

**TOWN OF WOODSTOCK ZONING REGULATIONS**  
**SECTION 506 - WIRELESS TELECOMMUNICATIONS FACILITIES**

Adopted November 5, 2002

Wireless telecommunication facilities shall include all wireless telecommunication providers, licensed and/or regulated by the Federal Communications Commission, and associated equipment and buildings.

**A. Purpose**

The purpose of this Section is to preserve the character and appearance of the Town of Woodstock while facilitating the provision of adequate wireless telecommunications services to residents and businesses. Accordingly, this Section shall:

1. Protect the Town's scenic, historic, cultural, aesthetic, and natural resources.
2. Minimize the adverse visual effects of towers and other facilities by providing standards and requirements for the operation, siting, design, appearance, construction, monitoring, modification, and removal of wireless telecommunications facilities and towers.
3. Minimize tower and antenna proliferation by requiring the sharing of existing communications facilities, towers and sites where possible and appropriate.
4. Require the location of towers and antennas in non-residential areas and away from private homes, schools, hospitals, childcare facilities and sensitive natural areas.

**B. Authority**

Pursuant to 24 V.S.A. § 4401 et seq. the Woodstock Planning Commission and Town Zoning Board of Adjustment are authorized to review, approve, conditionally approve, and deny applications for wireless telecommunications facilities. Pursuant to 24 V.S.A. § 4407, the Planning Commission and Town Zoning Board of Adjustment are authorized to hire qualified persons to conduct an independent technical review of applications and to require the applicant to pay for all reasonable costs thereof.

**C. Exemptions**

The following wireless telecommunications facilities are exempt from Section 506 provided the height of such facility does not exceed twenty (20) feet. If the facility exceeds twenty (20) feet, a Conditional Use Permit is required.

1. Amateur radio tower
2. Citizens band radio
3. Receiving antennae
4. Police, fire, ambulance, and other emergency dispatch
5. Single use local business radio dispatch

No other wireless telecommunications facility shall be considered exempt from these regulations for any reason whether or not said facility is proposed to share a facility or other structure with such exempt uses.

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**D. Permitted and Prohibited Locations**

Wireless telecommunications towers or facilities may be permitted as conditional uses in all but the following districts or locations:

1. Flood Hazard District
2. Residential High Density
3. Residential Medium Density
4. Residential Low Density
5. Hamlet Commercial District
6. Residential Office District
7. Property listed or eligible for listing on the Federal Historic Register unless located completely within an existing structure.

Additionally, freestanding telecommunications towers or antennas may not be located:

1. Closer than 300 feet to any existing structure, river, perennial stream, designated wetland, any known archeological site or the habitat of any State listed Rare or Endangered Species.
2. Within view of a designated scenic road or highway.
3. Within view from any Historic District or property eligible to be listed on the Federal Historic Register.
4. Within view of designated hiking trails, national, state, or municipal park.
5. Within open areas.
6. Within residential areas.
7. Near childcare facilities.
8. Near schools.
9. Near hospitals or health care facilities

**E. Approval Process**

1. **Applicant / Agent:** An applicant for a permit must be a personal wireless service provider or FCC licensee, or must provide a copy of its executed contract to provide land or facilities to such an entity, to the Administrative Officer at the time that an application is submitted. A permit shall not be granted for a tower or facility to be built on speculation.
2. **Conditional Use and Site Plan Approval:** Any construction, alteration, modification (including the installation of antennas for new uses), or installation of wireless telecommunications facilities not exempted in subsection 506C, whether new (non co-located) or co-located, must first be reviewed under the requirements of Section 506 by the Zoning Board of Adjustment as a conditional use and by the Planning Commission for site plan approval prior to the issuance of a zoning permit by the Administrative Officer.

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The Planning Commission and the Zoning Board of Adjustment shall have the authority to impose conditions consistent with the purpose of this section in approving a proposed facility. Furthermore, the Board may designate an alternative location for the tower to be evaluated by the applicant if it is determined that the proposed location would result in undue adverse aesthetic impacts.

