

**ST. CROIX COUNTY  
CODE OF ORDINANCES  
LAND USE AND DEVELOPMENT**

**CHAPTER 17  
ZONING**

Subchapter VIII  
Wireless Communication Service  
And Other Transmission Facilities  
17.80-17.90

ST. CROIX COUNTY PLANNING AND ZONING DEPARTMENT  
GOVERNMENT CENTER  
1101 CARMICHAEL ROAD  
HUDSON, WI 54016  
715-386-4680  
715-386-4686 FAX  
[WWW.CO.SAINT-CROIX.WI.US](http://WWW.CO.SAINT-CROIX.WI.US)



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**SUBCHAPTER VIII****WIRELESS COMMUNICATION SERVICE  
AND OTHER TRANSMISSION FACILITIES REGULATIONS****17.80 PURPOSE.**

The purposes of the regulations and requirements of this subchapter are to:

- (1) Accommodate the communication, radio, television, and electric generation needs while protecting the public health, safety and general welfare;
- (2) Minimize adverse visual impacts of wireless communication service and other transmission facilities through careful site and design standards;
- (3) Avoid potential damage to adjacent properties from the construction and location and operation of wireless communication service and other transmission facilities through structural standards and setback requirements; and
- (4) Maximize the use of existing and approved towers, buildings or structures to accommodate new wireless communication service and other transmission antennas to minimize the number of towers needed to serve the county, while minimizing adverse visual impacts.
- (5) Minimize hazards to birds.

**17.81 DEFINITIONS.**

- (1) Antenna. Any device or equipment used for the transmission or reception of electromagnetic waves, which may include omni-directional antenna (rod), directional antenna (panel) or parabolic antenna (disc).
- (2) Colocation. The location of more than one antenna or set of antennas on the same tower or structure.
- (3) FAA. Federal Aviation Administration.
- (4) FCC. Federal Communications Commission.
- (5) Height. The distance measured from ground level to the highest point on a tower or structure, including any antenna.
- (6) High power transmission line. A 69 kv or greater electric transmission line with towers at least 75 feet in height.
- (7) Stealth facility. A wireless communication service or other transmission facility which appropriately models or mimics in size, shape, scale and color something which exists in the immediate landscape or which could legally be placed there, or already exists there, at the time the application is submitted, such as a silo in farm settings or a tree in forested lands, and which is unrecognizable to a casual observer as a transmission facility
- (8) Tower. Any structure that is designed and constructed primarily for the purpose of supporting one or more antennas or wind generators, including guy towers, monopole towers and self-supporting lattice towers.
- (9) Tower accessory structure. Any structure located at the base of a tower for housing base receiving or transmitting equipment.
- (10) Transmission Facility. Any WCSF, radio, television or electric generation tower, equipment and accessory structure other than an electric transmission line.

- (11) Wireless communication. Any wireless communication services as defined in the Telecommunications Act of 1996, including FCC licensed commercial wireless telecommunications services such as cellular, personal communication services (PCS), specialized mobile radio (SMR), enhanced specialized mobile radio (ESMR), paging and similar services that currently exist or may be developed.
- (12) Wireless communication service facility (WCSEF). All equipment, buildings and structures with which a wireless communication service carrier or provider broadcasts and receives the radio frequency waves which carry its services, and all locations of said equipment, buildings and structures.

