

SECTION 22 - Personal Wireless Telecommunications

22.1 Purpose

In accordance with the terms of the Federal Telecommunications Act of 1996, this section of these regulations is intended to accommodate the needs of residents and businesses and the general public while protecting public health, safety and general welfare of the Town and minimizing any adverse visual and operational effects of towers and wireless communications facilities through careful analysis, design, siting and screening.

22.2 Objectives

- A. To accommodate the need for public and quasi-public telecommunications facilities, including antennae, while regulating their location and number;
- B. To minimize the negative effect on adjoining property values;
- C. To minimize adverse visual effects due to the location of such devices by:
 1. Ensuring optimum design, siting and screening in keeping with the Town's rural character; and
 2. encouraging a grid of minimally intrusive installations such as microcells; and
 3. Avoiding sites of high visibility, including ridgelines and prominences.
- D. To reduce the number of towers needed to serve the community both now and in the future, by maximizing the use of existing and approved suitable facilities, (including existing towers, buildings and other facilities) to accommodate new wireless telecommunication antennae;
- E. To avoid injury and potential damage to adjacent properties from tower failure through assurance of high structural standards and setback requirements;
- F. To minimize any potential for environmental damage associated with the installation or use of such equipment.

22.3 Definitions

- 22.3.1 Antenna - A device used to receive or transmit electromagnetic waves. Examples include, but are not limited to single pole antennas (omnidirectional or whip), panel antennas and satellite or microwave dish antennas (concave or convex).
- 22.3.2 Base Components - All the structures or buildings and equipment (except the tower and antenna) associated with daily operation of a Wireless Communications Facility.
- 22.3.3 Carrier - A company that provides wireless services.
- 22.3.4 COW - An acronym for “Cell On Wheels”. A COW does not include mobile motorized transient vans parked less than one day.
- 22.3.5 Co-Location - Installation of antennas of two or more Wireless Telecommunications Service Providers at a single Wireless Communications Facility.
- 22.3.6 Federal Communications Commission (FCC) - The Federal agency responsible for licensing and regulating wireless communications providers. The FCC has primary regulatory control over carriers through its powers to control interstate communications commerce and to provide a comprehensive national system in accordance with the Federal Communications Act.
- 22.3.7 Grid System - A network of Wireless Communications Facilities comprising the geographic service region of a Wireless Telecommunications Service Provider.
- 22.3.8 Lattice Structure - A free standing/self supporting or guyed Tower with three or four surfaces designed as an open steel-lattice space frame.
- 22.3.9 Monopole - A free standing/self supporting tubular

tower of varying diameter depending upon antenna and equipment loading.

- 22.3.10 Site - The specific location of a Wireless Communication Facility.
- 22.3.11 Tower - A structure intended to support equipment used to transmit and/or receive telecommunications signals. Examples of such structures include monopoles, and lattice construction steel structures. The term shall include all guy lines and other required supporting devices such as platforms. The term shall not include amateur radio operator's equipment, the operation of which is licensed by the FCC and which is not used for any commercial purposes.
- 22.3.12 Tower Height - The distance from the lowest ground elevation of any portion of the tower to the topmost point of the tower.
- 22.3.13 The Act - The 1996 Federal Telecommunications Act.
- 22.3.14 Wireless Communications Facility - The site with a parcel of land or a building (also known as a cell or cell site) where equipment and devices (whether mounted on a tower or not) collect telecommunications or radio signals from a mobile radio communication source and transmit those signals. Radio and television broadcast facilities are also wireless communications facilities.
- 22.3.15 Wireless Telecommunications Services, Commercial – The operations of a Wireless Telecommunications Service Provider at the location of a Wireless Telecommunication Facility.
- 22.3.16 Wireless Telecommunications Service Provider - An entity authorized by the FCC to be a signal carrier for cellular telephones, personal communication services (PCS), specialized mobile radio (SMR) enhanced

specialized mobile radio (ESMR), and paging services or other modes of communications as described in the Federal Telecommunications Act of 1996.

22.4 General Requirements

The following information, standards, application requirements, procedures and considerations for approval shall apply to the installation, placement, replacement, expansion, extension of height, setbacks, construction, and screening of telecommunications towers and antennae within the Town of Bethany.

It is strongly recommended that, at the earliest stages of developing a proposal, the applicant arrange to have an informal meeting with the Commission staff or its consultants to discuss these requirements.

