

**PLANNING BOARD  
TOWN OF MARLBOROUGH, ULSTER COUNTY, NEW YORK**

In the Matter of the Application of

---

**CELLCO PARTNERSHIP  
d/b/a Verizon Wireless**

Lands n/f James and Denise Garofalo  
3 Young Avenue  
Town of Marlborough  
Ulster County, New York  
Section 109.1, Block 3, Lot 26.2

---

**APPLICATION FOR SITE PLAN APPROVAL,  
SPECIAL USE PERMIT and  
STATEMENT OF INTENT**

Submitted by:

Verizon Wireless  
Mark Coon, Real Estate Manager  
1275 John Street Suite 100  
West Henrietta, New York 14586

Tectonic Engineering & Surveying Consultants, P.C.  
Steven Matthews, P.E.  
36 British American Blvd, Suite 101  
Latham, New York 12110  
(518) 783-1630

Tilson  
Kelley Spear, Site Acquisition Specialist  
245 Commercial Street Suite 203  
Portland, Maine 04101  
(802) 279-8204

Young/Sommer LLC  
Scott P. Olson, Esq.  
Executive Woods  
Five Palisades Drive  
Albany, New York 12205  
(518) 438-9907

Dated: March 10, 2017

**TOWN OF MARLBOROUGH PLANNING BOARD**

Cellco Partnership d/b/a Verizon Wireless  
Applicant's Name

**CHECKLIST FOR MAJOR/MINOR SUBDIVISION, SITE PLAN and/or LOT LINE REVISION**

I. The following items shall be submitted for a COMPLETED Planning Board Application Form.

1. X Completed Application
2. X Environmental Assessment Form (*May be obtained from Planning Board*)
3. X Letter of Agent Statement
4. X Application Fee (*Separate check from escrow fee*)
5. X Escrow Fee (*Separate check from application fee*)
6. X Copy of deed
7. X Completed checklist (*Automatic rejection of application without checklist*)
8. X Agricultural Data Statement (*if applicable*)
9. X Provide twelve (12) copies of all maps, plans, reports and a PDF computer file on CD of all documentation submitted. Plan sets must be correlated packages.

II. The following checklist items shall be incorporated on the Subdivision Plat, Site Plan, or Lot Line Revision prior to consideration of being placed on the Planning Board Agenda. Non-Submittal of the checklist will result in application rejection.

1. X Name and address of applicant
2. X Name and address of owner (*if different*)
3. X Subdivision name and location
4. X Tax Map Data (*Section-Block-Lot*)
5. X Location map at a scale of 1" = 2,000
6. X Zoning table showing what is required in the particular zone and what applicant is proposing.
7. X Show zoning boundary if any portion of proposed subdivision or

site is within or adjacent to a different zone

8.  Date of plat preparation and/or plat revisions

9.  Scale the plat is drawn to (Max 1" = 100')

10.  North Arrow

11.  Surveyor's Certification

12.  Surveyor's seal and signature

13.  Name, SBL and acreage of adjoining owners

14.  NYSDEC Wetland and 100 foot buffer zone with an appropriate certification block regarding DEC requirements.

15.  Flood plain boundaries

16.  Federal Wetland Boundary

17.  Metes and bounds of all lots

18.  Name and width of adjacent streets, include dedication parcels. The road boundary is to be a minimum of 25 feet from the centerline of the paved street.

19.  Show existing or proposed easements (*note restrictions*)

20.  Right of way width and Rights of Access and utility placement.

21.  Road profile and typical section including existing proposed grades, vertical curve data, utilities, drainage and other improvements.

22.  Lot area acreage. For lots under 2 acres, list in square feet & acres.

23.  Number of lots including residual lot.

24.  Show any existing waterways, wetlands, ponds, lakes, streams, drainage courses within 200 feet of parcel boundaries.

25.  A note stating a road maintenance agreement is to be filed in the County Clerk's Office for private roads.

26.  Applicable note pertaining to owners review and concurrence.

27.  Show any public improvements, i.e. drainage systems, water lines, sewer lines, etc.

28.  Show all existing houses, accessory structures, wells and septic

systems on and within 200 feet of the parcel to be subdivided.

29.  2 Foot Contours

30.  Indicate any reference to a previous subdivision, i.e., filed map number, data and previous lot number.

31.  If a private road, Town Board approval of name required, and notes on the plan that no Town services will be provided and a street sign (per Town specs) is to be furnished and installed.

32.  The amount of grading expected or known to be required to bring the site to readiness.

33.  Estimated or known cubic yards of material to be excavated.

34.  Estimated or known cubic yards of fill required.

35.  The amount of grading expected or known to be required to bring the site to readiness.

36.  Type and amount of site preparation which falls within the 100 foot buffer strip of wetlands and within the Critical Environmental Area. Please explain in square feet or cubic yards.

37.  Amount of site preparation within a 100-year flood plain or any water course on the site. Please explain in square feet or cubic yards.

38.  Planning Board approval block 4" x 2"

39.  Special district boundaries, agricultural, school, fire, water, sewer, etc.

40.  Sight distance of all intersections and driveways.

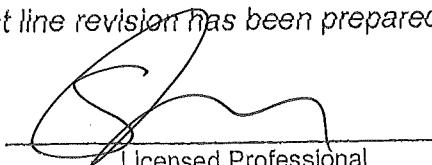
41.  Ridgeline and steep slope notation.

42.  Agricultural setbacks.

43.  After final approval is given by the Planning Board, the Building dept. needs to be contacted for further guidance.

The plat for the proposed subdivision, site plan, or lot line revision has been prepared in accordance with this checklist.

By:



Licensed Professional

Town of Marlborough  
Planning Board Application

*Application For: (Check One)*

*Subdivision \_\_\_\_\_ Site Plan  Lot Line Revision \_\_\_\_\_*

Application Number:

Date of Submission:

Name of Project: Verizon Wireless Node 9 Communications Facility

Location of Project: 3 Young Avenue

Tax Section Block and Lot: 109.1-3-26.2

Zoning District: R-1

Number of Acres: 23.1 x 125.9

Sq. Footage of Building: N/A

Description of Project (include number of lots/units & bedrooms): Installation of a new 41.3ft.

utility pole structure with one antenna and equipment thereon for an ODAS wireless communications service

Name of Property Owner: James and Denise Garofalo

Address of Property Owner: 3 Young Avenue

Telephone Number of Property Owner:

Name of Applicant: Cellco Partnership d/b/a Verizon Wireless

Address of Applicant: 1275 John St., Suite 100, West Henrietta, NY 14586

Telephone Number of Applicant: 518-438-9907 x 258 Attn: Scott P. Olson, Esq.

Name of Surveyor:

Address of Surveyor:

Telephone Number of Surveyor:

Name of Engineer: Tectonic Engineering and Surveying Consultants, P.C.

Address of Engineer: 36 British American Blvd., Suite 101, Latham, NY 12110

Telephone Number of Engineer 518-783-1630

Name of Attorney: Scott P. Olson, Esq.

Address of Attorney: Young/Sommer LLC, 5 Palisades Drive, Suite 300, Albany, NY 12205

Telephone Number of Attorney: 518-438-9907 x 258

Reason For Application: Special Use Permit and Site Plan Review

Description of Proposal: install a new 41.3 foot utility pole structure with one antenna and equipment thereon for an Outdoor Distributed Antenna System (“ODAS”) wireless communication service

## Disclaimer

The applicant is advised that the Town of Marlborough Town Code, which contains the Town's Zoning Regulations, is subject to amendment. Submission of an application to the Planning Board does not grant the applicant any right to continued review under the code's current standards and requirements. It is possible that the applicant will be required to meet changed standards or new code requirements made while the application is pending.

An approval by the Planning Board does not constitute permission, nor grant any right to connect to or use municipal services such as sewer or water. It is the applicant's responsibility to apply for and obtain Town of Marlborough and other agency approvals not within this Board's authority to grant.

**AFTER FINAL APPROVAL IS GIVEN BY THE PLANNING BOARD, THE BUILDING DEPT. MUST BE CONTACTED FOR FURTHER GUIDANCE.**

The Town of Marlborough Town Board sets forth the schedule of fees for applications to the Planning Board. The signing of this application indicates your acknowledgment of responsibility for payment of these fees to the Planning Board for review of this application including, but not limited to, fees for professional services (Planners/Consultants, Engineers, Attorneys,) public hearings and site inspections. Applicant's submissions and re-submissions that are not complete will not be considered by the Planning Board or placed upon its agenda unless all outstanding fees have been paid.

The undersigned applies for subdivision, site plan, or lot line approval as described above under the rules and procedures of the Town of Marlborough, New York as duly authorized by the Town Board of Marlborough, New York.

The undersigned also acknowledges receipt of the "Disclaimer" above.

Applicant's Name(Print): Cellco Partnership d/b/a Verizon Wireless

Applicant's Signature:

Date:

***\*\*Application will not be accepted if not signed and filled out completely\*\****

## Letter of Agent

PLEASE SEE TAB 2

I (We), \_\_\_\_\_ am (are) the owner(s) of a parcel of land located on \_\_\_\_\_ in the Town of Marlborough, Tax Map Designation: Section \_\_\_\_\_ Block \_\_\_\_\_ Lot \_\_\_\_\_.

I (We) hereby authorize \_\_\_\_\_ to act as my (our) agent to represent my (our) interest in applying to the Town of Marlborough Planning Board for a \_\_\_\_\_ Lot Subdivision, Site Plan, or Lot Line Revision Application. (circle one)

---

Signature

---

Date

---

Signature

---

Date

State Of New York}

County Of \_\_\_\_\_ }

SS:

On the \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_\_ before me, the undersigned, a Notary Public in and for said State, personally appeared

\_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity, and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

---

Notary Public

PLANNING BOARD, TOWN OF MARLBOROUGH  
ULSTER COUNTY, NEW YORK

In the Matter of the Application of

---

CELLCO PARTNERSHIP d/b/a Verizon Wireless

Premises: James and Denise Garofalo  
3 Young Avenue  
Marlborough, New York 12542  
Tax Map No. 109.1-3-26.2

---

STATEMENT OF INTENT and  
APPLICATION FOR SPECIAL USE PERMIT and SITE PLAN REVIEW

I. Purpose and Need

CELLCO PARTNERSHIP d/b/a Verizon Wireless ("Verizon Wireless" or the "Applicant") proposes to install a new 41.3 foot utility pole structure with one antenna and equipment to be located there on (a "communications facility") at the above location. [TABS 1, 2, and 3]. More specifically, Verizon Wireless is proposing an Outdoor Distributed Antenna System ("ODAS") collocated on a utility pole located along the Route 9W corridor (referred to internally as "Marlboro 9W ODAS (NODE 9)"). An ODAS system consists of a series of antennas connected by fiber optic cabling and is used to provide wireless communications service to a limited target area, in this case a portion of Route 9W. The fiber optic cabling is ultimately connected to an existing Verizon Wireless macro cell site and thus into the Verizon Wireless network.

Although this application is specific to Node 9, the overall plan is to have several antennas and related equipment (i.e. nodes) to be collocated on several proposed utility poles along the Route 9W corridor. [See RF Analysis at TAB 4]. The Applicant proposes to install on each pole: 1) a single, cylindrical ODAS antenna (approximately 24" tall x 12" in diameter) mounted at the top of each pole; 2) two Teko fiber remote units; and 3) a power supply box and power meter. The antennas and ODAS units will be painted to match the utility pole to limit the visibility of the additional equipment.

Upon completion, the proposed facility will provide necessary wireless network bandwidth to the area along Route 9W. Due to heavy customer usage on Verizon Wireless' 4<sup>th</sup> Generation LTE network generated from this area of the community along with the difficulty of identifying a location for a new tower or other location for a traditional macro cell site, additional capacity is required.

The proposed ODAS system is a significantly paired down version of a typical macro cell (i.e., a standard 3-sector array as commonly seen on wireless communications facilities in Ulster County). It is essentially a number of micro cell antennas in series. A micro cell is a low power, single-sector radio unit with a small external antenna that is intended to provide "hotspot" type coverage to specific buildings, malls, event venues, airports, etc. or small outdoor areas. [TAB 5]. The ODAS system, being essentially a number of microcell antennas in series, will provide a coverage footprint of an area approximately 500 feet in diameter from each node (since the antennas are below the tree tops, coverage is greatly diminished in the direction of trees, buildings,

etc., but will travel significantly further over open areas and along roads). This particular ODAS is intended to provide necessary capacity relief to the surrounding macro network and year-round coverage improvements along portions of Route 9W.

As Verizon Wireless' traditional and relatively higher powered macro communications facilities provide network-wide regional coverage, a layer of small cells or ODAS nodes can be under-laid beneath to create what is termed a Heterogeneous Network (HetNet). This network topology can achieve significant improvements in overall network capacity. Furthermore, as Verizon Wireless can utilize both 700 MHz and AWS (2100MHz) frequency bands, these independent frequency bands can be used in specific scenarios to provide an extra degree of freedom in overall HetNet design to achieve an even higher capacity. The diagram below is a simplified 2D illustration of Verizon Wireless' HetNet topology concept.

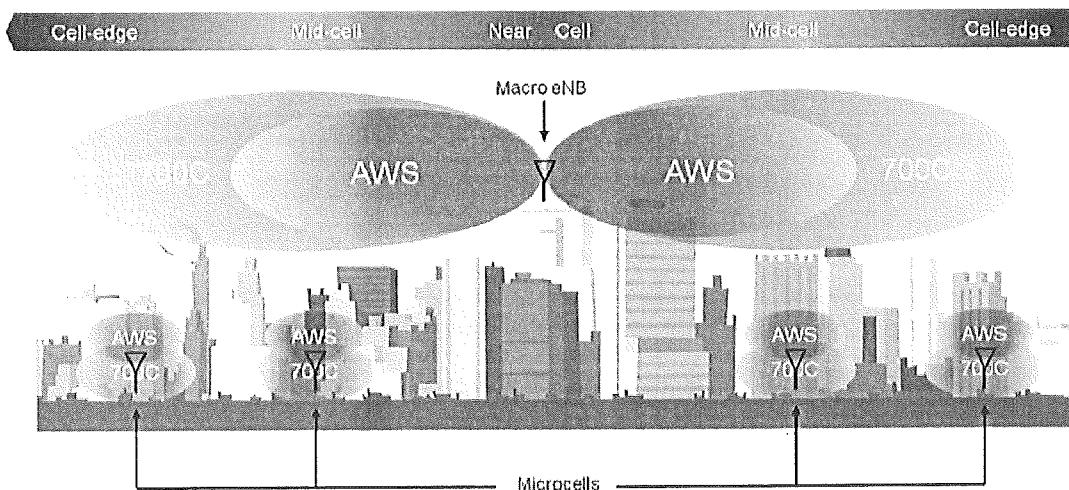


Figure 1 – 4G LTE Heterogeneous Network Concept

In a typical urban/dense suburban network, it is common to have high usage areas, sometimes referred to as "traffic hotspots". These are simply highly-concentrated pockets of users. These hotspots can be found anywhere within the macro cell's coverage footprint. Hotspots located in the mid-cell and cell-edge region (refer to Figure 1) are best served by deploying low-powered micro cells or ODAS nodes. Hotspot areas where customers are relatively isolated from the macro cell signals (e.g. where there is currently insufficient RF coverage) are also good candidate locations for micro cells or ODAS nodes.

Verizon Wireless is considered a public utility for land use and zoning purposes under New York decisional law (*Cellular Telephone Company v. Rosenberg*<sup>1</sup>, 82 N.Y.2d 364 [1993]) [TAB 6], and a provider of "personal wireless services" under the federal Telecommunications Act of 1996 (the "TCA") [TAB 7]. Verizon Wireless' ODAS equipment will be in operation twenty-four (24) hours a day, seven (7) days a week, three hundred sixty-five (365) days a year. Copies of the applicable Verizon Wireless FCC licenses are included herewith [TAB 8].

---

<sup>1</sup> In *Rosenberg*, the State's highest Court determined that the ordinary variance standard is inapplicable and a cellular telephone company applying for relief need only show that (1) the relief is "required to render safe and adequate service," and (2) there are "compelling reasons, economic or otherwise," for needing the variance. *Cellular Telephone Company v. Rosenberg*, 82 N.Y.2d 364, 372 (1993).

Although the ODAS nodes are minor in nature compared to macro cell facilities, Verizon Wireless is applying for Special Use Permit and Site Plan Review approval under the Town's traditional Wireless Telecommunications Facilities law based upon discussions with the Town's wireless communications consultant.

The proposed communications facility is unmanned, and will be visited for routine maintenance purposes approximately 1 - 3 times per month (only as needed). As such, the project will not have any impact on existing water and sewage services. In addition, neither pedestrian nor vehicular access to the premises will be impacted [see Zoning Drawings at TAB 3].

## II. Compliance with Chapter 152- Wireless Telecommunications Facilities

The proposed communications facility complies in all material respects with Town requirements:

### A. COMPLIANCE WITH SPECIAL USE PERMIT REQUIREMENTS:

1. **Special Use Permit (Telecommunications Facilities § 152-6):** Supporting materials complying with the requirements of the Town of Marlborough Wireless Telecommunications Facilities Law are included in this application as follows:
  - a. **Site Plan:** An overall Site Plan showing the location of all proposed structures and appurtenances on the property, boundaries of the Applicant's site plotted to scale, north arrow, scale and date, and all related fixtures and apparatus (including but not limited to height above grade and fencing) is included at TAB 3.
  - b. **Elevation Details:** A Detailed Site Plan showing the location and nature of the ground improvements is included at TAB 3, Sheet C1. Side elevations showing Applicant's proposed  $38.5 \pm$  ft. utility pole ( $41.3 \pm$  ft. to the top of the antenna) are included at TAB 3, Sheet C2. Verizon Wireless' ODAS antenna will be located at the top level of the proposed utility pole ( $40.3 \pm$  ft. antenna centerline).
  - c. **Access and Parking:** A  $20 \pm$  ft. wide access easement area will provide access to the utility pole. Parking for 1-3 vehicles is provided for infrequent maintenance visits [Sheet C1], and the facility will be unmanned and visited for routine maintenance purposes approximately 1-3 times per month (only as needed). As such, no pedestrian, vehicular access or parking issues exist.
  - d. **Screening:** The existing landscaping at the tower site will not be significantly altered. Due to the site's separation from surrounding properties, along with the limited nature of the utility pole and surrounding utility poles, additional landscaping will not be required.
  - e. **SEQRA:** In accordance with applicable provisions of the State Environmental Quality Review Act ("SEQRA"), the Applicant's

consultant engineers (Tectonic Engineering) have provided the attached Full Environmental Assessment Form ("Full EAF") and Visual EAF Addendum. (Telecommunications Law § 152-6(J)) [TAB 1 and TAB 9].

## B. COMPLIANCE WITH TELECOMMUNICATIONS SPECIFIC PROVISIONS

### 1. Visibility and Design Standards:

- a. **General Aesthetics:** Given the number of utility poles up and down the Route 9W corridor, the proposed utility pole will blend in with the surrounding landscape and existing development. [TABS 3 and 10].
- b. **FAA Marking/Lighting:** In accordance with Telecommunications Law, the Applicant has determined that tower marking and/or lighting is not required under Federal Aviation Administration (FAA) regulations [TAB 11]. More specifically, the Applicant has reviewed the tower location with the FCC TOWAIR tool and determined that the tower does not require registration.
- c. **Tower Design:** The telecommunications facility will be a single utility pole and is not designed to accommodate collocation of future providers. A waiver from the collocation requirement is requested.
- d. **Signage:** The required emergency contact information and RF safety signage will be posted on the utility pole. No portion of the telecommunications facility or site shall be used for advertising purposes. (Telecommunications Law § 152-12).
- e. **Appearance/Visibility:** As noted, the existing landscaping at the  $0.25\pm$  acre host parcel will not be significantly altered or disturbed during the construction process. Due to the site's proximity to other utility poles, additional landscaping is not proposed to screen the equipment from view. A Zone of Viewshed Map is attached at TAB 10. (Telecommunications Law § 152-6(K)).

### 2. Operational Matters

- a. **RF Safety/FCC Licenses (Telecommunications Law § 152-6(F)(19)):** A certification from a New York licensed professional engineer (Paul Dugan, P.E. of Millennium Engineering, P.C.) entitled "RF Safety FCC Compliance of Proposed Communications Facility" is included at TAB 12, to document that Verizon Wireless' proposed transmissions will be: (a) in full compliance with the current FCC RF emissions guidelines (NIER); and (b) categorically excluded from local regulation under applicable federal law. (Telecommunications Law § 6(F)(17)). Applicant's FCC licenses for the Ulster County area are provided at TAB 8.

- b. **Non-Interference:** While properly a matter of federal jurisdiction, Verizon Wireless has submitted a letter from Paul Dugan, P.E. of Millennium Engineering, P.C., identifying that the proposed facility will not interfere with communications devices operating in the surrounding vicinity. (Telecommunications Law § 152-6(F)(20)) [TAB 13].
3. **Financial Security (Telecommunications Law § 152-22):** The Applicant commits that, as a condition of approval and prior to the issuance of a building permit, it will post with the Town a tower removal bond in a reasonable amount to be set by the Planning Board to ensure full performance of the terms and conditions of the Special Use Permit. [TAB 14].
4. **Removal (Telecommunications Law § 152-29):** The Applicant agrees to remove all structures and facilities within ninety (90) days after receiving written notice from the Town that the facility has been abandoned for a period exceeding ninety (90) days or a total of one hundred-eighty (180) days in any three hundred-sixty five (365) day period.

### **III. Relief from Requirements (Section 152-30)**

1. **Radio Frequency (RF) Emissions:** A certification by a New York State Licensed Professional Engineer that the facility will be in full compliance with the current FCC RF emissions guidelines (NIER) is included at TAB 7. As such, this facility is eligible for the categorical exclusion under FCC regulations, and should be exempted from any further regulation under Telecommunications Law § 152-24 (annual NIER Certification).
2. **Liability Insurance:** Verizon Wireless will secure and maintain liability insurance as required by § 152-25 of the Telecommunications Law. However, there is no connection between the Town and the Applicant other than the permitting review process. There is no municipal interest to insure in this case. Therefore, a waiver from naming the Town as an "additional named insured" is respectfully requested. Even if an insurable municipal interest existed, we believe it would be inappropriate to require that the Town be a "named" insured. Such requirement would permit the Town to make changes to the Verizon Wireless insurance policy and would also obligate the Town to be liable for the policy fee.
3. **Indemnification:** As the Applicant is not leasing municipal property and the indemnification requirement in Telecommunications Law § 152-27 is not applicable and/or exceeds jurisdictional limitations on the regulation of the use of land under applicable federal and/or state law, a waiver of this requirement is respectfully requested.
4. **Tower Setbacks:** The proposed setbacks are shown in TAB 3, Sheet SB-1. Section 152-14 of the Telecommunications Law requires a setback equal to twice the tower height. Utility poles are often located immediately next to the right-of-way for the Town road or highway. As such, we are requesting that the Tower setback be waived to permit the utility pole as proposed.
5. **Number of Collocators:** The telecommunications facility is a single utility pole and therefore is not suitable for additional providers to collocate. (Telecommunications Law § 152-6(V)). A waiver from the collocation requirement is requested.

6. Balloon Test Requirement: The Balloon test is meant for tradition telecommunication towers such as a monopole or self-supporting structure. As this is an application for a utility pole structure that is 38.5' in height, we respectfully request a waiver from this requirement. (Telecommunications Law § 152-6(Y)).

7. Geotech and Foundation Design: Similarly, this is a requirement for a traditional telecommunication tower and is unnecessary and burdensome given the proposal. (Telecommunications Law § 152-6(F)(22)).

8. Recertification of Special Use Permit: Under applicable New York land use law, a special use permit runs with the land, and not to a particular Applicant. Accordingly, a waiver is respectfully requested from the limitations on permit duration appearing in Telecommunications Law § 152-19. The applicant is legally obligated to remove the tower facility upon termination or expiration of the underlying lease agreement. In this regard a limited permit duration is not necessary to protect the Town's interest in ensuring that the tower facility is properly removed once it is no longer in use.

9. Security Fencing: Similar to other utility poles throughout the Town, no security fencing is proposed for this wireless telecommunications facility. (Telecommunications Law § 152-11).

#### IV. Conclusion

The communications facility proposed is a public necessity under *Rosenberg* in that it is required to render adequate and safe service to this area of the Town of Marlborough. In an effort to supplement existing telecommunications services to this area of the Town, while reducing the need for a new tower or macro cell collocation, Verizon Wireless has identified an appropriate location for the deployment of an ODAS system. As noted herein, Verizon Wireless' existing macro cell sites in the area do not provide adequate capacity. The Town of Marlborough will be lacking adequate and safe capacity, and the failure to approve this application will eliminate the means to provide necessary capacity. This, combined with the federal mandate to expeditiously deploy advanced wireless services across the nation and Verizon Wireless' FCC licenses to provide such services in the Town of Marlborough, demonstrates that Verizon Wireless' facility is a public necessity. Without the construction of the ODAS communications facility proposed, the public would be deprived of an essential means of communication, which, in turn, would jeopardize the safety and welfare of the community and traveling public.

The ODAS system and supporting equipment will not be noticeable to the traveling public or nearby property owners. The communications system proposed has been sited to have the least practical adverse visual effect on the environment, and any resulting impact(s) may properly be considered as minimal in nature and scope.

As set forth above, the Applicant has proposed a facility that will enable Verizon Wireless to provide adequate and safe wireless services to an important area of the Town of Marlborough in accordance with its FCC licenses.

Approval of this project will enable Verizon Wireless to continue to provide an adequate and safe level of hand-held wireless telephone service to a busy area of the Town of Marlborough, within the confines of applicable technological limitations and in compliance with all applicable land use requirements. Such approval will also be in the public interest, in that it will allow Verizon Wireless to comply with its statutory mandate to build out and operate its network and provide local businesses, residents and public service entities with safe and reliable wireless communications services. For the reasons set forth herein, Verizon Wireless respectfully submits

that this project complies in all material respects with the requirements of the Town's Land Use Laws and any potential impact on the community created by approval of this project will be minimal and of no significant adverse effect.

Attached to this Application and Statement of Intent are the following:

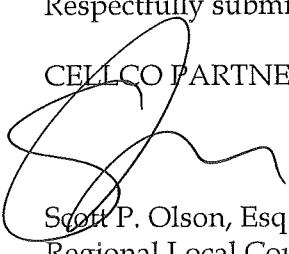
1. A Full Environmental Assessment Form ("Full EAF") prepared by Tectonic Engineering;
2. Redacted Lease between Absolutely Automotive Inc. and Verizon Wireless;
3. Zoning Site Plan Drawings prepared by Tectonic Engineering;
4. Site Selection Analysis and Radio Frequency justification prepared by Site Acquisition Specialist and RF Design Engineer;
5. Small Cell Fact Sheet;
6. Documentation of Public Utility Status and Overview of the Rosenberg Decision;
7. Overview of the Telecommunications Act of 1996;
8. Copy of Verizon Wireless' FCC Licenses for the Ulster County area;
9. Visual EAF Addendum prepared by Tectonic Engineering;
10. Viewshed Map;
11. FCC TOWAIR Determination Results;
12. Radio Frequency (RF) Safety Report of Millennium Engineering, P.C. (Paul Dugan, P.E.);
13. Non-Interference Letter prepared by Millennium Engineering;
14. Tower Design, Maintenance, and Bond Commitment Letter prepared by Verizon Wireless.

Kindly place this matter on the agenda for discussion at the next meeting of the Planning Board. In the meantime, if you should have any questions or require any additional information concerning this project, I can be reached at (518) 438-9907.

Thank you for your consideration.

Respectfully submitted,

CELLCO PARTNERSHIP d/b/a Verizon Wireless

  
Scott P. Olson, Esq.  
Regional Local Counsel

Dated: March 10, 2017

***Full Environmental Assessment Form***  
***Part 1 - Project and Setting***

**Instructions for Completing Part 1**

**Part 1 is to be completed by the applicant or project sponsor.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

**A. Project and Sponsor Information.**

Name of Action or Project: Marlboro 9W ODAS (Node 9)		
Project Location (describe, and attach a general location map): 3 Young Ave, Marlborough, NY 12542		
Brief Description of Proposed Action (include purpose or need): <p>Celco Partnership d/b/a Verizon Wireless ("Verizon Wireless" or the "Applicant") proposes the installation of an unmanned wireless communications facility on a proposed utility pole on the property. Said property being located on the east side of US-9W, approximately 100' north of Young Avenue.</p> <p>In general, the installation will consist of the following: A single antenna to be mounted at a centerline height of 40.3' above grade on a proposed 38.5' tall utility pole. All accessory equipment, cabling and utility services (power and fiber) are to be mounted on the utility pole at a minimum height of 5' above grade.</p>		
Name of Applicant/Sponsor: Celco Partnership, d/b/a Verizon Wireless		Telephone: (585) 321-5358 E-Mail: <a href="mailto:Mark.Coon@VerizonWirless.com">Mark.Coon@VerizonWirless.com</a>
Address: 1275 John Street, Suite 100		
City/PO: West Henrietta		State: NY      Zip Code: 14586
Project Contact (if not same as sponsor; give name and title/role): Scott Olson, Esq. Young Sommer, LLC		Telephone: 518-438-9907 E-Mail: <a href="mailto:solson@youngsommer.com">solson@youngsommer.com</a>
Address: Executive Woods, Five Palisades Drive		
City/PO: Albany		State: NY      Zip Code: 12205
Property Owner (if not same as sponsor): James and Denise Garofalo		Telephone: E-Mail:
Address: 3 Young Avenue		
City/PO: Marlborough		State: NY      Zip Code: 12542

## B. Government Approvals

**B. Government Approvals, Funding, or Sponsorship.** ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No or Village Board of Trustees		
b. City, Town or Village <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Planning Board or Commission	Site Plan Approval	TBD
c. City Council, Town or <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Village Zoning Board of Appeals	Special Use Permit	TBD
d. Other local agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Building Permit	TBD
e. County agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
g. State agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
h. Federal agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
iii. Is the project site within a Coastal Erosion Hazard Area?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

## C. Planning and Zoning

### C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the  Yes  No only approval(s) which must be granted to enable the proposed action to proceed?