### 17.82 APPLICABILITY.

- (1) Preexisting Transmission Facilities.
- (a) Any transmission facility for which a permit has been issued prior to August 28, 1997 shall not be required to meet the requirements of this subchapter exceeding those in effect at the time the permit was granted, §17.88, and:
1. Any preexisting transmission facility shall comply with all FCC and FAA rules and regulations.
  2. Any transmission facility which is unused for the use for which the permit was granted for 12 consecutive months must be removed and site restored within a reasonable time, but not more than three months after removal is requested by the County. Upon removal, the site shall be restored to its original or an improved condition, and anchoring elements shall be removed from the ground to a depth of at least 8 feet. If removal and/or restoration is not completed, the County is authorized to complete the removal and site restoration and charge the cost to the performance bond.
  3. Any addition or change to a preexisting transmission facility shall comply with all applicable requirements of this subchapter, provided that such modifications which make the transmission facility less visible or add a collocating antenna or wind generator without increasing its height are exempt from requirements adopted after August 28, 1997.
- (b) Any transmission facility for which a permit has been issued prior to the effective date of this subchapter and after August 28, 1997 shall not be required to meet the requirements of this subchapter exceeding those in effect at the time the permit was granted, §17.88, and:
1. Any preexisting transmission facility shall comply with all FCC and FAA rules and regulations.
  2. Design and installation of any transmission facility shall comply with the manufacturer's specifications. Plans shall be approved and certified by a registered professional engineer.
  3. Installation of any transmission facility shall comply with all applicable state and local building and electrical codes.
  4. For leased sites, written authorization for siting the transmission facility must be obtained from the property owner.
  5. Any transmission facilities must be adequately insured against personal injury, wrongful death, and property damage claims.
  6. Any transmission facility which is unused for the use for which the permit was granted for 12 consecutive months must be removed and site restored within a reasonable time,

- but not more than three months after removal is requested by the County. Upon removal, the site shall be restored to its original or an improved condition, and anchoring elements shall be removed from the ground to a depth of at least 8 feet. If removal and/or restoration is not completed, the County is authorized to complete the removal and site restoration and charge the cost to the performance bond.
7. Only one tower is permitted on a parcel of land. Additional towers may be permitted on a parcel of land with a conditional use permit if the additional tower is located within 200 feet of the existing tower(s) and all other requirements of this subchapter are met.
  8. Any addition or change to a preexisting transmission facility shall comply with all applicable requirements of this subchapter, provided that such modifications which make the transmission facility less visible or add a collocating antenna or wind generator without increasing its height are exempt from requirements adopted after August 28, 1997.
- (2) District Height Limitations. The requirements set forth in this subchapter shall govern the design and siting of a transmission facility that exceeds the height limitations specified for the zoning district in which the transmission facility is located.

#### 17.83 GENERAL REQUIREMENTS.

- (1) Any transmission facility shall comply with all FCC and FAA rules and regulations.
- (2) Design and installation of any transmission facility shall comply with the manufacturer's specifications. Plans shall be approved and certified by a registered professional engineer.
- (3) Installation of any transmission facility shall comply with all applicable state and local building and electrical codes.
- (4) For leased sites, written authorization for siting a transmission facility must be obtained from the property owner.
- (5) Any transmission facility must be adequately insured against personal injury, wrongful death, and property damage claims.
- (6) Any transmission facility which is unused for the use for which the permit was granted for 12 consecutive months must be removed and site restored within a reasonable time, but not more than three months after removal is requested by the County. Upon removal, the site shall be restored to its original or an improved condition, and anchoring elements shall be removed from the ground to a depth of at least 8 feet. If removal and/or restoration is not completed, the County is authorized to complete the removal and site restoration and charge the cost to the performance bond.
- (7) Proposals to erect a new transmission facility shall be accompanied by any required federal, state or local agency license or application for such license.
- (8) Only one tower is permitted on a parcel of land. Additional towers may be permitted on a parcel of land with a conditional use permit if the additional tower is located within 200 feet of the existing tower(s) and all other requirements of this subchapter are met.
- (9) The monopole is the required tower structure. Guy or lattice towers are prohibited. Antennas must be contained within or mounted flush with the monopole.
- (10) Any owner of a pre-existing transmission facility for which a permit has been issued shall accept at least two additional collocations on reasonable terms, so long as adverse visual impacts do not result.

**17.84 PROHIBITIONS.**

- (1) No transmission facility shall be over 200 feet in height.
- (2) No transmission facility may be installed on a parcel within a major subdivision created for residential purposes.
- (3) No transmission facility shall be artificially illuminated unless required by FCC or FAA regulations.
- (4) No part of any transmission facility shall extend across or over any right-of-way, public street, highway, sidewalk or property line.
- (5) A temporary mobile transmission facility site is not permitted except in the case of equipment failure, equipment testing, equipment replacement, or emergency and prior authorization is obtained from the Zoning Administrator. Use of a temporary site for testing purposes shall be limited to 24 hours, and the use of a temporary site for equipment failure, equipment replacement, or emergency shall be limited to 30 days, unless extended for good cause in writing by the Zoning Administrator.

