



Dane County Communication Tower Ordinance – Section 10.103(9)

(a) Purpose and intent of section.....	2
(b) New construction or substantial modification of communication towers	2
1. Application process.....	2
a. Application	2
d. Radio frequency propagation maps	3
e. Site plan.....	3
g. Notification to other carriers	4
h. Notification to nearby airports.....	4
i. Aeronautic hazards	4
j. Other information	4
k. Fees	4
2. Determination of completeness.....	4
3. Third party radio frequency engineering review.....	4
4. Existing and proposed network buildout	4
5. Action on Conditional Use Permit application	4
6. Failure to provide information	5
(c) General standards	5
1. Rationale for new tower.....	5
a. No existing tower.	5
b. Insufficient height.....	5
c. Insufficient structural capacity	5
d. Electromagnetic interference.....	5
e. Unreasonable fees, costs, or contractual provisions	5
f. Other factor(s).	5
2. Reasonable costs for physical or technical impediments to collocation	5
3. Substantial evidence required for unreasonable fees, costs, or contractual provisions.....	5
4. Feasibility of collocation	5
5. Height	5
6. Setbacks to property lines	5
7. Setbacks from other telecommunications towers.....	6
(d) Standard conditions	7
1. Collocation spots required	7
2. Minimum requirements for collocation spots	7
3. Aesthetic mitigation.....	7
4. May not prohibit collocation.....	7
5. Continued compliance required	7
6. Tower removal and surety	7

(a) Purpose and intent of section. The purpose and intent of this section is to provide a uniform and comprehensive set of standards for the development and installation of telecommunication towers and related facilities, including, but not limited to broadcast radio and television facilities, mobile service support structures and facilities, and fixed wireless internet facilities. The provisions of this section are intended to ensure that telecommunication facilities are located, constructed, maintained and removed in a manner that:

1. Protects and promotes public health, safety, community welfare and the quality of life in Dane County as set forth within the goals, objectives and policies of the Dane County Comprehensive Plan, and this ordinance;
2. Respects the rights and interests of towns, neighboring property owners, and existing land uses on adjoining properties in the decision making process;
3. Recognizes the public necessity for telecommunication facilities and the numerous benefits and opportunities a robust wireless infrastructure make possible for county residents, including improved public safety, efficient production and distribution of goods and services, access to educational resources, and economic development opportunities;
4. Allows appropriate levels of service to be obtained throughout the County, including expansion to rural areas seeking access to personal communications and broadband internet services as such services are defined by the Federal Communications Commission;
5. Minimizes the number of transmission towers throughout the County;
6. Encourages the joint use of new and existing telecommunication facilities as a preferred siting option;
7. Ensures that all telecommunication facilities, including towers, antennas, and ancillary facilities are located and designed to minimize the visual and environmental impact on the immediate surroundings and throughout the county;
8. Avoids potential damage to adjacent properties from tower failure or ice falls through sound engineering and careful siting of structures; and
9. Provides a public forum to assure a balance between public concerns and private interests in establishing commercial telecommunications and related facilities.

(b) New construction or substantial modification of communication towers.

1. **Application process.** New or substantially modified communication towers require approval of a conditional use permit. In addition to materials required under s. 10.101(6), the applicant must provide, in a form acceptable to the zoning administrator, the following:
 - a. *Application.* Completed communications tower conditional use permit application form, that includes, at a minimum:
 - i. The name and business address of, and the contact individual for, the applicant. If the applicant is a tower company or site acquisition consultant, the name(s), address(es), and contact individual(s) for the anchor tenant(s) along with the FCC license number(s) of the carrier(s) or service provider(s).
 - ii. The precise location and base ground elevation above mean sea level of the proposed or affected support structure. Location information shall be provided in latitude/longitude coordinates.
 - iii. The specific type(s) of communication services(s) to be provided by the proposed facility, the operating frequency or frequencies at which service(s) will be provided, and the minimum required elevation above mean sea level necessary to provide the services.

