

## CHAPTER 42

# TELECOMMUNICATIONS TOWERS

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**42.01 PURPOSE AND GENERAL POLICY.** The County finds that in order to ensure public safety and provide efficient delivery of services by the County and others wishing to utilize wireless communication technologies in order to protect public and private investments, ensure the health, safety and welfare of the population, to provide for the regulation and administration of the orderly location of antenna arrays and towers; and to secure the rights of the County to a return on its investment on public property; it is necessary for the County to establish uniform rules and policies.

1. To encourage the location of towers in nonresidential areas;
2. To minimize the total number of towers within the community necessary to provide adequate personal wireless services to residents of the County;
3. To encourage the joint use of new and existing tower sites among service providers;
4. To locate telecommunications towers and antennas in areas where adverse impacts on the community are minimized;
5. To encourage the design and construction of towers and antennas to minimize adverse visual impacts; and
6. To enhance the ability of the providers of telecommunications services to deliver such services to the community effectively and efficiently.

This chapter is to be interpreted in light of these findings for the benefit of the citizens of the County.

**42.02 DEFINITIONS.** Except as specifically defined herein, all words used in this chapter shall be defined in *The New Illustrated Book of Development Definitions* (1993, Rutgers). Words not defined herein or in the above referenced text shall be construed to have the meaning given by common and ordinary use, and shall be interpreted within the context of the sentence or section in which they occur. For the purpose of this chapter, the following words and terms are defined below. The word “erected” includes the words “constructed, located or relocated.” The word “map” or “zoning map” means the Zoning Map of Wapello County, Iowa. The word “parcel” includes the words “plot or lot.” The word “person” includes the words “individuals, firms, partnerships, corporations, associations, governmental bodies and all other legal entities.” The words “used” and “occupied” include the words “intended, arranged or designed to be used or occupied.”

1. “Alternative tower structure” means clock towers, bell towers, church steeples, light/power poles, electric transmission towers, manmade trees (without accessory

buildings/structures), and similar natural or manmade alternative-design mounting structures that camouflage or conceal the presence of antennas or towers.

2. "Antenna" means any exterior apparatus designed for wireless telecommunication, radio or television communications through the sending and/or receiving of electromagnetic waves.
3. "Co-location" means the placement of the antennas of two or more service providers upon a single tower or alternative tower structure.
4. "Department" means the Wapello County Department of Planning and Zoning.
5. "Director" means the Director of the Wapello County Department of Planning and Zoning or his/her designee.
6. "FAA" means the Federal Aviation Administration.
7. "FCC" means the Federal Communications Commission.
8. "Geographic antenna placement area" means the general vicinity within which the placement of an antenna is necessary to meet the engineering requirements of an applicant's cellular network or other broadcasting need.
9. "Governing authority" means the County Board of Supervisors or other governmental entity controlling affected real property.
10. "Height," when referring to a tower or other structure, means the distance measured from ground level to the highest point on the tower structure or appurtenance.
11. "Pre-existing towers and antennas" means structures as set forth in Section 42.06 of this chapter.
12. "Public officer" means the Zoning Administrator of the Department of Planning and Zoning.
13. "Scenic views" means those geographic areas containing visually significant or unique natural features, as identified in the Wapello County Comprehensive Plan or Routes designated by the Iowa Department of Transportation as part of the Iowa Scenic Byway Program.
14. "Telecommunications" means the exchange information across a distance.
15. "Tower" means any structure that is designed and constructed primarily for the purpose of supporting one or more antennas, including self-supporting lattice towers, guy towers, or monopole towers. The term includes radio and television transmission towers, microwave towers, common-carrier towers, cellular telecommunication towers, manmade trees (with accessory buildings/structures) and other similar structures.
16. "Visual quality" means the appropriate design, arrangement and location of tower structures in relation to the built or natural environment to avoid abrupt or severe differences.

**42.03 DISTRICT HEIGHT LIMITATIONS.** Except as set forth in Section 42.05 herein, the requirements of this chapter shall govern the location of telecommunications towers that exceed, and antennas that are installed at a height in excess of, fifty (50) feet.

**42.04 GOVERNMENTAL EXEMPTION.** The provisions of this chapter do not apply to governmental facilities and structures. Private facilities and structures proposed for placement on governmentally owned property are not exempt.

**42.05 AMATEUR RADIO; RECEIVE-ONLY ANTENNAS.** This chapter does not govern any tower, or the installation of any antenna, that is 75 feet or less in height and is owned and operated by a federally licensed amateur radio station operator from the operator's residence, or is used exclusively as a receive-only antenna.