- **If Yes**, complete sections C, F and G.
- **If No**, proceed to question C.2 and complete all remaining sections and questions in Part 1

### C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site  Yes  No where the proposed action would be located?

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action  Yes  No would be located?

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?)

If Yes, identify the plan(s):

---



---



---

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan,  Yes  No or an adopted municipal farmland protection plan?

If Yes, identify the plan(s):

---



---



---

**C.3. Zoning**

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. If Yes, what is the zoning classification(s) including any applicable overlay district?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
R1 - Residential 1	
b. Is the use permitted or allowed by a special or conditional use permit?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
c. Is a zoning change requested as part of the proposed action? If Yes, i. What is the proposed new zoning for the site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>C.4. Existing community services.</b>	
a. In what school district is the project site located?	Marlboro Central School District
b. What police or other public protection forces serve the project site?	Marlborough Police Department (21 Milton Turnpike, Milton NY 12547)
c. Which fire protection and emergency medical services serve the project site?	FD091 - Marlborough Fire (14 Grand Street, Marlboro NY 12542)
d. What parks serve the project site?	

**D. Project Details****D.1. Proposed and Potential Development**

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Unmanned telecommunications facility	
b. a. Total acreage of the site of the proposed action?	0.25 acres
b. Total acreage to be physically disturbed?	.001 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?	.001 acres
c. Is the proposed action an expansion of an existing project or use? i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
d. Is the proposed action a subdivision, or does it include a subdivision? If Yes, i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Is a cluster/conservation layout proposed?	<input type="checkbox"/> Yes <input type="checkbox"/> No
iii. Number of lots proposed?	
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____	
e. Will proposed action be constructed in multiple phases? i. If No, anticipated period of construction:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. If Yes: • Total number of phases anticipated	
• Anticipated commencement date of phase 1 (including demolition)	month _____ year _____
• Anticipated completion date of final phase	month _____ year _____
• Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:	

f. Does the project include new residential uses? If Yes, show numbers of units proposed.				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<u>One Family</u>		<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase		_____	_____	_____
At completion of all phases		_____	_____	_____
g. Does the proposed action include new non-residential construction (including expansions)? If Yes,				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<ol style="list-style-type: none"> <li>Total number of structures <u>1</u></li> <li>Dimensions (in feet) of largest proposed structure: <u>41.3'</u> height; <u>      </u> width; and <u>      </u> length</li> <li>Approximate extent of building space to be heated or cooled: <u>      </u> square feet</li> </ol>				
h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes,				
<ol style="list-style-type: none"> <li>Purpose of the impoundment: _____</li> <li>If a water impoundment, the principal source of the water: <input type="checkbox"/> Ground water <input type="checkbox"/> Surface water streams <input type="checkbox"/> Other specify: _____</li> </ol>				
iii. If other than water, identify the type of impounded/contained liquids and their source.				
<ol style="list-style-type: none"> <li>Approximate size of the proposed impoundment. Volume: <u>      </u> million gallons; surface area: <u>      </u> acres</li> <li>Dimensions of the proposed dam or impounding structure: <u>      </u> height; <u>      </u> length</li> <li>Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____</li> </ol>				
<b>D.2. Project Operations</b>				
a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)				
If Yes:				
<ol style="list-style-type: none"> <li>What is the purpose of the excavation or dredging? _____</li> <li>How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?       <ul style="list-style-type: none"> <li>• Volume (specify tons or cubic yards): _____</li> <li>• Over what duration of time? _____</li> </ul> </li> <li>Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____</li> </ol>				
<ol style="list-style-type: none"> <li>Will there be onsite dewatering or processing of excavated materials? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe. _____</li> <li>What is the total area to be dredged or excavated? <u>      </u> acres</li> <li>What is the maximum area to be worked at any one time? <u>      </u> acres</li> <li>What would be the maximum depth of excavation or dredging? <u>      </u> feet</li> <li>Will the excavation require blasting? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>Summarize site reclamation goals and plan: _____</li> </ol>				
b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
If Yes:				
<ol style="list-style-type: none"> <li>Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____</li> </ol>				

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

---

---

---

iii. Will proposed action cause or result in disturbance to bottom sediments?  Yes  No

If Yes, describe: \_\_\_\_\_

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation?  Yes  No

If Yes:

• acres of aquatic vegetation proposed to be removed: \_\_\_\_\_

• expected acreage of aquatic vegetation remaining after project completion: \_\_\_\_\_

• purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): \_\_\_\_\_

• proposed method of plant removal: \_\_\_\_\_

• if chemical/herbicide treatment will be used, specify product(s): \_\_\_\_\_

v. Describe any proposed reclamation/mitigation following disturbance: \_\_\_\_\_

c. Will the proposed action use, or create a new demand for water?  Yes  No

If Yes:

i. Total anticipated water usage/demand per day: \_\_\_\_\_ gallons/day

ii. Will the proposed action obtain water from an existing public water supply?  Yes  No

If Yes:

• Name of district or service area: \_\_\_\_\_

Yes  No

• Does the existing public water supply have capacity to serve the proposal? \_\_\_\_\_

Yes  No

• Is the project site in the existing district? \_\_\_\_\_

Yes  No

• Is expansion of the district needed? \_\_\_\_\_

Yes  No

• Do existing lines serve the project site? \_\_\_\_\_

Yes  No

iii. Will line extension within an existing district be necessary to supply the project? \_\_\_\_\_

If Yes:

• Describe extensions or capacity expansions proposed to serve this project: \_\_\_\_\_

• Source(s) of supply for the district: \_\_\_\_\_

Yes  No

iv. Is a new water supply district or service area proposed to be formed to serve the project site? \_\_\_\_\_

If Yes:

• Applicant/sponsor for new district: \_\_\_\_\_

Yes  No

• Date application submitted or anticipated: \_\_\_\_\_

Yes  No

• Proposed source(s) of supply for new district: \_\_\_\_\_

Yes  No

v. If a public water supply will not be used, describe plans to provide water supply for the project: \_\_\_\_\_

vi. If water supply will be from wells (public or private), maximum pumping capacity: \_\_\_\_\_ gallons/minute.

d. Will the proposed action generate liquid wastes?  Yes  No

If Yes:

i. Total anticipated liquid waste generation per day: \_\_\_\_\_ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): \_\_\_\_\_

iii. Will the proposed action use any existing public wastewater treatment facilities?  Yes  No

If Yes:

• Name of wastewater treatment plant to be used: \_\_\_\_\_

Yes  No

• Name of district: \_\_\_\_\_

Yes  No

• Does the existing wastewater treatment plant have capacity to serve the project? \_\_\_\_\_

Yes  No

• Is the project site in the existing district? \_\_\_\_\_

Yes  No

• Is expansion of the district needed? \_\_\_\_\_

- Do existing sewer lines serve the project site?  Yes  No
- Will line extension within an existing district be necessary to serve the project?  Yes  No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: \_\_\_\_\_

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site?  Yes  No

If Yes:

- Applicant/sponsor for new district: \_\_\_\_\_
- Date application submitted or anticipated: \_\_\_\_\_
- What is the receiving water for the wastewater discharge? \_\_\_\_\_

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans): \_\_\_\_\_

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: \_\_\_\_\_

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction?  Yes  No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

\_\_\_\_\_ Square feet or \_\_\_\_\_ acres (impervious surface)

\_\_\_\_\_ Square feet or \_\_\_\_\_ acres (parcel size)

ii. Describe types of new point sources. \_\_\_\_\_

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)? \_\_\_\_\_

- If to surface waters, identify receiving water bodies or wetlands: \_\_\_\_\_

- Will stormwater runoff flow to adjacent properties?  Yes  No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater?  Yes  No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations?  Yes  No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

\_\_\_\_\_ Construction equipment

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

\_\_\_\_\_ N/A

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

\_\_\_\_\_ N/A

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit?  Yes  No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year)  Yes  No

ii. In addition to emissions as calculated in the application, the project will generate:

- \_\_\_\_\_ Tons/year (short tons) of Carbon Dioxide (CO<sub>2</sub>)
- \_\_\_\_\_ Tons/year (short tons) of Nitrous Oxide (N<sub>2</sub>O)
- \_\_\_\_\_ Tons/year (short tons) of Perfluorocarbons (PFCs)
- \_\_\_\_\_ Tons/year (short tons) of Sulfur Hexafluoride (SF<sub>6</sub>)
- \_\_\_\_\_ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)
- \_\_\_\_\_ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Estimate methane generation in tons/year (metric): _____	
ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____	
i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____	
j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes:	
i. When is the peak traffic expected (Check all that apply): <input type="checkbox"/> Morning <input type="checkbox"/> Evening <input type="checkbox"/> Weekend	
<input type="checkbox"/> Randomly between hours of _____ to _____.	
ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____	
iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____	
iv. Does the proposed action include any shared use parking? <input type="checkbox"/> Yes <input type="checkbox"/> No	
v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____	
vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? <input type="checkbox"/> Yes <input type="checkbox"/> No	
vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? <input type="checkbox"/> Yes <input type="checkbox"/> No	
viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? <input type="checkbox"/> Yes <input type="checkbox"/> No	
k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes:	
i. Estimate annual electricity demand during operation of the proposed action: _____ <u>Minimal increase in electrical power usage as necessary to operate the facility</u>	
ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): <u>Local Utility</u>	
iii. Will the proposed action require a new, or an upgrade to, an existing substation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
l. Hours of operation. Answer all items which apply.	
i. During Construction:	
<ul style="list-style-type: none"> <li>• Monday - Friday: _____ 8am-5pm _____</li> <li>• Saturday: _____</li> <li>• Sunday: _____</li> <li>• Holidays: _____</li> </ul>	
ii. During Operations:	
<ul style="list-style-type: none"> <li>• Monday - Friday: _____ 24 hours _____</li> <li>• Saturday: _____ 24 hours _____</li> <li>• Sunday: _____ 24 hours _____</li> <li>• Holidays: _____ 24 hours _____</li> </ul>	

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes:	
i. Provide details including sources, time of day and duration:	<u>During construction, noise associated with the operation of construction equipment</u>
ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Describe: _____	
n.. Will the proposed action have outdoor lighting?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes:	
i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:	_____
ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Describe: _____	
o. Does the proposed action have the potential to produce odors for more than one hour per day?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____	
p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Product(s) to be stored	_____
ii. Volume(s) _____ per unit time _____ (e.g., month, year)	_____
iii. Generally describe proposed storage facilities:	_____
q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Describe proposed treatment(s):	_____
ii. Will the proposed action use Integrated Pest Management Practices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Describe any solid waste(s) to be generated during construction or operation of the facility:	_____
• Construction: _____ tons per _____ (unit of time)	_____
• Operation : _____ tons per _____ (unit of time)	_____
ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:	_____
• Construction: _____	_____
• Operation: _____	_____
iii. Proposed disposal methods/facilities for solid waste generated on-site:	_____
• Construction: _____	_____
• Operation: _____	_____

s. Does the proposed action include construction or modification of a solid waste management facility? If Yes:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____	
ii. Anticipated rate of disposal/processing:	<ul style="list-style-type: none"> <li>• _____ Tons/month, if transfer or other non-combustion/thermal treatment, or</li> <li>• _____ Tons/hour, if combustion or thermal treatment</li> </ul>
iii. If landfill, anticipated site life: _____ years	
t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? If Yes:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____	
ii. Generally describe processes or activities involving hazardous wastes or constituents: _____	
iii. Specify amount to be handled or generated _____ tons/month	
iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____	
v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? If Yes: provide name and location of facility: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: _____	

## E. Site and Setting of Proposed Action

### E.1. Land uses on and surrounding the project site

#### a. Existing land uses.

##### i. Check all uses that occur on, adjoining and near the project site.

Urban  Industrial  Commercial  Residential (suburban)  Rural (non-farm)  
 Forest  Agriculture  Aquatic  Other (specify): Educational, Recreational

##### ii. If mix of uses, generally describe:

\_\_\_\_\_

\_\_\_\_\_

#### b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces			
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.25	0.25	0
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____			

c. Is the project site presently used by members of the community for public recreation?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
i. If Yes: explain:	
d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes,	
i. Identify Facilities:	Marlboro Elementary School, Marlboro Middle School
e. Does the project site contain an existing dam?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Dimensions of the dam and impoundment:	
• Dam height:	feet
• Dam length:	feet
• Surface area:	acres
• Volume impounded:	gallons OR acre-feet
ii. Dam's existing hazard classification:	
iii. Provide date and summarize results of last inspection:	
f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Has the facility been formally closed?	<input type="checkbox"/> Yes <input type="checkbox"/> No
• If yes, cite sources/documentation:	
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:	
iii. Describe any development constraints due to the prior solid waste activities:	
g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:	
h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply:	
<input type="checkbox"/> Yes – Spills Incidents database	Provide DEC ID number(s): _____
<input type="checkbox"/> Yes – Environmental Site Remediation database	Provide DEC ID number(s): _____
<input type="checkbox"/> Neither database	
ii. If site has been subject of RCRA corrective activities, describe control measures:	
iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? If yes, provide DEC ID number(s):	<input type="checkbox"/> Yes <input type="checkbox"/> No
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):	

v. Is the project site subject to an institutional control limiting property uses?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> <li>• If yes, DEC site ID number: _____</li> <li>• Describe the type of institutional control (e.g., deed restriction or easement): _____</li> <li>• Describe any use limitations: _____</li> <li>• Describe any engineering controls: _____</li> <li>• Will the project affect the institutional or engineering controls in place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</li> <li>• Explain: _____ _____ _____</li> </ul>		
<b>E.2. Natural Resources On or Near Project Site</b>		
a. What is the average depth to bedrock on the project site? _____		>7 feet
b. Are there bedrock outcroppings on the project site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %
c. Predominant soil type(s) present on project site: _____		100 % % % %
d. What is the average depth to the water table on the project site? Average: _____		>7 feet
e. Drainage status of project site soils: <input checked="" type="checkbox"/> Well Drained: _____		100 % of site
<input type="checkbox"/> Moderately Well Drained: _____		% of site
<input type="checkbox"/> Poorly Drained: _____		% of site
f. Approximate proportion of proposed action site with slopes: <input checked="" type="checkbox"/> 0-10%: _____		100 % of site
<input type="checkbox"/> 10-15%: _____		% of site
<input type="checkbox"/> 15% or greater: _____		% of site
g. Are there any unique geologic features on the project site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, describe: _____		
h. Surface water features.		
i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Do any wetlands or other waterbodies adjoin the project site?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes to either i or ii, continue. If No, skip to E.2.i.		
iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency?		<input type="checkbox"/> Yes <input type="checkbox"/> No
iv. For each identified regulated wetland and waterbody on the project site, provide the following information:		
<ul style="list-style-type: none"> <li>• Streams: Name _____ Classification _____</li> <li>• Lakes or Ponds: Name _____ Classification _____</li> <li>• Wetlands: Name _____ Approximate Size _____</li> <li>• Wetland No. (if regulated by DEC) _____</li> </ul>		
v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies?		<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, name of impaired water body/bodies and basis for listing as impaired: _____		
i. Is the project site in a designated Floodway? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
j. Is the project site in the 100 year Floodplain? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
k. Is the project site in the 500 year Floodplain? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:		
i. Name of aquifer: _____		

m. Identify the predominant wildlife species that occupy or use the project site:		
Rabbits	Squirrels	Skunks
Chionomunks	Opossums	Foxes
Birds	Raccoons	Dear
n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes:		
i. Describe the habitat/community (composition, function, and basis for designation): _____		
ii. Source(s) of description or evaluation: _____		
iii. Extent of community/habitat:		
<ul style="list-style-type: none"> <li>• Currently: _____ acres</li> <li>• Following completion of project as proposed: _____ acres</li> <li>• Gain or loss (indicate + or -): _____ acres</li> </ul>		
o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, give a brief description of how the proposed action may affect that use: _____		
<b>E.3. Designated Public Resources On or Near Project Site</b>		
a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, provide county plus district name/number: _____		
b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
i. If Yes: acreage(s) on project site? _____ ii. Source(s) of soil rating(s): _____		
c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes:		
i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____    		
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes:		
i. CEA name: _____ ii. Basis for designation: _____ iii. Designating agency and date: _____		

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District	
ii. Name: _____	
iii. Brief description of attributes on which listing is based:	
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
g. Have additional archaeological or historic site(s) or resources been identified on the project site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Describe possible resource(s): _____	
ii. Basis for identification: _____	
h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Identify resource: _____	
ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____	
iii. Distance between project and resource: _____ miles.	
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Identify the name of the river and its designation: _____	
ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

#### F. Additional Information

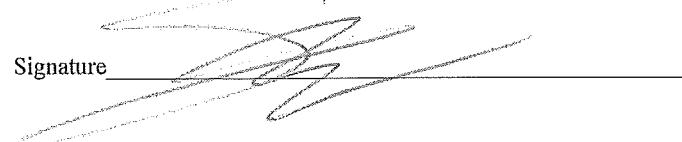
Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

#### G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Steven Matthews, PE Date 2/17/17

Signature 

Title Manager of Engineering

**Full Environmental Assessment Form**  
**Part 2 - Identification of Potential Project Impacts**

Agency Use Only [If applicable]  
 Project : \_\_\_\_\_  
 Date : \_\_\_\_\_

**Part 2 is to be completed by the lead agency.** Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

**Tips for completing Part 2:**

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "Yes" to a numbered question, please complete all the questions that follow in that section.
- If you answer "No" to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

**1. Impact on Land**

Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)

*If "Yes", answer questions a - j. If "No", move on to Section 2.*

		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

## 2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g)

NO

YES

*If "Yes", answer questions a - c. If "No", move on to Section 3.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____	E2g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

## 3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h)

NO

YES

*If "Yes", answer questions a - l. If "No", move on to Section 4.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	<input type="checkbox"/>	<input type="checkbox"/>

I. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>
-------------------------	--	--------------------------	--------------------------

#### 4. Impact on groundwater

The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer.  
(See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)

NO  YES

*If "Yes", answer questions a - h. If "No", move on to Section 5.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	<input type="checkbox"/>	<input type="checkbox"/>
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

#### 5. Impact on Flooding

The proposed action may result in development on lands subject to flooding.  
(See Part 1. E.2)

NO  YES

*If "Yes", answer questions a - g. If "No", move on to Section 6.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in development within a 100 year floodplain.	E2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in development within a 500 year floodplain.	E2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	<input type="checkbox"/>	<input type="checkbox"/>
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	<input type="checkbox"/>	<input type="checkbox"/>

g. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>
-------------------------	--	--------------------------	--------------------------

## 6. Impacts on Air

The proposed action may include a state regulated air emission source.  
(See Part 1. D.2.f., D.2.h, D.2.g)

*If "Yes", answer questions a - f. If "No", move on to Section 7.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. More than 1000 tons/year of carbon dioxide (CO <sub>2</sub> )	D2g	<input type="checkbox"/>	<input type="checkbox"/>
ii. More than 3.5 tons/year of nitrous oxide (N <sub>2</sub> O)	D2g	<input type="checkbox"/>	<input type="checkbox"/>
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	<input type="checkbox"/>	<input type="checkbox"/>
iv. More than .045 tons/year of sulfur hexafluoride (SF <sub>6</sub> )	D2g	<input type="checkbox"/>	<input type="checkbox"/>
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochlorofluorocarbons (HFCs) emissions	D2g	<input type="checkbox"/>	<input type="checkbox"/>
vi. 43 tons/year or more of methane	D2h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

## 7. Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.)  
*If "Yes", answer questions a - j. If "No", move on to Section 8.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	<input type="checkbox"/>	<input type="checkbox"/>

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____	E1b	<input type="checkbox"/>	<input type="checkbox"/>
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	<input type="checkbox"/>	<input type="checkbox"/>
j. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

#### 8. Impact on Agricultural Resources

The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.)

NO

YES

*If "Yes", answer questions a - h. If "No", move on to Section 9.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

## 9. Impact on Aesthetic Resources

The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.)

*If "Yes", answer questions a - g. If "No", go to Section 10.*

NO  YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 - 3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

## 10. Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.)

*If "Yes", answer questions a - e. If "No", go to Section 11.*

NO  YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E3e	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	<input type="checkbox"/>	<input type="checkbox"/>

d. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>
e. If any of the above (a-d) are answered "Moderate to large impact may occur", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	<input type="checkbox"/>	<input type="checkbox"/>
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>

#### 11. Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.

(See Part 1. C.2.c, E.1.c., E.2.q.)

If "Yes", answer questions a - e. If "No", go to Section 12.

NO       YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	<input type="checkbox"/>	<input type="checkbox"/>
e. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

#### 12. Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)

If "Yes", answer questions a - c. If "No", go to Section 13.

NO       YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

**13. Impact on Transportation**

The proposed action may result in a change to existing transportation systems.  
(See Part 1. D.2.j)

*If "Yes", answer questions a - f. If "No", go to Section 14.*

NO  YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action will degrade existing transit access.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

**14. Impact on Energy**

The proposed action may cause an increase in the use of any form of energy.  
(See Part 1. D.2.k)

*If "Yes", answer questions a - e. If "No", go to Section 15.*

NO  YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	<input type="checkbox"/>	<input type="checkbox"/>
e. Other Impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

**15. Impact on Noise, Odor, and Light**

The proposed action may result in an increase in noise, odors, or outdoor lighting.  
(See Part 1. D.2.m., n., and o.)

*If "Yes", answer questions a - f. If "No", go to Section 16.*

NO  YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in routine odors for more than one hour per day.	D2o	<input type="checkbox"/>	<input type="checkbox"/>

d. The proposed action may result in light shining onto adjoining properties.	D2n	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

#### 16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.)

*If "Yes", answer questions a - m. If "No", go to Section 17.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	<input type="checkbox"/>	<input type="checkbox"/>
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	<input type="checkbox"/>	<input type="checkbox"/>
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	<input type="checkbox"/>	<input type="checkbox"/>
m. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

**17. Consistency with Community Plans**

The proposed action is not consistent with adopted land use plans.  
(See Part 1. C.1, C.2. and C.3.)

*If "Yes", answer questions a - h. If "No", go to Section 18.*

NO  YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, Elb	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/>	<input type="checkbox"/>
h. Other: _____		<input type="checkbox"/>	<input type="checkbox"/>

**18. Consistency with Community Character**

The proposed project is inconsistent with the existing community character.  
(See Part 1. C.2, C.3, D.2, E.3)

*If "Yes", answer questions a - g. If "No", proceed to Part 3.*

NO  YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

SITE NAME: Marlboro 9W Node 9  
SITE NUMBER: 20151309132  
ATTY/DATE: S. Olson/July 7, 2016

## LEASE AGREEMENT

This Lease Agreement (the "Agreement") made this \_\_\_\_\_ day of \_\_\_\_\_, 2016, between James A. Garafalo and Denise A. Garafalo, with a mailing address of 3 Young Avenue, Marlboro, New York 12542 hereinafter designated LESSOR and Cellco Partnership d/b/a Verizon Wireless with its principal offices at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920 (telephone number 866-862-4404), hereinafter designated LESSEE. LESSOR and LESSEE are at times collectively referred to hereinafter as the "Parties" or individually as the "Party."

## WITNESSETH

In consideration of the mutual covenants contained herein and intending to be legally bound hereby, the Parties hereto agree as follows:

1. PREMISES. LESSOR hereby leases to LESSEE approximately forty-eight (48) square feet of space (the "Ground Space") located at Route 9W, Town of Marlborough, County of Ulster, State of New York, (the "Property"), for the installation, operation and maintenance of communications equipment; together with the non-exclusive right of ingress and egress from a public right-of-way, seven (7) days a week, twenty four (24) hours a day, over the Property and to and from the Premises (as hereinafter defined) for the purpose of installation, operation and maintenance of LESSEE's communications facility. The Ground Space is hereinafter collectively referred to as the "Premises" and is shown on Exhibit "A" attached hereto and made a part hereof. In the event there are not sufficient electric and telephone, cable or fiber utility sources located on the Property, LESSOR agrees to grant LESSEE or the local utility provider the right to install such utilities on, over and/or under the Property necessary for LESSEE to operate its communications facility, provided the location of such utilities shall be as reasonably designated by LESSOR. LESSOR agrees to grant LESSEE, Verizon New York, Inc., or any other local utility or fiber provider the right to install such utilities or fiber in, on, over and/or under the Premises necessary for LESSEE to operate the Communication Facilities, as amended herein.

2. CONDITION OF PROPERTY. LESSOR shall deliver the Premises to LESSEE in a condition ready for LESSEE's construction of its improvements and clean and free of debris. LESSOR represents and warrants to LESSEE that as of the Effective Date and continuing throughout the Term (as hereinafter defined) that the Property is in compliance with all Laws (as defined in Paragraph 23 below), including any applicable building codes, regulations, or ordinances which may exist, and (b) the Property is free of all lead-based paint, asbestos or other hazardous substances, as such term may be defined under any applicable federal, state or local law. If a breach of the representations and warranties contained in this Paragraph 2 is discovered at any time during the Term, LESSOR shall, promptly after receipt of written notice from LESSEE setting forth a description of such non-compliance, rectify same at LESSOR's expense.

### 3. TERM; RENTAL.

This Agreement shall be effective as of the date of execution by both Parties (the "Effective Date"), provided, however, the initial term shall be for five (5) years and shall commence on the first day of the month following the day that LESSEE commences installation of the equipment on the Premises (the "Commencement Date") at which time rental payments shall commence and be due at a total annual rental of [REDACTED] to be paid in advance annually on the Commencement Date and on each anniversary of it in advance, to James A. Garafalo or to such other person, firm or place as LESSOR

may, from time to time, designate in writing at least thirty (30) days in advance of any rental payment date by notice given in accordance with Paragraph 17 below. LESSOR and LESSEE acknowledge and agree that initial rental payment shall not actually be sent by LESSEE until ninety (90) days after the Commencement Date. LESSOR and LESSEE agree that they shall acknowledge in writing the Commencement Date.

Upon agreement of the Parties, LESSEE may pay rent by electronic funds transfer and in such event, LESSOR agrees to provide to LESSEE bank routing information for such purpose upon request of LESSEE.

LESSOR hereby agrees to provide to LESSEE certain documentation (the "Rental Documentation") including without limitation: (i) documentation evidencing LESSOR's good and sufficient title to and/or interest in the Property and right to receive rental payments and other benefits hereunder; (ii) a completed Internal Revenue Service Form W-9, or equivalent for any party to whom rental payments are to be made pursuant to this Agreement; and (iii) other documentation requested by LESSEE and within fifteen (15) days of obtaining an interest in the Property or this Agreement, any assignee(s), transferee(s) or other successor(s) in interest of LESSOR shall provide to LESSEE such Rental Documentation. All documentation shall be acceptable to LESSEE in LESSEE's reasonable discretion. Delivery of Rental Documentation to LESSEE shall be a prerequisite for the payment of any rent by LESSEE and notwithstanding anything to the contrary herein, LESSEE shall have no obligation to make any rental payments until Rental Documentation has been supplied to LESSEE as provided herein.

Within thirty (30) days of a written request from LESSEE, LESSOR or any assignee(s) or transferee(s) of LESSOR agrees to provide updated Rental Documentation. Delivery of Rental Documentation to LESSEE shall be a prerequisite for the payment of any rent by LESSEE to such party and notwithstanding anything to the contrary herein, LESSEE shall have no obligation to make any rental payments until Rental Documentation has been supplied to LESSEE as provided herein.

4. ELECTRICAL. LESSOR shall, at all times during the Term, provide electrical service and telephone service access within the Premises. If permitted by the local utility company servicing the Premises, LESSEE shall furnish and install an electrical meter at the Premises for the measurement of electrical power used by LESSEE's installation. In the alternative, if permitted by the local utility company servicing the Premises, LESSEE shall furnish and install an electrical sub-meter at the Premises for the measurement of electrical power used by LESSEE's installation. In the event such sub-meter is installed, the LESSEE shall pay the utility directly for its power consumption, if billed by the utility, and if not billed by the utility, then the LESSOR shall read LESSEE's sub-meter on a monthly basis and provide LESSEE with an invoice for LESSEE's power consumption on an annual basis. Specifically, after the expiration of each calendar year, LESSOR shall determine LESSEE's actual electrical power consumption and resulting charges for the immediately preceding calendar year based on reading of the LESSEE's sub-meter on a monthly basis and the electricity bills received by LESSOR throughout such calendar year. Each invoice shall reflect charges only for LESSEE's power consumption based on the average kilowatt hour rate actually paid by LESSOR to the utility for electricity, without mark up or profit. All invoices for power consumption shall be sent by LESSOR to LESSEE at Verizon Wireless, Accounts Payable – Cellsites, M/S 3846, P.O. Box 2375, Spokane, WA 99210-2375 or email to: [livebills@ecova.com](mailto:livebills@ecova.com), shall be provided to LESSEE within ninety (90) days following the conclusion of each calendar year (the "Invoice Period"), and shall be accompanied by copies of the electricity bills received by LESSOR during the subject calendar year and documentation of the sub-meter readings applicable to such calendar year. If LESSOR fails to deliver an invoice to LESSEE within the Invoice Period, LESSOR waives any right to collect any electrical charges

from LESSEE for the subject calendar year. LESSEE shall pay each annual power consumption charge within forty-five (45) days after receipt of the invoice from LESSOR.

