

ARTICLE 11 WIRELESS TELECOMMUNICATIONS FACILITIES

PART 1 11-100 PURPOSE AND APPLICABILITY

11-101 Purpose

The purpose of this Ordinance is to implement the wireless telecommunications facilities (wireless) policy set forth in the Comprehensive Plan in a manner that facilitates the provision of wireless service to the citizens of the County while protecting the character of the County and the health¹, safety and welfare of the general public and while complying with Section 704 of the Telecommunications Act of 1996 (47 U.S.C. § 332(c)(7)), Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012 (47 U.S.C. § 1455) and 47 CFR § 140001, and applicable sections of the Code of Virginia.

11-102 Applicability and Exemptions

This Article 11 shall apply to the installation, construction, and modification of all wireless telecommunication facilities, including towers, antenna, ground equipment and related accessory structures and equipment except:

- A. Broadcast Stations.
- B. Licensed Amateur (Ham) Radio Antenna used exclusively for amateur radio.
- C. Satellite Dish antenna 36 inches or less in diameter in all residential zoning districts and 72 inches or less in all other zoning districts.
- D. Temporary Facilities (shall be governed solely by the provisions in Section 11-301).
- E. Micro Wireless Facility only if attached to cables or lines strung between two existing utility poles.

PART 2 11-200 PREFERENCES AND APPROVAL REQUIREMENTS

11-201 County Preferences for New Facilities

New wireless facilities other than temporary facilities shall be designed and located in accordance with the following County preferences, with Tier 1 being the most preferred and Tier 5 being the least preferred.

TABLE 11-201.1: COUNTY HIERARCHY OF PREFERENCES FOR NEW WIRELESS FACILITIES

Tier	Type of Facility
Tier 1:	Collocated antenna on an existing wireless tower
Tier 2:	New concealed antenna attached to buildings or structures other than wireless towers
Tier 3:	Non-concealed antenna attached to buildings or structures other than wireless towers
Tier 4:	Concealed freestanding wireless tower including but not limited to:
	Monopoles in wooded areas
	Monopines
	Silos
	Flagpoles
	Fire Towers
Tier 5:	Non-concealed freestanding wireless tower

¹ Section 704 of the Telecommunications Act of 1996 (47 U.S.C. § 332(c)(7)(B)(iv)) states, “No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.”

11-202 Targeted Geographic Service Areas

Where the Board of Supervisors has formally adopted defined targeted geographic service areas in an effort to bring wireless services to underserved areas more quickly, proposals within these mapped geographic areas are afforded a streamlined process through the development review stage. Additionally, proposals that do not meet the standards for administrative approval may request a Board of Supervisors Waiver through a public hearing process rather than requiring a Special Exception.

11-203 Types of Reviews/Approvals Required

No new wireless facility shall be constructed in the County unless all of the applicable approvals listed in the table below are secured.

TABLE 11-203.1: APPROVAL PROCESS

Wireless Facility Type	Type	Authority	Process
Administrative Review-Eligible Projects	Site Plan – Minor Telecommunications	Zoning Administrator	11-402, 11-403, 11-404
Small Cell Facility	Site Plan – Small Cell Facilities	Zoning Administrator	11-402, 11-403, 11-404
Tiers 1-3 not meeting all facility standards, Tier 4 located within a Targeted Geographic Service Area and not meeting all facility standards, and Tier 5 within a Targeted Geographic Service Area	Waiver	Board of Supervisors	11-401, 11-406
Tier 4 not meeting all facility standards and located outside of a Targeted Geographic Service Area and Tier 5 outside of a Targeted Geographic Service Area	Special Exception	Board of Supervisors	11-401, 11-404, Article 5
Tiers 3-5 facilities located within 0.5 mile of a property listed in the National Register of Historic Places, proposed on or adjacent to a battlefield “study area,” as defined and mapped by the American Battlefields Protection Program (ABPP), or located within 0.5 mile of a designated National or Virginia Scenic Byway.	Architectural Review Board Review ²	Architectural Review Board	11-405
Tiers 1-4 meeting all facility standards	Site Plan Process ³	Zoning Administrator	11-402, 11-403, 11-407, Article 12
All applications above receiving Waiver or Special Exception approval	Site Plan Process ³	Zoning Administrator	11-402, 11-403, 11-407, Article 12
All facilities	Zoning/Building Permit	Zoning Administrator/ Building Official	11-408, 13-500

² The Architectural Review Board shall not approve facilities, but shall make a recommendation to the Board of Supervisors and/or Zoning Administrator prior to approval.

³ Specific Site Plan process to be determined by disturbed acreage and impervious surface area.

PART 3 11-300 FACILITY STANDARDS

11-301 Temporary Facilities

11-301.1 Temporary Emergency Use

The Zoning Administrator shall have the authority to approve the placement of a wireless facility on a temporary basis for up to 60 days with approval of an administrative permit if such facility is needed during an emergency. The Zoning Administrator shall rely on input from the County Emergency Services and Sheriff's Offices and state and federal agencies in determining whether a wireless facility is necessary because of the emergency. The Administrative permit shall contain conditions for removal of the temporary wireless facility after conclusion of the emergency. If the timeframe for the facility is expected to exceed 60 days, the permit shall be reviewed by the Board of Supervisors at its next scheduled meeting and the Board may extend the use of the facility beyond the 60 day period.

11-301.2 Temporary Event Use

The Zoning Administrator shall have the authority to approve the placement of a wireless facility on a temporary basis for an approved event exceeding 10,000 attendees by approval of an administrative permit. The facility shall be located in an area that provides adequate setbacks for a fall-zone. The permit shall require that the facility be erected no more than five (5) days prior to the event and removed within five (5) days after the conclusion of the event. These durations may be extended up to 21 days by the Zoning Administrator depending on the size and scope of the event.

