

April 8, 2024

Mr. Richard Nichols, Chairperson  
Planning Board  
Town of Millis  
900 Main Street  
Millis, MA 02054

RE: 121 Norfolk Road, Map 39, Parcels 39-043. Planning Board Special Permit Application for/with Site Plan Approval, Personal Wireless Communications Facilities, 2<sup>nd</sup> review comments.

Dear Mr. Nichols:

GCG has reviewed the following information for the Planning Board Special Permit Application for/with Site Plan Approval Personal Wireless Communications Facilities proposed at 121 Norfolk Street, Map 39, Parcel 39-043, in the Town of Millis Massachusetts.

Documents:

1. Stormwater Management Report prepared by Chappell Engineering Associates., LLC. (CEA) dated March 8, 2024.
2. Response letter prepared by Brown Rudnick LLP, dated January 31, 2024.
3. Monopole Safety Letter prepared by CEA, dated January 30, 2024.
4. Consent Letter from Dorothy Iorio dated March 1, 2024

Plans:

1. Millis Site ID: WEC-MA-07, 121 Norfolk Road, Millis, MA 02054, prepared by Chappell Engineering Associates., LLC. dated December 15, 2023, last revised 01/29/2024 and 3/19/24.  
Consists of 7 sheets:

Sheet 1	T-1 Title Sheet
Sheet 2	C-1 Property Plan
Sheet 3	C-2 Site Plan
Sheet 4	C-3 Access Way
Sheet 5	Z-1 Compound Plan & Elevation
Sheet 6	Z-2 Site Details
Sheet 7	Z-3 Erosion Control/Landscape Plan & Details

The applicant has submitted a Special Permit Applicant for/with Site Plan Approval Personal Wireless Communications Facilities proposed at 121 Norfolk Road (Map 39, Lot 43) in the Town of Millis.

Background:

The Town of Millis owns the property (121 Norfolk Road, Parcel 39-043), which consists of 2+/- acres of land and improved by an existing single-story building and a paved circular driveway with two curb cuts

on Norfolk Road. There is no wetland resource area identified in the project vicinity, the site is in the Flood Hazard Zone 'X,' (area of minimal flood hazard), there is no NHESP estimate habitats of rare wildlife and NHESP priority habitats of rare species identified in the area per FEMA FIRM and MassMapper/MassGIS layers. The applicant has proposed to lease the property from the Town of Millis and install a 150' above ground level monopole style communications tower with spaces for the antennas for The Town of Millis on top plus six different lower elevations spaces for the antennas of wireless telecommunications companies together with their related amplifiers, cables, fiber and other associated antenna equipment, including remote radio heads, surge arrestors, and global positioning system antennas, plus the installation of a 4,200 sq ft compound enclosed by an 8' high chain link fence for the location of electronic equipment, cabinets and other appurtenances, and the installation of an access drive, parking turnaround, steel bollards, pressure treated wood edging, as well as a transformer, meter bank, and underground conduit and utilities. Based upon our review of the above information, we offer the following comments with respect to compliance with the Town of Millis Zoning By-Law, Section V – Use Regulations; Section XII.Q – Special Permits; Section XIII.C - Site Plan Review and Approval for Commercial and Industrial Structures and Developments; and Section XIII.N – Personal Wireless Communications Facilities. The numerical section of the regulations is referenced at the beginning of each comment as it relates to a specific Bylaw. GCG latest comments shown in "Blue."