- b. *Project narrative.* A signed project narrative explaining the need for a new or modified communication tower. The narrative should also include the following information:
- i. An explanation why the particular site was selected.
 - ii. For an application to construct a new tower, an explanation as to why the applicant chose the proposed location and why the applicant did not choose collocation, that addresses the requirements of section 10.103(9)(c)1. The narrative must include a sworn statement from an individual who has responsibility over the placement of the mobile service facility attesting that collocation within the mobile service provider’s search ring would not result in the same mobile service functionality, coverage, and capacity; is technically infeasible; or is economically burdensome to the mobile service provider. For the purposes of this ordinance, cost savings or increased profitability shall not be considered an economic burden.
- c. *Search ring map.* Applicants must submit a search ring map issued by the mobile service provider on letterhead of the mobile service provider. The search ring map shall show the area in which the mobile service facility and mobile service support structure should be located to meet the radio frequency engineering requirements to provide mobile service to the geographic area or areas determined 40 by the mobile service provider to lack adequate service from the provider’s existing network. The map must include a scale of miles, road names, municipal boundaries, all existing mobile service support structures within 1.5 miles of the search ring, and any tall structure over 100’ in height within the search ring. The map must document and assign an identification number to all existing towers within 1.5 miles of the center of the search ring and include a brief statement explaining why the tower is not viable for collocation. The zoning administrator may require that the map be accompanied by a table providing additional data for each existing tower within 1.5 miles of the search ring, including but not limited to, the following: simple description of the tower, existing and maximum design height, FCC registration number; owner’s name and contact information; number of collocation spots occupied and available on the tower; present percentage of use of the tower, available aperture at the requester’s preferred height, type of communication technology being used.
- d. *Radio frequency propagation maps.* Two radio frequency (RF) propagation plots depicting the carrier’s current service (clearly highlighting the existing service area void), and the service to be gained by the proposed facility. These plots shall be prepared in accordance with accepted industry standards and shall be accompanied by a clear and simply written description by an RF engineer explaining the plots and how to read them.
- e. *Site plan.* In addition to all of the information required under s. 10.101(6), site plans must include the following information:
- i. Existing or proposed zoning and conditional use permit area and proposed or existing lease area
 - ii. Existing and/or proposed tower compound area depicting location and layout of existing and/or proposed tower and related facilities including distances to the lease and CUP area;
 - iii. Existing and/or proposed residences (if any) on both the subject property and neighboring properties within .5 mile of the subject property – distances should be shown to neighboring residences located within 1,500’ per 100’ of tower height.
- f. *Preliminary design / construction plans, site photos and photo simulations.* A description of the tower design and height. The description shall include:
- i. A preliminary scaled elevation drawing of the proposed tower showing the location and elevation (feet Above Ground Level and Above Mean Sea Level) of each potential antenna array and any anticipated lighting. The drawing should also identify the proposed color and surfacing of the tower and ancillary facilities;
 - ii. A statement indicating the anticipated design capacity of the tower in terms of the number, type and height of collocations it is designed to accommodate;

