

SECTION 17 - WIRELESS TELECOMMUNICATION SITES

17A. Purpose

The purpose of this regulation is to provide for the operation of wireless telecommunication services within the Town of Bolton while protecting neighborhoods and minimizing the adverse visual and operational effects of Wireless Telecommunications Sites (WTS) through careful design, siting and screening. More specifically this regulation has been developed in order to:

Maximize use of existing towers and other structures to accommodate new antennas and transmitters in order to reduce the number of communication towers needed to serve the community;

Encourage providers to co-locate their facilities on a single tower;

Site facilities below visually prominent ridge lines;

Minimize the location of facilities in visually sensitive areas;

Encourage creative design measures to camouflage facilities;

Protect historic and residential areas from potential adverse impacts of communication towers;

Avoid potential damage to adjacent properties from tower failure through engineering and careful siting of tower structures.

17B. Definitions

For the purpose of applying the provisions of this section the terms below shall be defined as follows:

Antenna means a device used to receive or transmit electromagnetic waves. Examples include, but are not limited to whip antennas, panel antennas and dish antennas.

Co-location means locating wireless communication facilities from more than one FCC licensed provider on a single support structure such as a tower or existing structure.

Wireless Telecommunication Services means licensed wireless telecommunication services including, but not necessarily limited to, cellular, personal communication services (PCS), specialized mobilized radio (SMR), enhanced specialized mobilized radio (ESMR), wireless video services, paging services and similar services that are marketed to the general public.

Height of Tower means the vertical distance measured in feet from the average existing level of the ground surrounding the tower and within ten feet thereof to the topmost point of the tower including any antenna or other appurtenances. The existing elevation shall mean the actual or approved elevations of the property at the time of application.

Tower means a structure that is intended to support equipment used to receive and/or transmit electromagnetic waves. Design examples of towers include but are not limited to (a) self-supporting lattice, (b) guyed and (c) monopole

17C. Location of Wireless Telecommunication Sites

The locations for siting the antennas and equipment involved in receiving or transmitting electromagnetic waves associated with wireless telecommunication services are listed in paragraphs 1 through 6 below, in order of preference.

1. On existing or approved towers.
2. On existing structures such as but not limited to buildings, water towers, steeples and utility poles.
3. On new towers less than 75 feet in height located in business or industrial zones.
4. On new towers 75 feet or greater in height located in business and industrial zones.
5. On new towers less than 75 feet in height located in residential zones.
6. On new towers 75 feet or greater in height located in residential zones..

17D. Uses Allowed by Site Plan Review

The following uses which generally pose minimum adverse visual effect, as determined by the Commission, are permitted uses subject to the standards in Subsection 17G and subject to the Site Plan Review requirements of Section 16. Uses that do not comply with the requirements of Section 17 D shall comply with the requirements of Section 17 E.

1. Wireless telecommunication sites with no towers but with antennas located on nonresidential buildings and shielded from view from all surrounding streets and driveways used by the general public. The method and materials used to shield such sites must be approved by the Planning and Zoning Commission as part of the Site Plan Review provided that the standards in Section 17D.3. are met.
2. Wireless telecommunications sites with no new towers where the antenna is mounted to existing towers, utility poles, water towers, steeples, light standards,

bridges or other structures not classified as buildings provided the standards in Section 17D.3. are met:

3. WTS standards for Site Plan Review:
 - a. No changes are made to the height of such structure except that an antenna may extend no more than 72 inches above the structure.
 - b. No panel antenna shall exceed 72 inches in height and 24 inches in width.
 - c. No dish antenna shall exceed 3 feet in diameter.
 - d. All accompanying equipment buildings or boxes shall be screened and fenced as approved by the Planning and Zoning Commission as part of the Site Plan review.
 - e. The following information shall be submitted in accordance with each particular application where applicable:
 1. A plan showing where and how the proposed antenna will be affixed to a particular building or structure.
 2. Details of all proposed antenna and mounting equipment including size and color.
 3. Elevations of all proposed shielding and details of materials including color.
 4. An elevation of all proposed equipment buildings or boxes. Details of all proposed fencing including color.
 5. Maps depicting the extent of the provider's planned coverage within the Town of Bolton and the service area of the proposed wireless telecommunication site. Maps indicating the search radius for the proposed wireless telecommunication site showing the least number of towers and all towerless antenna locations possible.