**42.06 PRE-EXISTING TOWERS AND ANTENNAS.** Any tower or antenna for which a permit has been properly issued prior to the effective date of this chapter shall not be required to meet the provisions of this chapter, other than the requirements of Section 42.16 and 42.17. Any such towers or antennas shall be referred to in this chapter as “preexisting towers” or “preexisting antennas.” If an additional antenna is co-located upon a pre-existing tower after adoption of this chapter, then fencing and landscaping requirements of Sections 42.13 and 42.14 shall be met as part of the permitting process.

**42.07 PRINCIPAL OR ACCESSORY USE.** A tower and/or antenna is considered a principal use if located on any lot or parcel of land as the sole or primary structure, and is considered an accessory use if located on a lot or parcel shared with a different existing primary use or existing structure. An existing use or structure on the same lot or parcel shall not preclude the installation of an antenna or tower. For purposes of determining whether the installation of a tower or antenna complies with zoning district requirements, including but not limited to setback, buffer and other requirements, the dimensions of the entire lot or parcel shall control, even though the antenna or tower may be located on a leased area within such lot or parcel. Towers that are constructed, and antennas that are installed, in accordance with the provisions of this chapter shall not be deemed to constitute the expansion of a nonconforming use or structure.

**42.08 INVENTORY OF EXISTING SITES.** To facilitate the co-location of antennas, each applicant seeking to locate a new tower, alternative tower structure or antenna, or modify any such existing structure, shall provide to the Department an inventory of its existing towers or alternative tower structures. Applicants seeking to erect an amateur radio tower or antenna are exempt from this provision. The inventory shall include all such structures that are within the jurisdiction of the governing authority; within a municipality located, in whole or in part, within Wapello County; or, within one-quarter mile of the border of Wapello County, and shall include specific information about the location (latitude and longitude coordinates), height, design, tower type and general suitability for antenna co-location of each tower, and other pertinent information as may be required by the Department. The Department may share such information with other applicants for a Building Permit under this chapter or other organizations seeking to locate towers or antennas within the jurisdiction of the governing authority, provided however, that the Department is not, by sharing such information, in any way representing or warranting that such sites are available or suitable.

**42.09 CO-LOCATION; DESIGN REQUIREMENTS.** In addition to all applicable building and safety codes, all towers, except amateur radio towers, shall be designed to accommodate the co-location of cellular telecommunication antennas according to the following:

1. For towers up to 150 feet in height, the structure and fenced compound shall be designed to accommodate at least two providers, and
2. For towers greater than 150 feet in height, the structure and fenced compound shall be designed to accommodate at least three providers.
3. For towers of all heights, provisions shall be made that will allow public emergency broadcast equipment to co-locate. These will be in addition to the requirements in subsections 1 and 2 above and will be limited to one emergency service per location, provided that the service does not interfere with the primary use of the tower or structure.

**42.10 CO-LOCATION; AVAILABILITY OF SUITABLE EXISTING STRUCTURES.** No new tower, except amateur radio towers, shall be permitted unless the applicant demonstrates to the satisfaction of the Department and Board of Supervisors that no existing tower or existing alternative tower structure can accommodate the applicant’s proposed antenna. All evidence submitted shall be signed and sealed by appropriate licensed professionals or qualified industry experts. Evidence submitted to demonstrate that no existing tower or structure can accommodate the proposed antenna shall consist of one or more of the following:

1. No existing towers or suitable alternative tower structures are located within the geographic antenna placement area required to meet the applicant's engineering requirements.
2. Existing towers or structures are not of sufficient height to meet the applicant's engineering requirements.
3. Existing towers or structures do not have sufficient structural strength to support the applicant's antenna and related equipment.
4. The applicant's proposed antenna would cause electromagnetic interference with the antennas on the existing towers or structures, or the antennas on the existing towers or structures would cause interference with the applicant's proposed antenna.
5. The cost or contractual provisions required by the tower owner to share an existing tower or structure or to adapt an existing tower or structure for sharing are unreasonable. Costs exceeding new tower development are presumed to be unreasonable.
6. The applicant adequately demonstrates that there are other limiting factors that render existing towers and structures unsuitable.

**42.11 AESTHETICS.** The guidelines set forth in this section govern the design and construction of all towers, and the installation of all antennas, governed by this chapter.

