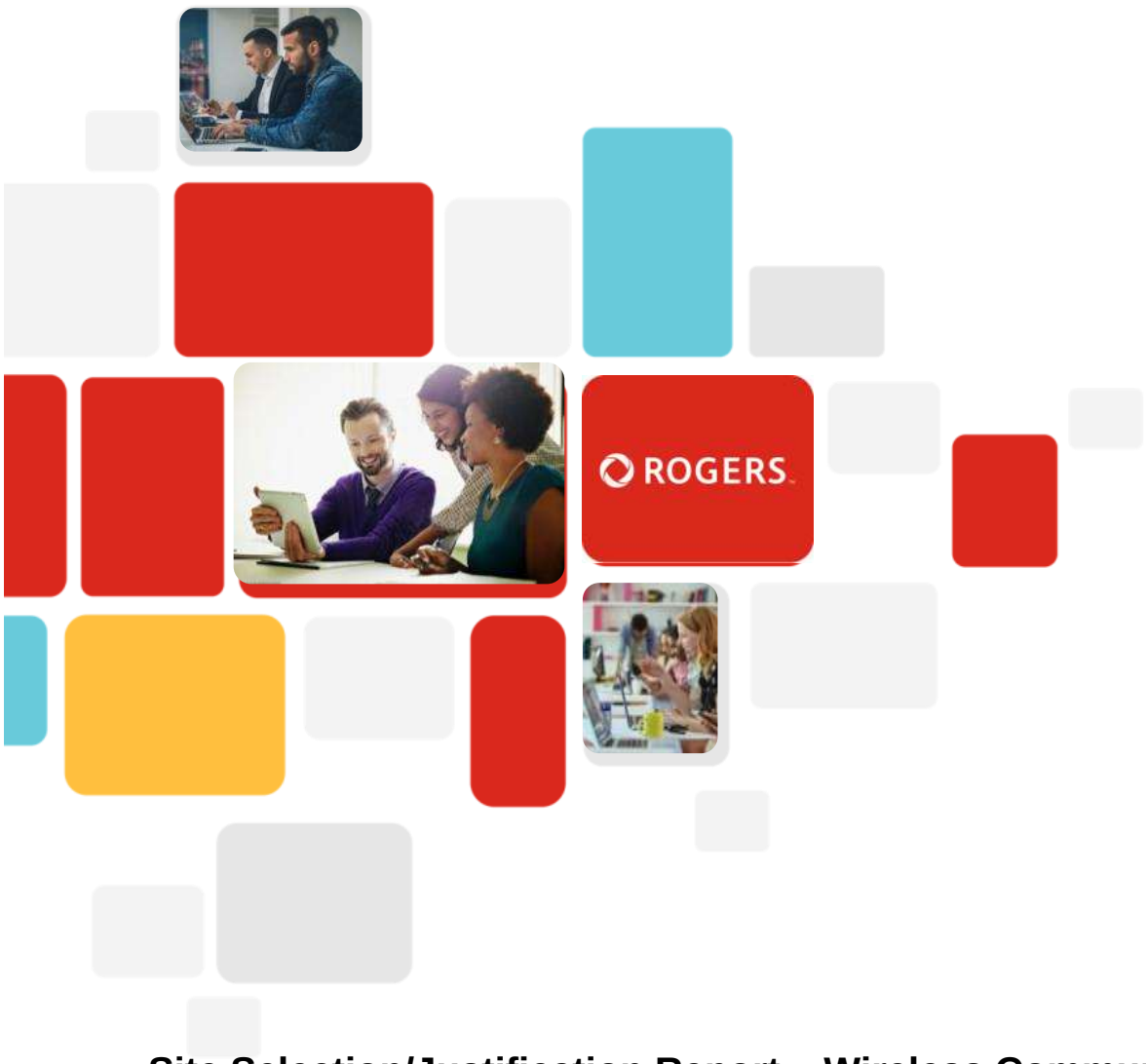

Site Selection/Justification Report – Wireless Communications Site

Prepared for: Township of Clearview

Rogers Site: C5715 (Collingwood South)
Clearview, ON

Rogers Communications Inc. | 8200 Dixie Road | Brampton ON L6T 0C1
Zachary Baum / Kathy Barbuto | Municipal Relations Specialists |

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ROGERS

Introduction

Like many areas of the province, your community is experiencing a growing demand for wireless services. As people rely more on wireless devices such as smartphones, tablets and laptops for business and personal use, network improvements are required to ensure high quality voice and data services are available.

