

## SECTION 9 WIRELESS TELECOMMUNICATION

### 9.1. DEFINITIONS

- A. For the purpose of this Section, all definitions in N.C.G.S. § 160D-9-31 shall apply unless otherwise defined below. The words "shall" and "will" are mandatory, and "may" is permissive.
1. *Antenna* means communications equipment that transmits or receives electromagnetic radio frequency signals used in providing wireless services or other communications services.
  2. *Applicant* means a person who submits an application, who may be the property owner or agent of the wireless provider.
  3. *Application* means a request submitted by an applicant to the City for a permit for a wireless telecommunication facility.
  4. *City* means the City of Monroe, North Carolina, a municipal corporation organized and existing under the laws of the State of North Carolina.
  5. *Collocation*. The placement, installation, maintenance, modification, operation, or replacement of wireless facilities on, under, within, or on the surface of the earth adjacent to existing structures, including utility poles, water support structures, buildings, and other structures capable of structurally supporting the attachment of wireless facilities in compliance with applicable codes. The term does not include the installation of new utility poles or wireless support structures.
  6. *Eligible Facilities Request*. A request for modification of an existing wireless support structure or base station that involves collocation of new transmission equipment or replacement of transmission equipment, but does not include a substantial modification.
  7. *Micro Wireless Facility* means a small wireless facility having dimensions no larger than twenty-four (24) inches in length, fifteen (15) inches in width, and

twelve (12) inches in height and an exterior Antenna, if any, no longer than eleven (11) inches.

8. *Public Right-of-Way* means land in which the City owns the fee or has an easement required for use as a transportation facility.
9. *Small Wireless Facility* means a wireless facility that meets all of the following qualifications:
  - a. Antennas associated with the facility are located inside an enclosure of no more than six (6) cubic feet in volume.
  - b. All other wireless equipment associated with the facility is cumulatively no more than twenty-eight (28) cubic feet in volume.
  - c. The following types of associated equipment are not included in the calculation of equipment volume: electric meters, concealment elements, telecommunications demarcation boxes, ground-based enclosures, grounding equipment, power transfer switches, cutoff switches, vertical cable runs for the connection of power and other services, and utility poles or other support structures.
10. *Stealth Design* means a method of camouflaging any support structure, antenna, wireless telecommunications facilities, or other ancillary supporting communications facility.
11. *Substantial Modification* means the mounting of a proposed wireless facility on a wireless support structure that substantially changes the physical dimensions of the support structure. A mounting is presumed to be a substantial modification if it meets any one or more of the following criteria:
  - a. Increasing the existing vertical height of the structure by the greater of (i) more than ten percent (10%) or (ii) the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty (20) feet.

- b. Except where necessary to shelter the antenna from inclement weather or to connect the antenna to the support structure via cable, adding an appurtenance to the body of a wireless support structure that protrudes horizontally from the edge of the wireless support structure the greater of (i) more than twenty (20) feet or (ii) more than the width of the wireless support structure at the level of the appurtenance.
  - c. Increasing the square footage of the existing equipment compound by more than 2,500 square feet.
12. *Utility Pole* means a pole or similar structure used in whole or in part by the City or a private organization or private property to provide communications services, electric distribution, lighting, traffic control, signage or similar functions.
13. *Wireless Provider* means a wireless infrastructure provider or a wireless services provider.
14. *Wireless Facilities* means equipment at a fixed location which enables wireless telecommunications between user equipment and a communications network, including radio transceivers, antennas, wires, coaxial or fiber-optic cable or other cables, wireless support structures, associated equipment.

