NETWORK BUILDING
& CONSULTING, LLC

Randy Wingfield
100 East Main Street
Christiansburg, VA 24073

March 30, 2011

RE: VERIZON WIRELESS - NEW RIVER VALLEY MALL SITE
REQUEST FOR CONDITIONAL USE PERMIT

Dear Mr. Wingfield,

Cellco Partnership, d/b/a Verizon Wireless, hereby submits the enclosed application for a Conditional Use Permit. Please also find seventeen (17) copies the following materials in support of this application:

- Conditional Use Permit Application, signed by the property owner;
- Project Narrative;
- Site Plan, prepared by Thompson & Litton and dated March 30, 2011;
- Photo simulations of the proposed improvements;
- Radio frequency propagation maps;
- Verizon Wireless' Collocation Policy;
- Check # 9856 in the amount of $500 for the Conditional Use Permit fee.

Kindly review these materials at your earliest convenience and schedule the matter for consideration by, and a public hearing with, the Planning Commission at the earliest availability on their schedule. Please do not hesitate to contact me at any time if you have any questions or if you require any additional information or supporting materials.

Thank you,

Clare Novak

Clare Novak
Land Use Project Manager
Network Building, & Consulting, LLC
Consultants to Verizon Wireless

PROJECT NARRATIVE

I. PROJECT DESCRIPTION

Cellco Partnership, d/b/a Verizon Wireless hereby requests a Conditional Use Permit to allow the installation of a new wireless communication facility (Site) on the north side of the New River Valley Mall on Parcel 435 (A) 41, property owned by PR Financing Limited Partnership and in the B-3 (General Business) District, as more particularly shown on the Site Plans prepared by Thompson & Litton and dated March 30, 2011. The proposed facility includes a 90′ monopole with Verizon Wireless antennas flush mounted at centerline heights of 86′ and 75′ above ground level (AGL) and a 4′ lightning rod mounted on top of the monopole which will reach an overall height of 94′ AGL. The antennas will be connected via coaxial cables to radio equipment on the ground which will be located inside a proposed 12′ x 20′ equipment shelter. A generator for supplying emergency power will be located on a 4′ x 8′ concrete pad near the shelter. The monopole, shelter, generator and other necessary utility connections will be enclosed by a security fence adjacent to the northeast side of the existing mall building north of and adjacent to the existing service court.

On January 18, 2011, Town Council denied a Conditional Use Permit for Verizon Wireless to build a 125′ monopole with a full antenna array, due largely to aesthetic concerns raised by adjoining property owners residing in the Villas at Pepper's Ferry subdivision. Verizon Wireless requests that the Planning Commission and Town Council act favorably upon the enclosed application in which Verizon Wireless has redesigned the Site to meet Verizon's engineering requirements of a lower height of a 90′ monopole with two sets of flush-mounted antennas as a means of addressing the adjacent property owners' concerns about the proposed Site's impact on their viewshed to the east. The redesign of the Site to only 90′ will reduce Verizon Wireless' coverage in this area versus the original proposal but will still represent address substantial coverage and capacity needs in this area, as shown in the propagation maps accompanying this application. As a result of these changes, there will not be collocation opportunities at this location for other commercial carriers.

II. CONSISTENCY WITH COMPREHENSIVE PLAN

<u>The proposed site is consistent with the Comprehensive Plan, and will help ensure the availability of high quality mobile voice and data service in the Town's primary business and traffic corridor.</u>

A. Historic Sites

Page 11 of the 2003 Comprehensive Plan (Plan) includes a table that lists the historic sites and districts within the Town of Christiansburg. The historic site or district closest to the project is the Edgar A. Long Building (154-5008) approximately 1.7 miles south-southeast of the Site. According to § VI.C.4.a of the Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings approved by the Federal Communications Commission, the presumed area of potential effect (APE) for visual effects for construction of new facilities is the area from which the monopole will be visible within ½ mile from the Site because the monopole is 200′ or less in overall height. Because the closest historic site or district is 1.7 miles away, there are no historic sites or districts located within the APE for visual effects of this Site. Also, the APE for direct effects is limited to the area of potential ground disturbance and any property that will be physically altered or destroyed. Because no historic site is within the area of potential ground disturbance and no historic site will be altered or destroyed by this project, no direct effect on historic sites is expected.