LESSEE shall be permitted at any time during the Term, to install, maintain and/or provide access to and use of, as necessary (during any power interruption at the Premises), a temporary power source, and all related equipment and appurtenances within the Premises, or elsewhere on the Property in such locations as reasonably approved by LESSOR. LESSEE shall have the right to install conduits connecting the temporary power source and related appurtenances to the Premises.

5. EXTENSIONS.

(a) This Agreement shall automatically be extended for four (4) additional five (5) year terms unless LESSEE terminates it at the end of the then current term by giving LESSOR written notice of the intent to terminate at least three (3) months prior to the end of the then current term. The initial term and all extensions shall be collectively referred to herein as the "Term".

6. USE; GOVERNMENTAL APPROVALS. LESSEE shall use the Premises for the purpose of constructing, maintaining, repairing and operating a communications facility and uses incidental thereto. LESSEE shall have the right to replace, repair, add or otherwise modify its utilities, equipment, antennas and/or conduits or any portion thereof and the frequencies over which the equipment operates, whether the equipment, antennas, conduits or frequencies are specified or not on any exhibit attached hereto, during the Term. It is understood and agreed that LESSEE's ability to use the Premises is contingent upon its obtaining after the execution date of this Agreement all of the certificates, permits and other approvals (collectively the "Governmental Approvals") that may be required by any Federal, State or Local authorities as well as a satisfactory building structural analysis which will permit LESSEE use of the Premises as set forth above. LESSOR shall cooperate with LESSEE in its effort to obtain such approvals and shall take no action which would adversely affect the status of the Property with respect to the proposed use thereof by LESSEE. In the event that (i) any of such applications for such Governmental Approvals should be finally rejected; (ii) any Governmental Approval issued to LESSEE is canceled, expires, lapses, or is otherwise withdrawn or terminated by governmental authority; and (iii) LESSEE determines that such Governmental Approvals may not be obtained in a timely manner, LESSEE shall have the right to terminate this Agreement. Notice of LESSEE's exercise of its right to terminate shall be given to LESSOR in accordance with the notice provisions set forth in Paragraph 17 and shall be effective upon the mailing of such notice by LESSEE, or upon such later date as designated by LESSEE. All rentals paid to said termination date shall be retained by LESSOR. Upon such termination, this Agreement shall be of no further force or effect except to the extent of the representations, warranties and indemnities made by each Party to the other hereunder. Otherwise, the LESSEE shall have no further obligations for the payment of rent to LESSOR.

7. INDEMNIFICATION. Subject to Paragraph 8, below, each Party shall indemnify and hold the other harmless against any claim of liability or loss from personal injury or property damage resulting from or arising out of the negligence or willful misconduct of the indemnifying Party, its employees, contractors or agents, except to the extent such claims or damages may be due to or caused by the negligence or willful misconduct of the other Party, or its employees, contractors or agents.

8. INSURANCE.

a. The Parties hereby waive and release any and all rights of action for negligence against the other which may hereafter arise on account of damage to the Premises or to the Property,

resulting from any fire, or other casualty of the kind covered by standard fire insurance policies with extended coverage, regardless of whether or not, or in what amounts, such insurance is now or hereafter carried by the Parties, or either of them. These waivers and releases shall apply between the Parties and they shall also apply to any claims under or through either Party as a result of any asserted right of subrogation. All such policies of insurance obtained by either Party concerning the Premises or the Property shall waive the insurer's right of subrogation against the other Party.

b. LESSOR and LESSEE each agree that at its own cost and expense, each will maintain commercial general liability insurance with limits not less than \$1,000,000 for injury to or death of one or more persons in any one occurrence and \$500,000 for damage or destruction to property in any one occurrence. LESSOR and LESSEE each agree that it will include the other Party as an additional insured.

9. LIMITATION OF LIABILITY. Except for indemnification pursuant to Paragraphs 7 and 21, neither Party shall be liable to the other, or any of their respective agents, representatives, employees for any lost revenue, lost profits, loss of technology, rights or services, incidental, punitive, indirect, special or consequential damages, loss of data, or interruption or loss of use of service, even if advised of the possibility of such damages, whether under theory of contract, tort (including negligence), strict liability or otherwise.

10. ANNUAL TERMINATION. Notwithstanding anything to the contrary contained herein, provided LESSEE is not in default hereunder beyond applicable notice and cure periods, LESSEE shall have the right to terminate this Agreement upon the annual anniversary of the Commencement Date provided that three (3) months prior notice is given to LESSOR.

11. INTERFERENCE. LESSEE agrees to install equipment of the type and frequency which will not cause harmful interference which is measurable in accordance with then existing industry standards to any equipment of LESSOR or other lessees of the Property which existed on the Property prior to the date this Agreement is executed by the Parties. In the event any after-installed LESSEE's equipment causes such interference, and after LESSOR has notified LESSEE in writing of such interference, LESSEE will take all commercially reasonable steps necessary to correct and eliminate the interference, including but not limited to, at LESSEE's option, powering down such equipment and later powering up such equipment for intermittent testing. In no event will LESSOR be entitled to terminate this Agreement or relocate the equipment as long as LESSEE is making a good faith effort to remedy the interference issue. LESSOR agrees that LESSOR and/or any other tenants of the Property who currently have or in the future take possession of the Property will be permitted to install only such equipment that is of the type and frequency which will not cause harmful interference which is measurable in accordance with then existing industry standards to the then existing equipment of LESSEE. The Parties acknowledge that there will not be an adequate remedy at law for noncompliance with the provisions of this Paragraph and therefore, either Party shall have the right to equitable remedies, such as, without limitation, injunctive relief and specific performance.

12. REMOVAL AT END OF TERM. LESSEE shall, upon expiration of the Term, or within ninety (90) days after any earlier termination of the Agreement, remove its equipment, conduits, fixtures and all personal property and restore the Premises to its original condition, reasonable wear and tear and casualty damage excepted. LESSOR agrees and acknowledges that all of the equipment, conduits, fixtures and personal property of LESSEE shall remain the personal property of LESSEE and LESSEE shall have the right to remove the same at any time during the Term, whether or not said items are

considered fixtures and attachments to real property under applicable laws. If such time for removal causes LESSEE to remain on the Premises after termination of this Agreement, LESSEE shall pay rent at the then existing monthly rate or on the existing monthly pro-rata basis if based upon a longer payment term, until such time as the removal of the antenna structure, fixtures and all personal property are completed.

13. RIGHT OF FIRST REFUSAL (COMMUNICATIONS EASEMENT). If LESSOR elects, during the Term to grant to a third party by easement or other legal instrument an interest in and to that portion of the Property occupied by LESSEE, or a larger portion thereof, for the purpose of operating and maintaining communications facilities or the management thereof, with or without an assignment of this Agreement to such third party, LESSEE shall have the right of first refusal to meet any bona fide offer of transfer on the same terms and conditions of such offer. If LESSEE fails to meet such bona fide offer within thirty (30) days after written notice thereof from LESSOR, LESSOR may grant the easement or interest in the Property or portion thereof to such third person in accordance with the terms and conditions of such third party offer.

14. RIGHTS UPON SALE. Should LESSOR, at any time during the Term decide (i) to sell or transfer all or any part of the Property to a purchaser other than LESSEE, or (ii) to grant to a third party by easement or other legal instrument an interest in and to that portion of the Property occupied by LESSEE, or a larger portion thereof, for the purpose of operating and maintaining communications facilities or the management thereof, such sale or grant of an easement or interest therein shall be under and subject to this Agreement and any such purchaser or transferee shall recognize LESSEE's rights hereunder under the terms of this Agreement. In the event that LESSOR completes any such sale, transfer, or grant described in this paragraph without executing an assignment of this Agreement whereby the third party agrees in writing to assume all obligations of LESSOR under this Agreement, then LESSOR shall not be released from its obligations to LESSEE under this Agreement, and LESSEE shall have the right to look to LESSOR and the third party for the full performance of this Agreement.

15. QUIET ENJOYMENT AND REPRESENTATIONS. LESSOR covenants that LESSEE, on paying the rent and performing the covenants herein, shall peaceably and quietly have, hold and enjoy the Premises. LESSOR represents and warrants to LESSEE as of the execution date of this Agreement, and covenants during the Term that LESSOR is seized of good and sufficient title and interest to the Property and has full authority to enter into and execute this Agreement. LESSOR further covenants during the Term that there are no liens, judgments or impediments of title on the Property, or affecting LESSOR's title to the same and that there are no covenants, easements or restrictions which prevent or adversely affect the use or occupancy of the Premises by LESSEE as set forth above.

16. ASSIGNMENT. This Agreement may be sold, assigned or transferred by the LESSEE without any approval or consent of the LESSOR to the LESSEE's principal, affiliates, subsidiaries of its principal or to any entity which acquires all or substantially all of LESSEE's assets in the market defined by the Federal Communications Commission in which the Property is located by reason of a merger, acquisition or other business reorganization. As to other parties, this Agreement may not be sold, assigned or transferred without the written consent of the LESSOR, which such consent will not be unreasonably withheld, delayed or conditioned. No change of stock ownership, partnership interest or control of LESSEE or transfer upon partnership or corporate dissolution of LESSEE shall constitute an assignment hereunder.

17. NOTICES. All notices hereunder must be in writing and shall be deemed validly given if sent by certified mail, return receipt requested or by commercial courier, provided the courier's regular

business is delivery service and provided further that it guarantees delivery to the addressee by the end of the next business day following the courier's receipt from the sender, addressed as follows (or any other address that the Party to be notified may have designated to the sender by like notice):

LESSOR:      James and Denise Garofalo  
                  3 Young Avenue  
                  Marlboro, New York 12542

LESSEE:      Cellco Partnership  
                  d/b/a Verizon Wireless  
                  180 Washington Valley Road  
                  Bedminster, New Jersey 07921  
                  Attention: Network Real Estate

Notice shall be effective upon actual receipt or refusal as shown on the receipt obtained pursuant to the foregoing.

18. RECORDING. LESSOR agrees to execute a Memorandum of this Agreement which LESSEE may record with the appropriate recording officer. The date set forth in the Memorandum of Lease is for recording purposes only and bears no reference to commencement of either the Term or rent payments.

19. DEFAULT. In the event there is a breach by a Party with respect to any of the provisions of this Agreement or its obligations under it, the non-breaching Party shall give the breaching Party written notice of such breach. After receipt of such written notice, the breaching Party shall have thirty (30) days in which to cure any breach, provided the breaching Party shall have such extended period as may be required beyond the thirty (30) days if the breaching Party commences the cure within the thirty (30) day period and thereafter continuously and diligently pursues the cure to completion. The non-breaching Party may not maintain any action or effect any remedies for default against the breaching Party unless and until the breaching Party has failed to cure the breach within the time periods provided in this Paragraph. Notwithstanding the foregoing to the contrary, it shall be a default under this Agreement if LESSOR fails, within five (5) days after receipt of written notice of such breach, to perform an obligation required to be performed by LESSOR if the failure to perform such an obligation interferes with LESSEE's ability to conduct its business; provided, however, that if the nature of LESSOR's obligation is such that more than five (5) days after such notice is reasonably required for its performance, then it shall not be a default under this Agreement if performance is commenced within such five (5) day period and thereafter diligently pursued to completion.

20. REMEDIES. In the event of a default by either Party with respect to a material provision of this Agreement, without limiting the non-defaulting Party in the exercise of any right or remedy which the non-defaulting Party may have by reason of such default, the non-defaulting Party may terminate the Agreement and/or pursue any remedy now or hereafter available to the non-defaulting Party under the Laws or judicial decisions of the state in which the Premises are located. Further, upon a default, the non-defaulting Party may at its option (but without obligation to do so), perform the defaulting Party's duty or obligation on the defaulting Party's behalf, including but not limited to the obtaining of reasonably required insurance policies. The costs and expenses of any such performance by the non-defaulting Party shall be due and payable by the defaulting Party upon invoice therefor. If LESSEE

undertakes any such performance on LESSOR's behalf and LESSOR does not pay LESSEE the full undisputed amount within thirty (30) days of its receipt of an invoice setting forth the amount due, LESSEE may offset the full undisputed amount due against all fees due and owing to LESSOR under this Agreement until the full undisputed amount is fully reimbursed to LESSEE.

21. ENVIRONMENTAL.

a. LESSOR will be responsible for all obligations of compliance with any and all environmental and industrial hygiene laws, including any regulations, guidelines, standards, or policies of any governmental authorities regulating or imposing standards of liability or standards of conduct with regard to any environmental or industrial hygiene conditions or concerns as may now or at any time hereafter be in effect, that are or were in any way related to activity now conducted in, on, or in any way related to the Property, unless such conditions or concerns are caused by the specific activities of LESSEE in the Premises.

b. LESSOR shall hold LESSEE harmless and indemnify LESSEE from and assume all duties, responsibility and liability at LESSOR's sole cost and expense, for all duties, responsibilities, and liability (for payment of penalties, sanctions, forfeitures, losses, costs, or damages) and for responding to any action, notice, claim, order, summons, citation, directive, litigation, investigation or proceeding which is in any way related to: a) failure to comply with any environmental or industrial hygiene law, including without limitation any regulations, guidelines, standards, or policies of any governmental authorities regulating or imposing standards of liability or standards of conduct with regard to any environmental or industrial hygiene concerns or conditions as may now or at any time hereafter be in effect, unless such non-compliance results from conditions caused by LESSEE; and b) any environmental or industrial hygiene conditions arising out of or in any way related to the condition of the Property or activities conducted thereon, unless such environmental conditions are caused by LESSEE.

c. LESSEE shall hold LESSOR harmless and indemnify LESSOR from and assume all duties, responsibility and liability at LESSEE's sole cost and expense, for all duties, responsibilities, and liability (for payment of penalties, sanctions, forfeitures, losses, costs, or damages) and for responding to any action, notice, claim, order, summons, citation, directive, litigation, investigation or proceeding which is in any way related to: a) failure to comply with any environmental or industrial hygiene law, including without limitation any regulations, guidelines, standards, or policies of any governmental authorities regulating or imposing standards of liability or standards of conduct with regard to any environmental or industrial hygiene concerns or conditions as may now or at any time hereafter be in effect, to the extent that such non-compliance results from conditions caused by LESSOR; and b) any environmental or industrial hygiene conditions arising out of or in any way related to the condition of the Property or activities conducted thereon, to the extent that such environmental conditions are caused by LESSOR.

22. CASUALTY. In the event of damage by fire or other casualty to the Premises that cannot reasonably be expected to be repaired within forty-five (45) days following same or, if the Property is damaged by fire or other casualty so that such damage may reasonably be expected to disrupt LESSEE's operations at the Premises for more than forty-five (45) days, then LESSEE may, at any time following such fire or other casualty, provided LESSOR has not completed the restoration required to permit LESSEE to resume its operation at the Premises, terminate this Agreement upon fifteen (15) days prior written notice to LESSOR. Any such notice of termination shall cause this Agreement to expire with the same force and effect as though the date set forth in such notice were the date originally set as the

expiration date of this Agreement and the Parties shall make an appropriate adjustment, as of such termination date, with respect to payments due to the other under this Agreement. Notwithstanding the foregoing, the rent shall abate during the period of repair following such fire or other casualty in proportion to the degree to which LESSEE's use of the Premises is impaired.

23. APPLICABLE LAWS. During the Term, LESSOR shall maintain the Property in compliance with all applicable laws, rules, regulations, ordinances, directives, covenants, easements, zoning and land use regulations, and restrictions of record, permits, building codes, and the requirements of any applicable fire insurance underwriter or rating bureau, now in effect or which may hereafter come into effect (including, without limitation, the Americans with Disabilities Act and laws regulating hazardous substances) (collectively "Laws"). LESSEE shall, in respect to the condition of the Premises and at LESSEE's sole cost and expense, comply with (a) all Laws relating solely to LESSEE's specific and unique nature of use of the Premises; and (b) all building codes requiring modifications to the Premises due to the improvements being made by LESSEE in the Premises. It shall be LESSOR's obligation to comply with all Laws relating to the Property, without regard to specific use (including, without limitation, modifications required to enable LESSEE to obtain all necessary building permits).

24. MISCELLANEOUS. This Agreement contains all agreements, promises and understandings between the LESSOR and the LESSEE regarding this transaction, and no oral agreement, promises or understandings shall be binding upon either the LESSOR or the LESSEE in any dispute, controversy or proceeding. This Agreement may not be amended or varied except in a writing signed by all parties. This Agreement shall extend to and bind the heirs, personal representatives, successors and assigns hereto. The failure of either party to insist upon strict performance of any of the terms or conditions of this Agreement or to exercise any of its rights hereunder shall not waive such rights and such party shall have the right to enforce such rights at any time. This Agreement and the performance thereof shall be governed interpreted, construed and regulated by the laws of the state in which the Premises is located without reference to its choice of law rules.

[signature page to follow]

IN WITNESS WHEREOF, the Parties hereto have set their hands and affixed their respective seals the day and year first above written.

LESSOR: James A. Garofalo

WITNESS

James A. Garofalo

James A. Garofalo

LESSOR: Denise A. Garofalo

WITNESS

Denise A. Garofalo

Denise A. Garofalo

LESSEE: Cellco Partnership d/b/a Verizon  
Wireless

WITNESS

\_\_\_\_\_

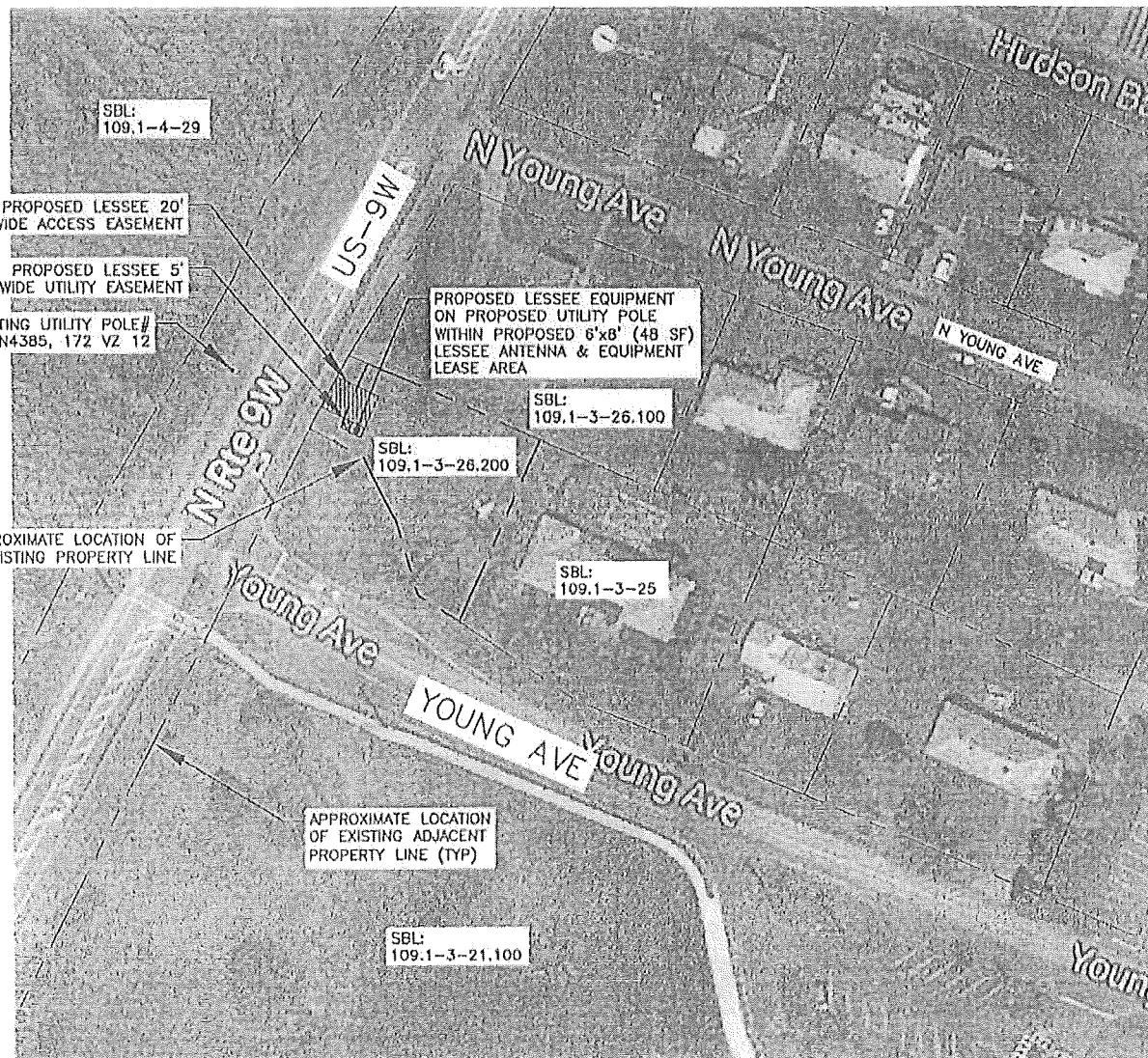
BY:

Richard Polatas  
Director Network Field Engineering

Date: \_\_\_\_\_

EXHIBIT "A"  
SITE PLAN OF GROUND SPACE

	SITE INFORMATION	
	COORDINATES:	41° 36' 32.44" N 73° 58' 7.81" W
	GROUND ELEVATION:	181' ± AMSL



## SITE LOCATION

SCALE: 1" = 100'

0 1  
ORIGINAL SIZE IN INCHES

<b>TECTONIC</b> Practical Solutions, Exceptional Service TECTONIC Engineering & Surveying Consultants P.C. 36 British American Blvd. Suite 101 Latham, NY 12110 Phone: (518) 783-1630 (800) 829-6531 www.tectonicengineering.com
--

MARLBORO 9W ODAS (NODE 9) - LEASE EXHIBIT

PROJECT #: 20151309132 - LOCATION CODE: 398841

3 YOUNG AVE - HAMLET OF MARLBORO  
ULSTER COUNTY, NY 12542

**verizon**  
(LESSEE)

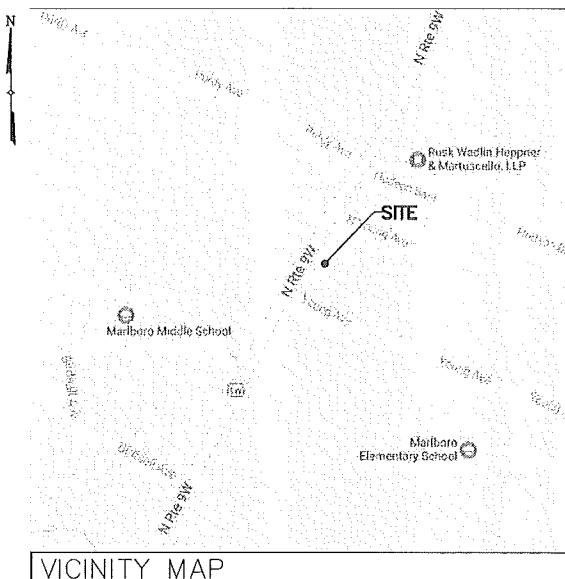
1275 JOHN STREET, SUITE 100, WEST HENRIETTA, NY 14586

**CELLCO PARTNERSHIP,  
d/b/a**

**verizon**®

SITE NAME:  
**MARLBORO 9W ODAS (NODE 9)**

REAL ESTATE P/N: 20151309132  
LOCATION CODE: 398841



REAL ESTATE P/N:	20151309132
LOCATION CODE:	398841
SITE NAME:	MARLBORO 9W ODAS (NODE 9)
SITE ADDRESS:	3 YOUNG AVENUE MARLBORO, NY 12542
MUNICIPALITY:	HAMLET OF MARLBORO
COUNTY:	ULSTER COUNTY
ZONING DISTRICT:	R-1
TAX ID:	109.1-3-26.2
STRUCTURE COORDINATES:	N 41° 36' 32.44" W 73° 58' 07.81"
GROUND ELEVATION:	181'± AMSL
PROPERTY OWNER:	JAMES AND DENISE GAROFALO 3 YOUNG AVENUE MARLBORO, NY 12542
APPLICANT:	VERIZON WIRELESS 1275 JOHN STREET, SUITE 100 WEST HENRIETTA, NY 14586
CONTACT PERSON:	MARK COON
CONTACT PHONE:	(585) 321-5358

SHEET INDEX

Before You Dig, Drill Or Blast!

Dig Safely.  
New York

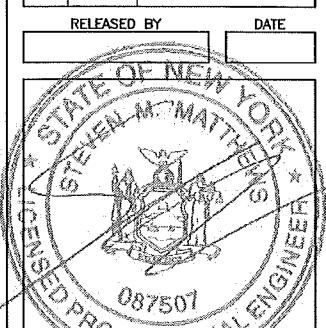
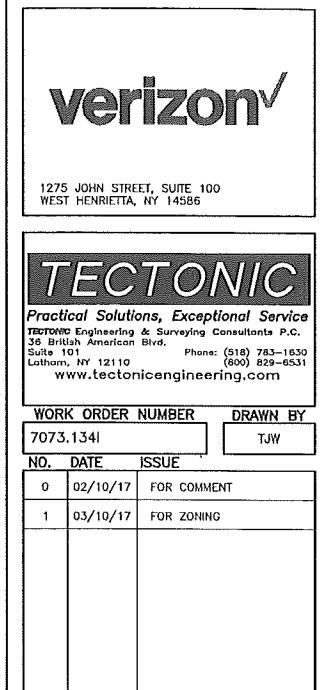
## UNDERGROUND FACILITIES

PROTECTIVE ORGANIZATION  
CALL US TOLL FREE 1-800-962-7962  
NY industrial code rule 753 requires no less than two

DIG SAFELY = NEW YORK

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED FOR 22" x 34" FULL SIZE AND 11" x 17" HALF SIZE. OTHER SIZED VERSIONS ARE NOT PRINTED TO THE SCALE SHOWN. CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



UNAUTHORIZED ALTERATION OR ADDITIONS TO A PLAN BEARING THE SEAL OF A LICENSED ENGINEER OR LAND SURVEYOR IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

COPIES OF THIS DOCUMENT WITHOUT A FACSIMILE OF THE SIGNATURE AND AN ORIGINAL EMBOSSED FINGERPRINT WILL NOT BE ADMITTED AS EVIDENCE.

DO NOT BE CONSIDERED THIS COPY

0 1

ORIGINAL SIZE IN INCHES

(22x34 FORMAT)

0 1

ORIGINAL SIZE IN INCHES  
(16x24 FORMAT)

SITE INFORMATION	
MARLBORO 9W ODAS (NODE 9)	
RE PN: 20151309132	
LC: 398841	

3 YOUNG AVENUE  
HAMLET OF MARLBORO  
ULSTER COUNTY  
NY 12542

**SHEET TITLE**

11. *Leucosia* (Leucosia) *leucostoma* (Fabricius) (Fig. 11)

**SHEET NUMBER**

## ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- ALL ELECTRICAL EQUIPMENT AND ACCESSORIES SHALL BE U.L. APPROVED OR LISTED.
- CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
- WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
- CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
- PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE USE-2 CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT RHW-2 OR XHHW-2, STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 90°C.
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- ELECTRICAL METALLIC TUBING (EMT) OR RIGID METALLIC CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT) OR RIGID METALLIC CONDUIT (RMC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- PVC SCHEDULE 40 CONDUIT SHALL BE USED UNDERGROUND EXCEPT IN AREAS OF VEHICULAR TRAFFIC. IN SUCH AREAS, PVC SCHEDULE 80 SHOULD BE USED.
- ALL OUTDOOR EXPOSED CONDUIT SHALL BE PVC SCHEDULE 80 AND SHALL BE SUPPORTED ADEQUATELY.
- LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED. LFMC SHALL CONFORM TO NEC ARTICLE 350.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- NON-METALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- IF REQUIRED, CONTRACTOR SHALL APPLY FOR ELECTRICAL SERVICE AS SOON AS POSSIBLE AND COORDINATE REQUIREMENTS, SERVICE ROUTING, AND METER SOCKET TYPE WITH LOCAL POWER COMPANY.
- CONTRACTOR SHALL OBTAIN ALL PERMITS, PAY PERMIT FEES, AND SCHEDULE INSPECTIONS.
- CONTRACTOR SHALL LABEL ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NEC 110.16 AND 110.24.
- CONTRACTOR SHALL VERIFY THAT THE MAIN BONDING JUMPER AND GROUNDING ELECTRODE CONDUCTOR IS INSTALLED PROPERLY AT SERVICE ENTRANCE.
- CONTRACTOR SHALL SEAL AROUND ALL CONDUIT PENETRATIONS THROUGH WALLS, FLOORS AND ROOFS TO PREVENT MOISTURE PENETRATION OR VERMIN INFESTATIONS.
- WHERE ELECTRICAL POWER IS TO BE SUB-FED FROM AN EXISTING DISTRIBUTION SYSTEM, THE FOLLOWING SHALL APPLY:
  - CONTRACTOR SHALL PERFORM LOAD TESTING TO DETERMINE MAXIMUM FEEDER DEMAND PER N.E.C. ARTICLE 220.
  - CONTRACTOR SHALL VERIFY WHETHER EXISTING FEEDER CAPACITY EXCEEDS VALUE CALCULATED PER N.E.C. ARTICLE 220.
  - CH. EACH BRANCH CIRCUIT PROTECTIVE DEVICE SHALL HAVE SAME INTERRUPTING RATING AS EQUIPMENT SUPPLYING IT.
  - PREFERRED MEANS OF SUPPLY SHALL BE A BRANCH CIRCUIT PROTECTIVE DEVICE LOCATED IN EXISTING PANEL.
- DURING TRENCH BACK-FILLING FOR EACH UNDERGROUND ELECTRICAL, TELEPHONE, SIGNAL AND COMMUNICATIONS LINE, PROVIDE A CONTINUOUS UNDERGROUND WARNING TAPE TWELVE INCHES BELOW FINISHED GRADE.