**17.85 DISTRICT REQUIREMENTS.**

A stealth facility is permitted with a county land use permit, which may be issued by the Zoning Administrator; a county land use permit may not be issued by a deputy zoning administrator. The Zoning Administrator shall not issue such a county land use permit prior to ten days after mailing notice of the application to the town in which the transmission facility is proposed to be located. Any other transmission facility shall be regulated in accordance with the regulations applicable to the zoning district in which the facility is located. All requirements of the zoning district other than the standards provided in this subchapter must be met. Following are the use standards for the various districts:

**(1) Commercial, Restricted Commercial and Industrial Districts.**

(a) The following are permitted with a county land use permit from the Zoning Administrator issued under this subchapter and §17.70(3):

1. Any antenna or generator attached to an existing tower or structure and not extending more than 20 feet above the highest point of the tower or structure and where the total height of the addition would not increase the maximum height to over 200 feet.
2. Any transmission facility within the easement of a high power transmission line or within 50 feet of the transmission line easement on the same side of the road up to a maximum height of 200 feet.

(b) The following may be permitted with a conditional use permit issued under this subchapter and §17.70(7):

1. Any antennas or generator attached to an existing tower or structure extending more than 20 feet above the highest point of the tower or structure and where the total height of the addition would not increase the maximum height to over 200 feet.
2. Any transmission facility to a maximum height of 200 feet.

**(2) Agricultural, Agricultural Two and Agricultural Residential Districts.**

(a) The following are permitted with a county land use permit from the Zoning Administrator issued under this subchapter and §17.70(3):

1. Any antenna or generator attached to an existing tower or structure and not extending more than 20 feet above the highest point of the tower or structure and where the total height of the addition would not increase the maximum height to over 200 feet.

2. Any Transmission Facilities within the easement of a high power transmission line or within 50 feet of the transmission line easement on the same side of the road up to a maximum height of 200 feet.
- (b) The following may be permitted with a conditional use permit issued under this subchapter and §17.70(7):
  1. Any antennas or generator attached to an existing tower or structure extending more than 20 feet above the highest point of the tower or structure and where the total height of the addition would not increase the maximum height to over 200 feet.
  2. Any transmission facility to a maximum height of 200 feet.
- (a) Those facilities locating within the state certified AG-1 and AG-2 districts are subject to Wis. Stats 91.46(4).
- (3) Residence and Conservancy Districts.
  - (a) The following are permitted with a conditional use permit issued under this subchapter and §17.70(7):
    1. Any antennas or generator attached to an existing tower or structure and not extending more than 20 feet above the highest point of the tower or structure and where the total height of the addition would not increase the maximum height to over 200 feet.
    2. Any transmission facility within the easement of a high power transmission line or within 50 feet of the transmission line easement on the same side of the road up to a maximum height of 200 feet.
  - (b) No other transmission facility is permitted in these districts.
- (4) Shoreland, Floodplain and St. Croix Riverway Overlay Districts. No transmission facility is allowed in these districts except:
  - (a) With a conditional use permit issued under this subchapter and §17.70(7), an antenna or generator attached to an existing tower or structure and not extending more than 20 feet above the highest point of the tower or structure and where the total height of the addition would not increase the maximum height to over 200 feet.
  - (b) With a county land use permit, a stealth facility in the Shoreland Overlay Districts and Floodplain District. With a county land use permit, a stealth facility in the St. Croix Riverway District, after Wisconsin Administrative Code Chapter NR 118 is amended to permit a stealth facility.
- (5) St. Croix River Buffer Zone. The St. Croix River Buffer Zone is the area located outside the St. Croix Riverway District and within two miles of the St. Croix River, measured from the ordinary high water mark. No transmission facility is allowed within the St. Croix River Buffer Zone, with the exception of a stealth facility.

