

CHAPTER 12-33 WIRELESS TELECOMMUNICATIONS FACILITIES

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12-33-010. Purpose.

The purpose of this Chapter is to address planning issues brought on by the rapid growth in demand for wireless telecommunications services facilities. This Chapter distinguishes wireless telecommunications services from other broadcasting type telecommunication technologies and establishes provisions that deal with issues of demand, visual mitigation, noise, engineering, residential impacts, health, safety and facility siting. This Chapter also addresses issues of residential impact with reference to Amateur Radio. It is not the purpose of this Chapter to address other types of business and commercial wireless telecommunication. Any wireless telecommunications transmission facilities not requiring the external installation of antennas or peripheral equipment to serve their purposes shall not be affected by this Chapter.

12-33-020. Definitions.

The following definitions are specific to this Chapter.

- (a) “Amateur Radio Services” means those not-for-profit radio services governed by the U.S. Code of Federal Regulations, Part 97 of Title 47 relating to the Federal Communications Commission.
- (b) “Antenna” means a transmitting or receiving device used in telecommunications that radiates or captures radio signals.
- (c) “Antenna Support Structures” means the mechanical devices by which antennas are attached to towers or buildings.
- (d) “Colinear” or rigid “whip” antenna means an antenna that is cylindrical in shape, omnidirectional in transmission and reception, and may vary in size depending upon the frequency and gain for which it is designed.
- (e) “Co-location” means the construction of towers designed to permit more than one user to attach antennas for permitted purposes.

(f) “Institutional Radio” means equipment used primarily for the transmission, reception or transfer of voice or data through radio wave (wireless) transmission for institutional use. These institutional uses include, but are not limited to: churches, well sites, water tanks, City parks, City buildings (fire, police, City Hall, public works), public schools, and quasi-public schools.

(g) “Lattice tower” means a self-supporting multiple sided, open steel frame structure used to support telecommunications equipment.

(h) “Monopole” means a single cylindrical steel or wooden pole that acts as the support for antenna structures and antennas.

(i) “Public Use” means a publicly-owned structure or use such as a city park, city building (fire, police, city hall, etc.), public school, a well site, a water tank, or similar uses or structures.

(j) “Quasi-public Use” means a structure or use such as facilities owned or operated by a community association, upon a street lamp or other lighting poles, electric power poles not exceeding thirty (30) feet in height, and similar uses and structures.

(k) “Roof mounted antenna” means an antenna or series of individual antennas mounted on a roof, mechanical room or penthouse of a building.

(l) “Small Wireless Facilities” Means wireless facilities and any support structure for the Small Wireless Facility(ies) that do not exceed the volume limitations for small wireless antennas and associated equipment in the First Amendment to Nationwide Programmatic Agreement for the Collocation of Wireless Antennas adopted by the Federal Communications Commission.¹

(m) “Wall mounted antenna” means an antenna or series of individual antennas mounted against the vertical wall of a building.

(n) “Wireless Telecommunications Facilities” means “Cellular” or “PCS” (Personal Communications System) facilities used primarily for the transmission, reception or transfer of voice or data through radio wave (wireless) transmissions which can be integrated with the public switched network. Such sites typically require the construction of transmission support structures to which antennas are attached and one or more unmanned accessory buildings to house equipment.

12-33-030. Wireless Telecommunications Facilities.

The requirements of this Chapter apply to commercial radio services such as “cellular” or “PCS” (Personal Communications System) communications and paging systems which can be

¹ See the Programmatic Agreement for specifics on the size and volume of equipment. Generally, the applicable size and volume limitations are: (a) an individual antenna must fit within an enclosure that is no more than three cubic feet in volume; (b) all antennas on the structure must in aggregate fit within enclosures that total no more than six cubic feet in volume; (c) other equipment associated with the structure may not cumulatively exceed 28 cubic feet for non-pole structures supporting fewer than 3 providers, 21 cubic feet for pole structures, and for structures supporting 3 or more providers, 35 and 28 cubic feet respectively.

integrated with a variety of competing networks, unless otherwise specifically exempted. All facilities shall comply with the following regulations and all other ordinances of the City, including building permit regulations and requirements, and any pertinent regulations of the Federal Communications Commission (FCC) and the Federal Aviation Administration (FAA).

12-33-040. Development Master Plan Required.

