Verizon Wireless – Walnut Creek Park - Tier III
Personal Wireless Service Facility

Project Description / Request:

Cellco Partnership, operating as Verizon Wireless ("Verizon"), respectfully requests approval of a Special Use Permit and Special Exemption for a Personal Wireless Service Facility (PWSF), including a 195-foot tall monopole to be located immediately south of the nearest addressed parcel at 3750 Walnut Creek Park Station, and identified as Tax Map & Parcel Number 10000-00-00-03500 (the "Property"). The leased area is 50'x 50'. Verizon's proposed radio transmitter cabinet will be placed on a concrete pad, besides an approximately 10' wide utility H-Frame stand and power communication components on a steel grated platform, and an emergency back-up power generator on another concrete pad. This facility will be installed within a 1600 square-foot fenced compound and the ground equipment will be covered with an ice guard to prevent possible damage to the ground equipment due to falling tree branches and ice. The monopole, antennas, and base station equipment that might be visible above the screening fence will all be painted with Sherwin Williams Java Brown - #6090, which is a matte enamel color that has been previously approved as an appropriate color for many other Personal Wireless Service Facility sites throughout Albemarle County.

Network Objectives:

Verizon is licensed by the Federal Communications Commission (FCC) to provide state-of-the-art wireless telecommunications services within Albemarle County using a combination of four (4) separate bands on the frequency spectrum. These consists of the 850 MHz band for Cellular (CDMA), the 1900 MHz frequency band for Personal Communications Services (PCS), the 4G Long Term Evolution (LTE) on 700 MHz band, and Advance Wireless Services (AWS) on the 2100 MHz band. In addition, the site will be upgradable to 5G CBAND service with just a small equipment change at the time of the tower installation. The network offers data upload and download transmission speeds that much faster than the previous generations of wireless technologies. Verizon has also recently added high-definition calling capabilities to the data networks in the form of Voice Over LTE (VOLTE) service.

Whenever possible, it is Verizon's goal to provide seamless in-building, in-car, and on-street coverage and the full range of voice and data services to existing and future customers. Verizon has determined that the area surrounding this proposed site needs expanded coverage to better service the popular Walnut Creek Park, nearby residences, businesses, and traffic along Old Lynchburg Road, Red Hill Road, and other secondary roads around the tower site. Therefore, this site is intended to provide infill coverage while also adding additional network capacity by offloading traffic from the company's nearest existing sites in all directions. The proposed 195' monopole tower will allow service from this facility to supplement coverage for customers who are currently drawing on the marginal coverage levels that are currently being provided by the four (3) nearest neighboring sites: "Crossroads Three & a Half (3.5) Miles to the West (VZW PWSF off Monacan Trail Road), "Moores Creek" Four (4) Miles to the North West (VZW PWSF off Monacan Trail Road), "Cartners Mtn" Six (6) Miles to the North (VZW PWSF Located on Top of Carters Mtn). Additional sites to the east and south are over Ten (10) Miles away and coverage from the proposed tower site will not supplement coverage from those facilities.

Character of the Area:

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The proposed PWSF will be contained within a 2500 square-foot lease area located on a 106.5 acre property. The site of the proposed facility has a ground level elevation of 666' feet Above Mean Sea Level (AMSL). The subject parcel, which is in the Samuel Miller Magisterial District, is located off of Old Lynchburg Road. All adjoining properties are zoned Rural Areas (RA) and have a mix of residential and agricultural uses. Access to the proposed PWSF will be provided from Old Lynchburg Road, utilizing the existing Walnut Creek Park entrance. Once in the park, Verizon will utilize the existing gravel road that leads to the maintenance shed. A small section The proposed monopole will be located approximately 995' feet from the nearest boundary line with the right-of-way for Old Lynchburg Road. The nearest off-site dwelling is located approximately 840' west of the proposed site and identified as Tax Map / Parcel Number 10000-00-00-035A0.