17E. Uses Allowed Only by Special Permit

All proposals to develop or expand a wireless telecommunication site shall be subject to the requirements in this Section 17 and the Special Permit requirements in Section 16 of these regulations except as otherwise provided for in these regulations. In addition the following information shall be submitted in accordance with each particular application where applicable.

1. Items listed in Section 17 D.3.e. above.

2. A design drawing including cross section and elevation of all proposed towers. A description of the tower's capacity including the number and type of antennas it can accommodate as well as the proposed location of all mounting positions for co-located antennas and the minimum separation distances between antennas. The design shall illustrate how the tower will collapse without encroaching upon any adjoining property line.
3. An analysis of the fall zone for the proposed tower prepared by a licensed engineer.
4. If applicable a report or letter from the Federal Aviation Administration that the proposed tower complies with all airport safety requirements.
5. Upon request of the Commission the applicant shall provide a simulation of the proposed wireless telecommunication site in order to help the Commission ascertain the visual impacts associated with such proposal.
6. For towers located in or within 100 ft of an R-1, R-2, or R-3 zone, upon request of the Commission, the applicant shall provide a view shed analysis showing all areas from which the tower would be visible.

17F. Dimensional Requirements

1. Lot Size. Each wireless telecommunication site located in a Residence Zone and containing a tower shall comply with the following requirements:
 - a. Each tower shall be located on a lot that has at least the minimum frontage for the zone that the lot is in.
 - b. Each tower shall be located on a lot that has at least the minimum lot area of 40,000 square feet per tower, exclusive of all other uses.
 - c. Any other uses on a lot with a tower shall comply with the area requirements of Section 11 exclusive of the tower(s) area requirements.
2. Height. The maximum height of a tower proposed under this regulation shall be 150 feet including the antenna and all other appurtenances.

The maximum height of any building shall be as required by Section 11.

3. Setbacks.
 - a. All towers shall be located a minimum distance from any property line equal to 125 percent of the proposed tower height.

- b. All equipment buildings/boxes or equipment areas shall comply with the minimum property line setbacks for a principal building in the underlying zone.
4. Building Size. The lot coverage area of all buildings for wireless telecommunication services shall not exceed 500 square feet per tower.

17G. General Requirements

1. No tower wireless telecommunication service shall be located within 200 feet of an existing dwelling.
2. No tower shall be located within 200 feet of the boundary of an existing approved historic district or a site on the national registry historic places.
3. No lights shall be mounted on proposed towers unless otherwise required by the FAA or applicable law. All strobe lighting shall be avoided if possible. Any required lights on a tower shall be directed upwards as much as possible. There shall be no outdoor lights in use except while a person is on the site and there shall be no direct light beyond the property line.
4. Towers not requiring special FAA painting or markings shall be a non-contrasting blue or gray or other unobtrusive color as approved by the Commission
5. Towers may not be used to exhibit any commercial signage or other advertising.
6. Any proposed tower shall be designed in all respects to accommodate both the applicant's antennas and comparable antennas for at least two additional users if the tower is over 100 feet in height or for at least one additional comparable antenna if the tower is over 50 feet in height. The Commission may require the tower to be of such design as to allow for future rearrangement of antennas upon the tower and to accommodate antennas mounted at varying heights.
7. Antennas or equipment buildings/boxes mounted to or on buildings or structures shall to the greatest degree possible blend with the color and design of such building.
8. No proposed wireless telecommunication site shall be designed, located or operated as to interfere with public safety communications.
9. All applications for wireless telecommunication sites within the Flood Protection Zone shall comply with the standards found in Section 3A18 of these regulations.
10. The design of all wireless telecommunication sites shall comply with the standards promulgated by the FCC for non-ionizing electromagnetic emissions. A report shall be provided from a Connecticut licensed engineer in the field of

telecommunications broadcasting indicating that the proposed wireless telecommunication site will comply with the emission standards found in Subsection 17G. of this regulation.