1. Towers and/or antennas shall either maintain a galvanized steel or concrete finish or, subject to any applicable standards of the FAA, be painted a neutral color so as to reduce visual obtrusiveness.
2. At all tower sites, the design of all buildings and related structures shall use materials, colors, textures, screening, and landscaping that will blend the tower facilities to the natural setting and building environment.
3. For antennas installed on a structure other than a tower, the antenna and supporting electrical and mechanical ground equipment shall be of a neutral color so as to make the antenna and related equipment visually unobtrusive.
4. Towers shall not be artificially lighted, unless required by the FAA or other applicable authority. If lighting is required, the governing authority may review the available lighting alternatives and approve the design that would cause the least disturbance to the surrounding views.
5. No signage or other identifying markings of a commercial nature shall be permitted upon any tower or alternative tower structure within the County.

**42.12 SETBACKS AND SEPARATION.** The following setbacks and separation requirements shall apply to all towers.

1. Towers shall be set back a distance equal to one-third of the height of the tower from its base to any public right-of-way or property line of the lot or parcel containing the tower.
2. Guy-wires and accessory buildings and facilities shall meet the minimum accessory use location and setback requirements.
3. In zoning districts other than A-1, A-2, C-1, C-2, OP, I-1 and I-2, towers over 150 feet in height shall not be located closer than 1,500 feet from any existing tower that is over 150 feet in height. This requirement does not apply to amateur radio towers.

**42.13 SECURITY FENCING/ANTI-CLIMBING DEVICES.** All towers and supporting equipment shall be enclosed by fencing not less than six (6) feet in height and shall also be equipped with appropriate anti-climbing devices. Fencing shall be of chain link, wood or other approved

alternative. Amateur radio towers and antennas or receive-only antennas are not subject to the provisions of this section unless required by the Board of Supervisors through the Building Permit process.

**42.14 LANDSCAPING.** The following requirements shall govern landscaping surrounding all towers.

1. Where adequate vegetation is not present, tower facilities shall be landscaped with a landscaped strip of plant materials, which effectively screens the view of the tower compound. Landscaped strips shall be a minimum of ten (10) feet in width and located outside the fenced perimeter of the compound.
2. Existing mature tree growth and natural landforms on the site shall be preserved to the maximum extent possible. Where natural vegetation around the perimeter of the site would provide an adequate visual screen, an undisturbed buffer may be utilized.
3. Amateur radio towers and antennas, or receive-only antennas are not subject to the provisions of this section unless required by the Board of Supervisors through the Building Permit process.

**42.15 REVIEW OF TOWER AND ANTENNA ERECTION BY AIRPORT DIVISION.** If upon receipt of an application for the erection of any tower or alternative tower structure governed by this chapter, the Department deems that the proposed structure may interfere with the use of the airways of the County by the public or interfere with the operation of existing or proposed airport facilities, a copy of the application shall be submitted by the Department to the Airport Division of the Department of Transportation for review and recommendation.

**42.16 FEDERAL REQUIREMENTS.** All towers must meet or exceed current standards and regulations of the FAA, the FCC, and any other agency of the Federal government with the authority to regulate towers and antennas. If such standards and regulations are changed, the owners of the towers and antennas governed by this chapter shall bring such towers and antennas into compliance with such revised standards and regulations within six (6) months of the effective date of such standards and regulations unless a more or less stringent compliance schedule is mandated by the controlling Federal agency. 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.

**42.17 BUILDING CODES; SAFETY STANDARDS AND NOISE AND EMISSION STANDARDS.** No equipment shall be operated at towers and telecommunications facilities so as to produce noise in excess of applicable noise standards under WAC 173-60, except during emergencies or periodic routine maintenance which requires the use of a back-up generator, where the noise standards may be exceeded temporarily. The Federal Telecommunications Act of 1996 gives the FCC sole jurisdiction to regulate radio frequency emissions. Facilities that meet the FCC standards shall not be conditioned or denied on the basis of emissions impacts. Applicants for tower sites shall be required to provide information on the projected power density of the facility and how this meets the FCC standards. To ensure the structural integrity of towers, the owner, permittee or subsequent lessee of a tower or alternative tower structure shall ensure that it is maintained in compliance with standards contained in applicable local building codes and the applicable standards for towers that are published by the Electronic Industries Association, as amended from time to time. If, upon inspection, the Department concludes that a tower fails to comply with all applicable codes and standards, or constitutes a danger to persons or property, then upon receipt of written notice by the owner, permittee or lessee of the tower, said party shall have fifteen (15) days to bring the tower into compliance with such standards. If the owner, permittee or lessee fails to bring the tower into compliance within the 15 days, the governing authority may remove the tower at the expense of the owner, permittee or lessee. Prior to the removal of any tower, the Department may consider detailed plans submitted by the owner, permittee or

subsequent lessee for repair of substandard towers, and may grant a reasonable extension of the above referenced compliance period.

