

**Telecommunications Tower,  
Antenna, and Facilities Siting  
Ordinance of  
Town of Union  
Rock County, Wisconsin**

**Dated September 6, 2012**

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## RECITALS:

WHEREAS, the Town of Union adopted a temporary stay on April 12, 2011 concerning the siting and construction of towers and antennas to give the Town time to research and develop an appropriate ordinance.

WHEREAS, there is an interest in establishing towers and antennas in the Town of Union.

WHEREAS, there is a concern that current Town ordinances do not adequately address issues relating to towers and antennas. These issues include the appropriate locations for such towers and antennas, a review and permitting process, and the conditions under which they may be allowed within the Town, including structural and construction requirements, collocation, setbacks, visual impacts and height limitations.

WHEREAS, the Town Board determined there is a need to study issues related to towers and antennas to determine what regulatory controls may need to be adopted to protect the public health, safety and welfare. The Town Board directed the Town Plan Commission to conduct studies to make such determinations.

WHEREAS, the Town Plan Commission held eleven (11) public meetings from April 2011 through March 2012 to study issues related to towers and antennas and draft an appropriate tower and antenna ordinance.

WHEREAS, on September 29, 2011 the Plan Commission recommended to the Town Board that the Town Attorney conduct a preliminary review of the draft Ordinance and provide comments to the Plan Commission. The Town Attorney provided such comments to the Plan Commission on November 17, 2011 and January 27, 2012.

WHEREAS, the Plan Commission and Town Board held public hearings on February 23, 2012, March 1, 2012, and August 2, 2012 concerning the draft ordinance and considered the comments received.

WHEREAS, the Plan Commission and Town Board received public comments from Town residents and industry representatives expressing concerns with siting of telecommunication towers.

WHEREAS, the Plan Commission and Town Board reviewed documents related to siting of towers and antennas, including, but not limited to documents, studies and reports which have been determined by the Town Board to be reasonably accurate, reliable and relevant to siting of towers, as described on Appendix A attached hereto.

WHEREAS, lights and generator noise associated with telecommunication towers, including radio and television towers, can create a nuisance to neighboring Town residents and adversely impact the rural character of the Township.

WHEREAS, the Town of Union Comprehensive Plan dated October 5, 2006 seeks to preserve the rural character and quality of the Township.

WHEREAS, the Town of Union Comprehensive Plan dated October 5, 2006 seeks to improve telecommunication services in the Township.

NOW THEREFORE, the Town Board of the Town of Union, Rock County, WI finds as follows:

- (1) The Town of Union finds that the construction of telecommunication towers, including radio and television towers and other related facilities may pose concerns with respect to the health, safety, public welfare, character and environment of the Town and its residents for issues where the Town is the primary regulatory authority.
- (2) Telecommunications towers, including radio and television towers, may affect property value.
- (3) The Town recognizes that facilitating the development of wireless service technology can be an economic development asset to the Town and benefit to the Town and its residents.
- (4) In order to insure that the placement, construction or modification of telecommunication towers, radio broadcast towers and related facilities is consistent with the Town's land use policies, it is in the best interest of the Town to adopt a single comprehensive set of standards for the development and installation of telecommunication towers, radio broadcast towers and related facilities.

**1.00 Purpose and Intent.** The purpose and intent of this chapter is to provide a uniform and comprehensive set of standards for the development and installation of telecommunication and related facilities. The regulations contained herein are designed to protect and promote public health, safety, community welfare and the aesthetic quality of the Town of Union as set forth within the goals, objectives and policies of the Town of Union Zoning Ordinance and Comprehensive Plan dated October 5, 2006, and to encourage and facilitate the managed development of telecommunications infrastructure, while at the same time not unduly restricting the development of needed telecommunications facilities.

It is intended that the Town shall apply these regulations to accomplish the following:

- (1) Minimize adverse visual and sound effects of telecommunication towers, radio and television towers, antennas and related facilities through design and siting standards in order to preserve the rural character of the Township.
- (2) Protect the rights, health, safety and welfare of Town of Union citizens to the full extent of the Town's ability under federal law.

- (3) Protect environmentally sensitive areas and scenic view sheds of the Town of Union as depicted in the Town of Union Comprehensive Plan by regulating the location, design and operation of telecommunication facilities, including radio and television facilities.
- (4) Ensure that a competitive broad range of telecommunication services and high quality telecommunications infrastructure are provided to serve the community, as well as serve as an important and effective part of the Town of Union's police, fire and emergency response network.
- (5) Encourage the use of alternative support structures, multi-antenna sites, co-location of new antennas on existing telecommunication towers, use of camouflaged, or "stealth" towers, use of painted monopoles, and the construction of towers with the ability to support as many co-located facilities as possible.
- (6) Provide a process for obtaining necessary permits for telecommunication facilities, including radio and television facilities, while at the same time protecting the interests of Town citizens.
- (7) Maintain and ensure that a nondiscriminatory, competitive and broad range of telecommunications services and high quality telecommunications infrastructure consistent with the Federal Telecommunication Act of 1996 are provided to serve the community, as well as serve as an important and effective part of the Town of Union's police, fire and emergency response network.

