

# City of Hamilton

## Telecommunication Tower and Antenna Protocol

### Section 1 - Goals and Guidelines

#### **1.1 - Protocol Goals**

1. To provide a consistent and timely process for the review of telecommunication facilities and installations within the City of Hamilton;
2. To encourage consultation by telecommunication providers with the municipality as early in the location process as practical and feasible;
3. To encourage the location and siting of telecommunication facilities in a manner which minimizes the effects on residents, lessens visual impact, and respects natural and human heritage features and sensitive land uses to the greatest extent possible;
4. To afford an appropriate and effective opportunity for public consultation with respect to mitigating concerns over the siting of wireless telecommunication facilities; and,
5. To recognize the jurisdiction of Industry Canada with respect to the implementation of appropriate health, safety, and environmental standards in exercising its authority to approve the location of telecommunications facilities.

#### **1.2 - Guidelines**

##### **1.2.1 - Site Selection**

In determining an appropriate site for a new tower or antenna, the Proponent shall adhere to the following principles:

1. Sites should be selected to minimize the total number of telecommunication tower sites required. Locations on existing structures or buildings are strongly encouraged. Co-locations on existing tower sites are encouraged provided that the existing tower is located a minimum of 120 metres, or three times the tower height (whichever is greater), from a Residential Zone, existing dwelling, or other sensitive land use. Opportunities to incorporate an antenna into the design of a new building or structure should be explored by the Proponent. The construction of a new telecommunication tower is discouraged, and will be accepted only when all other options to accommodate the telecommunication antenna are not viable.
2. New telecommunication towers are strongly discouraged within 120 metres, or three times the tower height (whichever is greater), of any Residential Zone, existing dwelling, or other sensitive land use, unless required for reasons of engineering or network objectives. If a new tower is proposed to be located within 120 metres, or three times the tower height

(whichever is greater), of a Residential Zone, existing dwelling, or other sensitive land use, a detailed rationale for the necessity of this location must be provided in the Site Selection/Justification Report (see Section 3.3.1).

3. The Proponent shall make every effort to locate new telecommunication towers within lands zoned for primarily Industrial, Commercial, or Utility uses, whenever possible, where technically feasible.
4. When selecting sites for telecommunication towers, the following shall be considered:
  - a) Maximizing distance from residential uses, schools, and active park space;
  - b) Maximizing distance from properties designated under Parts IV or V of the Ontario Heritage Act;
  - c) Maximizing distance from natural features, Environmentally Sensitive Areas, Hazard Lands, and Key Natural Heritage Features and Key Hydrologic Features, as defined by the Urban and Rural Hamilton Official Plans (completion of an Environmental Impact Statement may be required should the telecommunication tower be located on lands adjacent to a Key Natural Heritage Feature);
  - d) Avoiding sites that would obscure public views, vistas, and significant Cultural Heritage Landscapes; and,
  - e) Compatibility with adjacent uses.
5. Proponents shall be encouraged to locate telecommunication towers with a minimum setback to all property lines and to all existing buildings of a distance equivalent to the height of the tower (measured from grade), whenever possible.
6. New telecommunication facilities should comply with all Zoning By-law regulations.
7. Any request to install a telecommunication facility on City-owned lands shall be reviewed in accordance with the Procedure for the Installation of Broadcasting Communication Facilities on City of Hamilton Properties (2001), attached as Appendix "A" to this Protocol.
8. Any proposed telecommunication facility located within the Development Control Area of the Niagara Escarpment Plan (NEP) shall be in accordance with the current Niagara Escarpment Commission (NEC) Radio and Telecommunications Protocol. Any proposed telecommunication facility that is located within the NEP, but outside of the Development Control Area, shall be in accordance with this Protocol. The City of Hamilton will circulate the NEC on any proposals for new telecommunication facilities that are within the NEP but outside of Development Control, in accordance with Section 3.2, Minor Site Plan Application Process.