## ANTENNA MOUNTING NOTES

- DESIGN AND CONSTRUCTION OF ANTENNA SUPPORTS SHALL CONFORM TO ANSI/TIA-222-G "STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS". THE BUILDING CODE OF NEW YORK STATE, AND ALL OTHER APPLICABLE LOCAL, STATE, AND FEDERAL CODES.
- ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS OTHERWISE NOTED.
- ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
- DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED BY COLD GALVANIZING IN ACCORDANCE WITH ASTM A780.
- ALL ANTENNA MOUNTS SHALL BE INSTALLED WITH DOUBLE NUTS AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- DESIGN OF THE ANTENNA MOUNTING BRACKETS, SUPPORTS, AND ALL COMPONENTS THEREOF AND ATTACHMENT THERETO SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. MANUFACTURER SHALL PROVIDE THE OWNER DRAWINGS DETAILING ALL COMPONENTS OF THE ASSEMBLY, INCLUDING CONNECTIONS, DESIGN LOADS, AND ALL OTHER PERTINENT DATA. MANUFACTURER SHALL ALSO PROVIDE THE OWNER WITH A STATEMENT OF COMPLIANCE, INDICATING THAT THE ANTENNA SUPPORTS HAVE BEEN DESIGNED IN ACCORDANCE WITH ANSI/TIA-222-G STANDARDS. ALL SUBMISSIONS SHALL BEAR THE SIGNATURE AND SEAL OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.

## STRUCTURAL NOTES

- DESIGN REQUIREMENTS PER 2015 NEW YORK STATE BUILDING CODE, ANSI/TIA-222-G "STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS", AND ALL OTHER APPLICABLE LOCAL, STATE, AND FEDERAL CODES.

## GROUNDING NOTES

### GROUND TESTING AFTER CONSTRUCTION

AFTER COMPLETION OF CONSTRUCTION OF THE CELL SITE GROUND SYSTEM, A QUALIFIED INDEPENDENT ELECTRICAL TESTING FIRM WITH A QUALIFIED TECHNICIAN USING APPROVED TEST EQUIPMENT, SHALL TEST THE SITE TO ASCERTAIN THE RESISTANCE TO EARTH AS SPECIFIED IN VERIZON WIRELESS NETWORK STANDARDS AND NATIONAL ELECTRIC CODE.

SOIL RESISTIVITY TESTING METHOD TO BE FOUR-POINT RESISTIVITY TEST WITH A DESIRED RESULT LIMIT OF FIVE (5) OHMS OR LESS.

NOTE: GROUNDING TEST TO BE TAKEN BEFORE A/C POWER NEUTRAL / GROUND BOND IS CONNECTED.

A GROUNDING RESISTANCE TEST REPORT SHALL BE PREPARED UPON COMPLETION OF THE TESTING. THE TEST REPORT SHALL SHOW THE RESISTANCE IN OHMS AT 62% SPACING AND WITH AUXILIARY POTENTIAL ELECTRODES READINGS AT 10% INTERVALS WITH A TOTAL DISTANCE OF AT LEAST 250 FT. OR UNTIL THE AVERAGE RESISTANCE STARTS INCREASING. TESTING SHOULD BE COMPLETED IN A MINIMUM OF TWO (2) DIFFERENT DIRECTIONS AT 90 DEGREES APART.

TEST REPORT SHALL CONTAIN 10 TO 15 PHOTOGRAPHS TAKEN DURING CONSTRUCTION TO PROVIDE PROOF THAT THE ENTIRE EXTERNAL GROUND RING SYSTEM WAS COMPLETE BEFORE BACKFILLING. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION SUPERVISOR NO LESS THAN 48 HOURS IN ADVANCE OF BACKFILL.

REPORT: CONTRACTOR SHALL PREPARE THREE (3) TEST REPORTS, CERTIFIED BY THE TESTING ORGANIZATION, INCLUDE OBSERVATIONS OF WEATHER, SOIL CONDITIONS, AND OTHER PHENOMENA THAT MAY AFFECT TEST RESULTS. DESCRIBE MEASURES TO IMPROVE TEST RESULTS. REPORTS SHALL BE SUBMITTED TO CLIENT WITHIN ONE WEEK OF TEST COMPLETION FOR SITE.

## GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NEW YORK STATE BUILDING CODE, AND ALL OTHER APPLICABLE CODES AND ORDINANCES.
- CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND MAKE PROVISIONS AS TO THE COST THEREOF.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS OTHERWISE NOTED. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO EFFECT ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- DIMENSIONS SHOWN ARE TO FINISH SURFACES, UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS. SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, EXISTING CONDITIONS AND/OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE CARRIER'S AUTHORIZED REPRESENTATIVE OR THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
- CONTRACTOR SHALL RECEIVE CLARIFICATION IN WRITING, AND SHALL RECEIVE IN WRITING AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEMS NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND TO BE IN THE FIELD.
- CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE BEST CONSTRUCTION SKILLS AND ATTENTION. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT, UNLESS OTHERWISE NOTED.
- ERCTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMEN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS, AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS.
- CONTRACTOR SHALL COORDINATE HIS WORK AND SCHEDULE HIS ACTIVITIES AND WORKING HOURS IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE WORK OF OTHERS AS IT MAY RELATE TO RADIO EQUIPMENT, ANTENNAS AND ANY OTHER PORTIONS OF THE WORK.
- CONTRACTOR SHALL MAINTAIN LIABILITY INSURANCE TO PROTECT THE OWNER AND CARRIER.
- INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- MAKE NECESSARY PROVISIONS TO PROTECT EXISTING SURFACES, EQUIPMENT, IMPROVEMENTS, PIPING, ANTENNA AND ANTENNA CABLES. REPAIR ANY DAMAGE THAT OCCURS DURING CONSTRUCTION.
- REPAIR ALL EXISTING SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND WITH ADJACENT SURFACES.
- KEEP CONTRACT AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS AND RUBBISH. EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OF THE OWNER SHALL BE REMOVED. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ITEMS UNTIL COMPLETION OF CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
- CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS AND INSPECTIONS AND PAY ALL REQUIRED FEES.
- PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A-10-BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE BUILDOUT AREA DURING CONSTRUCTION.
- ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS AND OTHER DOCUMENTATION SHALL BE TURNED OVER TO CARRIER AT COMPLETION OF CONSTRUCTION.
- COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF ACCEPTANCE BY CARRIER. ANY WORK, MATERIALS, OR EQUIPMENT FOUND TO BE DEFECTIVE DURING THAT PERIOD SHALL BE CORRECTED IMMEDIATELY UPON WRITTEN NOTIFICATION AT NO ADDITIONAL COST TO CARRIER.
- RIGGING OPERATIONS SHALL BE DONE IN ACCORDANCE WITH STATE AND FEDERAL SAFETY REGULATIONS (OSHA). ENGINEER, CARRIER AND THE OWNER SHALL BE HELD HARMLESS IN THE EVENT THE CONTRACTOR DOES NOT FOLLOW SUCH SAFETY REGULATIONS.
- CONTRACTOR SHALL PROVIDE ACCESS TO THE SITE AND ASSIST THE RADIO EQUIPMENT VENDOR AND THE ANTENNA INSTALLATION CONTRACTOR AS THEY MAY REQUIRE.

**verizon**  
1275 JOHN STREET, SUITE 100  
WEST HENRIETTA, NY 14586

**TECTONIC**  
Practical Solutions, Exceptional Service  
Engineering, Surveying, Consulting P.C.  
36 British American Blvd. Suite 101, Latham, NY 12110  
Phone: (518) 783-1630 (800) 829-8531  
www.tectonicengineering.com

WORK ORDER NUMBER **7073.1341** DRAWN BY **TJW**  
NO. **0** DATE **02/10/17** ISSUE **FOR COMMENT**  
NO. **1** DATE **03/10/17** ISSUE **FOR ZONING**

RELEASED BY **STEVEN M. MATTHEWS** DATE **02/10/17**  
STATE OF NEW YORK  
STEVEN M. MATTHEWS  
PROFESSIONAL ENGINEER  
087501

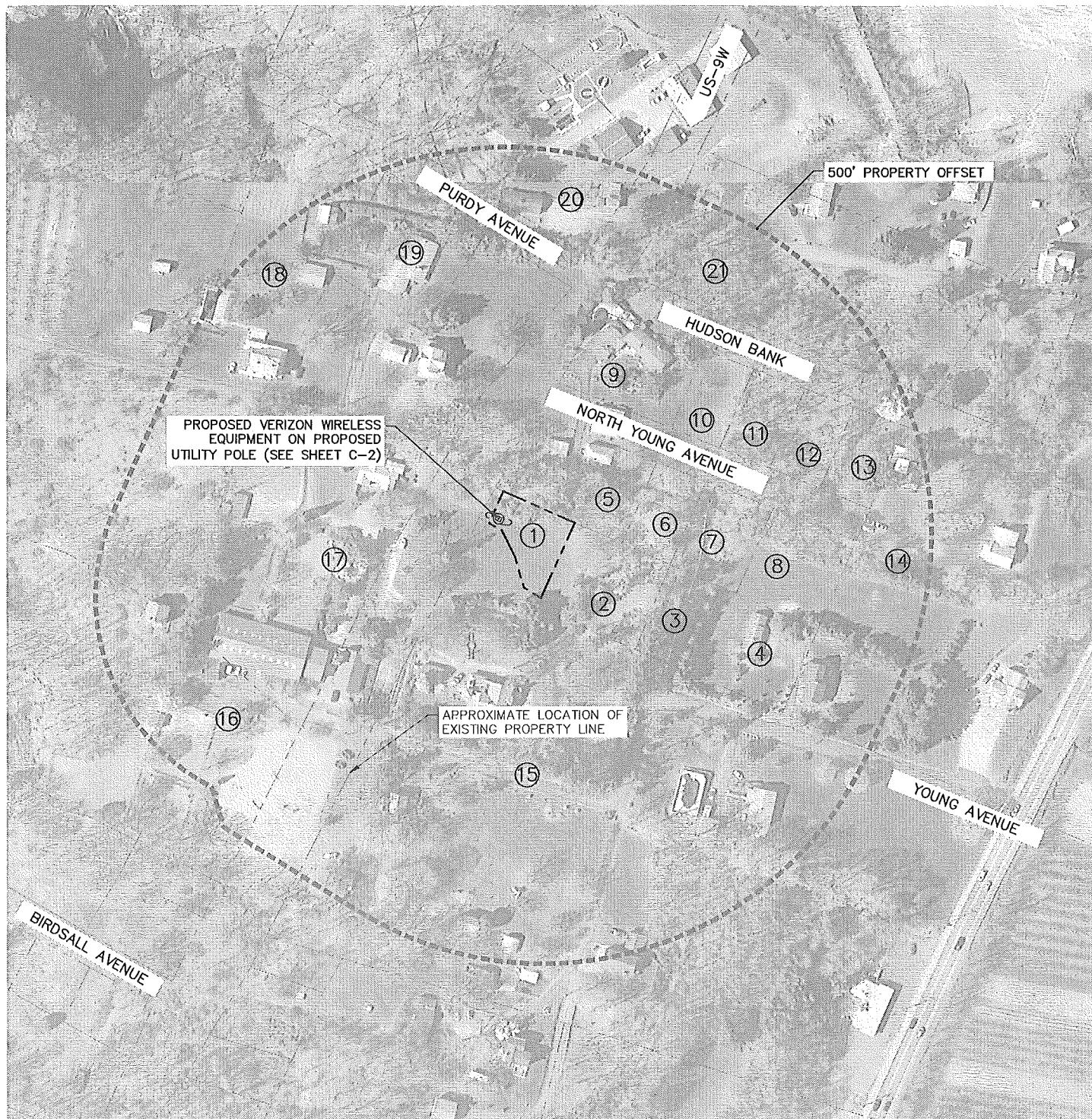
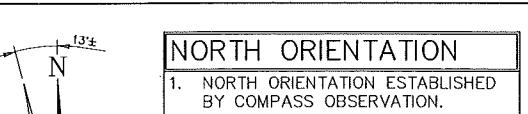
UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING THE SEAL OF A LICENSED ENGINEER OR LAND SURVEYOR IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.  
COPIES OF THIS DOCUMENT WITHOUT A FASCIPE OF THE SIGNATURE AND AN ORIGINAL EMBOSSED SEAL OR ORIGINAL STAMP IN BLUE OR RED INK OF THE PROFESSIONAL ENGINEER OR LAND SURVEYOR SHALL NOT BE CONSIDERED VALID COPIES.

0 1  
ORIGINAL SIZE IN INCHES  
(22x34 FORMAT)

0 1  
ORIGINAL SIZE IN INCHES  
(11x17 FORMAT)

SITE INFORMATION  
MARLBORO 9W ODAS (NODE 9)  
RE PN: 20151309132  
LC: 398841  
SITE ADDRESS  
3 YOUNG AVENUE  
HAMLET OF MARLBORO  
ULSTER COUNTY  
NY 12542  
SHEET TITLE  
GENERAL NOTES

SHEET NUMBER  
**GN-1**



**NOTE:**

1. THE PROPERTY LINES HEREON ARE APPROXIMATE BASED ON GIS DATA AND ARE FOR ORIENTATION PURPOSES ONLY. THEY DO NOT REPRESENT A PROPERTY/BOUNDARY DECISION BY A LAND SURVEYOR.

**ADJOINERS PLAN**

1  
AD-1

SCALE: 1" = 200' (11 x 17)  
1" = 100' (22 x 34)

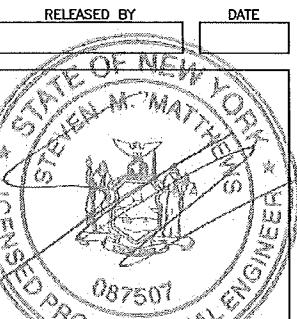
**ADJOINERS LIST**

2  
AD-1

SCALE: NTS



WORK ORDER NUMBER	DRAWN BY
7073.1341	TJW
NO. DATE	ISSUE
0 02/10/17	FOR COMMENT
1 03/10/17	FOR ZONING



UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING THE SEAL OF A LICENSED ENGINEER OR LAND SURVEYOR IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.  
COPIES OF THIS DOCUMENT WITHOUT A FASCIPE OF THE SIGNATURE AND AN ORIGINAL EMBOSSED SEAL OR ORIGINAL STAMP IN BLUE OR RED INK OF THE PROFESSIONAL ENGINEER OR LAND SURVEYOR SHALL NOT BE CONSIDERED VALID COPIES.

0 1  
ORIGINAL SIZE IN INCHES  
(22x34 FORMAT)

0 1  
ORIGINAL SIZE IN INCHES  
(11x17 FORMAT)

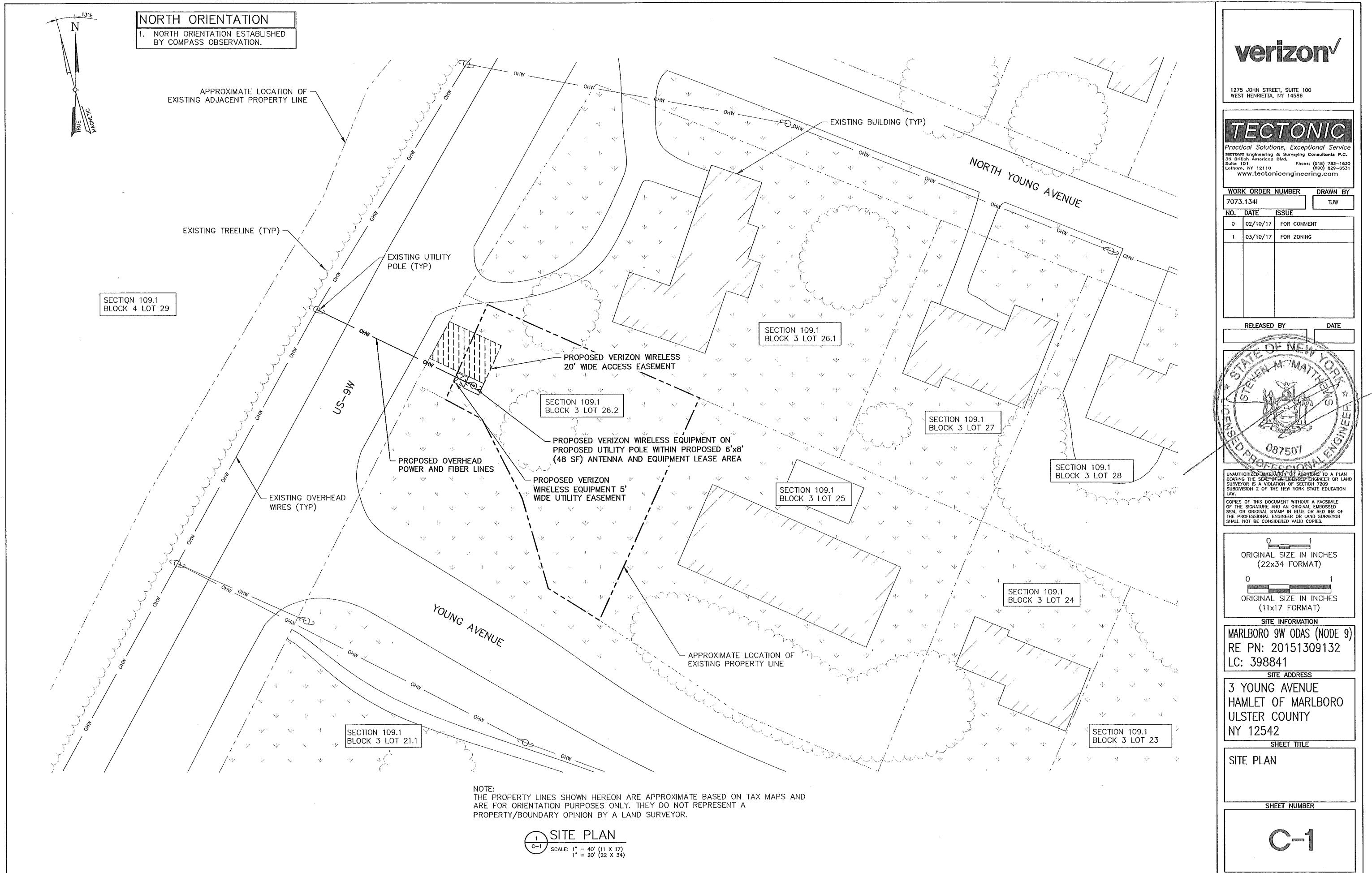
**SITE INFORMATION**  
MARLBORO 9W ODAS (NODE 9)  
RE PN: 20151309132  
LC: 398841

**SITE ADDRESS**  
3 YOUNG AVENUE  
HAMLET OF MARLBORO  
ULSTER COUNTY  
NY 12542

**SHEET TITLE**  
ADJOINERS PLAN

**SHEET NUMBER**  
**AD-1**





verizon

1275 JOHN STREET, SUITE 100  
WEST HENRIETTA, NY 14586

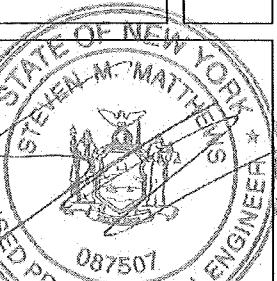
TECTONIC

Practical Solutions, Exceptional Service  
Surveying Engineering & Consulting Services P.C.  
36 British American Blvd. Phone: (518) 783-1630  
Suite 101 Latham, NY 12110 (800) 829-5531  
www.tectonicengineering.com

WORK ORDER NUMBER DRAWN BY  
7073.1341 TJW

NO.	DATE	ISSUE
0	02/10/17	FOR COMMENT
1	03/10/17	FOR ZONING

RELEASED BY DATE



UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING THE SEAL OF A LICENSED ENGINEER OR LAND SURVEYOR IS A VIOLATION OF SECTION 7209, SECTION 2 OF THE NEW YORK STATE EDUCATION LAW.  
COPIES OF THIS DOCUMENT WITHOUT A FACSIMILE OF THE SIGNATURE AND AN ORIGINAL EMBOSSED SEAL OR ORIGINAL STAMP IN BLUE OR RED INK OF THE PROFESSIONAL ENGINEER OR LAND SURVEYOR SHALL NOT BE CONSIDERED VALID COPIES.

0 1  
ORIGINAL SIZE IN INCHES (22x34 FORMAT)  
0 1  
ORIGINAL SIZE IN INCHES (11x17 FORMAT)

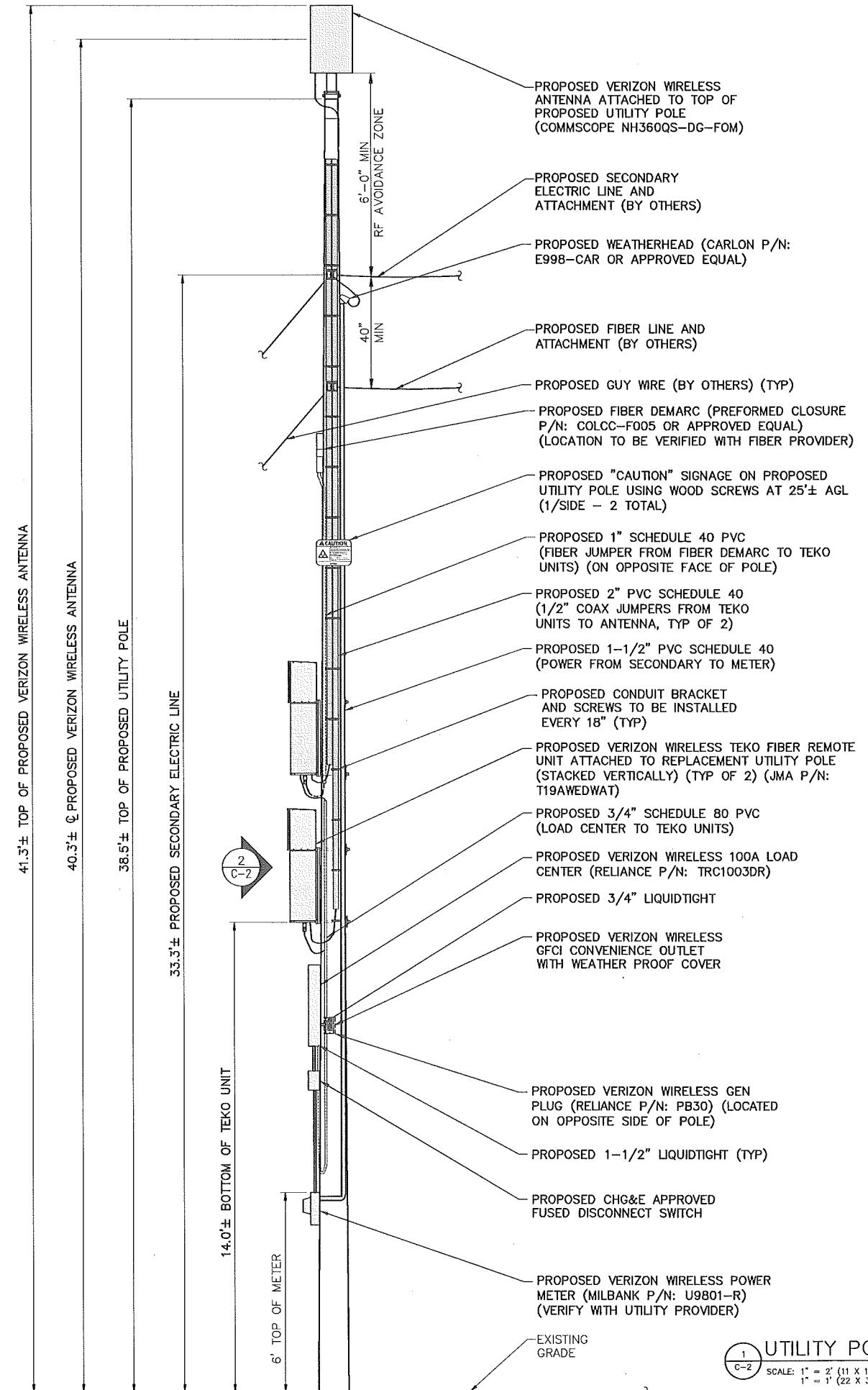
SITE INFORMATION  
MARLBORO 9W ODAS (NODE 9)  
RE PN: 20151309132  
LC: 398841

SITE ADDRESS  
3 YOUNG AVENUE  
HAMLET OF MARLBORO  
ULSTER COUNTY  
NY 12542

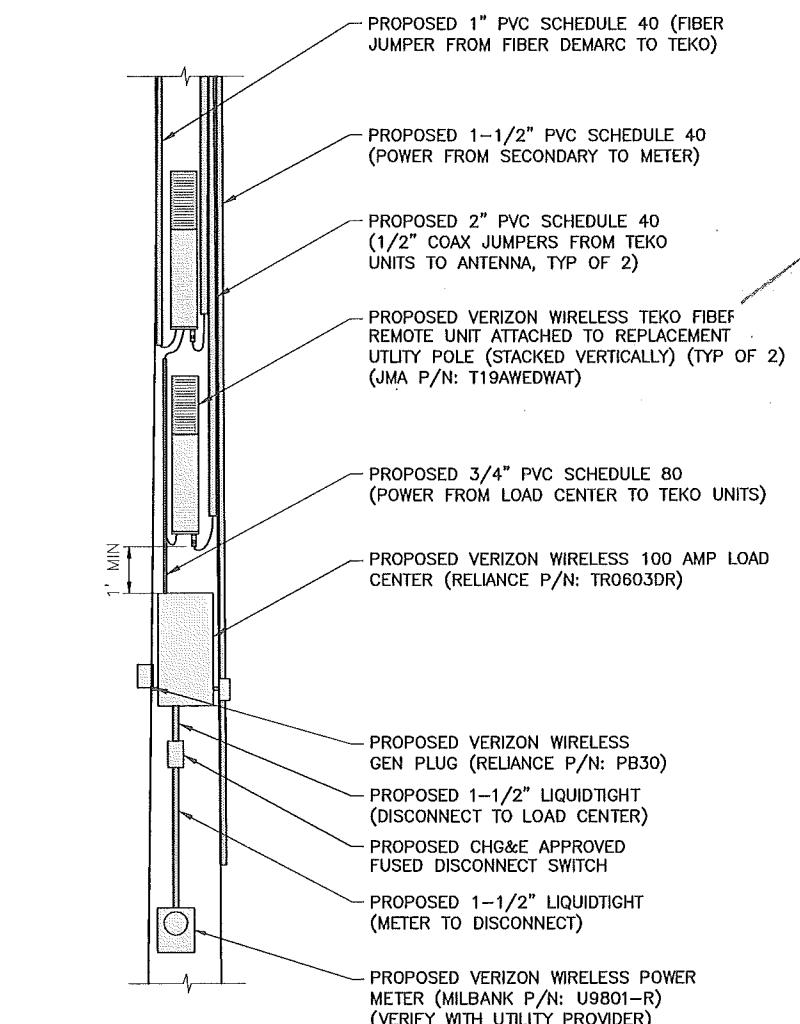
SHEET TITLE  
ELEVATIONS

SHEET NUMBER

C-2



UTILITY POLE ELEVATION  
1 2  
C-2  
SCALE: 1" = 2' (11 X 17)  
1" = 1' (22 X 34)



ELABORATION DETAIL  
1 2  
C-2  
SCALE: 1" = 2' (11 X 17)  
1" = 1' (22 X 34)

verizon

1275 JOHN STREET, SUITE 100  
WEST HENRIETTA, NY 14586

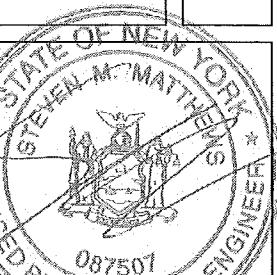
TECTONIC

Practical Solutions, Exceptional Service  
Surveying Engineering & Consulting Services P.C.  
36 British American Blvd. Phone: (518) 783-1630  
Suite 101 Latham, NY 12110 (800) 829-6531  
www.tectonicengineering.com

WORK ORDER NUMBER DRAWN BY  
7073.1341 TJW

NO. DATE ISSUE  
0 02/10/17 FOR COMMENT  
1 03/10/17 FOR ZONING

RELEASED BY DATE



UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING THE SEAL OF A LICENSED ENGINEER OR LAND SURVEYOR IS A VIOLATION OF SECTION 7209, DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.  
COPIES OF THIS DOCUMENT WITHOUT A FACSIMILE OF THE SIGNATURE AND AN ORIGINAL EMBOSSED SEAL OR ORIGINAL STAMP IN BLUE OR RED INK OF THE PROFESSIONAL ENGINEER OR LAND SURVEYOR SHALL NOT BE CONSIDERED VALID COPIES.