Furthermore, this ordinance is not intended to regulate residential satellite dishes or residential television antennas that are used privately. Additionally, it is not intended to regulate satellite dishes and antennas, whose regulation is prohibited by sec. 59.69(4d) or its successor sections of the Wisconsin Statutes.

**Severability.** If any section, subsection, clause or phrase of this ordinance is for any reason held to be unconstitutional or invalid, such decision shall not affect the remaining portions of this ordinance. The Town of Union Town Board declares that it would have passed this ordinance and each section, subsection, sentence, clause and phrase thereof irrespective of the fact that any one or more such provisions be declared unconstitutional or invalid.

**2.00 Exempt from Town Review.** The following shall be permitted without regulation of this ordinance, provided that the primary use of the property is not a telecommunications facility and that the antenna use is accessory to the primary use of the property (note these may be under the regulatory jurisdiction of other county or local ordinances):

- (1) The personal and non-commercial use of all television antennas and satellite dishes.
- (2) Personal and non-commercial use of radio towers is exempt from the provisions of this ordinance, including the installation of any antenna and supporting towers,

poles and masts that is owned and/or operated by a federally licensed amateur radio operator or is used exclusively for receive-only antennas.

- (3) Mobile services providing public information coverage of news events of a temporary nature.

**3.00 Conditional Use Approval Required for Telecommunication Towers.** The construction of telecommunications towers, support buildings and equipment shall not be permitted in the Town, except as a conditional use approved in accordance with this Ordinance, and only in the following zoning districts: A1, A2, C1, C2, M1, and SP. These districts are designated on the latest Town zoning map available from the Town of Union Building Inspector.

**4.00 Technical Review.**

- (1) The Town will retain an independent consultant or consultants to review the reasonableness and ordinance compliance of the CUP application, at the applicant's expense.
  - (a) The reasonableness of the location, height, and service area (such as an RF propagation study showing the subject cell site and adjacent sites), the capacity for collocation of the proposed structure.
  - (b) The location, height, and identifying information for other usable towers and alternative structures within the search ring,
  - (c) Propagation studies shall be included with the application, along with a signal level legend and a scale of miles showing the coverage area with and without the requested site. A tower elevation must be shown along with space for future co-locators, with the plans signed by a professional engineer.

**5.00 Conditional Use Application.** Locating and constructing a telecommunication tower, including the buildings or other supporting equipment used in connection with said tower, requires a Conditional Use Permit issued in accordance with this ordinance. The Plan Commission may recommend to the Town Board the issuance of a Conditional Use Permit after review and a public hearing, provided that such Conditional Use is in accordance with the standards required by this ordinance. Any granted Conditional Use Permit requires construction to begin within twelve (12) months of the date of issuance and shall expire twenty-four (24) months after issuance unless the tower permitted is completely constructed and a Certificate of Compliance is issued as described in Section 8.00 of this ordinance

- (1) **Submittal Information.** The applicant shall submit the completed Conditional Use Permit Application Form for towers to the Building Inspector for review of completeness. When the Building Inspector determines the application is complete, the applicant shall submit the application fee to the Town Treasurer. The applicant may then submit fourteen (14) copies of the Conditional Use Permit Application Form and maps, three (3) copies of the attachments to the application,

an electronic copy of all documents and maps on CD, and the fee payment receipt, to the Town Clerk. The Town Clerk shall determine the Plan Commission meeting date upon which the Commission will conduct a public hearing on the application according to the established Plan Commission meeting calendar. The Town Clerk will notify by mail all landowners of parcels within one thousand (1,000) feet of the property in question and post a class 2 notice of the public hearing.

The Town Clerk shall notify all Commission members of the meeting and provide copies of the Conditional Use Permit Application Form and maps to them.

For all towers, the following information shall accompany every application. The Plan Commission may require additional information.

- (a) Completed conditional use application and fee, as set by Town Board resolution.
- (b) Original signature of applicant and property owner (if the telecommunication tower is located in an easement, the beneficiaries of the easement and underlying property owner must authorize the application.).
- (c) The identity of the carrier and/or provider and their legal status.
- (d) The name, address and telephone number of the officer, agent and/or employee responsible for the accuracy of the application.
- (e) A description of the property, showing the telecommunication facility boundaries, tower, facilities, location, access, landscaping and fencing.
- (f) A written legal description of the telecommunication facility site.
- (g) In the case of a leased site, a lease agreement or binding lease memorandum which shows on its face that it does not preclude the tower owner from allowing collocation of other devices on the site.
- (h) A description of the telecommunications services that the applicant intends to offer and/or provide, or is currently offering or providing, to persons, firms, businesses or institutions.
- (i) A statement that the site complies with FCC OET bulletin 65.
- (j) A map drawn to scale of the proposed site.
- (k) Plans indicating security measures (i.e. access, fencing, lighting, fire prevention, etc.) as certified by a professional engineer.
- (l) An inventory of all existing telecommunications facilities that are located within the Town and within one and one half (1.5) miles of the proposed site. The inventory shall specify the location, height, type, and design of each existing telecommunication facility, the ability of the tower to accommodate additional antennas of the type at issue.