This document outlines the site selection process in accordance with the requirements of Innovation, Science and Economic Development Canada's Spectrum Management and Telecommunications Policy, CPC-2-0-03, Issue 5 (Jul.15, 2014) and provides a description of the system associated with the wireless communications installation on a property located at 4537 County Road 124, Clearview ON.

Telecommunications is a powerful economic enabler that promotes home occupations, teleworking, telecommuting and improved community networking and information dissemination.

Background and Coverage Requirements

A wireless telecommunications facility is a puzzle piece in a very complex radio network, whether that site is situated in an urban, suburban or rural setting. Customer demand and sound engineering principles direct where sites are required to be located. As people rely more on wireless devices such as smartphones, tablets and laptops for business and personal use, network improvements are required to ensure high quality voice and data services are available. In order for a wireless network to be reliable, an operator must provide "seamless" coverage so that gaps in the network are avoided. Gaps create dropped calls and overall poor service to customers. Rogers is committed and mandated by its license to ensure the best coverage and service to the public and private sectors.

The proposed site location at 4537 County Road 124, Clearview will achieve the necessary engineering coverage objectives for our network. The location will provide much relied upon communication services in the area such as EMS Response, Police and Fire; improved wireless signal quality for the local residents, those traveling along the major roads, as well provide local subscribers with Rogers LTE wireless network coverage and capacity for products and services such as iPhones, Smartphones, Tablets and wireless internet through the Rogers Rocket Stick technology in the surrounding area.

Rationale for New Telecommunication Infrastructure

In identifying a potential site location and design, Rogers examined the surrounding area, assessed the visibility of the structure and considered a possible structure design. Rogers evaluated the best location for a new facility using the following criteria:

a) **Technical Requirements**

The performance of a wireless network is dependent on the geographical location of its equipment, height of its antennas, line-of-sight requirement, the demand customers place on the network, as well as proximity to the users. In expanding its wireless network, Rogers is seeking to improve service in the Township of Clearview.

b) **Coverage Objectives**

Rogers' Network Planning and Engineering departments have generated coverage plots to provide an illustration of the "Existing" and "Future" coverage scenarios and how it will be met

with our proposed site.

The coverage maps below are generated and based on the current level of coverage and the proposed coverage - (Figure 3, 4).

The colour scale of the plot indicates levels of coverage as follows:

- Blue reflecting excellent coverage
- Light blue reflecting good street and in-building level coverage
- Green reflecting overall poor and unreliable in-building coverage
- Yellow & Red reflecting unreliable to minimal coverage

Figure 3

This map illustrates “Existing’ Coverage and the lack of contiguous, reliable coverage in the area.

