



December 29, 2023

Town of Sturbridge Planning Board
301 Main Street
Sturbridge, MA 01566

Applicant: Vertex Towers, LLC
Site Id: VT-MA-3155D
Property Address: 92 Stallion Hill Road, Sturbridge, MA 01566
Tax Assessor: 605-0281-092
Property Owner: Pamela Soper, Trustee of the Pamela A. Soper 2009 Irrevocable

Dear Members of the Planning Board:

In connection with the Planning Board application on the above referenced project, the Sturbridge Fire Department raised a question with respect to the fire protection methods that will be incorporated into the Facility. Because cell sites are many times built in remote, rugged and higher elevation terrain with limited access, tower owners, telecommunications carriers, equipment manufacturers and the engineers who design cell sites have incorporated many different fire prevention methods into these sites.

The telecommunications equipment that will be utilized at the Facility will be installed and owned by the respective carriers who co-locate at the Facility, and is constantly evolving with advances in technology and safety protocols. However, in general, the electronic equipment used at telecommunications facilities is non-combustible and heat sensitive. The cabinets in which telecommunications equipment is placed are generally made of a steel, UL listed, Telcordia approved, OSHA compliant, non-corrosive and fire resistant material to provide a suitable environment for telecommunications equipment and to prevent and/or self-contain combustion within the cabinet in the unlikely event of a combustible electrical malfunction. These cabinets also have passive (venting) and/or active (small cooling fans) cooling mechanisms to prevent overheating. More importantly the cabinets also contain thermostats and/or heat detectors and/or smoke detectors that are remotely monitored by carriers' respective Network Operations Control Center ("NOCC") to ensure that the equipment temperature remains optimal. In the event of extreme heat or combustion event, the equipment is programmed to either shut down automatically or can be shut down remotely at the NOCC, which can also dispatch a technician to the site to address the issue. Technicians who are required to visit a cell site are well-trained in fire safety protocol.



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Equipment cabinets are placed on concrete foundations within a gravel-covered fenced-in compound, which will be kept free of vegetation and which will mitigate the risk of fire within the compound by maintaining a non-combustible buffer. In addition, the area immediately surrounding the fenced-in compound will be cleared to facilitate construction and for the installation of the access driveway, further reducing the risk of fire around the perimeter of the Facility.

The cell tower proposed in Sturbridge will be designed with a lightning rod and an extensive, below grade electrical grounding system, to safely dissipate lightning electrical energy in the event of a lightning strike. Similarly, each base station cabinet will be grounded to also safely dissipate lightning and other electrical energy. Following approval of the Facility by the Planning Board, Vertex will conduct a more extensive below-grade geotechnical analysis to ascertain subsurface conditions so its engineers can design a site specific and appropriate foundation and grounding system, and will provide such detail the Building Inspector concurrent with its building permit application.

Upon completion of construction, maintenance representatives will visit the site periodically to make sure that the fencing and equipment cabinets remain sound and the compound and fencing remain free of vegetation. During the construction process, representatives of Vertex and Verizon would be happy to meet on site with the Fire Department to discuss emergency operations and protocol. In addition, Vertex can install a Knox box to provide the Fire Department with emergency access to the compound if necessary.

Vertex takes cell site safety very seriously, and engages engineers, construction managers and other professionals to ensure that the Facility will remain compliant with all applicable safety standards, including fire prevention, and believes that the public safety benefit of enhanced wireless communications greatly outweighs the risk of fire at the Facility.

Sincerely,

Vertex Towers, LLC

By: 
Stephen Kelleher, Manager

cc: LT Ashe, Sturbridge Fire Department
Town of Sturbridge Zoning Board