

Motion #2017-4 UDO Text Changes

Chapter 1:

155.103.C. Definitions Correct and Add:

Co-location shall mean the mounting or installation of communication (transmitting or receiving) equipment on an existing water tower, utility pole, communication tower or facility.

Communications Antenna: shall mean any structure or device used to collect or radiate electromagnetic waves, including directional antennas - such as panels, microwave dishes, and satellite dishes and omni-directional antennas such as whips but not including satellite earth stations for private use. Where a set or group of devices work as a single unit, such as three (3) panels facing different directions for three hundred sixty degree (360°) coverage, then that group shall be considered as a single antenna.

Digital Devices: shall mean a device that can generate, record, process, receive, transmit, or display information that is represented in discrete numerical form.

Distributed Antenna System (DAS): shall mean a clustered installation of antennas to boost cellular network coverage in areas with weak to no signals. A DAS generally doesn't generate a cellular signal, rather they send and receive signals.

Small Cell Site (SCS): shall be an umbrella term for operator-controlled, low-powered radio access nodes, including those that operate in licensed spectrum and unlicensed carrier-grade Wi-Fi. Small cells typically have a signal range from approximately 32 ft to 650 ft and are fully featured, short range wireless base stations used to complement service from the larger macro cell towers. Small cell sites are a good way to increase mobile phone coverage and data speeds for both voice and data. Sizes range from compact residential to a pole in public right-of-way. SCS are flexible enough to also be deployed indoors in large buildings or venues where large crowds can overwhelm traditional infrastructure.

Slick Stick: shall mean a unipole constructed similar to flagpoles, but without the flag.



Small Wireless Facility shall mean a wireless facility that meets both of the following: *i)* each antenna is located inside an enclosure of no more than six (6) cubic feet in volume or, case of an antennae, that has exposed elements, the antenna and all of its exposed elements, if enclosed could fit within an enclosure of no more than six (6) cubic feet; and *ii)* all other wireless equipment associated with the facility has a cumulative volume of no more than twenty eight (28) cubic feet in volume. The following types of ancillary 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, cut-off switches, vertical cable runs for the connection of power and other services, or other support structures.

Stealth Application: shall mean

Utility Pole: shall mean a structure that is designed for and used to carry lines, cables, or wires for telephone, cable television, or electricity, or provide lighting.

Water Tower: shall mean a water storage tank, a standpipe, or elevated tank situated on a support structure originally and primarily constructed for use as a reservoir or facility to store or deliver water.

Wireless Communication Equipment Base Station: shall mean a fixed point of communication for customer digital device on a carrier network. A specific site authorized to communicate with mobile stations, generally consisting of radio receivers, antenna, coaxial cables, power supplies, and other associated electronics. Base station elements must be in close physical location to SCS, DAS and/or tower.

Wireless Facility: shall mean the set of equipment and network components. Exclusive of the underlying wireless support structure or tower including antennas, transmitters, receivers, base stations, power supplies, cabling, and associated equipment necessary to provide wireless data and wireless telecommunications services to a discrete geographic area.

155.506.41 Communications Towers and Antennas Facilities.

- A. The purpose of this section is to: meet requirements of Telecommunications Act of 1996; direct the location of tall communications ~~towers~~ facilities where they have been determined to be least disruptive of existing or developing land use character, specifically to commercial road corridors; protect residential areas and land uses from potential adverse impacts of communications ~~towers~~ facilities; preserve the low building profile and character of the downtown; protect land values of adjacent and nearby properties; minimize adverse visual impacts of ~~communications towers~~ any wireless facilities through careful design, siting, landscape screening, and innovative camouflaging techniques; accommodate the growing need for communications ~~towers~~ facilities; promote and encourage shared use/~~collocation~~ co-location of existing and new communications ~~towers~~ facilities as a primary option rather than construction of additional single-use ~~towers~~ facilities ; encourage the use of concealment techniques ~~instead of towers~~ in providing support and height for antennas; protect public safety as it may be impacted by construction, wind damage, electric shock, unauthorized access to facilities, structural damage on non-tower supporting structures, monitoring visitor traffic, lighting for visibility to hospital, traffic, police, or other helicopter or private aircraft, and related considerations. ~~With or without towers, a~~ A communications antenna is considered a principal use or a secondary principal use on any site, except when it is ~~either~~ incidental to a business use on the same lot and used by that business for its operational communications, ~~or is on the same lot as a phone or cable consumer outlet or operations center.~~ They are permitted as a secondary principal use in residential districts (R-20, R-15, R-12, R-9, R-MH, R-VS, and CrC) where a permitted nonresidential principal use exists.

