

Good evening. My name is Karen Johnson. I am the owner of the property where the existing Keswick tower is located. I appreciate the opportunity to share my thoughts with you this evening about the project that is before you for consideration. I would suggest that you reject this proposal because there is an existing tower that meets the need.

To let you know a little bit about me, I am a 71-year-old wife, mother, grandmother, nurse, Vietnam veteran and avid community volunteer. Twenty years ago, I made the decision, while my husband was in the hospital awaiting a heart transplant, to allow the cellular tower to be placed on my property by Intelos because I knew how important that technology was to me as my children were growing and I continued to pursue my community activities. I felt that I had an opportunity to make this technology available to the people in my Keswick community as well as the surrounding communities in Albemarle, Fluvanna and Louisa counties. That tower has served the broader community very well for the past twenty years and continues to do that until this day.

In 2007, my husband and I decided to put the property into a conservation easement with the Virginia Outdoors Foundation. Because we were unhappy with the lack of responsiveness from the tower owner to our maintenance concerns regarding the access road and erosion of the overpass of the perennial stream that crosses that road, we decided that the tower would not remain after the completion of our contract and conveyed that fact to the Virginia Outdoors Foundation. That decision became a part of our final Deed of Easement with them.

Subsequent to the agreement with the VOF, the maintenance of the access road was properly addressed and the working relationship with the new owner, improved significantly. Crown Castle International, the current owner of the tower, has been eager for the tower to remain where it is and both they and I made it known to the VOF. Starting in 2009, two years after the easement acceptance, I began to petition VOF to permit the tower to remain. Subsequently over the next 7 years, Crown Castle Communications and I requested 8 different times that the tower lease be extended beyond 2018. Each time, VOF denied the request based on the specific removal language in the Deed of Easement. However, in 2016, VOF staff began to consider the possibility of completing a Conversion/Diversion (1704) for the cell tower to permit it to remain. One of the main reasons for this "change of heart" was that the Keswick tower had become essential to the existing telecommunications and public safety network for a large part of Albemarle County and smaller portions of Fluvanna and Louisa counties. Another factor is that it is fiscally irresponsible to incur the cost of taking down the existing tower, only to replace it with a similar tower not more than several hundred yards away from the current one.

On August 27, 2015, my husband was riding his horse in an area not easily accessible by a motor vehicle, when he was thrown from the horse and sustained an unrecoverable head injury. I want you to know that I was most grateful for the cellular

coverage that I had available to me as I called for help. The Rivanna Rescue Squad found us using the information received through the cellular network. He was evacuated very quickly but died two days later. I believe that if his injury had not been so catastrophic, the speed with which he was evacuated could have saved his life. We need this sophisticated type of communications in my community and in the entire state of Virginia and the country as a whole. I would urge you to reject this proposed project because we already have in place what we need. It would be far better to use whatever resources are available to expand what we already have.

Thank you, again, for allowing me to share my insights and concerns with you.

Karen S Johnson
4460 Richmond Road
Keswick, VA 22947



Received

FEB 12 2018

**County of Albemarle
Board of Supervisor's Office**

February 7, 2018

County of Albemarle
Office of Board of Supervisors
401 McIntire Road
Charlottesville, VA 22902-4596

**Re: Sec. 1704 Application for Conversion/Diversion at 4464 Richmond Road, Albemarle County, Virginia;
Crown Castle Telecommunications Tower #816361, Shentel Site ID 68328/CV117 Keswick**

TO WHOM IT MAY CONCERN:

Shenandoah Personal Communications, LLC ("Shentel"), successor in interest to Virginia PCS Alliance, L.C. ("NTELOS") relies on a 150' telecommunications tower ("Keswick Tower") at 4464 Richmond Road (Parcel Number 94-41A). The reason for this letter is to provide support to the Johnson Trust's Section 1704 application for conversion/diversion of open-space, so that the importance of conserving the existing tower at its present location is clear.

Background

Keswick Tower was built in 1998 and now houses five (5) wireless carriers. The wireless carriers lease space on the tower from its owner, Crown Castle, who in turn leases the space where the tower resides from the owner of the farm, which is the Johnson Trust. In 2007, the property owner granted a perpetual conservation easement to the Virginia Outdoors Foundation ("VOF") for the farm.

According to a term of that easement, the tower must be removed during 2018, after the original term of the lease expires. If the parties to the lease are unable to reach an understanding with the VOF so that the facility may remain in place, they must have a replacement facility in place to which **Shentel** and the other four (4) installed wireless carriers can migrate to prevent any interruption in service.

