

14.15.040 Placement Of Towers And Antennas

- .01 PERMITTED USE. A tower may be permitted upon determination that all of the applicable conditions in this ordinance are met.
- .02 HEIGHT LIMITATIONS. Towers are a permitted conditional use in the following districts with the specified height limitations:
 - .1 Residential (R-1, R-2, R-4) Free-standing tower with height not exceeding 100 feet is a permitted conditional use; height exceeding 100 feet requires a special exception.
 - .2 Business & Interchange Service (B-1, I-S) Free-standing or guyed tower with height not exceeding 180 feet is a permitted conditional use; height exceeding 180 feet requires a special exception.
 - .3 Industrial (I-1, I-2) Free-standing or guyed tower with height not exceeding 360 feet is a permitted conditional use; height exceeding 360 feet requires a special exception.
 - .4 Agricultural (A-1) Free-standing or guyed tower with height not exceeding 500 feet is a permitted conditional use; height exceeding 500 feet requires a special exception.
 - .5 If a special exception for additional tower height is requested, total tower height will not exceed 150% of the maximum height permitted in the county as a conditional use. Applicant must demonstrate that additional height above that permitted by this ordinance is necessary for service to residents of the county.
 - .6 Telecommunications towers erected on existing structures other than telecommunications towers shall be allowed in any district, provided the height of the tower does not exceed one-third of the height of the existing structure and the total of the existing structure and the tower does not exceed 200 feet.
 - .7 All tower height allowances outlined in the preceding sections are subject to approval from the municipal *Airport Commission*.
- .03 APPLICATION REQUIREMENTS. The applicant for a permit for construction of a tower or placement of a commercial telecommunications *antenna* on an existing structure other than a tower previously permitted shall file an application with the county zoning administrator accompanied by a fee of \$200. The application shall include the following documents:
 - .1 A site plan, drawn to scale, identifying the site boundary; tower location; tower height; guy wires and anchors; existing and proposed structures, including accessory structures; photographs or elevation drawings depicting design of proposed structures, parking, fences and landscape plan; and existing uses on abutting parcels. A site plan is not required if *antenna* is to be mounted on an approved existing structure; and latitude and longitude of each tower to be permitted.
 - .2 A current map showing locations of applicant's *antennas*, facilities, existing towers and proposed towers which are reflected in public records, serving any property within the county:
 - .3 A report from a structural engineer containing the following:
 - (1) A description of the tower, including a description of the design characteristics and material;
 - (2) Documentation to establish that the tower has sufficient structural integrity for the proposed uses at the proposed location and meets the minimum safety requirements in Electronics Industries Association (EIA) Standard 222, "Structural Standards for Steel *Antenna* Towers and *Antenna* Support Structures."
 - (3) The general capacity of the tower in terms of the number and type of *antennas* it is designed to accommodate
 - (4) Engineered collapse zone or designed fall distance (if applicable)
 - .4 If applicant is other than the site owner, written authorization from the site owner for the application:
 - (1) Identification of the owners of all *antennas* and equipment to be located at the site;
 - (2) Pursuant to Subsection 6(A), evidence that the applicant contacted owners of all existing or approved towers within a one-half mile radius of the proposed new

tower site, including county-owned property, and that the equipment for which the tower is being constructed cannot be technologically or structurally accommodated on an existing or approved tower;

- (3) Evidence that a valid FCC license for the proposed activity has been issued;
 - (4) A line of sight analysis showing the potential visual and aesthetic impacts on adjacent residential districts;
 - (5) A written agreement to remove the tower and/or *antenna* within 180 days after cessation of use;
 - (6) Additional information as required to determine that all applicable conditions of this ordinance have been met.
- .5 Documentation that the proposed tower site and height have been approved by the appropriate *Airport* Commission.