B. SITING HIERARCHY PREFERENCES

The following list indicates the Town's preferences for communications facility locations, in descending order of preference:

- Antenna mounted on/in an existing stealth (concealed) structure or building
- Antenna mounted on/in an existing building/structure
- Antenna mounted on an existing utility or light pole
- Co-location on existing communications tower
- New freestanding stealth structure
- New non-stealth monopole or slick stick tower

These preferences are intended as guidance for development of an application for communication facilities.

B-C. STANDARDS FOR COMMUNICATION TOWERS.

1. RESIDENTIAL DISTRICTS. Antennas may be located in stealth applications on supporting structures which are or will be the principal use or a permitted accessory structure to the principal use of the site in any residential district, and shall not be more than eighty feet (80') in overall height (antenna and supporting structure). Where structures which existed as of June 9, 1997 exceed eighty feet (80') in height, such as electric transmission towers, these structures may also be used for antenna locations. When an existing stealth structure is used, communications antennas may not increase the stealth structure's height by more than twenty feet (20') per antenna, up to forty feet (40') additional in height, and only when such location shall not require the antenna to be lighted.
2. MULTI-FAMILY DISTRICTS. Antennas may be located on buildings or in stealth applications on supporting structures in the R-15MF, R-12MF, SRN, and C-MF districts, and shall not be more than eighty feet (80') in overall height (antenna and supporting structure). Where structures which existed as of June 9, 1997 exceed eighty feet (80') in height, such as electric transmission towers, these structures may also be used for antenna locations. Because these districts typically have multi-story construction, location of antennas on building walls and rooftops is the preferred application. Maximum heights are given in the table below.
3. MIXED USE AND NONRESIDENTIAL DISTRICTS. Antennas may be located on towers or other supporting structures in the R/I district (except as given in table below), and all mixed use or nonresidential districts except the HUC and AU districts up to the overall heights listed below.
4. DOWNTOWN OVERLAY DISTRICT. Only antennas, Distributed Antenna Systems (DAS), and Small Cell Sites may be installed in the Downtown Overlay District, including the HUC district. Communication towers are not permitted in the Downtown Overlay District. See § 155.506.41.D below for location requirements.

5. TABLE OF MAXIMUM TOWER HEIGHT IN VARIOUS ZONING DISTRICTS

MAXIMUM ANTENNA TOWER HEIGHT (FEET) IN MULTI-FAMILY, MIXED USE AND NONRESIDENTIAL ZONING DISTRICTS			
District	Adjacent to any residential zoning district		When no residential district is adjacent
	Non-stealth	Stealth	1 user/2 users/3 users/Trunked Public Safety
R-15MF, R-12MF, SRN, C-MF	Not permitted	80*	80*/ 100/ 120/ not permitted
R/I	Not permitted	80*/***	80*/ 100 / 120 / not permitted
0	50	80*	100*/ 120 / 140 / not permitted
B-1, B-1SCD, B-D	50	80*	120*/ 140 / 160 / not permitted
B-H	50	80*	160*/ 180 / 200 / not permitted
B-3, I-1, MUD, TS, ENT	60	80*	180*/ 200 / 220 / not permitted
I-2	60	80*	200*/ 220 / 240 / 400 **

(Ord. 919, passed 4-28-97)

Note: Communication towers are not permitted in Downtown Overlay per § 155.506.41.C.4.