11-302 Administrative Review-Eligible Projects and Small Cell Facilities

11-302.1 Administrative Review-Eligible Projects

- A. Any new structure in public rights-of-way for a small cell facility meeting the Code of Virginia definition that is not more than 50 feet above ground level in height, provided that the structure with attached wireless facilities is (i) not more than 10 feet above the tallest existing utility pole located within 500 feet of the new structure within the same public right-of-way or within the existing line of utility poles; (ii) not located within the boundaries of a local, state, or federal historic district; and (iii) designed to support small cell facilities; or
- B. Any collocation on an existing structure that is not a small cell facility meeting the Code of Virginia definition and that meets the further standards expressed below.

11-302.2 Small Cell Facilities

Applications meeting the Code of Virginia's definition of a small cell facility may be denied only for the following reasons:

- A. Material potential interference with other pre-existing communications facilities or with future facilities that have already been designed and planned for a specific location or that have been reserved for future public safety communications facilities;
- B. The public safety or other critical public service needs;
- C. Only in the case of an installation on or in publicly owned or publicly controlled property, excluding privately owned structures where the applicant has an

agreement for attachment to the structure, aesthetic impact or the absence of all required approvals from all departments, authorities and agencies with jurisdiction over such property; or

- D. Conflict with an applicable local ordinance adopted pursuant to State Code section 15.2-2306, or pursuant to local charter on a historic property that is not eligible for the review process established under 54 U.S.C. section 306108.

11-303

Standards for All Wireless Facilities in Tiers 1-5 Except Temporary Facilities and New Structures for Small Cells Inside Public Rights-Of-Way

- A. Except for Targeted Facilities, no higher numbered tier facility shall be allowed unless the applicant has demonstrated that a lower tier alternative or combination of alternatives does not meet the service objective.
- B. The height of the facility shall be the minimum necessary to meet the service objective.
- C. All facilities except for equipment within the equipment compound area shall be located a distance from all property lines that is equal to the height of the structure, except the Board of Supervisors may reduce this setback requirement in conjunction with Special Exception or Waiver approval to a setback equal to no less than the fall zone where an applicant proposes to utilize break-point technology to reduce the fall zone. In no case shall the setback for all facilities, including the equipment compound, be less than the setback requirement for the underlying zoning district.
- D. No tower lighting shall be allowed except during maintenance or if required by the Federal Aviation Administration (FAA) with the exception of lighting incorporated into the design of a marquee-style concealed tower. Lighting on towers shall not exceed the FAA minimum standards. All other on-site lighting for security or emergency purposes shall be activated by timers or motion detectors and limited in duration to 15 minutes per activation.
- E. Commercial messages shall not be displayed on any tower. A tower concealed as a marquee should not display signage unrelated to the location of the tower.
 - 1. Identification signage for each wireless communication facility shall follow FCC regulations and at a minimum be required for the purpose of identifying the owner as well as the tenants, responsible party for the operation and maintenance of the facility, its current address and telephone number, ASR number, site name, security or safety signs and property manager information (if applicable). Identification signage on wireless communication facilities shall not exceed four (4) square feet.
 - 2. If more than 220 voltage is necessary for the operation of the facility and is present in a ground grid or in the structure, signs located every 20 feet and attached to an enclosing fence or wall shall display in large, bold, high contrast letters (minimum height of each letter: four (4) inches) the following: "HIGH VOLTAGE – DANGER."
- F. Any ground equipment or ground equipment shelter shall be screened from all lot lines either by terrain, existing structures, existing vegetation or by adding vegetation approved by the Zoning Administrator. Any fencing utilized to enclose ground equipment shall also be screened from view from adjoining properties and public streets with landscaping.
- G. Grading shall be minimized and limited only to the area necessary for the new facility

and its access.

- H. Access shall be located and designed in a manner that minimizes land disturbance, the removal of trees and does not open up views into the facility site.
- I. Interference with Public Safety Communications
 - 1. Whenever Fauquier County has encountered radio frequency interference with its public safety communications equipment, and it believes that such interference has been or is being caused by one or more antenna arrays, the following steps shall be taken:
 - a. The Zoning Administrator shall provide notification to all wireless service providers operating in Fauquier County of possible interference with the public safety communications equipment, and upon such notifications, the owners shall use their best efforts to cooperate and coordinate with Fauquier County and among themselves to investigate and mitigate the interference, if any, utilizing the procedures set forth in the joint wireless industry-public safety "Enhanced Best Practices Guide," released by the FCC in Appendix D of FCC 04-168 (released August 6, 2004), including the "Good Engineering Practices," as may be amended or revised by the FCC from time to time in any successor regulations.
 - b. If any equipment owner fails to cooperate with Fauquier County in complying with the owner's obligations or if the FCC makes a determination of radio frequency interference with the Fauquier County public safety communications equipment, the owner who failed to cooperate and/or the owner of the equipment that caused the interference shall be responsible, upon FCC determination of radio frequency interference, for reimbursing Fauquier County for all costs associated with ascertaining and resolving the interference, including but not limited to any engineering studies obtained by Fauquier County to determine the source of the interference. For the purposes of this subsection, failure to cooperate shall include failure to initiate any response or action as described in the "Best Practices Guide" within 24 hours of Fauquier County's notification.
- J. Abandonment
 - 1. Towers, antennas, and equipment compounds shall be removed, at the owner's expense, within 180 days of discontinuation of use.
 - 2. Within 30 days after use of a facility is discontinued, the owner of the facility shall notify the Zoning Administrator, in writing, that the facility's use has been discontinued.
 - 3. An owner wishing to extend the time for removal shall submit a request in writing stating the reason for such extension. The Zoning Administrator may extend the time for removal or reactivation up to 180 additional days upon a showing of good cause. If the tower or antenna is not removed within this time, the Zoning Administrator may give notice that it will contract for removal within thirty (30) days following written notice to the owner. Thereafter, the Zoning Administrator may cause removal of the tower with costs being borne by the owner.
 - 4. Upon removal of the tower, antenna(s), and equipment compound, the development area shall be returned to its natural state with topography and vegetation consistent with the natural surroundings or consistent with the current uses of the surrounding or adjacent land at the time of removal, excluding the foundation, which does not have to be removed.