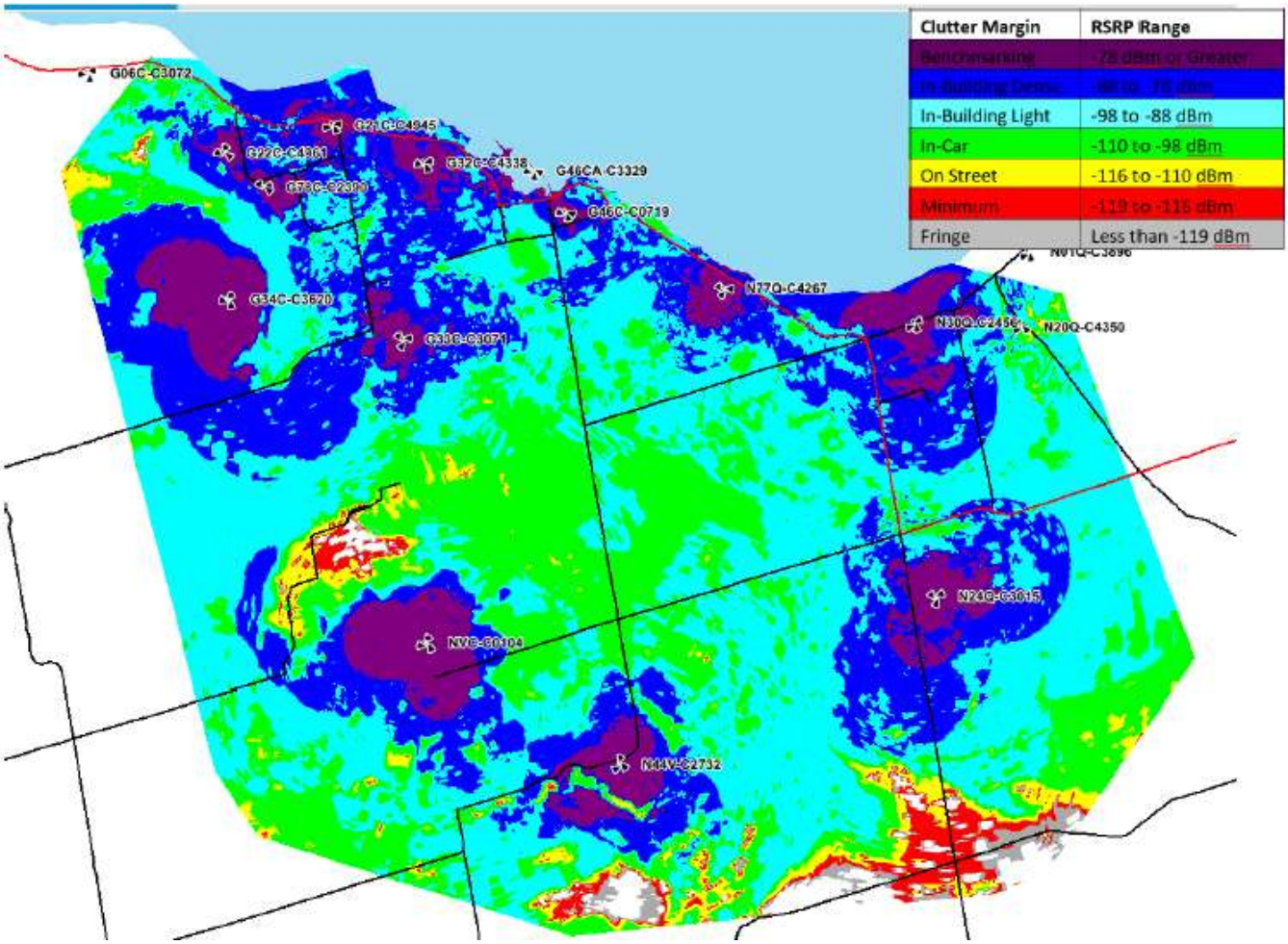
