

**Staff Report**



**Zoning and Land Regulation Committee**

Public Hearing: **February 27, 2024**

**Conditional Use 02611**

Zoning Amendment Requested:

**TO CUP: 180' self-support communication tower on FP-35 zoned property**

Town/Section:

**PLEASANT SPRINGS, Section 29**

Size: **0.23 Acres**

Survey Required.

Applicant

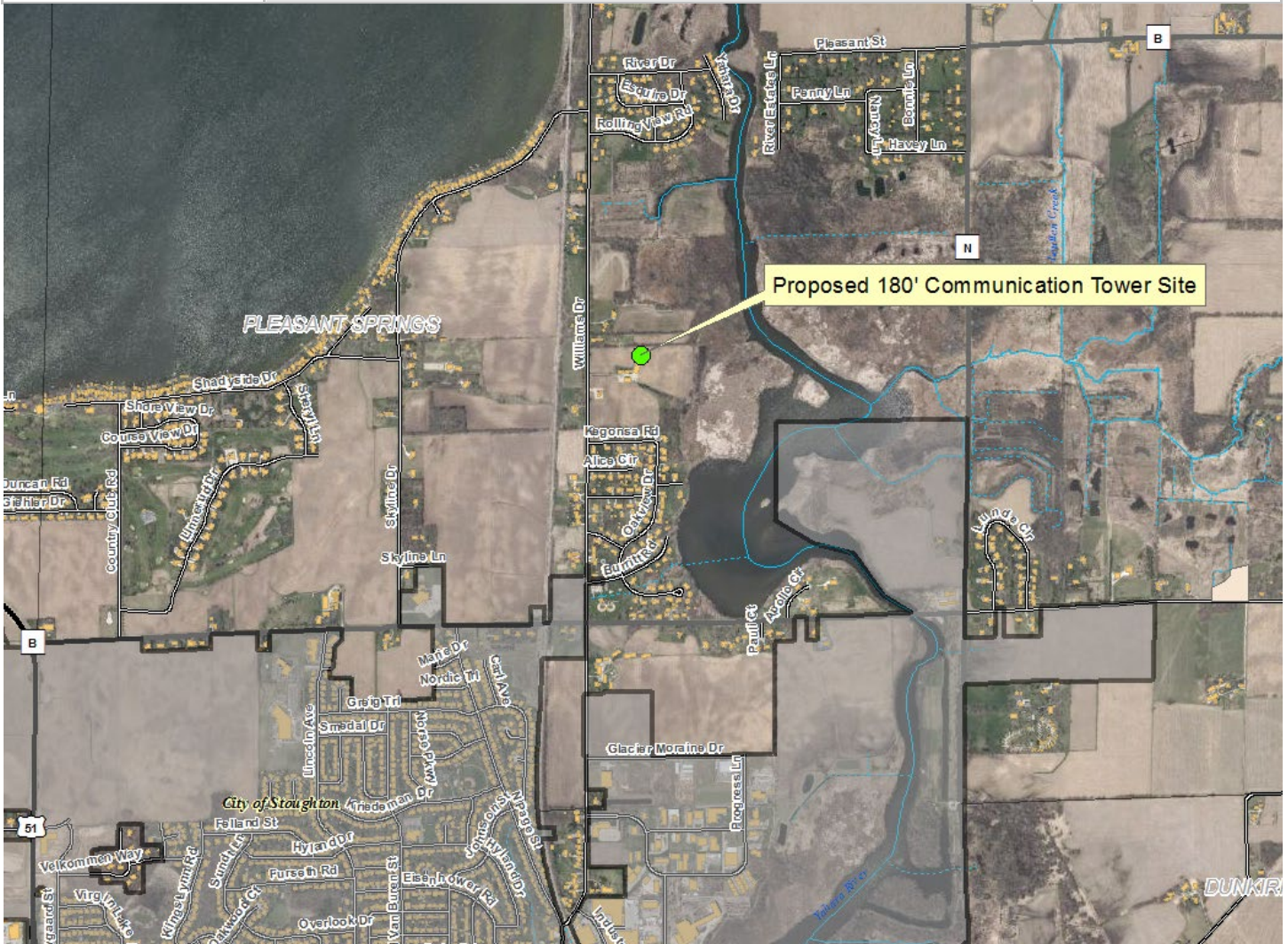
**NATHAN M MOE**

Reason for the request:

**180' self-support communication tower on FP-35 zoned property**

Address:

**1896 WILLIAMS DR**



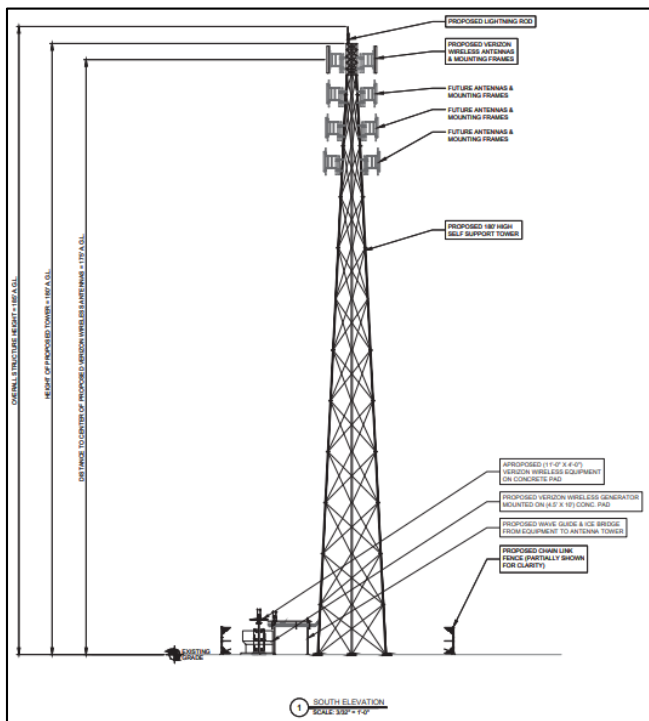
**DESCRIPTION:** Verizon Wireless and Tower North Development LLC are requesting approval of a Conditional Use Permit (CUP) for a 180' self-support lattice style communication tower (185' with lightning rod) that will allow Verizon to resolve network capacity issues with its cellular service in the surrounding area. Applicants have negotiated a lease agreement for a 100'x100' (10,000 sqft) area in the north-central portion of the ~75 acre FP-35 zoned parcel owned by Nathan Moe at 1896 Williams Drive in section 29 of the town of Pleasant Springs.

Applicants provided a sworn statement by an engineer for Verizon indicating that the new tower is needed at the proposed location because there are no existing towers or other collocation options within, or near, their identified search ring. The tower would be owned and operated by Tower North, with Verizon as the anchor tenant. The tower would include three additional collocation spots for other providers to potentially utilize.

The proposal has been reviewed by a third party radio frequency engineering firm, CityScape Consultants. CityScape’s review and report focuses primarily on determining if the proposed tower meets the requirements of the county ordinance as well as other applicable state and federal laws, and is justified based on supporting technical documentation. CityScape’s findings and recommendations are summarized below, and the full report is available on the county’s legistar website.

Action on tower CUPs must be completed within a state-imposed 90-day timeframe – in this case by Wednesday, March 20th – unless extended by mutual agreement of the applicant and county. The above mentioned violation could impact the timing of town and county action on the CUP application.

**CONDITIONAL USE PERMIT DECISION MAKING:** Conditional uses are those uses which, because of their unusual nature and potential for impacts on neighboring lands, public facilities, the environment or general welfare, warrant special consideration and review. The zoning ordinance includes specific requirements and standards for review and approval of conditional use permits.