Tier 1 Additional Standards for Collocation Applications on an Existing Wireless Facility.

- A. On towers outside of public rights-of-way (ROW), the proposal may not:
 - 1. Increase the original height of the tower by more than 10% or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed 20 feet, whichever is greater. Changes in height shall be measured from the dimensions of the tower inclusive of originally approved appurtenances and any modifications.
 - 2. Extend the width of the tower more than 20 feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater.
 - 3. Involve installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets.
 - 4. Involve any excavation outside of the current enclosed boundaries of the equipment compound.
 - 5. Defeat the concealment elements of the eligible support structure.
 - 6. Exceed conditions associated with the siting approval of the construction or modification of the eligible support structure.
- B. For towers in the ROW and all base stations, the proposal may not:
 - 1. Increase the original height of the base station or equipment by more than 10% or ten (10) feet, whichever is greater. Changes in height shall be measured from the original support structure inclusive of originally approved appurtenances and any modifications.
 - 2. Extend from the width of the original base station or equipment by more than six (6) feet.
 - 3. Involve installation of any new equipment cabinets on the ground if there are not pre-existing ground cabinets associated with the structure, or else involves installation of ground cabinets that are more than 10% larger in height or overall volume than any other ground cabinets associated with the structure.
 - 4. Entail any excavation except in the immediate vicinity of the original base station and equipment.
 - 5. Defeat the concealment elements of the eligible support structure.
 - 6. Exceed conditions associated with the siting approval of the construction or modification of the eligible support structure or base station equipment.
- C. Small Cell Facilities (excluding microcells strung on cables or wires hung between two existing utility poles) attached to Existing Structures.
 - 1. Any new small cell facility shall demonstrate, through engineering analysis, that it will not materially interfere with other pre-existing communications facilities or with future communications facilities that have already been designed and planned for a specific location or that have been reserved for future public safety communications facilities.
 - 2. Small cell facilities on public property shall obtain all required approvals from all departments, authorities, and agencies with jurisdiction over such property.
 - 3. Small cell facilities on public property shall comply with the aesthetic/concealment requirements of subsection 11-305 below.

11-305**Tier 2 Additional Standards for New Concealed Antenna Attached to Buildings or Structures Other Than Wireless Towers**

- A. The antenna, associated antenna support structures and equipment shelter shall be located on and/or within an existing structure, or within an addition to the structure that meets the height limits for the district and is designed in a manner that architecturally integrates the addition into the existing structure.
- B. If located on the roof of a structure, the antenna shall not extend more than 15 feet above the roofline or any parapet wall.
- C. Feed lines and antennas shall be designed to architecturally match the façade, roof, wall, and/or structure on which they are affixed so that they blend with the existing structural design, color, and texture.
- D. New Concealed Attached Antenna located on any property with a building listed in the National Register of Historic Places shall be designed in a manner that is architecturally consistent with the historic structure.

11-306**Tier 3 Additional Standards for Non-Concealed Antenna Attached to Structures Other Than Water Towers, High-Voltage Transmission Towers, or Utility Poles.**

- A. No such facility shall be located within a residential district, on a lot adjoining a residential district in a location visible from the residential lot, in a location visible from a designated Virginia Scenic By-Way, or on a structure listed in the National Register of Historic Places.
- B. No such facility shall be attached onto any building façade facing the street.
- C. The number of non-concealed antenna arrays on any building shall not exceed one.
- D. Each individual antenna proposed shall not exceed six (6) cubic feet.
- E. The antenna shall be mounted on a wall of an existing building and shall not project above the wall unless the projection is warranted for technical reasons. In no event shall an antenna project more than 15 feet above the peak of the roof.
- F. No antenna shall project from the structure or building beyond the minimum required by the mounting equipment, and in no case shall any point on the face of an antenna project more than 12 inches from the structure or building upon which the antenna is mounted.
- G. Each antenna and associated equipment shall be a color that matches the structure.
- H. Any ground equipment shelter shall be completely out of view from the street and nearby residences by being located within an existing building, within an addition to the building, within an accessory structure behind the building, screened behind faux walls on a rooftop designed to be compatible with the existing building or structure, or located entirely behind the building or structure.

11-306.1**Tier 3 Additional Standards for Non-Concealed Attached Antenna on Water Towers**

- A. Antenna are limited to omnidirectional whip antennas no more than seven (7) inches in diameter or panel antenna no more than 16 square feet in size.
- B. No antenna shall extend more than 15 feet above the water tower to which it is attached.
- C. The color of the antenna and mounting equipment shall match the color of the water tower.
- D. Antennas shall be attached in such a manner that they do not compromise the structural integrity of the water tank.

11-306.2 Tier 3 Additional Standards for Non-Concealed Attached Antenna on High Voltage Transmission Line Structures

- A. The antenna may be attached to the existing structure, located in a horizontal bracket mounting of the transmission tower or attached to an independent structure situated within the footprint of the transmission tower.
- B. No antenna shall extend more than 15 feet above the top of the tower.
- C. The tower and antenna shall be non-reflective.

11-306.3 Tier 3 Additional Standards for Non-Concealed Attached Antenna on Existing Telephone, Electric and Lighting Utility Poles

- A. The antenna shall be mounted on either an existing operational public utility pole or similar support structure (e.g. street light, traffic light, telephone pole, existing wooden pole) that is not being considered for removal, as determined by the Zoning Administrator.
- B. May only be a small cell facility.
- C. More than two antennas shall not be initially located on a single utility pole or similar structure unless it is determined by the Zoning Administrator that the visual impact will not exceed that caused by a single antenna.
- D. The highest point of the antenna shall not exceed four (4) feet above the height of the structure.
- E. If at a later date the utility poles are proposed for removal as part of the undergrounding of utility lines, the facility shall be removed prior to undergrounding and the permit for the facilities shall be null and void.