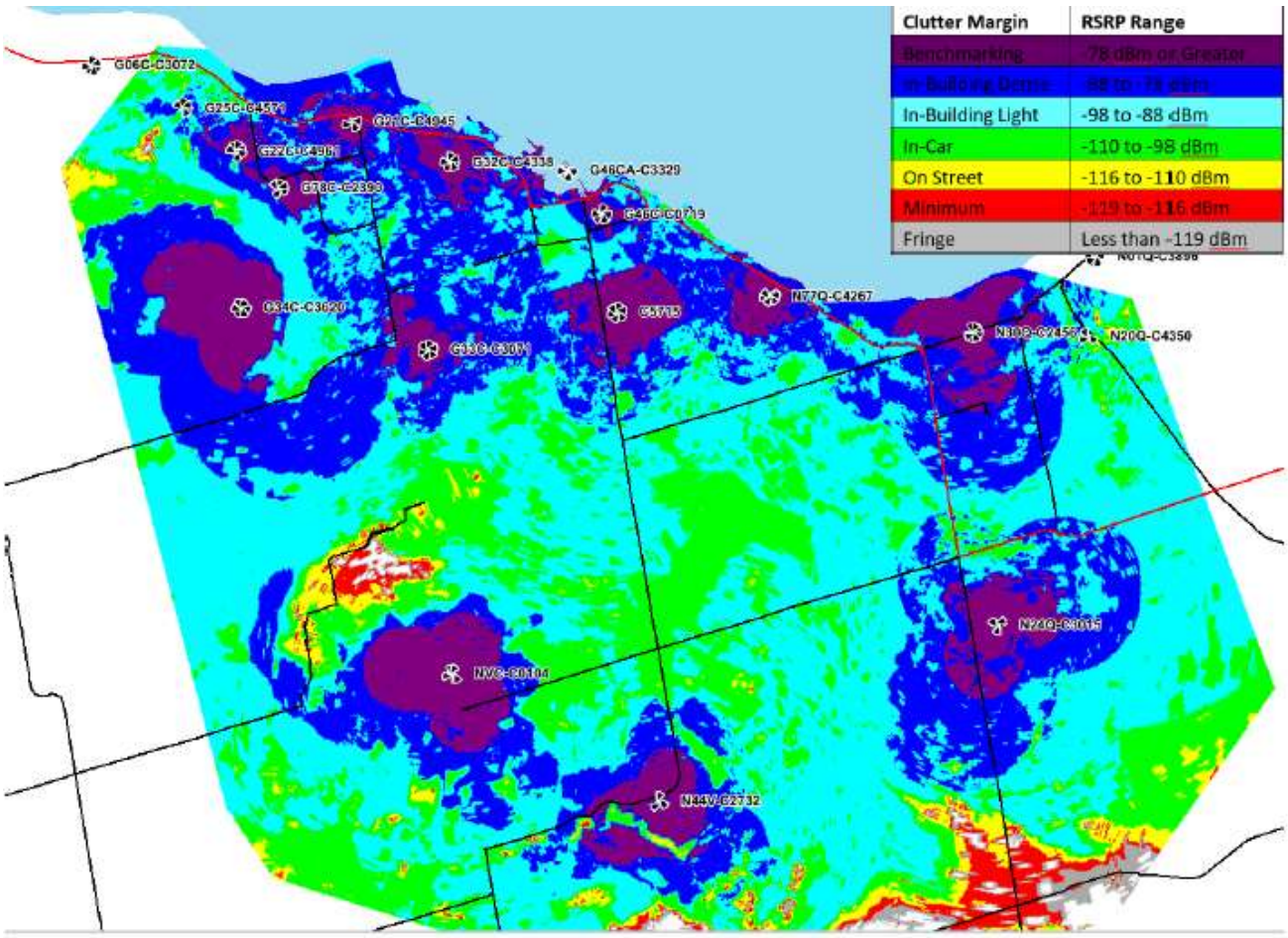


