STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 24-____- PET

Limited Size and Scope Application	)
of Bell Atlantic Mobile Systems, LLC	)
d/b/a Verizon Wireless and Vertex Towers, LLC,	)
for a Certificate of Public Good,	)
pursuant to 30 V.S.A. § 248a, authorizing the construction	)
of a telecommunications facility in Manchester, Vermont	)

LIMITED SIZE AND SCOPE APPLICATION OF VERTEX TOWERS, LLC and BELL ATLANTIC MOBILE SYSTEMS, LLC, d/b/a VERIZON WIRELESS, FOR A CERTIFICATE OF PUBLIC GOOD PURSUANT TO 30 V.S.A. SECTION 248a

By this Application, Vertex Towers, LLC ("Vertex") Bell Atlantic Mobile Systems, LLC, d/b/a Verizon Wireless ("Verizon") (collectively, "co-applicants"), represent:

1. Each of the Applicants is a "company" as defined by 30 V.S.A. § 201 and, as such, is subject to the jurisdiction of the Vermont Public Utility Commission ("Commission") pursuant to 30 V.S.A. § 203.

2. The proposed Project involves a "telecommunications facility" as defined by 30 V.S.A. § 248a(b)(6).

3. Vertex intends to construct a telecommunications facility on a ("Parcel") located at 410 Hunter Park Road in Manchester, Vermont for the initial use of Verizon and subsequent use by other communications providers. Verizon refers to the project as "Manchester 2." The property owner has given Verizon and Vertex permission to proceed with this Application. The coordinates for the Project are latitude 43°11'25.80" North and longitude 73°02'57.37" West. See Permit Plans (Exhibit DH-1) for a visual depiction of the Project's location.

4. Vertex will create a 50' x 50' "Compound" enclosed by an 8' high chain link fence, with a locked gate, and topped with barbed wire. A 130' above ground level ("AGL")

telecommunications tower disguised as an artificial pine tree ("Monopine") will be constructed within the Compound.

5. Verizon will center six (6) panel antennas ("Antennas"), six (6) Remote Radio Heads ("RRHs") and three (3) "clip-on" combined Antennas and RRHs known as "MMUs" at the 125' AGL level on the Monopine on a triangular mounting bracket with two (2) Antennas, two (2) RRHs, and one (1) MMU per side or "sector". Each Antenna will measure approximately 72" long and 11.9" wide. The topmost point of the antennas will extend to a height of 130' AGL. Each of the RRHs, measuring approximately 15.9" long and 15.5" wide, will be mounted directly behind each of the Antennas. The MMU, measuring approximately 35" long and 16" wide and will also be mounted with a centerline elevation of 125' AGL. One (1) OVP distribution box ("OVP"), measuring approximately 25.8" long by 15.9" wide will be mounted on the Monopine at the same centerline as the Antennas and the RRHs. Full and accurate specifications of the proposed Antennas, RRHs, MMUs and OVP are detailed in Exhibit ML-1[1]. The trunk of the Monopine will be painted brown or Corten steel will be used, and the OVP and Antennas will be painted brown or shrouded with brown "socks."

6. The Monopine has been designed to support the proposed equipment.

7. Verizon will install a 12' by 20' equipment steel platform with ice canopy ("Platform") within the Compound, located to the northwest of the Monopine

8. The Platform will contain the electronics equipment necessary for the operation of the Project. Verizon will also place an emergency generator ("Generator") on the Platform. The Generator will function if there is a power outage. Verizon will remotely test the Generator once

[1] From time to time, equipment manufacturers may slightly alter their products or Verizon may purchase from different suppliers. Therefore, there is a possibility that the actual antennas may differ slightly from what is described in the attached specifications.

a week at a time to be determined. If diesel is used to power the Generator, its tank will be placed underneath the Generator. If propane is used to power the Generator, Verizon will install a 500-gallon propane tank on an 11' by 4' concrete pad in the Compound.

9. Co-axial and fiber optic cables from the tower-mounted equipment will descend inside the hollow Monopine. The cables will exit near the base of the Monopine and will connect with the Platform via conduits. Electric and telephone services will be brought to the Platform from an equipment backboard adjacent the Monopine.

