



# TOWN OF KNIGHTDALE

## PLANNING DEPARTMENT

[www.knightdalenc.gov](http://www.knightdalenc.gov)

950 Steeple Square Court  
Knightdale, NC 27545  
(v) 919.217.2241  
(f) 919.217.2249

**ORD #11-10-19-002**  
**AN ORDINANCE TO AMEND THE UNIFIED DEVELOPMENT ORDINANCE**  
**OF THE TOWN OF KNIGHTDALE,**  
**REGARDING UPDATES RELATED TO WIRELESS TELECOMMUNICATION FACILITIES**

WHEREAS, the Town of Knightdale has received a petition to amend Chapters 3, 4, 8, 13 and 19 as related to standards, requirements and definitions for wireless telecommunication facilities; clarifying tower and antenna standards; detailing required co-location capabilities, adding bonding requirements and specifying removal requirements related to the cessation of use; and

WHEREAS, the Town of Knightdale Unified Development Ordinance Section 15.15 establishes uniform procedures for amending the text of the Ordinance; and

WHEREAS, the proposed zoning text changes are reasonable in that they advance the stated objective of directing and guiding development so as to achieve optimum utilization of public infrastructure by clarifying the standards and requirements related to the Town's privately provided wireless infrastructure, as well as being consistent with the Comprehensive Plan's stated goal of providing responsible urban design, planning and development and protection of the Town's historical, cultural and natural resources;

NOW, THEREFORE BE IT ORDAINED by the Town Council of the Town of Knightdale, North Carolina:

SECTION 1. That the Unified Development Ordinance of the Town of Knightdale Code be amended to read as follows (*editing notes in parenthetical italics*):

**Section 3.3XX Wireless Telecommunication Facility – Stealth/Camouflage (GR, UR, RMX, NMX, TC, HB, MI, MHD, TND) (2.3C(8)c)**

1. All antennas and related mechanical equipment placed on structures other than towers (a stealth/camouflage facility) shall be concealed. Antennas located on top of buildings or other structures shall not exceed 30% of the building height. In no event shall an antenna extend beyond the structure in any direction greater than 25 feet.
2. Stealth facilities, including antenna and supporting electrical and mechanical equipment, shall be designed to blend in with the existing structure or buildings with similar colors or other techniques as appropriate so as to make the antenna and related equipment as visually unobtrusive as possible.
3. No co-located antenna shall extend above the highest point of the tower.

### **Section 3.3YY Wireless Telecommunication Facility – Towers (RR\*, MI) \*Special Use (2.3C(8)d)**

In recognition of the Telecommunications Act of 1996, it is the intent of the Town of Knightdale to allow Wireless Telecommunication providers the opportunity to locate towers and related 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 Knightdale. Wireless Telecommunication Facilities may be considered undesirable with other types of uses, most notably residential, therefore special regulations are necessary to ensure that any adverse affects to existing and future development are mitigated.

