REDWOOD COUNTY ZONING ORDINANCE SECTION 20 TELECOMMUNICATIONS TOWER MANAGEMENT

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SECTION 20 TELECOMMUNICATIONS TOWER MANAGEMENT

SUBDIVISION 1. PURPOSE

Purpose: The purpose of this ordinance is to:

- 1. Regulate the location of telecommunication towers and telecommunication facilities in the County.
- 2. Protect residential areas and land uses from potential adverse impacts of telecommunication towers and telecommunication facilities.
- 3. Minimize adverse visual impacts of telecommunication towers and telecommunications facilities through careful design, siting, landscaping, and innovative camouflaging techniques.
- 4. Promote and encourage shared use/co-location of telecommunication towers and antenna support structures as a primary option rather than construction of additional single use telecommunication towers.
- 5. Avoid potential damage to adjacent properties caused by telecommunication towers and telecommunications facilities by ensuring such structures are soundly and carefully designed, constructed, modified, maintained and removed when no longer used or determined to be structurally unsound.
- 6. Ensure that telecommunication towers and telecommunications facilities are compatible with surrounding land uses.
- 7. Facilitate the provisions of wireless telecommunications services to the residents and businesses of the County while protecting the public health, safety, and general welfare of the Redwood County residents.

SUBDIVISION 2. PERMIT APPLICATION

All telecommunication towers will be a conditional use within the "A-1" Agricultural District, "UE" Urban Expansion District, "B-1" Highway Service Business District, and the "I-1" Industry District. A conditional use permit shall be required of all proposed towers and all applicants of a proposed telecommunication tower must fill out a conditional use permit application provided by the Redwood County Environmental Office. The application shall include the following:

- 1. A site plan, detailing the location of the project area boundaries including maps demonstrating size of communication cells and search radius for the antenna location. A narrative describing a search of not less than one (1) mile radius for the requested site, clearly explaining why the site was selected, locating all existing towers, and identifying all other structures that may be potential colocation sites.
- 2. The name, address, and telephone number of the owner and lessee of the parcel of land on which the tower is situated. If the applicant is not the owner of the parcel of land upon which the tower is situated, the consent of the owner shall be obtained by sworn affidavit.
- 3. The legal description, parcel number, and address of the parcel of land upon which the tower is situated.
- 4. The location of all public and private airports within a three (3) mile radius of proposed tower.
- 5. Towers located within 5 miles of a FAA approved Airstrip shall provide evidence of FAA and/or MnDOT consent.
- 6. Written documentation that the applicant made diligent, but unsuccessful efforts for permission to install or co-locate the applicant's telecommunications facilities on other available antenna support structures located within one (1) mile radius of the proposed tower site.
- 7. Written technical evidence from an engineer(s) that the proposed tower or telecommunications facilities cannot be installed or co-located on another person's tower or useable antenna support structure located within one (1) mile radius of the proposed tower site and must be located at the proposed site in order to meet the coverage requirements of the applicant's wireless communications system.
- 8. A report from a licensed engineer that describes the telecommunication tower's capacity, including the number and type of antenna that it can accommodate.
- 9. A sworn and certified statement by an engineer certifying that the tower is structurally sound and conforms to the requirements of the Minnesota Building Code and all other construction standards set forth by the County, Federal, and State law.
- 10. A copy of the Federal Communications Commissioner's licensure and approval as required for various communications application.

11. A letter of intent from the tower owner committing the tower owner and successors to allow the shared use of the tower if additional users agree in writing to meet reasonable terms and conditions for shared use.

SUBDIVISION 3. COMPLIANCE WITH CODES AND STANDARDS

- 1. Any telecommunications towers shall be in compliance with all applicable state and federal regulatory standards including:
 - A. Uniform Building Code as adopted by the State of Minnesota.
 - B. The National Electrical Code as adopted by the State of Minnesota.
 - C. FAA/FCC Requirements.
 - D. MPCA/EPA regulation (hazardous waste, construction, storm water, etc.)

SUBDIVISION 4. CO-LOCATION

- 1. All commercial wireless telecommunication towers erected, constructed, or located within the county shall comply with the following requirements. The applicant shall:
 - A. Provide documentation of the area to be served including maps demonstrating size of communication cells and search rings for the antenna location. A narrative describing a search ring of not less than one mile radius for the requested site, clearly explaining why the site was selected, what existing structures were available and why they are not suitable as locations or co-locations.
 - B. Provide documentation that the communications equipment planned for the proposed tower cannot be accommodated on an existing or approved tower or building within the search ring of the service area due to one or more of the following reasons:
 - 1. The planned equipment would exceed the structural capacity of the existing or approved tower or building, as documented by a qualified professional engineer, and the existing or approved tower cannot be reinforced or modified to accommodate planned equipment at a reasonable cost.
 - 2. The planned equipment would cause interference with other existing or planned equipment at the tower or building as documented by a qualified professional engineer, and the interference cannot be prevented at a reasonable cost.