Figure 4

This map illustrates “Future” Coverage with contiguous, reliable coverage in the area utilizing the proposed site.



c) **Evaluation of Existing Structures**

When a part of a network requires improvement, the first step is to evaluate existing structures that are located within the specific geographical area offering the required height and that may be available to support new equipment or to use for co-location.

There are no other wireless communication structures in the surrounding area that could be utilized in order to address the coverage needs in the area.

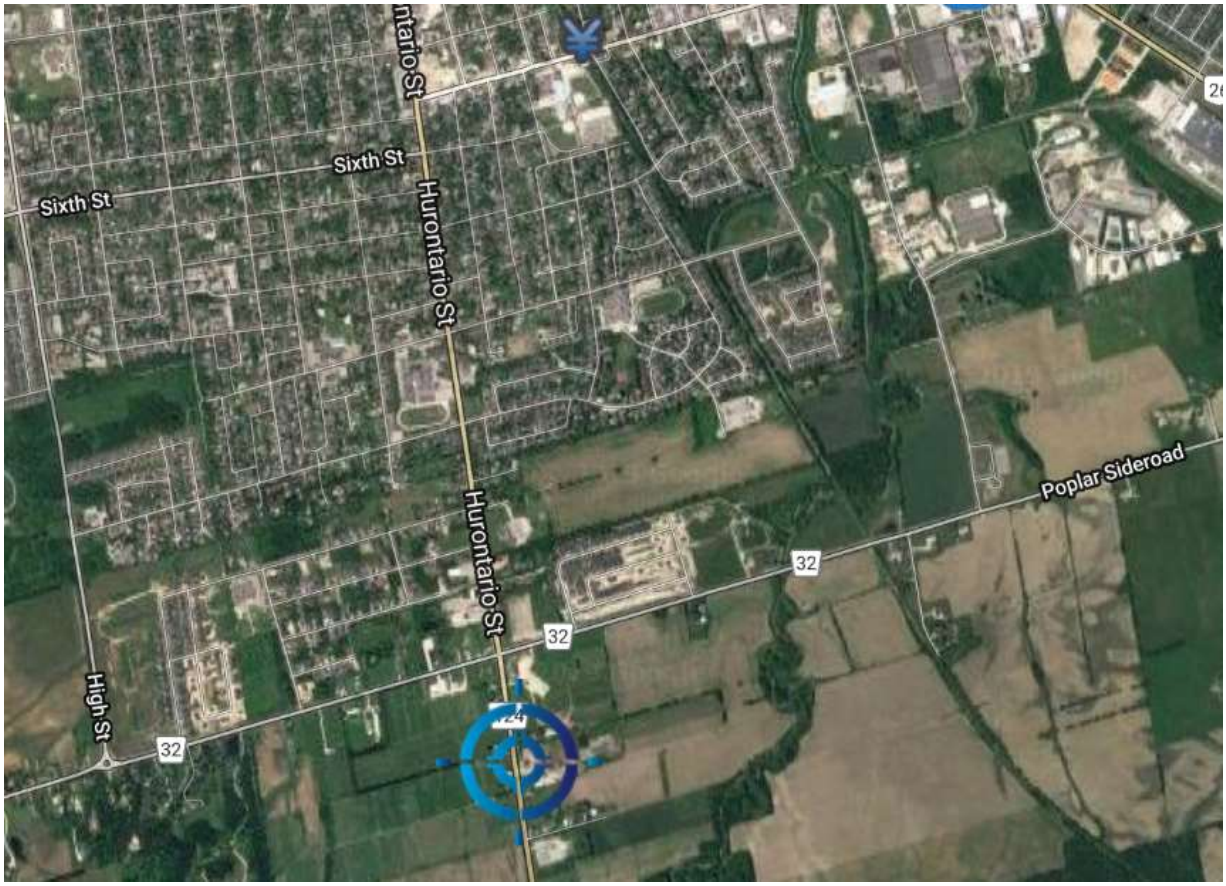
The map below illustrates the proposed location in relation to other existing structures - (Figure 5A). Please also refer to the table provided below for site locations and associated heights – (Figure 5).

Figure 5 – Existing/Future Structure table

	Address	Approximate Height	Details
A	221 Hume Street	30 meter water tower	Bell Mobility installation approximately 2.00 kilometers from the proposed site. This installation does not have the elevation to address the intended coverage area. Location of water tower is too far north from desired coverage area.

B	4436 County Road 124	40 meter monopole	This is an unbuilt Signum Wireless site with one incumbent/carrier who will be occupying the top 5.5 to 6 meters of the structure. The remaining height made available for Rogers equipment will not satisfy the coverage objectives intended for this site and has been disqualified by RF Engineers.

Figure 5A – Aerial of Existing sites in reference to our proposed location.



d) **Land Use Considerations**

Rogers's site selection process is a balanced exercise that must meet Rogers's network coverage objectives, respect local land-use constraints, listen to community concerns, while at the same time reflecting Rogers obligation to its customers to provide a high quality of service.

In consideration of Rogers's technical requirements and securing a land agreement with a willing property owner, Rogers considers the proposed location appropriate. The nearest residential dwelling is approximately 0.45 metres away from the proposed installation. Preliminary discussions have occurred with the Township of Clearview Planning and no concerns were identified on the proposed location. Rogers will access the site from the existing driveway off of County Road 124.

Rogers' site will provide for future co-location opportunities and may possibly further assist in the proliferation of towers in the Township, while providing the expected coverage levels to our customers and the accessibility to emergency services.

Proposed Facility Location

The structure is proposed to be located on a property known as 4537 County Road 124, Clearview in a predominately rural / agricultural area.