### **General Comment**

1. The applicant should list all relief requested items with reference section number for the Board to make a determination. [Relief for Section XIII C, \(Site Plan Review and Approval for Commercial and Industrial Structures and Developments.\), Section XIII N, \(Personal Wireless Communications Facilities\), and Section XII Q, \(Special Permit\) were requested on the response letter, no specific items listed.](#)
2. Section V, Use Regulations (Table 1) - The proposed Personal Wireless Communications Facilities use is permitted by right in the R-S (Residential Suburban) Zoning District with a Planning Board Special Permit (Section XII.Q) and (Section V.E.) Site Plan Review (Section XIII.C). [Statement, no response required.](#)
3. Section XII.Q, Special Permits – XII.Q.1.c., this project will improve public safety communications in the immediate vicinity by providing the communications tower and antennas to enhance the essential wireless signals. [Statement, no response required.](#)
4. Section XII.Q.1.d.- GCG concurs with the traffic assessment that there will be minimal traffic impacts on Norfolk Road and nearby intersections. The Supplement report estimated an average of one to two round trip visits per month per Carrier. For the six sets of antennas (six Carriers) and the Town of Millis' antenna, GCG estimated average of fourteen round trip visits per month. [Statement, no response required.](#)
5. Section XII.Q.1.e. – The proposed monopole tower does not require water or sewer services. There should not be any impact to the existing water and sewer services. However. The applicant should clarify the existing building use(s). The building is within the 'Fall-Zone,' see additional Site Plan Review comments under Section XIII.N. - below. The existing building will remain as shown on the site plan. Existing water and sewer services to the dwelling should be located on the plan to avoid conflicts with the proposed underground utilities (wire/cable). Portion the existing grading along the gravel access exceeded 20% slope (toward the proposed fence gate). The average access drive is approximately 12% slope. The parking space/turn-around area has an average slope of 27.5%. The proposed fenced compound has existing grading between 12% (northwest corner) to over 36% (southeast corner). There is 14 feet

elevation change along the easterly property line approximately 13-foot setback from the abutter. Applicant should clarify the intent of the finish grading; proposed contours should be shown on the plan. Due to the steep slope of the access drive, parking space/turn-around area and enclosed compound, drainage runoff mitigation and erosion control should be provided.

- a.) The latest plan showed a 14.83% slope gravel access driveway, which exceeded the 10% requirements, (CMR 18.2.3.4.6.1), fire department approval required.
  - b.) The proposed 20-foot length parking space has an average slope of 27.8%, that is 5.6' rise within the parking stall, physically not vehicle accessible.
6. Section XII.Q.1.g. – The applicant should layout the “Fall-Zone” on the plan, which could impact the abutting properties’ future development and potential hazard situation on Norfolk Road. Fall Zone laid out on plan sheet C-1, GCG recommends showing existing dwellings and structures nearby the fall zone to demonstrate any adverse impacts from the proposed cell tower. The March 1, 2024, letter signed by Dorothy Iorio contains a plan showing the fall zone.
  7. Section XII.Q.2 – Due to the steep existing grade on-site, proposed grading contours should be shown on the plan. There would be possible retaining wall required along the rear yard, additional screening may be considered. Proposed contours shown along the gravel drive, the steep slope needs Fire Department approval. Parking space grading (too steep) not vehicle accessible. No grading proposed within the equipment compound.
  8. Section XIII Site Plan: Section XIII.N.2.c. – A safety setback or “fall-zone,” a circular area with a radius equal to two (2) times the height of the tower or supporting structure. The existing building was located within the fall-zone, section of Norfolk Road and the front yard of 118 and 120 Norfolk Road and 234 Village Street (dual frontages) are in the fall-zone. Portion of the eastern abutter Map 39, Block 017F is also in the fall-zone. Block 017F is a vacant lot under a ten-year Chapter 61 Forest Land Use program. The applicant should clarify the time length of the lease agreement with the Town of Millis. GCG recommends considering easements from the abutters to secure the fall-zone during the lease period. However, the applicant needs to address the safety concerns regarding the Norfolk Road within the ‘fall-zone.’
    - a.) The Fall Zone as shown extended over Norfolk Road and Map 39 Blocks/Lots 039, 040, 041, and 017F. The applicant should verify any existing dwelling/structure is located within the 300' fall zone. Lot 017F is under a 10-year Chapter 61 use, which would expire prior to this site lease. The Fall Zone extended to the buildable setback of the above lots, which affected the properties owner’s development rights. Resolved see letter dated March 1, 2024, signed by Dorothy M. Iorio.
    - b.) The response letter stated that the pole would be designed with pre-engineered deform point(s) to deform into itself. Which is part of the structural design and under the Millis Building Department’s jurisdiction, and beyond the site plan review scope. The Monopole Safety letter also stated that the Monopole foundation will be designed by a geotechnical team. GCG recommends a condition that a design stamped by an engineer.
  9. Section XIII.N.2.d. – A landscape plan should be provided. Landscape plan shown on plan sheet Z-3. Since there are no specific requirements other than to minimize the visual impact of the installation on adjacent properties. Board decision is required.
  10. The existing contours along the gravel access exceeded 20% slope (toward the proposed fence gate). The average access drive is approximately 12% slope. The parking space/turn-around area has an average slope of 27.5%. The proposed fenced compound has existing grading between 12% (northwest corner) to over 36% (southeast corner). There is 14 feet elevation different along the easterly property line approximately 13-foot setback from the abutter. Applicant should clarify the intent of the finish grading; proposed contours should be shown on