0 1  
ORIGINAL SIZE IN INCHES (22x34 FORMAT)  
0 1  
ORIGINAL SIZE IN INCHES (11x17 FORMAT)

SITE INFORMATION  
MARLBORO 9W ODAS (NODE 9)  
RE PN: 20151309132  
LC: 398841

SITE ADDRESS

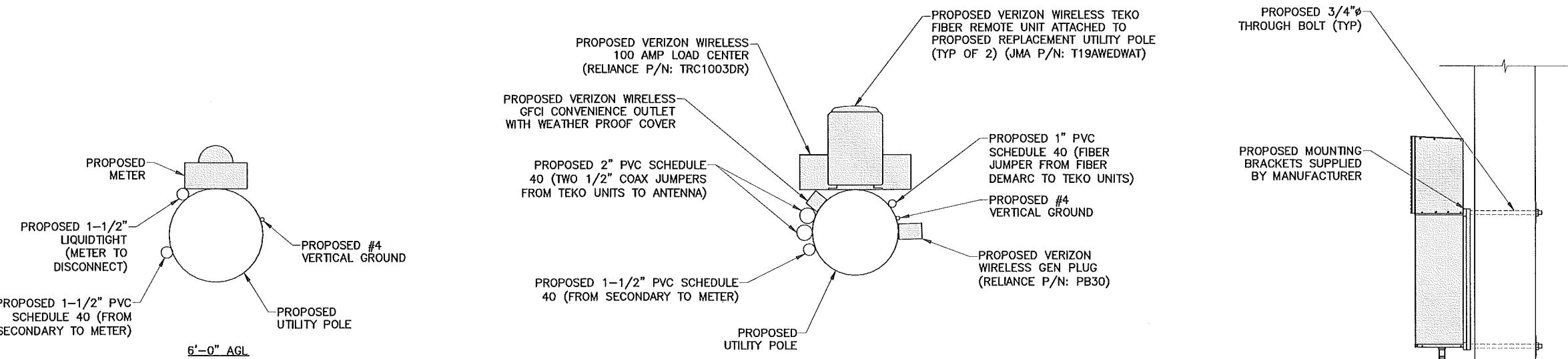
3 YOUNG AVENUE  
HAMLET OF MARLBORO  
ULSTER COUNTY  
NY 12542

SHEET TITLE

UTILITY POLE MOUNTING DETAILS

SHEET NUMBER

C-3

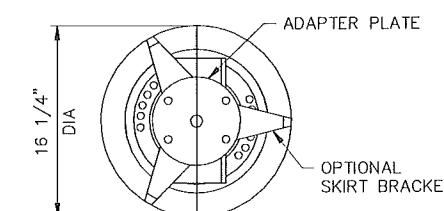


NOTE:

1. EQUIPMENT PLACEMENT ON POLE TO BE VERIFIED IN FIELD.

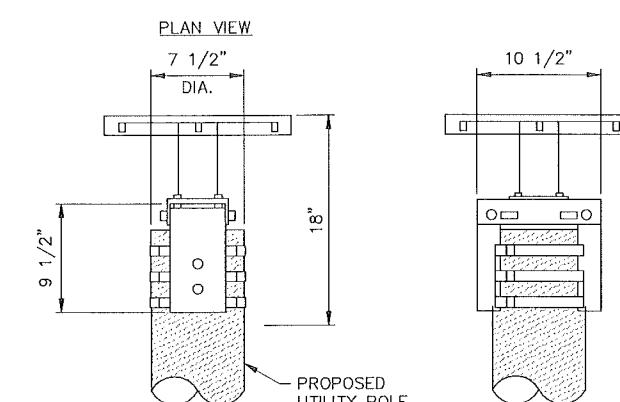
#### 1 UTILITY POLE SECTION DETAIL

C-3 SCALE: 3" = 1'-0" (11 X 17)  
1-1/2" = 1'-0" (22 X 34)



#### 2 UTILITY POLE SECTION DETAIL

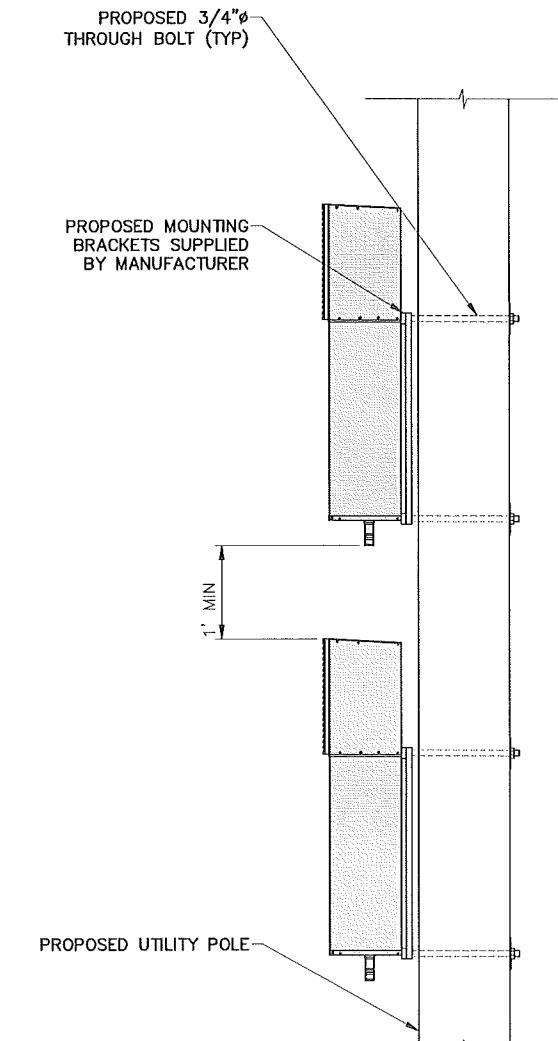
C-3 SCALE: 3" = 1'-0" (11 X 17)  
1-1/2" = 1'-0" (22 X 34)



SIDE ELEVATION  
FRONT ELEVATION  
BRACKET HEIGHT 16.75"  
BRACKET WIDTH 5"  
BRACKET LENGTH 11"  
HEIGHT WITH SKIRT 18"  
BRACKET WEIGHT 16LBS

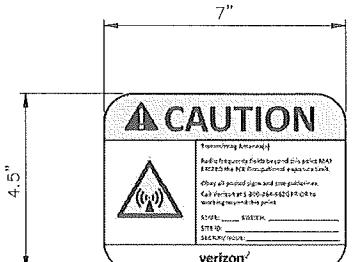
#### 4 POLE-TOP MOUNTING DETAILS

C-3 SCALE: NTS



#### 3 TEKO UNIT MOUNTING DETAIL

C-3 SCALE: 2" = 1'-0" (11 X 17)  
1" = 1'-0" (22 X 34)



NOTE:

1. ATTACH "CAUTION" SIGNAGE TO FACE OF PROPOSED UTILITY POLE AT 25' ± AGL USING 1" WOOD SCREWS

#### 5 PROPOSED SIGNAGE

C-3 SCALE: NTS

verizon

1275 JOHN STREET, SUITE 100  
WEST HENRIETTA, NY 14586

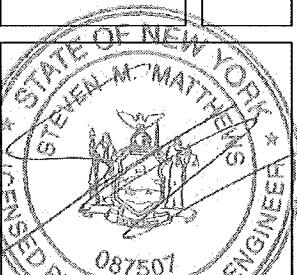
TECTONIC

Practical Solutions, Exceptional Service  
Tectonic Engineering & Surveying Consultants P.C.  
36 British American Blvd. Phone: (518) 783-1630  
Suite 101 (800) 429-6531  
Latham, NY 12110  
www.tectonicengineering.com

WORK ORDER NUMBER DRAWN BY  
7073.1341 TJW

NO. DATE ISSUE  
0 02/10/17 FOR COMMENT  
1 03/10/17 FOR ZONING

RELEASED BY DATE



UNAUTHORIZED ALTERATION OR ADDITION TO A PLAN BEARING THE SEAL OF A LICENSED ENGINEER OR LAND SURVEYOR IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.  
COPIES OF THIS DOCUMENT WITHOUT A FACSIMILE OF THE SIGNATURE AND AN ORIGINAL EMBOSSED SEAL OR ORIGINAL STAMP IN BLUE OR RED INK OF THE PROFESSIONAL ENGINEER OR LAND SURVEYOR SHALL NOT BE CONSIDERED VALID COPIES.

0 1  
ORIGINAL SIZE IN INCHES  
(22x34 FORMAT)  
0 1  
ORIGINAL SIZE IN INCHES  
(11x17 FORMAT)

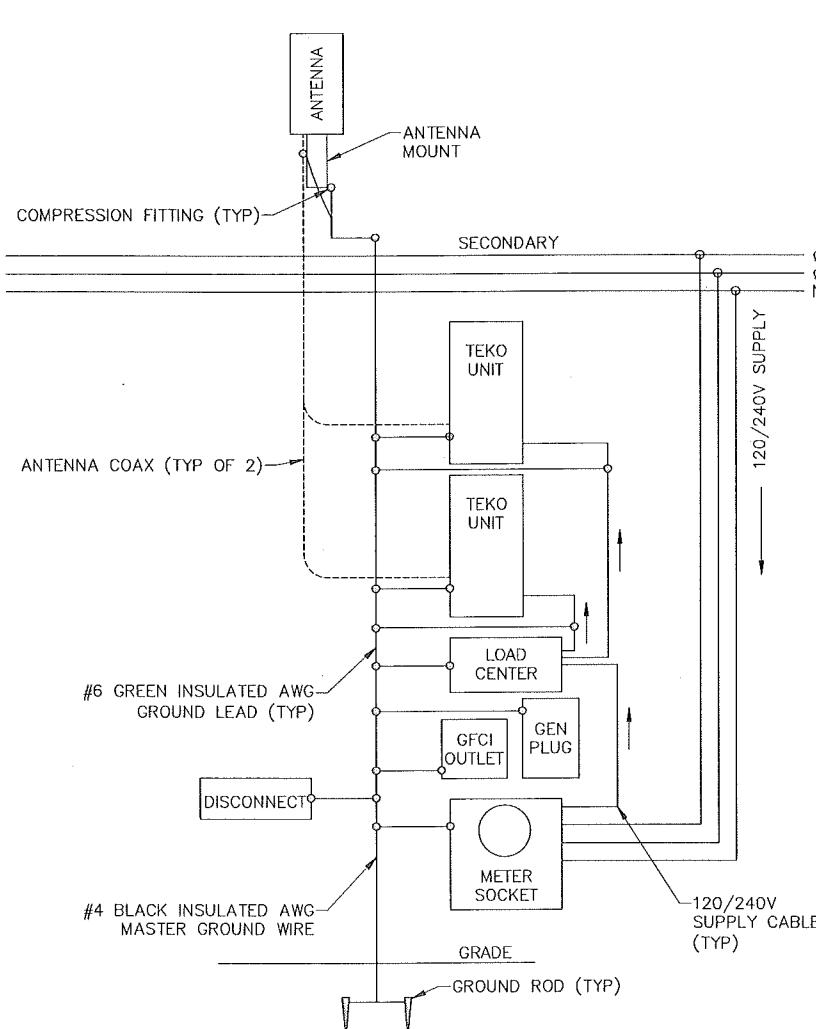
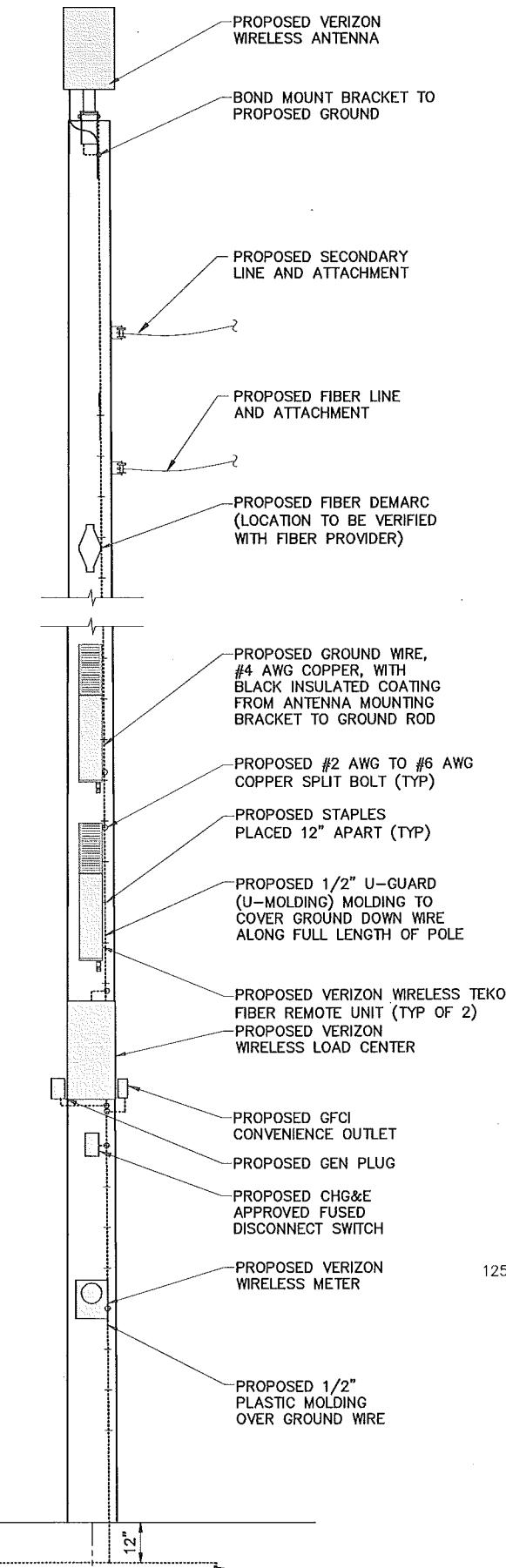
SITE INFORMATION  
MARLBORO 9W ODAS (NODE 9)  
RE PN: 20151309132  
LC: 398841

SITE ADDRESS  
3 YOUNG AVENUE  
HAMLET OF MARLBORO  
ULSTER COUNTY  
NY 12542

SHEET TITLE  
GROUNDING DETAILS

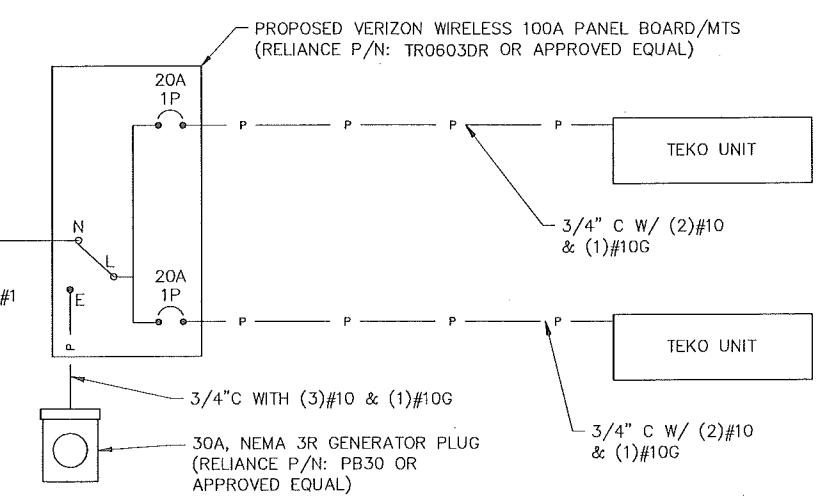
SHEET NUMBER

E-1

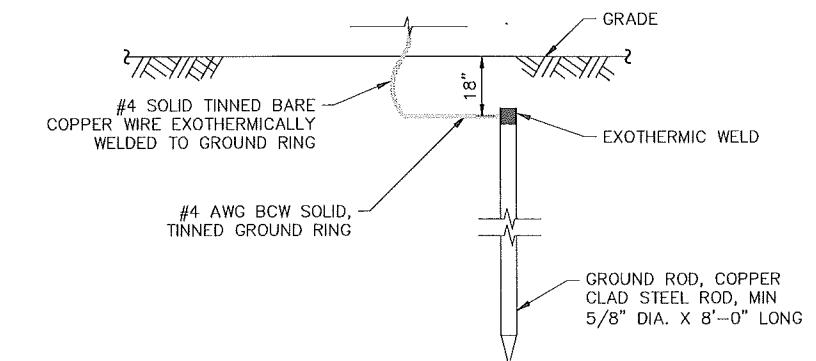


GROUNDING RISER DIAGRAM  
2 E-1 SCALE: NTS

ONE LINE DIAGRAM  
3 E-1 SCALE: NTS



UTILITY POLE GROUNDING DETAIL  
1 E-1 SCALE: 1" = 4' (11 X 17)  
1" = 2' (22 X 34)



NOTE:  
GROUND ROD SHALL BE DRIVEN VERTICALLY,  
NOT TO EXCEED 45 DEGREES FROM VERTICAL.  
3 E-1 SCALE: NTS  
GROUND ROD DETAIL

0 1  
ORIGINAL SIZE IN INCHES  
(22x34 FORMAT)  
0 1  
ORIGINAL SIZE IN INCHES  
(11x17 FORMAT)

SITE INFORMATION

MARLBORO 9W ODAS (NODE 9)

RE PN: 20151309132

LC: 398841

SITE ADDRESS

3 YOUNG AVENUE  
HAMLET OF MARLBORO  
ULSTER COUNTY

NY 12542

SHEET TITLE

GROUNDING DETAILS

SHEET NUMBER



Network Engineering

1275 John Street

West Henrietta, NY 14586

### **Marlboro 9W ODAS (node 9) Communications Facility**

#### **Site Selection Analysis**

The purpose of this analysis is to describe the general methodology of locating new wireless communications sites for Verizon Wireless.

Verizon Wireless currently operates a wireless communications network in the County of Ulster pursuant to various FCC Licenses. Verizon Wireless regularly monitors its network to ensure that it provides safe and adequate coverage for all of its customers, which include members of the general public as well as emergency personnel (i.e. fire, police and ambulance).

When a network need is identified (e.g., a gap in coverage and/or capacity constraints), the RF Engineer first determines, through a comprehensive analysis of the system performance in the surrounding network, whether the existing network can be modified to solve the problem. If this is not possible and a new wireless facility is required, the RF Engineer devises a "Search Area". A Search Area is the target area for locating a site on which to build a new wireless facility to solve the identified network performance problem. Once the Search Area is determined, it is given to a Site Acquisition Specialist for an in-depth investigation of the targeted area. The Site Acquisition Specialist then identifies appropriate locations within the Search Area to develop a new wireless telecommunications site. As part of this investigation, the Site Acquisition Specialist works closely with Verizon Wireless' land use and zoning attorneys, who review local zoning requirements with respect to the installation and operation of a new wireless telecommunications facility.



The Search Area Map for the proposed small cell is shown above. Each candidate is identified by number. The information pertaining to that candidate is detailed below the Search Area Map. In order to effectively cover the Verizon Wireless targeted coverage area, it was crucial to find an acceptable locations central to the targeted coverage area that provide the appropriate height for mounting the micro antenna. Within the Search Area Map, there were nine (9) potential locations. The nine locations were all evaluated as potential candidates.

Investigations were made with Central Hudson Gas and Electric on each of the identified poles within the Search Area. The results of those attempts, and Central Hudson's level of interest and the subsequent evaluation by the Site Acquisition Specialist is detailed within each candidate's summary below:

### **Candidate 1—Pole with transformer**

Address: Route 9W

Owner: Central Hudson Gas and Electric

Owner Interest: CHG&E was not interested due to transformer. It is the attachment policy of CHG&E to disallow any wireless attachment to a pole with a transformer.



### **Candidate 2—CHG&E with customer attachment**

Address: Route 9w

Owner: CHG&E privately leased

Owner Interest: CHG&E was not interested due to installations for another customer use. CHG&E has a private customer relationship and is unable to permit additional use. Additional safety issues arise due to limited ability to climb the pole



### Candidate 3— Proposed Pole

Address: 9W

Owner: Central Hudson Electric and Gas

Owner Interest: CHG&E was not interested in putting a new pole in due to gas line and slope



### Candidate 4—Pole with Reclosures

Address: 9W

Owner: Central Hudson Electric and Gas

Owner Interest: It is the attachment policy of CHG&E to disallow any wireless attachment to a pole with a Reclosure due to safety issues.

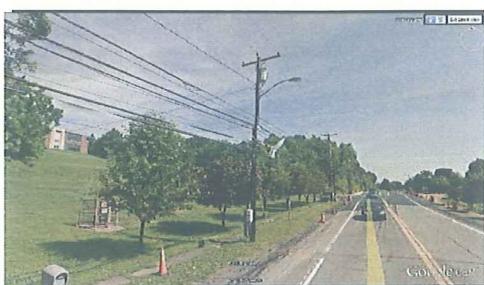


### Candidate 5—Pole with transformer

Address: Route 9W

Owner Interest: Central Hudson Electric and Gas

Consideration: CHG&E was not interested due to transformer. It is the attachment policy of CHG&E to disallow any wireless attachment to a pole with a transformer.



### **Candidate 6—Pole with attachment**

Address: Route 9W

Owner Interest: Central Hudson Electric and Gas

Consideration: CHG&E was not interested due to customer attachment. CHG&E was not interested due to installations for another customer use. CHG&E has a private customer relationship and is unable to permit additional use. Additional safety issues arise due to limited ability to climb the pole

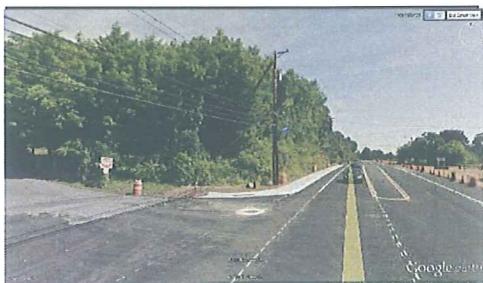


### **Candidate 7—Pole with Transformer**

Address: Route 9W

Owner Interest: Central Hudson Electric and Gas

Consideration: CHG&E was not interested due to transformer. It is the attachment policy of CHG&E to disallow any wireless attachment to a pole with a transformer.



### **Candidate 8—Pole with no available space**

Address: Route 9W

Owner Interest: Central Hudson Electric and Gas

Consideration: rejected by CHG&E due space limitations on the pole



After thoroughly canvassing this Search Ring, it has been determined that the only viable candidate is candidate number 9 located at 3 Young Ave. The eight structures shown in red, are not viable for lack of owner interest due to established Electrical and Operations standards.



## Conclusion

Verizon Wireless is proposing to install a new 41' wooden utility pole to support one (1) communications antenna and equipment, all of which will be mounted on the pole. The pole is to be located on the corner of Young Ave and US 9W and will be partially shielded by the existing vegetation. This micro cell is intended to provide "hotspot" type wireless telecommunications coverage in an area where Verizon Wireless' existing macro cell network is overburdened by exploding demand on its 4th Generation LTE network. The proposed 41' pole was the location that is viable to obtain the necessary antenna height for coverage.

Mark Kulik

Tilson Technology



Network Engineering  
1275 John Street  
West Henrietta, New York 14586

## MARLBORO 9W ODAS NODE 9 Micro Cell Communications Facility Radio Frequency Analysis

Verizon Wireless is proposing to add a micro cell facility to provide additional wireless network bandwidth and improved performance to Rte 9W and the commercial, residential area surrounding the intersection of Rte 9W and Mill House Rd in the Town of Marlborough, NY. Due to existing terrain in the surrounding area and heavy customer usage on Verizon Wireless' existing 4<sup>th</sup> Generation LTE network, Verizon Wireless' network service along Rte 9W requires improvement to meet customer demand. Because the issues involve small pockets of areas along portions of Rte 9W, Verizon Wireless' existing surrounding macro sites are not able to adequately satisfy the existing and emerging usage demand throughout this area.

With the relatively recent technological improvements in the wireless industry, particularly concerning hardware, Verizon Wireless has different tools at its disposal to resolve service issues. The appropriate tool/solution depends largely on the specific cause of the issue that requires resolution. As described above, the existing macro sites (i.e. towers) are not able to provide the necessary service.

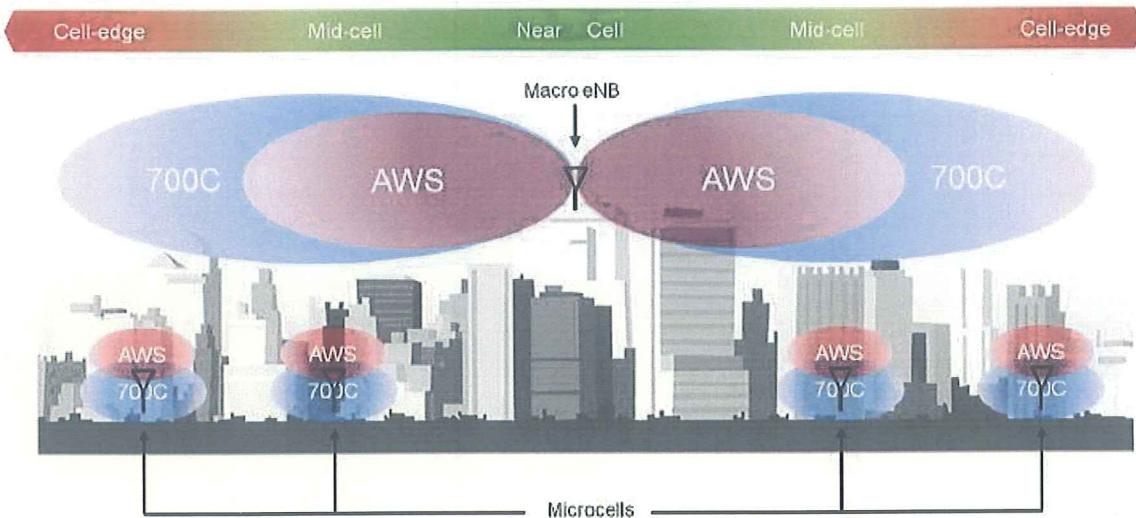
After careful consideration of the specific area to be served, Verizon Wireless has determined that the most efficient way to serve the areas in need is to deploy a series of "nodes" along the Rte 9W corridor. The overall plan is outlined in Figure 3. Although this application relates specifically to Node 5, we thought it was important to show the overall plan and the several additional nodes that are required to fill the underserved area.

The proposed micro cell is a significantly pared down version of a typical macro cell (i.e., a standard 3-sectored array as commonly seen on wireless communications facilities in Ulster County – e.g. 360 Mt Zion Rd). The micro cells are a single-sector radio unit with small external antennas that are intended to provide "hotspot" type coverage to specific buildings, malls, event venues, airports, heavily used roads, etc. or small outdoor areas where the coverage requirement is a radius of 1,000 ft. or less (or roughly a  $\frac{1}{4}$  mile).

The advent of micro cells has been primarily fueled by a few main forces:

- To meet the ever growing need for user bandwidth with Verizon Wireless' limited spectrum inventory
- To achieve better spatial reuse efficiency versus cell splitting with existing macro equipment
- To meet in-building usage and coverage demand
- To provide consistent user experience and performance across the network

As high powered macro communications facilities provide network-wide broad coverage, a layer of small cells can be under-laid beneath to create what is termed a Heterogeneous Network (HetNet). This network topology can achieve a significantly improved overall network capacity. Furthermore, as Verizon Wireless can utilize both 700MHz and 2100MHz (termed AWS) frequency bands, this provides an extra degree of freedom in overall HetNet design to achieve an even higher capacity. The diagram below is a simplified 2D illustration of Verizon Wireless' HetNet topology concept.



**Figure 1 – 4G LTE Heterogeneous Network Concept**

In a typical urban/suburban network, it is common to have high usage areas, sometimes referred to as “traffic hotspots”. These are simply highly concentrated pockets of users. These hotspots can be found anywhere within the macro cell’s coverage footprint. Hotspots located in the mid-cell and cell-edge region (refer to Figure 1) are best served by deploying micro cells. Hotspot locations where RF is relatively isolated from the macro cell signals (e.g. where there is currently insufficient RF coverage) are also good candidate locations for micro cells.

Traditionally, the primary and most effective way to increase capacity is to implement a cell split. A cell split simply refers to adding a second macro cell (either tower or rooftop) to provide coverage to the same footprint, effectively splitting the intended coverage area between two macro cells. However, continual cell splitting would yield lower and lower spectral efficiency as inter-cell interference starts to dominate. This is typical for inter-cell distances below  $\frac{1}{2}$  mile. Therefore, at short inter-cell distances the more effective way to gain capacity is to deploy micro cells as an underlay. Moreover, in a typical urban/suburban area, data users tend to be concentrated in hotspots rather than evenly distributed throughout. It is, therefore, much more effective to deploy micro cells at these congested hotspots to maximize user signal-to-noise ratio while minimizing interference generated to the macro network or nearby micro cells.