11-306.4 Tier 3 Additional Standards for Non-Concealed Antenna on New Utility Poles

- A. Approval is limited to Targeted Facilities.
- B. Height of the poles is limited to 50 feet.
- C. Antenna shall be limited to panel antenna or omnidirectional antenna. Antennas shall not exceed a volume of six (6) cubic feet and associated above ground equipment shall not exceed a volume of 28 cubic feet.
- D. No more than two antennas shall be located on a single utility pole or similar structure unless it is determined by the Zoning Administrator that the visual impact will not exceed that caused by a single antenna.
- E. The highest point of the antenna shall not exceed four (4) feet above the height of the structure.
- F. If at a later date the utility poles are proposed for removal as part of the undergrounding of utility lines, the facility shall be removed prior to undergrounding and the permit for the facilities shall be null and void.

11-307 Tier 4 and 5 Additional Standards for All New Wireless Support Structures

- A. When proposed in residential zoning districts, a tower shall only be permitted on lots developed for nonresidential land uses and shall be concealed.
- B. The site shall provide adequate opportunities for screening and the facility shall be sited to minimize its visibility from adjacent parcels and streets, regardless of their distance from the facility. The facility also shall be sited to minimize its visibility from any scenic byway or historic landmark.
- C. No Tier 4 or 5 facility shall be located on a ridge such that it projects above the ridge line, defined by a line drawn between the highest points of elevation along the ridge

line.

- D. Freestanding non-concealed towers shall be limited to monopole type towers, unless the applicant demonstrates that such design is not feasible to accommodate the intended uses. Lattice Towers and Guyed Towers are not permitted.
- E. No facility over 199 feet height shall be permitted unless it is demonstrated that the antenna service area will be so substantially compromised that there would be a requirement of an additional Tier 4 or 5 wireless support structure within a distance of two (2) miles if the taller facility is not built.
- F. Balloon Test
 - 1. A balloon test and photo simulation shall be required in order to demonstrate the proposed height of the tower. The applicant shall arrange to raise a colored balloon no less than three (3) feet in diameter at the maximum height of the proposed tower, and within fifty (50) horizontal feet of the center of the proposed tower.
 - 2. The applicant shall meet the following for the required balloon test:
 - a. Applicant must inform the Department of Community Development and abutting property owners in writing of the date and times, including alternative date and times, of the test at least seven (7) days in advance.
 - b. The date, time, and location, including alternative date, time and location, of the balloon test shall be advertised in a locally distributed paper by the applicant at least seven (7) days but no more than 14 days in advance of the test date.
 - c. The balloon shall be flown for at least four (4) consecutive hours during daylight hours on the date chosen. The applicant shall record the weather during the balloon test.
 - d. Re-advertisement will not be required if inclement weather occurs.
- G. Towers shall be constructed to accommodate antenna array collocations as follows:
 - 1. All freestanding towers up to 80 feet in height shall be engineered and constructed to accommodate no less than two (2) antenna arrays.
 - 2. All towers over 80 feet and up to 120 feet shall be engineered and constructed to accommodate no less than three (3) antenna arrays.
 - 3. All towers over 120 feet shall be engineered and constructed to accommodate no less than four (4) antenna arrays.

H. Buffers

The equipment compound shall be landscaped with a minimum ten (10) foot wide perimeter buffer containing the following planting standards:

- 1. All plants and trees shall be indigenous to Fauquier County.
- 2. Existing trees and shrubs on the site should be preserved and may be used in lieu of required landscaping as approved by the Zoning Administrator.
- 3. One (1) row of evergreen trees a minimum six (6) foot in height 25 foot on center.
- 4. Evergreen shrubs capable of creating a continuous hedge and obtaining a height of at least five (5) feet shall be planted, minimum three (3) gallon or 24 inches tall at the time of planting, five (5) foot on center.
- 5. Alternative landscape plans or preservation of existing vegetation that provide for the same or greater average canopy and understory trees as listed above, but propose an alternative location on the property, may be considered and approved by the Zoning Administrator, provided the proposed alternative

maximizes screening as provided above, and is otherwise consistent with the requirements of this section.

11-307.1 Tier 4 Additional Standards for Monopine Facilities

- A. Monopines shall only be allowed when surrounded by wooded areas at least 50 feet in all directions, and when located at least 200 feet from the edge of the property right-of-way and any residential property line.
- B. The maximum height of the tower shall be 20 feet above the tallest tree located within 50 feet of the tower.
- C. Monopines shall resemble “faux” evergreen trees native to Fauquier County with sufficient number of “faux” branches and foliage to conceal all external antennas, panels, trays, cables, support rods, crossbars, port holes, splitters, couplers and attenuators and any other equipment external to the tower mast. The tower’s concealment shall meet the following specifications:
 - 1. “Faux” branches shall commence at 20 feet Above Finished Grade Ground Level and surround the tower in a conical, multi-dimensional pyramid shape pattern to the top of the tower. As such, branches shall be arranged in a natural order with the widest branches at the lowest portion of the monopine tapering to the shortest branches at the top of the monopine.
 - 2. The branches shall not be uniform in length nor in density but shall be reflective of a natural tree.
 - 3. Branches and foliage material shall be of lengths, widths and depths sufficient to obscure physical view of the tower, antenna elements and brackets. Accordingly, antennas shall be mounted within the foliage of the monopine and all branches at the height of the antennas shall extend beyond the antenna panels and all mounting hardware, or any alternative acceptable to the Department of Community Development that maintains equivalent concealment effectiveness.
 - 4. All cables shall be concealed within the pole structure.
 - 5. All materials shall be painted or have applied material to simulate tree bark indigenous to the area. There shall be no unpainted metal on the monopine facility.

11-307.2 Tier 4 Additional Standards for Silos

- A. Where the property includes an existing silo, the telecommunications silo shall be designed in a style similar to the existing silo. In no case shall the telecommunications silo be more than 1.5 times the height or 1.5 times the width of the existing silo.
- B. If no silo is located on the property, the design of the silo shall be based on the design of other silos in the areas closest to the proposed facility. In no case shall the telecommunications silo be more than 1.5 times the height or 1.5 times the width of the model silo.
- C. All antenna shall be located completely within the silo and any panels in the silo utilized for antenna placement shall be designed to blend seamlessly into the silo.
- D. All equipment associated with the facility shall be located inside the silo or a small building designed as an agricultural building or behind existing buildings.

