

Article 18 - Telecommunication Towers

Section 16-18.1 Authority. This ordinance is enacted pursuant to the general zoning powers granted to the Town of Blowing Rock by Section 160A-381 of the General Statutes of the State of North Carolina, as well as the authority granted by Section 704 of the Telecommunications Act of 1996.

Section 16-18.2 Purpose. The purpose of this ordinance is to establish general guidelines and regulations governing the location, size, and design of telecommunication towers to be located within the Town of Blowing Rock.

Section 16-18.3 Goals. The goals of this ordinance are:

- a) To protect the health, safety, and welfare of the citizens of Blowing Rock.
- b) To encourage the location of towers in non-residential areas and minimize the total number of towers throughout the community.
- c) To encourage the joint use of new and existing tower sites.
- d) To minimize the adverse visual impact of towers and antennas.
- e) To enhance the ability of the providers of telecommunication services to provide such services to the community in a safe, effective, and efficient manner.

Section 16-18.4 Applicability. This Ordinance shall apply to the entire planning jurisdiction of the Town of Blowing Rock.

Section 16-18.5 Permit Required. Except as otherwise provided in this Ordinance, no telecommunication tower shall be erected, constructed, placed, enlarged, moved, used, maintained, or altered unless a Conditional Use Permit has been approved by the Town Council and a tower permit has been obtained from the Administrator. No tower permit shall be issued that is not in compliance with this Ordinance. No building permit shall be issued for any tower that falls under the provisions of this Ordinance unless that tower has received a tower permit.

16-18.5.1 Non-commercial, individual use towers that are twenty feet in height or less shall require a Zoning Permit issued by the Administrator in lieu of the Conditional Use Permit.

16-18.5.2 Existing towers owned by governmental agencies and designed for non-commercial emergency communications may be replaced with a tower equal in height (or shorter) to the replaced tower. All other ordinance provisions are applicable.

16-18.5.3 All applications for tower permits shall be submitted to the Administrator on the designated form. At minimum, the application shall include the following information:

- a) Name, address, and telephone number of the applicant.

- b) Street address, parcel number, and/or legal description of the premises or property upon which the tower is to be located.
- c) Written statement from the property owner of the proposed tower site authorizing the placement of the tower on the property.
- d) A site development plan prepared by a North Carolina Registered Land Surveyor and containing the following information:
 - 1) Title block containing the tower owner's name, the property owner's name, and their addresses; scale; north arrow; vicinity map; tax parcel identification number(s); and the tower's latitude and longitude coordinates;
 - 2) The name, address, signature, and seal of the surveyor preparing the site development plan;
 - 3) The surveyed boundary lines of the parcel(s) that will contain the proposed tower and its fall area; land contours;
 - 4) The name, addresses, and tax parcel identification numbers of all owners of property abutting the subject property; and existing land uses surrounding the site;
 - 5) All structures located on the parcel, all existing and proposed roads and parking areas; and overhead utilities and utility connections within and to the proposed site;
 - 6) All existing towers on the property or any towers whose fall area encroaches onto the property;
 - 7) The proposed tower's location, the proposed fall area, and the location of all support structures and guy line anchors;
 - 8) The location of existing and/or proposed fences;
 - 9) The ground elevation of the proposed tower's base based on mean sea level as provided through FEMA control points or another similar source.
 - 10) The height of the vegetative canopy at the site.
- e) A preliminary tower design plan prepared by a North Carolina Registered Professional Engineer and containing the following information:
 - 1) The tower owner's name and address, scale, north arrow, vicinity map, and tax parcel identification number;
 - 2) The name, address, signature, and seal of the engineer preparing the tower design plan;
 - 3) Information describing the tower height and design; a cross-section of the structure; engineering specifications detailing the construction of the tower, the base of the tower; the foundations for all guy line anchors, and support structures;
 - 4) A tower elevation showing the proposed painting and lighting schemes and all proposed antennas. Information describing the tower's capacity, including the number and type of antennas that it can accommodate.
 - 5) An elevation of each proposed set of guy line anchors;
 - 6) The proposed tower design loads;
 - 7) Designed fall zone for tower structure. (Note: All towers shall be set back from any surrounding property lines by a distance that is equal to the height of the tower

unless a North Carolina Registered Engineer certifies that the fall zone of the tower and appurtenances will be within the setback area proposed.)