Approval of the conditional use permit is subject to the Town Board making a finding that the proposed site is the most reasonable among the alternatives. The reasonableness of the proposed site shall be determined based upon whether the

site minimizes the adverse impacts of towers and facilities on the Town and Town residents. Adverse impacts will be evaluated based on environmental effects , impacts that impair the rural character of the Town, the loss of agricultural land, and any other impacts deemed by the Town to be detrimental to the health, safety or general welfare of the Town and Town residents. In evaluating the reasonableness of the proposed site, a plan that provides for Towers that are shorter than one hundred ninety nine (199) feet shall be viewed as more reasonable than a plan that requires Towers taller than one hundred ninety nine (199) feet, in order to reduce the impacts of flashing lights on the rural character of the Town. The availability of land is an additional factor that shall be considered in determining reasonableness.

The Town may require professional independent review of the alternatives analysis, at the applicant's expense.

- (2) **Information Required Prior to Permit Being Issued.** The applicant shall submit the following to the Building Inspector for review prior to issuance of Conditional Use Permit:
  - (a) A report prepared by an engineer licensed by the State of Wisconsin certifying the structural design of the tower and its ability to accommodate the required number of additional antennas.
  - (b) An affidavit stating space will be made on the proposed tower for future users, when technically possible, at a reasonable cost. Reasonable costs shall be considered any fees, cost or contractual provisions required by the owner that conform to terms standard in the industry and that do not exceed the cost of new tower development.
  - (c) Such other information as the Plan Commission may reasonably require.
  - (d) Proof of liability coverage.
  - (e) Certified statement from a radio frequency (RF) engineer showing the propagation coverage of the proposed facility both with and without the proposed site activated.
  - (f) For all devices to be installed on the proposed tower, copies of approvals from the FCC, and evidence satisfactory to the Town that all devices to be located on the tower, individually and collectively, will comply with the limits of radio frequency emissions standards set by the FCC. The evidence shall include the particular FCC Measured Permitted Emission (MPE) limit and the tested or design limit for the proposed facility.
  - (g) Copies of the determination of no hazard from the Federal Aviation Administration (FAA) including any aeronautical study determination or other findings and the Wisconsin Bureau of Aeronautics, if applicable.
- (3) **Technical Review.** The Town will employ an independent professional consultant to review the application and all materials submitted. The applicant shall pay all the costs of said review. An application fee as specified in Town of Union Resolution 2006-06, Adoption of Permit & Application Fees & Per Diem,



must accompany the application. Fee will be placed in escrow and any excess funds will be refunded to applicant within sixty (60) days after certificate of compliance is issued, less any amounts necessary to maintain the Town's Master Tower Plan, if a Master Plan is implemented. Fee will be used for consultant, Building Inspector fees, administrative fees, and Town Engineer fees. All invoices, fees and charges accumulated for the technical review, and administrative costs must be paid in full prior to the issuance of the Conditional Use Permit.

- (4) **Approval Process.** The Commission shall hold a public hearing on the Conditional Use Permit application after publication of a class 2 notice thereof. If no additional information is deemed necessary, the Commission will make a recommendation to approve, approve with conditions, or reject the permit. Written reasons for rejection, or the imposition of conditions, shall be documented in the minutes or in a written resolution approved by the Commission.

The applicant or applicant's designee shall attend the meeting and present the proposed Conditional Use Permit Application to the Commission. Failure of the applicant or its designee to attend the meeting or to provide a complete Conditional Use Permit Application or required attachments may be used as grounds for the Commission to recommend denial of the Conditional Use Permit.

The Town Board shall review the recommendation of the Plan Commission and shall decide whether to approve, approve with conditions, or reject the permit. If approved, written reasons shall be documented in the Clerk's minutes for rejection or the imposition of conditions. If approved by the Town Board, the Town Clerk will issue a written Conditional Use Permit to the applicant.

- (5) **Collocation.** All towers shall be designed to accommodate a minimum of four (4) completely functioning telecom systems. A lesser number of spaces may be allowed by the Commission based upon data supplied by applicant stating four (4) spaces would be structurally and/or technically unfeasible. Co-location is not required if the applicant can demonstrate that the addition of the new service or devices would impair existing service or cause the host to go offline for a significant period of time. Telecommunication towers, and necessary appurtenances, including but not limited to parking areas, access roads, utilities and equipment buildings, shall be shared by site users whenever possible.
- (6) **Standards for Granting Conditional Use Permits.** In reviewing an application for a Conditional Use Permit under this ordinance, the Plan Commission and Town Board shall consider the following standards. A Conditional Use Permit must be granted (with conditions, if necessary) if the standards are met and must be denied if the standards are not met:
- (a) For any Tower, the proposed site and Tower shall be shown to be the most reasonable.

- (b) The application shall demonstrate that the proposed Tower, support equipment, buildings, and all proposed devices, individually and collectively, will meet all the structural, design and environmental standards in section 8.00 of this ordinance, and the separation and setback requirements of section 9.00 of this ordinance.

The Plan Commission and Town Board shall also consider standards applicable to Conditional Uses in the Town of Union Code of Ordinances, Chapter 17 Zoning, Section 17.18 (6).