## 9.2. PURPOSE AND INTENT

- A. Purpose and Intent. It is the intent of this Section to comply with N.C.G.S. § 160D, Article 9, Part 3 Wireless Telecommunication Facilities, applicable state and federal law, and establish standards for the siting of wireless telecommunication facilities within the City. The City, through this Section, will allow wireless providers the opportunity to locate wireless telecommunication facilities, wireless telecommunication support structures, and small wireless facilities within its jurisdiction in order to provide an adequate level of service to its customers while protecting the health, safety, and welfare of the citizens of Monroe and its extraterritorial jurisdiction. No wireless facility, support structure, or small wireless facility shall be constructed, nor altered, from and

after the effective date of this Section, except in conformance to the provisions stated herein. This Section intends to:

1. Protect residential districts and uses from potential adverse impacts;
2. Encourage collocation. It is the policy of the City to limit the number of wireless facilities needed within its jurisdiction. To accomplish this, the City requires collocation whenever possible and permits support structures of sufficient height to allow space for multiple antennas. Small wireless facilities, which may negate the need for additional wireless support structures, are encouraged;
3. Comply with all applicable state and federal law; and
4. Ensure that wireless telecommunication facilities, support structures and small wireless facilities in public rights-of-way do not inhibit the safety of pedestrians or obstruct sight distance triangles.

B. **Applicability.** The provisions of this Section shall apply to all wireless telecommunication facilities, unless specifically exempted in this Section. All wireless telecommunication facilities, support structures and small wireless facilities shall comply with this UDO, applicable Federal Aviation Administration (FAA) regulations, Federal Communications Commission (FCC) regulations, and any other state or federal government regulations.

C. **Exemptions.** The following shall be exempted from the standards in this Section, but shall be required to comply with all other relevant standards in the UDO:

1. Amateur radio antennas operated by FCC-licensed amateur radio operators with an overall height of fifty (50) feet or less;
2. Satellite dish antennas, other than broadcast, which may only be developed in accordance with the provisions of this UDO;
3. Replacement or modification of antennas, appurtenances or other equipment with facilities that are substantially similar or of the same or smaller size, and that does not substantially change the physical dimensions of the wireless telecommunications facility when viewed from ground level from surrounding properties;

4. Wireless communications facilities, support structures, or small wireless facilities erected as a temporary use, that receive a temporary use permit.
  5. Wireless communications facilities, support structures or small wireless facilities erected upon the declaration of a state of emergency by a federal, state, or local government.
  6. Emergency communication support structures owned by a public agency that is wholly or in part used for public safety or emergency communication purposes.
  7. Small wireless facilities located in an interior structure or upon the site of any stadium or athletic facility. This subsection does not apply to a stadium or athletic facility owned or otherwise controlled by the city. This subsection does not prohibit the enforcement of applicable codes.
  8. Private easement agreements between private parties. Any and all rights for the use of a right-of-way are subject to the rights granted pursuant to an easement between private parties.
  9. Wireless telecommunications facilities in the rights-of-way of state-maintained highways or City rights-of-way by a provider authorized by state law to operate in the rights-of-way of state-maintained highways or city rights-of-way.
- D. Wireless Telecommunication Facility Types.
1. Wireless Telecommunication Facilities. Equipment at a fixed location which enables wireless telecommunications between user equipment and a communications network, including radio transceivers, antennas, wires, coaxial or fiber-optic cable or other cables, and associated equipment.
  2. Wireless Telecommunication Facility Support Structures. Wireless telecommunication facilities that take the form of a support structure (commonly referred to as a "tower"), whether monopole, lattice, guyed or similar. All support structures shall comply with the provisions of this UDO and state and federal law. Support structures shall be reviewed consistently with state and federal law.

- a. Major Wireless Telecommunication Facility Support Structure. Any new wireless telecommunication facility support structure greater than one-hundred-and-fifty (150) feet in height (maximum two-hundred (200) feet in height).
  - b. Minor Wireless Telecommunication Facility Support Structure. Any new wireless telecommunication facility support structure one-hundred-twenty (120) to one-hundred-fifty (150) feet in height.
  - c. Limited Wireless Telecommunication Facility Support Structure. Any new wireless telecommunication facility support structure below one-hundred-twenty (120) feet in height.
3. Small Wireless Facilities. Wireless facilities not in the form of a telecommunication facility or support structure, small cell wireless facilities typically consist of compact wireless telecommunication technology which exists inside an enclosure of no more than six (6) cubic feet in volume.