11-307.3 Tier 4 Additional Standards for Flag Poles

- A. Flag Poles shall only be allowed on property developed with public facilities such as parks, schools, fire stations, post offices, and similar uses as determined by the Zoning

Administrator.

- B. The Flag Pole shall actually be utilized to hang a proportionately sized flag daily.
- C. All Flag Poles shall be constructed so that vertical cables, wiring and similar attachments are contained within the monopole's structure.
- D. Equipment shall be underground, effectively screened or in building integrated into other buildings on site.

11-307.4 Tier 4 Additional Standards for Fire Towers

Fire Towers shall only be allowed in wooded areas of at least 5 acres and only within the RA and RC zoning districts.

11-307.5 Tier 4 Additional Standards for Monopoles in Wooded Areas

- A. Monopoles shall be allowed only when surrounded by wooded areas of at least 100 feet in all directions, and when at least 100 feet from the edge of the public right-of-way and 300 feet from any residence on an adjoining property.
- B. The maximum height of the monopole shall be 20 feet above the average height of surrounding wooded areas within 100 feet in all directions.
- C. Each monopole shall be a color that blends into the environment in which it is proposed to be located. The antennas, supporting brackets, and all other equipment attached to the monopole shall be a color that closely matches that of the monopole.
- D. New antenna mounts shall be flush-mounted, unless it is demonstrated through Radio Frequency propagation analysis that flush-mounted antennas will not meet the network objectives of the desired coverage area.
- E. Each monopole shall be constructed so that all cables, wiring, and similar attachments that run vertically from the ground equipment to the antennas are placed on the monopole to face the interior of the site and away from public view, as determined by the Zoning Administrator. Metal monopoles shall be constructed so that vertical cables, wiring and similar attachments are contained within the monopole's structure.

11-308 Tier 5 Additional Standards for Unconcealed Monopoles

- A. Monopoles shall be at least 100 feet from the edge of the public right-of-way and 300 feet from any residence on an adjoining property.
- B. Each monopole shall be a color that blends into the environment in which it is proposed to be located. The antennas, supporting brackets, and all other equipment attached to the monopole shall be a color that closely matches that of the monopole.
- C. New antenna mounts shall be flush-mounted, unless it is demonstrated through Radio Frequency propagation analysis that flush-mounted antennas will not meet the network objectives of the desired coverage area.
- D. Each monopole shall be constructed so that all cables, wiring, and similar attachments that run vertically from the ground equipment to the antennas are placed on the monopole to face the interior of the site and away from public view, as determined by the Zoning Administrator. Metal monopoles shall be constructed so that vertical cables, wiring and similar attachments are contained within the monopole's structure.

11-400 SUBMISSION AND REVIEW REQUIREMENTS

11-401 Pre-Application Meeting

A pre-application meeting is required for any application involving a special exception or a waiver from the Board of Supervisors. This requirement may be waived by the Department of Community Development if it may be demonstrated that the objectives of the pre-application meeting have already been met.

11-402 Eligible Facilities Request Determination

At least ten (10) days prior to filing any application for a modification to any Eligible Facility, an application shall be filed with the Zoning Administrator requesting a determination that the existing facility is, in fact, an Eligible Facility. The application shall identify the location of the existing facility and provide documentation showing that the existing facility was previously approved by the County as a telecommunication tower or base station. The Zoning Administrator shall make a determination in response to this application no later than 30 days from the application date.

11-403 Application Processing Time-Lines

- A. Any application for new facilities submitted for review and approval by the County shall be processed within the time-frames listed herein:
 - 1. Decision on application to modify an Eligible Facility – 30 days from submission.
 - 2. Decision on application for any small cell facility – 30 days from submission, subject to a 30 day extension right by the County if requested in writing.
 - 3. Decision on a new administrative review-eligible project – 60 days from submission.
 - 4. Decision on an administrative review-eligible collocation project – 60 days, unless it is also an Eligible Facility.
 - 5. Decision on application for collocation requests that are not Eligible Facilities – 60 days from submission.
 - 6. Decision on applications that are not collocations and not Eligible Facilities – 150 days from submission.
- B. Any request by the County for additional or missing information shall be made within 10 business days of the initial submission by electronic mail to the email address provided by applicant in its application. The request shall stop the clock on these deadlines provided the request includes the code provision, ordinance, application instruction or otherwise publicly-stated procedures that require the information to be submitted. For small wireless facilities meeting the FCC definition the clock date calculation shall restart at zero on the date on which the applicant submits all the documents and information identified by the County to render the application complete. For all other applications, the clock restarts when the required information is submitted. If additional information is still required, such requests may be made by the County within ten (10) days and shall again stop the clock. The deadlines may also be extended by written request or agreement of the applicant.

11-404 Applications

Applications shall be processed in accordance with the procedures set forth in Article 5 of the Zoning Ordinance. The submission requirements listed in the table below are in lieu of the general requirements for all applications and Special Exceptions found in PART 0 of

Article 5, General Provisions.