## **1.2.2 - Design and Landscaping**

The use of design features, colour, and landscaping can be used to screen telecommunication facilities from view and should be encouraged, whenever possible. The following design guidelines should be taken into consideration when designing a new tower or antenna:

1. *Lattice style towers shall be prohibited within the City of Hamilton, with the exception of new towers in areas identified in 1.2.2.2 below. Monopole towers are the preferred tower type for any new telecommunication tower in the City.*
2. *Lattice style towers shall only be permitted in the following Industrial Zones:*
  - General Business Park (M2) Zone*
  - General Industrial (M5) Zone*
3. A single-carrier Monopole design or other stealth design technique, as described in 1.2.2.5 below, is the preferred option for any new telecommunication tower which must be located within 120 metres, or three times the tower height (whichever is greater), of a Residential Zone, existing dwelling, or other sensitive land use. Any new telecommunication tower which is located within this buffer area should not be designed for future co-location capacity.
4. New telecommunication towers which are located greater than 120 metres, or three times the tower height (whichever is greater), from a Residential Zone, existing dwelling, or other sensitive land use may be designed with co-location capacity.
5. Where appropriate, stealth design techniques, including, but not limited to, camouflaging towers within church steeples, clock towers, or flagpoles, should be used in the design of a new telecommunication tower. If stealth design techniques are employed in the design of a new tower, co-location capacity will not be required in accordance with Section 1.2.2.3 above.
6. Efforts should be made to decrease the size and visibility of telecommunication towers so that they blend in with the surroundings to the greatest extent possible. To reduce the scale and visual impact of towers, mitigation measures should include consideration of design features, structure type, colour, materials, landscaping, screening, and decorative fencing. Neutral colours that blend the structure with its surroundings are encouraged (though it is recognized that new towers must comply with the requirements of Transport Canada and NAV Canada). Where equipment shelters are located on the ground, the visual impact of the built form shall be mitigated through the use of colour, decorative fencing, screening, and/or landscaping.
7. Where appropriate, the planting of trees and shrubs at the tower site is encouraged to enhance the character of the surroundings.
8. Telecommunication towers will only accommodate telecommunication antennas. Only

signage directly related to the equipment or required by Industry Canada shall be permitted on the site. A small plaque must be placed at the base of the structure identifying the owner/operator and contact information. No third party advertising or promotion shall be permitted. All signage shall comply with the City of Hamilton Sign By-law 06-243.

9. Lighting of telecommunication antenna and towers is prohibited unless required by Transport Canada. Proof of this requirement should be provided by the Proponent to the City of Hamilton with the Minor Site Plan application.

## **Section 2 - Exemptions from Requirement for Municipal Review**

Proposed telecommunication towers and antennas which are exempted from the requirement to consult with the City of Hamilton under the provision of Industry Canada's CPC-2-0-03 ("Radiocommunication and Broadcasting Antenna Systems", June 2007) will be exempt from the requirement to submit a Minor Site Plan application.

The exemptions are listed as follows:

1. Maintenance of existing radio apparatus including the antenna system, transmission line, mast, tower or other antenna-supporting structure.
2. Addition or modification of an antenna system (including improving the structural integrity of its integral mast to facilitate sharing), the transmission line, antenna-supporting structure or other radio apparatus to existing infrastructure, a building, etc., provided the addition or modification does not result in an overall height increase above the existing structure of 25% of the original structure's height.
3. Maintenance of an antenna system's painting or lighting in order to comply with Transport Canada's requirements.
4. Installation, for a limited duration (typically not more than 3 months), of an antenna system that is used for a special event, or one that is used to support local, provincial, territorial, or national emergency operations during the emergency, and is removed within 3 months after the emergency or special event.

In addition to the above exemptions mandated by Industry Canada, the City of Hamilton will also exempt the following installations from the requirement to submit a Minor Site Plan application:

5. Any new telecommunication tower or antenna proposed within the General Business Park (M2) Zone or the General Industrial (M5) Zone, provided that the following criteria are met:
  - (a) The proposed tower is located the greater of 120 metres or three times the tower height from a road that forms the boundary to an Industrial Area or an Industrial Business Park, as defined by the Urban and Rural Hamilton Official Plans, measured from the tower base or the outside perimeter of the supporting structure, whichever is greater; and,

- (b) The proposed tower is located the greater of 120 metres or three times the tower height from a Residential Zone, existing dwelling, or other sensitive land use, measured from the tower base or the outside perimeter of the supporting structure, whichever is greater.

If a new telecommunication tower is exempt from municipal review, the City of Hamilton requests that the Proponent still provide the City with information on their proposed installation for information purposes. This information will be provided to the local Ward Councillor so that they may respond to any questions from constituents, should they arise.

