

# **APPLICATION FOR SPECIAL USE PERMIT**

# **PROJECT INFORMATION:**

### **Applicant Information:**

Amazon Kuiper Infrastructure, LLC P.O. Box 80863 Seattle, WA 98108

### **Record/Owner/Land Owner Information:**

Williams Communications Inc #MD13B P.O. Box 22067 Tulsa, OK 74121

### **Representative Agent:**

Network Building + Consulting Attn: Matt Chaney 6095 Marshalee Drive, Suite 300 Elkridge, MD 21075 Email: mchaney@nbcllc.com

### Name of Project:

CLT501 Mt. Ulla Communications Site

### **Rural Address of Project:**

0 Upright Rd, Mt. Ulla, NC

Parcel Identification Number: 568 022

Twp/NBHD: 00801: Mt. Ulla 01

**Property's Legal Description:** 1.25 AC



# **PROJECT DESCRIPTION:**

Amazon Kuiper Infrastructure, LLC is in the process of deploying a satellite broadband network that will provide high quality, high speed internet access to communities that lack reliable internet access. As a first step in ensuring that residents of this County have access to this critical service, Amazon Kuiper is proposing to build an unmanned telecommunications facility compound that includes 6 ground-mounted dish antennas (less than 12.5' in total height) and 1 equipment cabinet. The facility will be located approximately 9 miles east of Mooresville and approximately 1 mile north of Mooresville Road on Upright Road. The compound area will be approximately 9,000 sq. ft. and surrounded by a corrugated metal fence for security. The facility will also have a 12' gravel access road for construction and maintenance that will run from Upright Road, through the existing Williams Communications parcel, to the proposed compound. The facility will be approximately 735' from the nearest residence and will be adjacent to the existing Williams Communications fiber hub located on the connected parcel immediately to the south.

### **STATEMENT OF PURPOSE AND COVERAGE OBJECTIVE:**

Amazon Kuiper Infrastructure, LLC ground stations ("gateways") are fully managed sites that connect groundbased fiber optic infrastructure to low earth orbit satellites. The COVID-19 pandemic highlighted the importance for fast, reliable internet service. Education, healthcare, small businesses and other critical sectors of the economy were sustained throughout the past few years due to access to broadband connectivity. Regardless of community location or population size, broadband availability will be a critical driver of economic development moving forward. Amazon's Project Kuiper is designed specifically to address the digital divide issues that rural communities face. The facility described in this application differs from more traditional communications facilities. A standard telecommunications site involves the placement of cellular towers or monopoles high above the ground, creating a coverage area that is limited by proximity to the tower or structure. With an Amazon Kuiper facility, the antennas are on the ground and directed up towards our network of satellites. By linking this facility with the rest of the Amazon Kuiper satellite network, Amazon will be creating a more expansive coverage area. All of Rowan County will benefit from this technology, from the more rural areas in the western half of Rowan County near this facility to residents and businesses in the southeast corner of the county and everything in between. Therefore, the entire Rowan County boundary will be able to utilize this new service offering.

### **SITE SELECTION ANALYSIS:**

Pursuant to Sections 21-56(6)(d) and 21-60(4)(a) of the zoning ordinance, Amazon began by considering nearby existing telecommunications structures for collocation. The closest two existing facilities are the American Tower-owned tower near Mooresville Rd and Caldwell Rd in Mt. Ulla and the SBA-owned tower at 490 G Goodnight Rd in Salisbury. However, unlike a traditional telecommunications facility, the nature of this Amazon Kuiper facility prevents collocation to these existing telecommunications towers from being a viable option. The wind load effect that the six 8' dishes would create would far surpass the existing structural capacity of these towers. This is especially true considering that the dishes need to be pointing at roughly the same azimuth (which would mean they would all need to be on the same side of the existing structure). In addition to the structural issue, hanging six 8' dish antennas high in the air would have a much greater visual impact to the surrounding area than placing them on the ground behind a fence. This prevents these existing towers from being viable options for this facility.



