



SUP 3-22: Network Building & Consulting

REQUEST: Wireless Support Structure – Satellite Dish Antennas for Internet Service

Parcel ID: 568-022

Location: 300 Block Upright Rd. Mt. Ulla

Acreage: Apx. 1.11 AC

Zoning: RA

Floodplain: N/A

Watershed: WS II BW (Back Creek / Sloans Creek)

Owner: Williams Communications Inc.

Applicant: Network Building and Consulting (NB+C) on behalf of Amazon Kuiper Infrastructure, LLC.

Existing Use: Vacant. Former fenced compound for utility

REQUEST

On behalf of their client Amazon Kuiper Infrastructure, LLC., Network Building and Consulting is requesting a special use permit for a wireless support structure in the form of a satellite earth base station that will provide high speed internet service on a vacant 1.11 acre parcel identified as Parcel ID 568-022 located at the 300 block of Upright Road zoned Rural Agricultural (RA). Per section 21-60 (4)(a), this request is subject to the issuance of a special use permit, compliance with the associated six (6) specific special use criteria, and compliance with the six (6) general special use criteria.

PROJECT DETAILS

By the Zoning Ordinance definition, all applications for “wireless support structures” to this point have been in the form of monopole, lattice, or guyed structure a.k.a “cell towers” to serve voice / data services. Amazon is proposing a telecommunication facility featuring six (6) satellite dishes eight (8) feet in diameter each mounted on short poles with an overall height of less than fifteen (15) feet, which will serve as an earth “base station”. Dishes will communicate with Amazon’s network of low earth orbit satellites to provide “high quality, high speed internet access” to “the entire Rowan County boundary”.

Planning staff encouraged the use of #57 stone over a geo-textile fabric specified by the Zoning Ordinance as a pervious surface for this development proposed within a WSII BW area, which limits impervious coverage to 12%. If approved, staff will ensure documentation is provided to substantiate the completed stone base complies with this limitation for future reference.

**SPECIAL USE
REQUIREMENTS:
SEC. 21-60 (4)(A)**

- 1. New Wireless Support Structures.** Applicants are encouraged to first investigate co-location opportunities on existing wireless support structures followed by consideration of preferred sites that minimize the impact on the North Carolina Scenic Byway corridor within the search ring.

Unlike a typical wireless support structure application which provide a “search ring” where a new facility is needed, this facility appears to have much more freedom in choosing a location less other extenuating parameters (e.g. proximity to fiber, Federal Communications Commission (FCC) interference standards). Page 2 and 3 of the enclosed project information include a general description of sites considered along with a simple explanation of why nearby towers are not suitable / practical for the dishes. This criterion is intended to address the unnecessary proliferation of towers when the existing inventory can address a provider’s need. Staff have no concerns regarding the degree of information provided. Sloan Road is part of the Millbridge Scenic Byway, which will be addressed in the below criteria regarding visual impacts.

- a. Site plan containing information from section 21-52 and 21-60 (4) A 3 i – v.** All required information provided.
 - b. Photos and simulations.** NB+C provided two (2) photos along Sloan Road and two (2) along an adjacent private driveway to the site’s rear along with the simulated ten (10) foot metal fence and proposed landscaping. This property is located on a high point which slopes to drainage areas east and west eventually meeting Sills Creek to the north while land extending to Sloan Road are slightly lower in elevation.
 - c. Tower capable of accommodating five (5) users and co-location policy.** N/A.
- 2. Tower heights and types.** The support structures and dishes will be well under the allowable 199’ height.
- 3. Provisions for tower safety.** These dishes will not have a typical fall zone. If approved, staff will require an engineered certification for compliance with ANSI / TIA and the purported “fall zone” within the fenced limits as applicable for a satellite dish.
- 4. Retention of consultant.** Rowan County’s telecommunication consultant City Scape provided their review and assessment of the request concluding the application meets the ordinance standards and offered four (4) conditions of approval should the Commission elect to approve the request.
- 5. Obstruction lighting and marking.** N/A. This section only applies to high hazard towers.
- 6. FCC license.** Amazon has applied for their FCC license and will have prior to operation.