## **6.00 Removal/Security for Removal.**

- (1) **Removal.** It is the express policy of the Town of Union and this ordinance that telecommunications facilities be removed once they are no longer in use and not a functional part of providing telecommunications service, and that it is the tower owner's responsibility to remove such facilities and restore the site to its original condition or condition approved by the Town Board. This restoration shall include removal of any subsurface structure or foundation, including concrete, used to support the telecommunications facility. After a telecommunications facility is no longer in operation, the owner of the tower shall submit a copy of the notice to the FCC of intent to cease operations to the Town Clerk. The owner shall have ninety (90) days from the date of the FCC notice to effect removal of the facility, and to restore the property unless weather prohibits such efforts. If removal to the satisfaction of the Town Board does not occur within said ninety (90) days, the Town Board may order removal utilizing the established bond as provided under this section and salvage said tower and all supporting equipment and building(s).
- (2) **Security for Removal.** The tower owner shall provide to the Town of Union, prior to the issuance of the Conditional Use Permit, a performance bond in an amount determined by the Town Engineer to guarantee that the telecommunications facility will be removed when no longer in operation. The Town of Union will be named as obligee in the bond and must approve the bond amount, terms, form, and bonding company. The adequacy of said bond shall be reviewed on an annual basis by the Town and, if it is determined to be insufficient in amount to cover the entire costs of removing the affected telecommunication facility, the Town shall assign a new amount which the tower owner shall be required to provide.

## **7.00 Compliance with Conditional Use Permit.**

- (1) **Revocation.** Any of the following shall be grounds for revocation of the Conditional Use Permit:
  - (a) The tower or supporting building or equipment fails to comply with the requirements of this ordinance and the permittee has failed to supply assurances acceptable to the Town Board that it will be brought into compliance within one hundred twenty (120) days;

- (b) The permittee has failed to comply with any condition of approval of the Conditional Use Permit;
  - (c) The tower or supporting building or equipment has not been properly maintained.
- (2) **Abandonment.** Any tower that is not in operation for a continuous period of twelve (12) months shall be considered abandoned. In such circumstances, the following shall apply:
- (a) The owner of such tower shall remove said tower and all supporting equipment and building(s) within one hundred-twenty (120) days of receipt of notice from the Town notifying the owner of such abandonment. If removal to the satisfaction of the Town Board does not occur within said one hundred-twenty (120) days, the Town Board may order removal utilizing the established bond as provided under Section 6.00 and salvage said tower and all supporting equipment and building(s).

## 8.00 Structural, Design and Environmental Standards.

- (1) **Tower, Antenna and Facilities Requirements.** All telecommunication facilities shall be designed to blend into the surrounding environment to the greatest extent feasible. To this end, all of the following measures shall be implemented:
- (a) All telecommunication facilities shall comply at all times with all rules, regulations, and standards promulgated by the United States Government;
  - (b) Telecommunication towers shall be constructed out of metal or other nonflammable material, unless specifically allowed by the Town to be otherwise;
  - (c) Parabolic antennas shall be situated as close to the ground as possible to reduce visual impact without compromising their function;
  - (d) Telecommunication support buildings and equipment (i.e., vaults, equipment rooms, utilities, and equipment enclosures) shall be constructed out of non-reflective materials (visible exterior surfaces only). Telecommunication support buildings and equipment shall be no taller than one (1) story or fifteen feet (15) in height (measured from the original grade at the base of the tower to the top of the structure), and shall be designed to blend with existing architecture in the area and shall be screened from sight by mature landscaping, and shall be located or designed to minimize their visibility;
  - (e) All buildings, poles, towers, antenna supports, antennas, and other components of each telecommunications facility shall be initially painted and thereafter repainted as necessary with a “flat” paint so as to reduce visual obtrusiveness and blend in to the natural setting and environment. Where evidence is accepted by the Commission that construction materials will be of sufficient non-glare characteristic and will blend into the natural setting and environment, painting requirements may be waived;
  - (f) All telecommunications towers shall be designed to collapse within a designated fall-down radius. The fall-down radius for a

telecommunications tower shall be contained within the parcel on which it is located;

- (g) The fall-down radius shall equal one hundred and twenty-five (125) percent of the tower height;
  - (h) Telecommunications facilities shall be designed and constructed in accordance with the State of Wisconsin Uniform Building Code, National Electrical Code, Uniform Plumbing Code, Uniform Mechanical Code, and Uniform Fire Code, Town of Union Land Division Ordinance, Town of Union Zoning Ordinance, Town of Union Building Code;
  - (i) The Town shall have the authority to require special design of the telecommunication facilities where findings of particular sensitivity are made (e.g. proximity to historic or aesthetically significant structures, views and/or community features);
  - (j) A radio frequency radiation emission test report, to demonstrate compliance with FCC adopted standards, shall be required for all rooftop antennas and other antennas that are less than thirty (30) feet above the original grade;
  - (k) The maximum height of an antenna platform located on a rooftop shall be twenty (20) feet above the roof. All platforms shall be screened by parapet or other approved methods from all public and private road right of ways, recreational areas, and adjacent residential district or uses;
  - (l) Telecommunication facilities shall not interfere with or obstruct existing or proposed public safety, fire protection or Supervisory Controlled Automated Data Acquisition (SCADA) operation telecommunication facilities. Any alleged interference and or obstruction shall be corrected by the applicant at no cost to the Town; interference standards shall be derived from FCC rules and good engineering practice.
  - (m) No advertising message or sign shall be affixed to any tower or antenna.
- (2) **Height.** It shall be preferable that the height of telecommunications towers be limited to one hundred ninety nine (199) feet above original grade, unless the applicant can demonstrate that no feasible alternative exists to provide coverage, such as collocating on existing telecommunications towers or alternative support structures, or constructing a new tower in a different location. This information will be confirmed by the Town's independent professional consultant.
- (3) **Lighting.** Telecommunications facilities shall not be artificially lighted unless required by the Federal Aviation Administration (FAA) or other applicable regulatory authority. If lighting is required, the lighting design which would cause the least disturbance to the surrounding views shall be chosen.
- (4) **Site Development, Roads and Parking.** The entire fall-down radius shall be contained within the leased parcel, said fall-down radius being determined under Section 8.00 (1)(g) of this ordinance. All telecommunication towers located on a parcel owned by the carrier and/or provider shall meet the minimum size requirement of the zoning district. Telecommunication facilities sites shall not be used for the outside storage of materials or equipment, or for the repair or servicing of vehicles or equipment. All grounds within the telecommunication