The subject property has a land area of 9.525 hectares and is legally known as Part of Lot 39, Concession 8, Township of Clearview.

The geographic coordinates for the site are as follows:
Latitude (NAD83) N 44˚ 28' 37.4" Longitude (NAD 83) W 80˚12' 25.7"

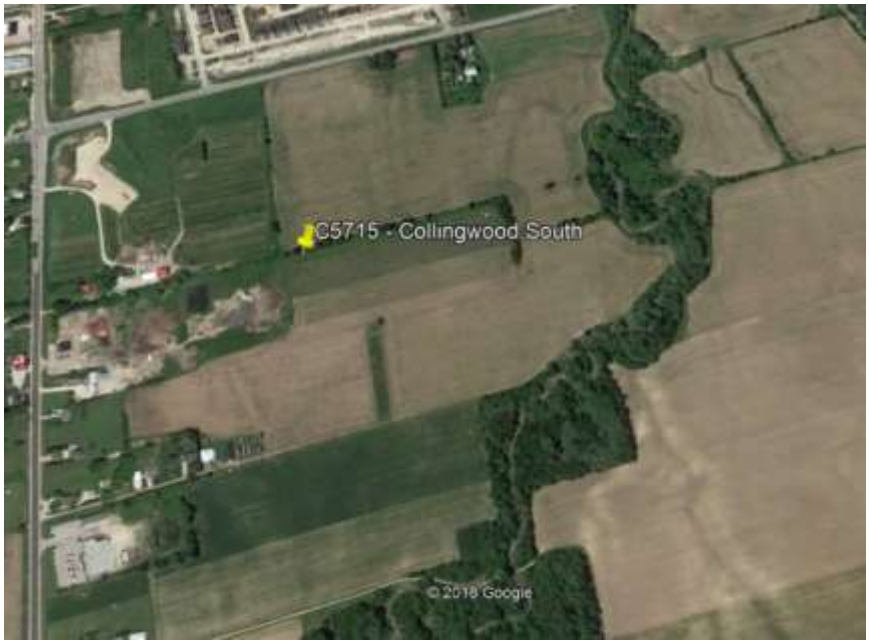
A copy of Rogers' surveyed site plan has been attached for your reference and information. Please refer to an aerial provided below for the site's location – (Figure 6).

Description of Proposed System

This particular site will be 45 metre monopole tower.

Please also refer to page 9 for a sample of the installation for your reference (Figure 8). An additional package of photo simulations is provided with this report. The viewscapes simulate the view of the proposed installation from major visible intersections. The process of simulating the proposed facility into the existing conditions of the viewscapes was done by superimposing an image of the proposed structure on the photographs taken for those viewscapes.

Figure 6 – Aerial of proposed location.



Site Selection

Rogers strives to be sympathetic to the surrounding land use features and takes all reasonable steps required by local land use authority to mitigate concerns with respect to planning and environmental matters. In reflection of area setting and the surrounding community, the site is set back from the road and the surrounding land uses.

It is important to note that the selection of a site for a telecommunication antenna support structure does not occur randomly. Among the factors considered are:

1. expected usage patterns of service and proximity to users
2. local topography and building types
3. interaction with existing and future sites
4. line of sight requirements for high quality communications
5. opportunities to use existing structures
6. availability of a willing Landlord
7. the industry's commitment to high service standards and customer satisfaction

The following are some of the considerations used by Rogers in development criteria of the proposal:

- The proposed site location has been set back from the main roads on the subject property to maximize the property setting, assisting in mitigating potential visual impacts of the installation on the community.

- Design selected will provide for future co-location opportunities of municipal services and other wireless service providers in an attempt to reduce the number of structures in the area.

- The installation will have no impact on the water shed or the wells, water quality or any water systems. No chemicals, pesticides or herbicides that could potentially have an adverse effect on the water systems will be contained on our structure or the associated walk-in radio equipment cabinet.

- During construction precautions will be taken to minimize any disruption to the current operation on the site and to the surrounding residents. Once the proposed site is in service, there will be no noise associated with the daily operation of the installation.