B. Tourism

As acknowledged on page 37 of the Plan, Christiansburg's tourist attractions include a significant retail base that helps draw a large number of out-of-town visitors, especially in conjunction with events associated with Virginia Tech and Radford Universities. These visitors are shoppers, hotel guests and diners at local restaurants. The proposed Site will be located at one of the Town's major shopping centers, the New River Valley Mall, and it will enhance wireless communication services and offer state-of-the-art mobile conveniences to the mall's tenants and patrons, including New River Community College. The coverage area of the site also includes neighboring businesses such as Best Buy, Wal-Mart, Lowe's, Target, Home Depot [confirm we still hit these], Adventure World Skate & Fun Center, PetSmart, Texas Steakhouse & Saloon, Kabuki Japanese Steak House, Applebee's Neighborhood Grill, The United States Post Office, Once Upon a Child, Hampton Inn, Outback Steakhouse, Office Max, Panera Bread, Olive Garden, Burger King, Taco Bell, El Gran Rodeo, IHOP, Red Lobster, Red Robin, KFC, O'Charley's, Fazoli's, BB&T, Starbuck's, Super 8, Wendy's, Wachovia, Chick-fil-A, , Walgreens, Texas Roadhouse, Blackstone Grill, and a number of other community attractions.

C. Agriculture and Forestry

Because this Site will be constructed on land that has already been improved, it will have no adverse effect on the Town's remaining farmland or forests.

D. Community Facilities & Services

According to Mike Poldiak, Manager of the New River Valley Mall, there have been numerous complaints about the ongoing problem of poor coverage in the mall itself, including some dead spots. Coverage is needed not only for mall tenants and customers, but for mall security and housekeeping. Unfortunately, crimes can often occur at malls. The proposed Site will not only provide state-of-the-art wireless voice, data and broadband services to the area of the Town that it serves, but it will also improve in-building coverage at the New River Valley Mall, provide access to the E-911 system and thereby enhance public safety. Improving commercial wireless service and eliminating gaps of coverage will help victims and witnesses to report crimes and request emergency services and also enable the mall security team to communicate better with the Town's Police, Fire and Rescue Squad personnel.

The Site will also improve coverage to the nearby Roselawn Memorial Gardens, and areas around the U.S. Post Office – Marketplace, DMV and VDOT.

E. Schools

The New River Community College has a campus at the New River Valley Mall. While the college has installed some WiFi antennas for classroom use, commercial wireless services need improved coverage for students in this area to access other data services. As explained above, the proposed Site will improve in-building coverage at the mall and offer a wireless broadband alternative.

F. Recreational Facilities

Huckleberry Trail is located just west of the Site. The one mile segment of the trail located inside the Town of Christiansburg will be within the Site's coverage footprint. This will provide added safety and convenience to hikers, bicyclists and others traveling to and from Blacksburg along this segment of the trail. The coverage area also encompasses a substantial portion of the planned extension for the trail which will continue on to the Recreation Center and downtown Christiansburg. Additionally, the Site will cover parts of Montgomery County Park.