* Where there are existing nonresidential structures that exceed the above-given height limit (such as electric transmission towers), then these structures may also be used for antenna locations. These limits may be increased by twenty feet (20') for each additional user co-locating on the stealth structure up to an additional forty feet (40'), and only when such location will not require the antenna to be lighted.

**(1) There are no residential zoning districts within one thousand feet (1,000') radius of the proposed tower site.

(2) The owner/developer and/or lessee of the proposed tower must possess a license (see Form FCC 574 or replacement Form FCC 600), to operate a Trunked Public Safety and Special Emergency Radio Services system in accordance with FCC Regulations Part 90, Subpart B and C, 90.15 and 90.33 respectively, and such tower will be used by licensee for the operation of a Trunked Public Safety and Special Emergency Radio Services system.

(3) Location of non-Public Safety system antennas for co-locators shall not be restricted to two hundred forty feet (240') or less, but such co-location antennas shall be located below the principal Public Safety system antennas.

(4) The proposed tower is designed to allow co-location by at least two users and applicant for the tower provides written documentation that a co-locating provider has/can lease space.

*** When utilizing a stealth tower application, the above given height limits may be increased up to an additional 40' at the time of initial construction. Photo simulations must be provided. Said simulations must show all exterior edges of the property. Additional documentation such as coverage maps may also be provided. Site plan to be reviewed and approved by Town Board. (Ord. 1965, passed 9-9-13; Ord. 2025A, passed 6-9-14)

4.6 SPACING DISTANCE SEPARATIONS BETWEEN COMMUNICATION TOWERS. Communications Towers shall be spaced from each other by the minimum radius as given below:

COMMUNICATION TOWER HEIGHT	MINIMUM DISTANCE
tower under 80 feet to tower under 80 feet	1,200 feet
tower under 200 feet to tower under 200 feet	1,800 feet
tower over 200 feet to tower under 200 feet	2,200 feet
tower under 200 feet to tower over 200 feet	2,200feet

tower over 200 feet to tower over 200 feet	2,500 feet
tower over 240 feet to tower over 240 feet	15,000 feet*

*This limit may be decreased with approval by the Board of Commissioners per § 155.506.41.C.7 below. (Ord. 919, passed 4-28-97)

~~5-~~ 7 MINIMUM LOT AREAS FOR COMMUNICATIONS TOWERS. Different types of communications towers are allowed in different zoning districts. In the R-15MF, R-12MF, SRN, C-MF, R/I and O districts, only monopole towers are permitted. Lattice towers ~~are~~ may be permitted in mixed use and nonresidential districts where communications towers are allowed. Guyed towers ~~are~~ may be allowed only in the I-2 District. Towers requiring guy wires are discouraged due to the extensive footprint necessary for the overall installation. A tower and its related equipment (including guy wire ground connections) must be located on a separate lot or leased portion of a larger lot and must meet setback and yard requirements of the appropriate district. Where a lattice or guyed tower is requested, the applicant must provide documentation, including site plan, from an engineer outlining why ~~another option~~ a monopole is not possible. Minimum lot size for communications towers shall be as follows:

Monopole	100 feet x 100 feet
Lattice	150 feet x 150 feet
Guyed	350 feet x 350 feet

~~These lot size requirements are waived when a stealth or concealed structure is used or when a monopole tower is attached to a mixed use or nonresidential building and all related equipment is located within such building.~~

~~6-~~ 8 REQUIRED LANDSCAPING.

- a. When a communications tower (not a stealth or concealed structure) is requested, the following landscape screening requirements shall apply:
 - i. A one hundred percent (100%) opaque wall or fence six feet (6') or higher around tower, related equipment structure(s), and parking, plus a minimum of two (2) rows of evergreen shrubs, planted in staggered fashion, ten feet (10') on center in each row, with initial plant height of three feet (3'); or
 - ii. A non-opaque fence or wall, six feet (6') or higher around tower, related equipment structure(s), and parking, plus a minimum of three (3) rows of evergreen trees and shrubs planted in staggered fashion so that the plant materials create a fifty percent (50%) opaque screen, six feet (6') high, at time of planting. Trees shall be minimum six feet (6') tall and shrubs shall be three feet (3') tall at time of initial planting. The combination of trees and shrubs shall be expected to create a one hundred percent (100%) opaque screen, six feet (6') tall, within three (3) growing seasons. The required plant material shall be located between the required fence or wall and the lot or lease lines. Vehicular entrance gate openings shall not be directly visible from any public street, or the gates shall be one hundred percent (100%) opaque from the ground up a minimum of six feet (6').
 - iii. All trees and shrubs must be from Matthews Approved Tree and Shrub List located in § 155.606.14.

