SUBJECT:  Telecommunication Tower and Antenna Protocol (PED09206) (City Wide)

RECOMMENDATION:

(a) That the Telecommunication Tower and Antenna Protocol, attached as Appendix “A” to Report PED09206, be adopted.

(b) That the item “Consultation process for wireless telecommunication facilities” be removed from the Economic Development and Planning Committee Outstanding Business List.

(c) That the Clerk forward a copy of the attached Protocol to Industry Canada, and to the Federation of Canadian Municipalities for information.

EXECUTIVE SUMMARY:

There is a growing need for new telecommunication facilities within the municipality in order to accommodate the increased usage of cellular phones and personal communication devices by residents and businesses. Industry Canada regulates these facilities and is the ultimate approval authority for the placement of new telecommunication facilities (towers and/or antennas). However, Industry Canada directs proponents of new telecommunication facilities to consult with the local land use
authority (municipality) prior to the installation of new telecommunication facilities. The attached Telecommunication Tower and Antenna Protocol (Appendix “A”) has been prepared by staff to provide guidance to proponents on the process that will be followed by the City of Hamilton in the siting of a new tower, and also to provide direction on the site selection and design guidelines which should be considered when a new tower is proposed.

BACKGROUND:

A letter from Thomson Rogers, the law firm that represents Bell Mobility, Rogers Wireless, and Telus Mobility, dated January 16, 2008, was received at the City Council meeting of January 30, 2008. The letter recommended that the City of Hamilton adopt a default consultation process developed by Thomson Rogers regarding the siting of new telecommunication facilities. At this meeting, Council passed the following resolution:

“that the matter be referred to the City Solicitor for a report to the Audit and Administration Committee; that Planning staff be in attendance when the report is being considered; and that a copy of the final resolution be forwarded to the Federation of Canadian Municipalities (FCM).”

At the Audit and Administration Committee meeting on April 16, 2008, this item (Consultation Process for Wireless Telecommunication Facilities) was referred to the Economic Development and Planning (ED&P) Committee. The item was placed on the ED&P Committee Outstanding Business List, pending a staff response.

Industry Canada CPC-2-0-03

The process for the siting of a new telecommunication tower or antenna is federally regulated. The federal body that regulates such installations is Industry Canada. In June 2007, Industry Canada released Client Procedures Circular CPC-2-0-03, Issue 4, Radiocommunication and Broadcasting Antenna Systems. Some of the key changes included in CPC-2-0-03 Issue 4 from the previous Issue 3 are a requirement for public notification and consultation in the siting of new telecommunication towers and increased public involvement. CPC-2-0-03 includes a Default Public Consultation Process, which outlines the process that telecommunication providers must follow when consulting with the local land use authority (municipality) and the public on the siting of a new tower. Proponents of new telecommunication towers must follow this Default Process when siting a new tower, unless the local municipality has adopted their own land use consultation protocol. The Industry Canada Default Process outlines the following: requirements for when and where public notification is required; the process for consulting with the public and responding to public concerns; the timeframe within which consultation shall be concluded (120 days); and the types of proposals that are to be exempt from the requirement for any municipal consultation. It must be noted that if a local municipality chooses to adopt their own protocol, it may not be more restrictive than the Industry Canada Default Process outlined in CPC-2-0-03. For instance, a protocol developed by a local municipality must honour all of the exemptions listed in CPC-2-0-03 for tower types that do not require any consultation. A municipality may, however, choose to include further exemptions as they see fit.
Correspondence from Thomson Rogers

As noted above, Thomson Rogers is the law firm that represents three wireless telecommunication providers: Bell Mobility, Rogers Wireless, and Telus Mobility. In a letter to the City of Hamilton, dated January 16, 2008, Thomson Rogers indicates that their clients would be looking to expand their services in the area within the next 12 months. The letter includes a proposed consultation process for the siting of new towers developed by Thomson Rogers. It is suggested in the letter that the City of Hamilton adopt this proposed consultation process instead of relying on the Industry Canada Default Process or creating a City of Hamilton Protocol. This Thomson Rogers proposed process is very similar to the Default Process in Industry Canada’s CPC-2-0-03. The primary difference with the Thomson Rogers suggested process is that it includes a requirement for telecommunication providers to voluntarily submit a site plan and justification report for the proposed tower to the municipality for review, though it is made clear that the municipality has no authority to approve or deny such a site plan application as it is not a requirement under the Planning Act. Rather, the municipality is a commenting agency.

While the process suggested by Thomson Rogers has positive aspects, such as the submission of a site plan, staff is of the opinion that the City of Hamilton should develop its own protocol to ensure that the needs of the City are met. Creating a City of Hamilton protocol allows the City to further ensure that our preferences for siting locations, design, site plan requirements, and consultation procedures are fully addressed.

Previous City of Hamilton Reports Regarding Telecommunication Facilities

Community Services Committee Report CS01097

Report CS01097 Broadcasting Communications Facilities - Policy and Procedure, presented to Committee of the Whole on December 5, 2001, proposed a procedure for dealing with requests to install broadcasting communication facilities on City-owned lands. The report outlines the benefits versus risks of allowing private communication facilities on City-owned lands. The benefits include a source of revenue to the City and an opportunity for improved wireless communication coverage. The risks include the need for staff time to review proposals, City liability issues, restriction on the use of City-owned lands for City purposes, security issues, and difficulty in terminating agreements. A Procedure for the Installation of Broadcasting Communication Facilities on City of Hamilton Properties was included as an Appendix to the report. The Procedure requires all requests for the installation of broadcasting equipment on City lands to be submitted to the Economic Development and Real Estate Division. The Economic Development and Real Estate Division then circulates the request to the ‘Host' department, as well as to Trunking Radio, Emergency Services, and Planning. The Host department reviews the proposal for acceptability. Once the technical review is complete, Real Estate coordinates the approval of a License Agreement. It is noted that this Procedure clearly indicates that at no time shall the City accept requests for the installation of telecommunication facilities on City water towers.
While this Procedure has been effective in dealing with proposals for telecommunication facilities on City lands, it does not address the siting of telecommunication towers on private lands within the City. Nor does it provide guidance on siting preferences, design options, or public consultation requirements. The proposed Protocol, attached as Appendix “A”, expands upon this 2001 policy, and is equally applicable to City-owned and privately owned lands.