- iii. Preliminary drawings showing the dimensions and design details for all tower facilities, including the specific types of communications equipment to be mounted on the tower.
 - iv. Information regarding any anticipated or proposed lighting, including types and color of lights, and whether lighting is nighttime only or both day / night and any difference between time periods.
 - v. Site photos and photo simulations showing the proposed location of the tower from adjoining properties and depicting the appearance of the tower following installation. Photo simulations shall include a scaled representation of the tower superimposed on the site photos taken from adjoining properties.
 - vi. Statement of compliance with Federal Communications Commission guidelines on radio frequency exposure and interference. Compliance statement must be on letterhead of the licensed carrier(s) proposing to provide telecommunications services on the tower.
- g. *Notification to other carriers.* Applicants shall provide written notification to other carriers licensed to provide wireless services in Dane County informing them of the intent to construct a new telecommunication tower. The zoning administrator shall maintain a list of licensed carriers, including contact information and a standard form that may be used to fulfill this requirement.
 - h. *Notification to nearby airports.* The applicant shall provide written notification to all operators and owners of airports located within 5 miles of the proposed site. (Staff note: an FAA determination of no hazard to air navigation *does not* satisfy this requirement.)
 - i. *Aeronautic hazards.* The applicant shall provide copies of a determination of no hazard from the federal aviation administration, including any aeronautical study or other findings, if applicable.
 - j. *Other information.* The Zoning Administrator, 3rd party engineering consultant, and/or Zoning & Land Regulation Committee may request additional information from the applicant as may be deemed necessary for review of a Conditional Use Permit application.
 - k. *Fees.* Application and review fees as required in Chapter 12.
2. **Determination of completeness.** Within 10 days of receipt of an application for a new or substantially modified communication tower, the zoning administrator or his/her designee shall provide the applicant with a written determination of completeness. If an application is not complete, the notification shall specify in detail the required information that was incomplete.
 3. **Third party radio frequency engineering review.** Unless waived by the committee, all applications shall be reviewed by the county's third party radio frequency engineering consultant for completeness and compliance with all applicable local, state, and federal regulations. All reasonable costs and expenses associated with such consultation, except travel expenses, shall be borne by the applicant. Failure to pay such costs and expenses, or provide information requested by the committee shall be grounds for denial or revocation of a conditional use permit.
 4. **Existing and proposed network buildout.** The committee may require that an applicant for a conditional use permit provide a written description, map, and attribute table documenting the applicant's existing network in Dane County. Describe and show on a map generally where gaps in service currently exist. Describe and show on a map the applicant's future plans for placement or construction of communication towers in Dane County and one mile surrounding the County's border in addition to the proposed tower that is the subject of the application.
 5. **Action on Conditional Use Permit application.** Within 90 days of receipt of a complete application for a new or substantially modified communication tower, the committee will make a final decision whether to approve or disapprove the application. Committee decisions shall be supported by substantial evidence. The 90 day time period may be extended upon mutual agreement of the applicant and county.

6. **Failure to provide information** or materials required under this section shall be grounds for disapproval of a Conditional Use Permit application.

(c) General standards.

1. **Rationale for new tower.** No conditional use permit for the placement or construction of a telecommunication tower shall be issued unless the applicant presents to the committee substantial evidence establishing to a reasonable degree of certainty the following:
 - a. *No existing tower.* No existing communication tower is located within the area in which the applicant's equipment must be located; or
 - b. *Insufficient height.* No existing communication tower within the area in which the applicant's equipment must be located is of sufficient height to meet applicant's requirements and the deficiency in height cannot be remedied at a reasonable cost; or
 - c. *Insufficient structural capacity.* No existing communication tower within the area in which the applicant's equipment must be located has sufficient structural strength to support applicant's equipment and the deficiency in structural strength cannot be remedied at a reasonable cost; or
 - d. *Electromagnetic interference.* The applicant's equipment would cause electromagnetic interference with equipment on the existing communication tower(s) within the area in which the applicant's equipment must be located, or the equipment on the existing communication tower(s) would cause interference with the applicant's equipment and the interference, from whatever source, cannot be eliminated at a reasonable cost; or
 - e. *Unreasonable fees, costs, or contractual provisions.* The fees, costs or contractual provisions required by the owner in order to collocate on an existing communication tower are unreasonable relative to industry norms; or
 - f. *Other factor(s).* The applicant demonstrates that there are other factors that render existing communication towers unsuitable or unavailable and establishes that the public interest is best served by the placement or construction of a new communication tower.
- 1) **Reasonable costs for physical or technical impediments to collocation.** The cost of eliminating physical or technical impediments to collocation referenced in subsection (c)1.b, c, and d, above, shall be deemed reasonable if it does not exceed by 25 percent the cost of constructing a new tower on which to mount applicant's equipment. Applicants must provide substantial evidence in the form of detailed cost estimates for structural or technical improvements from firms qualified and authorized to perform such services.
- 2) **Substantial evidence required for unreasonable fees, costs, or contractual provisions.** Any application for a new telecommunication tower being made on the basis of unreasonable fees, costs, or contractual provisions for collocation on an existing tower as referenced in subsection (c)1.e. above, must provide substantial evidence to the Zoning and Land Regulation Committee in the form of actual estimates of said fees, costs, or contractual provisions.
- 3) **Feasibility of collocation.** Failure or refusal to evaluate the feasibility of collocation shall be grounds for disapproval of a conditional use permit application.
- 4) **Height.** Height shall meet any applicable airport height limitation ordinances. No tower may be more than 195 feet in height unless a waiver from this requirement is granted by the Zoning and Land Regulation Committee based on unique transmission condition problems which cannot be overcome by another location.
- 5) **Setbacks to property lines.** Setbacks to property boundaries and public rights of way.
 - (a) All communication towers and accessory structures must meet all front, side and rear setbacks provided by this ordinance and Chapter 11, Dane County Code.

