

**VERIZON WIRELESS "SEMINOLE SQUARE" - FLINN PROPERTY  
TIER I PERSONAL WIRELESS SERVICE FACILITY  
(DOMINION POWER ANTENNA PLATFORM CO-LOCATION)**

**Project Description:**

Cellco Partnership, trading as Verizon Wireless, respectfully submits this Building Permit application with the request for approval of a Special Exception for modifications of Section 5.1.40.b(3)(c) in order to allow the installation of a Tier I Personal Wireless Service Facility (PWSF) on a parcel of land identified as tax Map and Parcel Number 060A0-09-00-00400. The proposed antenna configuration installation will be placed on a 10-foot high, 6-inch diameter extension pipe that will be placed above a monopole, power tower with a three-sectored platform measuring 10 feet on each side. Each platform face will be capable of supporting up to four (4) panel antennas, but the initial installation will only include six (6) antennas, with two (2) per sector. Ground equipment will consist of a 105 square foot steel, grated platform, containing cabinets housing radio transmitter and backup batteries, and an H-frame utility stand for other power and communications components, along with a natural gas powered, emergency back-up generator on a 32 square foot concrete pad. All of the ground equipment will be contained within a 396 square foot lease area located in the rear of the Property with a ground elevation of approximately 600 feet Above Mean Sea Level (AMSL).

For safety and maintenance purposes, all of the required structural work on the power tower including antenna installation must be performed and overseen by Dominion Power and their specially trained contractors during a scheduled power line outage. Additionally, changes that were made to Dominion Power's safety requirements in 2012 also dictate that new antennas can no longer be mounted directly to the structure or placed below the top static line on the company's power pole. Therefore, Verizon Wireless' proposed antennas will be centerline mounted on a 10-foot high extension above the 110' top level of the monopole with a platform that is designed to support tower and antenna workers according to the Dominion Power safety standards.

**Network Objectives:**

Verizon Wireless is licensed by the Federal Communications Commission (FCC) to provide various types of state-of-the-art wireless communications services within Albemarle County. These licenses are comprised of Cellular (CDMA / 800 MHz), PCS (Personal Communication Service / 1900 MHz), the Long Term Evolution 4G Network (LTE / 700 MHz) and Advanced Wireless Service (AWS / 2100 MHz) technologies, all of which are combined for a wide range of services which are used for mobile voice, data, video and text messaging among others.

Whenever possible, it is Verizon Wireless' goal to provide seamless in-building, in-car and on-street coverage for the full range of voice and data services to existing as well as potential future customers. In doing so, Verizon Wireless has planned this particular site for the purpose of filling in coverage gaps that are present within the surrounding residential neighborhoods that exist near the intersections of Georgetown Road with both Barracks Road and Hydraulic Road. Additionally, this proposed facility will also help to increase network capacity by offloading the demands on the company's voice and data services that are currently being provided by the two nearest, neighboring sites: "Colhurst" (co-location on a Dominion Power tower approximately 1-mile to the west along Garth Road and in the same electrical utility) and "North Beltway" (co-location on a lattice at the Dominion Power offices, approximately 1-mile to the east on Hydraulic Road and in the City of Charlottesville).

### **Character of the Area:**

The Property is zoned Rural Areas (RA) and all of the adjoining parcels to the south and west have the same zoning designation, while properties to the north and east are all zoned R-4, Residential. The mounting structure proposed for this site is located within Dominion Power's high tension electrical power line easement that runs from east/west and passes through the yard on the Property, just outside of the tree line that borders the southern property line.

Access to the facility is provided using an existing gravel driveway that begins on the eastern side of Georgetown Road and currently heads west for approximately 317 feet and past the owners' home. The road is proposed to be extended approximately 80 more feet and it will then turn south directly into the equipment compound. The ground area of the compound is relatively level with the base of the blue/gray power tower that is proposed for this co-location and situated at an elevation of approximately 600 feet above mean sea level (ASML).