- a. Conditional Use Review - Co-location Requirements:** An application for a new wireless telecommunications facility shall not be approved unless the Town Zoning Board of Adjustment finds that the new facility cannot be accommodated on an existing or approved tower or structure due to one of the following reasons, as documented by a qualified engineer licensed to practice in the State of Vermont:
- i.** The proposed antennas and equipment would exceed the *structural or spatial capacity* of the existing or approved tower or facility. Additionally, the existing or approved tower cannot be reinforced, modified or replaced to accommodate planned or equivalent equipment, at a reasonable cost, to provide coverage and capacity comparable to that of the proposed facility.
  - ii.** The proposed antennas and equipment would cause *radio frequency interference (RFI)* materially impacting the usefulness of other existing or permitted equipment at the existing or approved tower or facility and such interference cannot be mitigated at a reasonable cost.
  - iii.** The proposed antennas and equipment, either alone or together with existing facilities, equipment or antennas, would create *excessive radio frequency radiation (RFR)* in violation of federal standards or requirements.
  - iv.** *Existing structures* cannot accommodate, or be reasonably modified to accommodate, the planned equipment at a height necessary to function reasonably or are too far from the area of needed coverage to function reasonably.
  - v.** *Aesthetic reasons* make it unreasonable to locate the planned equipment upon an existing or approved tower or building.

New wireless telecommunications facilities shall be designed structurally, electrically, and in all other respects to accommodate future placement of antennas upon the tower and to accept additional antennas mounted at varying heights when overall permitted height allows.

- b. Conditional Use - Design Criteria:** Proposed facilities shall not interfere with the view from any public park, natural scenic vista, historic building or district, or major view corridor.

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Prior to granting conditional use approval, the Town Zoning Board of Adjustment shall make affirmative findings for each of the following criteria in addition to the other applicable provisions set forth in this Section 506 and Section 710 Conditional Uses.

- i. Height / Mass:** The height and mass of facilities shall not exceed that which is essential for the intended use and public safety.

  - (1) To protect public safety and to preserve the scenic character and appearance of the area, the height limit for towers, antennas and tower-related fixtures shall be not more than 10 feet above the average height of the tree line measured within 150 feet of the highest vertical element of the telecommunications facility. In no case shall the tower exceed 35 feet, absent the above stated tree standard.
  - (2) In the event that an existing structure (other than a wireless communication tower) is proposed as the mount for the facility, the height of that structure shall not be increased by more than ten (10) feet above the highest point of a flat or mansard roof or ten (10) feet above the midpoint of other roofs unless the facility is completely concealed (e.g., in a chimney, steeple, flagpole). The increase in height of the structure shall be in scale and proportionality to the structure as originally configured.
  - (3) Utility or service lines shall be buried underground.
  
- ii. Color/Materials/Glare:** Towers, antennas, and any necessary support buildings or structures shall be designed to blend into the surrounding environment through the use of color camouflaging and architectural treatment, except in cases in which the Federal Aviation Authority (FAA), state or federal authorities have dictated color. Use of stealth design, including those which imitate natural features, may be required in visually sensitive locations. In any case, materials used for the exterior of any structure shall be of a type, style and location that will minimize glare.
  
- iii. Lighting / Marking:** Unless required by the Federal Aviation Administration (FAA), no lighting of towers is permitted. In any case where a tower is determined to need obstruction marking or lighting, the applicant must demonstrate that it has or will request the least visually obtrusive marking and/or lighting scheme in FAA applications. Copies of required FAA applications shall be submitted by the applicant. To eliminate the need for lighting, heights may be reduced or another location selected.

Emergency, safety or security lighting may be utilized when people are on site, but limited to lighting that is directed downward towards the facility,

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shielded and away from neighboring properties. All lighting shall be extinguished when no one is present.

- iv. **Signage:** No commercial signs or lettering shall be placed on a tower or facility. Signage shall be limited to that required by federal or state regulation.
- v. **Noise:** In addition to requiring compliance with the Town's 70 decible performance standards for noise, or any future more restrictive standard, the Board may impose conditions to minimize the effect of noise from the operation of machinery or equipment upon adjacent properties.
- vi. **Screening:** All facilities shall be designed to blend into the surrounding environment though the use of existing vegetation, landscaping and screening, the use of compatible materials and colors, or other camouflaging techniques.