Public Works, Infrastructure, and Environment Committee Report PW05074

Report PW05074, presented at Committee of the Whole on July 13, 2005, discusses the issue of installation of wireless telecommunication devices on City-owned water towers. The report was prepared in response to a request from Bell Mobility to install a telecommunication device at the Dundas water tower. The report recommended that the General Manager of the Public Works Department be authorized and directed to decline the request made by Bell Mobility, and any similar future requests to install communication equipment on City water towers. The rationale for the recommendation to decline access to City water towers is twofold. First, the City does not want to preclude the use of its property for its own radio transmission equipment, and providing access to the wireless telecommunication providers may interfere with the City’s use of its own facility. Second, the City has concerns over security of its water system, and as such, every effort is made to restrict access to its water reservoirs and towers by outsiders.

Board of Health Report BOH08013

Report BOH08013 Health Risk Associated with Cell Phone Towers was presented at the July 9, 2008, Board of Health meeting. This report discussed possible human health impacts from cell phone towers and wireless communication devices. Health Canada has developed a guideline called Safety Code 6 - Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 KHZ to 300 GHZ. Safety Code 6 applies to mobile phones and cell towers. It establishes exposure limits which are based on the lowest exposure level at which potential harmful effects to humans could occur. Wireless communication devices use radio frequency (RF) energy to transmit data. Recent surveys have found that RF exposure from cell towers and wireless technologies in publicly accessible areas are normally thousands of times below the Safety Code 6 limits.

Report BOH08013 also discusses current debates on whether or not long term low level exposure to RF energy can have any health impacts. Current findings suggest that levels of RF exposure from cell towers and wireless networks are so low that there is no human health impact. Likewise, concern over cancer clusters surrounding cell towers has not been proven. The report summarizes that from all evidence accumulated to date, there are no adverse short or long term health effects from RF signals produced by cell towers.
ANALYSIS/RATIONALE:

Telecommunication Facilities

Wireless telecommunication facilities (antennas and towers) are federally regulated. Industry Canada is the body that regulates the approval and siting of new telecommunication facilities. Telecommunication towers and antenna are, therefore, not subject to the provisions of the Ontario Planning Act or the Ontario Building Code (though a Building Permit is required for an equipment shelter that exceeds 10 square metres in size). Industry Canada directs that telecommunication providers must consult with the local land use authority (municipality) on any new tower location (unless specifically exempted through CPC-2-0-03, as will be discussed below in the Analysis Section of this Report), however Industry Canada is the final approval authority in the case of any disputes.

Wireless communication devices such as cell phones and personal communication service devices (e.g. Blackberry) rely on a network of fixed antennas to relay information between users. These antennas may be fixed on an existing building or placed on a purpose built tower. There are several types of towers that can be constructed. Towers can range in height from 10 metres (30 feet) to 300 metres (300 feet). The taller towers often have an increased diameter and, therefore, have a higher structural strength which means that they are more capable of supporting antennas from multiple wireless providers. These types of towers are referred to as co-location towers. Smaller towers are often referred to as monopole towers, and generally support the antennas of one provider only. These monopole towers can range in height from 10 metres (30 feet) to 45 metres (150 feet). Each antenna on a tower can support approximately 300 users. Each time a new user beyond the 300 user capacity tries to access the antenna in an area, the user with the weakest signal is dropped from the tower. Therefore, as cell phone usage increases, the need for more towers increases, as telecommunication providers need to fill in the 'holes' that cause dropped calls.

Why is a Telecommunication Tower and Antenna Protocol Required?

The City of Hamilton does not currently have a policy in place for the review of new telecommunication facilities, other than the 2001 policy referred to in the Background Section of this report, which deals strictly with applications to place a new tower or antenna on City-owned lands. The 2001 policy does not provide any direction on siting or design guidelines that can assist in the review of proposed tower sites.

The current process used for the review of proposals for new telecommunication facilities is for proponents to submit a Minor Site Plan Application (MDA). There is currently no pre-defined list of submission requirements that must accompany such an application. Staff circulate the MDA to the respective Ward Councillor and relevant City departments for comment. There is no public consultation requirement. In addition, there are currently no design or site selection guidelines available to staff, or to proponents, to guide the review of these types of applications.
As mentioned above, through the recent passage of Industry Canada’s CPC-2-0-03, proponents are obligated to consult with the local land use authority in the placement of a new telecommunication facility. However, in the absence of a municipal protocol being in place, the proponents are obligated to consult with the municipality in accordance with Industry Canada’s Default Process. The Default Process does not include a requirement for the submission of a site plan control application, nor does it provide any guidance on design and siting of new facilities.

Therefore, staff is of the opinion that it is beneficial for the City to establish a made in Hamilton protocol, which will specifically address the concerns and preferences of the City. Staff has contacted other municipalities to determine how they deal with this issue, and to determine if they have established their own protocol. Staff has confirmed that many surrounding municipalities have indeed created their own protocols, including Toronto, Oakville, Brantford, London, Waterloo, and Grimsby. The results of this comparative search are attached as Appendix “B”.