### **Section 3 - Minor Site Plan Review**

All proposals for a new telecommunication tower which are not exempt from the requirement for municipal consultation, as specified in Section 2, are required to submit a Minor Site Plan application to the City of Hamilton for review. Applications are to be submitted to the attention of the Director of Planning. While the City of Hamilton recognizes that Industry Canada is the final approval authority for telecommunication facilities, it is also recognized that Industry Canada directs telecommunication providers to consult with the local municipality prior to erecting any non-exempt telecommunication towers. Although new telecommunication facilities are not required to obtain site plan approval under *The Planning Act*, the City's Minor Site Plan application process is an existing process which affords the City an opportunity to review and comment on new telecommunication towers. There will be no requirement for the Proponent to enter into a Site Plan Agreement as part of this process.

#### **3.1 - Formal Consultation**

Prior to submitting a Minor Site Plan application, the Proponent is required to attend a Formal Consultation meeting with City staff for any proposed telecommunication towers which are not exempt from the requirement for municipal consultation, as specified in Section 2. Proponents may obtain a Formal Consultation Request Form from the Planning and Economic Development Department or at [www.hamilton.ca/planning](http://www.hamilton.ca/planning). The purpose of a Formal Consultation meeting is to:

- Determine if the proposal meets any of the criteria specified in Section 2 for exemption from local municipality consultation;
- Determine if the proposal will require public consultation, as per Section 4;
- Provide an opportunity for discussion of site selection and design guidelines to ensure that all siting options are considered prior to a Minor Site Plan application being submitted;
- Identify any preliminary concerns or constraints on potential telecommunication tower sites; and,
- Review submission requirements for the Minor Site Plan application and identify any additional studies that may be required to be submitted with the application (including,

for example, an archaeological assessment or an Environmental Impact Statement).

Following the Formal Consultation meeting, the applicant will be provided with a Formal Consultation Document which must be included when the Minor Site Plan application is submitted.

### **3.2 - Minor Site Plan Application Process**

Following the Formal Consultation meeting, and upon submission of a completed Minor Site Plan application and fee, the following process shall be undertaken:

1. City of Hamilton Planning staff shall circulate the application to the Ward Councillor, the Hamilton Utility Co-ordinating Committee, and relevant departments/agencies for information and comment.
2. All comments received as a result of the internal circulation of the Minor Site Plan application shall be provided to the Proponent.
3. If public consultation is required, as per Section 4.1, the City can forward to the Proponent a list of all property owners within a radius of the greater of 120 metres or three times the tower height. An additional fee is required for this service. The Proponent is responsible for providing the required public notice and following the public consultation process, as outlined in Section 4.2.
4. The Proponent shall respond to the comments received, make the required modifications to the plans, and submit revised plans and drawings, where required.
5. The City of Hamilton shall provide a formal letter to Industry Canada and the Proponent with comments on the proposed tower, indicating concurrence or non-concurrence with the proposal, as outlined in Section 5.
6. The entire process shall take no more than 120 days to complete, as outlined in Industry Canada's publication CPC-2-0-03 ("Radiocommunication and Broadcasting Antenna Systems", June 2007). Proposals that do not require public consultation are expected to take less than 60 days to complete.

### **3.3 - Submission Requirements**

The following information shall be submitted with the Minor Site Plan application:

1. Site Selection/Justification Report - this report shall outline the steps taken by the Proponent to investigate all non-tower and co-location options, and why a new tower option is the preferred alternative. The report shall identify the location of all existing telecommunication towers within the proponent's search area, and identify the reasons why these towers are not suitable for co-location. The location of these towers shall be illustrated on a map to be included in the Report. In addition, the report shall also identify any alternate sites for the location of the new tower that were investigated by the

proponent, and the rationale for eliminating these sites as the preferred alternative. The report shall confirm the need for a new tower at the proposed location, and will also confirm the need for the proposed height of the tower. Future sharing possibilities with other providers shall also be reviewed. Finally, the report shall outline the design elements proposed in order to minimize the visual impact of the proposed structure, and address any lighting requirements that may be required by Transport Canada;

2. Site Plan with Key Map - the Site Plan shall be for the entire property and not only the leased portion, showing the relationship between the proposed telecommunication facility and existing features on the property such as buildings, parking, pedestrian and vehicular movement, natural features, site grading, property lines, fencing, and landscaping;
3. Elevation Drawings;
4. Minor Site Plan Application Form and Fee (available at [www.hamilton.ca/planning](http://www.hamilton.ca/planning));
5. A map indicating the horizontal distance between the proposed tower installation and the nearest residentially zoned property, dwelling, and/or sensitive land use;
6. A colour photograph of the subject property with a superimposed image of the proposed tower; and,
7. Any other information or studies identified in the Formal Consultation Meeting (see Section 3.1).