10. To provide access to the Compound, Verizon proposes to follow an existing paved drive connecting to Hunter Park Road and construct a new 12' wide gravel access drive ("Access") to reach the Compound.

11. Approximate clearing limits are shown on Sheet C-4 of Exhibit DH-1.[2] The contractor will limit clearing to the minimum required to construct the Access and Compound, which is estimated to be approximately 4,984 square feet. At the close of construction, Verizon will reseed and mulch all disturbed areas along the Access and around the Compound. An erosion control blanket and silt sock will be placed along the Access and at the Compound as indicated on the Permit Plans to control erosion both during and after construction. Underground utilities will follow the Access from the closest existing utility pole to the Compound, using a 20' wide easement.

12. Proposed new permanent impervious surface will total approximately 4,691 square feet.

13. Construction shall meet the requirements of the State of Vermont Low Risk Site Handbook for Erosion Prevention and Sediment Control.

[2] Clearing limits may need to be adjusted based on conditions encountered during construction.

Co-Location Analysis

14. As part of the design for this Project, C-Squared Systems, an RF engineering firm retained by the co-applicants, evaluated existing telecommunications facilities and existing structures for possible co-location opportunities. There are no such facilities or structures that would allow Verizon to meet its coverage and capacity needs for the Manchester 2 search ring. *See* Propagation Plots (Exhibit ML-2) and Existing Tower Analysis (Exhibit ML-3).

Analysis of Effects Under Applicable Criteria

15. The proposed Project will not have an adverse impact affecting the applicable criteria under 10 V.S.A. § 6086(a) and will conform to the land conservation measures in the applicable local and regional plans. Below are our detailed responses.

16. The co-applicants conducted an assessment of the Project's potential effects on the natural environment in accordance with the criteria applicable to those resources - floodways (10 V.S.A. § 6086(a)(1)(D), rare and irreplaceable natural areas (10 V.S.A. § 6086(a)(8)) and necessary wildlife habitat and endangered species (10 V.S.A. § 6086(a)(8)(A).

17. With respect to each of those criteria, the Project will not result in an undue adverse impact upon the natural environment in accordance with these criteria. *See* Exhibit MLS-2 and Exhibit MLS-3.[3]

18. Criterion 8 – Historic Sites: Because this project involves the construction of a new telecommunications tower, the consultant retained by the co-applicants analyzed its conformance

[3] With regard to Criterion 8(A), the consultant employed by the co-applicants observed that the Project is located in both summer roosting habitat and winter hibernacula for federally endangered Northern Long Eared and Indiana bats. The co-applicants do not presently expect to need to do any clearing. However, if clearing were to become necessary, the co-applicants would consent to a condition of approval stating that any clearing needed for the Project will be carried out only from November 1 to March 31 or with prior written approval from the Vermont Department of Fish and Wildlife.

with Section 106 of the National Historic Preservation Act. The standards in that Section are closely related to the historic sites criterion applied by this Commission. In accordance with FCC requirements, that consultant compiled the attached Submission Packet, FCC Form 620, (Exhibit BT-1) which presented the details on the proposed project as well as efforts that have been taken to identify, assess, and make determinations of effect based on an assessment of the impacts of the proposed project on Historic Properties.

19. Co-applicants' consultant concluded that an earlier version of the proposed project will have "No Adverse Effect" on historic resources. As seen by its stamp on the first page of Exhibit BT-1, the Vermont Division for Historic Preservation has concurred with those conclusions. On October 28, 2024, a letter was sent to the Vermont Division for Historic Preservation (Exhibit BT-2) notifying the agency of slight changes to the proposed project design (reduction in tower height, use of a monopine tower design, and alteration of access to mitigate impacts on natural resources). The consultant assessed the impacts of the new proposed project design on Historic Properties and included this information in the letter (Exhibit BT-2). As set forth in Exhibit BT-2, taking into account the new proposed project design, the consultant maintains her original opinion that the proposed project will have "No Adverse Effect" on historic resources.

20. Criterion 8 – Scenic or Natural Beauty: The Applicants retained Virtual Site Simulations ("VSS") to perform photo simulations of the proposed Tower. VSS determined that the Tower will have few views from public roads or residential homes. The majority of the areas that had visibility were in open fields throughout the Area of Analysis ("AOA") and the immediate area around the project site, including the gravel pit to the North, Hunter Park just to the South and the open field just to the West.