1. Radio, television or similar reception for adjoining properties shall not be disturbed or diminished.
2. No telecommunication tower shall exceed 200 feet in height.
3. Towers shall be sited to contain all on-site ice-fall or debris from tower failure. The minimum distance from the tower's base to the property line shall be equal to the tower's fall radius.
4. Towers must be set back from any residential district a minimum of 200 feet.
5. Towers shall be monopole construction.
6. Tower lighting shall not exceed the minimum standards established by the FAA in Advisory Circular No. 70/7460-1J dated November 29, 1995, and as may be amended from time to time. All towers that require lighting by the FAA shall utilize a dual system consisting of red lights for nighttime hours and high or medium intensity flashing white lights for daytime and twilight hours.
7. A property identification sign (Section 12.9F) shall be displayed in a visible location near the tower. The purpose of the sign is for use by law enforcement departments to contact the company operating the equipment in the event of an emergency. The sign shall contain a number to be assigned to the company and a telephone number for 24-hour emergency contact. No other signs shall be permitted on the facility.
8. The base of the tower along with any individual guy wires shall be enclosed by a commercial grade fence of a minimum of eight (8) feet in height.
9. A vegetative screen consisting of two (2) staggered rows of evergreen trees shall surround the perimeter of the property containing the base of the tower and related equipment. Evergreen vegetation shall be of sufficient density to serve the purpose of an opaque screen to keep the tower area itself from being visible from any public right-of-way or adjacent property.
10. If the tower equals or exceeds 100 feet in height, but is less than 150 feet in height, the tower shall be engineered and constructed to accommodate a minimum of two (2) telecommunication users. If the tower equals or exceeds 150 feet in height, but is less than 180 feet in height, the tower shall be engineered and constructed to accommodate a minimum of three (3) telecommunication users. If the tower equals or exceeds 180 feet in height, but is less than 200 feet in height, the tower shall be engineered and constructed to accommodate a minimum of four (4) telecommunication users. For each potential user there shall be a minimum of 600

square feet reserved on the approved plans for associated buildings and equipment, unless the applicant provides evidence that less space is necessary.

11. If the new tower is approved, the owner shall provide written authorization to the Administrator that the tower and its accessories may be shared by other telecommunication antenna(s). The owner shall record in the register of deeds' office a letter of intent prior to the issuance of the building permit. This letter shall bind all subsequent owners of the approved tower.
12. If the town determines that the proposed tower will be situated in a location that will enhance the town's telecommunication system, the permit applicant shall agree to allow the town to, at fair market value, co-locate its telecommunication equipment prior to the issuance of the building permit.
13. The output power from the tower shall not exceed federally-approved levels for exposure to electronic magnetic force (EMF).
14. Towers shall either maintain a galvanized steel finish or, subject to any applicable standards of the FAA, be painted a neutral color so as to reduce visual obtrusiveness. The design of the tower and related structures shall to the extent possible use materials, colors, textures, screening and landscaping that will blend the tower facilities to the natural setting and built environment.
15. The antenna and supporting electrical and mechanical equipment must be of a neutral color that is identical to, or closely compatible with, the color of the supporting structure so as to make the antenna and related equipment as visually unobtrusive as possible.
16. No antenna shall extend above the highest point of the tower.
17. Evidence must be presented to the Administrator that the proposal complies with all applicable FAA and FCC regulations.
18. The Applicant and the owner of record of any proposed Wireless Telecommunications Facilities property site shall, at its cost and expense, be jointly required to execute and file with the Town a bond, or other form of security acceptable to the Town as to type of security and the form and manner of execution, in an amount of at least \$75,000.00 for a tower and with such sureties as are deemed sufficient by the Town to assure the faithful performance of the terms and requirements of the UDO and conditions of any Special Use Permit issued pursuant to this UDO. The full amount of the bond or security shall remain in full force and effect throughout the term of the Special Use Permit and/or until any necessary site restoration is completed to restore the site to a condition comparable to that, which existed prior to the issuance of the original Special Use Permit.
19. Each calendar year, the antenna owner shall provide the town with a copy of any FCC and FAA license issued.
20. Any wireless telecommunication tower that ceases to be used for a period of at least 365 consecutive days shall be removed at the expense of the property owner or Special Use Permit holder within 30 days of notification by the Administrator. Failure to remove the tower within the specified 30 day period shall constitute a violation of this ordinance, subject to the provisions of Chapter 18.

#### **Section 4.7B4 Exceptions:**

- a. Engineered retaining walls necessitated by severe topography (slopes) are not subject to the height limitations of this section.
- b. Wireless Telecommunication Facility – Tower (Section 3.3YY) are not subject to the height limitations of this section.

