TITLE 20

MISCELLANEOUS

CHAPTER

1. TELECOMMUNICATIONS TOWERS AND ANTENNA ORDINANCE.

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TELECOMMUNICATIONS TOWERS AND ANTENNA ORDINANCE

SECTION

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20-101. <u>Definitions</u>. For purposes of this ordinance:

(1) "Alternative tower structure" shall mean man-made trees, clock towers, bell steeples, light poles and similar alternative design mounting structures that camouflage or conceal the presence of antennas or towers.

(2) "Antenna" shall mean any exterior transmitting or receiving device mounted on a tower, building or structure and used in communications that radiate or capture electromagnetic waves, digital signals, analog signals, radio frequencies (excluding radar signals), wireless telecommunications signals or other communication signals.

(3) "Backhaul network" means the lines that connect a provider's towers/cell sites to one or more cellular telephone switching offices or long distance providers, or the public switched telephone network.

- (4) "FAA" shall mean Federal Aviation Administration.
- (5) "FCC" shall mean Federal Communications Commission.

(6) "Height" shall mean, when referring to a tower or other structure, the distance measured from the finished grade or the parcel to the highest point on the tower or other structure, including the base pad and any antenna.

- (7) "May" shall mean with permission.
- (8) "Shall" shall mean mandatory.

(9) "Tower" shall mean any structure that is designed and constructed primarily for the purpose of supporting one or more antennas for telephone, radio and similar communication purposes, including self-supporting lattice towers, guyed towers or monopole towers; including, but not limited to, radio and television transmission towers, microwave towers, common-carrier towers, cellular telephone towers, alternative tower structures and any support thereto. (Ord. #291, June 1999)

20-102. <u>Applicability</u>. All new towers or antennas within the town limits of Carthage shall be subject to these regulations, except as follows:

Preexisting towers and preexisting antennas shall not be required to meet the requirements of this ordinance, other than the requirements of § 20-104(10) and § 20-104(11). (Ord. #291, June 1999)

20-103. <u>**Requirements**</u>. (1) Each applicant for an antenna and/or tower shall provide to the planning commission, prior to council consideration, the following:

(a) An inventory of its existing towers, antennas or sites that are within the jurisdiction of the Town of Carthage.

(b) Specific information about the proposed location, height and design of each tower and/or antenna; and

(c) Proposed sites requested for approval.

(2) Towers and antennas shall meet the following:

(a) 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;

(b) At a tower site, the design of the buildings and related structures shall, to the extent possible, use materials, colors, textures, screening and landscaping that will blend them into the natural setting and surrounding buildings;

(c) If an antenna is installed on a structure other than a tower, 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;

(d) Towers shall not be artificially lighted, unless required by the FAA or other applicable authority;

(i) If lighting is required, the lighting alternatives and design chosen must cause the least disturbance to the surrounding views.

(e) All towers must meet or exceed current standards and regulations of the FAA, the FCC and any other agency of the state or federal government with the authority to regulate towers and antennas;

(i) If such standards and/or regulations are changed, the owners of the towers and/or antennas governed by this ordinance shall bring such towers and/or antennas into compliance with revised standards and regulations within six (6) months of the effective date of such standards and regulations unless a different compliance schedule is mandated by the controlling state or federal agency.

(ii) Failure to bring towers and antennas into compliance with such revised standards and regulations shall constitute grounds for the removal of the tower or antenna at the owner's expense.

(f) The owner shall ensure that the structural integrity of the towers and/or antennas is maintained in compliance with standards contained in applicable state and local building codes and the applicable standards for towers that are most recently published and amended by the Electronic Industries Association;

(i) If, upon inspection, the Town of Carthage concludes that a tower and/or antenna fails to comply with such codes and standards and constitutes a danger to persons and/or property, then upon notice being provided to the owner of the tower, the owner shall have thirty (30) days to bring such tower into compliance with such standards.

(ii) Failure to bring such tower and/or antenna into compliance within thirty (30) days of notice shall constitute grounds for removal of the tower and/or antenna at the owner's expense.

(3) Tower setbacks and separation distances shall be calculated and applied to facilities located in the Town of Carthage irrespective of county jurisdictional boundaries.