- b. When a stealth application is employed which does not totally conceal wiring or related equipment at the ground level, such as an electric transmission tower, then the following landscape screening requirements shall apply:
 - i. A one hundred percent (100%) opaque wall or fence, six feet (6') or higher around ground level equipment, structure(s), and parking, plus a minimum of two (2) rows of evergreen shrubs, planted in staggered fashion, ten feet (10') on center in each row, with initial plant height of three feet (3'); or

- ii. A non-opaque fence or wall, six feet (6') or higher around ground level equipment, structure(s), and parking, plus a minimum of three (3) rows of trees and evergreen shrubs planted in staggered fashion so that the plant materials create a fifty percent (50%) opaque screen three feet (3') high and twenty five percent (25%) opaque screen six feet (6') high at time of planting. Trees shall be minimum six feet (6') tall and shrubs shall be three feet (3') tall at time of initial planting. When located within the easement for electric transmission towers, landscaping plans shall also meet the utility company's requirements.
- iii. All trees and shrubs must be from Matthews Approved Tree and Shrub List located in § 155.606.14.

- 7.9 SETBACK FROM STREETS AND PROPERTY LINES. ~~All antenna placements shall be subject to the district's setback and yard requirements, as well as the distance requirements given in § 155.601.8. Where the distances given below are different, the more restrictive shall apply.~~ Communications towers are not be allowed in the Downtown Overlay. Other than the Special Highway Overlay District, any communications tower up to eighty feet (80') in height shall be set back a minimum of one hundred feet (100') from any public street. Any communications tower between eighty feet (80') and one hundred twenty feet (120') in height shall be set back a minimum of one hundred twenty five feet (125') from any public street. Any communications tower over one hundred twenty (120') feet in height shall be set back a minimum of one hundred seventy five feet (175') from any public street. Where antennas are located in a stealth application, they shall be set back a minimum of forty feet (40') from any public street. In each case, distance shall be measured from edge of right-of-way to the tower, ~~the front of the stealth structure,~~ the related equipment, or the guy wire ground connection, whichever is the closest.
- 8.10. REMOVAL OF TOWERS, ANTENNAS, AND EQUIPMENT. Whenever a tower, or its antennas, and/or related equipment ceases to be in active operation, ~~it~~ they shall be removed within one hundred twenty (120) days of inactivation. Notification in writing to the Town Planning office of the final date of operation shall include the anticipated date of removal of all antennas, towers, equipment, and other structures associated with that location. Notification shall be submitted within thirty (30) days of the last day of operation.
9. ~~ANNUAL NOTIFICATION. During January of each calendar year, the supporting structure owner and all service providers shall jointly submit annual registration for each antenna location within the Town limits with the Town Planning office. The information provided shall include the location, type of tower or other support, height of tower/antenna, name/address/phone of company and contact person within each company responsible for the antenna and/or support structure, indicate whether or not there are collocating users at the same facility or whether there is the capability to have collocating users at the facility. This information shall be kept for reference and shall be available for public inspection. When an antenna location ceases operation, the user and the support structure owner are jointly responsible for updating their registration information. Both shall notify the Town in writing of the final date of operation, and shall include the anticipated date of removal of all antennas, towers, equipment, and other structures associated with that location. This end usage notice shall be submitted within thirty (30) days of the last day of operation.~~
- 10.11. SUBMISSION OF ZONING APPLICATION. All ~~antenna~~ antenna, new or revisions to existing communications towers, ~~locations or additions,~~ including co-locations, which require approval through a zoning action, shall submit a site plan and elevation of the proposed facility ~~improvements~~ as a part of the zoning application. The site plan shall include at a minimum: construction type of the tower/~~other supporting structure~~ and related equipment storage; total height including antenna; whether the tower/~~structure~~ will include or allow for co-location; zoning of all adjacent lots; the nearest residential zoning in a straight-line distance when all adjacent lots are nonresidential; lot boundaries or lease lines; all existing or proposed buildings and structures on the lot, or on larger parcel when a leased portion; method of screening; and vehicular access. If the ~~antenna~~ request is denied or restricted, a written explanation for the denial or restriction shall be given in the minutes of the Board of Commissioners meeting where such decision is made. (Ord. 912; passed 1/27/97)

