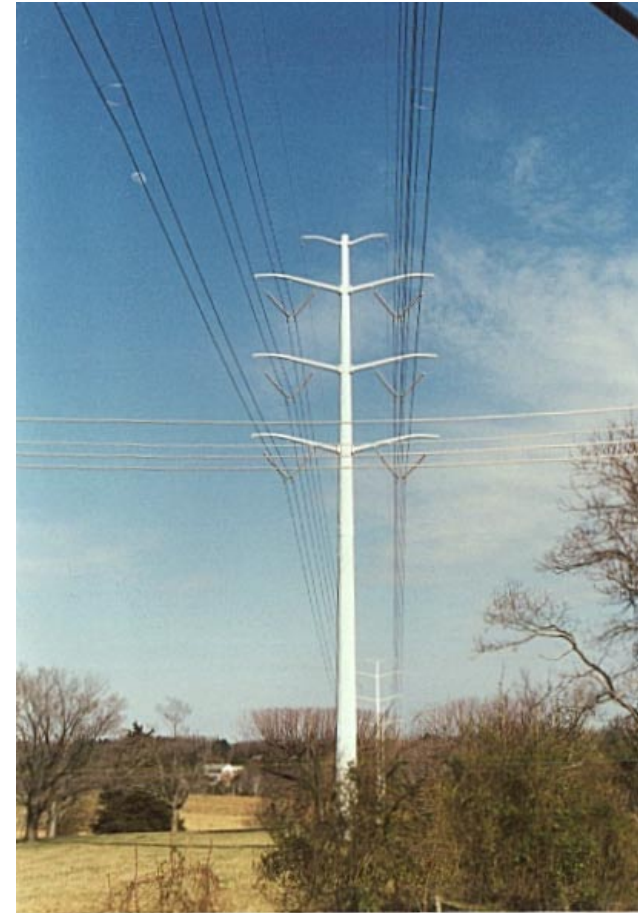


Electric transmission towers are another type of Opportunity Site.



Pictured is an antenna array on top of a transmission tower along Barracks Road. While this represents use of an opportunity site, the resulting design has visibility impacts that could have been reduced or eliminated by using alternative types of equipment and mounting techniques. Attachment to existing structures should complement - not overwhelm - the structure



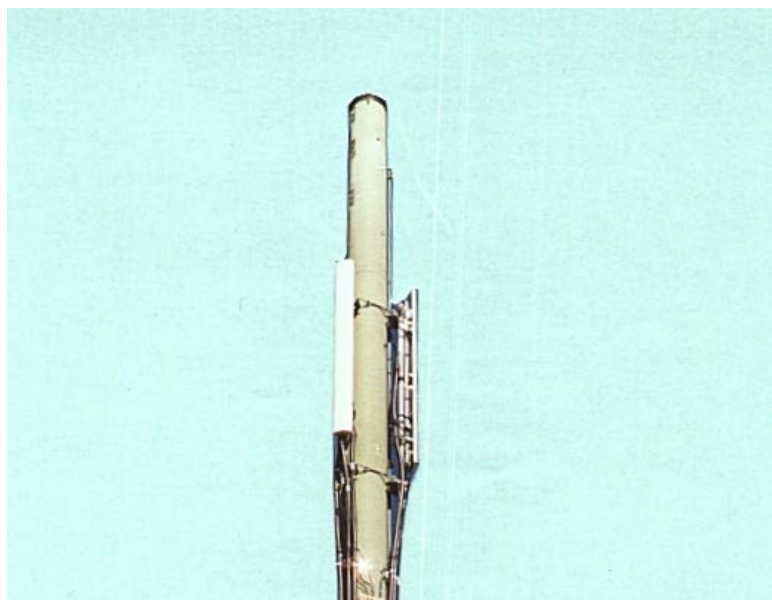
There are many more opportunities on transmission towers in Albemarle County such as this example along Barracks Road.

Antenna arrays are how the antennas are combined on a mount.



This antenna array on Barracks Road is sometimes called a “reindeer hat” or “top hat” array. These types of antennas can be found on transmission towers, lattice towers and monopoles.

These antenna arrays are provided for “spatial diversity”, but they are highly visible and are discouraged. These antenna arrays do not comply with the design guidelines contained on page 50.



This is a dual-polarized or cross-polarized antenna on 5th Street. It can provide for polarization diversity and can do everything that the “top hat” array can do. Dual polarization eliminates the need for “spatial diversity”.

Dual-polarized antennas cannot be placed as high and, therefore, more sites will be required. However, they do comply with the design guidelines contained on page 50.

The most important guideline for siting personal wireless service facilities in Albemarle County is visibility.

- The definition of a well-sited personal wireless service facility is that it would be virtually invisible to most viewers. Such a facility would be an improvement over a facility that is in the open and very visible.
- A poorly-sited personal wireless service facility is one that has visual impact.
- The degree to which a personal wireless service facility can be made invisible or the degree to which it has visual impact is often the most important standard by which it can be evaluated.

Visibility is objective because visibility can be measured. Aesthetics is not suggested as a standard and should not be used to evaluate personal wireless service facilities. Aesthetics is subjective and cannot be measured uniformly amongst all viewers.