A fifty (50) foot vegetated buffer area shall screen views of the facility year-round from all directions. Such buffer shall be protected by a landscape easement or be within the area of the provider's lease. The easement or lease shall specify that the trees within the buffer shall be maintained and shall not be removed or trimmed, unless dead or dying and present a hazard to persons or property; or approval is granted by the Zoning Board of Adjustment.

- vii. **Aesthetic Impact:** Towers, antennas, and any necessary support structures, including utility or service lines, shall be designed and located to prevent disruption to the scenic character or beauty of the area and to avoid creating an undue adverse aesthetic impact on prominent ridgelines, hilltops, trails, view corridors.

In determining whether a facility's aesthetic impact would be undue and adverse, the Board will consider:

- (1) The amount of time and the time of year during which the proposed facility would be viewed by the traveling public on a public highway, public trail, or public water body;
- (2) The frequency of the view experienced by the traveling public;
- (3) The degree to which the view of the proposed facility is screened by existing vegetation, the topography of the land, and existing structures;
- (4) Background features in the line of sight, from all angles of view, to the proposed facility that obscure the facility or make it more conspicuous;
- (5) The distance of the proposed facility from key vantage points and the proportion of the facility that will be visible above the skyline or treeline;

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- (6) The sensitivity or unique value of a particular view affected by the proposed tower;
  - (7) The number of travelers and residents of Woodstock and neighboring towns who will be affected by the alteration to the scenic character of the area;
  - (8) The sensitivity or unique value of the particular view affected by the proposal; and
  - (9) Significant disruption of a viewshed that provides context to a historic or scenic resource.
- c. **Site Plan Criteria:** The following shall be reviewed in addition to Section 709 Site Plan Review:
- i. **Screening:** All facilities shall be designed to blend into the surrounding environment through the use of existing vegetation, landscaping and screening, the use of compatible materials and colors, or other camouflaging techniques. A fifty (50) foot vegetated buffer area shall screen views of the facility year-round from all directions.
  - ii. **Setbacks:** All buildings and structures accessory to a tower (except for electric power poles where specifically exempted by the Board) shall (a) meet the minimum setback requirements of the underlying zoning district or (b) be set back one hundred five percent (105%) of its height from all property lines, whichever is greater. The 105% setback may be satisfied by including the areas outside the property boundaries if secured by an easement. The easement shall be shown on site plans and the terms of the easement shall be provided as part of the Application Materials.
  - iii. **Fencing:** Where deemed necessary by the Planning Commission, a new wireless telecommunications facility shall be fenced to discourage trespass on the facility and to discourage climbing on any structure by trespassers.
  - iv. **Landscaping:** Existing on-site vegetation outside the immediate site for the wireless facility shall be preserved or improved. Disturbance to existing topography shall be minimized unless the disturbance is demonstrated to result in reducing the visual impact of the facility on surrounding properties and other vantage points
  - v. **Access Roads and Above Ground Facilities:** Where the construction of new wireless telecommunications towers and facilities requires construction or improvement to access roads, to the extent practicable, roads shall follow the contour of the land, and be constructed or improved within forest or forest fringe areas, and not in open fields. The Town may require closure of access

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roads to vehicles following facility construction where it is determined that site conditions warrant the same and where maintenance personnel can reasonably access the facility site on foot.

**F. Application Requirements:**

In addition to Section 708 Application Information, the applicant shall provide the following:

1. **Applicant/Agent:** The name and address of the applicant, the record landowners and any agents of the landowners or applicants as well as an applicant's registered agent and registered office. If the applicant is not a person, the name and address of the business and the state in which it is incorporated and has its principal office shall be provided.
2. **Contact:** The name(s), address(es), fax/telephone numbers and email addresses of the persons authorized to act in the event of an emergency regarding the structure or safety of the facility.
3. **Abutters:** The names and addresses of the record owners of all abutting property. If proposed facility might be visible from parcels in a neighboring community, the names and addresses of the neighboring Planning Commission and Regional Planning Commission must also be provided.
4. **Location Map** using the most recent United States Geological Survey Quadrangle map showing the area within a three mile radius of the proposed facility site, indicating facility location, property lines of facility parcel, and all easements / rights of way needed for access from a public way to the facility.
5. **Vicinity Map** showing surrounding area within a 2,500-foot radius of the facility site, including the facility or tower, topography, public and private roads and driveways, buildings and structures, water bodies, wetlands, landscape features, historic sites, and habitats for endangered species.
6. **Site Plan** drawn at a scale no smaller than one (1) inch equals fifty (50) feet, indicating (a) the approximate average height of existing vegetation within 200 feet of the facility base and (b) all proposed improvements including landscaping, utility lines, guy wires, screening and roads.
7. **Elevations** showing all facades and indicating all exterior materials and color of towers, buildings and associated facilities.
8. **Computer-generated Photo Simulations** showing the proposed facility from all public rights-of-way and any adjacent property from which it may be visible. Each photo must be labeled with the line of sight, elevation and the date taken imprinted on the photograph. The photos must show the color of the facility and method of screening.

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- 9. Sequence and Schedule** for completion of each phase of the entire project.
- 10. Right of Way and Easement Agreements**, if applicable.
- 11. Report:** A report prepared by qualified engineers that:
  - a. Describes the facility height, design and elevation. [structural engineer]
  - b. Documents the height above grade for all proposed mounting positions for antennas to be co-located on a telecommunications tower or facility and the minimum separation distances between antennas. [radio frequency (RF) engineer]
  - c. Describes the tower's proposed capacity, including the number, height, and type(s) of antennas the tower is expected to accommodate. [structural engineer]
  - d. Demonstrates that existing telecommunications sites and structures, or other structures proposed by the applicant within 5 miles of the proposed site cannot reasonably provide adequate coverage and adequate capacity to the Town of Woodstock. The documentation shall include, for each facility site or proposed site within such radius, the exact location, ground elevation, height of tower or structure, and sufficient additional data to allow the independent reviewer to verify that other locations will not be suitable.
  - e. Demonstrates that the applicant has analyzed the feasibility of using "repeaters" or micro-cells in conjunction with all facility sites listed to provide coverage to the intended service area.
  - f. Describes potential changes to those existing facilities or sites in their current state that would enable them to provide adequate coverage.
  - g. Describes the output frequency, number of channels, sector orientation, and power output per channel, as appropriate for each proposed antenna.
  - h. Includes a written explanation for use of the proposed facility, including reasons for seeking capacity in excess of immediate needs, if applicable, as well as plans for additional development and coverage within the Town.
  - i. Demonstrates the tower's compliance with current Electronic Industries Association/Telecommunications Industries Association (EIA/TIA) 222 Revision Standard entitled "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures."
  - j. Provides assurance that at the proposed site the applicant will establish and maintain compliance with all FCC rules and regulations, particularly with respect to radio frequency exposure. The Town may hire independent engineers to perform evaluations of compliance with the FCC regulations, standards and requirements on an annual basis at unannounced times, at the applicant's expense (Pursuant to 24 V.S.A. § 4407).
  - k. Includes other information considered necessary by the Planning Commission or Town Zoning Board to evaluate the request.
  - l. Includes the structural engineers' stamp and registration numbers and credentials of radio frequency engineers. A letter of intent committing the facility owner and his



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or her successors to permit shared use of the facility if the additional user agrees to meet reasonable terms and conditions for shared use.

- m. For a facility to be installed on an existing structure, a copy of the applicant's executed contract with the owner of the existing structure (to be provided to the Administrative Officer at the time an application is submitted).
- n. To the extent required by the National Environmental Policy Act (NEPA) as administered by the FCC, a complete Environmental Assessment (EA) draft or final report describing the probable impacts of the proposed facility.
- o. Copy of the application or draft application for an Act 250 permit, if applicable.

**12. Performance Bond**

A performance bond in the minimum amount of \$2,000.00 posted by the applicant, shall accompany the completed application.

**13. Expense Reimbursement**

No permit for a tower shall be issued prior to reimbursement to the Town of Woodstock for all expenses incurred by said town, pertaining to the independent technical review of the application.