### 9.3. SUPPORT STRUCTURE APPROVAL PROCESS

- A. Application. Special use permits may be required for support structures where required per Section 7.1: Table of Permissible Uses. When a special use permit is required, a complete application for a special use permit shall consist of a completed application form, a site plan, and documentation prepared and sealed by a professional engineer registered in North Carolina sufficient to address necessary requirements (including collocation) per state and federal law. The special use permit shall be reviewed in accordance with Section 3.4.9: Special Use Permit and the provisions of this Section.
- B. Additional Review Procedures.
  1. In addition to the review procedures provided for in Section 3.4.9: Special Use Permit, the Board of Adjustment (BOA) may consider the support structure's harmony with the surrounding area, its compatibility with adjacent properties, and the availability or lack thereof of other more suitable sites. The aesthetic effects of the support structure, as well as any mitigating factors concerning the

aesthetics, may be used to evaluate the application. In reaching a decision, the BOA may request the height, design, screening, placement, or other characteristics of the support structure be modified.

2. The review of support structure shall comply with all state and federal law and shall be completed within one-hundred-fifty (150) days (or timeframe mandated under federal law, if amended).
  3. Denials shall be provided to the applicant in writing and provide details as to the reason for denial.
- C. Findings of Fact. In addition to any criteria for Special Use Permits, per Section 3.4.9: Special Use Permit, the BOA shall make the following findings of fact:
1. The use will not interfere with any of the surfaces provided under FAA Regulation 14 CFR Part 77 surrounding the Charlotte-Monroe Executive Airport or affect the radio and navigation signals of the operating ground and airborne equipment in the vicinity of the Airport.
  2. For any support structure proposed to be located in a residential zoning district, as identified in Section 4.2: Residential Zoning Districts, or within five-hundred (500) feet of the nearest property line of a legal conforming residential use, the applicant has submitted substantial evidence that the support structure cannot, by technical necessity, be located more than five-hundred (500) feet from the nearest property line of a legal conforming residential use.
  3. For any support structure proposed to be located in a nonresidential zoning district and within five-hundred (500) feet of the nearest property line of a legal conforming residential use or residential zoning district, the applicant has submitted substantial evidence that the support structure cannot, by technical necessity, be located more than five-hundred (500) feet from the nearest property line of a legal conforming residential use or residential zoning district.
  4. The height of the support structure, as proposed, is required to: (1) provide a reasonable level of service; or (2) meet the collocation requirements of this Section; or (3) prevent the need for another support structure in the search area.

## 9.4. STANDARDS

### A. Specific Standards

1. Major Support Structure. Any new wireless telecommunication facility support structure greater than one-hundred-fifty (150) feet in height shall comply with the following standards:
  - a. A valid Special Use Permit is required.
  - b. The support structure must be constructed to have the capacity to support at least three collocations.
  - c. Maximum height is two-hundred (200) feet.
  - d. Permitted support structure types include monopole, lattice or guyed.
  - e. Stealth designs are not required.
  - f. In no case shall a new wireless telecommunication facility support structure be permitted in the DC-MX district, DG-MX district, a locally designated historic district, a National Register Historic District, or within five-hundred (500) feet of a property listed on the National Register of Historic Places. Major support structures may only be allowed in permitted districts per Section 7.1: Tables of Permissible Uses.
2. Minor Support Structure. Any new wireless telecommunication facility support structure one-hundred-twenty (120) to one-hundred-fifty (150) feet in height.
  - a. The support structure must be constructed to have the capacity to support at least two collocations.
  - b. Maximum height is one-hundred-fifty (150) feet.
  - c. Permitted support structure types include monopole, lattice or guyed.
  - d. Stealth design is not required.
  - e. Minor support structures may only be allowed in permitted districts per Section 7.1: Tables of Permissible Uses.
3. Limited Support Structure. Any new wireless telecommunication facility support structure below one-hundred-twenty (120) feet in height.



