Exhibit 11 OZAH Case No: CU 24-17

# Montgomery County, MD

Old Hundred Rd

Mar 13, 2022

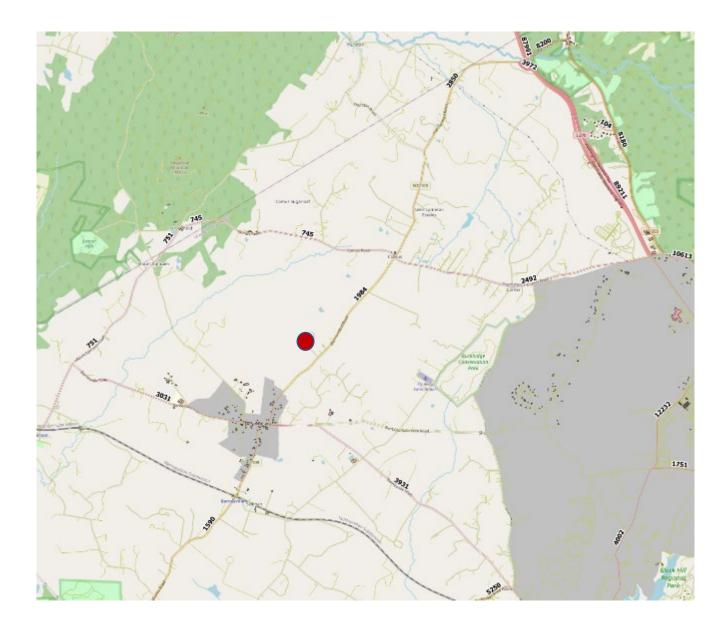
### Summary

- Areas in the vicinity are identified by CAF II for voice and broadband service modernization in unserved areas.
- The proposed TCG Old Hundred Road site is positioned to serve Barnesville, Old Hundred Rd, Comus Rd, Barnesville Rd, and Beallsville Rd
- The minimum required height for the proposed TCG Old Hundred Rd site is 136 ft. Supporting RF propagation plots and terrain analysis provided.
- Additional heights are needed to support multiple wireless service providers. Supporting RF propagation plots are provided for the requested 156 ft.

# Background

#### 2019 Vehicular Traffic

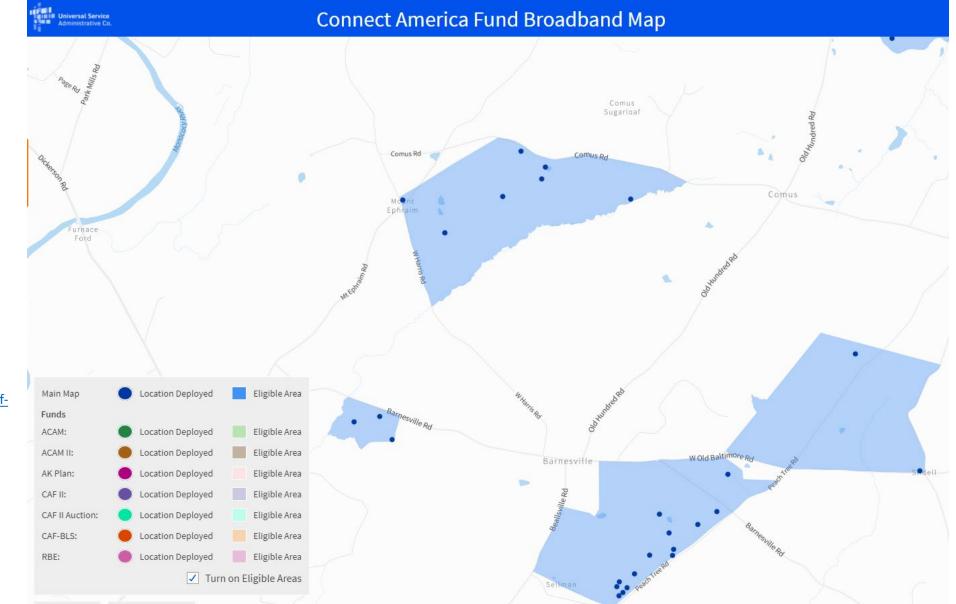
 The proposed site is positioned to serve Barnesville, Old Hundred Rd, Comus Rd, Barnesville Rd, and Beallsville Rd.



#### Area Background

Areas around Barnesville, Old Hundred Road and Comus Road have experienced recent CAF II activities to modernized networks for deploying voice and broadband services in states with unserved areas.