- f) Exterior lighting specifications.
- g) Detailed landscaping plan.
- h) A listing of the inventory of the applicant's existing towers within the Town and within a mile of the Town's limits, including specific information about the location, height, and design of each tower.
- i) A map or description of the service area(s) for the proposed tower's antenna(s). The applicant shall identify other possible alternatives within the service area for the proposed tower's antenna(s) and explain why the proposed tower is necessary and why existing towers and structures cannot accommodate the proposed antenna(s).
- j) If a proposed tower site is within one mile of the centerline of the Blue Ridge Parkway or within the viewshed of the Blue Ridge Parkway, the applicant shall inform the National Park Service of the proposed tower siting. Park Service recommendations shall be given reasonable consideration. The applicant must include documentation of the recommendations from the Park Service as well as any specific actions taken by the applicant, in response to those recommendations, to mitigate the impact of the proposed tower on the parkway. The Park Service shall be provided at least 45 days from the date of notification in which to respond. Failure of the Park Service to respond to the applicant within the 45 days shall satisfy the requirements of this subsection.
- k) The applicant must present evidence of fee simple ownership or a recorded leasehold interest from the record owner(s) of all property within a radius equal to the height of the tower. Any lease agreement must allow the leaseholder to enter into leases with other providers. Any lease agreement must specify that if the applicant/provider fails to remove the tower upon 180 days of its discontinued use, the responsibility for removal shall fall upon the landowner.
- l) The applicant shall identify any requested variances to the standards contained in this Ordinance, the reasons for seeking the variances, and any measures that are proposed to mitigate the possible adverse effects of the proposed variances.
- m) The application shall be accompanied by payment of a non-refundable processing fee in the amount of Two Hundred Fifty Dollars (\$250.00).

Section 16-18.6 Issuance of Permit/Expiration. A conditional use permit for a telecommunication tower shall expire five years after the effective date of the permit approval by the Town Council. A permittee wishing to continue the use of a specific tower must apply for a renewal of the conditional use permit at least six months prior to the expiration of the permit. In considering the request for the renewal of the conditional use permit, the Town Council shall apply all regulations then in effect and shall consider the impact that any changes in technology since the approval of the original permit may have had on the need for the tower or the tower's design.

Following the Town Council's approval of a conditional use permit for a proposed tower, and the permit owner's acknowledgment, acceptance, and execution of the conditional use permit,

the Administrator shall issue a tower permit. If a building permit is not obtained for the construction of the tower within 12 months after the approval of the conditional use permit, or if the conditional use permit expires in accordance with the provisions of Section 16-4.14 of the Land Use Code, then the tower permit shall be void.

Section 16-18.7 Tower Approval Standards. In addition to the other criteria set forth in the Land Use Code for the approval and issuance of conditional use permits by the Town Council, the Council shall apply the standards contained herein in considering a tower application.

16-18.7.1 Only monopole towers or alternative tower structures shall be permitted. An alternative tower structure, which employs high quality stealth technology appropriate for the proposed location, shall be required unless the applicant can demonstrate to the satisfaction of the Town Council that an alternative tower structure is not practical or feasible. The comparative cost of the alternative tower structure or stealth technology shall not be the sole basis for determining whether it is practical or feasible.

16-18.7.2 At a minimum, any proposed tower shall provide a substantial additional needed service or benefit to the residents in Blowing Rock and/or residents in the Blowing Rock ETJ, that cannot otherwise be met. Applicants for new cellular towers, alternative tower structures, and commercial telecommunications antennas shall provide a map that indicates the signal strength or new service areas provided by the proposed tower/antennas.

16-18.7.3 The tower must be designed to meet the ANSI/EIA/TIA-222-E standards of minimum 100-year return wind speed and a minimum 2 inch of solid radial ice.

16-18.7.4 Towers shall be sited on a property so that all ice-fall or other debris from a potential tower failure can be contained on the property. The minimum distance from the tower's base to the property line shall be equal to the tower's height. However, the setback distance may be reduced by the Town Council where a North Carolina registered engineer has certified that the tower has been designed so that the fall zone will be within a reduced setback area. Guy wires and other support devices shall be no closer than 20 feet to any lot line.