facility shall be mowed and cleared of noxious vegetation and so maintained as to not create a visual or physical nuisance. All sites may use an existing drive, or new drive, which conforms to the Town of Union Code of Ordinances Chapter 12.01 Driveway & Highway Access Permit.

- (5) **Vegetation Protection and Facility Screening:**
- (a) All telecommunications facilities shall be installed in such a manner so as to minimize disturbance to existing native vegetation and shall include suitable mature landscaping to screen the facility, where necessary. For purposes of this section, “mature landscaping” shall mean trees, shrubs or other vegetation of a size that will provide the appropriate level of visual screening immediately upon installation.
  - (b) Upon project completion, the owner(s)/operator(s) of the facility shall be responsible for maintenance and replacement of all required landscaping during the most current growing season.
  - (c) All facilities shall be located, designed and screened to blend with the existing natural or built surroundings, so as to reduce visual impacts.
- (6) **Fire Prevention.** All telecommunication facilities shall be designed and operated in such a manner so as to minimize the risk of igniting a fire or intensifying one that otherwise occurs. To this end all of the following measures shall be implemented for all telecommunication facilities:
- (a) At least one (1) hour fire resistant interior surfaces shall be used in the construction of all buildings;
  - (b) Monitored automatic fire extinguishing systems shall be installed in all equipment buildings and enclosures;
  - (c) Rapid entry KNOX systems shall be installed as required;
  - (d) All tree trimmings and trash generated by construction and operation of the facility shall be removed from the property and properly disposed of.
- (7) **Noise and Traffic.** All telecommunication facilities shall be constructed and operated in such a manner as to minimize the amount of disruption caused to nearby properties. To that end all the following measures shall be implemented for all telecommunication facilities:
- (a) Noise producing construction and routine maintenance activities shall only take place on weekdays (Monday through Saturday, non-holiday) between the hours of 7:00 a.m. and 6:00 p.m.; and
  - (b) Backup generators shall only be operated during power outages and for testing and maintenance purposes; and
  - (c) Maintenance related to outages is allowed at any time. The Town Board Chairman shall be notified of any outages requiring maintenance.
- (8) **Certificate of Compliance.** No telecommunication tower or equipment hereafter erected, altered or moved shall be used until a Certificate of Compliance is issued by the Building Inspector. The Certificate of Compliance shall show that the tower, support buildings and equipment conform to the provisions of this

ordinance and any conditions of approval of the Conditional Use Permit.

The Building Inspector shall, within ten (10) working days after receipt of a request for certification from the applicant, issue a Certificate of Compliance only if the tower, support buildings and equipment conform with all the requirements of this ordinance and with the conditional use permit.

**9.00 Separation and Setback Requirements.** Telecommunication towers shall be located in accordance with the following separation and setback standards:

- (1) **Separation.** Building a new tower is discouraged if there is another existing usable structure within the search ring. Separation between towers requirements may be waived by the Commission provided:
  - (a) The applicant provides sufficient data to justify the spacing requirements cannot be met for technical reasons, and
  - (b) An alternative site is not available at locations more than the minimum separation distance from an existing tower.
  
- (2) **Setbacks.** All setbacks shall be measured from the base of the tower or structure to the applicable property line.
  - (a) **Setbacks from property lines.** All towers shall be setback as follows:
    - (i) Towers one hundred ninety nine (199) feet or less in height shall not be located less than a distance equal to one hundred twenty five (125) percent of the tower height from any property line.
    - (ii) Towers greater than one hundred ninety nine (199) feet in height shall not be located less than a distance equal to six hundred sixty (660) feet of any property line, or one hundred twenty five (125) percent of the tower height feet from any property line, whichever is greater.
    - (iii) When located on property with a residence that is contiguous to land that also contains a residence, the setback from any single family residence on adjacent property shall be no less than that from the residence on the property on which the tower is to be located, unless it can be shown that this requirement would preclude any tower meeting the applicant's needs from being located on said lands. For the purpose of this chapter, contiguous lands shall include adjacent parcels separated by public highway, whether dedicated or by easement.
    - (iv) Any of the above setbacks can be waived by owners of adjacent properties. Such waivers shall be evidenced by written documentation submitted with the application for Conditional Use Permit and filed with the Rock County Register of Deeds.
  
