

## Ordinance 17-008

### An Ordinance Amending the Zoning Ordinance of the City of Brookings to Include Provisions Pertaining to Small Cell Facilities and Distributed Antenna Systems in the City of Brookings.

Be It Ordained and Enacted by the Council of the City of Brookings, State of South Dakota, as follows:

I.

That Section 94-396 of the Ordinances of the City of Brookings be amended to read as follows:

#### **Sec. 94-396. - Wireless communication facilities.**

The purpose of this section is to establish regulations and performance standards for the siting of wireless communication facilities (WCFs) in a manner that will protect the public's health, safety, and welfare and maintain the aesthetic integrity of the community

(1) *Permit required.* An application for a building permit is required prior to the construction of any WCF. Compliance with all applicable building codes, navigation hazard requirements, Federal Aviation Administration Regulations and section 94-164 must be achieved before a permit will be issued.

(2) *Definitions.* The following definitions shall apply:

*Amateur radio operator tower:* A structure used for the transmission, broadcast or reception of amateur radio or citizen band signals.

*Antenna:* Any device that radiates or captures electromagnetic wave signals including digital and analog voice and data signals or video or microwave signals.

*Antenna support structure:* An existing building or structure such as, but not limited to, utility poles, light poles, signs, elevated water tanks and steeples upon which an applicant proposes to install wireless communications facilities.

*Broadcast tower:* A structure for the transmission of radio or television broadcast communications. This term does not include offices or studios.

*Co-location/site sharing:* Use of an antenna support structure or telecommunications tower by two or more wireless license holders or by one wireless license holder for more than one type of communication. This includes the placement of a WCF on a structure owned and operated by a municipal or public utility.

*Distributed Antenna System (DAS):* A system consisting of: (1) a number of remote communications nodes deployed throughout the desired coverage area, with each node including at least one antenna, but not more than three antennas per provider, for transmission and reception; (2) a high capacity signal transport medium

(typically fiber optic cable) connecting each node to a central communications hub site; and (3) radio transceivers located at the hub site (rather than at each individual node as is the case for small cells) to process or control the communications signals transmitted and received through the antennas.

*Equipment facility:* A structure used to contain ancillary equipment for a WCF, such as cabinets, pedestals and similar devices.

*Height:* The distance measured from the original grade to the highest point on the WCF, including the antenna(s).

*Small Cell Facility:* A wireless service facility that either meets both of the following qualifications or is within a stealth design that is consistent with the design guidelines:

1. Each antenna is located inside an enclosure of no more than five (5) cubic feet in volume or, in the case of an antenna that has exposed elements, the antenna and all of its exposed elements could fit within an enclosure of no more than five (5) cubic feet, however, the maximum dimensions of the antenna shall not exceed 36" in height and 16" in diameter; and
2. Each provider's equipment enclosures shall be no larger than seventeen (17) cubic feet in volume. The following associated equipment may be located outside of the primary equipment enclosure and, if so located, is not included in the calculation of equipment volume: electric meter, concealment, telecommunications demarcation box, underground enclosures, back-up power systems, grounding equipment, power transfer switch, and cut-off switch.

*Stealth:* The ability of freestanding telecommunication towers to blend into the neighborhood environment at a given location and the ability to camouflage or conceal the presence of wireless communication facilities when attached to antenna support structures.

*Telecommunications tower:* Any pole, spire, structure or combination thereof, including supporting lines, cables, wires, braces and mast, designed and constructed primarily for the purpose of supporting one (1) or more antennas, including self-supporting lattice towers, guyed towers or monopole towers. A communication tower may include, but not be limited to, radio and television towers, microwave towers, common carrier towers, cellular telephone towers and personal communication service towers.

*Temporary WCF:* A WCF that is placed in service for less than 180 days.

*Wireless communications facilities:* One or more antenna, tower, base station, antenna support structure, mechanical and/or electronic equipment, conduit, cable, fiber, wire, and associated structures, enclosures, assemblages, devices and supporting elements that generate, transmit or produce a signal used for communication that is proposed by an entity other than the City, including but not

limited to radio/tv/satellite and broadcast towers, telephone service, including new microwave or cellular towers, personal wireless service facilities, DAS, small cell facilities and Temporary WCF.