Proposed 180' lattice tower

In order to obtain a Conditional Use Permit, an applicant must provide **substantial evidence** to demonstrate that the application, and all requirements and conditions established by the county relating to the conditional use, are or shall be satisfied. Substantial evidence means, *“facts and information, other than merely personal preferences or speculation, directly pertaining to the requirements and conditions an applicant must meet to obtain a conditional use permit and that reasonable persons would accept in support of a conclusion.”*

Prior to granting or denying a conditional use, the town board, if it chooses to act, and zoning committee shall make written findings of fact based on evidence presented and issue a determination whether the proposed conditional use, with any recommended conditions, meets all of the following standards:

- General standards for approval under s. [10.101\(7\)\(d\)](#)
- Any prescribed standards specific to the applicable zoning district – none apply in this case
- Any prescribed standards specific to the particular use under s. 10.103 - in this case, section [10.103\(9\)](#)

The town board and/or zoning committee must deny a conditional use permit if either/both find that the standards for approval are not met, and must approve if either/both find that the standards for approval are met.

The decision to approve or deny a conditional use permit must be supported by substantial evidence. Any conditions imposed must be based on substantial evidence, related to the purpose of the ordinance, reasonable, and, to the extent practicable, measurable.

The town board and zoning committee must review the proposed conditional use against all of the following standards for approval.

General Standards for Approval of a Conditional Use Permit

1. That the establishment, maintenance or operation of the conditional use will not be detrimental to or endanger the public health, safety, comfort or general welfare;

2. That the uses, values and enjoyment of other property in the neighborhood for purposes already permitted shall be in no foreseeable manner substantially impaired or diminished by establishment, maintenance or operation of the conditional use;
3. That the establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district;
4. That adequate utilities, access roads, drainage and other necessary site improvements have been or are being made;
5. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets;
6. That the conditional use shall conform to all applicable regulations of the district in which it is located.
7. That the conditional use is consistent with the adopted town and county comprehensive plans.
8. If the conditional use is located in a Farmland Preservation Zoning district, the town board and zoning committee must also make the findings described in s. 10.220(1).

Dane County communication tower ordinance: Approval of a Conditional Use Permit is required for a new or substantially modified communication tower. In addition to the review procedures and standards for all Conditional Use permits, communication tower applications are subject to the provisions of the Dane County communication tower ordinance, section [10.103\(9\)](#). The purpose of the ordinance is to ensure that facilities are sited in a manner that:

1. Protects and promotes public health, safety, community welfare and the quality of life in Dane County as set forth within the goals, objectives and policies of the Dane County Comprehensive Plan, this ordinance, and s. 66.0404 Wis. Stats;
2. Respects the rights and interests of towns, neighboring property owners, and existing land uses on adjoining properties in the decision making process;
3. Recognizes the public necessity for telecommunication facilities and the numerous benefits and opportunities a robust wireless infrastructure make possible for county residents, including improved public safety, efficient production and distribution of goods and services, access to educational resources, and economic development opportunities;
4. Allows appropriate levels of service to be obtained throughout the County, including expansion to rural areas seeking access to personal communications and broadband internet services;
5. Minimizes the number of transmission towers throughout the County;
6. Encourages the joint use of new and existing telecommunication facilities as a preferred siting option;
7. Ensures that all telecommunication facilities, including towers, antennas, and ancillary facilities are located and designed to minimize the visual and environmental impact on the immediate surroundings and throughout the county;
8. Avoids potential damage to adjacent properties from tower failure or ice falls through sound engineering and careful siting of structures; and
9. Provides a public forum to assure a balance between public concerns and private interests in establishing commercial telecommunications and related facilities.

Dane County's ordinance has robust application requirements for communication tower proposals. In addition to providing a detailed statement of intent, site and operations plans, and responses demonstrating how the proposal satisfies the standards for approval of a CUP, applicants must provide technical documentation verifying the need for the tower at the requested height and location. This technical information is provided directly to, reviewed and fact checked by the 3<sup>rd</sup> party engineering firm, CityScape Consultants. The application also includes [photo simulations](#) to help decision makers and other interested parties assess the potential aesthetic impact of the proposed tower. The application packet is available on the county's legistar website, [here](#).