**G. Continuing Obligations**

Upon receiving a permit, the permittee shall annually demonstrate compliance with all FCC standards and requirements regarding radio frequency exposure, and provide the basis for his or her representations. Such report to be prepared by a qualified engineer selected by the Town. Permittee is obligated to contact the Town Zoning Administrator 90 days prior to the due date of this report to determine the engineering firm selected by the Town to prepare the report. All costs of preparing the report shall be at the sole expense of the permittee.

**H. Facility Removal**

Abandoned, unused, obsolete, or noncompliant facilities shall be removed as follows:

- 1. **Declaration of Use:** The owner of a facility shall annually, on January 15, file a declaration with the Town of Woodstock's Administrative Officer certifying the continuing safe operation of every facility installed subject to these regulations. Failure to file a declaration shall mean that the facility is no longer in use and considered abandoned.

An owner who has failed to file an annual declaration with the Administrative Officer by January 15 may, by February 15, file a declaration of use or intended use and may request the ability to continue use of the facility/tower.

- 2. **Removal:** Facilities which are constructed in violation of permit conditions or application representations and facilities deemed to be abandoned or unused shall be removed within 180 days of cessation of operations at the site unless a time extension is

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approved by the Zoning Board of Adjustment. In the event the tower or facility is not removed within 180 days of the cessation of operations at a site, the municipality shall notify the owner and may remove the tower or facilities. Costs of removal shall be assessed against the property or tower owner.

3. **Bond:** Applicant shall, as a condition of the conditional use permit, provide a financial surety bond payable to the Town of Woodstock and acceptable to the Board to cover the cost of removal of the facility and remediation of the landscape, should the above clauses be invoked.

**I. Maintenance Requirements**

The Applicant shall maintain all facilities. Such maintenance shall include, but not be limited to painting, structural integrity, and landscaping. In the event the applicant fails to maintain the facility, the Town of Woodstock may undertake such maintenance at the expense of the applicant or landowner.

**J. Insurance Requirements**

The facility owner shall maintain adequate insurance on all facilities. In no event shall such liability insurance be less than five million dollars.

**K. Consultant Fee**

In addition to application / review fees, the Applicant shall be charged the reasonable cost of independent technical assessment(s) incurred during the review and permitting process.

**L. Definitions**

***Adequate Capacity:*** Capacity for wireless telephony is considered to be "adequate" if the grade of service ("GOS") is p.05 or better for median teletraffic levels offered during the typical busy hour, as assessed by direct measurement of the facility in question. The GOS shall be determined by the use of standard Erlang B calculations. As call blocking may occur in either the land line or radio portions of a wireless network, Adequate Capacity for this regulation shall apply only to the capacity of the radio components. Where capacity must be determined prior to the installation of the personal wireless services facility in question, Adequate Capacity shall be determined on the basis of a 20% busy hour (20% of all offered traffic occurring within the busiest hour of the day), with total daily traffic based on aggregate estimates of the expected traffic in the coverage area.

***Adequate Coverage:*** Coverage for wireless telephony is "adequate" within that area surrounding a base station where the predicted or measured median field strength of the transmitted signal is such that most of the time, transceivers properly installed and operated will be able to communicate with the base station without objectionable noise (or excessive bit-error-rate for digital) and without calls being dropped. In the case of cellular communications in a rural environment, this would be a signal strength of at least -90 dBm. It is acceptable for there to be holes within the area of adequate coverage as long as the signal regains its strength further away from the base station. The outer

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boundary of the area of adequate coverage, however, is that location past which the signal does not regain.

***Affiliate:*** When used in relation to an operator, another person who directly or indirectly owns or controls, is owned or controlled by, or is under common ownership or common control with the operator, or an operator's principal partners, shareholders, or owners of some other ownership interest. When used in relation to the municipality, any agency, board, authority or political subdivision affiliated with the municipality or other person in which the municipality has legal or financial interest.

***Alternative Design Tower Structure:*** Artificial trees, clock towers, bell steeples, light poles, silos and similar alternative-design mounting structures that camouflage or conceal the presence of antennas or towers (see also *Stealth Facility*).