Submission Requirements		Tier 1	Tier 2 & 3	Tier 4 & 5
1	Land Development Application and required fees.	X	X	X
2	An application must include a licensed carrier as an applicant or co-applicant.	X	X	X
3	A statement of justification that addresses compliance with every applicable standard in Sections 11-300.	X	X	X
4	A plat of the property completed by a registered professional, licensed in Virginia, showing:			
	A Name of project and date.	X	X	X
	B Deed Book and Page and PIN Reference.	X	X	X
	C Scale, north arrow and vicinity map.	X	X	X
	D Location, classification and size of all public and private streets and rights-of-way and distances from the proposed infrastructure.		X	X
	E Subject property information, including topography, structures, uses, easements, zoning, watercourses, floodplain, access and percent coverage of lot to be impervious.		X	X
	F Adjacent property information, including land owners, land uses, building locations, size of lots and zoning and their distances from the proposed infrastructure.		X	X
	G All features within 500 feet of property boundary including buildings, driveways, open space, uses, trails, and any other pertinent features. Show distance between any existing residences and the proposed facility.		X	X
	H Type, location, size, height, elevation and configuration of existing and proposed towers, base stations, antennas and other equipment.	X	X	X
	I Elevations and architectural details showing the design, materials and colors proposed for the facility.	X	X	X
	J Maximum height of the proposed facility and proposed future mounting elevations of future antenna, including individual measurement of the base, the tower and lightning rod.	X	X	X
	K The caliper and species of all trees over four (4) inches in diameter where the dripline is located within 100 feet of the facility. The height, caliper and species of any tree that the applicant is relying on to provide screening of the facility. The height, caliper and species of the reference tree. The caliper and species of all trees that will be adversely impacted or removed during installation or maintenance of the facility, regardless of their distances to the facility. For Tier 4 and 5 Facilities, only required for Monopoles in wooded areas, Tree Poles, Fire Towers and any facility where existing trees were proposed to be utilized to meet any screening requirements.			X
	L Screening plans for equipment, including landscaping buffer if applicable.	X	X	X
5	List and analysis of the lower Tier options considered, demonstrating why these options, or some combination of these options, cannot be utilized to meet the service objective.		X	X
6	A written statement agreeing to the following:			
	A Compliance with "Good Engineering Practices" as defined by the FCC in its rules and regulations.	X	X	X

	B	Compliance with FCC regulations regarding susceptibility to radio frequency interference, frequency coordination requirements, general technical standards for power, antenna, bandwidth limitations, frequency stability, transmitter measurements, operating requirements, and any and all other federal statutory and regulatory requirements relating to radio frequency interference (RFI).	X	X	X
7		In any case where an application will result in telecommunications facilities co-located with public safety communications equipment, the applicant, together with the owner of the subject site, shall provide a composite analysis of all users of the site demonstrating that the applicant's proposed facilities will not cause radio frequency interference with the Fauquier County's public safety communications equipment.	X	X	X
8		Results of a balloon test conducted per Section 11-307 F			X
9		Simulated photographic evidence displaying before and after images of the proposed tower and antenna appearance from vantage points identified by Department of Community Development Staff during the pre-application meeting. For Tiers 1, 2 and 3 this information is only required for antenna that increase the height of the facility.	X	X	X

11-405 Architectural Review Board (ARB) Review

Where specifically required by any provision of this Article 11, the Architectural Review Board shall review the proposal for the effect on historic resources, according to *Assessing Visual Effects on Historic Properties*, published by the Virginia Department of Historic Resources (DHR), and the Fauquier County Comprehensive Plan goals, objectives and actions. If the effect is found to be adverse, the ARB shall make a recommendation to minimize or mitigate the effect to the approval authority. No separate application is required. No additional information is required to be submitted beyond the application submission materials, but additional copies of materials may be required. The ARB review shall be scheduled for the first available meeting after a complete submission. The ARB shall make its recommendation at its first meeting.

11-406 Board of Supervisors Waiver Applications

Where specifically authorized by any provision of this Article 11, the Board of Supervisors shall hold a public hearing to consider a Waiver to specific standards for telecommunication facilities. A specific application for a Waiver is required. The Department of Community Development and/or the Board of Supervisors may request submission of additional information as necessary to demonstrate that approval of a Waiver will not impact the health, safety and welfare of the community.

11-407 Site Plan Applications

Site Plan applications shall be processed in accordance with the procedures set forth in Article 12 of the Zoning Ordinance. The submission requirements listed below are in addition to the general requirements for all Site Plans listed in Article 12.

	Submission Requirement	Tier 1	Tier 2 & 3	Tier 4 & 5
1	Type, location, size, height, elevation and configuration of existing and proposed support structures, antennas and other equipment.	X	X	X
2	Elevations and architectural details showing the design, materials and colors proposed for the facility.	X	X	X
3	Maximum height of the proposed facility and proposed future mounting elevations of future antenna, including individual measurement of the base, the tower and lightning rod.	X	X	X
4	A tree conservation plan that shall specify tree protection methods and procedures, identify all existing trees over four (4) inches in diameter to be removed on the parcel for the installation, operation and maintenance of the facility, and identify all dead and dying trees that are recommended to be removed. The installation, operation, and maintenance of the facility shall be conducted in accordance with the tree conservation plan. The applicant shall not remove existing trees within the lease area or within 100 feet in all directions surrounding the lease area of any part of the facility except for those trees identified on the plan to be removed for the installation, operation, and maintenance of the facility and dead and dying trees. Before the applicant removes any tree not designated for removal on the approved plan, the applicant shall submit and obtain approval of an amended plan. The agent may approve the amended plan if the proposed tree removal will not adversely affect the visibility of the facility from any location off of the parcel. The agent may impose reasonable conditions to ensure that the purposes of this paragraph are achieved. For Tier 4 and 5 Facilities, only required for Monopoles in wooded areas, Tree Poles, Fire Towers and any facility where existing trees were proposed to be utilized to meet any screening requirements.			X

11-408 Zoning/Building Permit Requirements

All applications for Zoning/Building Permits shall be processed pursuant to standard procedures promulgated by the Department of Community Development. The submission requirements listed below are in addition to all general requirements for zoning and building permits.