  - (b) **Setbacks from all streets and private and public road right of ways.** All towers shall be set back from all road right of ways, public and private, a distance equal to one hundred twenty five (125) percent of the tower height.

- (c) **Setback from the Ordinary High Water Mark (OHWM).** All towers shall be set back a minimum of one hundred (100) percent of the tower height from the OHWM of a navigable stream and a minimum one hundred twenty five (125) percent of the tower height from the OHWM of a navigable lake.
- (d) **Setback from overhead power lines.** All towers shall be set back a distance of one hundred twenty five (125) percent of the tower height from an overhead power line with a voltage exceeding seven hundred fifty (750) volts.
- (e) **Guy Wires Setback.** All guy wires and security fences shall be at least fifty (50) feet from all owned or leased property lines.

#### **10.00 Annual Information Report and the Addition of Devices to an Approved Tower.**

The purpose of the annual report under this section is to assist the Town in enforcement of this ordinance by providing the Town of Union with accurate and current information concerning the telecommunications towers and their owners. The Town Clerk will give a thirty (30) day notice prior to the annual deadline of these requirements.

- (1) **Annual Information Report.** All owners of any telecommunication tower located in the town shall submit annually on or before January 31 of each year, to the Town Clerk, a Telecommunications Facility Annual Information Report. This annual report shall include the tower owner name(s), address(es), phone number(s), contact person(s), annual review fee and proof of bond as security for removal. The owner shall supply the tower height and shall describe the current occupancy of the tower, along with how the inventory has changed (increased or decreased) during the past year. This information will be used to update the Town’s Master Plan, if implemented, and shall include “overlay” information. The owner shall supply evidence satisfactory to the Town that all devices located on the tower, individually and collectively, comply with the limits of radio frequency emissions standards set by the FCC. The evidence shall include the particular FCC Measured Permitted Emission (MPE) limit and the tested or design limit for the facility. The owner shall certify that the tower is still being used. This information shall be submitted on a Town form, designated for such use.
- (2) **Adding a Device to an Approved Tower.** Prior to the installation of a device to a permitted Tower, where the device was not approved in the original conditional use permit, the Tower owner shall apply for an amendment to the conditional use permit to allow installation of the device. The application shall be reviewed and granted or denied using the same process and standards that apply under section 5.00 of this ordinance.
- (3) **Failure to Provide Information.** Failure to provide this information shall result in a daily civil forfeiture until the information is received by the Town Clerk and Town Treasurer.

### **11.00 Transfer of Permits and Licenses**

- (1) A valid Conditional Use Permit may be transferred from one tower owner to another only after submittal of a permit transfer form to the Town Clerk. The fee for a transfer permit shall be set by the Town Board.
- (2) A valid License may be transferred from one telecommunications device owner to another only after submittal of a license transfer form to the Town Clerk. The fee for a transfer permit shall be set by the Town Board.

**12.00 Facilities on Town-Owned Property.** The Town encourages the location of new telecommunication facilities and the collocation of telecommunication facilities on Town-owned properties; provided that the operation of said facilities will not disrupt public service use communication or operations and that the proposal complies with the provisions of other local and county ordinances. The Town Board from time-to-time may establish standards, separate from this ordinance, relative to the location of telecommunication facilities on Town-owned properties.

**13.00 Enforcement.** It shall be unlawful to construct, use, or maintain any Tower telecommunication facility in violation of any provision of this ordinance. In case of any violation, the Town or any person who would be damaged by such violation, may institute appropriate action or proceedings to enjoin a violation of this ordinance.

The Building Inspector is hereby authorized to issue a Cease Work Order for any construction that has commenced in violation of this ordinance. The Cease Work Order shall be accompanied by a notice of violation, options for compliance, and a date on which compliance shall be achieved. Failure to comply with a Cease Work Order shall be a violation of this ordinance.

Any person, firm, or corporation who fails to comply with any provisions of this ordinance shall, upon conviction thereof, forfeit no less than Ten Dollars (\$10.00) nor more than Five Hundred Dollars (\$500.00), and the costs of prosecution. for each violation. Each day a violation exists or continues shall constitute a separate violation.

In a case where a citation is issued, the payment of the forfeiture shall not constitute compliance, nor shall said payment bar the issuance of further citations.



**14.00 Effective Date.** Following passage by the Town Board, this ordinance shall take effect the day after the date of publication or posting as provided by § 60.80, Wis. Stats.

ADOPTED this 2nd day of August, 2012.