- A. Co-Location is encouraged for any telecommunications facility in all applications where feasible. The Commission may require co-location after independent outside evaluation of the feasibility of co-location as determined by a study done for the Commission by a qualified outside professional consultant selected by the Commission at the applicant's expense. The applicant shall incur any and all costs of the study, for which payment shall be made at the time of application to the Commission.
- B. The Commission may require a fence with a height of eight (8) feet around any approved tower and the base equipment.
- C. If the site is not already adequately screened by virtue of its location or natural features so as to protect the rural character of the Town, as viewed from public roads and potential and/or existing private residences, the Commission may require landscaping around the fence which accomplishes this. The applicant and the property owner shall be responsible for the maintenance of the plantings to ensure their continued effectiveness.
- D. Only unmanned equipment facilities including buildings shall be permitted and shall not exceed five hundred (500) square feet of area per carrier per location and shall not be

more than 12 feet in height. Manned facilities incidental to the site such as a business office, maintenance depot and /or vehicle storage are not permitted under this section and must be applied for and permitted under other applicable sections of these regulations.

- E. No signage or illumination of any form shall be permitted on the tower or antenna unless required by the FCC, FAA or the Connecticut Siting Council.
- F. A contact person shall be designated in writing by the applicant as the person to contact regarding any matters concerning the proposed facility if and when constructed. The designation shall include at least the name, address and telephone number of the designated contact person and shall be included with the application and shall also be displayed on a sign mounted at the entrance to the facility. The purpose of this is to designate the person to whom should be reported any electro-magnetic interference with receptor devices on adjoining or nearby properties, with emergency services communications, any violations of these regulations, or any public safety and/or emergency conditions existing at the site. The contact person shall reply in writing within 2 business days to the person making the contact with a copy to the Zoning Enforcement Officer of the Town of Bethany and shall take prompt action appropriate to the nature of the reported condition.
- G. Directional or panel antennae shall in no case exceed six (6) feet in height or two (2) feet in width. Omni-directional antenna (e) shall not exceed twenty (20) feet in height or seven (7) inches in diameter.
- H. Satellite and microwave dish antennae shall not exceed two (2) meters in diameter. Building or rooftop mounted antennae shall be located so as not to be visible from abutting public streets or adjoining residences. The Commission may require appropriate screening.
- I. Any tower and/or antennae shall be designed and certified by a Connecticut Licensed Professional Engineer to withstand sustained winds in compliance with prevailing Connecticut standards while minimizing the height and visual impact.

- J. Service providers shall submit full information establishing that they have exhausted all technically feasible alternatives for minimizing the size and visual impact of the proposed installation and for sharing space or using an existing facility or structure before any permit for a new tower shall be granted.
- K. In all cases where the Commission determines that an expert/peer review of the applicant's application, service area, tower sharing, alternative location or other technical issues is reasonably warranted, the applicant shall be required to reimburse the Town for the cost of performing such expert/peer review. This payment shall be made to the Town in accordance with Section 22.6. G., at the time of application. The required deposit will be used for performing the required reviews.
- L. Where tower location is proposed for a residential zone, the applicant shall fully demonstrate that no locations in a business and industrial zone can fulfil the requirements of the proposed installation.
- M. The Commission may require the posting of a bond to secure compliance with the approved installation of all towers and/or antennae to ensure the timely and proper removal of said facilities upon discontinuance or cessation of use. The bond shall conform to Section 12 requirements.
- N. Towers must be a non-contrasting blue, gray or other neutral color as approved by the Commission.
- O. An "as-built" certification as to location and all required Connecticut standards shall be submitted to the Zoning Enforcement Officer upon completion of construction.
- P. Any freestanding, ground mounted tower must be surrounded by a minimum of one hundred (100) feet of tree screening.

22.5 Permitted Uses

- A. Uses permitted as-of right; subject to other applicable zoning regulations and permitting requirements.
 - 1. Amateur (Ham) radio facilities, when proposed and used for personal and non-commercial purposes.