G. Transportation

The Site will provide improved coverage and capacity for state-of-the-art wireless services, including broadband access at the intersection of and along segments of two major roadways, US 460 (North Franklin Street) and SR 114 (Peppers Ferry Road) that serve the Mid-County Growth Area. According to the Plan, SR 114 "carries a good deal of commuter traffic particularly from more rural residential areas to more urbanized Christiansburg, Blacksburg and Radford", and "[t]he region near the Route 460/114 interchange has been recognized as the new 'regional downtown'. Data indicate that the traffic load carried by U.S. Route 460 is the highest in all of Montgomery County." Enhancing wireless services along these heavily travelled roads will foster improved public safety and add convenience to quality of life for residents, business travelers, tourists and other visitors to the Town of Christiansburg. High speed data access will allow business passengers along these routes to increase efficiency and productivity, thereby stimulating economic development in the region.

H. Public Utilities

The Site will not require water or sewer services, and it will not generate any solid waste. The radio equipment will typically operate off of commercial electrical power offered by AEP. However, in times when commercial power is not available, service can be maintained by battery backup and the proposed emergency power generator. The facility will also be connected to fiber optic service for the transmission of telephone and data signals. The proposed monopole will be a new antenna support structure. A discussion of collocation opportunities that were explored as alternatives to this design can be found below. For the reasons stated herein, the location of this new structure is appropriate and no suitable existing alternatives are available. The Site will be located approximately 0.8 miles south and 1 mile west of the Town line, so it should not have any adverse impact to the citizens of neighboring Montgomery County. As preferred by the Plan, the structure type proposed here is a monopole and the site is not located on a ridge, but stealth technology is not appropriate at this site due to the height needed in order to achieve the radio frequency design objectives, the number of technologies that will be deployed and other radio frequency engineering constraints as more fully described below.

I. Floodplains

According to the FEMA Flood Insurance Rate Map data (Community Map #510101, Panel 0141C), the Site is not located within a Special Flood Hazard Area (100-year flood) or an Other Flood Area (500-year flood).

J. Storm Drainage

The Site is located within the Slate Branch Watershed. According to the DEQ Stream Mapping System, the closest stream is an unnamed tributary that runs through the subject parcel. The proposed area of disturbance is approximately 2,100 square feet, though, and according to § 10-1 of the Town Code, the definition of "Land Disturbing Activity" does not include "[d]isturbed land areas less than 10,000 square feet in size". It would be inappropriate for Town Council to reduce this exception in this case because the subject parcel is already improved with a large area of existing impervious surface consisting of the New River Valley Mall building and its associated parking lot. The additional runoff generated by this project will be an insignificant contribution to the existing stormwater management plan.

K. Wetlands

According to the United States Fish & Wildlife Service National Wetlands Inventory (Wetlands Mapper), the Site is not located within 100 feet of any documented wetlands.

L. Housing

Residential growth is expected to continue in the vicinity of Peppers Ferry Road west of North Franklin Street. Accordingly, this Site will help address the additional demand for state-of-the-art wireless services, especially as fewer people are maintaining residential land lines and are relying on their wireless phones as their only phones. Like other necessary infrastructure, it is best if construction of wireless communications facilities anticipate such growth, consistent with the philosophy of Objective 2, Strategy b. of the Land Use Goals and Objectives which seeks to "[e]ncourage development in areas where public utilities already exist."

M. Future Land Use

The Site is located in an area of the Town designated for future commercial development. Because this Site will be a commercial telecommunications facility, the location of the site is consistent with the Plan's Future Land Use designation. Furthermore, the Site will provide services that will support and complement other commercial, industrial, residential, recreational and mixed uses in the nearby area.

III. COMPLIANCE WITH ZONING ORDINANCE

1. District Requirements

According to the Town of Christiansburg Zoning Map, the Site is located within the General Business (B-3) Zoning District. § 30-100(a) of the Town of Christiansburg Zoning Ordinance provides that in the B-3 General Business District, "[c]ommunication monopoles and major transmission lines are permitted with a Conditional Use Permit." Notably, a broad range of facilities and structures necessary for rendering utility services are permitted by right in this Zoning District, including, utility poles, transmission lines and wires, substations, communication antennas, and related uses.