## RELEVANT FACTS & INFORMATION

Location, size, existing use and characteristics of subject property: The subject property is a ~75 acre FP-35 zoned property located at 1896 Williams Drive in section 29 of the town of Pleasant Springs. The property is within a mile of the city of Stoughton municipal boundary. Principal existing use of the property is agriculture, including the owner's residence and several accessory buildings. The proposed tower site would be located in an area of existing cropland approximately 100' from a large agricultural accessory building. The 10,000 sqft CUP area is at an approximate elevation of 882 feet above mean sea level. The center of the tower would be setback from the northerly property boundary by 127.5' and the easterly / front property line by 729.9'.

### Current zoning and applicable district regulations:

The property is zoned FP-35 (General Farmland Preservation). Communication towers are listed as a conditional use in this district. Conditional uses are subject to the General standards for approval under s. [10.101\(7\)\(d\)](#), along with any prescribed standards specific to the particular use under s. 10.103 - in this case, section [10.103\(9\)](#)

### Surrounding land uses / neighborhood:

Surrounding land uses include agriculture / open space and scattered rural residences. There are 47 residences, including the owner of the subject property, located within 2,000' of the proposed site.

No sensitive environmental features or resource protection areas located on the proposed CUP site.

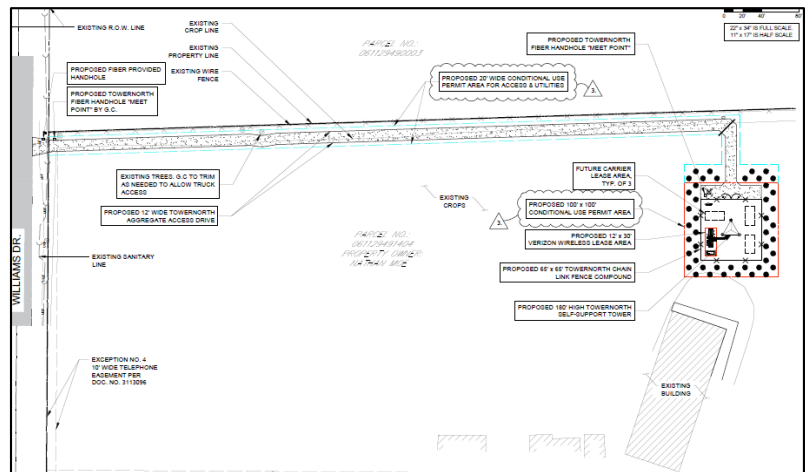
There are no existing communication towers located within approximately 1.5 miles of the subject property.

There is one private airfield (Sundby) located within 2 miles of the proposed tower site to the southeast. The applicant has provided notification of the intent to construct a tower to airports within 5 miles of the site.

Utilities, access, drainage, and other necessary site improvements: The applicant proposes a 65' x 65' fenced compound around the tower site. Access would be to Williams Drive via a new ~800' driveway close to the northerly property boundary. No structural development, signage, or onsite waste disposal is proposed.

Applicable additional standards: In addition to the noted county code standards and requirements, other state and federal regulations apply to siting of communication towers. Compliance with these standards are the sole responsibility of the applicant.

Outstanding ordinance violation: There is an outstanding violation of the county's Erosion Control and Stormwater Management Ordinance (Chapter 14, DCCO) on the property. The property owner created several acres of impervious surface without obtaining the required permit. Staff from the county's Land & Water Resources Department have



Residences within 2,000' of tower site

notified the owner of the violation who will need to obtain an “after the fact” permit to bring the property into compliance. The owner has indicated he’s taking steps to resolve the violation.