- 3. No existing or approved towers or commercial/industrial buildings within a one (1) mile radius meet the radio frequency design criteria.
- 4. Existing or approved towers and commercial/industrial buildings within one (1) mile radius cannot accommodate the planned equipment at a height necessary to function reasonably as documented by a qualified professional engineer.
- 5. Other unforeseen reasons that would not allow for co-locating the planned telecommunications equipment upon an existing or approved tower or building.
- C. The applicant must demonstrate that a good faith effort to co-locate on existing towers and structures within a one (1) mile radius was made, but an agreement could not be reached.
- D. Any proposed commercial wireless telecommunication service tower shall be designed, structurally, electrically, and in all respects to accommodate both the applicant's antennas and comparable antennas for at least two additional users. Towers must be designed to allow for future rearrangement of antennas upon the tower and to accept antenna mounted at varying height.
- 2. Antennas mounted on roofs, walls, and existing towers shall:
 - A. Submit a site plan showing the location of the proposed antennas on the structure and documenting that the request meets the requirements of this ordinance.
 - B. Submit a building plan showing the construction of the antennas, the proposed method of attaching them to the existing structure, and documenting that the request meets the requirements of this ordinance.
 - C. Submit proof of the structure or tower's ability to support antennas.
 - D. Submit an intermodulation study to ensure there will be no interference with existing tenants or public safety telecommunication providers.

SUBDIVISION 5. SETBACK GUIDELINES

- 1. The setback shall be measured from the center point of the base of the tower.
 - A. All towers shall be located no closer than the height of the tower plus 100 feet to the nearest residence other than the applicant.

- B. All towers shall be located no closer than the height of the tower plus 100 feet to any property line including the road right-of-way line.
- C. All towers shall be located no closer than the height of the tower plus 100 feet to all other structures other than the applicants'.
- D. All towers shall be located no closer than one-quarter (1/4) mile to the outside boundary of an existing or proposed County Park.
- E. All towers shall be located outside of the shoreland zoning district.
- F. No part of any antenna or tower, nor any lines, cable, equipment, wires, or braces shall at any time extend across or over any part of the right-of-way, public street, highway, or sidewalk.
- G. No tower or accessory structure shall be erected in any public or private drainage easement.
- H. All anchoring structures shall be setback at least ten (10) feet from the property lines.
- 2. Tower height shall be determined by measuring the vertical distance from the point of contact with the ground to the highest point of the tower including all antennae or other attachments.
- 3. Towers located closer to a property line than the distance equal to the height of the tower plus 100 feet shall be designed and engineered to collapse progressively within the distance between the tower and property line. The applicant for a tower shall submit written documentation explaining tower construction and possible failure and provide assurance that blowing or falling ice can be contained on the subject property.
- 4. Setback guidelines are reciprocal.

SUBDIVISION 6. ACCESSORY UTILITY BUILDINGS/FACILITIES

- 1. All accessory structures shall meet the setbacks of the underlying zoning district.
- 2. Must be architecturally designed to blend in with the surrounding environment and shall meet the height and setback limitations as established for the land use district in which they are located.

SUBDIVISION 7. PERFORMANCE STANDARDS

- 1. A tower shall be located on a parcel of land so as to have the least impact on adjoining properties and any negative impact of the tower shall be confined as much as possible to the property on which the tower is located.
- 2. Generally, only one communication tower is permitted on a parcel of land. If, in the opinion of the Redwood County Planning Commission, a particular parcel is well suited for more than one communications tower, the additional tower may be allowed following the issuance of a conditional use permit. All other standards contained in the Ordinance must be met.
- 3. Towers are prohibited on any property whose principle use includes the storage, distribution, or sale of volatile, flammable, or hazardous materials such as LP gas, propane, gasoline, natural gas, and corrosive or dangerous chemicals.
- 4. Structural design, mounting and installation of the antenna and tower shall be in compliance with manufacturer specifications. The plan shall be approved and certified by a registered professional engineer.
- 5. In general, self-supporting towers (i.e. those without the use of wires, cables, beams or other means) are preferred.
- 6. All towers shall be reasonably protected against unauthorized climbing. The bottom of the tower from ground level to 12 feet above ground shall be designed in a manner to preclude unauthorized climbing or shall be enclosed by a six-foot high chain link fence with a locked gate.
- 7. Permanent platforms or structures, exclusive of antennas, other than that necessary for safety purposes or tower maintenance are prohibited.
- 8. All Communications towers and their antennas shall be adequately insured for injury and property damage caused by collapse of the tower. A "certificate of insurance" shall be filed with the Redwood County Environmental Office prior to commencing operation of the facility.
- 9. No temporary mobile sites are permitted except in the case of equipment failure, equipment testing, or in case of emergency situation as authorized by the County Zoning Administrator. Use of temporary mobile cell sites for testing purpose shall be limited to twenty-four (24) hours; use of temporary mobile cell sites for equipment failure or in the case of emergency situations shall be limited to a term of thirty (30) days. The Redwood County Zoning Administrator can extend these limits.