Compliance with Section 5.1.40 of the Albemarle County Zoning Ordinance Section 5.1.40(b) – Development Requirements for Tier III Personal Wireless Service Facilities (Items 1-12):

1. General Design: The Facility shall be designed, installed, and maintained as follows:
   - **(a)** Guy Wires: *The proposed monopole will not require any installation of guy wires.*
   - ***(b)*** Outdoor Lighting: *One LED Floodlight will be placed on the utility H-Frame and test lights will only be used as needed during unexpected events that require nighttime visits by Verizon's technical operations staff. The proposed light must be adjustable to illuminate various parts of the compound for safety reasons. However, it will not be turned on nightly and will be located well below the treetops which will provide natural shielding from the light shining skyward during any relatively short periods of emergency maintenance.*
   - **(c)** Ground Equipment: *Proposed equipment consisting of the base station cabinets, H-Frame stand and future generator will be placed in a location that is screened from offsite views by the surrounding trees, and a wooden fence will also be installed to help fortify the existing screening elements that are offered to this site. Any portions of equipment that are visible above the screening fence will be painted to match the tower and blend into the wooded area.*
   - **(d)** Whip Antenna: *No whip antennas are currently proposed with this application.*
   - **(e)** Grounding Rod: *The proposed grounding rod to be mounted at the top of this monopole will comply with the County's sizing requirements for a maximum of Two (2) feet in length and one (1) inch in diameter.*

2. Antennas and associated equipment:
   - **(a)** Number of arrays: *Verizon will use a mounting collar and mounting frames that will allow all six (6) of the necessary antennas to be installed in a single array within three (3) horizontally separated sectors at the same height. This antenna array will be centerline mounted at the 195' foot AGL level), with the (2) antennas grouped in each sector to support the combination of the licensed Cellular, PCS, LTE, and AWS frequencies all at one mounting level on the monopole. Other supporting devices that consist of six (6) remote radio heads and two (2) fiber optic surge protection boxes will be placed below the antenna array on an additional array.*
   - ***(b)*** Size: *The antennas initially to be installed in Verizon's array are identified as Commscope Model Number: NHH-65C-R2B [96.0"(H) x 11.9"(W) x 7.1" (D),*

equaling 1,142.40 square inches] & Samsung Model Number: MT6407-77A [35.06"x 16.06"x 5.51", 563.06 square inches]. Specific equipment will likely change over the life of the PWSF as technology advances.

(c) Projection: *The antennas are proposed to be mounted with 18" between the face of the monopole and the backs of the antennas, and no need for physical down-tilting. Therefore, Verizon is also requesting approval of a Special Exception to modify Section 5.1.40.b(2)(c) of the Zoning Ordinance which allows maximum distances of 12" to 18" between the face of the monopole and the back of the antennas when down-tilting is employed.*

(d) Color: *All antennas will be painted the same Java Brown color as the proposed monopole.*

3. Tree Conservation Plan;Content:
Prior to the approval of a building permit, Verizon will also provide a tree conservation plan that has been prepared by a Certified Arborist. As standard practice, the designated arborist will not issue a written conservation plan letter until after they have had the chance to review Verizon's Final Construction Drawings / Site Plan and visit the site. The final issued letters often provide recommendations for any post-construction tree care techniques in addition to granting approval for app proposed land disturbance techniques, vegetation protection fencing locations, and other design elements that might affect the health of trees that surround this site. Only two (2) trees will be removed to facilitate the installation of the facility.

4. Creation of slopes steeper than 2:1.
Upon the completion of this project, none of the remaining slopes will be greater than 2:1 as a result of construction and land disturbing activities for the proposed facility.

5. Ground equipment shelter;fencing.
Verizon is proposing the installation of a 10-foot (10') tall wood fence in order to prevent trespassing. The location and design details of the proposed screening fence are provided in the construction drawings/site plan being submitted with this application.

6. Screening and siting to minimize visibility.
The monopole will be located 995' from the right-of-way line for Old Lynchburg Road There are numerous mature trees along the north property line that will screen views of the monopole from adjacent properties and the public right-of-ways. Only two (2) trees will be removed to facilitate the installation of the facility.

7. Open space plan resources.
The PWSF location was chosen in the Walnut Creek Park due to its location close to the maintenance facility of the park and its distance from the main public use areas in the park. In addition, the mature growth trees surrounding the tower will limit the facilities view from any off site residential or commercial uses.

8. Horizontal separation of multiple facilities.

This facility will be the first facility on the property and therefore this provision is inapplicable.

9. Diameter of monopole
As indicated in the attached construction drawings, Verizon's proposed monopole will be designed and constructed so that it is 30 inches at its base and tapers to 18 inches at its top.

10. Height of Monopole
195' foot tall.

11. Color of monopole, antennas, and equipment.
The monopole and all antennas will be painted Sherwin Williams Java Brown #6090, a color that has been applied to a number of treetop PWSF monopoles in Albemarle County. All of the base station equipment that is installed to support this facility will also be painted the same color and enclosed behind a ten foot (10') wooden security fence.