11. All utilities proposed to serve a wireless telecommunication site shall be installed underground unless otherwise approved by the Commission.
12. All generators installed in conjunction with any wireless telecommunication site shall comply with all State and local noise regulations.
13. Any building in a residential zone or on a lot adjacent to a residential zone shall be made to look like a residential building with a pitched roof.
14. Appropriate trees and other vegetation as approved by the Commission shall be planted and maintained to screen a tower and any equipment buildings from view from nearby residences and roads. Existing trees and vegetation should be used as much as possible to provide this screening.
15. The Commission may require that an appropriate bond be submitted as surety to remove any abandoned towers, buildings or equipment.

17H. Factors Upon Which Special Permit Decisions of the Commission Shall Be Based.

In order to approve applications for wireless telecommunication sites, the Commission, must find:

In the case where an application for the proposed location of a wireless telecommunication site is not a preference 1 through 3 location in Section 17C the applicant has adequately described the efforts and measures taken to pursue those preferences and has provided an adequate explanation as to why a higher preference location was not technologically, legally or economically feasible. The documentation supplied by the applicant should include an evaluation of the following factors:

1. Whether the planned equipment would cause unacceptable interference with the operation of other existing or planned equipment on an existing or approved tower and whether the interference can be prevented or eliminated at a reasonable cost as documented by a Connecticut licensed engineer in the field of telecommunications broadcasting.
2. Whether the planned equipment cannot be accommodated on existing or approved towers due to structural deficiencies and whether such deficiencies cannot be eliminated at a reasonable cost, as documented by a Connecticut licensed engineer, in the field of telecommunications broadcasting.

3. Whether the existing or planned equipment on an existing or approved tower would cause unacceptable interference with the equipment proposed by the applicant and whether the interference cannot be prevented or eliminated at a reasonable cost as documented by a Connecticut licensed engineer in the field of telecommunications broadcasting.
4. any restriction or limitation imposed by the FCC.

17I. Abandonment

A wireless telecommunication site that is determined by the Commission or its agent to be not in use for 12 consecutive months shall be removed by the service facility owner. The Commission shall send the service facility owner a notice of abandonment by certified mail. This removal shall occur within 90 days of the date that the notice of abandonment is sent. Upon removal the site shall be restored to its previous appearance and where appropriate re-vegetated to blend with the surrounding area.

17J. Expiration of Approval

The approval of an application for special permit or site plan review shall be void and of no effect unless the applicant has obtained a bona fide license from the Federal Communications Commission (FCC) to provide the telecommunication services that the proposed tower is designed to support and construction of the WTS is completed within one year from the date of the approval granted by the Commission. The Commission may grant up to two six-month extensions of this period upon written request by the applicant. The Commission shall not grant an extension unless the development plan is brought into conformance with any relevant zoning regulations which have been amended subsequent to the original approval and the applicant provides adequate evidence that construction is able to be completed within the extended time period sought. This evidence shall include, but not be limited to, the acquisition of any or all required government approvals and project financing. Any appeals of such special permit, site plan, inland wetlands or subdivision approvals shall extend the aforementioned one-year period the length of such appeal. The Commission may as a condition of approval of a special permit establish a time period that such special permit shall remain in effect.

- 17K. Any existing tower as of the effective date of this Section 17 may continue to be used to the full approved height of the tower in accordance with all the requirements of Section 17 except for height.