#### **Section 4.8 Amateur Radio Antennas**

For amateur radio antennas and their supporting structures, the height of the antenna together with the supporting structure may not exceed 90 feet under any circumstances. Furthermore, for the safety of the general public, the height of the antenna and any supporting structure shall be further restricted to no more than the distance from the base of the structure to the nearest property line which may be a public right-of-way or an adjacent property with structures that might otherwise be damaged in the event of an antenna failure and collapse.

**Section 8.7D Wireless Telecommunication Facility – Tower:** See Section 3.3YY for specific information necessary to meet the required additional screening standards.

**13.5 Nonconforming Wireless Telecommunication Towers:** Towers existing at the time of the ordinance may be replaced with a taller tower and reviewed for approval by the Administrator, provided that the tower shall conform to the standards detailed in Section 3.3YY, as well as the following:

- A. Subject to the provisions of Section 3.3YY(2), the height of the replacement tower may not exceed the height of the original tower by more than 50 feet, and the addition of up to 50 feet may occur only once.
- B. The fall and debris radius requirement and setback requirement in Section 3.3YY(3) and Section 3.3YY(4) may be exempted provided that:
  1. a registered engineer certifies that the proposed replacement tower and debris would fall within the boundary lines of the property on which the tower is located; and
  2. this certification is reviewed and verified by a third-party engineer of the Town's choosing.
- C. The replacement tower must be located in as close proximity to the base of the original tower as reasonably possible, but in no event more than 50 feet from the base of the original tower.
- D. The owner of the replacement tower must provide the planning director with an affidavit stating that at least one (1) other wireless communications carrier needs a wireless communications facility within 1,250 feet of the subject site and that such carrier has agreed to co-locate on the replacement tower.

## CHAPTER 19 DEFINITIONS

### **Wireless Telecommunication Facility:**

Equipment constructed in accordance with Section 332(c)(7) of the Communications Act at a single location by a private business user, governmental user, or commercial wireless service provider to transmit, receive, or relay electromagnetic signals (including microwave). Such facilities includes antennas or antenna arrays, wireless telecommunication towers, support structures, transmitters, receivers, base stations, combiners, amplifiers, repeaters, filters, or other electronic equipment; together with all associated cabling, wiring, guy anchors, equipment enclosures, and other improvements.

**Stealth/Camouflage 2.3C(8)c:** Antenna and related telecommunication equipment designed as an integral part of a permitted existing structure and unobtrusive in its appearance. Such existing structures may include, but are not limited to: flagpoles, buildings, silos, water tanks, signs, lighting standards, steeples, and electric transmission towers. This use also includes co-located facilities on a permitted existing tower.

**Tower 2.3C(8)d:** Any free-standing structure up to 200 feet in height designed and constructed to primarily support one (1) or more telecommunication antennas, or an attachment to a building or structure designed and constructed for previous said purpose where the attachment extends more than 20 feet above the normal height of the building or structure on which it is placed. The following shall not be included in this definition as a tower:

- Amateur radio facilities with antennas mounted on supporting structures less than 90 feet in height;
- Residential antennas for receiving television or AM/FM radio broadcasts;
- Residential satellite dishes; or
- Commercial or industrial satellite dishes that are less than 20 feet in height.

SECTION 2. That all laws and clauses of law in conflict herewith are hereby repealed to the extent of said conflict.

SECTION 3. That if this ordinance or application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions of this ordinance which can be given separate effect and to the end the provisions of this ordinance are declared to be severable.

SECTION 4. That this ordinance has been adopted following a duly advertised public hearing of the Town Council and following review and recommendation by the Land Use Review Board.

SECTION 5. That this ordinance shall be enforced as provided in G.S. 160A-175 or as provided for in the Knightdale Town Code.

SECTION 6. That this ordinance shall become effective upon its adoption by Town Council.

Adopted this 19<sup>th</sup> day of October, 2011.

ATTEST:

---

Russell B. Killen, Mayor

---

Suzanne M. Yeatts, Town Clerk

APPROVED AS TO FORM:

---

Clyde Holt, III; Town Attorney