(3) *Siting and co-location criteria.* The siting and co-location of all WCFs shall be subject to the following criteria before consideration will be given to a new site:

- a. WCFs shall be located on existing antenna support structures, such as utility poles, light poles, signs, elevated water tanks, buildings and other WCFs; or
- b. WCFs shall co-locate or site share upon existing telecommunication towers; or
- c. WCFs shall consider the use of public property and structures.
- d. If an applicant has shown a good faith effort to co-locate but has found it not to be feasible, a written statement indicating the reasons why co-location is not feasible shall be provided

(4) *Application requirements.* The following information is required prior to the siting of all WCFs. Installing antenna(s) on existing WCFs and amateur radio operator towers are exempt from these requirements.

- a. In business and industrial districts, a scaled drawing or aerial map, showing the subject property and all properties within one and one-half times the height of the proposed tower and the location of all existing buildings and structures, and the exact location of the tower and equipment facility. In residential districts, a WCF on an existing antenna support structure shall be considered through administrative review. A proposed telecommunication tower shall be considered through the conditional use permit process. An application shall be accompanied by a scaled drawing or aerial map showing the subject property and all properties within three times the height of the proposed tower and the location of all existing buildings and structures and the exact location of the tower and equipment facility.
- b. If applicable, an application must also include written documentation under a licensed engineer's stamp verifying the need for a guyed-lattice tower when no other means of antenna support structure is available due to technical engineering constraints.
- c. Procedure for Administrative Review for WCFs in the public right of way:
  1. The City shall issue a written decision concerning the application within sixty (60) days of submission of the initial application unless (a) the City notified the applicant that its application was incomplete within thirty (30) days of filing. If so, the remaining time from the sixty (60) day total

review time is suspended until the applicant provides the missing information, (b) extension of time is agreed to by the applicant, or (c) additional time required by processes of the Federal Aviation Administration (FAA), the State Historic Preservation Office or the Historic Preservation Commission, if applicable to the proposed installation, and to the extent that the same are beyond the control of the City. The running of the aforementioned sixty (60) day period shall not otherwise be tolled.

2. Failure to issue a written decision within sixty (60) days shall constitute an approval of the application.
3. The provisions of this subsection (c) do not apply to applications for facilities outside of the public rights of way in the municipality.

(5) *Development standards.*

a. *Location and setback*

1. *Antenna:* Antenna(s) that are attached to support structures are exempt from the setback requirements in the district in which they are located. The antenna(s) may extend up to five feet horizontally beyond the edge of the support structure provided it does not encroach over the property line.
2. *Telecommunication towers:* A telecommunication tower shall meet the setback requirements for the district in which it is located. A telecommunication tower shall also be constructed on a lot so that it is as far away as possible from existing off-site buildings, and in no event nearer to any residential building than a distance of one hundred percent of the height of the tower. A telecommunications tower shall not be closer to a residential district boundary line than one hundred percent of its height. Where telecommunication towers are required to meet FAA paint and/or lighting regulations, the distance between them shall not be less than one-half mile.
3. *Equipment facilities:* All equipment facilities shall meet the setback requirements for the district in which they are located.
4. *Amateur radio operator tower:* All amateur radio operator towers shall meet the setback requirements for the district in which they are located.

b. *Height.*

1. Antenna(s) attached to antenna support structures may not add more than 20 feet in height to the existing building or structure to which it is

attached. In residential districts, the maximum height including the antenna support structure and the antenna(s) is 100 feet.