- a. The support structure must be constructed to have the capacity to support at least one collocation.
  - b. Stealth design is required. Tree stealth design is not permitted.
  - c. Permitted support structure types include monopole, lattice, or guyed.
  - d. Limited support structures may only be allowed in permitted districts per Section 7.1: Tables of Permissible Uses.
- B. General Standards. The following standards shall be required:
1. Collocation Opportunities. Applicants must submit a notarized statement signed by the owner, or its legal representative, of the number of collocation sites on the wireless telecommunication facility support structure which will be made available. A declaration that such site will be negotiated in good faith at reasonable terms to other wireless providers is also required. Documentation sealed by a professional engineer registered in North Carolina is required to demonstrate that the support structure has sufficient structural integrity for the intended users and collocations.
  2. Aesthetics. To minimize the visual impact of new wireless telecommunication facility support structures, the following requirements shall apply:
    - a. Wireless telecommunication facilities shall not be lighted unless specifically required by the FAA. If FAA lighting is required, strobe lights shall be avoided unless specifically required by the FAA. Lighting of all facilities in any district shall be directed toward the support structure and/or equipment shelters.
    - b. Two-way and microwave antennas shall be located inside accessory buildings when technically possible.
    - c. Outdoor storage of equipment or other related items is prohibited on wireless telecommunication facility sites.
  3. Fencing. In order to secure the site from unauthorized use, an eight (8) foot high fence shall be constructed around any support structure and all ancillary

structures housing equipment. The gate into the fenced area shall be located so that it is not easily visible from a public street or adjacent residence.

4. Screening. Screening is required along all exterior sides of the fence, excluding the gate.
  - a. Screening shall be located outside and parallel to the perimeter of the security fencing.
  - b. Such screening shall consist of evergreen shrubs or trees or any combination thereof planted in such numbers and intervals which will provide an opaque screen within two years.
  - c. All plantings shall be at least three (3) feet in height at the time of planting and capable of reaching a height of six (6) feet within two (2) years. The owner of the property and the owner of the support structure shall be jointly and severally responsible for the maintenance of all screen materials. Such maintenance shall include all actions necessary to keep the screened area free of litter and debris, to keep plantings healthy, and to keep planting areas neat in appearance. Vegetation and plant material shall be maintained and replaced when necessary.
5. Signage. Signage is required to identify the facility as a “no-trespassing area” and to provide a current emergency contact, telephone number, site address and other information as required by applicable federal, state, or local laws. Signage shall meet the following standards:
  - a. No advertising signs are permitted on a support structure site where the support structure is the principal use of the property.
  - b. No advertising signs are permitted within or on the fence securing the support structure site.
  - c. No advertising signs are permitted to be located anywhere on a support structure.

- d. Signs for the purpose of safety and information, not legible from a public right-of-way or adjacent residential lots, are permitted within the fenced area of any support structure site.
  - e. Freestanding signs are prohibited.
6. Lot Size. Support structure sites must be a minimum of 10,000 square feet in size or meet the minimum lot size for the district in which it is located, whichever is greater. A support structure site shall include the entire legal parcel on which the support structure is located, even if the support structure is an accessory use of the property. When support structures are located as accessory uses, any undeveloped/un-impervious requirements which apply to the property must continue to be met for the property as a whole. In addition, if the principal use requires a minimum lot size, then the minimum lot size for the support structure shall be in addition to the minimum lot size established for the principal use.
7. Interference or Obstruction with Public Safety Telecommunications. New wireless telecommunication service shall not obstruct existing or proposed public safety telecommunication facilities. All applications for new service shall be accompanied by a certification obtained by the applicant from the City Chief of Police, Union County Sheriff and Union County Emergency Management Director that the support structure and ancillary wireless telecommunication facilities are not expected to interfere or obstruct such public facilities. In the event interference or obstruction does occur with public safety telecommunication facilities, it shall be the responsibility of the owner of the commercial wireless telecommunication facility creating the interference or obstruction to make all necessary repairs and/or accommodations to alleviate the problem.
8. Setbacks. All support structures, including ancillary structures and guy wires, must meet a minimum fifty (50) feet setback requirement. Major wireless telecommunication facility support structures may have greater setback requirements as part of any Special Use Permit approval.