\_\_\_\_\_ (Town Board Chairperson)  
Kendall Schneider, Chairman

[Published / Posted] this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

Attest:

\_\_\_\_\_ (Town Clerk)  
Regina Ylvisaker, Town Clerk

## APPENDIX A

### Documents Reviewed Related to Siting of Towers

1. Sample Tower Ordinances for the following Municipalities:
  - a. Telecommunications Tower, Antenna, and Facilities Siting Ordinance of Iowa County, Wisconsin;
  - b. Code of Ordinances, Title 10, Chapter 1, Village of Bellville, WI;
  - c. Ordinance No. 2003-15, Village of Mount Horeb, WI;
  - d. Zoning Code Section 4.12, Tower and Antenna Overlay District, Town of Magnolia, Rock County, WI;
  - e. Article IV, Zoning Regulations, Washburn County, WI;
  - f. Resolution No. 156-03, Ordinance No. 156-03, Polk County, WI;
  - g. Zoning & Planning Ordinance Section 8.8, Wireless Communication Facilities, Douglas County, WI;
  - h. Zoning Ordinance Article 14 Towers, Itasca County, MN;
  - i. Zoning Ordinance Article 21.0 Towers, Lake County, MN;
  - j. Zoning Ordinance Z-19-97, Outagamie County, WI;
  - k. Telecommunications Tower Ordinance, Door County, WI; and
  - l. Chapter 142, Code of the Town of Hempstead, Town of Hempstead, Nassau County, Long Island, NY.
  - m. Chapter 10-Zoning, Dane County Code of Ordinances, Dane County, WI
2. Monroe, Lawrence and Comi, Richard, “Misconceptions About Regulating Towers and Wireless Facilities”, The Center for Municipal Solutions Consultants, 2010.
3. “Local Zoning Authority Over Cellular Antennas and Towers”, Local Officials Guide – Siting Cellular Towers, Wisconsin Towns Association, pgs. 5-14.
4. Bond, Sandy, Ph.D., MBS, ANZIV, “Using GIS to Measure the Impact of Distance to Cell Phone Towers on House Prices in Florida”, December 2006.
5. Federal Communications Commission Office of Engineering and Technology, “Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields”, OET Bulletin 65, August 1997.
6. Federal Communications Commission Office of Engineering and Technology, “Questions and Answers about Biological Effects and Potential Hazards of Radiofrequency Electromagnetic Fields”, OET bulletin 56, August 1999.
7. Federal Communications Commission Office of Engineering and Technology, “A Local Government Official’s Guide to Transmitting Antenna RF Emission Safety: Rules, Procedure, and Practical Guidance”, June 2, 2000.
8. Kramer, Jonathan L., Esq., “A Practical Guide to Radio Frequency Emissions Safety”, The Public Law Journal, Vol. 32, No. 3, Summer 2009.

9. Baller, Jim and Lide, Casey, “Wireless Tower Siting: The Local Government Perspective”, The Baller Herbst Law Group, July 3, 2003.
10. Oberfeld, Gerd, “Environmental epidemiological Study of Cancer Incidence in the Municipalities of Hausmannstatten & Vasoldsberg (Austria)”, January 20, 2008.
11. [www.SixWise.com](http://www.SixWise.com), “What are the Dangers of Living Near Cell Phone Towers?”, printed 7/28/2011.
12. Wolf, Ronni, MD and Wolf, Danny, MD, “Increased Incidence of Cancer Near a Cell-Phone Transmitter Station”, International Journal of Cancer Prevention, Vol. 1, No. 2, April 2004.
13. Rogers, Karen, “Health Effects from Cell Phone Tower Radiation”, 2002.
14. Eger, Horst, et al., “The Influence of Being Physically Near to a Cell Phone Transmission Mast on the Incidence of Cancer”, Umwelt-Medizin-Gesellschaft 17, April 2004.
15. World Health Organization, “Electromagnetic Field and Public Health,” May 2006.
16. Questions on the Application for Magnum Communications Tower,” Town of Rutland, April 16, 2011, Pg. 10, Statement from Rutland Town Assessor regarding Property Values.
17. “Town of Union Comprehensive Plan,” Town of Union, Rock County, WI, October 5, 2006.

## APPENDIX B

**Definitions.** Definitions may be modified or expanded as technology evolves without affecting the terms or applicability of the ordinance. For the purpose of this ordinance, the following terms and phrases shall have the meaning ascribed to them in this section:

**Alternative Support Structure:** Clock towers, steeples, silos, light poles, utility poles, buildings or similar structures that can be used to support telecommunication facilities.

**Antenna:** Any system of wires, poles, rods, reflecting discs, or similar devices used for the transmission or reception of electromagnetic waves when such system is either external to or attached to the exterior of a structure. Antennas shall include devices having active elements extending in any direction, and directional beam-type arrays having elements carried by and disposed from a generally horizontal boom that may be mounted upon and rotated through a vertical mast or tower interconnecting the boom and antenna support, all of which elements are deemed to be a part of the antenna.

**Antenna, Vertical:** A vertical type antenna that emits a vertically-polarized electromagnetic wave.

**Applicant:** the individual or business entity that seeks to secure a permit/license for an antenna supporting structure under this ordinance.

**Board or Town Board:** The Town of Union Town Board.

**Bond:** Any form of security including cash deposit, surety bond, collateral, property, or instrument of credit in the amount and form satisfactory to governing body. All bonds shall be approved by the Town Board wherever a bond is required by these regulations.

