

Article 24

WIRELESS TELECOMMUNICATIONS FACILITIES

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ARTICLE 24: WIRELESS TELECOMMUNICATIONS FACILITIES

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SECTION 1 - PURPOSE AND INTENT

- 24.1.1 The purpose of this Section is to establish guidelines regulating the location of telecommunication towers and antennas with the objective of minimizing their number, to protect and promote public safety, and to mitigate any adverse visual impacts on the community while promoting the provision of telecommunications service to the public.
- 24.1.2 The regulations contained in this ordinance have been developed under the following general guidelines as provided in the federal Telecommunications Act of 1996. ¹
- A. Cities have local authority over “placement, construction and modification” of cellular telephone facilities and other personal wireless telecommunication service facilities.
 - B. Regulations “shall not unreasonably discriminate among providers of functionally equivalent services.”
 - C. Regulations “shall not prohibit or have the effect of prohibiting the provision of personal wireless services.”
 - D. “Denial shall be in writing and supported by substantial evidence.”
 - E. Cities may not “regulate the placement, construction and modification of personal wireless service facilities on the basis of environmental or radio frequency emissions to the extent that such facilities comply with the Federal Communication Commissions regulations concerning such emissions.
- 24.1.3 Notwithstanding any other provision of this ordinance, telecommunications towers and antennas, when permitted by federal law and the laws of the State of Texas, shall be regulated and governed by the following use regulations and requirements.

SECTION 2 - DEFINITIONS

24.2.1 Definitions

Alternative Mounting Structure: A man made tree, clock tower, church steeple, bell tower, utility pole, light standard, identification pylon, flagpole, or similar structure, designed to support and camouflage or conceal the presence of telecommunications antennas.

Antenna: A structure or device used to collect or radiate electromagnetic waves, including directional antennas, such as panels, wireless cable and satellite dishes, and Omni-directional antennas, such as whips, but not including satellite earth stations.

Antenna Array: An arrangement of antennas and their supporting structure.

Antenna, Dish: A parabolic or bowl shaped device that receives and/or transmits signals in a specific directional pattern.

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Antenna, Panel: An antenna that receives and/or transmits signals in a directional pattern.

Antenna, Stealth: A telecommunications antenna that is effectively camouflaged or concealed from view.

Antenna, Telecommunications: An antenna used to provide a telecommunications service. This excludes lightning rods, private mobile radio systems, amateur radio antennas less than 50 feet (15 meters) in height and whip antennas less than 4 inches (10 cm) in diameter and less than 10 feet (3 meters) in height.

Antenna, Whip: An Omni-directional dipole antenna of cylindrical shape, which is no more than 6 inches (15 cm) in diameter.

Co-location: A single telecommunications tower and/or site used by more than one telecommunications service provider.

EIA-222: Electronics Industries Association Standard 222, "Structural Standards for Steel Antenna Towers and Antennas Support Structures."

Identification Pylon: A permanent ground mounted sign consisting solely of a single monolithic structure used to identify a development.

Structure: An object, including a mobile object, constructed or installed by man, including, but not limited to, buildings, poles, water towers, cranes, smokestacks, earth formations and overhead transmission lines.

Telecommunications: The transmission, between or among points specified by the user, of audio and/or visual information of the user's choosing, without change in the form or content of the information as sent and received.

Telecommunications Service: The offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

Tower, Electric Transmission: A self-supporting structure in excess of 50 feet(15 meters) in height designed to support high voltage electric lines. This does not include local utility or distribution poles (with or without transformers) designed to provide electric service to individual customers.

Tower, Guyed: Any telecommunications tower supported in whole or in part by cables anchored to the ground.

Tower, Height: The distance measured from grade to the highest point of any and all components of the structure, including antennas, hazard lighting, and other appurtenances, if any.

Tower, Monopole: A self-supporting telecommunications tower that consists of a single vertical pole fixed into the ground and/or attached to a foundation.

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Tower, Self-supporting Lattice: A telecommunications tower that consists of an open network of metal braces forming a tower that is usually triangular or square in cross-section.