2. Telecommunication towers:
    - (i) In all industrial districts, the tower structure shall not exceed the maximum height of 200 feet.
    - (ii) In all business districts, except the RB-4, B-2A and B-5 districts, the maximum height is 100 feet.
    - (iii) In the agricultural/conservation district, as depicted on the adopted future land use plan, the maximum height is 200 feet.
    - (iv) In residential districts, the maximum height shall be determined through the conditional use permit process.
  3. Amateur radio operator towers shall have a maximum height of 35 feet. Exceptions: Antennas co-located upon existing structures. In addition, for every one additional foot in from the side or rear building setback lines, one additional foot in height may be added, to a maximum height of 60 feet.
  4. Broadcast towers may be erected to a height as approved by the city council upon conditional use review.
- c. *Screening and landscaping.* Telecommunication tower sites and equipment facilities shall be screened when there exists a clear view from adjacent residential uses. A fence, wall, berm, shrubbery or tree plantings shall be installed to a sufficient height along the perimeter or in appropriate areas in order to reduce the visual impact of the tower base and buildings. Existing mature tree growth and natural landforms shall be preserved to the maximum extent possible and may be a sufficient buffer. If a chainlink fence is erected, the fence shall have wood or plastic slats woven into the fence, open mesh windscreens installed or additional shrubbery or tree plantings located outside the fence.
- d. *Illumination.* Towers shall not be artificially lighted unless required by the FAA or other governing authority. Security or safety lighting for equipment facilities is permitted.
- e. *Design.* Towers shall be of a neutral color unless otherwise required by the FAA. Antenna(s) installed on support structures shall be of a neutral color that is the same as or compatible with the support structure. Buildings and other structures shall be made of exterior materials and colors that will blend the facilities to the natural setting and built environment. In residential districts, aesthetics is a high priority. Therefore, only a monopole design shall be permitted unless otherwise approved during the administrative review or conditional use process. In addition, incorporating stealth design into the tower and equipment facilities

whenever possible will be an important factor in the review of any conditional use permit application.

- f. *Maintenance.* Telecommunication towers, antenna support structures, and WCFs shall be maintained in compliance with Electronic Industries Association/Telecommunications Industries Association Standard (EIA/TIA) 222 Revision G Standard entitled "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures" as it may be updated or amended.
- g. *Abandonment.* Any wireless communication facility that is no longer in use shall be reported to the city by the facility owner. If a WCF is not operated for a continuous period of 12 months, it shall be considered abandoned and the owner shall remove the WCF within six months.
- h. *Development Standards for Small Cell Facilities and Distributed Antenna Systems (DAS):*
  - 1. The applicant shall demonstrate that through location, construction, or stealthing, the proposed facility or network of facilities will have minimum visual impact upon the appearance of adjacent properties and the views from adjacent residential neighborhoods and the pedestrian environment, while retaining viable opportunities for future collocation, provided applications for designs consistent with the design guidelines provided for in subsection 5.e of this section shall be deemed to have met the requirement of this subsection.
  - 2. Documentation of the number of other entities desiring to use the telecommunications facility that can be accommodated within the design parameters of the telecommunications facility as proposed.
  - 3. A statement indicating the owner's commitment to allow feasible shared use of the facility within its design capacity for collocation.
  - 4. The proposed site plan and design plans meet or exceed all applicable standards, including without limitation those of the FAA, Federal Communications Commission (FCC), American National Standards Institute (ANSI), and Institute of Electrical and Electronics Engineers (IEEE) standards for power density levels and structural integrity, American Concrete Institute (ACI), American Standards Testing and Materials Institute (ASTM), the National Electrical Code, and the American Steel Institute. The telecommunications facility must comply with building codes and other federal, state, and local regulations, Applicant must also comply with applicable Historic Preservation ordinances of the City.
  - 5. With respect to telecommunication facilities within public rights-of-way.

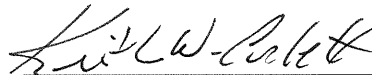
- a. Support structures and above-ground transmission equipment shall be located outside the pedestrian portion of any sidewalk.
- b. New telecommunication facility support structures may not be erected to a height greater than the height surrounding utility poles or street lights, whichever is greater. If no utility poles are present, the total height shall be built to a maximum height of 35', including antennas, lightning rods or other extensions. All new proposed structures, or a stealth telecommunications support structure replacing an existing support structure or alternative structure, within the right-of-way shall be designed for a minimum of two wireless communication facility providers.
- c. Telecommunication facilities shall be constructed consistent with the design requirements of the Community Development Department, and, where applicable, the Historic Preservation Commission

II.

Any or all ordinances in conflict herewith are hereby repealed.

First Reading: May 9, 2017  
Second Reading: May 23, 2017  
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CITY OF BROOKINGS, SD



Keith W. Corbett, Mayor

  
Shari Thornes, City Clerk