the plan. Due to the steep slope of the access drive, parking space/turn-around area and enclosed compound, drainage runoff mitigation and erosion control should be provided. Concrete pads for equipment, if any, should be shown on the plan to account impervious surface. There was no grading proposed within the enclosed compound. The proposed canopy and steel platform runoff discharge onto the steep grade would create concentrated flow and increased peak runoff toward the existing water treatment building and the proposed gravel drive with steep slope would also increase peak runoff and volume toward Norfolk Road.

11. Section XIII.N.2.e. – The proposed 8' high fence with gate addresses security concerns. [Statement.](#)
12. Section XIII.N.2.f. – The applicant should submit a maintenance plan and schedule detailing the nature and frequency of all maintenance visits including equipment tests and any drainage and ground maintenance of the property, where applicable. [Not addressed.](#)
13. Section XIII.N.2.g. – A removal plan detailing provisions for the removal of all equipment and structures installed at the site if the applicant discontinues operations at the site. (At the end of the lease.) A removal plan should be included in Tower Removal bond value. [Not addressed, a removal bond may be required by the Board.](#)
14. Section XIII.N.2.h. and Section XIII.N.3.d. - The proposed 150' height monopole design meets the requirements. [Statement.](#)
15. [Proposed infiltration basin contours elevation should be identified, GCG recommends basin side slope not to exceed three horizontals to one vertical slope \(3H:1V\) slope, 2.5H:1V proposed. Proposed contours should connect back to the existing contours, proposed infiltration trench \(detail drawing 3/Z-3\) shows a 2' wide trench and top trench elevation 173. The applicant should show the infiltration trench on the plan view, \(1/Z-3\). The infiltration basin contours as shown would only collect a portion of the equipment compound's runoff, and most of the gravel drive would drain directly toward Norfolk Road. The basin should have a minimum one-foot freeboard and an emergency spill designed at brimful conditions without effecting the structural integrity of the basin such as overtopping and washing out earth berm.](#)

There were no drainage calculations or reports included in the site plan package. The site consists of Hydrologic Soil Group 'A,' well drain soil, per USDA Web Soil Survey. The proposed clearing of wooded surface to gravel surface would create a substantial increase of surface runoff drain down the steep access gravel driveway to Norfolk Road. Drainage mitigation should be provided to address the increased post-development runoff.

[There is no wetland resource area shown within 200 feet of the site and the proposed work limit is less than an acre, which is below the Stormwater Management Regulations threshold. Therefore, the stormwater mitigation requirements are limited to the Zoning Bylaw Section XII Q.1.e. "will not overload any public drainage system and Section XIII.C.4.c. "The site plan shall include specific measures to control erosion and sedimentation, maximize groundwater recharge, protect groundwater quality, and maintain aesthetic character."](#)

[The Stormwater Management Report shows summary for the pre- and post-development peak runoff rate and volume for the 2-year, 10-year, and 100-year storm events. The HydroCAD report/calculations should be provided. Pre-development and post-development watershed maps should be provided. Based on the grading plan as shown, only portion of the equipment compound runoff would be collected by the infiltration basin. The proposed equipment pads' canopy and steel platform are](#)

impervious surface, which discharge runoff onto the steep existing grade within the enclosed equipment compound. Where does not meet the "Qualifying Pervious Areas (QPA)," (maximum 5% slope and meeting the required QPA minimum length) requirements. See MSH Vol.3, Ch.1, Pg. 47 (Low Impact Development Site Design Credit, Credit 2, Minimum Criteria for Credit). Therefore, the canopy or steel platform runoff should be designed to discharge to a QPA or to a properly designed infiltration system. Outflow of the equipment compound and infiltration basin outflow should be directed away from the existing building.

The steep gravel drive also created a higher peak runoff and volume flow toward Norfolk Road, GCG recommends providing drainage improvements at the front yard area to mitigate the drainage impacts.

The Planning Board may want to request elevations views or at least discuss what visual impact the platforms may have on adjacent neighbors.

If you have any questions regarding these matters, please contact our office.

Respectfully Submitted,  
GCG Associates

*Michael J. Carter*

Michael J. Carter, P.E.  
Project Manager