#### 17.86 PERFORMANCE STANDARDS

- (1) Except as provided in this subchapter, any transmission facility must meet the dimensional standards applicable to the parcel within the zoning district in which it is located. Where the transmission facility is the principal use on a parcel, the parcel shall meet the minimum lot size requirements of the zoning district in which the parcel is located. On a parcel of land that already has a principal use, the transmission facility shall be considered an accessory use and a smaller area of land may be leased for it, provided that all requirements of this ordinance are met.
- (2) Setbacks and Separation.

- (a) Generally, any tower shall be set back from the nearest property line a distance equal to the height of the tower. This setback may be reduced up to one-half the height of the tower if the applicant submits an engineering report from a registered professional engineer that certifies that the tower is designed and engineered to collapse upon failure within the distance from the tower to the property line.
- (b) No tower shall be located within 500 feet of any residence unless the owner of the residence agrees in writing.
- (3) Colocation/Sharing of Facilities.
  - (a) No new tower shall be permitted unless the applicant demonstrates to the reasonable satisfaction of the permitting authority that no existing tower or structure can accommodate the applicant's proposed antenna or generator. Examples of supporting evidence are:
    - 1. No tower or structure is located within the geographic area required to meet the applicant's engineering requirements.
    - 2. No existing tower or structure is of sufficient height to meet the applicant's engineering requirements.
    - 3. No existing tower or structure can be rebuilt to support applicant's proposed antenna or generator.
    - 4. Electromagnetic interference would interfere with an existing or proposed system.
    - 5. The fees, cost, or contractual provisions required by the applicant to share an existing tower or structure or to adapt an existing tower or structure for sharing are much more expensive considering factors such as, without limitation, depreciation, technical obsolescence, wear and land acquisition.
    - 6. The applicant establishes other facts that render colocation unsuitable.
  - (4) Screening and Landscaping. The transmission facility is to be located on the site so as to have the least visual impact. The site shall be landscaped and maintained with a buffer of plant materials that effectively screens the view of all tower accessory structures, equipment and improvements at ground level from adjacent properties year around. Existing mature vegetation and natural landforms on the site shall be preserved to the maximum extent possible.
  - (5) Security Fencing and Lighting.
    - (a) Any transmission facility shall be reasonably protected against unauthorized access. The bottom of the tower from ground level to 12 feet above ground shall be designed to prevent unauthorized climbing and shall be enclosed with a minimum of a 6 feet high chain link fence with a locked gate.
    - (b) Security lighting for on-ground structures and equipment is permitted, as long as it is down shielded to keep light within the boundaries of the site.
  - (6) Color and Materials. Any transmission facility shall use building materials, colors, textures, screening, and landscaping that blend the transmission facility with the surrounding natural features and built environment to the greatest extent possible. The tower and everything attached to it shall be painted and maintained light blue to minimize visibility, except for those stealth facilities where light blue would not be appropriate.
  - (7) Parking and Access. Adequate parking spaces shall be provided on each site so that parking on public road right-of-way will not be necessary. Additional parking may be

required by the permitting authority if the minimum parking proves to be inadequate. Access must be provided by a gated, all-weather driveway.