Tower, Telecommunications: A self-supporting or guyed structure more than twenty feet (6 meters) in height, built primarily to support one or more telecommunications antennas.

SECTION 3 - GENERAL PROVISIONS

- 24.3.1 **Applications:** All applications for rezoning or a Specific Use Permit (SUP) for a telecommunications tower, antenna, or other facility to provide a telecommunications service shall include a completed supplemental information form provided by the City regarding said facilities.
- 24.3.2 **Platted Lots:** Unless an exception is granted by the Planning and Zoning Commission, telecommunications facilities requiring rezoning or a Specific Use Permit (SUP), including towers and related equipment buildings, shall be located on a platted lot. ²
- 24.3.3 **Technical Assistance:** When a rezoning or SUP is required to comply with the provisions of this section, and when the technical information provided by the applicant is beyond the technical capacity of city staff to review, the applicant, in addition to the usual application fee, shall reimburse the City for the actual cost to the City for the services of a technical expert to review the application and/or information supplement, up to a maximum of \$5,000 dollars.
- 24.3.4 **Pre-application Meetings:** Prior to leasing or purchasing facilities, the telecommunications service provider is encouraged to meet with the Director of Planning or his/her designee to determine if the location will require a Specific Use Permit or other approvals, and to review the merits of potential locations. Failure to review a location with appropriate City staff, prior to leasing or purchasing a site or facility, may be presented as evidence in subsequent zoning hearings as a lack of good faith effort to coordinate locations with the City.
- 24.3.5 **Master Antenna Plan:** To facilitate co-location and coordination of telecommunication sites, the city shall, within 30 days of its effective date, notify the providers of telecommunications services, as that term is defined by federal law, of the enactment of this ordinance. Said providers shall, within 90 days of the date of such notice, provide the City with their respective master antenna plans. Said plans shall include detailed maps, showing the locations and characteristics of all telecommunications towers and antennas serving any portion of the City and indicating coverage areas for current and, to the extent possible, future telecommunications towers and antennas. Providers shall also provide the City with any updates to the above documents within 90 days of their creation. ³

SECTION 4 - TELECOMMUNICATIONS TOWER STANDARDS

- 24.4.1 **Applicable Federal and State Standards:** All telecommunications towers and antennas shall be erected and operated in compliance with current Federal Communication Commission (FCC) and Federal Aviation Administration (FAA) rules and regulations and other applicable federal, state, and local standards.

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- 24.4.2 **Structural Standards:** Telecommunications tower structures must conform to the most current revision of EIA 222 standards. Guyed telecommunications towers shall be designed and located such that if the structure should fall it will avoid habitable structures and public streets.
- 24.4.3 **Co-location:** Towers shall be designed and built to accommodate a minimum of two cellular or PCS providers, if over 75 feet (23 meters) in height. The owner of the tower must certify to the City that the tower is available for use by other telecommunications service providers on a reasonable and nondiscriminatory basis.
- 24.4.4 **Fencing and Screening:** Security fencing, if installed, shall be by a wrought iron or steel chain link fence with evergreen hedge, or a masonry wall, each not less than 6 feet(1.8 meters) in height. The exterior of equipment buildings and/or metal equipment cabinets visible from residential areas or public rights-of-way must have a neutral aggregate finish or be painted to reflect the color and character of adjoining structures or blend with adjacent landscaping and other surroundings.
- 24.4.5 **Setbacks:** All telecommunication towers as well as guys and guy anchors shall be located within the build able area of the lot and not within the front, rear, or side yard building setbacks. Telecommunication towers in excess of 400 feet (120 meters) in height shall be set back a minimum of 2600 feet (800 meters) from the right-of-way of all controlled access federal and state roadways designated as freeways to provide unobstructed flight paths for helicopters.
- 24.4.6 **Signage:** Except as otherwise permitted in this ordinance, no signage, lettering, symbols, images, or trademarks in excess of 200 square inches (1290 square cm) shall be placed on or affixed to any part of a telecommunications tower, antenna, antenna array, equipment building, or security fencing other than as required by FCC regulations or other applicable law.
- 24.4.7 **Lighting:** Except as otherwise permitted in this ordinance, no signals, lights or illumination of any kind shall be permitted on or directed toward any tower unless required by the FCC, the FAA or other appropriate public authority.
- 24.4.8 **Abandonment:** In the event the use of any Wireless Communication Facility, which would include any telecommunications tower or other antenna support structure, has been discontinued for a period of 360 days, the antenna support structure shall be deemed to be abandoned. Determination of the date of abandonment shall be made by the Building Official who shall have the right to request documentation from the owner/operator regarding the issue of usage.