With there being no suitable existing structures, Amazon considered whether there were any nearby preferred sites that would be suitable for this installation. The most important criteria for siting an Amazon Kuiper facility is an open area with clear line of site to the sky and access to nearby existing, significant fiber utilities. The following are the nearby preferred sites that were ruled out as not a viable location for this facility:

- Sloan Park (550 Sloan Road): This parcel is heavily wooded and would not provide a clear line of site to the sky
- Thyatira Presbyterian Church (220 White Road): This parcel is also heavily wooded, with the only non-wooded area being used for the cemetery.
- County Recycling Site (3282 Goodnight Road): While part of this parcel is being farmed and has a clear line of site to the sky, it does not have proximity to significant fiber services.
- Back Creek Presbyterian Church (2180 Back Creek Church Road): This parcel is also heavily wooded, with the only non-wooded area being used for the cemetery.
- West Rowan VFD Station 68 (235 Back Creek Church Road): While this small parcel abuts a farm field and may have clear line of site to the sky, it does not have proximity to significant fiber services.

With no preferred sites being found to be viable locations for this facility, Amazon evaluated other parcels in this area. By placing the Amazon Kuiper facility on the same parcel as the existing Lumen facility, this application limits the amount of disturbance to the surrounding community keeps similar uses together. This prevents the need for cutting a trench through any roads or disturbing right-of-way area on any other properties to bring utilities to the site, thus furthering the goals of the zoning ordinance.

# **COMPLIANCE WITH ZONING REGULATIONS:**

# **ZONE:** RA-3 Rural Agriculture

# **IMPERVIOUS AREA:**

The gravel compound area around the antennas and equipment cabinet will be #57 Stone a minimum of 4" deep on top of a geotextile fabric to meet Rowan County's requirements for pervious surface.

	Acreage	Square Footage	# of Units	Total Sq Footage
Existing Parcel Size	1.11	48,351.6	1	48,351.6
Antenna Foundation Size	.001	64	6	384
Cabinet Foundation Size	.001	44	1	44
Equipment Total	.002	108	7	428

(Total square footage of equipment/Total square footage of parcel) x 100 (428 / 48,351.6) x 100 = <u>.88%</u>

# SECTION 21-59 – EVALUATION CRITERIA RESPONSES

- 1) Adequate transportation access to the site exists:
  - This unmanned facility will be accessible by a new access road off of Upright Road.



- 2) The use will not significantly detract from the character of the surrounding area:
  - By placing this facility adjacent to the existing Lumen fiber facility, this application keeps similar uses together and maintains the existing character of the surrounding area.
- 3) Hazardous safety conditions will not result:
  - All Amazon Kuiper facilities are properly licensed by the FCC. Additionally, this facility will meet all FCC guidelines related to RF emissions, as well as local, state, and federal safety regulations.
- 4) The use will not generate significant noise, odor, glare, or dust:
  - This facility will be unmanned and will not generate significant noise, odor, glare, or dust from the operation of the equipment.
- 5) Excessive traffic or parking problems will not result:
- This facility will be unmanned and will only require occasional, routine maintenance.
- 6) The use will not create significant visual impacts for adjoining properties or passersby:
  - The equipment will be surrounded by a 10' metal fence, which will be painted green to help it blend into the surroundings. In addition, a landscaping buffer (Osmanthus Heterophyllus aka False Holly) will be planted around the perimeter of the fence (spaced 5' apart) to add extra screening. The landscaping will be at least 4' in height at planting and will grow to an ultimate height of approximately 10'. Additionally, any small amount of the dish antennas that may be above the 10' fence will have their visibility greatly reduced or eliminated by virtue of the dishes being set 23' back from the fence and by the sitting at a higher elevation that most of the surrounding area (approximately 10' above Sloan Road).