## **Section 4 - Public Consultation**

### **4.1 - Exclusions from Requirement for Public Consultation**

Where a proposed telecommunication tower is located a minimum distance of 120 metres, or three times the tower height (whichever is greater) from a Residential Zone, existing dwelling, or other sensitive land use, measured from the tower base or the outside perimeter of the supporting structure, whichever is greater, no public consultation is required. In addition, all telecommunication towers that are exempt from the requirement for municipal review, as per Section 2, are also exempt from the requirement for public consultation.

### **4.2 - Notice Requirements**

1. For all applications that are not exempt from the requirement for public consultation, the Proponent will be required to send notice of the proposal by regular mail to all property owners within a radius of the greater of 120 metres or three times the tower height, measured from the tower base or the outside perimeter of the supporting structure, whichever is greater. The City of Hamilton can provide the Proponent with the list of property owners, for an additional fee.

2. The notification shall include the following information in plain language:
  - a) The address of the proposed tower site;
  - b) A Location Map identifying the site of the proposed tower;
  - c) A plan indicating the proposed location of the tower on the subject site;
  - d) Physical details of the tower including height, colour, type, and design;
  - e) Colour photograph of the property with a picture of the tower superimposed;
  - f) The last day of the 30 day comment period; and,
  - g) Contact information (name and telephone number) for both the Proponent and the City of Hamilton.

The City of Hamilton (Planning staff and the Ward Councillor) must be provided with a complete notification package.

3. The public shall have a minimum 30 day comment period to provide comments in writing to the Proponent.
4. The Proponent shall provide a copy of all written comments received from the public to the City of Hamilton.
5. Upon receiving comments from the public, the Proponent shall respond, in writing, to all reasonable and relevant concerns, or explain why the question, comment, or concern is not, in the view of the Proponent, reasonable or relevant. The Proponent shall copy the City of Hamilton (Planning staff and the Ward Councillor) on all responses provided.
6. If any modifications to the proposal are agreed upon as a result of the public comments, revised drawings and plans must be submitted to the City of Hamilton.

## **Section 5 - Concluding Consultation**

1. The City of Hamilton's response to the Proponent and Industry Canada will take into consideration all division and agency responses from the Minor Site Plan review and from the public consultation.
2. The Director of Planning, or his or her designate, on behalf of the City of Hamilton, will provide the Proponent and Industry Canada with a letter stating whether the local land-use consultation process has been completed in accordance with the City's Protocol, and will include recommendations regarding the proposal as follows:
  - a) Concurrence, if the proposal conforms with the City's requirements, as set out within this Protocol, and will include conditions of concurrence, if required; or,

b) Non-concurrence, if the proposal does not conform with the City's requirements, as set out in this Protocol.

3. The City will provide a copy of this letter to all interested parties and the Ward Councillor.

## Definitions

**Adjacent Lands** - those lands contiguous to a specific natural heritage feature or area where it is likely that development or site alteration would have a negative impact on the feature or area. The extent of the adjacent lands may be recommended by the Province or based on municipal approaches which achieve the same objectives. (PPS, 2005)

**Antenna** - an exterior transmitting device used in telecommunications designed for various uses such as telephonic, radio, or television communications by sending and/or receiving radio signals.

**Areas of Archaeological Potential** - a defined geographical area with the potential to contain archaeological resources. Criteria for determining archaeological potential are established by the Province and the City's Archaeological Management Plan. Archaeological potential is confirmed through archaeological fieldwork undertaken in accordance with the Ontario Heritage Act. (PPS, 2005, amended)

**Co-location** - the installation of multiple telecommunication antenna systems on a building or tower structure by two or more Proponents.