12. Placement of cables, wires, and similar attachments.
The proposed monopole will be designed and constructed to contain all of Verizon Wireless's coaxial and fiber optic cables that will run from the ground equipment to all antennas and their supporting devices.

Section 5.1.40(c) – Applicability of other regulations in this chapter (Items 1-6):

1. Building site exemption.
Verizon acknowledges this exemption from the standard building site requirements for PWSF.

2. Vehicular access.
Verizon will utilize Old Lynchburg Road and the Walnut Creek Park public access road.

3. Setbacks.
Verizon has selected a location for this proposed monopole facility will be located 995' feet from the right-of-way line for Old Lynchburg Road. The PWSF is located 545' from the adjacent property line shared with Parcel ID #10000-00-00-035A0.

4. Area, bulk, and minimum yards.
Verizon acknowledges this exemption that allows relief to PWSF from the standard area, bulk, and minimum yard requirements.

5. Required yards.
Verizon acknowledges this exemption that allows relief to PWSF from the required yard standards.

6. Site plan.

Please refer to the attached construction drawings with site plan details and the specification sheets for proposed antennas and equipment that all demonstrate compliance with the Tier III PWSF criteria, set forth in Section 5.1.40(a)(4) – Plans and Supporting Documents. Any other supporting information that is deemed relevant to the requirements set forth in Section 32 of the zoning ordinance for site plans can be submitted upon request.

Compliance with Section 33.40 of the Albemarle County Zoning Ordinance
Section 33.40(B) – Factors to be Considered for Special Use Permits

In acting on a special use permit, the Board shall consider the following factors, provided that the Board is not required to make specific findings in support of its actions.

1. No substantial detriment:
   This proposal meets all the design criteria for a Tier III PWSF currently required by Section 5.1.40 of the Albemarle County Zoning Ordinance. The property is screened by a buffer of mature trees that will help to screen the facility from adjacent properties and public use areas of the park. The PWSF is unmanned (no water and sewer) and only requires monthly trips by a technician to maintain the facility, therefore impacts to public facilities and infrastructure will be minimal. The property does not contain steep slopes or floodplains nor will the proposed development create any steep slopes greater than 2:1. Lastly, the PWSF will not require any lighting on the structure or emit noise or odors which would affect any adjacent property owner's quiet enjoyment of their property.

2. Character of the nearby area is unchanged:
   The area surrounding this facility is a mix of rural residential with large parcels being used for agricultural purposes. Only Two (2) trees will be removed to facilitate the installation of the facility.

3. Harmony:
   The RA (Rural Area) district was established to preserve agricultural and forestall land activities, water supply protection and conservation of natural, scenic, and historic resources. There are adjacent conservation easements adjacent to the subject property. These easements seek to protect the open and scenic views, as well as visibility from neighboring properties also currently under conservation easements. A mature tree buffer on the associated property along with those on neighboring properties will help to screen the tower from adjacent views.

4. Consistency with the Comprehensive Plan:
   Per the adopted Albemarle County 2015 Comprehensive Plan calls for the preservation of the county's historic, archeological, and cultural resources within the Rural Areas.. There is a mature tree buffer along all the property lines which will screen the PWSF from adjacent properties. The proposed PWSF and ground based equipment will be

painted brown which further will allow the facility to blend within the natural environment.

Objective 10 of the Community Facilities Chapter 12 of the Comprehensive Plan is to support the provision of private utilities, including wireless service when its provision is in keeping with other aspects of the Comprehensive Plan. This proposed site supports this objective and is consistent with Strategy 10e as the proposed facility has been sited and designed in accordance with the County's Personal Wireless Service Facilities Policy.

Conclusion

Approval of this PWSF application will contribute to the expansion of Verizon's coverage to the Rural Areas, existing and future residents, businesses and emergency communications within Walnut Creek Par. In addition, this facility will also help to reinforce network capacity and relieve some of the high levels of traffic that has been experienced at the neighboring network locations. Therefore, Verizon is confident that the proposed PWSF will meet the design criteria necessary for approval of a Tier III Facility, and that is does not conflict with any of the goals and objectives set forth in the Albemarle County Comprehensive Plan.

Sincerely,



Nathan Holland
GDN Sites
Site Development Consultants to Verizon