**Description of Protocol**

The proposed Telecommunication Tower and Antenna Protocol is attached as Appendix “A”. The Protocol is organized into five sections: Goals and Guidelines; Exemptions; Minor Site Plan Review; Public Consultation; and Concluding Consultation. The Sections are described, in detail, below.

**Section 1: Goals and Guidelines**

The first section of the Protocol deals with the goals that the City of Hamilton wishes to achieve in the development of this Protocol. The goals relate to consistency in review of telecommunication tower proposals, encouragement of consultation with the municipality and the public, identifying locational and design characteristics which minimize the impact of new towers, and recognizing the jurisdiction of Industry Canada and its authority in approving telecommunication facilities.

Guidelines relating to Site Selection and Design and Landscaping have been included in the Protocol. Under the Site Selection Guidelines, the Protocol states that new tower sites should be selected to minimize the total number of telecommunication tower sites required. A new tower is to be viewed as a last resort. Co-location is encouraged either onto an existing building or structure, or onto another existing cell tower. Also under Site Selection, the Protocol strongly discourages new towers from being located within 120 metres of a residential zone or school, and encourages new towers to be located within lands zoned for Industrial, Commercial, or Utility purposes, whenever possible. In addition, distance separation from sensitive land uses, heritage buildings, and natural features should be maximized. Comments from staff through circulation of the draft Protocol have contributed to identifying the lands/features included under this Section. Finally, the Protocol reinforces earlier City resolutions (see CS01097 above under the Background section) regarding the review of proposals for new telecommunication facilities on City-owned lands.
Regarding the Design and Landscaping Guidelines, the Protocol states that all new towers shall be designed with co-location capacity. The exception to this preference is where a new tower must be located within 120 metres of a residential zone or school. In these cases, a monopole design for a new tower may be considered, as this could lead to a less obtrusive tower being constructed in or near a residential neighbourhood. This issue of co-located versus monopole installations will be discussed further below.

The Protocol also stresses the importance in the design of new towers or antennas being sympathetic to surrounding architecture and built form. Efforts should be made to decrease the size and visibility of new towers as much as possible through the use of design features, colour, and landscaping. Stealth design (camouflaging towers into other uses such as flag poles, clock towers or church steeples) should be used, whenever possible.

Section 2 - Exemptions from Requirement for Municipal Review

Industry Canada’s Client Procedures Circular CPC-2-0-03 lists several types of new telecommunication facility installations which are exempt from the requirement to consult with the local municipality prior to installing the antenna or tower. These exemptions, listed in Section 2 of the proposed Protocol, are summarized as follows:

- Maintenance of existing radio apparatus;
- Addition or modification of an antenna system, transmission line, antenna-supporting structure or other radio apparatus to existing infrastructure or a building, provided that that the addition does not result in an overall height increase of more than 25% of the existing structure’s height;
- Maintenance of an antenna system’s painting or lighting to comply with Transport Canada;
- Temporary installation (generally less than 3 months) of an antenna system; and,
- New antenna systems that are less than 15 metres above ground level.

The municipality cannot be more restrictive than Industry Canada in its Protocol and, therefore, the municipality is required to recognize these exemptions. The City may, however, add additional types of exempted installations as it sees fit.

Staff is recommending that two additional exemptions be added to the list of exemptions already granted by Industry Canada. First, staff is recommending that any new telecommunication tower proposed within an Industrial Zone be exempt from the requirement for municipal review, provided that it conforms to the following three criteria: the tower is located a minimum distance of three times the tower height away from a road that forms the boundary to an Industrial Area or an Industrial Business Park; the tower is not located within the Airport Employment Growth District; and the tower will be located a minimum distance of three times the tower height away from a residential zone, school, or existing dwelling. Second, staff is recommending that any new tower proposed in a Rural or Agricultural Zone be exempt from the requirement for
municipal review, provided that the following two criteria are met: the tower is located a minimum distance of three times the tower height away from a residential zone, school, or existing dwelling; and the tower is not located within or adjacent to an Environmentally Sensitive Area or a Key Natural Heritage Feature or Key Hydrologic Feature. The rationale for these two exemptions is that it provides an incentive for proponents to find new tower sites within preferred Industrial or Rural areas, away from residential uses, which staff is recommending as the preferred location for new towers. Input from staff, as a result of the circulation of the draft Protocol, has assisted with the identification of these exemptions.

Section 3 - Minor Site Plan Review

The third section of the Protocol outlines the process for municipal review of new telecommunication tower proposals. While the City recognizes that Industry Canada is the approval authority for new towers, it is also recognized that Industry Canada directs telecommunication providers to consult with the municipality before erecting any non-exempt towers. The City’s Minor Site Plan review process is an existing process which will afford the City with an opportunity to review and comment on new telecommunication towers. All Minor Site Plan applications received for new towers will be forwarded to the Ward Councillor for information. As per Industry Canada requirements, the review process for any new tower shall take no longer than 120 days to complete. Proposals that do not require public consultation, as outlined in the next section, should take less than 60 days to review.

Submission requirements to be included with the Minor Site Plan application have also been included under Section 3. These requirements include:

- Site Selection/Justification Report (the report shall include a list/map of all existing telecommunication towers within the proponent’s search area, alternate sites explored by the proponent, a demonstration of why a new tower is required, and a review of future sharing possibilities with other providers);
- Site Plan;
- Elevation drawings;
- A map indicating distance to the closest residentially zoned property, dwelling, or school;
- A colour photograph of the property with the tower image superimposed; and,
- Minor Site Plan Application Form and Fee.