***Antenna:*** A device for transmitting and/or receiving electromagnetic waves, which is attached to a tower or other structure.

***Antenna Height:*** The vertical distance measured from the base of the antenna support structure at grade to the highest point of the structure. If the support structure is on a sloped grade, then the average between the highest and lowest grades shall be used in calculating the antenna height.

***Antenna Support Structure:*** Any pole, telescoping mast, tower tripod, or any other structure which supports a device used in the transmitting and/or receiving of electromagnetic waves.

***Applicant:*** A person who applies for a telecommunications facility siting. An applicant can be the telecommunications service provider with the owner's written permission (or other legally designated representative) or the owner of the property.

***Available Space:*** The space on a tower or structure to which antennas of a telecommunications provider are both structurally able and electromagnetically able to be attached.

***Base Station:*** The primary sending and receiving site in a telecommunications facility network. More than one base station and/or more than one variety of telecommunications provider can be located on a single tower or structure.

***Bulletin 65:*** Published by the Federal Communications Commission (FCC) Office of Engineering and Technology specifying radio frequency radiation levels and methods to determine compliance.

***Cell Site:*** A tract or parcel of land that contains a cellular communication antenna, its support structure, accessory building(s), and parking, and may include others uses associated with and ancillary to cellular communications transmission.

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**Cellular Service:** A telecommunications service that permits customers to use wireless, mobile telephones to connect, via low-power radio transmission sites called cell sites, either to the public switched network or to other mobile cellular phones.

**Cellular Telecommunications:** A commercial Low Power Mobile Radio Service bandwidth licensed by the FCC to providers in a specific geographical area in which the radio frequency spectrum is divided into discrete channels which are assigned in groups to geographic cells within a service area and which are capable of being reused in different cells within the service area.

**Cellular Telecommunications Facility:** Consists of the equipment and structures at a particular site involved in receiving telecommunication or radio signals from mobile radio communications sources and transmitting those signals to a central switching computer which connects the mobile unit with the land-based telephone lines.

**Channel:** The segment of the radiation spectrum to or from an antenna which carries one signal. An antenna may radiate on many channels simultaneously.

**Co-location:** Locating wireless communications equipment from more than one provider on a single site.

**Common Carrier:** An entity licensed by the FCC or a state agency to supply local and/or long distance telecommunications services to the general public at established and stated rates.

**Communication Equipment Shelter:** A structure located at a base station designed principally to enclose equipment used in connection with telecommunications transmissions.

**Communication Tower:** A guyed, monopole, or self-supporting tower, constructed as a free standing structure or in association with a building, other permanent structure or equipment, containing one or more antennas intended for transmitting and/or receiving television, AM/FM radio, digital, microwave, cellular, telephone, or similar forms of electronic communication.

**Communications Facility:** A land facility supporting antennas and/or microwave dishes that sends and/or receives radio frequency signals. Communications facilities may include structures, towers or accessory buildings.

**dBm:** Unit of measure of the power level of a signal expressed in decibels above 1 milliwatt.

**Directional Antenna:** An antenna or array of antennas designed to concentrate a radio signal in a particular area.

**Dish Antenna:** A dish-like antenna used to link communications sites together by wireless transmission of voice or data. Also called microwave antenna or microwave dish antenna.

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**Facility Site:** A property, or any part thereof, which is owned or leased by one or more telecommunications facility(s) and where required landscaping is located.

**FCC:** Federal Communications Commission. The government agency responsible for regulating telecommunications in the United States.

**Frequency:** The number of cycles completed each second by an electromagnetic wave measured in hertz (Hz).

**GHz:** Gigahertz. One billion hertz.

**Hertz:** (Hz) One hertz is the frequency of an electric or magnetic field which reverses polarity once each second, or one cycle per second.

**Location:** References to site location shall be the exact longitude and latitude, to the nearest tenth of a second. Bearing or orientation should be referenced to true North.

**MHz:** Megahertz, or one million hertz.

**Micro-Cell:** A low power mobile radio service telecommunications facility used to provide increased capacity in high call-demand areas or to improve coverage in areas of weak coverage.