#### 17.87 PERMIT REQUIREMENTS.

- (1) The construction or installation of any transmission facility requires a county land use permit or conditional use permit under this ordinance. The permit will specify the use or uses allowed.
- (2) County Land Use Permits. Any stealth facility or the addition of an antenna or generator to an existing structure permitted under this subchapter may be authorized by the Zoning Administrator, as indicated above, upon the submission and approval of a properly completed application and the fee for a county land use permit under this section and §17.70(3). A county land use permit may be issued by the Zoning Administrator, but may not be issued by a deputy zoning administrator. The Zoning Administrator shall not issue such a county land use permit prior to ten days after mailing notice of the application to the town in which the transmission facility is proposed to be built.
- (3) Conditional Use Permits. Any other transmission facility requires a conditional use permit under this subchapter authorized by the Board of Adjustment upon the submission and approval of a properly completed application for a conditional use under this section and §17.70(7) and the fee.
- (4) Applications. In addition to the application requirements of §17.70(3) or §17.70(7), any application for a county land use permit or conditional use permit for a new transmission facility shall include the following information. Applications for land use permits may omit (b) 4 below.
  - (a) A report from a registered professional engineer and other professionals which:
    1. describes the tower height and design, including a cross section and elevation;
    2. certifies the transmission facility's compliance with structural and electrical standards;
    3. describes the tower's capacity, including the potential number and type of antennas or generators that it can accommodate;
    4. describes the lighting to be placed on the tower if required by the FCC or FAA;
    5. certifies that the transmission facility will not cause destructive interference with previously established public safety communications systems; and
    6. describes how the requirements and standards of this ordinance will be met by the proposed transmission facility.
  - (b) Each application shall include a facility plan containing the following information:
    1. Written description of the type of consumer services each provider will provide to its customers (radio, television, electric generation, cellular, PCS, SMR, ESMR, paging or other anticipated wireless communication services).
    2. List of all existing sites, existing sites to be upgraded or replaced, and proposed sites within the County for services to be provided by the provider.
    3. Map of the County which shows the geographic service areas of the applicant's existing and proposed sites.
    4. Copies of letters informing each government unit adjacent to the unit and the unit itself in which the transmission facility is proposed to be located, in Wisconsin and Minnesota, of the application.

5. A visual analysis, including photo simulations of the view of the vicinity of the transmission facility before and after the proposed transmission facility is built, taken from approximately a mile from the transmission facility, north, south, east and west of the proposed site, and which may include photo montage, field mock up or other techniques, which identifies the potential visual impacts of the proposed transmission facility. Consideration shall be given to views from public areas as well as from private residences. The analysis shall assess the cumulative impacts of the proposed transmission facility and other existing and foreseeable transmission facilities in the area, and shall identify and include all feasible mitigation measures consistent with the technological requirements of the proposed service.
- (c) Landowner Acknowledgement. Written acknowledgement by the landowner of a leased site that he/she will abide by all applicable terms and conditions of the land use permit or conditional use permit, including the restoration and reclamation requirements of §17.83(6) of this ordinance.
- (d) A performance bond in a form acceptable to the Zoning Administrator in an amount sufficient to provide for removal of the transmission facility.
- (e) Additional Information and Analysis.
  1. The Zoning Administrator or Board of Adjustment may, at his/her or its discretion, require visual impact demonstrations, including mock-ups and/or photo montages; screening and painting plans; network maps; alternative site analysis; lists of other nearby transmission facilities; or facility design alternatives for the proposed transmission facilities.
  2. The Zoning Administrator or Board of Adjustment may employ on behalf of the County independent technical experts to review materials submitted by the applicant or to prepare any materials required but not submitted by the applicant. The applicant shall pay the costs of such review and/or independent analysis.

#### 17.88 BIENNIAL REPORT.

Owners, providers or permittees shall submit each even numbered year on or before January 31, a transmission facility information report, on a County form. The report shall detail the use, maintenance and condition of the transmission facility since the previous report, availability of the Transmission Facility for added colocation and other information reasonably deemed necessary by the Zoning Administrator. The report shall be accompanied by a two-year renewal of the performance bond in a form acceptable to the Zoning Administrator in an amount sufficient to provide for removal of the transmission facility.

#### 17.89 SAFETY INSPECTION.

If the County has reason to believe that a transmission facility is a safety risk, it may require the permit holder to perform an inspection by a registered engineer and provide a copy of the inspection results to the Zoning Administrator within sixty days. The County shall provide the owner with information forming the basis for belief that the transmission facility is a safety risk before requiring inspection.

#### 17.90 ENFORCEMENT AND PENALTIES

In addition to all other enforcement and penalty remedies available in sec. 17.71, a county

permit issued under this subchapter may be revoked under 17.71(6)(a). Failure or delay longer than sixty days after the County mails the blank Transmission Facilities information report form to the owner/provider or permittee shall result in a late fee of \$200.00 per week until received.