Section 4 - Public Consultation

Public consultation for a new telecommunication tower is only required if the new tower will be located within a distance of three times the tower height from a residential zone or school. For proposals that do require public consultation, the proponent will be
required to mail a notice of the proposal to all property owners within a radius of three times the tower height of the proposed tower. The City of Hamilton can provide the proponent with the list of property owners for an additional fee. This distance of three times the tower height for notification purposes has been adopted from the Industry Canada CPC-2-0-03 Default Process. As previously mentioned, municipalities cannot be more restrictive than the Industry Canada minimum requirements. A copy of any comments received from the public as a result of this circulation shall be forwarded to the City. The proponent shall be responsible for attempting to address as many of the concerns raised by the public as is feasible. The City shall also be copied on any responses supplied from the proponent to members of the public.

Section 5 - Concluding Consultation

Industry Canada’s CPC-2-0-03 states that municipalities must provide correspondence to both the proponent and Industry Canada indicating that the consultation process has been completed in accordance with the municipal Protocol, and whether or not the municipality is in concurrence with the proposed telecommunication tower or antenna. Any conditions identified through the consultation process, such as design or landscaping conditions, may also be included. It is noted that if the municipality is not in concurrence with the proposed tower or antenna, Industry Canada would have the ultimate approval authority as to whether or not the proposed telecommunication facility would be approved.

Issues Identified Through Circulation of the Draft Protocol

Co-location versus monopole design

As previously described, telecommunication towers may be designed in one of two ways: co-location or monopole towers. Towers designed to accommodate co-location capacity (i.e. multiple antennas) are generally greater in height and have a thicker pole than towers designed as a monopole. The pole must be larger in size to handle all of the equipment required for each antenna. The benefit of telecommunication towers designed for co-location are that multiple antenna (users) may be accommodated on a single tower and, therefore, the overall number of individual towers is decreased. The drawback of co-location towers is that they are more visually obtrusive than monopole installations, and cannot be disguised using stealth design techniques, such as a flagpole design. While monopole designs are smaller and less obtrusive, they cannot accommodate multiple users and, therefore, multiple monopole towers would be required to achieve the same network coverage as a single co-location tower.

It is generally agreed that towers designed for co-location are preferred in most situations, and that new towers should be designed with co-location capacity to accommodate additional users in the future, as stated in Section 1.2.2.1 of the attached Protocol. This approach will have the desired effect of reducing the overall number of new towers required, and is consistent with direction supplied by Industry Canada, which stresses the importance of co-location.
The debate surrounding this topic is in regards to new towers which are required to be located in close proximity to sensitive land uses. Comments received from the telecommunications industry have indicated that, in their experience, a monopole design is preferable in locations which are in proximity to a sensitive land use. Residents find these designs less obtrusive in their neighbourhoods. The telecommunications industry recommends that the Protocol include a provision to require all new towers to be designed with co-location capacity, except for towers which are to be located in proximity to a sensitive land use, in which case a monopole design may be considered. Comments from Industry Canada confirm that, while co-location should be encouraged in most situations, there may be instances when a smaller monopole design would be appropriate. In addition, from an Urban Design perspective, a monopole tower may be preferred in some situations as it can be more easily camouflaged through design techniques. Therefore, staff has included a provision in the Protocol, under Section 1.2.2.2, stating that a monopole design for a new tower may be considered when a new tower is required to be located within 120 metres of a residential zone or school. This does not mean that a monopole design is always the most appropriate design for new towers located in proximity to these sensitive land uses. Rather, each proposal will be evaluated on a case-by-case basis, in consultation with relevant City departments and the Hamilton Utility Coordinating Committee. It is acknowledged that the installation of monopole towers may result in a greater number of new towers to be required within these areas. However, the Protocol stresses that every effort should be made to locate towers away from sensitive land uses, as stated in Sections 1.2.1.2 and 1.2.1.4, and that new towers in proximity to a residential zone or school should be viewed as a last resort.

Separation from Sensitive Land Uses

The first draft of the Protocol included, under Section 1.2.1.2, a provision stating that new towers are strongly discouraged within 120 metres of any residential zone. Through circulation of the draft Protocol to City staff, it was suggested that it may be appropriate to also discourage new towers within 120 metres of other potentially sensitive land uses, such as institutional uses and parks. Staff has considered this suggestion and has modified Section 1.2.1.2 to state that new towers are strongly discouraged within 120 metres of any residential zone or elementary or secondary school. Staff is of the opinion that other institutional uses (for example, universities or hospitals) could represent preferred locations for a new tower, and these locations should not be limited through the Protocol. This provision also recognizes that there may be instances where a new tower will need to be located in closer proximity to sensitive uses in order to provide adequate coverage to the local population. However, locations within 120 metres of a residential zone or school should be viewed as a last resort, whenever possible.

With regard to parks, staff has not added this use to Section 1.2.1.2, which strongly discourages new towers within 120 metres of a residential zone or school. However, active park space is included under Section 1.2.1.4, which lists a number of features for which distance from a new tower should be maximized. This includes not only parks, but also heritage and natural features and public views and vistas. Staff is of the opinion that the uses that are most critical to protect from the obtrusiveness of a new
tower are residential uses and schools. Other uses/features should be protected to the greatest extent possible, while recognizing that there is a strong demand for telecommunications products, and new towers are going to be needed and must locate somewhere. This is the rationale behind Section 1.2.1.4. In addition, any request to install a new telecommunication tower or antenna in a City-owned park would be reviewed in accordance with the 2001 Procedure regarding review of proposals on City lands, which will be attached as an Appendix to the Protocol, and which requires approval from the Host department prior to any agreements for new telecommunication equipment being issued.