**Carrier:** Entity that provides telecommunications services.

**Cell Network:** A cellular network is a radio network distributed over land areas called cells, each served by at least one fixed-location transceiver known as a cell site or base station. When joined together these cells provide radio coverage over a wide geographic area. This enables a large number of portable transceivers (e.g., mobile phones, pagers, etc.) to communicate with each other and with fixed transceivers and telephones anywhere in the network, via base stations, even if some of the transceivers are moving through more than one cell during transmission. Cellular networks offer a number of advantages over alternative solutions: 1) increased capacity; 2) reduced power use; 3) larger coverage area; 4) reduced interference from other signals.

**Collocated:** When two or more telecommunications devices are mounted to the same tower or alternative support structure.

**Commission or Plan Commission:** The Town of Union Plan Commission.

**Conditional Use:** A use of land which, while appropriate for inclusion within a given district, possesses a high likelihood of creating problems with regard to nearby parcels of land or the occupants thereof, and which are therefore permitted only subject to the fulfillment of conditions which effectively insure that no such problems will be created.

**Conditional Use Permit:** A permit issued by the Town Board allowing the applicant to construct and use a telecommunications tower or an alternative support structure, as well as accessory support buildings or equipment, for the purposes described in this ordinance.

**FAA:** The Federal Aviation Administration

**FCC:** The Federal Communications Commission

**Fall-down Radius:** The designated area of a telecommunication facility surrounding a telecommunication tower, which, in the event of a structural failure of all or part of the telecommunications tower, would likely completely contain the failed or collapsed telecommunication tower. This area may also be called the collapse zone.

**Height, Telecommunications Tower:** The distance measured from the original grade at the base of the tower to the highest point of the tower. This measurement includes attached antennas, lightning rods and lighting.

**Independent Professional Consultant or “Consultant”:** A radio frequency engineer or a firm specializing in radio frequency engineering. This is a highly specialized field requiring an in-depth knowledge of mathematics, physics, general electronics theory as well as specialized training in propagation. An independent consultant has no ties to any telecom vendors or equipment manufacturers.

**Navigable Stream or Lake:** As determined by the Wisconsin Department of Natural Resources.

**Non-Conforming:** Any telecommunications facility that was in existence prior to the adoption of this ordinance and that has not been issued a Conditional Use Permit under this ordinance.

**Operation:** Other than just nominal use; when a facility is used regularly as an integral part of an active system of telecommunications it shall be deemed in operation.

**Platform:** A support system that may be used to connect antennas and antenna arrays to telecommunication towers or alternative support structures.

**Property Line:** the recognized and mapped property parcel boundary line.

**Provider:** Entity that provides a telecommunication facility.

**Public Service Use or Facility:** A use operated or used by a public body or public utility in connection with any of the following services: water, waste water management, public education, parks and recreation, police, fire and emergency response network, solid waste management, utilities, or highway departments.

**Satellite Dish:** A device incorporating a reflective surface that is solid, open mesh, or bar configured that is shallow dish, cone, horn, or cornucopia shaped and is used to transmit and/or receive electromagnetic signals. This definition is meant to include, but is not limited to, what are commonly referred to as satellite earth stations, TVROs and satellite microwave antennas.

**Search Ring:** The area within which a new cell must be located to be effective.

**Setback:** The minimum horizontal distance between the property line and the nearest point of a building, tower, or alternative support structure, or any projection thereof.

**Telecommunications Device or “Device”:** An antenna, satellite dish, or other device that can be mounted on a tower or alternative support structure and used to transmit and/or receive electromagnetic signals.

**Support Equipment or Building:** A building or equipment located on a tower or alternative support structure site that houses or comprises the electronic transmittal, receiving and relay equipment needed to support the use of the facility to transmit, receive or relay telecommunications signals.

**Telecommunication Facility or “Facility”:** A facility, site, or location that contains one or more antennas, telecommunication towers, alternative support structures, satellite dish antennas, other similar communication devices, and support equipment, all of which is used for transmitting, receiving, or relaying telecommunications signals, excluding those facilities exempted under Section 2.00.

**Telecommunications Tower or "Tower":** Any structure that is designed and constructed primarily for the purpose of supporting one or more antennas. This includes radio and television transmission towers, microwave towers, and common-carrier towers. It shall exclude alternative support structures and those facilities exempted under Section 2.00. The four different types of towers are:

- Lattice Tower /Self-Support Tower or SST - the lattice tower affords the greatest flexibility and is often used in heavy loading conditions. A lattice tower is typically three sided and has a triangular base, however there are some four sided lattice towers.
- Monopole Tower- A monopole tower is a single tube tower. It requires one foundation and typically doesn't exceed two hundred (200) feet. The antennas are mounted on the exterior of the tower.
- Guyed Tower - Guyed towers used to be the cheapest tower to construct, but require the greatest amount of land. For taller heights (three hundred (300) feet and greater) it is much cheaper to build a guyed tower than a self-supporting structure. Most radio and television towers are guyed towers. A guyed tower is a straight tower supported by guy wires to the ground which anchor the tower.
- Stealth Tower – A tower made to look like a naturally occurring structure such as a pine tree. Stealth towers are typically installed in environmentally sensitive areas. They are always more expensive than the other types of towers, and they inhibit the number of collocators. In addition, the “tree branches” of many stealth towers can dislodge during ice storms, causing damage to the tower and on the ground.

**Town:** The Town of Union, Rock County, Wisconsin.