Source: <u>https://data.usac.org/publicreports/caf-</u> map/



#### Minimum Height Requirement for Proposed TCG Old Hundred Road Site

Single Provider

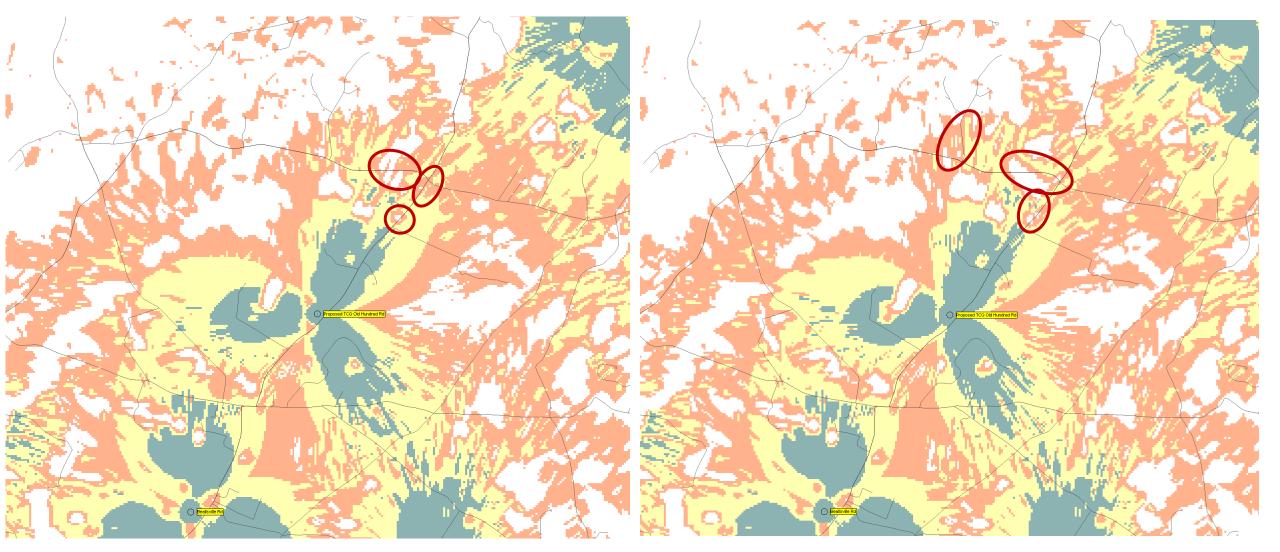
#### **Barnesville Propagation Maps**

Proposed tower height is the minimum Unserved/underserved areas north of Barnesville height required to serve the vicinity of and along Old Hundred Road and Comus Rd. Comus Rd and Old Hundred Rd above desired threshold Desired Threshold 5 dB below desired threshold LOO dBn

#### Existing service area

Proposed TCG Site at 136 ft – Minimum Height

#### Barnesville Propagation Maps at Lower Antenna Heights

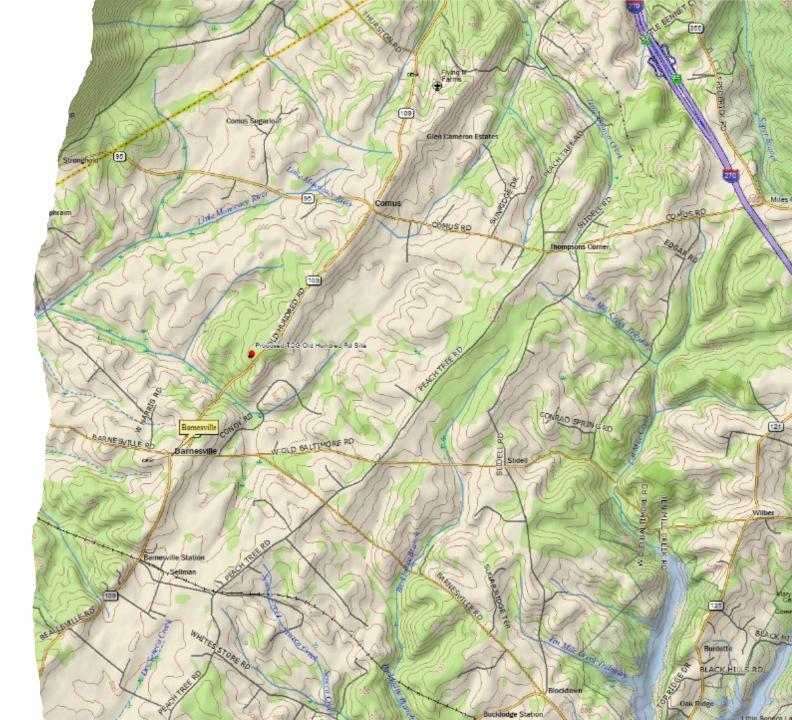


116 ft

Degraded service along Comus Road at lower heights. Foliage effects, e.g., trees, are also more noticeable at lower antenna heights. 96 ft

# Terrain Analysis

- Old Hundred Rd is on higher ground. The proposed site is better suited to cover areas west of Old Hundred Road as the terrain dips slightly.
- Other sites are further way, e.g., Route 270, and is at a disadvantage to cover west of Old Hundred Acres Rd due to terrain changes and distance.



Additional Height Requirement to support multiple service providers

#### Barnesville Propagation Maps at 126 ft and 156 ft

A lower height of 126 ft shows degraded service along Comus Rd, especially by the Barley Field Ln and Comus Rd intersections. A height of 156 ft improves service along Comus Rd by the Barley Field Ln and Old Hundred Road intersections

5 dB above desired threshold

Desired Threshold

-100 dBm 5 dB below desired threshold

-95 dBm

above desired threshold **Desired Threshold** 5 dB below desired threshold

Degraded service along Comus Road at lower heights.

156 ft

126 ft Foliage effects, e.g., trees, are also more noticeable at lower antenna heights.