**Telecommunication Towers on City-owned Lands**

A primary concern raised by Thomson Rogers, the law firm representing the telecommunication providers, in their response to the draft Protocol concerns the opportunity for the installation of telecommunication facilities on City-owned lands. The telecommunication providers would like the opportunity to lease space on City lands to erect a new tower, and/or to lease space on City facilities (e.g. Water towers) to install new antennas. The providers argue that this would be beneficial to the City in that it is a source of revenue for the City, and that allowing antennas to be installed on City facilities would decrease the number of new tower installations required.

The City’s historical view on the installation of telecommunication facilities on City lands has been to review each application on a case by case basis. However, as mentioned above, the City, through Council-adopted Report PW05074, currently has a policy in place to prohibit the placement of telecommunication antennas on City water towers. The rationale for this prohibition is based on concerns over water security, and based on the desire to maintain these facilities for City use rather than private use.

As part of the consultation process for this Protocol, staff consulted with the City’s Portfolio Management Committee (PMC) to discuss the issue of the potential for placement of new towers or antennas on City lands. The members of the PMC identified that telecommunication facilities represent a potential revenue source for the City, and directed staff to have follow-up meetings with key City departments with an interest in real estate.

Discussions were held on this issue with staff from the following Divisions: Public Works (Water and Wastewater); Public Works (Capital Planning and Implementation); Public Works (Operations and Maintenance); Public Works (Facilities); and Hamilton Emergency Services (Trunking Radio). The main findings of these discussions can be summarized as follows:

- **Water and Wastewater** - the concerns expressed in staff Report PW05074, Communication Equipment Located on City Water Towers, have not changed. The concerns surrounded issues of water security and the need to reserve space on water towers for the City’s own use. In addition, staff notes that the agreements that have been entered into in the past, which allowed private antennas on City water towers, have proven to be problematic and costly. Therefore, the City’s policy
prohibiting the installation of telecommunication facilities on water towers should remain in place.

- Capital Planning and Implementation - new telecommunication towers should not be permitted adjacent to active (programmable) park space, as this has the effect of removing programmable space from the park.

- Operations and Maintenance - cemeteries and natural open space lands may represent preferred locations for new facilities, provided that appropriate agreements are in place.

- Facilities - opportunities may be available to lease space on City facilities (e.g. libraries, public works yards, community services). Each request would need to be reviewed on a case-by-case basis.

- Trunking Radio - discussions with Trunking Radio confirm that a concern remains that the City must maintain space on its own facilities to accommodate the City's future needs. Therefore, any proposals would be reviewed on a case-by-case basis to ensure that the City’s own needs are not compromised.

Based on the discussions above, staff is recommending that in terms of the review of applications for facilities on City lands, the Procedure currently in place from 2001 be continued, and that it be attached as an Appendix to the Protocol. The Procedure outlines a review process for these applications, and requires agreement from the Host department that would be providing space for the tower or antenna, and also requires that Trunking Radio be contacted. In addition, this Procedure also states that telecommunication facilities shall not be permitted on water towers.

**ALTERNATIVES FOR CONSIDERATION:**

1. Not adopt the attached Protocol - status quo - the City would still request that proponents apply for Minor Site Plan approval, but proponents would only be obligated to follow the Industry Canada Default Process.

2. Adopt the Protocol - the Protocol outlines a clear process for all parties to follow in siting a new tower and provides the City with a pre-defined review function, which includes guidelines regarding design, siting, landscaping and location.

**FINANCIAL/STAFFING/LEGAL IMPLICATIONS:**

- Financial - N/A.
- Staffing - N/A.
- Legal - N/A
Policies Affecting Proposal:

Report CS01097 Broadcasting Communications Facilities - Policy and Procedure and Report PW05074 Communication Equipment Located on City Water Towers, discussed in the Background Section of this Report.

Urban Hamilton Official Plan

The Urban Hamilton Official Plan was adopted by City Council on July 9, 2009. While the Plan is not yet in force and effect, it is noted that the attached Protocol conforms with the Council-adopted Plan. Policy 3.2.1(b) states that telecommunication facilities shall be permitted in all land use designations. In addition, Policy 3.4.10 states that the City of Hamilton shall prepare a telecommunications antenna siting protocol to ensure effective local participation in decisions respecting the siting of proposed antennas and their supporting structure. Therefore, the attached Protocol is implementing the policies of the Urban Hamilton Official Plan.

Rural Hamilton Official Plan

The Rural Hamilton Official Plan has been approved by the Province of Ontario, but is not yet in force and effect due to appeals. Policy 3.4.2 states that only major utility facilities such as compressor stations, major easements, waste management facilities, and commercial wind farms shall be designated as Utilities. All other utility uses, which would include telecommunication facilities, shall be permitted in all designations. The Plan also states that utilities shall be developed to integrate with the general character of the surrounding uses through the provision of landscaping, screening and buffering, siting of structures, height control, and any other measures as may be deemed appropriate by the City. These issues have been addressed in the attached Protocol and, therefore, the Protocol is consistent with the policies of the Rural Hamilton Official Plan.

Relevant Consultation:

The attached Protocol was circulated to Industry Canada, representatives of the telecommunication industry (Bell, Rogers, and Telus), and relevant City departments for comment. A summary of the comments is provided below.

Agencies/Departments Having No Comment or Objections

- Health Protection Branch, Public Health Services.

The Public Works Department, Water and Wastewater Division has recommended that a reference be included in the Protocol to the Council Resolution regarding the prohibition on installing communication equipment on City water towers. This has been included in the Protocol under Section 1.2.1.7.
The Public Works Department, Capital Planning and Implementation Division, has commented that the goals of the Protocol should reflect that co-location and co-operation among telecommunication providers is an important goal of the City. In addition, the Protocol should also be amended to include a reference to the Hamilton Utility Coordinating Committee, and to ensure that this Committee is circulated on any new tower applications. The Protocol has been amended in Section 3.2.1 to include this requirement.

