

June 26, 2019

**North Carolina Division of Highways**

Division 6, District 2  
Attn: R.R. Stone, P.E.  
PO Box 1150  
Fayetteville, NC 28302

**RE: Proposed US Cellular Small Cell Installation  
1722 Neighbors Road, Dunn NC  
Lat/Long: 35.37493871, -78.58266432  
Project Name: ERWIN EAST OSC**

Mr. Stone,

US Cellular has determined that they have a network (coverage/capacity) need to place a small wireless facility in the public right-of-way in the above-referenced location. Tilson outside plant engineers have evaluated all the existing utility poles in proximity to the area of need to determine if an existing pole or a replacement pole could be utilized to support the small wireless facilities. The existing utility poles are owned by Duke Energy on the opposite side of the roadway from the proposed site. As with all pole asset owners, Duke Distribution has pole attachment standards that must be followed when collocating small wireless facility equipment on their poles.

Tilson has determined that all the existing poles close enough to meet radio frequency needs cannot be utilized for the reasons indicated below:

- Inadequate height of existing poles:
  - Duke Energy requires small wireless facilities to be attached in the communications space.
  - Existing poles do not have communications space available at the height required for adequate radio frequency propagation of signals.
  - Poles with communications space available would have to be replaced with a pole at least 55-feet tall to meet RF height requirements. This would become a substantial modification of the structure, according to NCGS § 160A-400.51(7b):

*“Substantial modification. – The mounting of a proposed wireless facility on a wireless support structure that substantially changes the physical dimensions of the support structure... Increasing the existing vertical height of the structure by the greater of (i) more than ten percent (10%) or (ii) the height of one additional antenna array with separation from the nearest existing antenna not to exceed 20 feet.”*

This substantial modification violates the requirements for the issuance of a permit by the Department of Transportation according to NCGA § 136-18.3A, which states:

*“The collocation of small wireless facilities and the construction, operation, modification, or maintenance of utility poles ...for the provision of small wireless facilities along, across, upon, or under the rights-of-way of State-maintained highways shall be subject to all of the following requirements:*

*(2) Each new or modified utility pole and wireless support structure installed in the right-of-way of State-maintained highways shall not exceed the greater of (i) 10 feet in height above the height of the tallest existing utility pole, other than a utility pole supporting only wireless facilities, in place as of July 1, 2017, located within 500 feet of the new pole in the same rights-of-way or (ii) 50 feet above ground level.”*

- Replacement of existing poles with a 55-foot pole would create tenting issues with the other existing poles in addition to violating height requirements as stated above.
- Replacing a line of poles to disseminate tenting issues is cost prohibitive.

For the reasons stated herein, we respectfully request that NCDOT process our application to place a new pole at the proposed location to meet our current coverage objectives.

Sincerely,

*Eric Anderson*

Eric Anderson (Jun 26, 2019)

Civil/Structural Engineer

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