B-3 district setbacks under § 30-102 require that structures "be located 30 feet or more from any street right-of-way, or, in the event that buildings are already constructed on the same side of the street in the block, no new structure shall be closer to the street right-of-way line than a distance equal to the average of the distance to the street right-of-way of all existing structures in the same block on the same side of the street." In this case, as shown on Sheet Z-2 of the enclosed Site Plans, the Site is approximately 350′ from the right-of-way of New River Road. Also, there are buildings already constructed on the south side of New River Road, namely the New River Valley Mall buildings. The two corners of the New River Valley Mall buildings between which the Site is located are approximately 130′ and 165′ from the right-of-way of New River Road, respectively. Therefore, the average distance to the right-of-way of New River Road from the existing buildings on the south side of the road is approximately 147.5′. Accordingly, the Site will be located well in excess of both the 30′ and the average distance from said right-of-way.

§ 30-103(b) requires that no commercial building or structure be located closer than 20′ to the boundary of a Residential District or located within any easement or right-of-way. The closest Residential District is a Multi-Family Residential (R-3) District, located approximately 850′ west of the Site. As shown on Sheet Z-1 (Survey) of the enclosed Site Plans, the Site is not located on an easement or right-of-way.

§ 30-103(c) requires that 20% of the site be designated as green space. A small area of existing landscaped ground adjacent to the mall's current maintenance area will be removed to accommodate the Site. This area will encompass only 2,075 square feet of a parcel that contains 58.471 acres or over 2.5 million square feet which is already intensively developed for commercial use. Thus, the reduction in green space in this instance is de-minimus and will not cause any adverse impact. Therefore, Verizon Wireless requests that the Town Council grant a waiver as to this requirement as the impact will be minimal on the entire parcel as whole, and additional new landscaping will be installed to help offset the area being removed as shown on Sheet L-1.

Sheet L-1 contains the proposed landscape plan as required under § 30-103(d) which incorporates several of the existing birch trees along with evergreen plantings along the fence of the equipment compound.

The existing sidewalk adjacent to and west of the Site will remain, consistent with § 30-103(f).

District height restrictions are set forth in § 30-104 which provides that "[b]uildings may be erected up to 35 feet in height from street grade or lot grade at setback line whichever is greater, except, that... (a) [t]he height limit may be increased up to 70 feet provided the building is set back from all lot lines at least two feet for each one foot of height over 35 feet." § 30-1 defines "Building" to be "[a]ny structure having a roof supported by columns or walls for the housing or enclosure of persons, animals or chattels." In this case, there is only one proposed building, the 12' x 20' radio equipment shelter at the base of the monopole. As shown on Sheet Z-5 of the enclosed Site Plans, the overall height of the proposed shelter is approximately 11' AGL, well below the standard district height limit for buildings. Because the monopole does not have a roof and is not being constructed for the purpose of housing or enclosing personal, animals or chattels, it not considered a Building under the Zoning Ordinance and is therefore not subject to the district height limitations.

Article XXIII governs the siting of telecommunications structures, and §30-200(A)(2)(a) provides that,

> "The height of monopoles and towers shall not exceed the allowable heights as specified in the definitions of this Chapter. Monopoles shall not exceed 70 feet in total height including antennas in Residential Districts."

§ 30-1 defines "Communications monopole" *as:*

> "A single, self-supporting pole for the erection of communication antenna(s) and not exceeding one-third of the height of the main structure above a roof support or 125 feet in total height including any communications antennas."

Although local RF engineering needs, more particularly described below, would benefit from a taller structure, in this case, due to the concerns of residents and Town Council to a taller monopole, the monopole is now proposed to be only 90' tall with a lightning rod extending an additional 4' above the top of the pole for an overall height of 94' AGL. The proposed Verizon Wireless 94' monopole conforms to the height requirements because it is less than 125' AGL.