**TOWN / COUNTY PLAN:** The property is within a designated agricultural preservation area in the Town of Pleasant Springs and Dane County Comprehensive Plans. Within designated agricultural preservation areas, plan policies focus on preserving both farmland and the town’s rural character by strictly limiting the density and siting of nonfarm development. Town plan policies count communication towers as a density unit. As indicated on the attached density study report, the property remains eligible for one density unit. If the CUP is approved, the eligible density units will be exhausted.

The town plan requires that new towers comply with the county’s tower ordinance. The county comprehensive plan includes policies that promote well planned cellular infrastructure and shared facilities, where feasible. See staff analysis section below on page 7 for additional discussion on consistency with adopted comprehensive plan policies.

**3<sup>rd</sup> PARTY ENGINEERING REVIEW:** The County relies on a the services of CityScape, a 3rd party radio frequency engineering consultant, to provide an independent and unbiased technical review of communication tower proposals. In addition to evaluating proposals for compliance with local, state, and federal regulations, CityScape also analyzes whether a particular site and tower height is justified based on the provided technical documentation, and if collocation on any existing tower facilities is feasible.

The applicant has provided confirmation from a Verizon network engineer that collocation was not an option on any nearby existing communication towers, including a currently vacant tower at the intersection of Spring Road and County Highway B. CityScape’s report includes the following statement regarding the feasibility of collocation on the 2 nearby towers:

*“Cityscape has verified that there are no collocation opportunities at communications towers that are known to exist within the 1.5 mile radius circle, see **Figure 3**. The nearest structure is an existing Verizon facility, which is not shown in **Figure 3** due to the NDA constraints. As Verizon’s sworn statement alluded, expanding capacity at an existing maxed-out wireless facility is not technically possible. Thus, the Applicant appears to have met the threshold set by the County Ordinance for justifying new construction for the proposed facility.”*

CityScape’s report provided the following summary finding and recommendations:

*CityScape concludes there is a preponderance of evidence that the construction of a new personal wireless communications facility in the area is technically justified and is essential for the Applicant to achieve its objective of continuous service in the area. CityScape also believes the location and height proposed are technically appropriate.*

*If the County elects to approve the new wireless facility, it should do so with the following conditions:*

- 1) Prior to permitting, the Applicant shall submit a structural analysis report, signed by a Professional Engineer licensed in Wisconsin, certifying that the tower will have the structural capacity for the proposed Verizon equipment and collocations of at least two other wireless providers with similar equipment; and,*
- 2) Prior to permitting, the Applicant shall submit final construction drawings for the facility which shall be certified by a Wisconsin-registered Professional Engineer; and,*
- 3) The Applicant shall construct the tower so as to accommodate a minimum of two additional antenna arrays for collocation in similar in size and function to that placed on the tower by the Applicant; and,*

4) At the County's discretion, the tower, antennas and all other ancillary equipment mounted on the tower shall be painted a color deemed the least visually obtrusive; and,

5) The tower shall not be artificially illuminated unless required by the FAA or any other applicable authority; and,

6) If a valid complaint of interference to an authorized County or municipal public safety radio facility is found to be associated with Verizon's installation at the proposed facility, the Applicant shall comply with all applicable rules regarding radio-frequency interference as mandated by the Federal Communications Commission (FCC), and in accordance with the FCC's Best Practices Guide.

## STAFF ANALYSIS

As indicated in the applicant's submittal, this site is being proposed to address capacity issues with Verizon's network service in the area. As indicated in the CityScape report, the inability to meet capacity needs can result in dropped calls, inability to complete calls, and slow data speeds.

Common Tower Related Issues. There are a number of issues that are commonly associated with the siting, operation, and maintenance of communication towers. Below is a brief synopsis of these issues in the context of the tower proposed under CUP #2611.