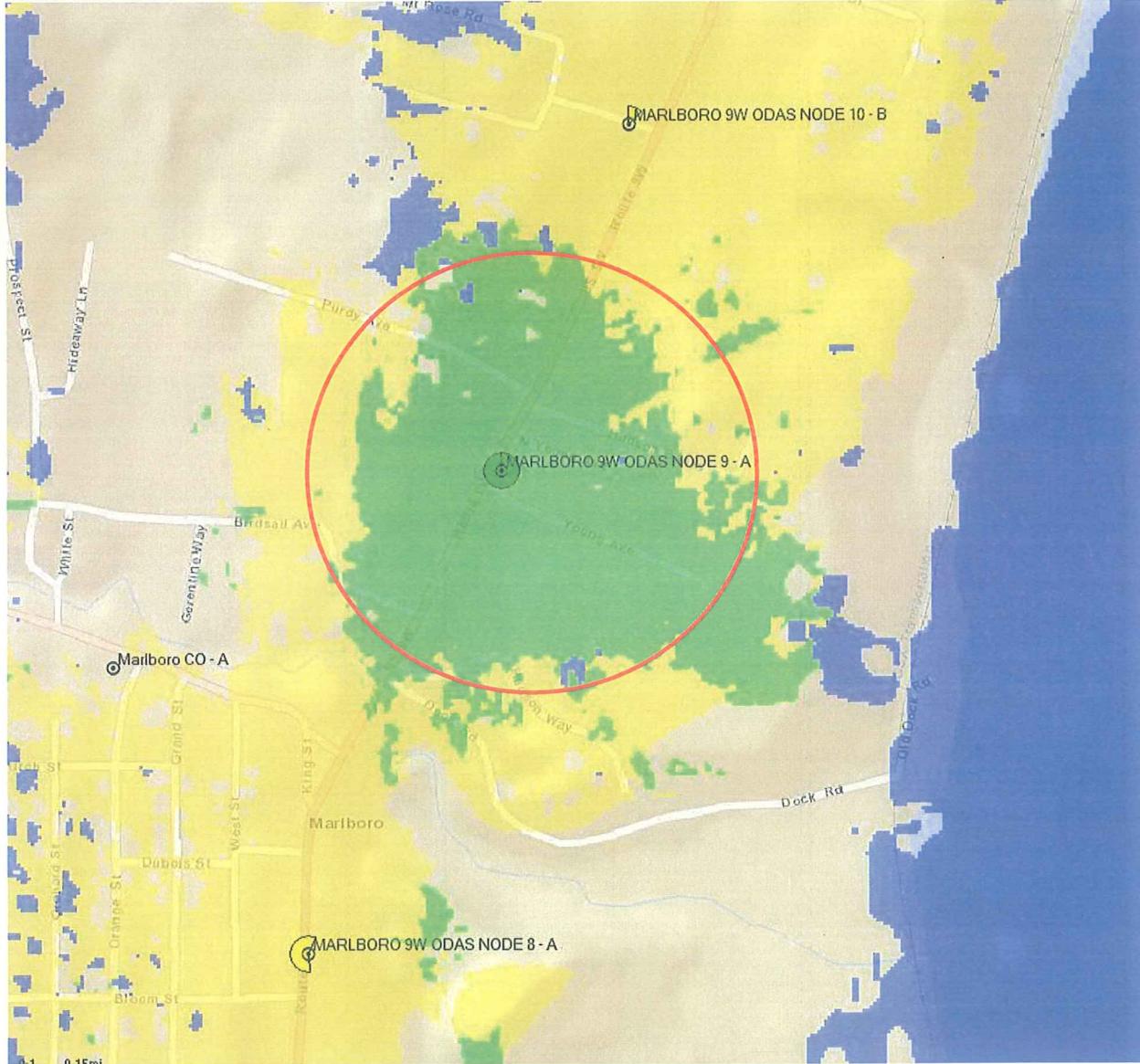
#### **General Methodology – Network Design/Micro Cell Placement**

Verizon Wireless’ approach to micro cell placement is a two part process. The first step is to identify sectors within the macro cell network that are reaching or are at maximum capacity. These sectors are deemed “exhausted”, which means one or more of its components has reached the maximum load it can handle. The result of a sector becoming exhausted varies from slow data speeds to blocked sessions for the user. The second step is to identify hotspot locations within the footprint of a specific sector. These locations are then proposed as potential micro cell locations with a goal of sufficiently offloading traffic from the macro network. With reduced traffic, all users within the macro sector’s footprint will see improved performance as a result of the activation of the proposed micro cell.

In choosing the property located at 3 Young Ave for a micro cell location, the two step process was again followed. The macro cell site currently serving the area reached its maximum capacity in January 2017 and has become overloaded and provides reduced performance to the Verizon Wireless telecommunications customers being served by this site. The propagation map in Figure 1 illustrates the areas of deficient coverage along Rte 9W that require improvement. The area surrounding 3 Young Ave is comprised of schools, businesses, and residential homes. This “traffic hotspot” area is shown in Figure 2 as the Predicted Coverage Area of the proposed micro cell. The proposed micro cell will provide localized coverage to this area and deliver immediate relief to the existing overlay (macro) network. The propagation map provided at Exhibit 1 shows the coverage of the proposed micro cell in green. The

existing coverage provided by the macro network is shown in blue. The coverage by other proposed micro cells in the area is in yellow.

The proposed micro cell is one of 11 micro cells Verizon Wireless planned in this area along Rte 9W. Figure 3 provides overall propagation map that includes other planned microcells. These micro cells along with existing macro network provide coverage on Rte 9W and surrounding commercial and residential area.



**Figure 2 – Predicted Coverage Area of the Proposed Micro Cell**



Figure 3 – Predicted Coverage Area of the all Proposed Micro Cells in the area

**Conclusion**

Verizon Wireless proposes to install one antenna (roughly 2ft high by 1ft in diameter) on top of a utility pole at 3 Young Ave with a pole mounted micro cell unit. This micro cell is intended to provide "hotspot" type wireless telecommunications coverage to the area surrounding the Rte 9W and Young Ave intersection where Verizon Wireless' network coverage is poor and its existing macro cell network is overburdened by exploding demand on its 4th Generation LTE network.

Date: February 2, 2017

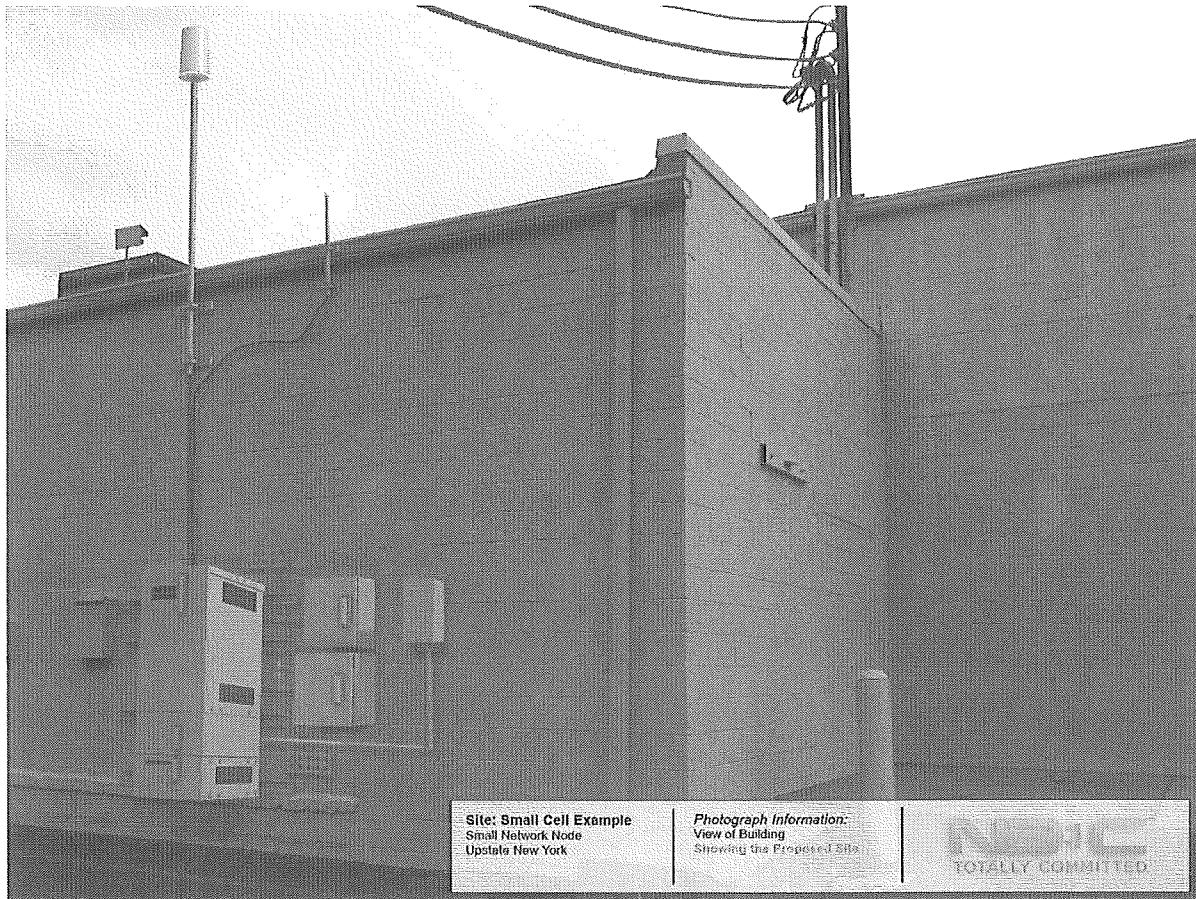
Prepared by:



Weifeng Huang  
Radio Frequency (RF) Design Engineer  
Verizon Wireless

Small Cell Solutions

- In certain localized areas that require additional system capacity (for example, areas of dense vehicular traffic, malls, event venues, college campuses, etc.), Verizon Wireless has the ability to deploy a small, non-intrusive solution to increase wireless network service and improve network performance.
- Called a microcell (or small cell), the installation consists of small equipment cabinets and one or two small antennas which utilize Verizon Wireless' 4G LTE technology.
- Microcells are intended to provide "hotspot" type coverage to specific buildings, structures or locations where the area to be covered is less than a radius of 1,000 feet.
- The microcells are sited in specific locations to help alleviate existing or projected capacity concerns affecting existing nearby traditional cell antenna locations (called macrocells – the typical panel antennas on a tower, building or water tank, etc.). In many cases, a microcell is expected to eliminate the need for an additional, traditional macrocell site.
- The main cabinet weighs approximately 450 lbs. with dimensions of two feet by two feet by four and a half feet (2x2x4.5 ft.). Looking like a typical telephone or utility cabinet, when not located in a building, the equipment is typically roof or wall mounted with little or no visual impact to the community. Verizon Wireless makes every attempt to install the cabinet equipment on the side or at the rear of a building or in other areas not normally viewed by the public.
- The system works using one or more antennas referred to as "cantennas", which are cylindrical, 24 inches tall and 15 inches in diameter. A cantenna weighs between 17 and 23 lbs., depending on the model.
- The cantennas are mounted above the roofline to "see" the service area and to provide the intended coverage.
- The coverage range is typically 500-1,000 feet.
- These systems operate at extremely low radio frequency power and are in full compliance with FCC regulations.
- The equipment operates using 110 volt A/C power.
- The installation also includes a small GPS antenna mounted in the vicinity of the equipment.
- A copy of the antenna specifications is attached.
- A simulation of an installation is attached.

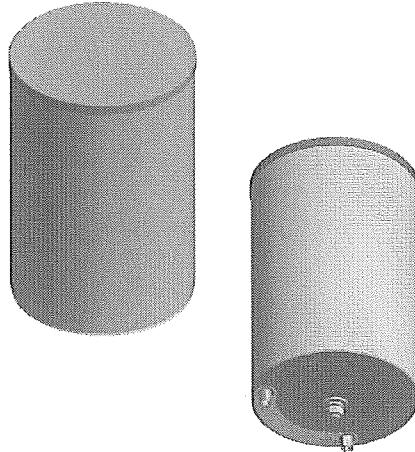


This simulation shows a typical small cell installation where the equipment cabinets are not on the interior of a building. The simulation shows the antenna (the taller pole-mounted structure) and the GPS antenna (the lower pole-mounted structure). This simulation shows typical wall mounted microcell cabinets which serve the antennas.



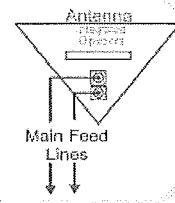
# CYL-X7CAP-2

Small Cell Cantenna X-Pol, 698-896/1710-2170MHz, 2FT



- X-Pol Small Cell
- Internally Duplexed
- Suitable for Pole or Building mount
- Dual Broadband Radiators
- Internal Beam combining
- Integrated Global Position System (GPS) option

**Includes Integrated Duplexers**  
Requires half the number of feeder cables



## Electrical Specifications

Frequency Band, MHz	698-824	824-896	1710-1880	1850-1990	1920-2170
Vertical Beamwidth, 3dB points	32.7	27.8	16.4	15.3	14.2
Polarization	+/-45°		+/-45°		
Electrical Downtilt	0°		0°		
VSWR/Return Loss, dB, Maximum	1.7:1/11.7		1.7:1/11.7		
Isolation Between Ports, dB, Minimum	-25		-25		
Intermodulation (2x20w), IM3, dBc, Maximum	-150		-150		
Impedance, ohms	50		50		
Maximum Power Per Connector, CW	250		125		

## Electrical Specifications based on Antenna Configuration

Antenna Model	No of beams	698-824		1710-1880		1920-2170	
		Beamwidth	Gain dBi	Beamwidth	Gain dBi	Beamwidth	Gain dBi
CYL-X7CAP-2-C	1	*360°	6.1	*360°	9.1	*360°	9.7
CYL-X7CAP-2-H	1	*240°	7.1	*240°	11.2	*240°	11.6
CYL-X7CAP-2-P	1	*180°	7.1	*180°	11.2	*180°	11.6
CYL-X7CAP-2-T	3	70°	10.6	62°	14	59°	14.5
CYL-X7CAP-2-B	2	70°	10.6	62°	14	59°	14.5

\* Beamwidth represented for functional purposes only. See pattern diagram for beam shape

**GPS Specification 26dB Internal amplifier with Enhanced Narrow Band Filtering**

Frequency	Amplifier Gain	VSWR	Maximum Noise	Voltage Range	Current @ 5V	Filtering	Out of band rejection	Lightening protection
1575.42Mhz ±1.2Mhz	26.5dB ± 3dB	<2.0:1	4.5dB @ 25°C	3.3 - 12V regulated	40mA	4 stages including pre-selector	65dB @ 1559Mhz 65dB @ 1625Mhz	EN61000-4-5 Level 4

**Mechanical Specifications**

Dimensions, Height/Diameter	24.2/15.1 in (615/384 mm)
Antenna RF Connector Type	7/16 DIN Female
Antenna RF Connector Torque	DIN 220-265 lbf-in (23-30 N-m)
GPS Connector Type	Mini DIN Female (4.1-9.5 per IEC 61169-4)
GPS Connector Torque	Mini-DIN 88.5 lbf-in (10 Nm)
Connector Location	Bottom
Radome Material	PVC
Wind Survival	150 mph (241 km/h)
Front Wind Load	45.9 lbf (204.18N) @100mph
Equivalent Flat Plate	0.91 sq-ft (c=2) @ 100mph

**Mechanical Specification based on Antenna Configuration**

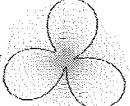
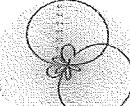
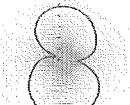
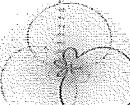
Antenna model	Beam configuration	Connector			Antenna weight (Estimate)	Antenna w GPS option
		Antenna 7/16 DIN	GPS Mini-DIN	Antenna		
CYL-X7CAP-2-C	Omni Clover	2	1	22 lbs (10 kg)	23 lbs (10.4 kg)	
CYL-X7CAP-2-H	Omni Heart	2	1	22 lbs (10 kg)	23 lbs (10.4 kg)	
CYL-X7CAP-2-P	Omni Peanut	2	1	17 lbs (7.7 kg)	18 lbs (8.2 kg)	
CYL-X7CAP-2-T	Tri-Sector	6	1	22 lbs (10 kg)	23 lbs (10.4 kg)	
CYL-X7CAP-2-B	Bi-Sector	4	1	17 lbs (7.7 kg)	18 lbs (8.2 kg)	



# CYL-X7CAP-2

Small Cell Cantenna X-Pol, 698-896/1710-2170MHz, 2FT

## Order Information

Models	Description
 CYL-X7CAP-2-C	OMNI CLOVER
CYL-X7CAP-2-C CYL-X7CAP-2-C-G	Cantenna with 2 DIN connectors Clover Omni pattern with integrated Duplexer Cantenna with 2 DIN connectors Clover Omni pattern w integrated Duplexer & GPS with 1 mini-DIN
 CYL-X7CAP-2-H	OMNI HEART
CYL-X7CAP-2-H CYL-X7CAP-2-H-G	Cantenna with 2 DIN connectors Heart Omni pattern with integrated Duplexer Cantenna with 2 DIN connectors Heart Omni pattern w integrated Duplexer & GPS with 1 mini-DIN
 CYL-X7CAP-2-P	OMNI PEANUT
CYL-X7CAP-2-P CYL-X7CAP-2-P-G	Cantenna with 2 DIN connectors Peanut Omni pattern with integrated Duplexer Cantenna with 2 DIN connectors Peanut Omni pattern w integrated Duplexer & GPS with 1 mini-DIN
 CYL-X7CAP-2-T	THREE SECTORS
CYL-X7CAP-2-T CYL-X7CAP-2-T-G	Cantenna with 6 DIN connectors (3) 65° sectors with integrated Duplexer Cantenna with 6 DIN connectors (3) 65° sectors with integrated Duplexer & GPS with 1 mini-DIN
 CYL-X7CAP-2-B	TWO SECTORS
CYL-X7CAP-2-B CYL-X7CAP-2-B-G	Cantenna with 4 DIN connectors (2) 65° sectors with integrated Duplexer Cantenna with 4 DIN connectors (2) 65° sectors with integrated Duplexer & GPS with 1 mini-DIN

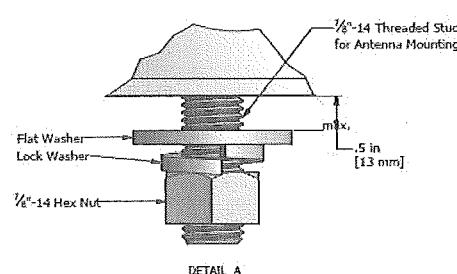
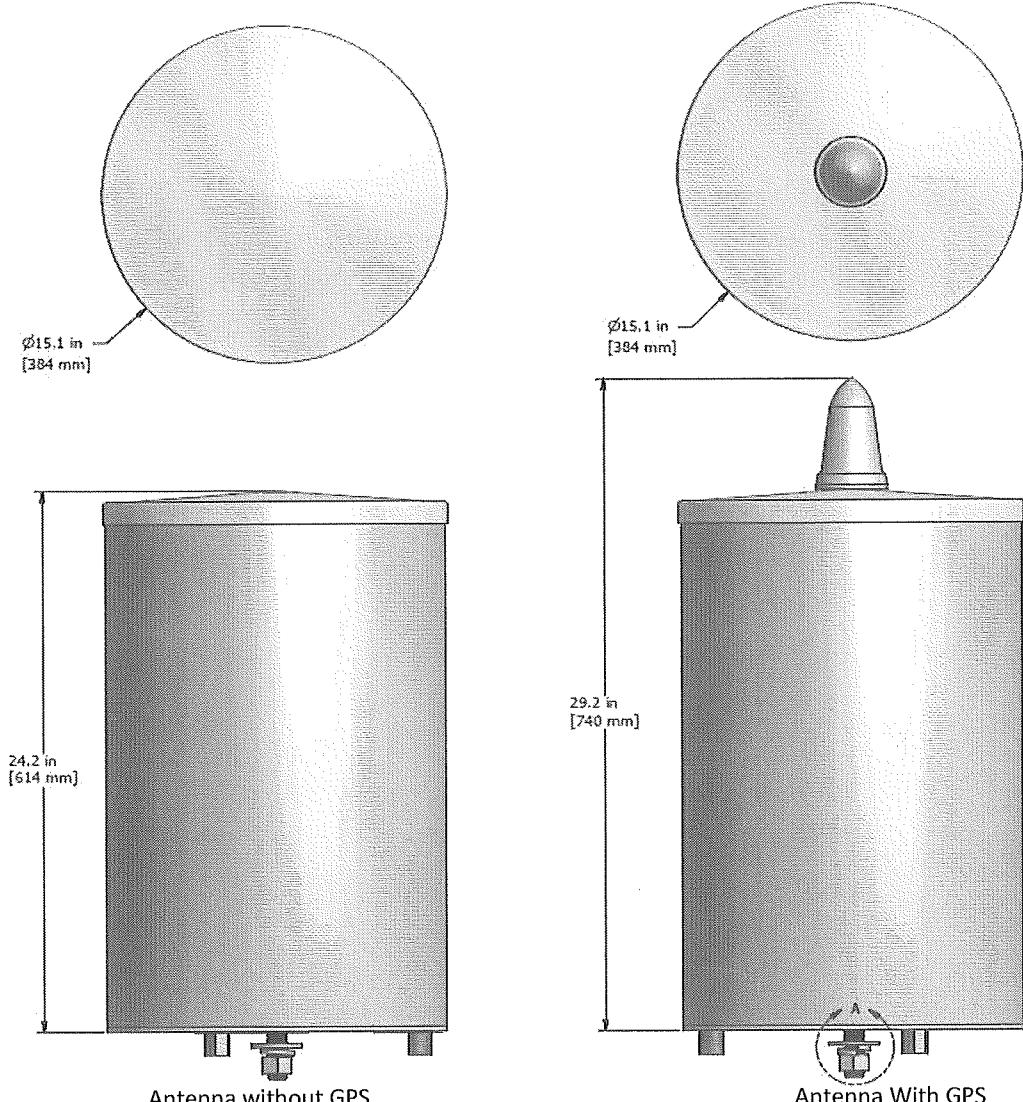


**CYL-X7CAP-2**

Small Cell Cantenna X-Pol, 698-896/1710-2170MHz, 2FT

**Mechanical Outline Drawing**

**CYL-X7CAP-2**

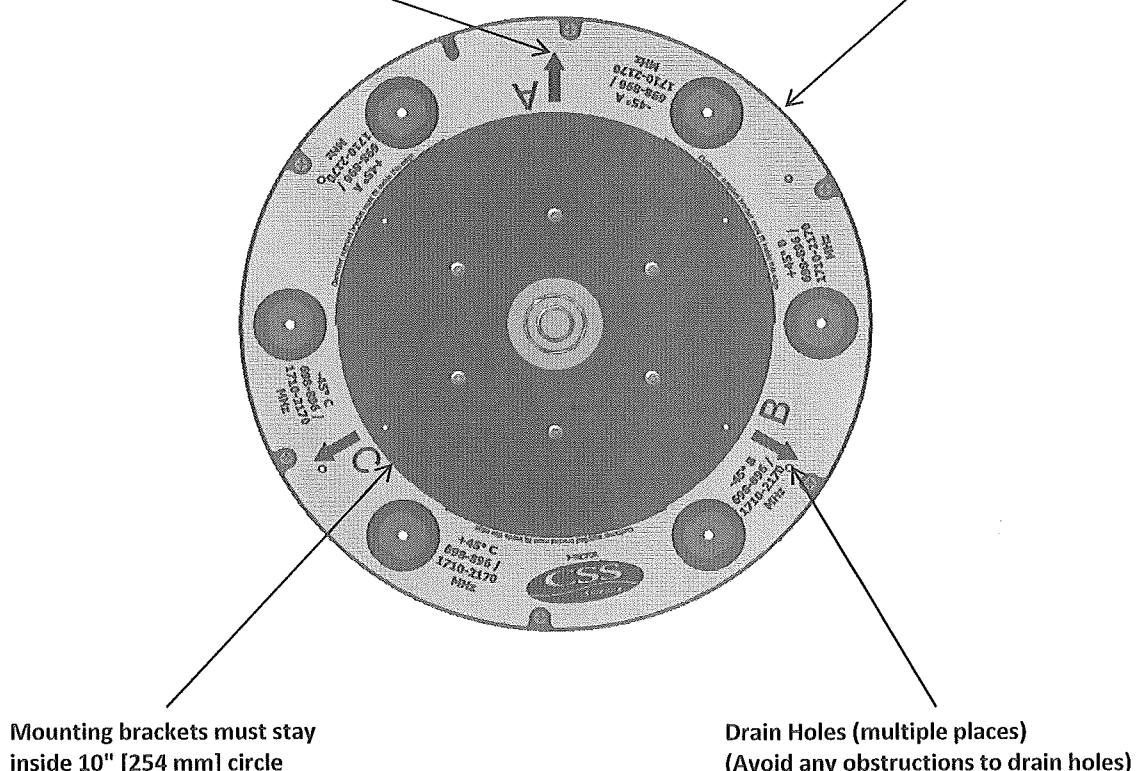


**Mechanical Outline Drawing**  
**CYL-X7CAP-2 Bottom**

\* Shown below is the bottom view of the Omni 3-Sector option.  
 Connector location & count may vary depending on  
 antenna option. Refer to page 2 for more details.

Arrows point to the direction of  
 maximum signal strength

15.1" [384 mm] dia





**DOCUMENTATION OF PERSONAL WIRELESS SERVICE FACILITY STATUS  
and  
FEDERAL TELECOMMUNICATIONS ACT OF 1996**

In addition to being considered a public utility under New York decisional law, Verizon Wireless is classified as a provider of “personal wireless services” under the federal Telecommunications Act of 1996 (the “TCA”).

As stated in the long title of the Act, the goal of the TCA is to “promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.” *Telecommunications Act of 1996, Pub. L.A. No. 104-104, 110 Stat. 56 (1996)*.

The TCA mandates a process designed to achieve competitive telecommunications markets. In keeping with the central goals of the TCA, the authors specify in Section 253(a) that “[n]o State or local statute or regulation...may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.” *TCA Section 253(a), emphasis added.*

Section 332(c) of the TCA preserves the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction and modification of personal wireless service facilities, subject to several important limitations:

- the “regulation of the placement...of personal wireless service facilities by any State or local government or instrumentality thereof shall not unreasonably discriminate among providers of functionally equivalent services” (*TCA §332(c)(7)(B)(i)(I)*);
- the “regulation of the placement...of personal wireless service facilities by any State or local government or instrumentality thereof shall not prohibit or have the effect of prohibiting the provision of personal wireless services” (*TCA §332(c)(7)(B)(i)(II)*);
- Applications must be processed within a reasonable period of time, and any decision to deny a request for placement of personal wireless service facilities must be in writing and supported by substantial evidence contained in a written record (*TCA §§332(c)(7)(B)(ii) and (iii)*); and
- regulations based upon the perceived environmental effects of radio frequency emissions are prohibited, so long as the proposed personal wireless service facility complies with FCC regulations concerning such emissions (*TCA §332(c)(7)(B)(iv)*).

A reference copy of the Telecommunications Act of 1996 is included herewith.

## TELECOMMUNICATIONS ACT OF 1996

---

JANUARY 31, 1996. Ordered to be printed

---

Mr. BLILEY, from the committee of conference,  
submitted the following

### CONFERENCE REPORT

[To accompany S. 652]

The committee of conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 652), to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the Senate recede from its disagreement to the amendment of the House to the text of the bill and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment, insert the following:

**SECTION 1. SHORT TITLE; REFERENCES.**

(a) **SHORT TITLE.**—This Act may be cited as the "Telecommunications Act of 1996".

(b) **REFERENCES.**—Except as otherwise expressly provided, whenever in this Act an amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of the Communications Act of 1934 (47 U.S.C. 151 et seq.).

**SEC. 2. TABLE OF CONTENTS.**

The table of contents for this Act is as follows:

Sec. 1. Short title; references.

Sec. 2. Table of contents.

Sec. 3. Definitions.

~~the owner shall provide written notification of such attachment to any entity that has obtained an attachment to such conduit or right-of-way so that such entity may have a reasonable opportunity to add to or modify its existing attachment. Any entity that adds to or modifies its existing attachment after receiving such notification shall bear a proportionate share of the costs incurred by the owner in making such conduit, duct, conduit, or right-of-way accessible.~~

~~(b) Any entity that obtains an attachment to such conduit, duct, or right-of-way shall not be required to bear any of the costs of rearranging or replacing its attachment if such rearrangement or replacement is required as a result of an additional attachment or the modification of an existing attachment sought by any other entity.~~

**SEC. 704. FACILITIES SITING; RADIO FREQUENCY EMISSION STANDARDS.**

(a) **NATIONAL WIRELESS TELECOMMUNICATIONS SITING POLICY.**—Section 332(c) (47 U.S.C. 332(c)) is amended by adding at the end the following new paragraph:

**"(7) PRESERVATION OF LOCAL ZONING AUTHORITY.—**

**"(A) GENERAL AUTHORITY.**—Except as provided in this paragraph, nothing in this Act shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

**"(B) LIMITATIONS.—**

**"(i) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof—**

**"(I) shall not unreasonably discriminate among providers of functionally equivalent services; and**

**"(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.**

**"(ii) A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.**

**"(iii) Any decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.**

**"(iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.**

"(v) Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

"(C) DEFINITIONS.—For purposes of this paragraph—

"(i) the term 'personal wireless services' means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

"(ii) the term 'personal wireless service facilities' means facilities for the provision of personal wireless services; and

"(iii) the term 'unlicensed wireless service' means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services (as defined in section 303(v))."

(b) RADIO FREQUENCY EMISSIONS.—Within 180 days after the enactment of this Act, the Commission shall complete action in ET Docket 93-62 to prescribe and make effective rules regarding the environmental effects of radio frequency emissions.

(c) AVAILABILITY OF PROPERTY.—Within 180 days of the enactment of this Act, the President or his designee shall prescribe procedures by which Federal departments and agencies may make available on a fair, reasonable, and nondiscriminatory basis, property, rights-of-way, and easements under their control for the placement of new telecommunications services that are dependent, in whole or in part, upon the utilization of Federal spectrum rights for the transmission or reception of such services. These procedures may establish a presumption that requests for the use of property, rights-of-way, and easements by duly authorized providers should be granted absent unavoidable direct conflict with the department or agency's mission, or the current or planned use of the property, rights-of-way, and easements in question. Reasonable fees may be charged to providers of such telecommunications services for use of property, rights-of-way, and easements. The Commission shall provide technical support to States to encourage them to make property, rights-of-way, and easements under their jurisdiction available for such purposes.

~~SECTION 332(c) (47 U.S.C. 332(c)) is amended by adding at the end the following new paragraph:~~

"(8) MOBILE SERVICES ACCESS.—A person engaged in the provision of commercial mobile services, insofar as such person is so engaged, shall not be required to provide equal access to

~~common carriers for the provision of telephone toll services.~~

portionate share of the costs incurred by the owner in making such conduit or right-of-way accessible.

*Conference agreement*

The conference agreement adopts the Senate provision with modifications. The conference agreement amends section 224 of the Communications Act by adding new subsection (e)(1) to allow parties to negotiate the rates, terms, and conditions for attaching to poles, ducts, conduits, and rights-of-way owned or controlled by utilities. New subsection 224(e)(2) establishes a new rate formula charged to telecommunications carriers for the non-useable space of each pole. Such rate shall be based upon the number of attaching entities. The conferees also agree to three additional provisions from the House amendment. First, subsection (g) requires utilities that engage in the provision of telecommunications services or cable services to impute to its costs of providing such service an equal amount to the pole attachment rate for which such company would be liable under section 224. Second, new subsection 224(h) requires utilities to provide written notification to attaching entities of any plans to modify or alter its poles, ducts, conduit, or rights-of-way. New subsection 224(h) also requires any attaching entity that takes advantage of such opportunity to modify its own attachments shall bear a proportionate share of the costs of such alterations. Third, new subsection 224(i) prevents a utility from imposing the cost of rearrangements to other attaching entities if done solely for the benefit of the utility.