**42.18 PRIORITIES.** Priority of the use of County-owned land for communications antennas and towers will be given to the following entities in descending order of priority:

1. All functions of the County.
2. Public safety agencies that are not a part of the County, including law enforcement, fire and ambulance services and private entities with a public safety agreement with the County.
3. Other governmental agencies for uses which are not related to public safety.
4. Entities providing licensed commercial communications services, including cellular, personal communications services (PCS), specialized mobilized radio (SMR), enhanced specialized mobilized radio (ESMR), paging and similar services that are marketed to the general public for business and/or personal use.

**42.19 PLACEMENT REQUIREMENTS ON COUNTY-OWNED LAND.** The placement of communications antennas or towers on County-owned property must comply with the following requirements:

1. The antenna or tower will not interfere with the purpose for which the County-owned property is intended.
2. The antenna or tower will have no adverse impact on surrounding private property.
3. The applicant will produce proof of adequate liability insurance for potential damage antennas or towers could reasonably cause to property and facilities and commit to a lease agreement which includes equitable compensation for the use of public land and other necessary provisions and safeguards. The fee shall be established by resolution of the Board of Supervisors.
4. The applicant will submit a letter of credit, performance bond, or the security acceptable to the County to cover the cost of antenna or tower removal.
5. The antennas or towers will not interfere with other uses which have a higher priority as discussed in the subsections above.
6. Upon reasonable notice, the antennas or towers may be required to be removed at the user's expense.
7. The applicant must reimburse the County for any costs which it incurs because of the presence of the applicant's antenna or tower.
8. The user must obtain all necessary land use approval.
9. The applicant will cooperate with the County's objective to promote collections and thus limit the number of separate antenna sites requested.

**42.20 CHANGE OF OWNERSHIP NOTIFICATION.** Upon the transfer of ownership of any tower, alternative tower structure, or lot upon which such a structure has been erected, the tower permittee shall notify the Department of the transaction in writing within 30 days.

**42.21 PERMITTED USES.**

1. General. The uses listed in this section are deemed to be permitted uses and shall not require administrative review or approval of a Building Permit. However, all such uses shall comply with requirements set forth in Sections 42.07 through 42.20 of this chapter and all other applicable codes and ordinances.

2. Co-location of Antennas Required. Applicants for the erection of a tower or placement of an antenna shall be required to co-locate upon an existing tower or alternative tower structure. An exception to co-location shall only be made if the applicant adequately demonstrates that an existing tower suitable for co-location does not exist in the geographic antenna placement area utilizing the tower inventory maintained by the Department, and that no suitable alternative tower structure is available as set forth in Section 42.10 of this chapter.

3. Permitted Uses. If it is adequately demonstrated that antenna co-location, as required in subsection 2 above, is not possible for a given geographic antenna placement area, the following uses are permitted:

A. Constructing a new tower, including the placement of additional buildings or other supporting equipment used in connection with said tower or antenna, in the following zoning districts:

A-1 (Agricultural)

A-2 (Agricultural/Rural Residential)

C-1 (Commercial)

C-2 (Highway Service Commercial)

OP (Office Park District)

I-1 (Light Industrial District)

I-2 (Heavy Industrial District Airport Overlay)

Provided, however, all structures shall meet the setback, screening and buffer requirements contained herein, and are located a minimum distance of two (2) times the height of the tower from any residentially zoned property.

B. Installation of an antenna on an existing structure other than a tower (such as a building, sign, light pole, water tower, or other free-standing nonresidential structure) that is fifty (50) feet in height or greater, if the additional antenna height adds no more than twenty (20) feet to the height of the existing structure, subject to the zoning district restrictions of this section.

4. Public Notice/Appeal. At least ten days prior to the issuance of a Building Permit for the construction of a tower as a permitted use, the Department shall cause a sign to be posted on the property and the publication of a public notice in a newspaper of general circulation within the territorial boundaries of the County. Said public notice shall state the nature of the application, street location of the proposal and height of the proposed structure. If during the public notice period an objection to the building permit application is raised, the validity of the application and all pertinent documentation shall be determined by the Board of Adjustment. The objection shall be placed on the first available agenda of a regularly scheduled meeting following the expiration of the 10-day appeal period. The Board of Adjustment shall dispense with the objection by either:

A. A determination that the application is valid and meets all applicable criteria of this chapter, which shall result in the issuance of a Building Permit.

B. A determination that the application is or is not in the best interest of the public. Applications found not to be in the best interest of the public may, as a result, be processed through Section 40.27(7) of Chapter 40 of this Code of Ordinances (the Zoning Ordinance).