16-18.7.5 A tower shall be set back from other on-site and off-site towers and supporting structures such that the failure or collapse of one tower will not strike another tower or its support structure.

16-18.7.6 The tower shall be designed and placed on the site in a manner that takes maximum advantage of existing trees, mature vegetation, and structures so as to (a) use the existing site features to screen the tower from prevalent views or (b) use existing site features as a background so that the tower blends into the background with increased site distances.

16-18.7.7 No artificial lighting shall be permitted on towers except as required to meet the minimum standards of the Federal Aviation Administration. If lighting is required, the Administrator shall review the available lighting alternatives and approve the design that would cause the least disturbance to surrounding properties and views. Security lighting at the base of a tower may be provided if the lighting is shielded so that no light is directed toward adjacent properties or rights-of-way.

16-18.7.8 The base of the tower shall be surrounded by a fence or wall at least eight feet in height unless the tower is constructed entirely on a building over eight feet in height.

16-18.7.9 No tower or alternative tower structure located on any major mountain ridge shall have its highest point at an elevation greater than 30 feet higher than the vegetative canopy immediately surrounding the base of the tower. No tower at a location other than a major mountain ridge shall have its highest point at an elevation greater than 100 feet from the ground.

16-18.7.10 The proposed tower shall be engineered and constructed to accommodate one additional antenna that is at least as large as the largest proposed antenna identified in Section 16-18.5.3,e,4) and 16-18.6.1. Tower permit approval is conditioned upon the tower owner agreeing to allow the future co-location of other antennas upon the tower structure. This provision shall not apply to monopole towers or alternative tower structures located on a major mountain ridge where the height restriction placed on the tower or alternative tower structure makes it infeasible or impractical to place more than one antenna on the tower or structure.

16-18.7.11 In the event that a dispute arises as to whether a permittee has exercised good faith in accommodating other users, the Town may require a third party technical study (at the expense of the permittee or the proposed user, or both) to determine whether the tower could accommodate the proposed use.

16-18.7.12 Failure to comply with the co-location requirements of this subsection may result in the denial of a permit request or the revocation of an existing permit.

16-18.7.13 Towers shall be light gray or other blending color as approved by the Town, except when some other color may be required by applicable Federal or State regulations.

16-18.7.14 Property located within the tower's fall area shall not be subdivided so long as the tower is standing.

16-18.7.15 Existing mature tree growth and natural land forms on the tower site shall be preserved to the maximum extent possible. The tower and support structures shall be designed and placed on the site in a manner that will take maximum advantage of existing trees and mature vegetation so that the existing site features will be used to screen the tower and support structures from prevalent views.

16-18.7.16 Where a tower is proposed adjacent to a residential area, the setback space is to be used as a buffer zone. The buffer shall consist of a semi-opaque planting/landscaping screen as described in Section 16-22.5 and Appendix E of the Land Use Code. Trees shall be at least six to seven feet tall for evergreens and six to eight feet tall with a 1.5-inch caliper for deciduous trees at the time of planting and shall reach a height of no less than 20 feet at maturity.

16-18.7.17 The applicant must be willing to allow the Town of Blowing Rock, the Blowing Rock Fire Department, the Blowing Rock Rescue Squad, or other public entities use of the tower under reasonable terms and conditions if a request is made for such use within 30 days of the filing of the permit application, provided that tower load and frequency compatibility issues are satisfied.

16-18.7.18 Proposed towers shall not be permitted within the R-15, R-10, R-6, R-MH, or HMC zoning districts or within one-half mile of the centerline of the Blue Ridge Parkway. Within the other acceptable areas, the Town Council shall give preference to proposed tower sites that are not located on a major mountain ridge or within view of the Blue Ridge Parkway.

16-18.7.19 No tower sites shall be approved for any property located in an approved historic district, listed in the National Register of Historic Places, or listed by the North Carolina Department of Cultural Resources, Division of Archives and History, as eligible for National Register status.

16-18.7.20 The tower owner shall provide the Administrator with proof of general liability insurance in the minimum amount of One Million Dollars (\$1,000,000).