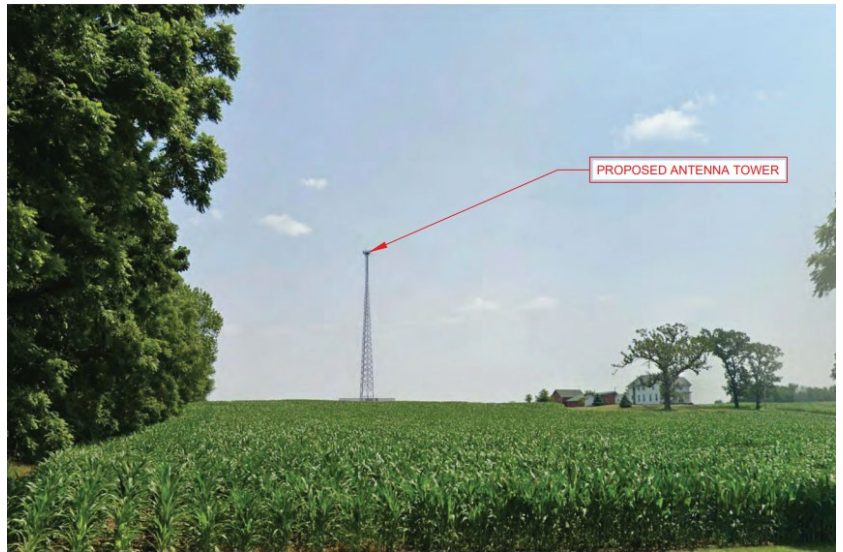
*Air navigation.* The potential for impacts to air navigation, including nearby private airports, is a concern handled through the FAA. The applicant has provided a copy of the FAA's "determination of no hazard to air navigation" for this site, and has also provide direct notification of the proposed tower to airports within 5 miles of the site. The closest airport is the Sundby private airstrip, located about 1.5 miles to the southeast of the site. Staff is unaware of any concerns from nearby airports as of February 13, 2024.

*Fall-down and ice-fall.* Catastrophic tower collapse as well as ice fall from towers can be a concern for towers located in developed areas or near occupied buildings. The closest building is the owner's large agricultural accessory building located about 100' from the tower. The closest occupied building is the owner's residence, approximately 340' from the tower. The applicant has provided an engineering certification indicating an anticipated fall down radius of 127.5' or less. While ice fall is a possibility with all towers, the likelihood of damage is relatively low given the rural location and prevailing winds coming from the west.

*Visual aesthetics.* Aesthetics is a highly subjective issue and one of the most significant points of contention often associated with new communication tower requests, particularly those that would involve nighttime lighting. There are 47 residences within 2,000 feet of the site. The closest is the owner's residence at 340', with the next closest (1922 Williams Dr) approximately 675' away from the proposed tower. The tower would be set back a significant distance the road, which should mitigate aesthetic impacts to a degree. However, given the relative lack of topography, the tower will undoubtedly be visible from the surrounding area. The tower would not be lighted.

The applicant has submitted [photo simulations](#) that illustrate the potential visual impact from two locations surrounding the property. Under applicable state law, aesthetics cannot be the sole determining factor in denying a new tower proposal.

**Electromagnetic radiation.** The issue of electromagnetic radiofrequency (RF) emissions is commonly raised in response to communication tower proposals. Given the rural location of the site and lack of nearby residential structures, RF emissions should not be an issue. Verizon has provided confirmation that the facility will be in compliance with the RF energy human exposure guidelines and FCC rules regarding interference to other communications services.



*View from Williams Dr near property boundary where driveway would be installed*

**Consistency with adopted town / county comprehensive plan:** To be approved, a proposed conditional use must be found to meet the standards in section 10.101(7)(d)1. This includes a finding by the town board and county zoning committee that the proposed conditional use is consistent with the adopted town and county comprehensive plans.