	Submission Requirement	Tier 1	Tier 2	Tier 3
1	Design, type, location, size, height, and configuration of all existing and proposed support structures, antennas and other equipment.	X	X	X
2	Color Information. Identification of each paint color on the facility, by manufacturer color name and color number. A paint chip or sample shall be provided for each color.	X	X	X
3	Certification furnished by a registered professional engineer licensed in the State of Virginia that the structure has sufficient structural integrity to support the proposed antenna and feed lines in addition to all other equipment located or mounted on the structure, including future collocation facilities.	X	X	X
4	Completion of installation; submitting certifications of compliance. Within 30 days after completion of the installation of the facility, the applicant shall provide to the agent prior to issuance of a certificate of occupancy: (i) certification stating		X	X

	the height of the facility, measured in feet above ground level; and (ii) certification stating that the lightning rod's height does not exceed two (2) feet above the top of the tower or monopole. See definition for tower height.			
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PART 5 DEFINITIONS

Administrative review-eligible project - A project that provides for either (1) The installation or construction of a New Structure that is not more than 50 feet above ground level, provided that the structure with attached wireless facilities is (i) not more than ten (10) feet above the tallest existing utility pole located within 500 feet of the new structure within the same public right-of-way or within the existing line of utility poles; (ii) not located within the boundaries of a local, state, or federal historic district; and (iii) designed to support small cell facilities; or (2) the collocation on any Existing Structure of a wireless facility that is not a small cell facility as defined by the Code of Virginia.

Antenna - Any apparatus designed for the transmitting and/or receiving of electromagnetic waves used in the provision of all types of wireless communication services.

Antenna Array - A single or group of antenna elements and associated mounting hardware, transmission lines, or other appurtenances which share a common attachment device such as a mounting frame or mounting support structure for the sole purpose of transmitting or receiving electromagnetic waves.

Antenna Element - Any antenna or antenna array.

ASR - The Antenna Structure Registration Number as required by the FAA and FCC.

Base Station - The supporting structure and equipment at a fixed location that enables FCC-licensed or authorized communications between user equipment and a communications network. The term does not encompass a "tower" or any equipment associated with a tower.

Base Station, Existing - A structure supporting or housing, at the time of an application for new telecommunications facilities, an antenna, transceiver or other associated equipment that was approved by the County for telecommunications use and constitutes part of a base station, even if the particular structure was not built for the sole or primary purpose of providing support.

Collocation - Installing, mounting, maintaining, modifying, operating or replacing a wireless facility on, under, within or adjacent to a base station, building, existing structure, utility pole, or wireless support structure.

Concealed - A tower, antenna, ancillary structure, or equipment compound that is designed and constructed such that it is invisible or not readily identifiable as a telecommunication facility from adjacent streets and properties. Concealed towers and antenna include but are not limited to monopines, silos, marque and flagpoles.

Discontinued - Any tower where mounted transmitting and/or receiving antennas have been removed or have ceased operation.

Eligible Facility - An eligible support structure proposed to be modified in a manner that does not result in a Substantial Change and such modification involves: (i) collocation of transmission equipment, (ii) removal of transmission equipment; or (iii) replacement of transmission equipment.

Eligible Facility Request - A request seeking a determination that the proposed modification of an existing tower or base station is an Eligible Facility.

Eligible Support Structure - Any tower or base station that is existing at the time of an Eligible Facility request and that was previously approved by the County through the required zoning and/or site plan processes.

Equipment Compound - The fenced-in area surrounding the ground-based wireless communication facility including the areas inside or under a tower's framework and including all ancillary structures such as equipment necessary to operate the antenna on the structure that is above the base flood elevation

including cabinets, shelters, pedestals, and other similar structures.

Equipment Cabinet - Any structure above the base flood elevation including cabinets, shelters, pedestals, and other similar structures and used exclusively to contain radio or other equipment necessary for the transmission or reception of wireless communication signals.

Existing Structure - Any structure that is installed or approved for installation at the time a wireless services provider or wireless infrastructure provider provides notice to a locality or the Department of an agreement with the owner of the structure to co-locate equipment on that structure. "Existing structure" includes any structure that is currently supporting, designed to support, or capable of supporting the attachment of wireless facilities, including towers, buildings, utility poles, light poles, flag poles, signs, and water towers.

Fall Zone - Land area controlled by the applicant or the underlying property owner around the tower in which a tower could collapse and fall, calculated as the total height of the tower as measured from the base of the tower to the top of the tower. If the tower is constructed with breakpoint technology, a smaller area may be identified by providing the tower's engineering design calculations illustrating the maximum area in which the tower might fall.

FAA - The Federal Aviation Administration.

FCC - The Federal Communications Commission.

Feed Lines- Cables used as the interconnecting media between the transmission/receiving base station and the antenna.

Flush-Mounted - Any antenna or antenna array attached directly to the face of the support structure or building such that no portion of the antenna extends above the height of the support structure or building. Where a maximum flush-mounting distance is given, that distance shall be measured from the outside edge of the support structure or building to the inside edge of the antenna.

Guyed Structure - (see Tower)

Ground Equipment - Any structure above the base flood elevation including cabinets, pedestals, and other similar structures and used exclusively to contain radio or other equipment necessary for the transmission or reception of wireless communication signals.

Lattice Tower - (see Tower, Lattice)

Height, Original - The height approved in the first application for the new wireless facility.

Height, Tower - (see Tower Height)

Micro-wireless facility - A small cell facility that is not larger in dimension than 24 inches in length, 15 inches in width, and 12 inches in height and that has an exterior antenna, if any, not longer than 11 inches.

Monopole Structure - (see Tower, Monopole)

Monopine - A concealed monopole tower designed to replicate an evergreen tree.

New Structure - A wireless support structure that has not been installed or constructed, or approved for installation or construction, at the time a wireless services provider or wireless infrastructure provider applies to a locality for any required zoning approval.

Non-concealed - A wireless communication facility that is readily identifiable as such.

Personal Wireless Service - Commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services as defined in the Telecommunications Act of 1996.

Public Safety Communications Equipment - All communications equipment utilized by a public entity for the purpose of ensuring the safety of the citizens.

Radio Frequency Emissions - Any electromagnetic radiation or other communications signal emitted from an antenna or antenna-related equipment on the ground, tower, building, or other vertical projection.