21. In particular, VSS created a Photo Simulation Package for this Project. Using several software programs, the photos and photo metadata, VSS is able to accurately represent a tower with photo simulations to show how much of the proposed tower would be seen. Photos from locations where the balloon is visible and not visible within the AOA are used in the package to show the overall visibility characteristics of the proposed tower location. The Photo Simulation Package is attached as Exhibit DA-2.

22. On June 4, 2024, VSS visited the proposed site and floated a three (3)-foot diameter helium balloon to 130' above ground level at the location of the proposed tower. From available mapping and with the balloon in the air, VSS drove public roads within a one-mile radius of the tower site, trying to determine from how many viewpoints the tower would be seen and, if visible, how much of the tower would be seen. VSS identified 28 representative viewpoints. The balloon was visible (marking the highest point of the tower) from six (6) of those viewpoints. It was not visible from the other 22 viewpoints. Other than a location .12 miles away from the tower site (next to the existing solar farm), the six (6) simulations that VSS prepared using the results of the balloon float showed that only the topmost part of the tower would be visible. In many of those cases, it would be backdropped by higher terrain.

23. Due to this limited visibility, the Tower will not have an undue adverse effect on scenic or natural beauty.

24. Criterion 10 – Conformance with Local and Regional Plans -- According to 30 V.S.A. § 248a(c)(2), during the Commission's review, "substantial deference [will be] given to the land conservation measures" in the local and regional plans of the "affected municipality." We are, therefore, addressing the relevant provisions of the Manchester Town Plan (adopted on May 9, 2017) ("Town Plan"; see Exhibit DH-4) and the Bennington County Regional Plan amended as

of March 23, 2017 (the "Regional Plan"; see Exhibit DH-5) to illustrate that the proposed Project will comply.

25. The Town Plan contains a Policy section devoted to "infrastructure," which states in pertinent part:

> Appropriate infrastructure must be in place to serve the needs of the community and employers. More than just water, sewer, and power, this includes fiber optics, access to high-speed, wide-bandwidth telecommunications facilities, and other types of technological capacity. Broadband access throughout Manchester is as essential as electricity in allowing citizens, employers, and home businesses to thrive and participate in community and commerce.
>
> *Id.* at 4.

The Town Plan also contains a section entitled, "Power and Telecommunications Facilities." *Id*. at 37. That section states, in pertinent part:

> with regard to wireless telecommunications facilities, the *Manchester Land Use & Development Ordinance* requires conditional use review of all proposed development and siting of towers and related infrastructure. Visual impacts, lighting, noise generation, natural resource impacts, and site screening are all required to be carefully considered by the Development Review Board prior to approval of any new facilities.

Id. at 38.

26. The Regional Plan contains the following general observation:

> Vermont has invested and worked aggressively to bring broadband services to all parts of the state. High speed telecommunications currently is available throughout most of the region, with complete coverage still being pursued in some rural areas. **Improvements in wireless/cell service for all carriers are still needed and all of the major providers currently are working to expand coverage.**

Id. at 55 (emphasis added).

27. The Regional Plan contains a more specific discussion in its section entitled, "Information and Telecommunications Services:

> Cellular telephone service providers have been steadily expanding their coverage area within the region with the installation of new towers and antennas at strategic locations. The widespread availability and use of tablet computers and handheld wireless phones,

> including "smart phones," that offer portable access to the internet has led to an even greater demand for these wireless facilities.
>
> The infrastructure required for wireless communication services include towers, antennas, equipment buildings, access roads, and electrical service. Bennington County is a challenging area for the development of wireless communication infrastructure. The narrowness of the inhabited valleys and highly visible slopes and ridges of the surrounding mountains require careful siting to ensure that adequate coverage is efficiently provided while not having undue adverse impacts on natural or scenic resources. Those concerns can be minimized by careful planning that includes siting antennas on existing buildings or structures, co-location of antennas on towers to limit the number of towers, and careful site design to avoid sensitive areas and avoid disruption of viewsheds identified as particularly important to local communities.
>
> The Vermont Public Service Board has regulatory jurisdiction over the siting of telecommunication facilities, weighing the public good of a proposal together with its environmental and social impacts. Municipal and regional plans are given consideration by the Public Service Board, so it is important that those plans include clear policy guidelines regarding sensitive areas, tower height, co-location requirements, and other factors. In some cases it may be preferable to develop one tall (140 feet or more) tower that provides coverage over a relatively wide area in a location where identified local and regional impacts can be avoided. In other cases, two or more smaller and lower towers (90 feet in height and possibly using a "monopole" design) might be needed to provide the same coverage while avoiding impacts to natural and scenic resources or residential neighborhoods.