A site location Development Master Plan shall be submitted by each company desiring placement of wireless telecommunication services facilities. The Development Master Plan shall be submitted and approved by the Planning Commission prior to the processing of any permits for permitted or conditional use locations. Future amendments to each company's Development Master Plan shall be submitted and reviewed by the Planning Commission prior to approval of additional facility locations. The Development Master Plan shall show approximate locations of future facilities, and provide specific locations when possible, and if the information is available detail the specific type (i.e., pole, roof, wall mount) of antenna. In addition, the Development Master Plan shall show the service area of each antenna within the City and the approximate location and service area of any other tower/antenna locations in communities adjoining Woods Cross City.

12-33-050. Allowed Use.

Antennas to be located on monopoles, as allowed herein, are authorized if co-located on an existing monopole or other antenna site that has been previously approved by the City; provided that the applicant desiring to co-locate agrees in writing to abide by all the conditions and terms of the original approval and/or the original conditional use permit.

12-33-060 Prohibition in Residential Zones -- Conditional Uses in Residential and Other Zones.

(a) Except as otherwise provided in this section, wireless telecommunication facilities are prohibited in residential zones.

(b) Small Wireless Facilities may be allowed as a conditional use in a residential zone if located upon or within a public or quasi-public structure.

(c) Wireless telecommunications facilities that employ effective stealth-type techniques and designs that match or compliment the structure on which the facility is deployed may be allowed as a conditional use in a residential zone if located on a structure dedicated to a public use, and are otherwise shielded from public view by creative use of screens, landscaping, etc.

(d) In all non-residential zones, wireless telecommunications facilities may be allowed as a conditional use; exclusive of amateur radio facilities governed by Section 12-33-110.

12-33-070. Facility Types.

Commercial wireless telecommunications services facilities are characterized by the type or location of the antenna structure. There are four general types of such antenna structures: wall mounted antennas; roof mounted antennas; monopoles with antennas and antenna support structure; and lattice towers. Standards for the installation of each type of

antenna are as follows:

(a) Wall Mounted Antenna. The following provisions apply to wall mounted antennas:

(1) Wall mounted antennas shall not extend above the top or side wall line of the building or extend more than four (4) feet horizontally from the face of the building.

(2) Antennas, equipment and the supporting structure of any antenna shall be constructed of materials or painted to match the color of the building or structure or the background against which they are most commonly seen. Antennas and the supporting structures on buildings should be architecturally compatible with the building.

(3) Antennas mounted directly on existing parapet walls, penthouses, or mechanical equipment rooms, with no portion of the antenna extending above the roofline of such structures, shall be considered a wall mounted antenna.

(b) Roof Mounted Antenna. The following provisions apply to roof mounted antennas:

(1) Roof mounted antennas are allowed on top of existing roofs, penthouses or mechanical equipment rooms provided the antennas and antenna support structures are enclosed by a structure that creates a visual screen. The screening structure, antennas and antenna mounting structures shall not extend more than eight (8) feet above the existing roofline of the roof, penthouse or mechanical equipment room.

(2) For antennas not mounted on a penthouse or mechanical equipment room, the antennas shall be mounted at least five (5) feet from the exterior wall of a building. For antennas mounted between five (5) and ten (10) feet from the exterior wall, the maximum height of a roof mounted antenna is directly proportional to the distance the antenna is set back from the exterior wall up to a maximum height of ten (10) feet above the roofline of the building to which the antenna is attached. Antennas shall be mounted at least five (5) feet behind a parapet wall; and the maximum height of the antenna is directly proportional to the distance the antenna is set back from the wall up to a maximum of ten (10) feet as measured from the top of the parapet wall.

(3) Roof mounted antennas are permitted only on a flat roof and shall be screened, constructed and/or colored to match the structure to which they are attached.

(c) Area Limitations for Wall and Roof Mounted Antennas. A combination of both roof and wall mounted antennas may be allowed on a building. The total area for all wall and roof mounted antennas and supporting structures combined shall not exceed forty (40) square feet for each exterior wall of the building or a total of one hundred sixty (160) square feet per building. A maximum of four (4) walls may be occupied by antennas. The total area shall be the sum of the area of each individual antenna face and the visible portion of the supporting structure as viewed when looking directly at the face of the building. The total allowable area for a roof mounted antenna and supporting structures shall be reduced by the number of square feet utilized by the wall antenna and structures on the nearest exterior wall. Each applicant for a wall or roof mounted antenna shall obtain a separate conditional use permit.