- ~~44~~.12. So as to promote and encourage shared use/co-location of existing communications towers, the foregoing provisions of this § 155.506.41 shall not apply to:
- a. the essentially equivalent replacement of a tower that was in existence as of January 27, 1997; or
 - b. the placement of additional communications antennas and/or supporting or related equipment or equipment buildings on or in the immediate vicinity of a tower that is in existence as of January 27, 1997, provided that any additional equipment or buildings located on the ground shall be reasonably screened from view from the public roadway. (Ord. 920, passed 6-9-97) [**formerly known as § 153.172**]

D. STANDARDS FOR WIRELESS FACILITIES OTHER THAN COMMUNICATIONS TOWERS

Distributed Antenna System (DAS) and Small Sell Sites (SCS) are newer technology in the realm of wireless communications. There are many advantages in the implementation of these types of wireless communications systems. These systems can be adopted and used in residential, suburban, and urban areas where sufficient wireless coverage is lacking. These are relatively small structures that can be easily concealed or placed so that they are not visually obvious or prominent. DAS and small cell sites may be placed within any zoning districts. Certain criteria apply when placing DAS and Small Cell Sites within specific districts.

1. LOCATIONS OF WIRELESS FACILITIES.

- a. Adhering to the siting hierarchy in §155.506.41.B, wireless facilities are encouraged to co-locate on existing utility and street light poles whenever possible in order to reduce the proliferation of poles in right-of-way.
- b. No new utility pole may be installed for the principal use of wireless facilities if a pole exists within twenty feet (20') of a desired location. If a pole exists within twenty feet (20') of the proposed location but cannot meet the height or load bearing demands for the wireless facility installation, that existing pole can be replaced with an appropriate new pole, not increasing in height more than ten feet (10')
- c. Along town maintained street rights-of-way where there are no existing utility poles (all underground utilities), wireless facilities may be attached to street lights in the public right-of-way. An encroachment agreement must be issued by the Public Works Director before installation. Approval from the owner of the light pole must be submitted with the easement agreement. Equipment cabinet(s) for systems placed on light poles in the rear of private property in utility easements shall be located underground, at the base or on the corresponding light pole.

2. WIRELESS FACILITIES STANDARDS

- a. When antennas are placed on top of a building in the Downtown Overlay, wireless facilities must be located within an equipment penthouse, or on top of a building behind the parapet so as not to be seen from the public realm, occupied window, or occupied rooftop when installed. Wireless facilities will be limited to three feet (3') in height above the parapet and must be seventy-five (75) to one hundred (100) percent concealed. Wireless facilities cannot be visible from the public realm and must blend in with the look and design of where they are being located.
- b. Within the Special Highway Overlay district, wireless facilities can be placed on existing buildings or structures including utility poles. New poles for the sole purpose of wireless facilities shall only be placed in the existing driveway locations. Where tree clearing has occurred, it must remain open. They may not be placed in Special HO buffer except for existing cleared area of driveway or interior to the site.
- c. Outside of overlay districts, wireless facilities may be placed on existing utility poles located within the public right-of-way, on buildings or on other structures. An

encroachment agreement must be issued by the Public Works Director before installation. If wireless facilities are placed on top of an existing building, they shall be placed within an equipment penthouse, or behind the parapet. Roof top applications shall be limited to no more than three feet (3') in height above the parapet, concealed from the public realm, and must blend in with the look and design of where they are being located.