(4) Owners and/or operators of towers and/or antennas shall certify that all franchises required by law for the construction and/or operation of a wireless communication system in the Town of Carthage have been obtained with a copy of each provided to the city recorder. (Ord. #291, June 1999)

20-104. <u>**Regulations**</u>. (1) It shall be unlawful for any person to install, erect, or use a tower and/or antenna without first making application to, and obtaining approval from the town council.

(2) No new tower shall be permitted unless the applicant demonstrates that no existing tower, structure or alternative technology that does not require the use of towers and structures can accommodate the applicant's proposed antenna.

(3) No signs shall be permitted on an antenna and/or tower.

(4) Buildings and support equipment associated with antenna and/or towers shall comply with all applicable requirements and codes.

(5) Any civil, mechanical and/or electrical engineering information that the applicant submits shall be certified by a licensed professional engineer under the guidelines of the State of Tennessee. (6) Sites for locating a tower and/or antenna, including the placement of additional buildings or other supporting equipment used in connection with said tower and/or antenna shall be as follows:

- (a) Located in commercial or industrial zoning areas;
- (b) Meet setback requirements as listed in Table 2;

(i) In dimensions of the entire lot shall control the determination of the tower or antenna complying with town development regulations, including but not limited to, setback requirements and lot-coverage requirements.

(ii) Towers must be set back a distance equal to at least one hundred percent (100%) of the height of the tower plus thirty (30) feet from any adjoining lot line.

(iii) Guys and accessory buildings must satisfy the minimum zoning setback requirements.

Separation Distance

TABLE 2

Off-site Use/Designated Area

1. Residential: Single family or duplex 200 feet or 300% height of including modular homes and mobile tower; whichever is greater 2.Residentially zoned land which is either 200 feet or 300% height of platted or has preliminary subdivision tower; whichever is greater plan approval. 3. Vacant unplatted residentially zoned 200 feet or 200% height of lands, multi-family residentially tower; whichever is greater Existing multi-family residential units 200 feet or 100% height of 4. greater than duplex units tower; whichever is greater 5. Non-residentially zoned lands or non-None, only setbacks apply residential uses

(c) Meet separation requirements as listed in Table 1:

(i) Tower separation shall be measured from the base of the tower to the lot line of the off-site users and/or designated areas.

(ii) Separation distances between towers shall be applicable and/or measured between the proposed tower and preexisting towers by drawing or following a straight line between the base of the existing tower and the proposed base, pursuant to a site plan, of the proposed tower.

TABLE 1

Existing Towers-Types

	L	attice	Guyed	Monopole 75 ft. in Height or Greater	Monopole Less than 75 ft. in Height
Latt	ice	5000 ft.	5000 ft.	1500 ft.	750 ft.
Guyed		5000 ft.	5000 ft.	1500 ft.	750 ft.
Monopole 75 ft. in Height or Greater		1500 ft.	1500 ft.	1500 ft.	750 ft.
Monopole Less than 75 ft. in Height		750 ft.	750 ft.	750 ft.	750 ft.
1.	Residential: Single family or duplex, including modular homes and mobile homes used for living purposes			200 feet or 300% height of tower; whichever is greater	
2.	Residentially zoned land which is either platted or has preliminary			200 feet or 300% height of tower; whichever is greater	
3.	Vacant unplatted residentially zoned lands, multi-family residentially zoned greater than duplex			200 feet or 200% height of tower; whichever is greater	
4.	Existing multi-family residential units greater than duplex units			200 feet or 100% height of tower; whichever is greater	
5.	Non-residentially zoned lands or non-residential uses			None, only setbacks apply	

(d) Towers shall be enclosed by security fencing not less than six (6) feet in height and shall also be equipped with an appropriate anticlimbing device.

(e) Tower facilities shall be landscaped with a buffer of plant materials that effectively screens the view of the tower compound from property used for residences.

(i) Standard buffer shall consist of a landscaped strip at least four (4) feet wide outside the perimeter of the compound.

(ii) Existing mature tree growth and natural land forms on the site shall be preserved to the maximum extent possible. (iii) Sites on large, wooded lots, with natural growth around the property perimeter may be considered sufficient buffer.

(f) Antennas mounted on utility poles or light poles shall have the equipment cabinet or structure used in association with antennas located in accordance with the following:

(i) Residential area. In a rear yard, provided the cabinet or structure is no greater than twelve (12) feet in height or 100 square feet in gross floor area when the cabinet/structure is located no more than twenty (20) feet from all lot lines and screened by an evergreen hedge with an ultimate height no less than eight (8) feet and a planted height of at least thirty-six (36) inches.