Small Cell Facility, Code of Virginia - A wireless facility that meets both of the following qualifications: (i) each antenna is located inside an enclosure of no more than six (6) cubic feet in volume, or, in the case of an antenna that has exposed elements, the antenna and all of its exposed elements could fit within an imaginary enclosure of no more than six cubic feet and (ii) all other wireless equipment associated with

the facility has a cumulative volume of no more than 28 cubic feet, or such higher limit as is established by the Federal Communications Commission. The following types of associated equipment are not included in the calculation of equipment volume: electric meter, concealment, telecommunications demarcation boxes, back-up power systems, grounding equipment, power transfer switches, cut-off switches, and vertical cable runs for the connection of power and other services.

Small Wireless facility, FCC - Facilities that meet each of the following conditions:

1. The facilities:
 - A. are mounted on structures 50 feet or less in height including their antennas, or
 - B. are mounted on structures no more than ten (10) percent taller than other adjacent structures, or
 - C. do not extend existing structures on which they are located to a height of more than 50 feet or by more than ten (10) percent, whichever is greater.
2. Each antenna associated with the deployment, excluding associated antenna equipment (as defined in the definition of antenna is no more than three (3) cubic feet in volume;
3. All other wireless equipment associated with the structure, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet in volume;
4. The facilities do not require antenna structure registration under part 17 of this chapter;
5. The facilities are not located on Tribal lands, as defined under 36 CFR 800.16(x); and
6. The facilities do not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in 1.1307(b).

Substantial Change - Pursuant to 47 USC §1455 means a modification or collocation to an eligible support structure if it meets any of the following criteria:

1. For towers other than towers in the public rights-of-way (ROW), it increases the height of the tower by more than ten (10) percent or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed 20 feet, whichever is greater; for all other eligible support structures (including towers within a ROW and base stations), it increases the height of the structure by more than ten (10) percent or ten (10) feet, whichever is greater; or
2. Changes in height should be measured from the original support structure in cases where deployments are or will be separated horizontally, such as on buildings' rooftops; in other circumstances, changes in height should be measured from the dimensions of the tower or base station, inclusive of originally approved appurtenances and any modifications that were approved prior to the passage of the 47 USC §1455; or
3. For towers other than towers in the public ROW, it involves adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than 20 feet of the width of the tower structure at the elevation of the appurtenance, whichever is greater; for other eligible support structures (including towers within a ROW and base stations) it involves adding an appurtenance to the body of the structure that would protrude from the edge of the structure by more than six (6) feet; or
4. For any eligible support structure (tower or base station), it involves installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four (4) cabinets; or for towers in the public rights-of-way and base stations, it involves installation of any new equipment cabinets on the ground if there are no pre-existing ground cabinets associated with the structure, or else involves installation of ground cabinets that are more than

ten (10) percent larger in height or overall volume than any other ground cabinets associate with the structure; or

5. It entails any excavation or deployment outside the current site; or
6. It would defeat the concealment elements of the eligible support structure; or
7. It does not comply with conditions associated with the siting approval of the construction or modification of the eligible support structure or base station equipment, provide however that this limitation does not apply to any modification that is non-compliant only in a manner that would not exceed the thresholds identified in 1- 6 above.

Targeted Facility - A new wireless facility within an area formally designated by the Board of Supervisors as an area that is underserved in the provision of wireless services.

Tower - A structure built for the sole or primary purpose of supporting any FCC-licensed or authorized antennas and their associated facilities.

Tower, Guyed - A tower support structure that is secured and stabilized by diagonal cables (guy wires) anchored to the ground or other structures.

Tower, Lattice - A support structure that is self-supporting with multiple legs and cross-bracing of structural steel. - A tapered style of tower that consists of vertical and horizontal supports with multiple legs and cross bracing, and metal crossed strips or bars to support antennas.

Tower, Monopole - A style of freestanding tower consisting of a single shaft usually composed of two (2) or more hollow sections that are in turn attached to a foundation. This type of tower is designed to support itself without the use of guy wires or other stabilization devices.

Tower Base - The foundation, usually concrete, on which the tower is situated. For measurement calculations, the tower base is that point on the foundation reached by dropping a perpendicular from the geometric center of the tower.

Tower Height - The vertical distance measured from the ground and the highest point of the tower, including any antenna, lighting or other equipment affixed thereto. Height shall include any base, foundation or grading that raises the monopole above the pre-existing natural ground elevation. A grounding rod, whose height shall not exceed two (2) feet may be installed at the top of any facility and shall be considered additional height.

Tower Site - The land area that contains, or will contain, a proposed tower, support structures and other related buildings and improvements.

Utility Pole - A structure owned, operated, or owned and operated by a public utility, local government, or the Commonwealth that is designed specifically for and used to carry lines, cables, or wires for communications, cable television, electricity, or to provide street lighting. Utility poles shall not include poles designed specifically to support wireless technology.

Water Tower - a water storage tank, or a standpipe or an elevated tank situated on a support structure, originally constructed for use as a reservoir or facility to store or deliver water.

Wireless facility - equipment at a fixed location that enables wireless communications between user equipment and a communications network, including (i) equipment associated with wireless services, such as private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services, such as microwave backhaul, and (ii) radio transceivers, antennas, coaxial, or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration.

Wireless infrastructure provider - any person that builds or installs transmission equipment, wireless facilities, or wireless support structures, but that is not a wireless services provider.

Wireless services - means (i) "personal wireless services" as defined in 47 U.S.C. § 332(c)(7)(C)(i); (ii) "personal wireless service facilities" as defined in 47 U.S.C. § 332(c)(7)(C)(ii), including commercial mobile services as defined in 47 U.S.C. § 332(d), provided to personal mobile communication devices

through wireless facilities; and (iii) any other fixed or mobile wireless service, using licensed or unlicensed spectrum, provided using wireless facilities.

Wireless services provider - a provider of wireless services.

Wireless support structure - a freestanding structure, such as a monopole, tower, either guyed or self-supporting, or suitable existing structure or alternative structure designed to support or capable of supporting wireless facilities. "Wireless support structure" does not include any telephone or electrical utility pole or any tower used for the distribution or transmission of electrical service.

Wooded Area - shall mean growth of deciduous or conifer trees at a minimum density of 80 wooden stems per acre of trees that measure at least four inches in diameter breast high (DBH) or four and one half feet.