The Niagara Escarpment Commission (NEC) has its own Radio and Telecommunication Protocol, dated 2001. Staff has consulted with the NEC during the preparation of the City of Hamilton Protocol. Section 1.2.1.8 has been included in the City's Protocol, which states that any proposed telecommunication facility within the Development Control Area of the Niagara Escarpment Plan (NEP) shall be in accordance with the NEC 2001 Protocol. The City of Hamilton would be circulated on any Development Permit applications within the NEP area, and would have the opportunity to make comments through the circulation process. New telecommunication facilities proposed within the NEP area, but outside of Development Control, would be subject to the City of Hamilton Protocol.

Industry Canada has provided the following comments on the Protocol:

- The definitions should be amended to reflect federal law. Staff notes that the definitions have been amended, as suggested.

- The draft Protocol included a provision encouraging proponents to co-locate a new antenna onto an existing tower. Industry Canada suggested the Protocol should also encourage co-location of a new antenna onto an existing building or structure other than an existing telecommunication tower. The Protocol was amended in Section 1.2.1.1 to reflect this comment.

- In some instances a monopole design may be sufficient to meet the needs of telecommunication providers. Industry Canada suggests that the Protocol could be amended to recognize that monopole towers may be appropriate in some cases. The Protocol has been amended in Section 1.2.2.1 to reflect this comment.

- Section 1.2.1.2 of the Protocol discourages new towers from being located within 120 metres of a residential zone or school. Industry Canada has suggested that this proposed 120 metre separation may impede the placement of a monopole type tower which, using stealth design techniques, could be designed as a flag pole or light standard. This type of pole may not be offensive to a residential zone or school. After considering this comment, staff maintains the provision of Section 1.2.1.2 discouraging the placement of new towers within 120 metres of residential zones or schools, as this is not considered to be the optimal location for any type of tower. However, as mentioned above, the Protocol has been amended in Section 1.2.1.2 to reflect that monopole tower designs may be considered in instances where a new tower must be located within 120 metres of a residential zone or school for reasons of engineering or network objectives.
• Section 1.2.1.4 of the Protocol, which requires that distance from parks be maximized when selecting new tower sites, may preclude installation of a monopole type tower which could incorporate lighting for the park. Staff does not feel that the Protocol needs to be amended to reflect this comment, as any proposals to install a new tower on City-owned lands will be reviewed on a case-by-case basis in accordance with the 2001 Procedure on the Installation of Broadcasting Communication Facilities on City of Hamilton Properties (attached as an Appendix to the Protocol).

• Section 1.2.1.5 encourages all new towers to be sited with a minimum setback to all property lines and existing buildings of a minimum distance equivalent to the height of the tower. Industry Canada has commented that this may preclude leasing opportunities on smaller industrial or commercial properties which may otherwise be desirable locations. Staff recognizes this as a valid concern, but notes that the Protocol states that “where possible” this minimum setback shall be provided. Therefore, if a proponent can demonstrate that a location is appropriate, but it cannot meet this recommended setback, staff may still review and consider the application.

• The City’s policy of prohibiting telecommunication facilities on water towers is restrictive. Industry Canada suggests that permitting such facilities on water towers could be beneficial to both the City and to proponents. As stated above, due to the concerns stated in Report PW05074, staff suggests that the City’s policy prohibiting the installation of telecommunication facilities on water towers should remain in place.

**Thomson Rogers** (law firm representing Bell, Rogers, and Telus) has provided the following comments:

• The City should provide direction on where towers designed for co-location versus monopole designs are preferred. Co-location and stealth design are inconsistent with each other and, as such, the City needs to indicate where unobtrusiveness is preferred. As noted above, the Protocol has been amended in Sections 1.2.2.1 and 1.2.2.2 to recognize that monopole designs may be considered by the City for new tower installations within 120 metres of a residential zone or school.

• The Protocol should be amended in Section 1.2.1.2 to state that new towers are strongly discouraged within 120 metres of any residential zone or school “unless required for reasons of engineering or network objectives”. Staff has amended the Protocol accordingly to reflect the fact that there will be occasions when new towers may be required within 120 metres of these sensitive land uses to accommodate network capacity.

• The City should reconsider its policy to prohibit new telecommunication facilities on City water towers. As stated above, due to the concerns stated in Report PW05074, staff suggests that the City’s policy prohibiting the installation of telecommunication facilities on water towers should remain in place.
Thomson Rogers provided comments on Section 1.2.1.4, which encourages new telecommunication towers to be situated to maximize distance from natural features and parks. The comments suggest that there may be occasions when it is appropriate to locate a new tower within these areas. Staff does not feel that the Protocol needs to be amended to reflect this comment, as any proposals to install a new tower on or adjacent to a natural feature will be reviewed on a case-by-case basis, and any proposal to situate a new tower on City-owned lands will be reviewed in accordance with the 2001 *Procedure on the Installation of Broadcasting Communication Facilities on City of Hamilton Properties* (attached as an Appendix to the Protocol).

Within Section 2 of the Protocol - Exemptions from Requirement for Municipal Review, it is requested that proponents of new telecommunication installations that are exempt from the requirement for municipal review still provide the City of Hamilton with information on the installation for information purposes only. This will allow staff and the Ward Councillor to have information available to answer questions from residents, should they arise. The comments from Thomson Rogers state that telecommunication providers will not file any information with the City if the proposal meets one of the exemptions of Section 2. Staff requests that the providers reconsider this comment, as staff does not feel that it is overly onerous to provide this information to the City in good faith. Conversely, if the providers do not supply this information to the City, staff will redirect all enquiries on new telecommunication facilities to the respective service provider.