(ii) Residential area. In a front or side yard provided the cabinet or structure is no greater than 12 feet in height or 100 square feet of gross floor area and the cabinet/structure is located a minimum of forty (40) feet from all lot lines and screened by an evergreen hedge with an ultimate height no less than eight (8) feet and a planted height of at least thirty-six (36) inches.

(iii) Commercial/industrial area. The equipment cabinet or structure shall be no greater than twenty (20) feet in height or 200 square feet in gross floor area and screened by an evergreen hedge with an ultimate height no less than eight (8) feet and a planted height of at least thirty-six (36) inches.

(iv) Commercial/industrial area. In all instances, structures or cabinets shall be screened from view of all residential properties which abut or are directly across the street from the structure or cabinet by a solid fence six (6) feet in height or an evergreen hedge with ultimate height of twelve (12) feet and a planted height of at least forty-eight (48) inches.

(g) Antennas located on towers and related unmanned equipment structure shall not contain more than 100 square feet of gross floor area or be more than twelve (12) feet in height and shall be located no closer than forty (40) feet from all lot lines.

(h) The tower meets the following height and usage criteria:

(i) Single user: Up to ninety (90) feet in height.

(ii) Two users: Up to one hundred twenty (120) feet in height.

(iii) Three or more users: Up to one hundred fifty (150) feet in height.

(i) A licensed professional engineer under the guidelines of the State of Tennessee shall certify the tower can structurally accommodate the number of shared users proposed by the applicant.

(7) Locating antennas or existing structures or towers shall be governed by the following:

(a) Any antenna not attached to a tower may be approved as an accessory use to any commercial, industrial, professional, institutional or multi-family structure of eight or more dwelling units, provided:

(i) The antenna does not extend more than thirty (30) feet above the highest point of the structure.

(ii) The antenna complies with all applicable FAA and FCC regulations.

(iii) The antenna complies with all applicable building codes.

(b) Antennas mounted on structures or rooftops shall have the equipment cabinet or structure used in association with antennas complying with the following:

(i) The cabinet or structure shall not contain more than 100 square feet of gross floor area or be more than 12 feet in height.

(ii) Buildings and/or structures which are less than sixtyfive (65) feet in height, the related unmanned equipment structure, if over 100 square feet of gross floor area and/or 12 feet in height, shall be located on the ground and shall not be located in the roof of the structure.

(iii) If the equipment structure is located on the roof of a building, the area of the equipment structure and other equipment and structures shall not occupy more than ten percent (10%) of the roof area.

(iv) Equipment storage buildings or cabinets shall comply with all applicable building codes.

(8) An antenna which is attached to an existing tower may be approved to minimize adverse visual impacts associated with the proliferation and clustering of towers, collection of antennas by more than one carrier on existing towers shall take precedence over the construction of new towers, provided such collection is accomplished in a manner consistent with the following:

(a) A tower which is modified or reconstructed to accommodate the collocation of an additional antenna shall be of the same tower type as the existing tower, unless the council allows reconstruction as a monopole.

(b) An existing tower may be modified or rebuilt to a taller height, not to exceed thirty (30) feet over the tower's existing height, to accommodate the collocation of an additional antenna;

(i) The height change shall only occur one time per communication tower.

(ii) The additional height may not exceed distance separation.

(c) A tower which is being built to accommodate the collocation of an additional antenna may be moved onsite within fifty (50) feet of its existing location.

(i) After the tower is rebuilt to accommodate collocation, only one tower shall remain on the site.

(ii) A relocated onsite tower shall continue to be measured from the original tower location for purposes of calculating separation distances between towers.

(iii) A licensed professional engineer under the guidelines of the State of Tennessee shall certify the tower can structurally accommodate the number of shared users proposed by the applicant.

(iv) The onsite relocation of a tower which comes within the separation distances to residential units or residentially zoned lands shall only be permitted after a public hearing and approval by the council.

(9) Special use permits may be approved by the council, with the recommendation of the zoning board, with the following provisions governing:

(a) Required for the construction of a tower or the placement of an antenna in agricultural zoning.

(b) Minimal adverse effects of the proposed tower on adjoining properties.

(c) Any civil, mechanical, and/or electrical engineering information that the applicant submits shall be certified by a licensed professional engineer under the guidelines of the State of Tennessee.