.04 APPLICABLE CONDITIONS. Any applicant must show that all of the following applicable conditions are met:

- .1 Prior to consideration of a permit for location on private property which must be acquired, applicant must show that available publicly owned sites, and available privately owned sites, are unsuitable for operation of the facility under applicable telecommunications regulations and applicant's technical design requirements. A tower is not allowed if technically suitable space can be found on an existing telecommunications tower within one-half mile radius of the proposed new tower site.
- .2 Applicant must show that the new tower is designed to accommodate applicant's future demand for additional *antennas*.
- .3 Applicant must show that all applicable health, nuisance, noise, fire, *building* and safety code requirements are met.
- .4 Reserved
- .5 For towers on county property, applicant must file with the county zoning administrator a written indemnification of the county and proof of liability insurance or other proof of financial ability to respond to claims up to \$1,000,000.00 in the aggregate which may arise from operation of the facility during its life, in form approved by the county attorney. This information shall be updated annually by the applicant.
- .6 Land use regulations, visibility, fencing, screening, landscaping, parking, access, lot size, exterior illumination, sign, storage, and all other general zoning regulations except setback and height, shall apply to the tower.
- .7 All towers up to fifty (50) feet in height shall be set back a distance equal to the total height of the tower from the road right-of-way. Towers in excess of fifty (50) feet in height shall be set back a distance equal to the manufacturer's designed fall distance. Documentation to said fall distance shall be submitted with the application. Setback requirements shall be measured from the base of the tower to the nearest boundary line of the tract of land on which it is located. If no documentation for the manufacturer's designed fall distance is provided, the minimum set back distance shall be equal to the total height of the tower.
- .8 To limit climbing access to the tower, a fence six (6) feet in height with a locking portal, or an anti-climbing device may be required at the tower base.
- .9 All equipment used for installation shall follow an approved route to the site. The route shall be approved by the County Engineer.
- .10 The application shall provide covenants, easements, or similar documentation from the abutting property owners providing access to wind sufficient for its adequate operation, unless adequate accessibility to the wind is provided on site.
- .11 The wind energy system operation shall not cause interference to the radio and television reception on adjoining property.
- .12 The placement of all Wind Turbine Generators (WTG's) shall comply with the following:
 - (1) Setback distances with respect to property lines shall not apply to wind turbines located within a wind farm where the property lines nearest to any

given wind turbine define and separate properties belonging to two or more participating landowners.

- (2) With respect to a wind turbine all setback and separation distances shall be defined relative to the nearest surface of the wind turbine support tower as measured at the natural ground level.
- (3) Notwithstanding any other consideration including calculated sound levels no commercial wind turbine shall be located at a distance less than 1000 Feet from the nearest occupied dwelling. Wind generator towers may be setback less than 1000 feet from a dwelling if the property owner signs a waiver agreeing to the reduced setback distance. However, the wind generator tower shall not be located closer than the distance equal to the height of the tower.

.13 The following setback and separation distances shall apply to Wind Turbine Generators.

- (1) Any wind turbine within a wind farm shall be located not less than 1000 feet, as measured from the nearest dwelling to the nearest wind turbine tower, from a dwelling. Wind generator towers may be setback less than 1000 feet from a dwelling if the property owner signs a waiver agreeing to the reduced setback distance. However, the wind generator tower shall not be located closer than the distance equal to the height of the tower.
- (2) Any wind turbine within a wind farm shall be located not less than the Rotor Radius from the nearest non-dwelling, principal or secondary structure.
- (3) Any wind turbine within a wind farm shall be located not less than the total height from a road right-of-way line.
- (4) Any wind turbine within a wind farm may be located straddling the property lines separating two participating properties.
- (5) Any wind turbine within a wind farm shall be located not less than the Rotor Radius from property lines abutting non-participating properties.

.05 **INSPECTIONS.** At least every 24 months, every tower shall be inspected by an expert who is regularly involved in the maintenance, inspection and/or erection of towers. At a minimum, this inspection shall be conducted in accordance with the tower inspection check list provided in the Electronics Industries Association (EIA) Standard 222, "Structural Standards for Steel *Antenna* Towers and *Antenna* Support Structures." A copy of such inspection record shall be provided to the county.

.06 **ABANDONMENT.** In the event the use of any tower has been discontinued for a period of 180 consecutive days, the tower shall be deemed to be abandoned. Determination of the date of abandonment shall be made by the county zoning administrator. Upon such abandonment, the tower owner shall have an additional 180 days within which to (1) reactivate the use of the tower, or (2) dismantle and remove the tower. If the tower is not dismantled and removed as required, the county may do so and assess the costs against the property for collection in the same manner as a property tax, pursuant to Iowa Code 331.384.1