The proposed facility will not substantially impact the character of the surrounding area because the facility existing 110-foot tall power pole will only be extended by 10 additional feet, and approximately 9 percent, to a top height of 120 feet (not including the lightning rod. Furthermore, the tower proposed for this extension and installation is located within a power line easement that has many other structures that are similar in size, and some even have similarly designed attachments for personal wireless service antennas. Neither the access road extension nor other construction activities that will be necessary to install the PWSF ground equipment will require any clearing of the mature vegetation that runs parallel with the power line easement along its northern and southern sides. Verizon Wireless is also proposing the addition of new evergreen screening trees that will be placed around the compound in order to help soften views from the owners' home and also fortify the existing natural screening.

### **Request to Modify Section 5.1.40.b(2)(c) of the Zoning Ordinance:**

Although Tier I facilities are allowed by right, Verizon Wireless is also required to request approval of a Special Exception to allow a modification of the requirements set forth in Zoning Ordinance Section 5.1.40.b(3)(c), which states the following: *"Projection. No antenna shall project from the facility, structure or building beyond the minimum required by the mounting equipment, and in no case shall the closest point of the back of the antenna be more than twelve (12) inches from the facility, structure, or building, and in no case shall the farthest point of the back of the antenna be more than eighteen (18) inches from the facility, structure, or building."*

Verizon Wireless is requesting Board of Supervisors modification of the regular flush-mounting restrictions because all twelve of the antennas in this array will be mounted on a triangular platform as required by Dominion Power in order to meet the company's standards for safely working above power lines. The proposed platform will measure 10 feet in length across each face, allowing for approximately 2.88 feet of separation between the extension pipe and antennas in the nearest mounting spaces on each sector, and 5.77 feet from the farthest points where each of the platform sides meet. Verizon Wireless' initial installation will contain six antennas with the option to expand the total buildout to twelve panel antennas using the six mounting pipes that will be left vacant at first. The proposed antennas are identified as Andrew Model# SBNHH-1D65C [96.0"(H) x 11.9"(W) - approximately 1,060 square inches]. In order to closely match the color of the existing power tower, the mounting devices, extension and all of the panel antennas will be colored to match the flat blue/gray color of the existing monopole power structure.

Although the top height of this monopole will need to be increased, this site and the power line both have two strips of largely wooded areas, combined amount of mature trees spread throughout the area that all help to screen the tower from most offsite residences at normal, eye-level points of view. This particular power tower is also setback far enough off of the right-of-way for Georgetown Road, so that it is most visible only when passing by the Property under the power lines. Furthermore, the clearest standing view of the designated power tower is from the next structure Dominion Power's easement to the east.

The platform used to support Verizon Wireless' antennas will be very similar to those supporting PWSFs on other Dominion Power towers throughout Albemarle County. In addition to meeting the Dominion safety standards, this proposed full-sectored platform array is a design that allows for the maximized use of an existing structure in order to provide new and improved levels of wireless coverage. This is very important from a siting standpoint as well, because the proposed facility will be located on a 3.82-acre parcel which is relatively large for this area of the county that is greatly characterized by small lot and multifamily residential developments that would not otherwise be capable of accommodating more conventional PWSF designs, due to restrictions on maximum structure heights and setbacks.

**Conclusion:**

The Albemarle County Personal Wireless Service Facilities Policy identifies power towers in high tension power line easements as "Opportunity Sites". There are many similar full-sector mounted co-location designs that have been implemented throughout the County on existing structures; and therefore, Verizon Wireless is confident that the proposed Personal Wireless Service Facility will meet the criteria for approval of a co-located Tier I PWSF.

**It should also be clear that approval of a Special Exception, allowing the proposed design modifications, will not impose any detriment upon adjacent properties as evidenced in the site photos, photosimulations and other information that has been addressed throughout this request and project description.** The approval of this Tier I Personal Wireless Service Facility application and the related Special will contribute to the expansion and improvement of Verizon Wireless' voice and data services in an area of the county that currently experiences both coverage and capacity issues.

Sincerely,



Stephen Waller, AICP  
Planner / Site Development Consultant  
For Verizon Wireless