As noted above, the property is in a designated agricultural preservation area. Town / county planning goals, objectives, and policies emphasize the preservation of farmland and rural character. The town of Pleasant Springs comprehensive plan includes the following [policy](#) for communication towers:

*“Towers should be sited in a manner that minimizes the aesthetic and environmental impact on surrounding property and the rural character of the town in general. The town may consider the potential visual and aesthetic impact of a proposed tower site as one of many factors when acting on a tower Conditional Use Permit application. The town may also apply other applicable siting criteria and standards when reviewing proposals.”*

The [town’s plan](#) includes the following *applicable* standards and criteria for siting new development in Agricultural Preservation Areas:

*Any proposed development shall comply with the following siting and design requirements. Other requirements may apply to specific proposals as indicated elsewhere in this plan.*

- 2. Roads or driveways should avoid crossing agricultural land to reach non-farm development. Generally, “flag lots” or layouts requiring long access roads are discouraged, unless necessary to promote the town’s farmland preservation objectives and access the most appropriate building site.*
- 3. Development shall be directed away from soils classified as “prime farmland,” “farmland of statewide significance,” those areas shown as having severe or very severe limitations for septic tanks (as shown on soils maps), and hydric (“wet”) soils. Discretion may be used for sites that consist entirely of soils classified as “prime farmland” or “farmland of statewide significance.”*

## Telecommunications

### Policies and Programs

1. Encourage Dane County communities to adopt enforceable guidelines for siting and removing telecommunications facilities.
2. Strengthen consideration of aesthetics in the building of towers (e.g., education, design competition, exhibits).
3. Maximize coordination of telecommunication facility needs with existing structures, buildings, water towers, etc.
4. Adopt ordinance requiring feasibility study of alternatives before allowing new tower construction.
5. Because Internet communication has become necessary in the conduct of commerce and provision of services in the county, promote countywide wireless Internet service (WiFi).
6. Encourage exploration of municipally owned telecommunication facilities to furnish wireless service to all areas of the county.

[Dane County Comprehensive Plan Telecommunications Policies](#)

6. *The following additional considerations and standards may apply to proposed development. They are intended to promote safety, environmental protection, farmland preservation, and rural character, and to protect neighboring property owners:*
- a. *Erosion control and/or stormwater management measures*
  - b. *Light pollution control (e.g., shrouded lighting)*
  - c. *Noise abatement measures*
  - d. *Site design and location (e.g., homesite location/building envelope)*
  - e. *Landscaping or screening (e.g., natural or man-made buffers between incompatible uses)*
  - f. *Driveway design, distance, and location*

Impacts to rural character and aesthetics can be difficult issues for decision makers to navigate. Particularly in the context of siting facilities that play a critical role in the delivery of services town and county residents utilize on a daily basis. Understandably, there is no way to completely hide a 180' tower from view of the surrounding area. There are certainly options for addressing visual aesthetics, including tower design and painting the tower a color that blends with the surrounding environment. However, tower design alternatives involve tradeoffs. For example, a monopole tower may be less visually obtrusive than a self-support lattice tower, but more expensive to construct and less sturdy and adaptable to the needs to potential collocators.

Regarding concerns about aesthetic impacts to rural character, the county zoning ordinance provides the [following](#):

3. *The committee may require, unless it is shown to be unreasonable, modifications to the tower design, including but not limited to visual screening or landscaping, that it deems necessary to minimize the aesthetic impact of the tower.*

Modifications to the tower design (e.g., monopole, landscaping, paint color) may be required if the town and/or county zoning committee determine it necessary to support findings that the proposed conditional use satisfies one or more [standards of approval](#).

**TOWN:** The town of Pleasant Springs has not yet acted on this proposal.

**STAFF RECOMMENDATION:** As noted above on page 4 of this report, there is an outstanding violation of the county's Erosion Control and Stormwater Management ordinance that has not yet been corrected by the property owner. Under section 10.101(7), the ZLR Committee may postpone action on pending CUP applications until any violations are corrected. Staff recommends that the ZLR committee postpone action at the February 27<sup>th</sup> public hearing to allow an opportunity for public testimony at the hearing and for the property owner to resolve the outstanding violation.

Any questions about this proposal, please contact Majid Allan at: [allan@countyofdane.com](mailto:allan@countyofdane.com), or 608-267-2536 (office), or 608-720-0167 (cell).