EVALUATION CRITERIA:
SEC. 21-59

In addition to meeting the above standards, the applicant must illustrate they are able to comply with the following criteria (see applicant responses on pages 3-4 of the project information sheet):

1. Adequate transportation access to the site exists. Upright Road (SR# 1769) is a publicly maintained gravel road approximately fifteen (15) foot in width providing access to a half-dozen homes from the Sloan Road intersection to the bridge over Sills Creek. NCDOT indicated they had no concerns with the request but will require a driveway permit if approved.
2. The use will not significantly detract from the character of the surrounding area. The immediate and general vicinity is dominated by active croplands and limited residential development. The property is located between a 200 foot Duke Power transmission line right of way and 100 foot Transcontinental gas pipeline right of way. Additionally, this facility would be located within 100 feet of the adjacent VYVX Inc. fiber optic communications facility associated with Williams-Transco, which currently contains one satellite dish for company communications.
3. Hazardous safety conditions will not result. Development will be subject to compliance with FCC rules and certifications noted in section #3 above.
4. The use will not generate significant noise, odor, glare, or dust. As best staff understands the operation, this unmanned facility should not generate impacts in these areas.
5. Excessive traffic or parking problems will not result. N/A.
6. Use will not create significant visual impacts for adjoining properties or passersby. According to City Scape, it is possible the applicant could illustrate to the FCC the metal fence is not necessary to address potential Radio Frequency (RF) interference with other users operating on the same frequency. However, staff recommended the applicant use the color green for the proposed ten (10) foot metal fence and plant for (4) foot evergreen shrubs [False Holly or equivalent] spaced five (5) feet on center to address visual impacts. The nearest home (275 Upright Rd.) is located approximately 675 feet from the fenced limits while Sloan Road [NC Scenic Byway] is located approximately 1,100 feet away and slightly lower in elevation. While the dishes will protrude above the fence and allowed vegetation growth of ten (10) foot by a few feet, visibility impacts should be minimal considering item #2 above.

PUBLIC NOTICE

October 5, 2022 – Mailed notice to three (3) adjoining land owners (generally within 100 feet of the subject property).

October 5, 2022 – Sign posted on property.



FINDINGS OF FACT

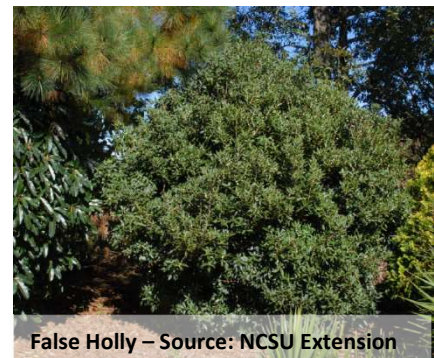
The BoC must adopt facts supporting the below findings of fact based on the above six (6) criteria:

1. The development of the property in accordance with the proposed conditions will not materially endanger the public health or safety.
2. That the development of the property in accordance with the proposed conditions will not substantially injure the value of adjoining or abutting property, or that the development is a public necessity.
3. That the location and character of the development in accordance with the proposed conditions will be in general harmony with the area in which it is located and in general conformity with any adopted county plans.

See enclosed checklist to guide decision. Planning Staff will provide example findings for consideration at the hearing.

STAFF COMMENTS

While not a conventional “wireless support structure”, the same criteria apply to this request less the noted exception regarding analysis of existing towers or preferred sites within a “search ring”. Plans include the staff encouraged evergreens to screen three (3) sides of the proposed solid metal fence surrounding the facility. If approved, staff would encourage consideration of the following conditions of approval:



1. Prior to permitting, Applicant shall provide a structural analysis report by a registered North Carolina structural engineer certifying that the satellite dishes will comply with ANSI/TIA-222 G or H standards and the fall radius within the lease area.
2. If an emergency power backup generator is to be used, its noise level shall not exceed 65dBa at the nearest property edge. Testing shall be limited to the hours between 9:00 A.M. and 4:00 P.M., (Monday through Friday).
3. Clearly visible signs warning of potential RF exposure risk shall be affixed to the compound fence in accordance with FCC Rules and Regulations and OET Bulletin 65.

4. No advertising shall be posted on the compound fence.
5. Provide PE certification and as-built documentation substantiating the total built-upon area square footage does not exceed 12% of the property acreage outside the right of way.

ENCLOSURES

- Application
- Project Information Description
- Site Plan
- Photo Simulations
- GIS Map
- Consultant Review
- FCC Documents
- Procedural Checklist