(d) Installing a cable microcell network through the use of multiple low-powered transmitter/receivers attached to existing wireline systems, such as conventional cable or telephone wires, or similar technology that does not require the use of towers.

(10) Any antenna and/or tower that is not operated for a continuous period of twelve (12) months shall be considered abandoned.

(a) The owner of such antenna and/or tower shall remove the same within ninety (90) days of receipt of notice from the Town of Carthage.

(b) Failure to remove an abandoned antenna and/or tower with said ninety (90) days shall be grounds to remove the tower and/or antenna at the owner's expense.

(c) If there are two or more users of a single tower, then this provision shall not become effective until all approved users abandon the tower.

(11) Rebuilding damaged or destroyed towers or antennas shall be of the same type, height, location and density as the original facility approval.

(a) Building permits to rebuild the facility shall comply with the applicable building codes at that time and shall be obtained within 180 days from the date the facility is damaged or destroyed.

(b) If no building permit is obtained, the tower and/or antenna shall be deemed abandoned.

(c) After obtaining building permit, construction shall begin with 90 days or the tower and/or antenna shall be deemed abandoned. (Ord. #291, June 1999)

20-105. <u>Application process</u>. Prior to presentation to the council, all plans shall be submitted to the planning commission and/or board of zoning appeals for review.

Proposed location and use must comply with all setback and separation requirements as outlined in § 20-104.

The planning commission and/or zoning board will submit to the council, with comments if any, the proposal within sixty (60) days.

The council will approve/disa pprove the application within sixty (60) days of submission from the planning commission. (Ord. #291, June 1999)

20-106. <u>Requirements for application</u>. (1) Application shall be made to the city recorder, or such person as designated by the council to receive such applications.

(2) Each application shall be accompanied by a nonrefundable cashier's check in the amount of one thousand dollars (\$1,000.00) made payable to the Town of Carthage.

(3) Each applicant shall deposit with the city recorder a surety bond, not less than one million dollars (\$1,000,000), to cover the costs to the municipality if the applicant fails to meet applicable requirements as set forth in this ordinance. The bond will remain in effect to ensure adequate funds available for continued maintenance.

(4) Application for a tower shall be submitted with the following:

- (a) A scaled site plan clearly indicating:
 - (i) Location;

(ii) Design, type and height of the proposed tower with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness;

(iii) On-site land uses and zoning;

(iv) Adjacent land uses and zoning;

(v) Adjacent roadways;

(vi) All properties within the applicable separation distances;

(vii) Proposed area of access (ingress and egress);

(viii) Setbacks from property lines;

(ix) Elevation drawings of the proposed tower and any other structures;

(x) Surrounding topography, tree coverage and foliage;

(xi) Roadway and parking.

(b) Legal description of the parent tract and leased parcel (if applicable).

(c) The setback distance between the proposed tower and the nearest residential unit, platted residentially zoned properties, and unplanted residentially zoned properties.

(d) The separation distance from other towers described in the inventory of existing sites shall be shown on an updated site plan or map.

(e) Identify the type of construction of the tower and the owner and/or operator.

(f) A landscape plan showing specific landscape materials.

(g) Method of fencing, finished color, method of camouflage and illumination (if applicable).

 $(h) \qquad A \ description \ of \ compliance \ with \ all \ applicable \ federal, \ state \ and \ local \ laws.$

(i) A notarized statement by the applicant as to whether construction of the tower will accommodate collocation of additional antennas for future users.

(j) A description of the suitability of the use of other structures or alternative technology not requiring the use of towers or structures to provide the services to be provided through the use of the proposed tower.

(i) Costs of alternative technology that exceed new tower and/or antenna development shall not be presumed to render the technology unsuitable.

(k) A description of the feasible location(s) of towers within the Town of Carthage based upon existing physical, engineering, technological or geographical limitations.

(5) Each applicant must certify they have read, and are familiar with, the provisions of this ordinance.

(6) Every application that meets the requirements of this ordinance shall be considered by the council.

(7) In the event an applicant's circumstances change which affect the provisions set forth in this ordinance, the applicant shall notify the city recorder in writing fifteen (15) days from the change in circumstances.

(8) Any applicant denied approval three (3) times shall not be allowed to reapply until the expiration of one (1) year from the date of the third refusal. (Ord. #291, June 1999)