(d) Monopole Antennas. The following provisions apply to monopole antennas:

(1) For purposes of this Chapter, there shall be two divisions of monopoles: monopoles with antennas and antenna support structures less than two feet in width; and monopoles with antennas and antenna support structures two feet in width and greater. Both antenna types shall be subject to the following restrictions:

(A) The height limit of single user monopoles shall be limited to sixty (60) feet. The height limit of multiple user monopoles on which multiple facilities are to be co-located shall be limited to one hundred (100) feet. A separate conditional use permit shall be required for each pole location.

(B) Facilities to be co-located upon an existing pole shall be considered an allowed use, provided that the initial pole installation received a conditional use permit, and the co-locator agrees in writing to abide by all requirements of the conditional use permit. All such facilities shall comply with all other provisions relating to site development, landscaping, security, etc., as provided herein.

(C) Monopoles shall be allowed only in rear yard areas only and are prohibited in any front or side yard or in any landscape buffer area.

(D) Monopoles shall be surrounded with a six (6) foot solid completely opaque fence, the material of which shall be approved by the Planning Commission. There shall be no climbing pegs located on the lower twenty (20) feet of the monopole.

(E) Electronic equipment and cabinetry shall be located within an enclosure which shall not exceed twenty-five (25) feet by twenty-five (25) feet by ten (10) feet tall.

(F) Monopoles, enclosures and electronic cabinetry shall be located and designed in a manner that will ensure effective and attractive visual screening, such as behind existing structures, and screened with trees and shrubbery. Each application shall be accompanied by a drawing that clearly identifies the screening to be utilized for the pole and any related structure.

(G) Where a monopole is to facilitate co-located equipment, the applicant shall design and construct an enclosure that houses users and co-locators electronic cabinetry in a manner that will ensure efficient space utilization. All companies utilizing enclosures for cabinetry shall be responsible for removing any graffiti on the structure and/or perimeter fence and to correct any vandalism to the structure within seventy-two (72) hours of notification.

(H) There shall be no lighting on towers unless required by the FAA. Any other lighting shall be oriented inward so as not to project onto surrounding property.

(2) For monopoles with antennas and antenna support structures less than two feet in width, the total antenna structure attached to a monopole shall not exceed two (2) feet in width and the maximum height of such array shall not exceed ten (10) feet. Such monopoles may be allowed only in the I-1 Light Industrial and I-2 Industrial Zones. No such monopoles shall be located within 200 feet of a residential zone or area

designated for future residential development in the City's General Plan.

(3) For monopoles with antennas and antenna support structures two feet in width and greater, the maximum visible width of antennas and antenna mounting structures attached shall not exceed eight (8) feet in height or thirteen (13) feet in width as viewed looking directly at the monopole at the same elevation as the antennas and antenna mounting structure. Such monopoles may be allowed only in the I-1 Light Industrial and I-2 Industrial Zones. No monopole shall be located within 350 feet of a residential zone or area designated on the General Plan or City Zoning Map for future residential or mixed-use residential development, nor closer than 250 feet from a major collector street or 500 feet from a major arterial street. In addition, no monopole shall be located less than one and one-half (1½) times the tower height from any other City street or residential dwelling.

(e) Lattice Tower. Lattice towers are not permitted for wireless telecommunications services facilities.

12-33-080. Additional Conditional Use Requirements.

In addition to conditional use standards outlined in this Title, the following shall be considered by the Planning Commission in evaluating a conditional use application for the location of a wireless telecommunication facility:

(a) Compatibility of the proposed structure with the height and mass of existing buildings and utility structures.

(b) Whether co-location of the antenna on other existing structures in the same vicinity such as other towers, buildings, water towers, utility poles, athletic field lights, parking lot lights, etc., is possible without significantly impacting antenna transmission or reception.

(c) The location of the antenna in relation to existing vegetation, topography and buildings to obtain optimal visual screening.

(d) Whether the spacing between monopoles creates quantifiable detrimental impacts on adjoining properties.

(e) The Planning Commission may reduce the required setback from a residential zone if practical difficulties are demonstrated by the applicant (i.e., City Park location, public buildings, etc.) or upon demonstration by the applicant that the proposed facility can be effectively screened from the view of nearby sensitive land uses, provided that no pole may be permitted closer than one and one-half (1½) times the height of the pole to any residential dwelling.

(f) Compliance with provisions of this Title regarding the Airport Protective Area, the International Building Code, regulations of the Federal Communications Commission, and other applicable Federal, State and City regulations.