SECTION 704—FACILITIES SITING; RADIO FREQUENCY EMISSION STANDARDS

*Senate bill*

No provision.

*House amendment*

Section 108 of the House amendment required the Commission to issue regulations within 180 days of enactment for siting of CMS. A negotiated rulemaking committee comprised of State and local governments, public safety agencies and the affected industries were to have attempted to develop a uniform policy to propose to the Commission for the siting of wireless tower sites.

The House amendment also required the Commission to complete its pending Radio Frequency (RF) emission exposure standards within 180 days of enactment. The siting of facilities could not be denied on the basis of RF emission levels for facilities that were in compliance with the Commission standard.

The House amendment also required that to the greatest extent possible the Federal government make available to use of Federal property, rights-of-way, easements and any other physical instruments in the siting of wireless telecommunications facilities.

*Conference agreement*

The conference agreement creates a new section 704 which prevents Commission preemption of local and State land use decisions and preserves the authority of State and local governments over

zoning and land use matters except in the limited circumstances set forth in the conference agreement. The conference agreement also provides a mechanism for judicial relief from zoning decisions that fail to comply with the provisions of this section. It is the intent of the conferees that other than under section 332(c)(7)(B)(iv) of the Communications Act of 1934 as amended by this Act and section 704 of the Telecommunications Act of 1996 the courts shall have exclusive jurisdiction over all other disputes arising under this section. Any pending Commission rulemaking concerning the preemption of local zoning authority over the placement, construction or modification of CMS facilities should be terminated.

When utilizing the term "functionally equivalent services" the conferees are referring only to personal wireless services as defined in this section that directly compete against one another. The intent of the conferees is to ensure that a State or local government does not in making a decision regarding the placement, construction and modification of facilities of personal wireless services described in this section unreasonably favor one competitor over another. The conferees also intend that the phrase "unreasonably discriminate among providers of functionally equivalent services" will provide localities with the flexibility to treat facilities that create different visual, aesthetic, or safety concerns differently to the extent permitted under generally applicable zoning requirements even if those facilities provide functionally equivalent services. For example, the conferees do not intend that if a State or local government grants a permit in a commercial district, it must also grant a permit for a competitor's 50-foot tower in a residential district.

Actions taken by State or local governments shall not prohibit or have the effect of prohibiting the placement, construction or modification of personal wireless services. It is the intent of this section that bans or policies that have the effect of banning personal wireless services or facilities not be allowed and that decisions be made on a case-by-case basis.

Under subsection (c)(7)(B)(ii), decisions are to be rendered in a reasonable period of time, taking into account the nature and scope of each request. If a request for placement of a personal wireless service facility involves a zoning variance or a public hearing or comment process, the time period for rendering a decision will be the usual period under such circumstances. It is not the intent of this provision to give preferential treatment to the personal wireless service industry in the processing of requests, or to subject their requests to any but the generally applicable time frames for zoning decision.

The phrase "substantial evidence contained in a written record" is the traditional standard used for judicial review of agency actions.

The conferees intend section 332(c)(7)(B)(iv) to prevent a State or local government or its instrumentalities from basing the regulation of the placement, construction or modification of CMS facilities directly or indirectly on the environmental effects of radio frequency emissions if those facilities comply with the Commission's regulations adopted pursuant to section 704(b) concerning such emissions.

The limitations on the role and powers of the Commission under this subparagraph relate to local land use regulations and are not intended to limit or affect the Commission's general authority over radio telecommunications, including the authority to regulate the construction, modification and operation of radio facilities.

The conferees intend that the court to which a party appeals a decision under section 332(c)(7)(B)(v) may be the Federal district court in which the facilities are located or a State court of competent jurisdiction, at the option of the party making the appeal, and that the courts act expeditiously in deciding such cases. The term "final action" of that new subparagraph means final administrative action at the State or local government level so that a party can commence action under the subparagraph rather than waiting for the exhaustion of any independent State court remedy otherwise required.

With respect to the availability of Federal property for the use of wireless telecommunications infrastructure sites under section 704(c), the conferees generally adopt the House provisions, but substitute the President or his designee for the Commission.

It should be noted that the provisions relating to telecommunications facilities are not limited to commercial mobile radio licensees, but also will include other Commission licensed wireless common carriers such as point to point microwave in the extremely high frequency portion of the electromagnetic spectrum which rely on line of sight for transmitting communication services.

~~SECTION 705. MOBILE SERVICE DIRECT ACCESS TO LONG DISTANCE CARRIERS~~

*Senate bill*

Subsection (b) of section 221 of the Senate bill, as passed, states that notwithstanding the MFJ or any other consent decree, no CMS provider will be required by court order or otherwise to provide long distance equal access. The Commission may only order equal access if a CMS provider is subject to the interconnection obligations of section 251 and if the Commission finds that such a requirement is in the public interest. CMS providers shall ensure that its subscribers can obtain unblocked access to the interexchange carrier of their choice through the use of interexchange carrier identification codes, except that the unblocking requirement shall not apply to mobile satellite services unless the Commission finds it is in the public interest.

*House amendment*

Under section 109 of the House amendment, the Commission shall require providers of two-way switched voice CMS to allow their subscribers to access the telephone toll services provider of their choice through the use of carrier identification codes. The Commission rules will supersede the equal access, balloting and prescription requirements imposed by the MFJ and the AT&T-McCaw consent decree. The Commission may exempt carriers or classes of carriers from the requirements of this section if it is consistent with the public interest, convenience, and necessity, and the

**REFERENCE COPY**

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



# Federal Communications Commission

## Wireless Telecommunications Bureau

## RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY  
CELLCO PARTNERSHIP  
1120 SANCTUARY PKWY, #150 GASASREG  
ALPHARETTA, GA 30009-7630

Call Sign KNKN999	File Number
<b>Radio Service</b> CL - Cellular	
Market Number CMA563	Channel Block B
<b>Sub-Market Designator</b> 0	

FCC Registration Number (FRN): 0003290673

Market Name New York 5 - Otsego	Grant Date 08-31-2010	Effective Date 08-20-2013	Expiration Date 10-01-2020	Five Yr Build-Out Date	Print Date
------------------------------------	--------------------------	------------------------------	-------------------------------	------------------------	------------

### Site Information:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
1	41-59-24.1 N	074-01-05.0 W	162.2	63.4	1259937

**Address:** 121 Miggins Road

City: KINGSTON County: ULSTER State: NY Construction Deadline:

<b>Antenna: 1 Azimuth (from true north)</b>	<b>0</b>	<b>45</b>	<b>90</b>	<b>135</b>	<b>180</b>	<b>225</b>	<b>270</b>	<b>315</b>
<b>Antenna Height AAT (meters)</b>	113.600	171.400	159.100	164.300	143.000	70.300	14.400	-69.000
<b>Transmitting ERP (watts)</b>	47.370	60.150	15.280	0.200	0.200	0.200	0.200	5.350
<b>Antenna: 2 Azimuth (from true north)</b>	<b>0</b>	<b>45</b>	<b>90</b>	<b>135</b>	<b>180</b>	<b>225</b>	<b>270</b>	<b>315</b>
<b>Antenna Height AAT (meters)</b>	113.600	171.400	159.100	164.300	143.000	70.300	14.400	-69.000
<b>Transmitting ERP (watts)</b>	0.200	0.200	3.630	33.110	13.180	0.220	0.200	0.200
<b>Antenna: 3 Azimuth (from true north)</b>	<b>0</b>	<b>45</b>	<b>90</b>	<b>135</b>	<b>180</b>	<b>225</b>	<b>270</b>	<b>315</b>
<b>Antenna Height AAT (meters)</b>	113.600	171.400	159.100	164.300	143.000	70.300	14.400	-69.000
<b>Transmitting ERP (watts)</b>	0.360	0.200	0.200	0.200	1.410	31.530	63.100	31.530

### Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN999

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
3	41-36-03.2 N	074-33-16.2 W	481.5	91.1	1201514

Address: Wolf Lake Road

City: MAMAKATING County: SULLIVAN State: NY Construction Deadline:

Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	144.400	209.100	299.900	310.100	257.700	125.000	119.800	125.900
Transmitting ERP (watts)	4.170	10.770	8.520	10.700	3.850	0.200	0.200	0.200
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	144.400	209.100	299.900	310.100	257.700	125.000	119.800	125.900
Transmitting ERP (watts)	0.200	0.200	0.400	9.750	35.900	41.760	16.720	1.180
Antenna: 4 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	144.400	209.100	299.900	310.100	257.700	125.000	119.800	125.900
Transmitting ERP (watts)	56.230	10.000	0.230	0.200	0.200	1.410	23.990	74.130

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
4	42-20-35.3 N	075-20-03.9 W	553.2	59.4	

Address: 387 KILKENNY ROAD

City: UNADILLA County: OTSEGO State: NY Construction Deadline:

Antenna: 5 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	168.200	139.000	207.000	145.200	105.100	220.900	195.800	162.300
Transmitting ERP (watts)	100.000	43.650	6.920	0.950	0.220	1.100	8.510	48.980
Antenna: 6 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	168.200	139.000	207.000	145.200	105.100	220.900	195.800	162.300
Transmitting ERP (watts)	1.410	15.490	70.790	91.200	26.920	3.630	0.360	0.200
Antenna: 7 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	168.200	139.000	207.000	145.200	105.100	220.900	195.800	162.300
Transmitting ERP (watts)	1.910	0.200	0.280	3.240	27.540	91.200	67.610	13.490

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN999

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
5	41-39-38.3 N	074-41-12.6 W	490.7	92.4	1004409

Address: Rt. 42, HILLCREST AVE

City: Monticello County: SULLIVAN State: NY Construction Deadline:

Antenna: 5 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	106.200	163.400	138.700	134.800	123.200	170.700	173.200	149.700
Transmitting ERP (watts)	5.500	42.660	33.110	4.370	0.200	0.200	0.200	0.200
Antenna: 6 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	106.200	163.400	138.700	134.800	123.200	170.700	173.200	149.700
Transmitting ERP (watts)	0.200	0.200	0.850	3.420	7.410	5.170	1.350	0.200
Antenna: 7 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	106.200	163.400	138.700	134.800	123.200	170.700	173.200	149.700
Transmitting ERP (watts)	9.550	0.210	0.200	0.200	0.200	2.570	28.840	52.480

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
6	41-41-08.0 N	074-21-13.0 W	695.6	51.2	1013333

Address: (Ellenville) 3 MI NE OF RT 52 AT LAKE MATARANZA

City: ELLENVILLE County: ULSTER State: NY Construction Deadline:

Antenna: 4 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	475.400	447.600	528.300	608.300	570.600	409.000	435.800	481.700
Transmitting ERP (watts)	98.300	382.430	252.670	23.040	0.980	0.980	0.980	3.650
Antenna: 5 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	475.400	447.600	582.300	608.300	570.600	409.000	435.800	481.700
Transmitting ERP (watts)	0.980	0.980	13.890	196.130	409.780	142.090	9.170	0.980
Antenna: 6 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	475.400	447.600	528.300	608.300	570.600	409.000	435.800	481.700
Transmitting ERP (watts)	33.550	1.140	0.800	0.800	0.800	13.670	193.050	285.540

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN999

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
7	42-17-05.3 N	074-15-53.9 W	917.4	34.8	

Address: Windham Ski Area, 1.55 miles South of SR-23

City: Windham County: GREENE State: NY Construction Deadline:

Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	310.800	465.300	318.700	266.900	255.200	310.100	350.200	327.000
Transmitting ERP (watts)	37.150	29.640	4.790	0.200	0.200	0.200	5.250	31.760
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	310.800	465.300	318.700	266.900	255.200	310.100	350.200	327.000
Transmitting ERP (watts)	0.260	12.740	35.850	36.810	21.280	1.490	0.200	0.200
Antenna: 4 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	310.800	465.300	318.700	266.900	255.200	310.100	350.200	327.000
Transmitting ERP (watts)	0.250	0.200	0.200	1.560	22.680	36.930	35.040	11.360

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
8	42-33-43.3 N	074-55-38.6 W	570.0	61.0	

Address: 597 WEST BOY SCOUT ROAD

City: MILFORD County: OTSEGO State: NY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	188.500	49.500	96.800	151.800	158.400	208.500	174.400	127.400
Transmitting ERP (watts)	235.000	235.000	235.000	235.000	235.000	235.000	235.000	235.000

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
9	42-38-04.0 N	074-26-58.0 W	693.1	60.9	1009718

Address: KING RD

City: COBLESKILL County: SCHOHARIE State: NY Construction Deadline:

Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	399.800	467.200	361.100	311.500	232.800	173.800	285.400	362.600
Transmitting ERP (watts)	49.560	49.560	49.560	49.560	49.560	49.560	49.560	49.560

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN999

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
10	42-02-00.5 N	075-26-59.3 W	520.0	57.6	

Address: Oquaga Lake Rd

City: Deposit County: BROOME State: NY Construction Deadline:

Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	75.700	142.400	108.800	139.200	55.900	122.200	139.200	130.200
Transmitting ERP (watts)	46.770	46.770	46.770	46.770	46.770	46.770	46.770	46.770

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
11	42-53-32.7 N	075-01-02.5 W	483.1	32.9	

Address: 2.6 MILES NORTH OF THE INTERSECTION OF ROUTES 20 AND 28

City: Richfield Springs County: HERKIMER State: NY Construction Deadline:

Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	191.700	97.800	50.300	66.900	96.200	30.900	83.600	73.800
Transmitting ERP (watts)	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
12	41-56-11.9 N	074-47-47.6 W	696.5	57.9	

Address: (Livingston Manor) 2.4 MILES NORTH NORTHEAST OF THE INTERSECTION OF  
LITTLE IRELA

City: Livingston Manor County: SULLIVAN State: NY Construction Deadline:

Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	121.400	-3.600	104.900	181.600	195.200	166.400	204.900	120.900
Transmitting ERP (watts)	1.240	37.800	305.140	435.330	129.690	8.290	1.160	1.160
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	121.400	-3.600	104.900	181.600	195.200	166.400	204.900	120.900
Transmitting ERP (watts)	1.460	1.460	1.460	4.200	145.670	730.070	241.750	9.620
Antenna: 4 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	121.400	-3.600	104.900	181.600	195.200	166.400	204.900	120.900
Transmitting ERP (watts)	579.910	271.250	25.310	1.160	1.160	1.160	11.840	210.550

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN999

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
14	42-57-08.9 N	075-19-23.2 W	545.3	57.9	

Address: 8535 CANNING FACTORY ROAD

City: New Hartford County: ONEIDA State: NY Construction Deadline:

Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	288.400	245.900	180.600	187.800	113.700	191.000	246.600	282.500
Transmitting ERP (watts)	66.070	66.070	66.070	66.070	66.070	66.070	66.070	66.070

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
15	42-08-15.4 N	074-31-40.6 W	905.6	59.6	

Address: 15 Kelly Road

City: Shandaken County: ULSTER State: NY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	283.700	280.600	377.200	263.500	120.400	177.400	401.100	378.900
Transmitting ERP (watts)	92.000	92.000	92.000	92.000	92.000	92.000	92.000	92.000

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
16	41-47-53.3 N	074-02-18.5 W	174.0	55.4	

Address: 700 N. Ohiovile Rd

City: New Paltz County: ULSTER State: NY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	161.800	151.300	143.500	148.300	65.000	159.000	127.400	141.600
Transmitting ERP (watts)	2.190	30.900	95.500	66.070	12.300	0.440	0.210	0.200
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	161.800	151.300	143.500	148.300	65.000	159.000	127.400	141.600
Transmitting ERP (watts)	0.200	0.200	0.200	0.420	12.020	100.000	8.320	0.200
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	161.800	151.300	143.500	148.300	65.000	159.000	127.400	141.600
Transmitting ERP (watts)	87.100	25.120	1.550	0.200	0.200	0.590	15.490	77.620

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN999

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
17	42-17-17.3 N	074-53-00.6 W	686.1	51.8	

Address: Federal Hill Rd

City: Delhi County: DELAWARE State: NY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	159.400	164.100	74.000	121.300	114.900	231.100	130.900	133.500
Transmitting ERP (watts)	485.610	309.280	30.290	0.930	0.930	0.930	6.190	147.050
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	159.400	164.100	74.000	121.300	114.900	231.100	130.900	133.500
Transmitting ERP (watts)	0.930	24.400	270.120	504.190	182.040	8.800	0.930	0.930
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	159.400	164.100	74.000	121.300	114.900	231.100	130.900	133.500
Transmitting ERP (watts)	2.080	0.930	0.930	1.940	71.220	403.710	433.510	83.320

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
18	41-43-10.2 N	073-59-43.4 W	337.7	94.5	1007753

Address: ATOP ILLINOIS MOUNTAIN LLOYD (010329)

City: HIGHLAND County: ULSTER State: NY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	278.100	334.300	350.300	360.800	284.400	236.800	318.900	317.000
Transmitting ERP (watts)	0.200	0.350	0.640	0.200	0.200	0.200	0.200	0.250
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	278.100	334.300	350.300	360.800	284.400	236.800	318.900	317.000
Transmitting ERP (watts)	0.200	0.200	0.200	1.410	9.980	6.380	0.300	0.200
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	278.100	334.300	350.300	360.800	284.400	236.800	318.900	317.000
Transmitting ERP (watts)	3.260	0.200	0.200	0.200	0.200	0.200	3.580	11.220

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN999

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
19	41-47-36.2 N	074-58-51.2 W	549.6	60.6	

Address: Knack Road

City: Callicoon County: SULLIVAN State: NY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	55.600	17.800	146.900	200.300	243.100	256.800	212.900	144.200
Transmitting ERP (watts)	24.100	34.840	21.480	30.340	27.670	3.820	0.130	2.700

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
21	41-58-26.5 N	075-13-04.0 W	349.9	42.7	

Address: 254 City Brook Road

City: Hancock County: DELAWARE State: NY Construction Deadline: 12-01-2009

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	-172.900	-134.300	-109.500	-143.100	-49.300	-25.200	-58.100	-109.900
Transmitting ERP (watts)	1.100	66.320	418.430	252.130	14.850	0.960	0.960	0.960
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	-172.900	-134.300	-109.500	-143.100	-49.300	-25.200	-58.100	-109.900
Transmitting ERP (watts)	0.960	0.960	0.960	6.060	40.440	49.420	42.160	3.010

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
22	42-48-00.3 N	075-13-53.3 W	469.9	60.8	

Address: (Leonardsville site) 172 Perkins Rd

City: West Edmeston County: OTSEGO State: NY Construction Deadline: 04-22-2011

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	142.500	29.800	34.100	42.400	73.100	124.400	43.300	29.400
Transmitting ERP (watts)	372.700	67.820	8.150	1.350	1.350	12.340	138.470	502.760
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	142.500	29.800	34.200	42.400	73.200	124.400	43.300	29.400
Transmitting ERP (watts)	30.290	246.240	551.270	246.240	31.000	4.480	1.350	3.320
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	142.500	29.800	34.200	42.400	73.200	124.400	43.300	29.400
Transmitting ERP (watts)	1.350	1.350	5.910	69.400	372.700	502.760	135.320	15.180

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN999

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
23	41-48-54.7 N	074-45-43.5 W	642.8	58.4	

Address: (Liberty site) 196 Revonah Hill Road

City: Liberty County: SULLIVAN State: NY Construction Deadline: 04-22-2011

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	96.900	59.900	233.300	277.800	278.100	264.400	222.400	103.500
Transmitting ERP (watts)	1.450	21.170	223.760	317.690	52.720	2.340	1.450	1.450
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	96.900	59.900	233.300	277.800	278.100	264.400	222.400	103.500
Transmitting ERP (watts)	1.450	1.450	1.450	1.450	20.540	178.880	107.780	4.600
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	96.900	59.900	233.300	277.800	278.100	264.400	222.400	103.500
Transmitting ERP (watts)	481.450	147.780	1.150	1.150	1.150	1.150	15.580	283.500

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
24	41-46-20.2 N	074-39-43.9 W	499.6	39.6	

Address: (Loch Sheldrake site) 46 Leroy Rd

City: Hurleyville County: SULLIVAN State: NY Construction Deadline: 10-01-2011

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	25.900	72.200	155.200	149.900	104.200	149.300	89.000	18.200
Transmitting ERP (watts)	34.700	364.570	418.190	50.940	1.270	1.270	1.270	1.270
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	25.900	72.200	155.200	149.600	104.200	149.300	89.000	18.200
Transmitting ERP (watts)	1.270	1.270	3.500	98.710	594.790	298.100	16.010	1.270
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	25.900	72.200	155.200	149.600	104.200	149.300	89.000	18.200
Transmitting ERP (watts)	71.440	1.270	1.270	1.270	1.270	24.200	309.240	455.370

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN999

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
25	42-45-35.4 N	074-32-06.9 W	364.8	56.1	

Address: (Sharon site) 1176 Slate Hill Road

City: Sharon Springs County: SCHOHARIE State: NY Construction Deadline: 10-01-2011

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	162.200	107.500	57.900	32.500	36.300	-58.600	-73.600	116.100
Transmitting ERP (watts)	15.900	282.720	710.170	132.240	4.380	1.520	1.520	1.520
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	162.200	107.500	57.900	32.500	36.300	-58.600	-73.600	116.100
Transmitting ERP (watts)	1.520	1.520	7.100	166.480	760.960	229.810	10.030	1.520
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	162.200	107.500	57.900	32.500	36.300	-58.600	-73.600	116.100
Transmitting ERP (watts)	93.620	3.170	1.520	1.520	1.520	22.980	355.930	694.010

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
26	41-41-28.6 N	074-52-40.3 W	421.8	37.8	

Address: (Bethel Woods) 48 Hurd Rd

City: Bethel County: SULLIVAN State: NY Construction Deadline: 06-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	24.400	8.300	55.600	72.800	76.700	89.400	104.900	76.200
Transmitting ERP (watts)	647.680	155.370	5.770	1.550	1.550	1.550	5.640	166.480
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	24.400	8.300	55.600	72.800	76.700	89.400	104.900	76.200
Transmitting ERP (watts)	1.550	18.140	182.550	243.620	43.660	1.550	1.550	1.550
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	24.400	8.300	55.600	72.800	76.700	89.400	104.900	76.200
Transmitting ERP (watts)	1.550	1.550	1.550	2.830	41.600	168.640	115.370	16.020

Control Points:

Control Pt. No. 3

Address: 500 West Dove Rd.

City: Southlake County: TARRANT State: TX Telephone Number: (800)264-6620

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN999

File Number:

Print Date:

**Waivers/Conditions:**

THIS AUTHORIZATION IS SUBJECT TO THE CONDITION THAT, IN THE EVENT THAT CELLULAR SYSTEMS USING THE SAME FREQUENCY BLOCK AS GRANTED HEREIN ARE AUTHORIZED IN ADJACENT TERRITORY IN CANADA, COORDINATION OF ANY OF THE LICENSEE'S TRANSMITTER INSTALLATIONS WHICHARE WITHIN 45 MILES OF THE U.S. CANADA BORDER SHALL BE REQUIRED TO ELIMINATE ANY HARMFUL INTERFERENCE THAT MIGHT OTHERWISE EXIST AND TO INSURE CONTINUANCE OF EQUAL ACCESS TO THE FREQUENCY BLOCK BY BOTH COUNTRIES.

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

**REFERENCE COPY**

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



**Federal Communications Commission**  
**Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY  
CELLCO PARTNERSHIP  
1120 SANCTUARY PKWY, #150 GASA5REG  
ALPHARETTA, GA 30009-7630

Call Sign	File Number
KNLH268	
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003290673

Grant Date 07-23-2007	Effective Date 12-16-2010	Expiration Date 06-27-2017	Print Date
Market Number BTA361	Channel Block F	Sub-Market Designator 0	
<b>Market Name</b> Poughkeepsie-Kingston, NY			
1st Build-out Date 06-27-2002	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

**Waivers/Conditions:**

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

This authorization is conditioned upon the full and timely payment of all monies due pursuant to Sections 1.2110 and 24.716 of the Commission's Rules and the terms of the Commission's installment plan as set forth in the Note and Security Agreement executed by the licensee. Failure to comply with this condition will result in the automatic cancellation of this authorization.

**Conditions:**

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

**REFERENCE COPY**

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



## Federal Communications Commission

### Wireless Telecommunications Bureau

#### RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY  
CELLCO PARTNERSHIP  
1120 SANCTUARY PKWY, #150 GASA5REG  
ALPHARETTA, GA 30009-7630

Call Sign	File Number
WQJQ689	
Radio Service	WU - 700 MHz Upper Band (Block C)

FCC Registration Number (FRN): 0003290673

Grant Date 11-26-2008	Effective Date 03-26-2013	Expiration Date 06-13-2019	Print Date
Market Number REA001	Channel Block C	Sub-Market Designator 0	
Market Name Northeast			
1st Build-out Date 06-13-2013	2nd Build-out Date 06-13-2019	3rd Build-out Date	4th Build-out Date

**Waivers/Conditions:**

If the facilities authorized herein are used to provide broadcast operations, whether exclusively or in combination with other services, the licensee must seek renewal of the license either within eight years from the commencement of the broadcast service or within the term of the license had the broadcast service not been provided, whichever period is shorter in length. See 47 CFR §27.13(b).

This authorization is conditioned upon compliance with section 27.16 of the Commission's rules

**Conditions:**

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

**REFERENCE COPY**

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



**Federal Communications Commission**  
**Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY  
CELLCO PARTNERSHIP  
1120 SANCTUARY PKWY, #150 GASA5REG  
ALPHARETTA, GA 30009-7630

Call Sign	File Number
WQGA715	0006015570
Radio Service	AW - AWS, 1710-1755/2110-2155 MHz bands

FCC Registration Number (FRN): 0003290673

Grant Date 11-29-2006	Effective Date 03-12-2014	Expiration Date 11-29-2021	Print Date 05-09-2014
Market Number REA001	Channel Block F		Sub-Market Designator 11
Market Name Northeast			
1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

**Waivers/Conditions:**

This authorization is conditioned upon the licensee, prior to initiating operations from any base or fixed station, making reasonable efforts to coordinate frequency usage with known co-channel and adjacent channel incumbent federal users operating in the 1710-1755 MHz band whose facilities could be affected by the proposed operations. See, e.g., FCC and NTIA Coordination Procedures in the 1710-1755 MHz Band, Public Notice, FCC 06-50, WTB Docket No. 02-353, rel. April 20, 2006.

AWS operations must not cause harmful interference across the Canadian or Mexican Border. The authority granted herein is subject to future international agreements with Canada or Mexico, as applicable.

**Conditions:**

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

**617.20**  
**Appendix B**  
**State Environmental Quality Review**  
**VISUAL EAF ADDENDUM**

This form may be used to provide additional information relating to Question 11 of Part 2 of the Full EAF.

(To be completed by Lead Agency)

<b>Visibility</b>	<b>Distance Between Project and Resource (in Miles)</b>				
	0 - ¼	¼ - ½	½ - 3	3 - 5	5 +
1. Would the project be visible from:					
<input checked="" type="checkbox"/> <i>A parcel of land which is dedicated to and available to the public for the use, enjoyment and appreciation of natural or man-made scenic qualities?</i> Marlboro School Athletic Fields	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>An overlook or parcel of land dedicated to public observation, enjoyment and appreciation of natural or man-made scenic qualities?</i> Marlboro School Athletic Fields	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>A site or structure listed on the National or State Registers of Historic Places?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>State Parks?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>The State Forest Preserve?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>National Wildlife Refuges and State Game Refuges?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>National Natural Landmarks and other outstanding natural features?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>National Park Service lands?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>Rivers designated as National or State Wild, Scenic or Recreational?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>Any transportation corridor of high exposure, such as part of the Interstate System, or Amtrak?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>A governmentally established or designated interstate or inter-county foot trail, or one formally proposed for establishment or designation?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>A site, area, lake, reservoir or highway designated as scenic?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>Municipal park, or designated open space?</i> Marlboro School Athletic Fields	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>County road?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>State road? US-9W</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>Local road? Young Ave, N Young Ave, Hudson Bank, Purdy Ave</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Is the visibility of the project seasonal? (i.e., screened by summer foliage, but visible during other seasons)					
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
3. Are any of the resources checked in question 1 used by the public during the time of year during which the project will be visible?					
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					

#### DESCRIPTION OF EXISTING VISUAL ENVIRONMENT

4. From each item checked in question 1, check those which generally describe the surrounding environment.

	Within	
	*1/4 mile	*1 mile
Essentially undeveloped	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forested	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Agricultural	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Suburban Residential	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	<input type="checkbox"/>
Commercial	<input type="checkbox"/>	<input type="checkbox"/>
Urban	<input type="checkbox"/>	<input type="checkbox"/>
River, Lake, Pond	<input type="checkbox"/>	<input type="checkbox"/>
Cliffs, Overlooks	<input type="checkbox"/>	<input type="checkbox"/>
Designated Open Space	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Flat	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hilly	<input type="checkbox"/>	<input type="checkbox"/>
Mountainous	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

NOTE: add attachments as needed

5. Are there visually similar projects within:

\*1/2 mile  Yes  No 1 mile  Yes  No 2 miles  Yes  No 3 miles  Yes  No

\*Distance from project site is provided for assistance. Substitute other distances as appropriate.