16-18.7.21 If the tower, or the equipment on the site, is of a type that will emit a continuous or frequent noise, the applicant must prove that sufficient action will be taken to prevent such noise from being audible to surrounding residents and businesses. Tower facilities and equipment must be operated so that noise levels are less than 45dB as measured from the property line nearest to the tower facilities.

16-18.7.22 The applicant shall comply with federal standards for radio frequency emissions. The applicant shall ensure that the tower/antennas will not cause localized interference with the reception of area television or radio broadcasts. If on review, the Town finds that the tower/antenna interferes with such reception, and if the interference is not corrected within 60 days, the Town may revoke or modify the Conditional Use Permit.

16-18.7.23 New towers shall meet the following distance separation requirements from existing towers, based upon the height of the existing and proposed towers

16-18.7.24 A sign identifying the owner(s) and operator(s) of the tower and an emergency telephone number shall be placed in a clearly visible location on the premises of the tower.

New Towers	Existing Towers	
	<i>Towers in Excess of 100 Feet in Height</i>	<i>Towers Less Than 100 Feet in Height</i>
<i>Towers in Excess of 100 Feet in Height</i>	1500 feet of separation	750 feet of separation
<i>Towers Less Than 100 Feet in Height</i>	750 Feet of separation	750 feet of separation

16-18.7.25 The tower must meet or exceed current standards and regulations of the Federal Aviation Administration, the Federal Communications Commission, and any other agency of the federal government with the authority to regulate towers and antennas.

16-18.7.26 Mobile or immobile equipment not used in direct support of a tower facility shall not be stored or parked on the site of a telecommunication tower, unless repairs to the tower are being made.

Section 16-18.8 Denial of Permit. In accordance with the Telecommunications Act of 1996, any decision by the Town Council denying a request for permission to install or construct a wireless telecommunication facility must be in writing and must be based on evidence in a written record before the Council.

Section 16-18.9 Continued Compliance Required. All permits for the erection of a tower are issued in reliance upon a presumption that the tower will in fact conform to the plans that are submitted as the basis for the permit. Once erected, the tower shall at all times be maintained in compliance with the provisions of Section 16-18.7 and the conditional use permit.

16-18.9.1 To ensure the structural integrity of towers, the owner of a tower shall ensure that it is constructed and maintained in compliance with standards contained in the applicable State building codes and the applicable standards for towers that are published by the Electronic Industries Association (EIA), as amended from time to time.

16-18.9.2 At least every 12 months, the tower shall be inspected at the owner’s expense by an expert who is regularly involved in the maintenance, inspection, and or erection of telecommunication towers. At a minimum, this inspection shall be conducted in accordance with the tower inspection check list provided in the EIA Standard 222, “Structural Standards for Steel Antenna Towers and Antenna Support Structures”. A copy of such inspection record shall be forwarded to the Administrator.

16-18.9.3 If the Administrator concludes that a tower fails to comply with the State building codes and/or the EIA standards and constitutes a danger to persons or property, then upon notice being provided to the owner of the tower, the owner shall have 30 days to bring such tower into compliance with such codes and standards. If the owner fails to bring such tower into compliance within the 30 days, the Town Council may order the removal of the tower at the owner's expense.

Section 16-18.10 Removal of Abandoned Towers. Any antenna or tower must be removed within 180 days of the date upon which it ceases to be in active use.

Section 16-18.11 Standards for Commercial Wireless Telecommunications Antennas. The following standards for commercial wireless telecommunications antennas exclude non-commercial antennas, radio and television signals, and non-commercial satellite dishes.

16-18.11.1 Antennas mounted to support structures (towers, buildings, utility poles, etc.) shall not exceed 8 feet in total length and shall not extend more than 6 feet above the top of the support structure.

16-18.11.2 Antennas shall be located at least 500 feet from another antenna unless mounted on a government-owned support structure.

16-18.11.3 Antennas shall only be attached to select support structures that offer the most concealment from public view. The Administrator shall have the final discretion on the approval of support structures for proposed antenna mounts.

16-18.11.4 Equipment cabinet and hardware colors shall match the support structure colors. Antennas colors shall be light gray or other blending color and approved by the Administrator.