

AMENDMENT NO. 1 -A  
AUDUBON COUNTY, IOWA, TOWER PLACEMENT REGULATIONS  
AUDUBON COUNTY ZONING ORDINANCE

0.000.000      PLACEMENT OF TOWERS AND ANTENNAS

- .01      CONDITIONAL USE. A tower may be permit upon determination that all of the applicable conditions in this ordinance are met.
- .02      HEIGHT LIMITATIONS. Towers are a permitted conditional use in the follow district with the specified height limitations:
  - .1          Residential (R-1, R-3) Free-standing tower with height not exceeding 100 feet is a permitted conditional use; height exceeding 100 feet requires a special exception.
  - .2          Commercial (C-1), Free-standing or guyed tower with heights not exceeding 180 feet is a permitted conditional use; height exceeding 180 feet requires a special exception.
  - .3          Industrial (I-1) 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, A-2) 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 required, total 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 residence of the county.
  - .6          Telecommunications towers erected on existing structures other than telecommunication 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 if located within the airport flight path.
- .03      APPLICATION REQUIREMENTS. The applicant for a conditional use permit for construction of a tower or placement of a commercial telecommunication 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 \$100.00. 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 structure, including accessory structure; photographs or elevation drawing depicting design of proposed structure, 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;
- .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 characteristics and material;
  - (2) Documentation to establish that the tower has sufficient structure 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 If applicant is other than the site owner, written authorization from site owner; there shall be in the form of a written lease, easement, licenses or other agreements between the site owner and the applicant and written authorization from the site owner for the applicant for the application:
- (1) Identification of the owners of all antennas and equipment to be located at the site;
  - (2) Evidence that the applicant contacted owners of all existing or approved towers within a one-half 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 existing or approved landowner towers;
  - (3) Evidence that a valid FCC license for the proposed activity has been issued, if required;
  - (4) A line of sight analysis showing the potential visual and aesthetic impacts on adjacent residential districts; if locations near urban area are dictated necessary;
  - (5) A written agreement to remove the tower and/or antenna within 365 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, if the tower is within a defined flight path and exceeds height limitations associated with the airport that could be impacted.
- .04 APPLICABLE CONDITIONS. An applicant must show that all of the following applicable conditions are met:
- .1 Applicant must show that the new tower is designed to accommodate applicant's future demand for additional antennas.

- .2 Applicant must show that all applicable health, nuisance, noise, fire and safety code requirements are met.
- .3 Reserved.
- .4 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 a claim 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.
- .5 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.
- .6 For free-standing or guyed towers, setback on all sides shall be a distance equal to the height of the tower.
- .7 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 around the tower base. Fencing around the tower base is not required if the tower is a self-contained, lattice or tubular tower.
- .8 All equipment used for installation shall follow an approved route to the site. The route shall be approved by the County Engineer.
- .9 The wind energy system operation shall not cause interference to the radio and television reception on adjoining property.
- .10 The placement of all Wind Turbine Generators (WTG's) shall comply with the following:
  - (1) Setback distance with respect to property lines shall not apply to wind turbines located within a wind farm where the property line nearest to any given wind turbine define and separate properties belonging to two or more participating landowners.
  - (2) With respect to wind turbines all setback and separation distance shall be defined relative to the nearest surface of the wind turbine support tower as measured at the ground level.
  - (3) Notwithstanding any other consideration including calculated sound levels no commercial wind turbine shall be located at a distance less than 1,000 feet from the nearest occupied dwelling. Wind generator towers may be setback less than 1,000 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.
  - (4) 10-(1) through 10-(3) should be contained in an agreement with property owners (see previous page).
- .11 The following setback and separation distance shall apply to Wind Turbine Generators:
  - (1) Any wind turbine within a wind farm shall be located not less than 1,000 feet, as measured from the nearest dwelling to the nearest

wind turbine tower, from a dwelling as located at the time that the wind turbines are constructed. Wind generator towers may be setback less than 1,000 feet from a dwelling if the property owner signs a waiver agreeing to the reduced 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 500 feet 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 total height from property lines abutting non-participating properties.

.05 INSPECTION. 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 checklist provided in the Electronics Industries Association (EIA) Standard 222, "Structural Standard for Steel Antenna Support Structures." A copy of such inspection record shall be provided to the county.

.06 ABATEMENT. In the event the use of any tower has been discontinued for a period of 365 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 365 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 manner as a property tax, pursuant to Iowa Code 331.384(1). Exceptions to this standard shall include circumstances associated with (1) forced majeure (i.e. extraordinary events, circumstances beyond control, acts of nature, etc.) or (2) Submittal of a certification of non-abandonment by turbine owner of the county.

.07 DEFINITIONS.

.01 WIND FARM: One or more wind turbine generators which are connected to the transmission of a local distribution grid. Wind farms shall include, but are not limited to: wind turbine generators, operations and maintenance building, meteorological towers, collector grids, roads and substations.

.02 WIND TURBINE GENERATOR (WTG): A wind turbine generator is a device designed to extract kinetic energy from the wind and supply it in the form of electrical energy that is suitable for use by the electrical grid.

.03. BLADE: An element of a wind turbine which acts as a part of an airfoil assembly, thereby extracting through rotation, kinetic energy directly from the wind.

- .04 WIND TOWER: The tubular structure, above grade, that supports the nacelle and rotor assembly.
- .05. TOWER FOUNDATION: The tower support structure, below grade, that supports the entire weight of the wind turbine.
- .06 TOTAL HEIGHT: The height from grade to the highest vertical point of the swept rotor arc. In the case of a wind turbine with a horizontal axis rotor, the total height includes the distance from grade to the rotor axis of rotation within the nacelle plus one-half the swept rotor diameter.
- .07 SUBSTATION: An electrical construction designed to collect and modify electrical energy produced by the wind turbines for the purpose of supplying it to the local electrical utility.