Upon the determination of abandonment, the owner/operator of the antenna support structure shall remove same within 90 days of receipt of notice from the building official notifying the owner/operator of such abandonment. If said antenna support structure is not removed within 90 days, the Building Official may cause it to be removed at the owner's expense.

SECTION 5 - TOWER LOCATION STANDARDS

- 24.5.1 **Historic/Cultural:** Except for compatible alternative mounting structures that effectively camouflage or conceal the presence of telecommunications antennas, telecommunications facilities should not be located on or within 300 feet (90 meters) of property zoned historic or property included in a national or local historic district. In addition, said facilities should, wherever

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possible, be located so as to ensure that historic or culturally significant vistas, and landscapes are protected and that the views of and vistas from architecturally and/or historically significant structures are not impaired or diminished.

24.5.2 **Residential Zoning:** Except as otherwise provided in this ordinance, telecommunications towers are not permitted in any residential zoning district and must be a minimum of a 3 to 1 distance to height ratio from a single-family residential district and 1 to 1 distance to height ratio from a multifamily district.

24.5.3 **Towers Permitted by Right:** Freestanding monopole telecommunications towers 85 feet (26 meters) or less in height are permitted in the non-residential districts indicated in Article 4 of this ordinance. ⁴

24.5.4 **Towers Requiring a Specific Use Permit (SUP):** Except as otherwise provided in this ordinance, telecommunication towers in excess of 50 feet (15 meters) in height and monopole towers in excess of 85 feet (26 meters) in height are permitted in the non-residential districts, indicated in Article "4" of this ordinance with a Specific Use Permit (SUP).

24.5.5 **Tower Spacing:** Any new telecommunications tower in excess of 180 feet (55 meters) in height must be located a minimum of 1 mile (1.6 km) from any existing tower in excess of 180 feet (55 meters) in height. ⁵

24.5.6 ***Alternative Mounting Structures***

- A. New Alternative Mounting Structures 100 feet (30 meters) or less in height are permitted, by right, in the non-residential districts indicated in Article "4" of this ordinance.
- B. New Alternative Mounting Structures in excess of 100 feet (30 meters) in height are permitted in the non-residential districts indicated in Article "4" of this ordinance with a Specific Use Permit (SUP).
- C. All new Alternative Mounting Structures located in the residential zoning districts indicated in Article "4" of this ordinance shall require a Specific Use Permit (SUP).
- D. Alternative Mounting Structures must be similar in color, scale and character to adjoining buildings or structures or blend with the landscaping and other surroundings immediately adjacent to them so as to generally avoid the creation of unique visual objects that stand out in the environment.

SECTION 6 - ANTENNA MOUNTING STANDARDS

24.6.1 The purpose of this section is to promote public safety and maintain order and harmony within the City's business, cultural and residential districts by restricting the size and location of telecommunication antennas. The objective is to avoid the creation of visual distractions, prevent obstructions to the view of pedestrians and motorists on public thoroughfares, and to insure the structural integrity of supporting structures. ⁶

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24.6.2 *Whip and Panel Antenna Mounting Standards*