- d. Equipment cabinet(s) shall be located at the rear or non-street side of a building not visible to pedestrians. Equipment cabinet(s) for systems placed on utility poles or street lights shall be located either on the utility pole ten feet (10') above ground level or at the base of the corresponding utility pole or street light. All supporting equipment (meters, switches, ground equipment and the like) must be no more than 28 cubic feet, ten feet (10') from back edge of sidewalk and no more than five feet (5') in height. Sealed drawings shall be provided indicating that the utility pole or street light can physically accommodate the equipment.

3. CO-LOCATION

The Town encourages the installation of wireless facilities on an existing structure for transmitting or receiving radio frequency signals for communications purposes to avoid unreasonable duplication of wireless facilities. Co-located facilities and equipment may be separately owned and used by more than one entity.

- a. All new wireless facilities shall be designed and constructed to provide for co-location and utilize neutral host equipment capable of use by multiple additional wireless communication providers.
- b. As a condition of installing a new pole or facility for wireless communication services, the owner of a new pole shall reasonably consent to allowing future requests for co-location by other providers of personal wireless services on reasonable terms and conditions that do not discriminate between similarly situated providers of wireless communication services.
- c. New wireless facilities that cannot be co-located on an existing wireless facility or utility pole must be separated by a minimum of 400 linear feet from any existing wireless facility or utility pole.

4. INSTALLATIONS OF NEW POLES IN SINGLE FAMILY RESIDENTIAL DISTRICTS

- a. The minimum distance of a new pole from any single family dwelling structure shall be at least 150% of the pole height and shall not be located directly in front of any single family dwelling located in a single family zoning district. The minimum setback distance shall be measured from the facility installation to the nearest point of a single family dwelling located in a single family zoning district.
- b. Along streets and within subdivisions where there are no existing utility poles (all underground utilities), wireless facilities may be attached to street lights in the public right-of-way. Approval from the owner of the light pole must be submitted with the easement agreement. Equipment cabinet(s) for systems placed on light poles in the rear of private property in utility easements shall be located underground.
- c. New poles may not be erected in residential area solely for wireless communication equipment attachment unless the applicant has demonstrated that it has evaluated whether it can reasonably provide service by:
 - i. Installing poles outside of the residential area;
 - ii. Attaching equipment to existing poles within the rights-of-way;
 - iii. Installing poles in rights-of-way not contiguous to parcels used for single family residential purposes; or
 - iv. Installing poles in rights-of-way contiguous to reverse frontage parcels.

- d. All requests for new poles within the rights-of-way in residential neighborhoods shall be in compliance with Matthews Utility Right-of-Way Policy:
 - i. At least 10 business days prior to submitting an application, the applicant shall complete each of the following pre-submission requirements;
 - ii. Notify all property owners within 500 feet of proposed pole installations, measured along the public right-of-way, via a door hanger, direct mailing or other means approved by the Town;
 - iii. Host a community meeting to occur not less than 30 days after initial notice to present in reasonable detail the proposed draft plan of installation, including facility descriptions, locations, applicable screening, and aesthetic characteristics;
 - iv. Receive and consider for a period of 30 days after the community meeting any community comments or proposed alternative locations and designs;
 - v. Host a second meeting to occur not less than 35 days after the initial community meeting to present in reasonable detail the proposed plan of installation, including facility descriptions, locations, relevant screening, and aesthetic characteristics.
- e. An encroachment agreement must be issued by the Public Works Director before installation of any new pole in right-of-way.
- f. New poles shall not be constructed of wood.
- g. Any disturbance in street rights-of-way that would require relocation of poles and associated equipment shall be the responsibility of the communications company that own the poles.
- h. The maximum height of the pole shall be the lesser of 50 feet or the height of existing utility poles, except where in the Town's discretion, increased pole height is an acceptable alternative to either reduce the total number of new poles or to allow installation of a pole in a location preferred by the community. The maximum height of an antenna on top of the pole shall be no more than six feet (6') above the height of the pole.