- (b) 1. In addition to the requirements of sub (a), a communication tower on or adjacent to a parcel of land upon which single-family residential use is permitted shall be setback a distance equal to or greater than the proposed height of the tower.
 2. The setback requirement under sub. 1 shall be measured from the lot lines of other adjacent and nonadjacent parcels for which single-family residential use is permitted.
- 6) **Setbacks from other telecommunications towers.** No telecommunication tower may be erected within 0.5 miles of an existing telecommunication tower unless a waiver from this requirement is granted by the Zoning and Land Regulation Committee based on unique transmission condition problems which cannot be overcome by another location or other reason the committee deems necessary to serve the public interest.

(d) Standard conditions. In addition to the conditions described in s. 10.101(7)(d), the town board and zoning committee must impose the following conditions on any tower constructed under this section.

1. **Collocation spots required.** New or substantially modified towers must be designed to support, without substantial modification, at least three users (the primary user and two collocation sites) for mounting of equipment supporting International Telecommunications Union “International Mobile Telecommunications-Advanced” systems (a/k/a “LTE / Long-term evolution”). A Wisconsin-licensed Structural Engineer shall approve and stamp the tower design, and certify that the tower can support at least three users.
2. **Minimum requirements for collocation spots.** In applying the standards and criteria set forth in this ordinance and in section 10.101(7)(d), D. C. Ords., to applications for conditional use permits for the placement or construction of a communication tower the committee shall, unless it is shown to be unreasonable, condition the grant of the permit upon the applicant placing or constructing the communication tower so as to accommodate, at a minimum height of 150 feet, the collocation of two additional antenna arrays similar in size and function to that placed on the tower by the applicant. Collocation sites need not be available on the tower as initially placed or constructed, provided that the tower will support at the specified minimum height the later addition of the required number of collocation sites. Notwithstanding the height and number of collocation sites on the tower as initially placed or constructed, the communication tower design approved and permitted under this ordinance shall be for a tower of 150 feet in height and shall include the required collocation sites. The holder of a permit under this section shall make the collocation sites required hereunder available for the placement of technologically compatible antenna arrays and equipment upon contractual provisions which are standard in the industry and at prevailing market rates allowing the permit holder to recoup the cost of providing the collocation sites and a fair return on investment.
3. **Aesthetic mitigation.** The committee may require, unless it is shown to be unreasonable, modifications to the tower design, including but not limited to visual screening or landscaping, that it deems necessary to minimize the aesthetic impact of the tower.
4. **May not prohibit collocation.** No lease or deed restriction on property that is proposed for the location of a mobile service support structure or mobile service facility shall preclude the owner or lessee from entering into agreements, leases, or subleases with other providers or prohibit collocation of other providers.
5. **Continued compliance required.** Upon written inquiry by the committee, the holder of a Conditional Use Permit issued under this section shall have the burden of presenting to the committee credible evidence establishing to a reasonable certainty the continued compliance with all applicable standards and conditions placed upon the conditional use permit. Failure to establish compliance with the standards and conditions shall be grounds for revocation of the permit. In the event the committee determines that it is necessary to consult with a third party to ascertain compliance with the standards and conditions, all reasonable costs and expenses, except travel expenses, associated with such consultation shall be borne by the holder of said conditional use permit. Failure to pay such costs and expenses or provide information requested by the committee shall be grounds for revocation of the conditional use permit.
6. **Tower removal and surety.** Conditional use permits issued under this section shall identify the primary type or types of transmission equipment which is to be placed on the subject communication tower. Any communication tower on which the transmission equipment so identified is no longer placed or used for a continuous period of 12 months shall, upon notification by the committee, be removed by the holder of the conditional use permit issued under this section. If the tower is not removed within 60 days of such notification, the county may remove the tower at the expense of the holder of the conditional use permit. Financial surety bonds or other security instruments described in s. 10.101(7)(d)2.b.x., will be required.