- A. Individual telecommunications antennas are allowed on existing electric utility poles, light standards, and telecommunication towers in excess of 40 feet (12 meters) in height, provided that the total length of any antenna does not exceed 15 percent of the height of the existing structure. The height of a telecommunications tower is determined by the highest point of any and all components of the structure, including antennas.
- B. Telecommunications antennas and arrays are allowed by right on existing electric transmission towers.
- C. Existing structures in excess of 50 feet(15 meters) in height may, as a matter of right, be rebuilt, if necessary, to support or contain a new antenna, provided that the new structure is the same height and substantially the same in appearance as the structure it replaces.
- D. Panel antennas which do not extend above the structure, or whip antennas 15 feet (4.5 meters) or less in height, are permitted on conforming billboard structures. ⁷
- E. Building mounted panel antennas are permitted on non-residential buildings and multifamily dwellings in all zoning districts, provided that they are mounted flush with the exterior of the building and that they do not project above the roofline nor more than 30 inches (75 cm) from the surface of the building to which they are attached. The antenna's appearance shall be such that its color and texture blends with the surrounding surface of the building.
- F. Whip antennas are permitted on non-residential buildings and multifamily dwellings in all zoning districts, provided that the total length of said Whip antennas, regardless of mounting method or location, does not exceed 15 percent of the height of the existing building.
- G. Only one building/roof mounted antenna support structure, less than 100 square feet (nine square meters) in area, is permitted per 5,000 square feet (450 square meters) of building floor area.

24.6.3 *Dish Antenna Mounting Standards*

- A. Dish antennas shall not be permitted in any front setback area or side yard setback adjacent to any roadway.
- B. Ground mounted dish antennas in excess of five feet(1.5 meters) in height shall be screened from roadways and adjacent property by a minimum 6 foot(1.8 meter) high screening fence, evergreen hedge, or masonry wall.
- C. Dish antennas in excess of 10 feet (3 meters) in height, in any position, or more than 3 meters in diameter, shall not be permitted in any residential zoning district.
- D. Building/roof mounted dish antennas one (1) meter or less in diameter, are permitted in all zoning districts indicated in Article "4" of this ordinance.

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- E. Building/roof mounted dish antennas 2 meters or less in diameter, are permitted on all buildings in excess of 5,000 square feet (450 square meters) of building floor area in the non-residential districts indicated in Article “4” of this ordinance.
- F. Only one building/roof mounted dish antenna, 2 meters or less in diameter, is permitted per 5,000 square feet (450 square meters) of building floor area on non-residential buildings and on multi-family dwellings in the residential zoning districts indicated in Article “IV” of this ordinance.
- G. Building/roof mounted dish antennas in excess of 2 meters in diameter, may be permitted on buildings in excess of 100,000 square feet (9,000 square meters) of building floor area in the non-residential districts indicated in Article “4” of this ordinance with an SUP.
- H. Building/roof mounted dish antennas in excess of one(1) meter in diameter, in residential zoning districts shall be painted to have an appearance that blends with the building on which they are located or be located so that they are not visible from any adjacent roadway.
- I. Building/roof mounted dish antennas in excess of 2 meters in diameter, in non-residential districts shall be painted or screened with enclosures so as to have an appearance that blends with the building on which they are located or be located so that they are not visible from any adjacent roadway.

24.6.4 Structural Certification

- A. Prior to the installation of any building/roof mounted telecommunications antenna, antenna array or support structure the City’s Building Official shall be provided with an engineer’s certification that the structure will support and not be adversely affected by the proposed antenna and associated equipment.

SECTION 7 - APPEALS

- 24.7.1 Any entity that desires to erect or utilize telecommunication facilities that wishes to present evidence that such entity would be limited by the current ordinances or regulations of the City dealing with zoning and land use may apply for such use under this section. The City Council shall, upon a showing that strict application of the regulations would prohibit or have the effect of prohibiting personal wireless service, as defined by federal law, modify the subject regulations, consistent with the spirit and intent of this chapter and section, to the extent necessary to prevent the prohibition.