**Cultural Heritage Landscape** - a defined geographical area of heritage significance, which has been modified by human activities and is valued by a community. It involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites, and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts. Examples may include, but are not limited to, heritage conservation districts designated under the Ontario Heritage Act; and villages, parks, gardens, battlefields, main streets and neighbourhoods, cemeteries, railways, and industrial complexes of cultural heritage value. (PPS, 2005)

**Industry Canada** - the Federal Department which is responsible for radio frequency spectrum management. Information detailing federal procedures relating to the siting of radiocommunication and broadcasting antenna systems is available at: [www.ic.gc.ca/antenna](http://www.ic.gc.ca/antenna)

**Proponent** - shall include the following: AM, FM, TV Broadcast Undertakings; Cable Television Distribution Undertakings; Radiocommunication Service Providers; and Radiocommunication Users (business or government use only).

**Radiocommunication Carrier** - a person who operates an interconnected radio-based transmission facility used by that person or another person to provide radiocommunication services for compensation. (Radiocommunication

Regulations, 1996)

**Radiocommunication Service Provider** - a person, including a Radiocommunication Carrier, who operates radio apparatus used by that person or another person to provide radiocommunication services for compensation. (Radiocommunication Regulations, 1996)

**Radiocommunication User** - a person who operates radio apparatus for government use or for a business other than the business of a Radio Communication Service Provider. (Radiocommunication Regulations, 1996)

**Sensitive Land Uses** - means buildings, amenity areas, or outdoor spaces where routine or normal activities occurring at reasonably expected times would experience one or more adverse effects from contaminate discharges generated by a nearby major facility. Sensitive land uses may be a part of the natural or built environment. Examples may include, but are not limited to: residences, day care centres, and educational and health facilities. (PPS, 2005)

**Significant** - in regard to cultural heritage and archaeology, means cultural heritage resources that are valued for the important contribution they make to our understanding of the history of a place, an event, or a people. (PPS, 2005)

**Telecommunication Facility** - the components required for the operation of a wireless communication network, which includes cell sites, transmitters, receivers (antennae), and an unoccupied equipment shelter.

**Telecommunication Tower** - a structure used to support one or more antenna systems for the purpose of radio telecommunications, and which may include, but is not limited to, a guyed tower, a self-support tower or monopole tower, and which may be located at ground level or on the roof of a building.

## **Procedure for the installation of Broadcasting Communication Facilities on City of Hamilton Properties**

- 1) That all requests for permission by a telecommunications company to locate its electronic wireless broadcast+ receiving equipment and accessory structure on City property, shall be submitted to the Corporate Buildings and Real Estate Division of the Community Services Department, A generalized description and site location of the proponent's plans will be submitted at this stage. Note: The City will not accept requests for the installation of telecommunication facilities on its Tunbridge Drive Pumping Station.
- 2) The Corporate Buildings and Real Estate Division will circulate the proposal to the City Councillor for the Ward in question for information, the department under whose jurisdiction the site falls under (the 'Host' department), along with the System Administrator of Trunking Radio, the Fire and Emergency Services Department, the Police Department and the Planning and Building Departments for comments.
- 3) If the proposed installation is acceptable in principle, to the 'Host' department and System Administration of Trunking Radio Corporate Buildings and Real Estate will contact the proponent to request detailed plans and specifications of the proposal for review. These detailed plans once received will be forwarded to the 'Host' department with copies also to be submitted to the System Administrator, Trunking Radio. The 'Host' department's staff or its consultants will subsequently undertake a technical review to determine the acceptability of the proposal, Additional information and more detailed documentation may be requested to complete the technical review. The 'Host' department would communicate to the proponent any required adjustments to its proposed installation to meet City requirements and conditions (Conditions would include reserving space that may be required in the future by the City on the given structure for its own communications equipment; annual inspections and the requirement for the proponent to provide a survey of the subject location, if it is to be a free standing tower).
- 4) Once the technical review is complete, the results including the plans and specifications, as amended, would be reported to Corporate Buildings and Real Estate by the 'Host' department. Upon receipt of the departmental acceptance Corporate Buildings and Real Estate will prepare a report to obtain approval of a Licence Agreement. Once approval is received Real Estate in conjunction with Legal Services will then prepare the Licence Agreement to be forwarded to the proponent for their review and execution. The Licence Agreement to include all specific conditions set out by the 'Host' department, an annual fee to be based on a value established by Real Estate and a one time administration fee of \$750,00 (the annual fee and administrative fee to be credited to the 'Host' department).
- 5) Once the executed Licence Agreement is returned the 'Host' department will coordinate with the proponent the supervision of the equipment installation.