- 10. Construction of an approved tower, including all accessory structures, including footings and foundation, must be completed within one (1) year following the date of the permit.
- 11. The tower will need to be lighted as required by the FAA. If no light is required, the tower will be lit with a red strobe light.
- 12. Colored guide guard sleeves will be placed on the anchors to make them visible or each wire guide shall be surrounded by at least a six (6) foot high fence.

SUBDIVISION 8. SIGNAGE

1. No advertising or identification of any kind intended to be visible from the ground or other structures is permitted, except applicable warning and equipment information signage required by the manufacturer or by Federal, State, or local authorities.

SUBDIVISION 9. AESTHETICS

- 1. Metal towers shall be constructed of, or treated with, corrosive resistant material.
- 2. Towers and antennae, including support cables and structures, and fencing shall be designed to blend into the surrounding environment to the maximum extent possible through the use of color. Communication towers not requiring FAA/FCC painting/marking shall have either a galvanized finish or be painted a non-contrasting color consistent with the surrounding area.

SUBDIVISION 10. WASTE MANAGEMENT

- 1. Solid Waste
 - A. Construction of telecommunication towers will lead to the generation of various types of waste: packaging, equipment parts, litter, debris generated by clearing. Removal of such material shall be accomplished in a timely manner. Similarly, ongoing operation and maintenance of these machines results in the generation of various waste products. This may include worn parts, and packaging for new parts. All such materials shall be removed from the site immediately and managed in an appropriate manner.

SUBDIVISION 11. INTERFERENCES

1. No telecommunications tower shall be permitted that causes any interference with commercial or private use and enjoyment of other legally operating telecommunication devices including but not limited to radios, televisions, telephones, personal communication devices and other electronic equipment and devices.

SUBDIVISION 12. MAINTENANCE

- 1. Tower owners shall at all times employ ordinary and reasonable care and shall install and maintain and use nothing less than commonly accepted methods and devices for preventing failures and accidents which are likely to cause damage, injuries, or nuisances to the public.
- Tower owners shall install and maintain towers, telecommunication facilities, wires, cables, fixtures, and other equipment in substantial compliance with the requirements of the National Electric Safety Code and all FCC, state, and local regulations, and in such manner that will not interfere with the use of other property.
- 3. All towers, telecommunication facilities and antenna support structures shall at all times be kept and maintained in good condition, order, and repair so that the same shall not menace or endanger the life or property of any person.
- 4. Licensed maintenance and construction personnel shall perform all maintenance or construction on a tower, telecommunication facilities or antenna support structure.
- 5. All towers shall maintain compliance with current radio frequency emissions standards of the FCC.
- 6. Antenna and tower owners shall be required to conduct an annual inspection of their facilities to insure continuing compliance with this Ordinance. A copy of the annual inspection report shall be provided to the zoning administrator.

SUBDIVISION 13. NON-CONFORMING USES

- 1. Telecommunication towers in existence at the time of the adoption of this ordinance are subject to the following provisions.
 - A. Towers may continue in use and maintenance for the purpose now used but may not be replaced or structurally altered without complying in all respects with this Ordinance.

B. At the sole discretion of the Redwood County Planning Commission, towers in existence at the time of the adoption of this Ordinance which do not conform or comply may be considered for the co-location of other user's antenna.

SUBDIVISION 14. ABANDONED OR UNUSED TOWERS

1. Abandoned or unused towers and associated facilities shall be removed within twelve (12) months of the cessation of operations unless the Redwood County Planning Commission has granted a time extension. In the event that a tower is not removed within twelve (12) months of the cessation of the operations at the site the County may remove the tower and associated facilities with costs being assessed against the property.

SUBDIVISION 15. EFFECTIVE DATE

1.	This ordinance shall be in full force and effect upon adoption and publication pursuant to law. Passed and adopted by the Redwood County Board of				
	Commissioners this		•		
Brian Kletscher, Chairman			Matthew L. Hylen,		
Redwood County Board of Commissioner			Redwood County Coordinator		