SECTION 8 - VIOLATION DEEMED NUISANCE

- 24.8.1 In addition to the penalties provided in this code, any violation of this subchapter is hereby declared to be a nuisance. In addition to any other relief provided by this subchapter, the city may apply to a court of competent jurisdiction for an injunction to prohibit the continuation of any violation of this article, and other available relief.

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**TABLE 1
SUMMARY OF WIRELESS TELECOMMUNICATION FACILITIES**

Tower/Antennae Facility Type	Non-Residential	Residential	Historical/Cultural	Reference
<i>New Lattice, Other Towers</i>				
0 to 50 Feet	X	-	-	24.5.3
Over 50 Feet	SUP	-	-	24.5.4
<i>New Monopole Tower</i>				
0 to 85 Feet	X	-	-	24.5.3
Over 85 Feet	SUP	-	-	24.5.4
<i>Alternative Mounting Structures</i>				
0 to 100 Feet	X	SUP	Stealth	24.5.6
Over 100 Feet	SUP	SUP	Stealth	24.5.6
<i>Antenna Only Mountings</i>				
Electric Transmission Towers	X	X	Stealth	24.6.2.b
Existing Telecom Towers Over 40 Feet	X	X	Stealth	24.6.2.a
Utility Poles Over 40 Feet	X	X	Stealth	24.6.2.a
Light Poles Over 40 Feet	X	X	Stealth	24.6.2.a
Conforming Billboards	X	X	Stealth	24.6.2.d
Bldg Mounted Panels	Stealth	X ¹	Stealth	24.6.2.e
Bldg Mounted Whips	X	X ¹	Stealth	24.6.2.f
Roof Mounted Arrays	X ²	X ²	Stealth	24.6.2.g
<i>Dish Antennae Mountings</i>				
Building/Roof Mounted Under 1m Diameter	X	X	Stealth	24.6.3.d
Building/Roof Mounted 1m to 2m Diameter	X ²	X ¹	Stealth	24.6.3.f
Building/Roof Mounted Over 2m Diameter	X ³	-	Stealth	24.6.3.g
Ground Mounted Under 3m Diameter	X	X	Stealth	24.6.3.c
Ground Mounted Over 3m Diameter	X	-	Stealth	24.6.3.c

Notes:

X: Allowed By Right

SUP: Requires a Specific Use Permit

Stealth: See Definition for *Antenna, Stealth* in Section 24.2

¹: Non-Residential and Multi-Family Structures ONLY

²: Non-Residential Structures in Excess of 5,000 Sq./Ft. Floor Area

³: Non-Residential Structures in Excess of 100,000 Sq. Ft. Floor Area

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Notes to Cities:

¹ Inclusion is optional depending upon local legal review, but it helps in public hearings to recite the “game rules.”

² This paragraph is not intended to require any revision or amendment to an existing platted lot in order to accommodate the location of a telecommunication facility. In addition, an exception to the platting requirement may be granted in agricultural zoning districts or where the platting of vacant land for a tower would create problems in the future platting of property and where the dedication of rights-of-way or easements have already been accomplished.

³ If information is submitted by the telecommunications providers that is claimed to be proprietary, the City Attorney should be consulted prior to releasing such information to others. Proprietary information is protected from disclosure by the Texas Public Information Act.

⁴ Article “10” refers to the standard use tables of the zoning ordinance that identify those uses allowed in particular zoning districts.

⁵ Tower separation can range from no spacing requirement to as much as five miles, no matter what the height. It should be noted, however, that this provision would preclude clustering of towers in areas where they would not be objectionable. It may be wise to designate areas where this requirement would not apply.

⁶ This section includes “satellite dish antennas.” A community may want to include other provisions already contained in their current code of ordinances. It should be noted that current FCC Regulations limit the restrictions a city may place on satellite dishes.

⁷ Legal non-conforming signs are excluded so as to avoid any complications that might interfere with the eventual abatement of such signs. Some cities may decide that reducing the need for new telecommunications towers, by making available as many alternative opportunities as possible, overrides this concern. These cities may decide to allow antennas on both conforming and legal non-conforming signs.