structure to the highest point of the building or structure.

The proposed amendments also provide the Fire Chief or Building Official with the discretion to exempt buildings if, in their opinion, a building should be exempt from the Bylaw. These revised exemptions would help provide increased clarity for developers and owners in constructing or renovating buildings and continue to ensure that first responders have adequate radio communication.

In addition, the proposed amendments include minor text amendments to better reflect the intent of the Bylaw and to broaden the scope of renovations captured by the Bylaw.

Legal Services Division Review

Legal Services Division has reviewed the proposed amendments contained in this report and has no concerns.

SUSTAINABILITY CONSIDERATIONS

These proposed amendments support the objectives of the City's Sustainability Charter 2.0. In particular, the proposed amendments relate to Sustainability Charter 2.0 them of Public Safety, Built Environment and Neighbourhoods and Infrastructure. Specifically, these amendments specifically the following Desired Outcomes ("DO"):

- Community Safety and Emergency Services DO5: Surrey is recognized and perceived as a leader in establishing and maintaining collaborative partnerships for community safety and well-being;
- Emergency Preparedness and Prevention DO6: Surrey has proactive and coordinated emergency prevention measures in place, and can effectively deal with emergencies that arise;
- Buildings and Sites DO15: All new buildings, public places and outdoor spaces are welcoming, safe and universally accessible, and
- Telecommunications DO22: The city has excellent communications infrastructure that provides affordable and effective connectivity across the community.

CONCLUSION

The Surrey Fire Service and Planning & Development Department recommend that Council:

- Receive this report for information;
- Approve amendments to the "Public Safety Radio Building Amplification System Bylaw, 2017, No. 19108" as documented in Appendix "I" of this report; and
- Authorize the City Clerk to bring forward the necessary amendment bylaw for the required readings.

Len Garis
Fire Chief

Jean Lamontagne
General Manager, Planning & Development

Appendix "I": Proposed Amendments to the Public Safety Radio Building Amplification System Bylaw, 2017, No. 19108

APPENDIX "I"

Proposed Amendments to the Public Safety Radio Building Amplification System Bylaw, 2017, No. 19108 (the "Radio Bylaw")

That the Radio Bylaw be amended as follows:

1. Section (a), immediately under the heading "INTENT OF BYLAW", be amended by deleting that paragraph in its entirety and replacing it with the following:
 - (a) to require new or renovated buildings and structures, unless specifically exempt, to install and maintain Amplification Systems that provide highly reliable in-building communications for users of the public safety communications service provider radio system within the City;
2. Section 3. be amended by deleting the phrase "or provide an addition of more than 20% to" and replacing it with the phrase ", or renovate";
3. Section 6(b) be amended by deleting that subparagraph in its entirety and replacing it with the following:
 - (b) any building or structure that complies with all of the following:
 - i) is constructed entirely of wood frame;
 - ii) does not have any metal cladding;
 - iii) does not have any Low-E reflective glass;
 - iv) does not have any portion of the building or structure with a floor level that is partially or wholly underground, including basements, cellars and crawlspaces;
 - v) the area of all the floors of the building or structure is less than 5000 square metres, as measured to the lesser of the outside edge of the exterior walls or sheathing; and
 - vi) is less than 12 metres in height, as measured from the lowest ground elevation of the building or structure to the highest point of the building or structure; or
4. Section 6(c) be amended by deleting that subparagraph in its entirety and replacing it with the following:
 - (c) any building or structure that has been granted an exemption in writing by the Fire Chief or Building Official, where the Fire Chief or Building Official considers that the building or structure should be exempt from this Bylaw, having consideration for the operational needs of the City, the need for or quality of radio coverage in the

building or structure, or any other factor the Building Official or Fire Chief considers appropriate.

5. Section 6(d) be amended by deleting that subparagraph in its entirety.