2. Dishes for personal use for reception of television and microwave signals, not for rebroadcast, when said dishes are less than 1 meter in diameter.
 3. Dishes less than 2 meters in diameter for business use in a B and I zone.
- B. Uses permitted by Administrative Permit from the Zoning Enforcement Officer:
1. Antennae mounted on or in existing structures which are totally screened from view or are architecturally treated so as to blend harmoniously with the architecture of the building and which do not exceed the height restrictions for the structures in the zone where they are located or do not exceed the height of any pre-existing non conforming structure to which they are attached.
 2. Additions to existing towers, provided that those additions would have minimal adverse visual impact.
- C. Uses requiring Site Plan approval by the Commission:
The following uses must meet all general requirements, but shall only be required to comply with Section 22.6. paragraphs A, B, D, F and H.
1. Antennae which comply with Section 22.5. B., except that the total (mount and antenna) height proposed is greater than that allowed for other structures in the zone location proposed but is not higher than fifty (50) feet maximum.
 2. Antennae which are a total height, (mount and antenna) of not more than fifty (50) feet, but which are freestanding or attached to an existing utility pole or are architecturally treated or disguised, such as a flagpole.
- D. Uses Allowed Only By Special Exception after compliance with all requirements including all portions of Section 22.6. All applications under section 22.5 D. for a wireless telecommunications facility, tower or site shall require a site plan and special exception

application, which may only be approved by the Commission after the required public hearing.

1. All proposed telecommunications applications and uses which do not meet the requirements of A., B., or C. above.

22.6 Application Requirements

In addition to the general requirements, a Site Plan or Special Exception application, as appropriate, shall be submitted and shall be accompanied by the following as required in Section 22.5.

- A. A narrative description and plans including elevations, of the proposed antennae, or antennae mount or tower, associated equipment and stabilizing materials, if any. Height, design features, access roads, power lines and all other pertinent features including landscaping shall be shown and described.
- B. A map showing the extent of existing coverage from sites within the Town of Bethany and any adjacent community and the service area of the proposed facilities.
- C. A topographic profile showing the proposed tower and its associated equipment. This profile shall cover at least twice the proposed service area diameter.
- D. Architectural renderings, accurate photo simulations or similar accurate products showing sightline views, profiles and elevation drawings of the tower from all adjoining properties. Simulation photographs showing the maximum visual impact from all properties from which the tower is visible shall also be submitted for review.
- E. A statement containing a description of the siting criteria and the process by which other potential sites were considered. The application and this statement shall show and propose at least one alternative site for the location of the proposed facility.
- F. The applicant shall be required to fly a balloon at the height of the proposed tower for a period of 14 days at

the direction of the Commission during the application process.

- G. The applicant shall provide a deposit of \$10,000 at the time of application for a Section 22.5 D. application and \$2,000 for a Section 22.5 C. application, which shall be used for outside consultant review of the application. Any money remaining from the review shall be refunded to the applicant upon decision and expiration of the appeal period. If more than \$10,000 is required, it shall be paid prior to any approval of the application by the Commission.
- H. A description of technical alternatives and their costs for any proposed tower or other mount.
- I. A detailed statement describing the potential environmental impact of the proposed facility and mitigation measures to be taken.

22.7 Height and Area Requirements

- A. No tower may be proposed which exceeds twenty (20) feet above the average tree height in the area of the tower. However, no tower may be approved which exceeds 100 feet in height.
- B. All existing setback requirements shall govern except as may be noted herein.
- C. No tower may be located on any parcel of land smaller than the minimum lot size for the zone in which it is located, although the tower may be on leased land on a legally sized lot.
- D. No tower may be closer to any property line than 125% of the proposed tower height.
- E. No tower may be located within 1000 feet of an established historic district or a federal, state or locally designated historic structure.

22.8 Decision Guidelines

When deciding upon an application for a telecommunication facility the Commission shall review all the above noted material and in addition shall be

guided by the following location and installation preferences. The following are ranked in order of preference with 1. being the most preferred.

Notes: A. Attempts to mitigate any negative impacts from a proposed tower installation shall be employed most rigorously in the least preferred locations.
 B. Preference shall be given to applications for facilities located on Town owned property.

1. Totally enclosed within existing structures.
2. On existing utility structures such as chimneys, silos, water tanks, utility poles and the like with visual mitigation. A Section 22. 5. C. application is preferred.
3. On government or institutional structures including buildings, towers, church steeples, cupolas, and observation decks with visual mitigation.
4. On existing approved towers
5. On new towers in commercial or industrial zones.
6. On new towers in a residential zone.

22.9 Discontinuation of Use

The following shall apply to the removal of discontinued towers, antennae and related appurtenances:

- A. The owner/operator of any antenna (e) shall submit a report annually, on the date of the initial approval, indicating whether the facility is still in active use.
- B. A facility not in use for more than twelve (12) months shall be removed by the service facility owner. This removal shall be completed within 90 days of notification from the Planning and Zoning Commission to do so. Following the removal the site shall be restored to its original condition.