The telecommunication providers are agreeable to the requirement for submission of a Minor Site Plan application, but request that the Protocol be amended to state that there will be no requirement for a site plan agreement. The Protocol has been amended accordingly. This is consistent with City’s standard procedure, as a site plan agreement is not a requirement for a Minor Site Plan application.

Section 3.3.1 should be amended to state that the Site Selection/Justification Report should include information as to why a new tower is the "preferred" alternative, rather than the "only viable" alternative. The Protocol has been amended accordingly to recognize that there may be situations, in close proximity to a residential zone or school, where a new monopole or stealth design tower is the preferred alternative.

**CITY STRATEGIC COMMITMENT:**

By evaluating the "**Triple Bottom Line**", (community, environment, economic implications) we can make choices that create value across all three bottom lines, moving us closer to our vision for a sustainable community, and Provincial interests.

Community Well-Being is enhanced. ☑ Yes ☐ No

Community well-being is enhanced by providing guidelines for the design and placement of new telecommunication facilities, and by requiring public consultation opportunities in this process.
Environmental Well-Being is enhanced. ☑ Yes ☐ No
The Protocol recommends that new telecommunication facilities are located to maximize distance from environmental features. In addition, new telecommunication facilities that are located within or adjacent to an environmentally sensitive area may be required to undertake an Environmental Impact Statement.

Economic Well-Being is enhanced. ☑ Yes ☐ No
Investment in Hamilton is enhanced and supported by providing a Protocol for telecommunication providers to follow in the siting of new telecommunication facilities, thus reducing uncertainty and improving efficiency in the process.

Does the option you are recommending create value across all three bottom lines? ☑ Yes ☐ No

Do the options you are recommending make Hamilton a City of choice for high performance public servants? ☑ Yes ☐ No

:HT
Attachments. (2)
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 or co-locations on existing tower sites are strongly encouraged. 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 of any Residential Zone or elementary or secondary school, unless required for reasons of engineering or network objectives. If a new tower is proposed to be located within 120 metres of a Residential Zone or a school, 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. New telecommunication towers which are located greater than 120 metres from a Residential Zone or elementary or secondary school shall be designed with co-location capacity.
2. A new telecommunication tower, which must be located within 120 metres of a Residential Zone or elementary or secondary school for reasons of engineering or network objectives, is not required to be designed for future co-location capacity. In this situation, a monopole design or other stealth design technique, as described in 1.2.2.3 below, may be considered.

3. 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 1.2.2.2 above.

4. The design of the tower or antenna should be sympathetic to the surrounding architecture and built form.

5. 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.

6. Where appropriate, the planting of trees and shrubs at the tower site is encouraged to enhance the character of the surroundings.

7. 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.

8. 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.

5. New antenna systems, including masts, towers, or other antenna-supporting structure, with a height of less than 15 metres above ground level.

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:

6. Any new telecommunication tower or antenna proposed within an Industrial Zone, provided that the following criteria are met:

   (a) The proposed tower is located a minimum of three times the tower height away 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;

   (b) The proposed tower is not located within the Airport Employment Growth District, or any other such designation for these lands as amended from time to time, and as defined in the Rural Hamilton Official Plan; and,

   (c) The proposed tower is located a minimum of three times the tower height away from a Residential Zone, elementary or secondary school, or existing dwelling, measured from the tower base or the outside perimeter of the supporting structure, whichever is greater.

7. Any new telecommunication tower or antenna proposed within a Rural or Agricultural Zone, provided that the following criteria are met.

   (a) The proposed tower is located a minimum of three times the tower height away from a Residential Zone, elementary or secondary school, or existing dwelling, measured from the tower base or the outside perimeter of the supporting structure, whichever is greater; and,
(b) The proposed tower is not located within or adjacent to an Environmentally Sensitive Area or a Key Natural Heritage Feature or Key Hydrologic Feature, as defined in the Urban and Rural Hamilton Official Plans.

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 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);

5. A map indicating the horizontal distance between the proposed tower installation and the nearest residentially zoned property, dwelling, and/or elementary or secondary school;

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 distance of three times the tower height or greater from a Residential Zone or elementary or secondary school, measured from the tower base or the outside perimeter of the supporting structure, 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 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 21 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 21 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, mainstreets and neighbourhoods, cemeteries, trailways, 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)

**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.
Appendix "A" to the City of Hamilton Telecommunication Tower and Antenna Protocol:

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 any of its existing or future Water Towers.**