9. **Certifications Required.** Prior to the release of any occupancy permit or certificate for a support structure site, the applicant must submit federal/local documentation that the support structure complies with (or is not subject to) all requirements of the FCC, the National Environmental Policy Act (NEPA), and State Building Code requirements. In addition, prior to approval, the applicant shall submit a copy of any FAA comments for review by staff.
10. **Placement of Antennas on Existing Buildings.** An antenna may be attached to a commercial or multifamily building in accordance with the following standards:
  - a. Antennas shall not extend above a height twenty percent (20%) higher than the highest point of the building or structure;
  - b. Antennas visible from the street shall be omni-directional, screened, or be camouflaged to minimize appearance; and
  - c. All other equipment shall be located within the building or screened to prevent off-site views.
11. **Rights-Of-Way.** Per N.C.G.S. § 160D-936, a wireless provider shall be required to repair all damaged caused by their work on rights-of-way.
12. **Abandonment.** Whenever a support structure ceases to be in active operation for more than one-hundred-eighty (180) days, it shall be considered abandoned and removed by the owner of the support structure or the owner of the property.
  - a. The owner of the property and the owner of the support structure shall be jointly and severally responsible for the removal of an abandoned support structure.
  - b. The City Council may grant a one-time extension equal to one-hundred-eighty (180) days whenever it finds that such an extension will not compromise the public health, safety, or welfare and that such extension is not solely for the purpose of delaying the cost of removing the support structure.

- c. Whenever a support structure is abandoned, the owner of the support structure shall notify the City's Planning and Development Department within thirty (30) days following abandonment.

## 9.5. EXISTING SUPPORT STRUCTURES

- A. General. All support structures which existed prior to the adoption date of this UDO, and which do not meet the requirements of this Section, shall be permitted to continue as legal non-conforming structures, but shall not be modified except in accordance with this Section.
- B. Modification. Minor modifications, including ordinary maintenance performed on a nonconforming wireless facility or support structure, may be permitted so long such maintenance does not represent a Substantial Modification (as defined in this Section).
  - a. Substantial Modifications shall require a zoning permit, per Section 3.4.20: Zoning Permit, and approval by the Director.
  - b. An Eligible Facilities Request (as defined in this Section) shall not constitute a Substantial Modification and shall be approved by the City, per N.C.G.S. § 160D-934.
  - c. Collocation of wireless telecommunications facilities on an existing nonconforming wireless support structure shall not constitute a Substantial Modification, but shall be reviewed and approved in accordance with the site and development plan process as stated in Section 3.4.17. Qualified collocation applications can be reviewed for conformance with site plan and building permit requirements, but are not otherwise subject to zoning requirements

## 9.6. SMALL WIRELESS FACILITIES

- A. Applicability. The placement of small wireless facilities (including micro wireless facilities) in all cases are subject to the standards of this UDO and require a zoning permit, per Section 3.4.20: Zoning Permit.
- B. Standards. A small wireless facility shall meet all of the standards below:

1. The small wireless facility shall not extend more than ten (10) feet above the highest point of the vertical structure;
  2. Any antenna shall be capable of fitting in an enclosure a maximum of six (6) cubic feet;
  3. Associated equipment for a small wireless facility shall maintain a maximum volume of twenty-eight (28) cubic feet;
  4. The small wireless facility shall not have any type of lighted signal, lights, or illuminations unless required by an applicable federal, state, or local rule, regulation or law;
  5. The small wireless facility shall comply with any applicable FCC emissions standards;
  6. The small wireless facility shall comply with any applicable local building codes in terms of design, construction and installation; and
  7. The small wireless facility shall not contain any commercial advertising.
- C. City Utility Poles. If small wireless facilities are installed on City utility poles, the City shall not enter into an exclusive agreement or arrangement with any person for the right to attach equipment to City utility poles. Any rates or fees for collocations on City utility poles must be nondiscriminatory regardless of the services provided.
- D. Right-of-Way Use Permit. If a small wireless facility is placed within the public right-of-way, in addition to a zoning permit, a right of way permit shall be required. The City may deny a right-of-way use permit for a small wireless facility if the proposed facility:
1. Interferes with the safe operation of traffic control equipment;
  2. Interferes with sight visibility lines for transportation or pedestrians;
  3. Interferes with compliance of the Americans with Disabilities Act or similar federal or state mandated provisions regarding pedestrian access of movement;  
or
  4. Fails to comply with applicable standards of this UDO and Standard Specification and Detail Manual.

#### E. Application Review Criteria

- a. Applications for small wireless facilities shall be processed and reviewed within forty-five (45) days from the date an application is considered to be complete. The applicant and City may mutually agree to a longer review period.
- b. Construction of any approved small wireless facility shall commence within six (6) months of its approval date. The small wireless facility shall be activated for use within one (1) year from the right-of-way use permit issuance date.
- c. City approval is not required for routine maintenance, replacement of existing small wireless facilities which are substantially similar, or installation or replacement of micro wireless facilities that are suspended on cables strung between existing utility poles.

#### F. Abandonment

- a. As authorized by N.C.G.S. § 160D-935(g), whenever a small wireless facility ceases to be in active operation for more than one-hundred-eighty (180) days, it shall be considered abandoned and removed by the wireless provider.
  - a. For purposes of this subsection, a small wireless facility shall be deemed abandoned at the earlier of the date that the wireless provider indicates that it is abandoning such facility or the date that is one-hundred-eighty (180) days after the date that such facility ceases to transmit a signal, unless the wireless provider gives the City reasonable evidence that it is diligently working to place such facility back in service.
  - b. The City Council may grant a one-time extension equal to one-hundred-eighty (180) days whenever it finds that such an extension will not compromise the public health, safety, or welfare and that such extension is not solely for the purpose of delaying the cost of removing the small wireless facilities.

- b. The wireless provider shall be responsible for the removal of a small wireless facility.
- c. Whenever a small wireless facility is abandoned, the wireless provider shall notify the City's Planning and Development Department within thirty (30) days following abandonment.
- d. Should the wireless provider fail to timely remove the abandoned small wireless facility, the City may cause such wireless facility to be removed and may recover the actual cost of such removal, including legal fees, if any, from the wireless provider.

### 9.7. COLLOCATION STANDARDS.

- A. A Wireless Provider, shall, whenever possible, enter into joint use agreements with the City and other parties, for collocation, provided that the terms of such agreements are satisfactory to the Wireless Provider.
  1. Nothing shall mandate that the Wireless Provider enter into joint use agreements with parties other than the City or an agency of the City. However, prior to placement of any new or additional wireless facilities in the Public Rights-of-Way, a Wireless Provider is required to certify in writing to the City that it has made appropriate inquiry to all existing utilities and other entities possessing a right to occupy the Public Rights-of-Way as to the availability of right-of-way that it could reasonably utilize to meet its needs, and that no such facility is available or planned at a reasonable cost by any other entity on the time schedule reasonably needed.
  2. The Wireless Provider shall not be permitted to perform any placement or maintenance of wireless facilities in those segments of the Public Rights-of-Way where there exists vacant or available collocation of facilities.
  3. Collocations shall require an application on a form designated by the City. Decisions on these applications must be made within forty-five (45) days of receipt of a completed application. Notice of any deficiencies in a collocation