(g) Other safety, functional and aesthetic elements of the proposal including without limitation the following:

(1) design and construction characteristics that minimize the visual impact to

the extent possible through design, screening and siting;

(2) the removal or modification of site landscaping and the provision of replacement landscaping elements;

(3) efforts to ensure that the facilities do not increase the height of the existing, approved facility;

(4) for wall-mounted facilities, the antenna and associated equipment incorporates stealth-type design features and is of a scale and design compatible with the building;

(5) how the facilities will blend with and/or complement the color, design and/or character of the surrounding context, whether natural backdrop, building or existing facility;

(6) the exclusion of exterior, artificial lighting unless required for safety purposes by State or Federal Law;

(7) ground equipment and vertical elements have been screened/buffered using landscaping and fencing to the extent possible;

(8) the facility incorporates stealth/aesthetic designs such as public art, clock towers, flag poles or other appropriate visual forms, if possible;

(9) design and construction elements that ensure the absence of guy wires;

(10) signage is limited to warning and informational signs; and

(11) design and construction considerations that discourage unauthorized access.

12-33-090. Accessory Buildings to Antenna Structures.

Accessory buildings to antenna structures shall comply with the required setback, height and landscaping requirements of the zoning district in which they are located. Where required by applicable City Zoning Ordinances, all power lines on the lot leading to the accessory building(s) and antenna structure shall be underground.

12-33-100. Antennas and Mounting Structures on or Over a Public Right-of-Way.

Antennas and mounting structures are not permitted to encroach on or over the public sidewalk or on or over a public right-of-way, except as may be expressly provided in a duly approved franchise agreement.

12-33-110. Amateur Radio Services.

Amateur radio services are licensed and protected by the Federal Communications Act and Part 97 of Title 47 of the U. S. Code of Federal Regulations regarding Amateur Radio Services. It is not the purpose of this Chapter to limit Amateur Radio Services, but to guide the installation of such facilities with regard to issues of visual mitigation, residential impacts, health,

safety and facility siting. Amateur radio services are permitted in all zones of the City with the following restrictions:

(a) Height. Amateur radio station antenna towers may not exceed sixty-five (65) feet in height.

(b) Siting. Towers and antennas shall be limited to rear yards. Antenna towers shall be sited such that the tower is no closer to a neighboring dwelling than the height of the tower plus five (5) feet; guy wires shall not be closer than five (5) feet from the property line on any side. Towers shall be installed to withstand wind forces of up to one hundred (100) miles per hour.

(c) Quantity. The average size of R-1-8 and R-1-10 City lots and the proximity to other dwellings limits the number of 65-foot towers to no more than one per lot. Additional 65-foot towers may be permitted on larger lots with due consideration given to the negative visual impact on the surrounding area.

(d) Size. Any station antenna for amateur radio services greater than twelve (12) feet tall with antenna and support structure exceeding ten (10) square feet in surface area, must apply for a building permit for installation after receiving Community Development approval in accordance with the provisions of this Section.

(e) Special Exception. Any person desiring to erect a tower or structures in excess of the above limitations for amateur radio services in accordance with Part 97 of Title 47 of the Code of Federal Regulations regarding Amateur Radio Service may apply for a special exception to the Planning Commission for reasonable accommodation from the provisions of this Section. The Planning Commission shall determine what, if any, reasonable accommodations and reasonable restrictions can be made for such structures to mitigate the adverse effects thereof to constitute the minimum practicable regulation to accomplish the City's legitimate purposes. The Planning Commission shall comply with the procedural requirements set forth in Chapter 4 of this Title regarding special exceptions and shall prepare written findings and conclusions regarding its decision. Any applicant wishing to apply for an exception to the restrictions set forth herein shall specify the details and dimensions of the proposed antenna and its supporting structures and shall further specify why the applicant contends that such a location, design and height are necessary to accommodate reasonably, the amateur radio communication.

12-33-120. Non-Maintained or Abandoned Facilities.

The City may require each non-maintained or abandoned commercial wireless telecommunications antenna supporting tower, antenna mounting structure, antenna(s) and any other antenna, communications facility or communications equipment regulated herein to be removed from the building or premise, at the permittee's expense, when such equipment has not been repaired or put into use by the owner, person having control, or person receiving benefit of such structure within thirty (30) calendar days after notice of non-maintenance or abandonment is given to the owner, person having control, or person receiving the benefit of such structure. For purposes of this Section, "abandoned" shall mean any facility or supporting tower, antenna mounting structure, and antenna(s) which has not been used for a continuous period of one (1) year.

12-33-130. Other Types of Antennas.

Antennas, communications facilities or communications equipment not defined or regulated by this Chapter are conditional uses in all non-residential zones within the City and require conditional use review to ensure that any negative effects thereof may be mitigated by the imposition of reasonable requirements or regulations.