Keswick Tower -- A Key Position

Shentel has been providing wireless service to its subscribers in this area of Albemarle County, periodically upgrading its installations to meet the increasing subscriber demand for nearly two decades. With customers talking less, but texting, emailing and using data much more, the importance of this facility cannot be overstated. This site provides critical coverage to those living, working and traveling through this part of the County and emergency first responders rely on the seamless coverage achieved by this site to provide rescue services. About 41,000 vehicles travel through the tower's coverage area every day, not to mention the local stationary subscribers. If Keswick Tower is not allowed to stay, a replacement facility or replacement facilities

must be built. Not only must new locations be found, but these locations must be close to the existing site to work in conjunction with the surrounding sites (discussed in more detail below).

Building a replacement tower (or towers) too far from the existing site would hamper the effective hand off of signal from this site to neighboring sites. This concept is best illustrated by the attached propagation maps. These maps show the distribution of low- and mid-band signal from the Keswick Tower for **Shentel**. Clearly, if this site is forced off air, the resulting gap in coverage would be substantial. Wireless signal would no longer be handed off between Site Nos. 801475, 5800112 and 861959. Customers traveling in the area would experience dropped and blocked calls due to the resulting lack in coverage. Some customers might have trouble getting the emergency services they need in a crisis.

Specific Replacement Site Considerations

When the search ring for a possible replacement tower was originally designed, three significant considerations became apparent. First, the site's main coverage area is an interstate and the rural area surrounding it. It is very important that the replacement site keep contiguous coverage along the interstate and work well with the neighboring sites as noted above. The second consideration is the capacity of the site. A replacement would need to serve the same number of users that are currently served in their homes and as they travel through the site's footprint. The third consideration is the elevation. There is a significant area of lower terrain to the west of the existing site, but the replacement site needs to remain on a higher elevation, in order to avoid having to increase the size of the structure.

Contiguous Coverage

The relocation site and its surrounding neighbors must have overlapping coverage to prevent lost service and dropped calls when subscribers are moving east and west on Interstate 64. The overlapping coverage areas allow the system to measure a mobile phone's signal as it moves through the area. The network constantly calculates which cell site is best suited to process the call while the mobile device is within that overlap area. When the signal strength measured by the cell site being approached reaches a set threshold, an instruction is given to the system telling the new site to take over the call. This is how the system "hands-off" a cellular call from one telecommunications site to another, and it requires the sites or towers to be placed within a particular distance and at a particular elevation with respect to one another.

Capacity

The capacity concern has to do with the site's ability to process a certain number of calls and provide the bandwidth requested by each user within the site's coverage area. As wireless devices have become more prevalent and are used for more data-driven tasks, such as streaming music and video, greater demand for bandwidth and capacity is placed on the networks. Because the licensed bandwidth is limited, only so many mobile sessions can occur at a given time through a particular tower. When that number is reached, the next potential call is rejected due to a lack of capacity. In this instance, the subscriber would get a "System is busy"

error, or a call which would otherwise be handed-off to a new tower would be dropped. This means that sites with overlapping service areas are necessary in order to share demand and reduce call rejection during periods of high demand. Keswick Tower is a robust site which is properly placed in the developed network, in fact, the network has grown up around it. This would make it very difficult to adequately replace if it were removed.

Terrain

The terrain also has implications for the coverage of the replacement site. Currently there are five (5) carrier operators on Keswick Tower. The elevation to the west of the falls approximately 30' below the existing elevation. A replacement tower work best if it were on the same or higher elevation. This would allow the replacement site to 'see' the surrounding area as well as the existing site without having to build a replacement tower 30 to 40 feet taller to match Keswick's current coverage.

Conclusion

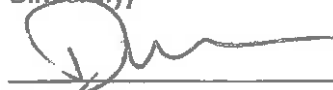
If Keswick Tower is removed, a replacement site (or sites) that will minimize the impact or changes to the surrounding sites will be needed so that when the carriers move to it (or them) the impact on the public is minimized and subscribers do not have a significant change or disruption in services. If the existing structure cannot be replaced, then problems in either capacity or contiguous coverage will necessarily result.

Capacity and coverage deficiencies will result in dropped calls, blocked access to the network, or poor quality and reliability. It could also mean no coverage at all for some current subscribers. This not only affects every day personal and business communications within the area, but also endangers lives as access to emergency services is negatively impacted. Given these considerations, it is understandable that the potential loss of a cell tower is viewed as a critical event for our network and our customers.

On the other hand, the existing facility has served the surrounding community, traffic into and out of Albemarle County on the interstate highway as well as on Virginia highway 250, and the area's emergency services needs for almost twenty years. With responsible maintenance and timely upgrades, there is no reason it cannot continue to serve reliably into the foreseeable future, perhaps as long as land-based wireless networks remain technologically relevant.

For the foregoing reasons, we respectfully offer our enthusiastic support to the Johnson Foundation's application for Section 1704 conversion or diversion of open-space land, in the hope that the existing facility will be conserved, and not removed.

Sincerely,

A handwritten signature in black ink, appearing to read 'Daniel J. Meenan', written over a horizontal line.

Signature

Daniel J. Meenan

Name

Vice President, Wireless Network Development

Title