5. Appeal of Administrative Determination. If a Building Permit application for a tower as a permitted use is determined by the Department of Planning and Zoning not to meet all

applicable criteria of this chapter, the Building Permit applicant may appeal the determination to the Board of Adjustment. The Board of Adjustment shall dispense with the objection by either:

A. A determination that the application is valid and meets all applicable criteria of this chapter, which shall result in the issuance of a Building Permit.

B. A determination that the application does not satisfy all applicable criteria of this chapter. Applications which do not satisfy all applicable criteria must, as a result, be processed through the Zoning Board of Adjustment as provided in Section 40.27 of this Code of Ordinances.

#### **42.22 ADMINISTRATIVE APPROVALS.**

1. General.

A. The Department may administratively approve the placement of additional antennas upon towers or alternative tower structures as set forth in subsection 3 of this section.

B. Each applicant requesting an administrative approval under this chapter shall submit a scaled site plan, scaled elevation view and supporting drawings, calculations, and other documentation, signed and sealed by appropriate licensed professionals, showing the location and dimensions of all improvements, including topography (utilizing minimum two-foot contour intervals), tower height requirements, setbacks, access driveways or easements, parking, fencing, landscaping, adjacent uses, and any other information deemed by the Department to be necessary to assess compliance with this chapter and compatibility with surrounding uses. Amateur radio antennas shall meet the requirements of the County Construction Code. Certain documentation requirements of this section may be waived by the Director for amateur radio antenna applications.

C. The Department shall respond to each application within thirty (30) days of its receipt by either approving or denying the application. One thirty-day extension of this review period may be exercised by the Department if such additional time is deemed necessary to adequately assess the request. If the Department fails to respond to the applicant within a maximum of sixty (60) days, the application shall be deemed to be approved.

D. As part of any administrative approval, the Department may administratively reduce setback requirements by up to ten percent (10%) to compensate for irregularly shaped lots or parcels.

E. If a request for administrative approval is denied, the applicant may appeal the decision in accordance with Section 40.27 of Chapter 40 of this Code of Ordinances (Zoning Ordinance). In such an instance, the Board of Adjustment may authorize such variances from the terms of this chapter as will not be contrary to the public interest where, owing to special conditions, a literal enforcement of this chapter will, in an individual case, result in unnecessary hardship, so that the spirit of this chapter shall be observed, public safety and welfare secured, and substantial justice done. Such variances may be granted, in such individual cases of unnecessary hardship, upon a finding by the Board of Adjustment that the denial of the variance presents a significant detriment to the telecommunications service provider making application, and that the denial of the variance is insubstantially related to the public welfare.

2. Co-location of Antennas Required. Applicants for the erection of an antenna, except amateur radio operators, shall be required to co-locate upon an existing tower structure. An exception to co-location shall only be made if the applicant adequately demonstrates that an existing tower suitable for co-location does not exist in the geographic antenna placement area

utilizing the tower inventory maintained by the Department, and that no suitable alternative tower structure is available as set forth in Section 42.10 of this chapter.

3. Uses Allowed by Administrative Approval. The following uses may be approved by the Department after conducting an administrative review:

A. Installation of an antenna on any alternative tower structure, and further including the placement of additional buildings or other supporting equipment used in connection with said antenna, so long as such addition does not add more than twenty (20) feet to the height of the existing structure.

B. Installation of an antenna on an existing tower of any height, including a pre-existing tower, and further including the placement of additional buildings or other supporting equipment used in connection with said antenna, so long as the addition of said antenna adds no more than twenty (20) feet to the height of said existing tower.

**42.23 REMOVAL OF ABANDONED TOWERS AND ANTENNAS.** Any tower or antenna that is not operated for a continuous period exceeding twelve (12) months shall be considered abandoned, and the owner of such antenna or tower shall remove the structure within 180 days of receipt of notice from the Department notifying the owner of such abandonment. If said tower or antenna is not removed within said 180 days, the governing authority may remove such antenna or tower at the owner's expense. If there are two or more users of a single tower, then this provision shall not become effective until all users cease utilizing the tower.

**42.24 FEES.** Fees will be set by resolution of the Board of Supervisors.

**42.25 CONFLICT WITH OTHER LAWS.** Whenever the regulations of this chapter require a greater width, depth or size of yard or impose other more restrictive standards than are required in or under any other statute or covenant, the requirements of this chapter shall govern. Whenever the provisions of any other statutes or covenants require more restrictive standards than those of this chapter, the provisions of such statutes or covenants shall govern.