The proposed monopole tower site will occupy a compound area, of approximately 226 square metres. The compound also contains a walk-in equipment cabinet (WIC) containing radio equipment, backup battery power, maintenance tools, manuals and a first aid kit. The installation is equipped with a silent alarm system.

Please refer to the following page for a picture of the installation for your reference (Figure 8).

Rogers feels that the location and design chosen provides a significant buffer between residential uses; utilizes existing property's setting in mitigating the visual impact on the immediate land uses; and will provided expected coverage levels to Rogers' customers and for accessibility and enhancement of emergency communication services.

Figure 8 – Sample image of proposed installation

All efforts have been made to minimize the number of cellular base station locations required throughout the targeted area and yet allow for a network design which can adequately provide wireless voice and data service to our existing and new customer base.

Municipal and Public Notification

Rogers has a strong history of consultation with municipalities and understands the importance of land-use protocols and transparency in consultation.

As the provisions of the *Ontario Planning Act* and other municipal by-laws and regulations do not apply to federal undertakings, wireless communication facilities are not required to obtain municipal permits of any kind. However, Innovation, Science and Economic Development Canada (formerly Industry Canada) requires that consultation be undertaken with the appropriate land-use authorities to ensure those authorities are aware of significant structures within their boundaries and so that local land-use issues can be raised, while respecting the federal government's jurisdiction in the siting and operation of wireless voice and data systems.

Rogers' proposed site ensures that the site is set back with a considerable buffer from the residential uses surrounding the subject property and with sufficient distance from the road in order to minimize the visual aspects of the installation.

Rogers is committed to effective public consultation. The public will be invited to provide comments to Rogers about this proposal by mail, electronic mail, phone or fax as per the Township of Clearview's Telecommunications Tower Protocol.

Innovation, Science and Economic Development Canada's policy contains requirements for timely response to all questions, comments or concerns. Rogers will acknowledge receipt of all communication within ***14 days*** and will provide a formal response to the Municipality and those members of the public who communicate to Rogers, within ***30 days***. The members of the public who communicated with Rogers will then have ***21 days*** to review and reply to Rogers a final response. Rogers will keep record of all correspondence during the consultation process, which will be included in the summary report to the Township and the regional Innovation, Science and Economic Development Canada office.

Proponents' Contact Information - Rogers Communications Inc.

Zachary Baum, Municipal Relations Specialist
Rogers Communications Inc.
8200 Dixie Road, Brampton, ON. L6T 0C1
Phone: (647) 202-2328
zachary.baum@rci.rogers.com

Federal Requirements

In addition to the requirements for consultation with municipal authorities and the public, Rogers must also fulfill other important obligations including the following:

Canadian Environmental Assessment Act

Industry Canada requires that the installation and modification of antenna systems be done in a manner that complies with appropriate environmental legislation. This includes the Canadian Environmental Assessment Act, 2012 (CEAA 2012), where the antenna system is incidental to a physical activity or project designated under CEAA 2012, or is located on federal lands.

Rogers attests that the radio antenna system as proposed for this site is not located within federal lands or forms part of or incidental to projects that are designated by the Regulations Designating Physical Activities or otherwise designated by the Minister of the Environment as requiring an environmental assessment. In accordance with the Canadian Environmental Assessment Act, 2012, this installation is excluded from assessment. For additional detailed information, please consult the Canadian Environmental Assessment Act at: http://laws-lois.justice.gc.ca/eng/acts/C-15.21/.

Transport Canada's Aeronautical Obstruction Marking Requirements

Aerodrome safety is under the exclusive jurisdiction of NAV Canada and Transport Canada. An important obligation of Rogers' installations is to comply with Transport Canada / NAV CANADA aeronautical safety requirements. Transport Canada perform an assessment of the proposal with respect to the potential hazard to air navigation and notify Rogers of any painting and/or lighting requirements for the antenna system. Rogers has submitted the appropriate applications and it has been confirmed by NAV Canada/Transport Canada that the proposed Rogers site will have no markings and/or lighting as per the approvals obtained. For additional detailed information, please consult Transport Canada at:

Rogers attests that the radio antenna system described in this notification package will comply with Transport Canada / NAV Canada aeronautical safety requirements. For additional detailed information, please consult Transport Canada at:
http://www.tc.gc.ca/eng/civilaviation/regserv/cars/part6-standards-standard621-3808.htm

Health Canada's Safety Code 6 Compliance

Health Canada is responsible for research and investigation to determine and promulgate the health protection limits for Exposure to the RF electromagnetic energy. Accordingly, Health Canada has developed a guideline entitled "Limits of Human Exposure to Radiofrequency Electromagnetic Field in the Frequency Range from 3kHz to 300 GHz – Safety Code 6".