Id. at 165-66.

28. The Project will enhance the quality of the Verizon's infrastructure serving Manchester in a manner that will maintain and improve the reliability of the Verizon network and Internet connectivity and speed on that network. Verizon shares the goals of the Town Regional Plans of using existing infrastructure rather than building new towers where feasible. However, in this case, there is no existing infrastructure than will allow Verizon to accomplish its objectives of enhancing coverage and capacity in this area. The location that Verizon has chosen is well developed and is not in an ecologically sensitive area. There will be little disruption of viewsheds.

29. Neither Vertex nor Verizon has applied for, obtained, nor been denied a permit or permit amendments under applicable provisions of Title 24 or chapter 151 of Title 10 for the

proposed improvements covered by the current application or substantially similar improvements.

30. There are no known permit conditions that would impact the proposed improvements.

31. The Project will promote the general good of the State by improving wireless telecommunication infrastructure to increase capacity and support state-of-the-art wireless services in the community; improving high speed data services; providing competitive choices for consumers; and providing the opportunity to improve economic development within the State – all in conformance with the substantive criteria under 30 V.S.A. § 248a.

32. Concurrently with the filing of this Application, co-applicants have provided a copy of this Application, with accompanying exhibits and testimony, to the Planning Commission and Select Board of the Town of Manchester, the Bennington County Regional Commission, the Agency of Natural Resources, Division of Historic Preservation, Commissioner of the Department of Public Service and its Director for Public Advocacy and the Secretary of the Agency of Transportation. A notice of the filing of this Application has also been provided to the landowner of record of the property on which the facility is located and the landowners of properties adjoining the Project site.

33. In support of this Application, the co-applicants submit the Prefiled Testimony and exhibits sponsored by the following witnesses:

Witness	Subject
Martin Levin, Senior RF Engineer	Description of the installation and the Project's purpose and impact on the existing Verizon network.
Daniel Hamm, P.E.	Description of proposed Project
Britta Tonn	Description of impacts on historic resources
Michael Lew-Smith	Description of impacts on natural resources

David Archambault

Description of predicted visibility

NOTICE TO RECIPIENTS

Pursuant to the Public Utility Commission's ("Commission") *Order Adopting Revised Standards and Procedures Implementing 30 V.S.A. § 248a* issued by the Commission on January 18, 2023 ("Procedures Order"), any and all recipients of this application will have 30 days to file comments, motions to intervene, or requests for hearing on the project with the Commission. If a recipient would like to request a hearing, the recipient must make a showing that the project raises a significant issue with respect to the applicable criteria under 30 V.S.A. § 248a(c)(1) and pursuant to the Procedures Order.

WHEREFORE, Applicant respectfully requests that the Commission:

1. Find that the Application complies with all applicable notice requirements set out in 30 V.S.A. § 248a(e) and (j);

2. Find that the Application meets the requirements set out in 30 V.S.A. § 248a(b)(4)(A), and, therefore, qualifies as one of "limited size and scope";

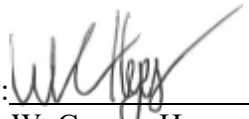
3. Find that the Project will promote the general good of the State of Vermont and authorize Applicant to undertake the actions as described herein and in its exhibits;

4. Issue an Order and Certificate of Public Good; and

5. Take such other measures as may be required for the expeditious review and approval of this Application.

Dated in Burlington, Vermont this 1st day of November 2024

Vertex Towers, LLC and Bell Atlantic Mobile Systems, LLC, d/b/a Verizon Wireless

By: 

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