Verizon Wireless currently experiences a gap in coverage in the Town of Christiansburg areas adjacent to the New River Valley Mall along north and south on Peppers Ferry Road, the Huckleberry Trail, and east and west along Franklin Street/Route 460, along with poor in-building coverage at the mall. Verizon Wireless acknowledges that the reduction in height from the previously proposed 125' monopole will weaken Verizon Wireless' ability to provide optimal in-building coverage along Route 460, the Walmart and TJ Maxx retail areas, but notes that it will still provide significant improvements in coverage and capacity in this area.

The radio frequency coverage objective for the 94' monopole is to address a gap in the immediate area of the New River Valley Mall. Currently, Verizon Wireless has facilities located to the north and west of the mall along with another site located in downtown Christiansburg leaving a coverage gap in the area of the New River Valley Mall. The new monopole located at 1840 Palmer Street, NW, is over one mile southeast of the proposed Site and would not provide the level of in-building coverage objective required by Verizon Wireless to service its customers located in both the vicinity of the New River Valley Mall, the Corning plant located northeast of the Mall, and other nearby structures.

The Verizon Wireless network deploys three types of wireless technologies for voice and data consisting of Cellular, Personal Communication Systems (PCS) and Long Term Evolution (LTE). The LTE and Cellular technologies operate on very close frequencies and therefore require separation to avoid interference and perform optimally. They are not able to utilize the dual band antennas which would allow the two technologies to be combined using one antenna. There are numerous customer advantages to availability of Cellular, PCS and LTE services. One result of these multiple technologies, however, is that Verizon Wireless requires separate antennas to improve its voice, data and broadband services to its customers in the area of the New River Valley Mall. While the necessary antenna separation could have been achieved horizontally with a typical full antenna array, in an effort to address Town Council's concerns and further reduce the visual impact of this project to the neighbors in the Villas of Pepper's Ferry, Verizon Wireless has not only decreased the height of the monopole, but has now also proposed a "flush-mounted" antenna design. Verizon Wireless can still achieve the necessary separation between the cellular and LTE antennas but will have to do so vertically in this scenario. Therefore, Verizon Wireless requires the installation of two separate flush-mounted heights on the monopole, eliminating commercial collocation opportunities.

In compliance with § 30-200(A)(2)(b), the proposed monopole will have a galvanized steel finish.

§ 30-200(A)(2)(c) requires that "[a]t a facility site, the design of the buildings and related structures shall use materials, colors, textures, screening, and landscaping that will blend the facilities to the natural setting and the built environment. The related unmanned equipment structure shall not contain more than 750 square feet of gross floor area or be more than 12 feet in height, and shall be located in accordance with the requirements of the zoning district in which it is located." In this case, the equipment shelter will have an aggregate finish which will blend in and be compatible with existing walls of the New River Valley Mall building. Because the site will be located in an inside corner of the mall building exterior footprint between Sears and Belk, the existing mall buildings will effectively and completely screen the equipment shelter, the base of the monopole, the generator and related equipment from every direction except from the north, including from the residential communities west of the Site. From the north, the Site will have the commercial mall building and the existing service court as a backdrop. The proposed monopole will be visible from adjacent properties but due to the surrounding topography and large existing structures it will be partially obscured from most vantage points such as the Huckleberry Trail and 150 Peppers Ferry Road. The proposed 94′ monopole will be visible in locations surrounding the mall such as locations north, east and south but due to the fact that this area is a substantially developed commercial retail corridor the monopole will blend against the existing tall structures and infrastructure such as the light poles in the mall parking lot. The proposed equipment shelter will be approximately 12′ x 20′, having only 240′ square feet of gross floor area, well below the limit established in the zoning ordinance. The shelter will also be less than 12′ in height at approximately 11′ AGL. As explained above, the location of the equipment shelter complies with the B-3 district requirements.

No artificial lighting or advertising is proposed to be installed on the monopole.