The exposure limits specified in Safety Code 6 were established from the results of hundreds of studies over the past several decades where the effects of RF energy on biological organisms were examined.

Radiocommunication, including technical aspects related to broadcasting, is under responsibility of the Ministry of Industry (Industry Canada), which has the power to establish standards, rules, policies and procedures. Industry Canada, under this authority, has adopted Safety Code 6 for the protection of the general public. As such, Industry Canada requires all proponents and operators to ensure that their installations and apparatus comply with the Safety Code 6 at all times.

Rogers Communications Inc. attests that the radio antenna system described in this notification package will at all times comply with Health Canada's Safety Code 6 limits, as may be amended from time to time, for the protection of the general public including any combined effects of additional carrier co-locations and nearby installations within the local radio environment.

Furthermore, Rogers's engineers have taken an extra step by undertaking a further analysis on the proposed antenna system in relation to the ground surrounding the site. The emission levels of Rogers wireless communication antenna will be well within the limits outlined in the Safety Code 6 standards set out by Health Canada. In fact, the calculations of emission levels at the ground surrounding our Site will be a 100 times below the allowable Safety Code limit. Our site meets and exceeds the applicable Safety Code 6 guideline value by a significant margin.

More information in the area of RF exposure and health is available at the following web site: *Safety Code 6*: http://www.hc-sc.gc.ca/ewh-semt/radiation/cons/radiofreq/index-eng.php

Engineering Practices

Rogers attests that the radio antenna system as proposed for this site will be constructed in compliance with the National Building Code and The Canadian Standard Association and comply with good engineering practices including structural adequacy.

Innovation, Science and Economic Development Canada's Spectrum Management

Please be advised that the approval of this site and its design is under the exclusive jurisdiction of the Government of Canada through Industry Canada. For more information on Industry Canada's public consultation guidelines including CPC-2-0-03 contact (http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/sf08777e.html) or the local Innovation, Science and Economic Development Canada office at: spectrum.toronto@ic.gc.ca:

Industry Canada Toronto District Office
Room 9
55 St. Clair Avenue East
Toronto, ON M4T 1M2
Tel.: 416-973-8215, Fax: 416-954-3553
Email: spectrum.toronto@ic.gc.ca

General information relating to antenna systems is available on Innovation, Science and Economic Development Canada's Spectrum Management and Telecommunications website (http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/home)

Conclusion

Reliable wireless communication services are a key element of economic development across Canada. It facilitates the growth of local economies by providing easy access to information, and connectivity for residents and business alike.

The infrastructure proposed is suitable for the development over the long term and protects public health and safety, and is a powerful economic enabler that promotes home occupations, teleworking, telecommuting and improved community networking.

In response to this growing demand for wireless services, Rogers Communications Inc. has worked to find the most suitable location for a telecommunications structure in efforts to provide improved wireless services to the community.

In addition to meeting consumer needs, technological upgrades are also critical to ensuring the accessibility of emergency services such as fire, police and ambulance. Wireless communications products and services, used daily by police, EMS, firefighters and other first responders, are an integral part of Canada's safety infrastructure.

Rogers feels that the proposed site is well located to provide improved wireless voice and data services in the targeted area. The proposed location is also situated and designed to have minimal impact on surrounding land uses.

Rogers looks forward to working with the Township of Clearview in providing improved wireless services to the community.

Should you have any further questions or comments, please feel free to contact me via email at zachary.baum@rci.rogers.com, or via phone at (647) 202-2328.

Sincerely,

Zachary Baum, Municipal Relations Specialist
Rogers Communications Inc.
Network Implementation

APPENDIX 1

Public Consultation Package

APPENDIX 2

Site Survey