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 who's 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.
<table>
<thead>
<tr>
<th>Sitting Preferences</th>
<th>Exemptions to Local approval</th>
<th>Submission Requirements</th>
<th>Exemption</th>
<th>Open House</th>
<th>Notice Requirement</th>
<th>Commenting Period</th>
<th>Conclusion of Process</th>
<th>Timing</th>
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<tbody>
<tr>
<td><strong>Location</strong></td>
<td><strong>Pre-consultation?</strong></td>
<td><strong>Industry Canada default process</strong> (Jan, 2009)</td>
<td>Toro</td>
<td>No</td>
<td>Yes - Site Selection/Justification Report must be submitted for all applications not exempt from Industry Canada Approval (applicants must also consult with the municipality).</td>
<td>Telecommunication Tower Application Review Form; application fee; Site Selection/Justification Report; photos with tower; site plan; map showing adjacent residential areas within 150 m; map with 120 m mailing list</td>
<td>New towers minimum 120 m from designated Residential Zones; replacement of towers 120 m from residential zones; proposals exempt as per Industry Canada Guidelines</td>
<td>Yes - community meeting, chaired and organized by applicant</td>
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<td><strong>Zoning</strong></td>
<td><strong>Siting</strong></td>
<td><strong>Design/ Landscaping</strong></td>
<td>Toronto</td>
<td>Yes</td>
<td>Residential zones, must be designed to accommodate 2 additional users; within residential zones - monopole, minisetback equivalent to height of tower when possible; parking; reduce visual impact; equipment</td>
<td>Amateur radio structures; co-locations; new faculties less than 16 m in height and 120 m from residential designation; new facilities greater than 16 m in height and less than 30 m and located away from sensitive use; new facilities in Institutional Zone; maintenance; rooftop towers provided not exceeding 25 % height; temporary installations; towers within 120 m of highways; application form and fee; (justification report; colour photo with tower superimposed; inventory of towers within search area; site plan; map showing distance to residential property; engineers report for roof mounted towers; statement re electronic equipment; EIS if required</td>
<td>Yes, required</td>
<td>120 m, or 3 times tower height, or 25 m of proposed antenna</td>
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<td><strong>Waterloo</strong></td>
<td><strong>Siting</strong></td>
<td><strong>Design/ Landscaping</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes, Required</td>
<td>Yes, required</td>
<td>Yes, required</td>
<td>Yes, required</td>
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<td>Sitting Preferences</td>
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<td>Co-location?</td>
<td>Zoning</td>
<td>Siteing</td>
<td>Design/Landscaping</td>
<td>Pre-consultation?</td>
<td>Exemptions to Local approval</td>
<td>Submission Requirements</td>
<td>Exemption</td>
<td>Open House</td>
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<td><strong>Brantford (2008)</strong></td>
<td>Yes, and must address future co-location options in submission</td>
<td>discouraged within 500m of densely populated area, institutional use or natural or human heritage feature</td>
<td>attempt to place on existing sites or buildings, avoid natural features</td>
<td>minimize visual impact; trees and shrubs; neutral colours; equipment shelters; only accommodate telecommunications facilities; no signage</td>
<td>Yes, Required</td>
<td>application (minor site plan), cover letter; fee; Site Selection/Justification report; site plan; elevation drawings; location map; map or inventory of all suitable telecommunications towers within proponent's search area; PIN printout; photo with tower superimposed; EIS if required</td>
<td>less than 7 m height; 500 m + from Residential Zone, institutional bldg; or natural or human heritage feature; maintenance/repair of existing structures; replacement/modification to existing tower provided does not increase height by more than 25%</td>
<td>Site selection report (outline why co-location not possible); site plan; engineered drawings of tower design or engineers report for rooftop installation; statement of need for tower height; map showing distance to residentail; approvals of other agencies; building permit application; confirmation of public consultation as per Industry Canada default process</td>
</tr>
<tr>
<td><strong>North Middlesex (April, 2009)</strong></td>
<td>Yes</td>
<td></td>
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<td>as per Industry Canada guidelines</td>
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<td><strong>Grimsby (Jan, 15, 2008)</strong></td>
<td>Discouraged in existing or future residential areas</td>
<td>Protect sight line to certain areas, protect natural features</td>
<td>Trees, neutral colour, accommodate only telecommunications facilities</td>
<td>Yes, Required</td>
<td>Normal Site Plan application requirements including fee, site plans, elevation plans and other supporting information</td>
<td>as per Industry Canada Guidelines (note, Grimsby's site plan process does not involve public consultation, but Industry Canada does)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Chatham-Kent (2008)</strong></td>
<td>Discouraged in existing or future residential areas</td>
<td></td>
<td></td>
<td></td>
<td>as per Industry Canada guidelines</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Sitting Preferences</th>
<th>Co-location?</th>
<th>Zoning</th>
<th>Siting</th>
<th>Design/ Landscaping</th>
<th>Pre-consultation?</th>
<th>Exemptions to Local approval</th>
<th>Submission Requirements</th>
<th>Exemption</th>
<th>Open House</th>
<th>Notice Requirement</th>
<th>Commenting Period</th>
<th>Conclusion of Process</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oakville (2007)</td>
<td>yes</td>
<td></td>
<td></td>
<td>avoid natural hazards and minimize impact on viewscapes and residential/ sensitive uses</td>
<td>type and colour should mitigate visual impact, neutral colours, landscaping, stealth design</td>
<td>new facilities on existing structures; new equipment shelters in conjunction with co-location (max 34 sq m); replacement of existing structure; new facilities on building with height in excess of 6 stories; new facilities on buildings with height under 6 stories provide height does not exceed 7.6 m; street pole type installations; temporary towers; normal maintenance</td>
<td>site selection/justification report; site plan; elevation drawings; location map; inventory of all suitable towers within search area; survey; colour photos with lower superimposed; EIS if required; utility confirmation</td>
<td>yes, held by proponent if located within residential zone or within 60 m or 3 times tower height of residential zone</td>
<td>60 m of subject property</td>
<td>30 days if no public consultation required; 30 days after public meeting if consultation is required</td>
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<tr>
<td>London (2003)</td>
<td>yes</td>
<td></td>
<td></td>
<td>avoid residential areas and prime agricultural land; protect natural and cultural landscape</td>
<td>landscaping; neutral colour</td>
<td>co-locations; rooftop structures on buildings over 6 stories; rooftop structures on buildings under 6 stories provided does not increase height more than 25%; new facilities under 16.8 m in height</td>
<td>justification report; site plan; elevation drawings; horizontal distance to nearest residential dwelling; application form and fee</td>
<td>located in industrial or commercial zone and at least 120 m from residential; rooftop structures where structure is more than 25% of building height</td>
<td>120 m of subject property</td>
<td>20 days</td>
<td>Letter of Recommendation from Director of Building Control</td>
<td>30 days if no public consultation required; 30 days if public consultation is required</td>
<td></td>
</tr>
</tbody>
</table>