Verizon Wireless requests a waiver from the requirement of § 30-200(A)(5) to provide a structural engineering report certifying that the monopole has been designed to accommodate at least 3 similar users. Due to the fact that the monopole will be designed for flush-mounted antennas for Verizon Wireless at centerline heights of 86′ and 75′, it is unlikely that another carrier would collocate at a lower height. Verizon Wireless will construct the monopole to be extendable in case there is demand for additional height at this site in the future. If the available collocation heights are not attractive to potential future collocators, then they will likely seek other siting options which may include new support structures elsewhere. This may run contrary to the intent of the Zoning Ordinance and Comprehensive Plan to minimize the number of antenna support structures in the Town. Therefore, in order to preserve the future potential, with a new CUP, for some collocation opportunities at this Site,

Town Council should waive the requirement of § 30-200(A)(5) with a condition that the proposed monopole will be constructed to be extendable to provide collocation opportunities in the future.

In addition to compliance with district setbacks, § 30-200(A)(7) provides additional setback requirements for wireless facilities through a reference to Chapter 6 "Antennas" and by requiring monopoles to be setback a distance "no less than the total height of the structure". § 6-29(a) requires that poles for supporting antennas shall not be installed nearer any electric power line with potential higher than 250 volts than the height of the pole plus eight feet. In this case, because the overall height of the pole is 94', § 6-29(a) requires a setback of 102' from any such power lines. There are no power lines located within 102' of the Site. The Site is in compliance with the 1:1 setback requirement of § 30-200(A)(7). As explained above, the Site is located approximately 350' from the right-of-way of New River Road.

The facility will be enclosed by a fence not less than 6' high as required by § 30-200(A)(8).

Due to location of the Site with respect to the existing mall buildings and on account of the screening that those buildings provide, together with the commercial nature of the subject parcel and the fact that the only adjoining parcels from which the ground equipment will be visible are another commercial shopping center to the north and an unimproved section of a industrially-zoned parcel, Verizon Wireless respectfully requests that the Planning Commission recommend and Town Council waive the landscaping requirements of § 30-200(A)(9), and require the landscaping buffer to be as shown in the attached drawings.

2. Efforts to Locate Existing or Alternate Locations.

For nearly five (5) years, Verizon Wireless has been searching for a suitable location for a site to satisfy its RF engineering objectives for this search area. In conformity with § 30-200(A)(6), before pursuing this new monopole, Verizon Wireless considered other nearby locations, including a collocation on the existing 110' smokestack at the Corning facility to the north, a new antenna support structure on the Corning property, an installation on the Stellar One Bank rooftop and an antenna support structure mounted on the roof of the mall. The Corning property is located in the General Industrial (I-2) zoning district, which would have been a favorable location for a new site, but after good faith efforts to negotiate, Verizon Wireless and Corning could not agree on mutually acceptable terms for a lease of space on the existing Corning smokestack, and Corning would not consider the option of constructing a new tower on their land. The Stellar One Bank building is approximately 5 stories high and located approximately .43 miles (2,290 feet) northeast of the proposed Site. After a thorough evaluation, Verizon Wireless' RF engineer determined that the bank building would be too far north and too far away from retail centers on the south side of the mall, such as Walmart, Target and TJ Maxx, that were originally targeted for improved in-building coverage. Because the zoning ordinance only allows for rooftop antenna support structures up to 1/3 of the height of the main building, an antenna support structure on the roof of the mall would not provide enough height. Applying this rule to a rooftop structure on the bank building would yield an overall height of approximately 73' AGL, and would not be sufficient to provide the in-building coverage objectives for the New River Valley Mall. As previously discussed, Verizon Wireless has revised the design of the Site by reducing the height of the monopole structure by 31' and by utilizing two sets of flush mounted antennas instead of a full array in order to reduce the structure's visibility from the adjacent residential community. For these reasons, Verizon Wireless respectfully requests that Town Council approve this monopole to be constructed as proposed, to the desired overall height of 94' AGL.