**Microwave Antenna:** A dish-like antenna manufactured in many sizes and shapes used to link communication sites together by wireless transmission of voice or data.

**Monitoring:** The measurement, by the use of instruments in the field, of radio frequency exposure from telecommunications facilities, towers, antennas or repeaters.

**Monopole:** A single self-supporting vertical pole with no guy wire anchors, usually consisting of a galvanized or other unpainted metal or a wooden pole with below grade foundations.

**Omnidirectional Antenna:** An antenna that is equally effective in all directions and whose size varies with the frequency and gain for which it is designed.

**Permit:** Embodies the rights and obligations extended by the municipality to an operator to own, construct, maintain, and operate its facility within the boundaries of the municipality.

**Personal Communications Services or PCS:** Digital wireless telephone technology using higher frequency spectrum than cellular.

**Personal Wireless Services:** Commercial mobile services, unlicensed wireless exchange access services. These services include: cellular services, personal communications services, specialized mobile radio services, and paging services.

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***Preexisting Towers and Antennas:*** Any tower or antenna for which a permit has been issued prior to the effective date of these regulations.

***Radiated-Signal Propagation Studies or Coverage Plots:*** Computer generated estimates of the signal emanating, and prediction of coverage, from antennas or repeaters sited on a specific tower or structure. The height above ground, power input and output, frequency output, type of antenna, antenna gain, topography of the site and its surroundings are all taken into account to create these simulations. They are the primary tools for determining a need and whether the telecommunications equipment will provide adequate coverage for that site.

***Repeater:*** A small receiver/relay transmitter and antenna of relatively low power output designed to provide service to areas which are not able to receive adequate coverage directly from a base or primary station.

***Roof and/or Building Mount Facility:*** A facility in which antennas are mounted to an existing structure on the roof (including rooftop appurtenances) or a building face.

***Scenic View:*** A scenic view is a wide angle or panoramic field of sight and may include natural and/or manmade structures and activities. A scenic view may be from a stationary viewpoint or be seen as one travels along a roadway, waterway, or path. A view may be to a far away object, such as a mountain, or a nearby object.

***Self-Supporting Tower:*** A communications tower that is constructed without guy wires.

***Spectrum:*** Relating to any transmissions or reception of electromagnetic waves.

***Stealth Facility:*** Any communications facility which is designed to blend into the surrounding environment. Examples of stealth facilities may include architecturally screened roof-mounted antennas, building-mounted antennas painted to match the existing structure, antennas integrated into architectural elements, antenna structures designed to look like light poles, and structures designed to resemble natural features such as trees or rock outcroppings. (See also Alternative Design Tower Structure.)

***Structurally Able:*** The determination that a tower or structure is capable of carrying the load imposed by the proposed new antenna(s) under all reasonable predictable conditions as determined by professional structural engineering analysis.

***System:*** The communications transmission system operated by a telecommunications service provider in the municipality or region.

***Telecommunications Facility:*** All equipment (including repeaters) and locations of equipment with which a telecommunications provider transmits and receives the waves which carry their services.

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This facility may be sited on one or more towers or structure(s) owned and permitted by the provider or another owner or entity.

***Telecommunications Provider:*** An entity licensed by the FCC to provide telecommunications services to individuals or institutions.

***Temporary Wireless Communication Facility:*** Any tower, pole, antenna, etc., designed for use while a permanent wireless facility is under construction, or for a special event or conference.

***Tower:*** A vertical structure for antenna(s) that provide telecommunications services.

***View Corridor:*** A three dimensional area extending out from a viewpoint. The width of the view corridor depends on the focus of the view. The focus of the view may be a single object, such as a mountain, which would result in a narrow corridor, or a group of objects, such as a downtown skyline, which would result in a wide corridor. Panoramic views have very wide corridors and may include a 360-degree perspective. Although the view corridor extends from viewpoint to the focus of the view, the mapped portion of the corridor extends from the viewpoint and is based on the area where base zone heights must be limited in order to protect the view.

***Whip Antenna:*** A vertical antenna that normally transmits signals in 360 degrees. Whip antennas are typically cylindrical in shape, narrow (less than 6 inches in diameter) and long (often measure 18 inches in height or more).