#### EXPOSURE

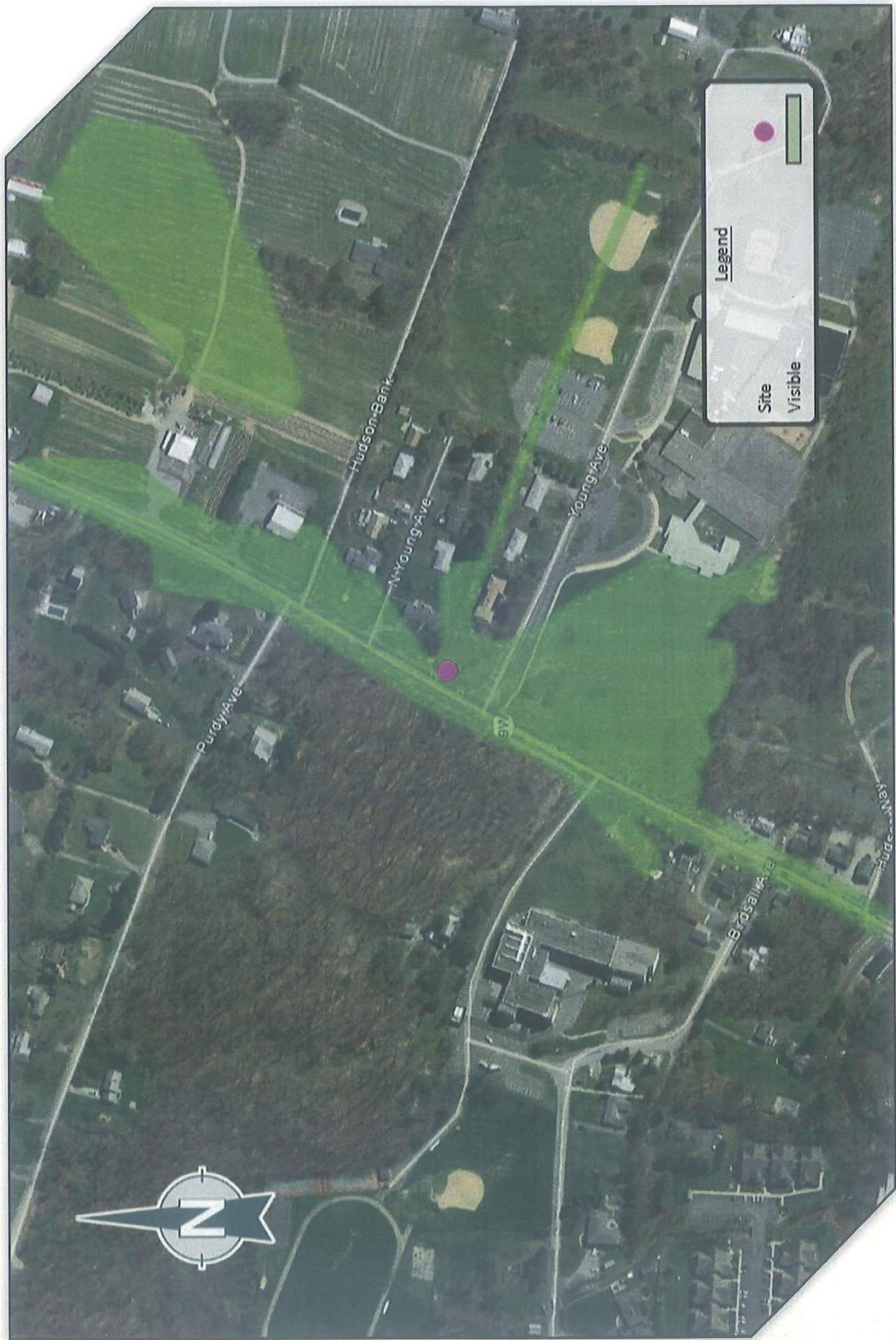
6. The annual number of viewers likely to observe the proposed project is ?

NOTE: When user data is unavailable or unknown, use best estimate.

#### CONTEXT

7. The situation or activity in which the viewers are engaged while viewing the proposed action is:

Activity	FREQUENCY			
	Daily	Weekly	Holidays/ Weekends	Seasonally
Travel to and from work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Involved in recreational activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Routine travel by residents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At a residence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At worksite	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

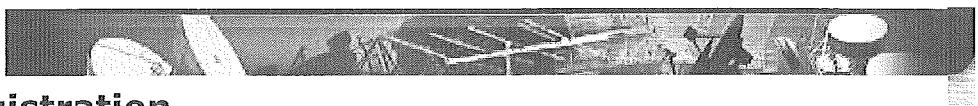
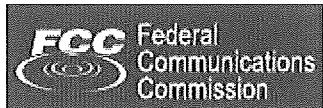


Viewshed  
Map  
7073.134I

Marlboro 9W ODAS (Node 9)  
3 Young Avenue  
Marlborough, New York 12542

**TECTONIC**

Practical Solutions, Exceptional Service



## Antenna Structure Registration

[FCC](#) > [WTB](#) > [ASR](#) > [Online Systems](#) > [TOWAIR](#)
[FCC Site Map](#)
 [HELP](#)
 [New Search](#)  [Printable Page](#)

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

### \*\*\* NOTICE \*\*\*

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

#### DETERMINATION Results

##### **PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 6567.83 MTRS (6.56780 KM) AWAY**

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	41-37-19.00N	073-53-31.00W	DUTCHESSE COUNTY	DUTCHESSE COUNTY POUGHKEEPSIE, NY	44.7	1524.3

##### **PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 6962.85 MTRS (6.96290 KM) AWAY**

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	41-37-30.00N	073-53-17.00W	DUTCHESSE COUNTY	DUTCHESSE COUNTY POUGHKEEPSIE, NY	44.7	1524.3

##### **PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7352.69 MTRS (7.35269 KM) AWAY**

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	41-37-49.00N	073-53-7.00W	DUTCHESSE COUNTY	DUTCHESSE COUNTY POUGHKEEPSIE, NY	44.7	1524.3

#### Your Specifications

##### NAD83 Coordinates

Latitude

41-36-32.4 north

Longitude 073-58-07.8 west

**Measurements (Meters)**

Overall Structure Height (AGL)	11.7
Support Structure Height (AGL)	0
Site Elevation (AMSL)	55.2

**Structure Type**

UPOLE - Utility Pole/Tower used to provide service (Electric, Telephone, etc)

**Tower Construction Notifications**

Notify Tribes and Historic Preservation Officers of your plans to build a tower.

**ASR Help** [ASR License Glossary](#) - [FAQ](#) - [Online Help](#) - [Documentation](#) - [Technical Support](#)

**ASR Online Systems** [TOWAIR](#)- [CORES](#) - [ASR Online Filing](#) - [Application Search](#) - [Registration Search](#)

**About ASR** [Privacy Statement](#) - [About ASR](#) - [ASR Home](#)

[FCC](#) | [Wireless](#) | [ULS](#) | [CORES](#)

[Help](#) | [Tech Support](#)

Federal Communications Commission  
445 12th Street SW  
Washington, DC 20554

Phone: 1-877-480-3201  
TTY: 1-717-338-2824  
[Submit Help Request](#)

**MILLENNIUM ENGINEERING, P.C.**  
132 Jaffrey Road  
Malvern, Pennsylvania 19355

Cell: 610-220-3820  
[www.millenniumengineering.net](http://www.millenniumengineering.net)

Fax: 610-644-4355  
Email: [pauldugan@comcast.net](mailto:pauldugan@comcast.net)

February 11, 2017

Attn: Josh Doolin, RF Engineer  
Verizon Wireless  
1275 John Street, Suite #100  
West Henrietta, NY 14586

**Re: RF Safety FCC Compliance of Proposed Communications Facility**  
**Site Name: Marlboro 9W oDAS (Node 9), Proposed 38.5' Utility Pole**  
**3 Young Avenue, Marlboro, NY 12542 (Hamlet of Marlboro, Ulster County)**  
**41° 36' 32.44" N, 73° 58' 07.81" W (NAD83)**

Dear Mr. Doolin,

I have performed an analysis to provide an independent determination and certification that the proposed Verizon Wireless communications facility at the above referenced property will comply with Federal Communications Commission (FCC) exposure limits and guidelines for human exposure to radiofrequency electromagnetic fields (Code of Federal Regulation 47 CFR 1.1307 and 1.1310). As a registered professional engineer I am under the jurisdiction of the State Registration Boards in which I am licensed to hold paramount the safety, health, and welfare of the public and to issue all public statements in an objective and truthful manner.

The proposed communications facility consists of a proposed 38.5' utility pole owned by Verizon at the above referenced property. The proposed Verizon Wireless antenna configuration from the information furnished to me consists (1) 700 MHz (LTE) omnidirectional antenna (a.k.a. "cantenna" for can-shaped antenna) (CommScope NH360QS-DG-F0M or equivalent) with a centerline of 33.5' above ground level and no mechanical downtilt. Transmitting from this antenna will be (1) 700 MHz LTE wideband channel. The proposed Verizon Wireless antenna will be mounted on the side of the proposed utility pole with a centerline of approximately 3.5' above a proposed fiber line and 4.5' below a proposed secondary electric line.

The following assumptions are made for reasonable upper limit radiofrequency operating parameters for the proposed facility due to the Verizon Wireless antenna alone:

- (1) 700 MHz (LTE) transmit antenna at 0-10 degrees mechanical downtilt
- (1) 700 MHz LTE wideband channel at 2x40W max power before cable loss/antenna gain
- The facility would be at or near full capacity during busy hour

Using the far-field power density equations from FCC Bulletin OET 65, the power density at any given distance from the antenna is equal to  $0.360(\text{ERP})/R^2$  where R is the distance to the point at which the exposure is being calculated. The given equation is a conversion of the OET 65 power density equation for calculating power density given the distance in feet and the result in metric units ( $\text{mW/cm}^2$ ). This calculated power density assumes the location is in the main beam of the vertical pattern of the antenna. After making an adjustment for

the reduction in power density due to the vertical pattern of the transmit antenna, the calculated ground level power density is below  $2 \mu\text{W}/\text{cm}^2$  at any distance from the antenna system of Verizon Wireless.

The 700 MHz “Upper C Block” transmit frequencies (746-757 MHz), which Verizon Wireless is licensed by the FCC to operate, have an uncontrolled/general population maximum permissible exposure (MPE) FCC limit of  $497 \mu\text{W}/\text{cm}^2$ . Therefore, the exposure at ground level at any distance from the structure would be substantially below 1 % of the FCC exposure limits due to Verizon Wireless antennas alone. The extremely low ground exposure levels are due to the elevated positions of the antennas on the structure and the low power which these systems operate. See Figures 1 and 2 in back of this report which discuss the relationship between height, proximity or distance, and orientation to level of electromagnetic field exposure.

I have performed a near-field analysis to determine the exposure levels directly in front of the proposed Verizon Wireless antenna for the safety of occupational workers. I have performed upper limit calculations to determine the maximum possible exposure for occupational workers at a distance of 3 feet directly in front of the antenna. **The calculated exposure is well below the FCC occupational exposure limits at 3 feet directly in front of the antenna.** As a general rule, occupational workers should maintain a distance of 3 feet from all transmitting antennas.

**In summary, the proposed communications facility will comply with all applicable exposure limits and guidelines adopted by the FCC governing human exposure to radiofrequency electromagnetic fields (FCC Bulletin OET 65).** Federal law (FCC Rule Title 47 CFR 1.1307 and 1.1310) sets the national standard for compliance with electromagnetic field safety. The FCC exposure limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI). **Thus, there is full compliance with the standards of the IRPA, FCC, IEEE, ANSI, and NCRP.**

#### General Information on Electromagnetic Field Safety

Verizon Wireless facilities transmit and receive low power electromagnetic fields between base station antennas and handheld portable cell phones. The radiofrequency energy from these facilities and devices is non-ionizing electromagnetic energy. Non-ionizing, unlike X-Rays or other forms of potentially harmful energy in the microwave region, is not cumulative over time nor can the energy change the chemical makeup of atoms (e.g. strip electrons from ions). “Non-ionizing” simply means that the energy is not strong enough to break ionic bonds.

Safe levels of electromagnetic fields were determined by numerous worldwide organizations, such the International Committee for Non-Ionizing Radiation Protection, a worldwide multi-disciplinary team of researchers and scientists studying the effects of non-ionizing radiofrequency energy such as that emitted by base stations or cell phones. The FCC did not arbitrarily establish their own standards, but adopted the recommendations of all leading organizations that set standards and research the subject such as the Institute of Electrical and Electronics Engineers (IEEE), American National Standards Institute (ANSI), and National Council on Radiation Protection and Measurements (NCRP).

When Verizon Wireless is located on an antenna structure such as a self-supporting lattice type tower, monopole, guyed tower, watertank, etc. the antennas are typically 10 meters or more above ground level (10 meters = 32.81 feet). With the relatively low power and elevated positions of the antennas on the structure with respect to ground level, the maximum ground level exposure can rarely approach 1 % of the applicable FCC exposure limit regardless of how many sets of antennas are collocated on the structure. For this reason, the FCC considers the facilities “categorically excluded” from routine evaluation at antenna heights above 10 meters (or above 32.81 feet). Categorical exclusion exempts a site from routine on-site evaluation. However, the facility is

not excluded from compliance with the federal exposure limits and guidelines. The types of facilities used by Verizon Wireless typically elevated on antenna structures (away from access to close proximity, i.e. greater than 10 meters or 32.81 feet) simply cannot generate ground level exposure levels that approach the limits under any circumstances.

From a regulatory perspective, the FCC has sole jurisdiction over the regulation of electromagnetic fields from all facilities and devices. The FCC has established guidelines and limits over emissions and exposure to protect the general public. The FCC also has certain criteria that trigger when an environmental evaluation must be performed. The criteria are based on distance from the antenna (accessibility) and transmit power levels.

**CONCLUSIONS:**

- 1) **The proposed communications facility will comply with electromagnetic field safety standards by a substantial margin (well below 1 %) in all publicly accessible areas. This includes the base of the proposed structure and any areas in proximity to the proposed structure.**
- 2) **Verizon Wireless takes appropriate measures to ensure that all telecommunications facilities (including this proposed facility) comply with applicable exposure limits and guidelines adopted by the FCC governing human exposure to radiofrequency electromagnetic fields (FCC Bulletin OET 65).**
- 3) **In cases where such compliance exists, the subject of electromagnetic field safety is preempted.** The Telecommunications Act of 1996 states that: "No state or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the [FCC's] regulations concerning such emissions." Telecommunications Act of 1996, § 332[c][7][B][iv].

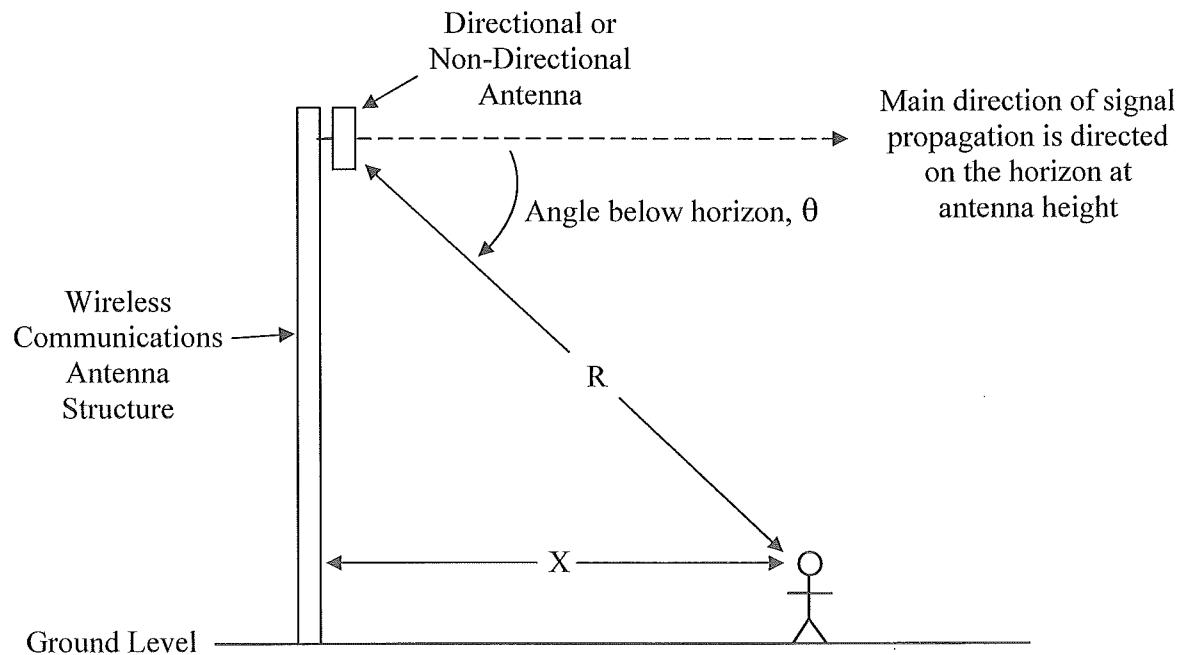
Respectfully,



Paul Dugan, P.E.  
Registered Professional Engineer  
New York License Number 79144

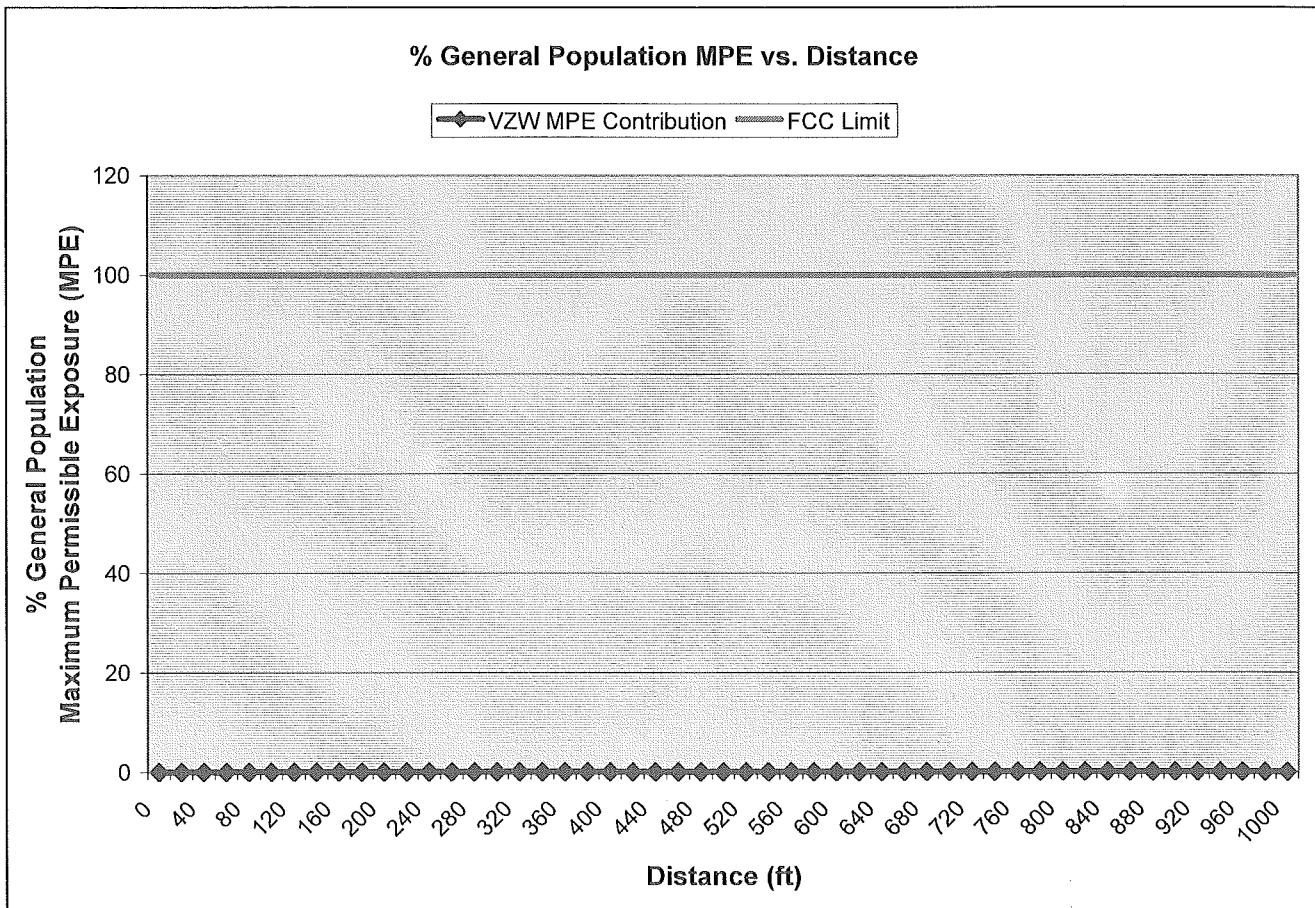


**FIGURE 1: Diagram of Electromagnetic Field Strength as a Function of Distance and Antenna Orientation**



The above diagram illustrates the conceptual relationship of distance and orientation to directional or non-directional antennas used in wireless communications. At the base of the structure ( $x = 0$ ), the distance  $R$  is a minimum when the angle of the direction of propagation  $\theta$  is a maximum. As one moves away from the antenna structure, the horizontal distance  $X$  increases as well as the distance  $R$  to the antennas while the angle below the horizon decreases. For this reason, electromagnetic fields from these facilities remain fairly uniform up to a few hundred feet and continue to taper off with distance. As noted in the report, the electromagnetic fields from these types of facilities are hundreds of times below safety standards at any distance from the antenna structure, making them essentially indistinguishable relative to other sources of electromagnetic fields in the environment due to the elevated heights of the antennas and the relatively low power at which these systems operate.

**FIGURE 2: Graph of MPE Contribution vs. Distance**



The above graph represents the contribution of Verizon Wireless to the composite electromagnetic field exposure level at any distance from the base of the structure. The contribution of Verizon Wireless will remain well under 1% of the FCC general population maximum permissible exposure (MPE) at any distance as shown.

## DECLARATION OF ENGINEER

Paul Dugan, P.E., declares and states that he is a graduate telecommunications consulting engineer (BSE/ME Widener University 1984/1988), whose qualifications are a matter of record with the Federal Communications Commission (FCC). His firm, Millennium Engineering, P.C., has been retained by Verizon Wireless to perform power density measurements or calculations for an existing or proposed communications facility and analyze the data for compliance with FCC exposure limits and guidelines for human exposure to radiofrequency electromagnetic fields.

Mr. Dugan also states that the calculations or measurements made in the evaluation were made by himself or his technical associates under his direct supervision, and the summary letter certification of FCC compliance associated with the foregoing document was made or prepared by him personally. Mr. Dugan is a registered professional engineer in the Jurisdictions of Pennsylvania, New Jersey, Delaware, Maryland, Virginia, New York, Connecticut, District of Columbia, West Virginia and Puerto Rico with over 30 years of engineering experience. Mr. Dugan is also an active member of the Association of Federal Communications Consulting Engineers, the National Council of Examiners for Engineering, the National Society of Professionals Engineers, the Pennsylvania Society of Professional Engineers, and the Radio Club of America. Mr. Dugan further states that all facts and statements contained herein are true and accurate to the best of his own knowledge, except where stated to be in information or belief, and, as to those facts, he believes them to be true. He believes under penalty of perjury the foregoing is true and correct.



---

Paul Dugan, P.E.

Executed this the 11<sup>th</sup> day of February, 2017.

**PAUL DUGAN, P.E.**  
132 Jaffrey Road  
Malvern, Pennsylvania 19355

Cell: 610-220-3820  
Fax: 610-644-4355  
Email: pauldugan@comcast.net  
Web Page: [www.millenniumengineering.net](http://www.millenniumengineering.net)

---

**EDUCATION:** Widener University, Chester, Pennsylvania  
**Master of Business Administration**, July 1991  
**Master of Science, Electrical Engineering**, December 1988  
**Bachelor of Science, Electrical Engineering**, May 1984

**PROFESSIONAL ASSOCIATIONS:** **Registered Professional Engineer** in the following jurisdictions:

Pennsylvania, License Number PE-045711-E  
New Jersey, License Number GE41731  
Maryland, License Number 24211  
Delaware, License Number 11797  
Virginia, License Number 36239  
Connecticut, License Number 22566  
New York, License Number 079144  
District of Columbia, License Number PE-900355  
West Virginia, License Number 20258  
Puerto Rico, License Number 18946

Full member of **The Association of Federal Communications Consulting Engineers** ([www.afcce.org](http://www.afcce.org)) January 1999 to Present  
**Elected to serve on the Board of Directors for 2006-2007**

Full member of **The National Society of Professional Engineers** ([www.nspe.org](http://www.nspe.org)) and the **Pennsylvania Society of Professional Engineers** ([www.pspe.org](http://www.pspe.org)) June 2003 to Present  
Currently serving on the Board of Directors of the Valley Forge Chapter and as South East Region Vice-Chair for the "Professional Engineers in Private Practice" Executive Committee

Actively participate in **Chester County ARES/RACES** (CCAR [www.w3eoc.org](http://www.w3eoc.org)) which prepares and provides emergency backup communications for Chester County Department of Emergency Services, March 2005 to Present

Full member of **The National Council of Examiners for Engineering** ([www.ncees.org](http://www.ncees.org)) May 2001 to Present

Full Member of **The Radio Club of America** ([www.radio-club-of-america.org](http://www.radio-club-of-america.org)) December 2003 to present

**PROFESSIONAL EXPERIENCE:** Millennium Engineering, P.C., Malvern, Pennsylvania  
Position: **President**, August 1999 to Present ([www.millenniumengineering.net](http://www.millenniumengineering.net))

Verizon Wireless, Plymouth Meeting, Pennsylvania  
Position: **Cellular RF System Design/Performance Engineer**, April 1990 to August 1999

Communications Test Design, Inc., West Chester, Pennsylvania  
Position: **Electrical Engineer**, May 1984 to April 1990

**MILLENNIUM ENGINEERING, P.C.**

132 Jaffrey Road

Malvern, Pennsylvania 19355

Cell: 610-220-3820

[www.millenniumengineering.net](http://www.millenniumengineering.net)

Fax: 610-644-4355

Email: [pauldugan@comcast.net](mailto:pauldugan@comcast.net)

February 11, 2017

Attn: Josh Doolin, RF Engineer  
Verizon Wireless  
1275 John Street, Suite #100  
West Henrietta, NY 14586

**Re: Non-Interference Certification of Proposed Communications Facility**  
**Site Name: Marlboro 9W oDAS (Node 9), Proposed 38.5' Utility Pole**  
**3 Young Avenue, Marlboro, NY 12542 (Hamlet of Marlboro, Ulster County)**  
**41° 36' 32.44" N, 73° 58' 07.81" W (NAD83)**

Dear Mr. Doolin,

I have performed an analysis to provide an independent interference evaluation and certification that the proposed Verizon Wireless communications facility at the above referenced property will comply with Federal Communications Commission (FCC) licensed operating parameters and that the system will be free of disruptive radiofrequency interference or cause interference to other wireless systems. As a registered professional engineer I am under the jurisdiction of the State Registration Boards in which I am licensed to hold paramount the safety, health, and welfare of the public and to issue all public statements in an objective and truthful manner.

The proposed communications facility consists of a proposed 38.5' utility pole owned by Verizon at the above referenced property. The proposed Verizon Wireless antenna configuration from the information furnished to me consists (1) 700 MHz (LTE) omnidirectional antenna (a.k.a. "cantenna" for can-shaped antenna) (CommScope NH360QS-DG-F0M or equivalent) with a centerline of 33.5' above ground level and no mechanical downtilt. Transmitting from this antenna will be (1) 700 MHz LTE wideband channel. The proposed Verizon Wireless antenna will be mounted on the side of the proposed utility pole with a centerline of approximately 3.5' above a proposed fiber line and 4.5' below a proposed secondary electric line.

In Ulster County, Verizon Wireless is licensed by the FCC to transmit the 700 MHz "Upper C Block" (746-757 MHz).

Verizon Wireless, other commercial wireless communications licensees, broadcast facilities, public safety communications systems, and utility companies collocate routinely with some basic precautions and there will be no interference issues with the proposed antennas. The licensees that collocate on these types of structures all must operate within their licensed operating parameters. A commercial wireless communications antenna system operates at a frequency and power level authorized by the FCC and, with proper precautions, will not interfere with antenna systems of other commercial wireless services, public safety telecommunications, airport navigation, broadcast radio and television, cordless phones, computers, etc., or other community office or residential household appliances. The different operating frequencies and relatively low power that commercial wireless communications antenna systems operate allow these systems to co-exist in close proximity.

When two or more wireless communications systems co-exist on the same structure or in very close proximity, there is the potential for many forms of interference between systems, such as intermodulation distortion. For the proposed facility subject to this application, no other base station antennas are in close proximity for which to model for intermodulation.

There is nothing commercial wireless communications licensees could gain by operating (intentionally or inadvertently) outside of their licensed operating parameters. The network equipment used by the licensees is designed to operate at certain frequencies and power levels and sharp filtering is designed into the transmit/receive paths to ensure a clean radio system. The technicians who visit the facility for routine maintenance generally perform FCC testing to ensure proper operation of the facility and the systems are monitored remotely twenty-four hours a day, seven days per week. Furthermore, radios are designed so that virtually any type of radio equipment malfunction would cause the radio to shut down.

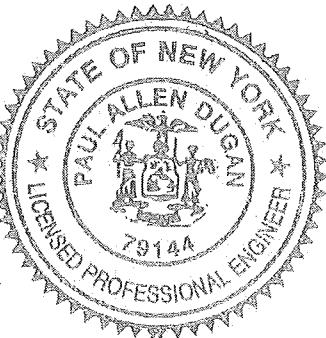
The FCC has remediation processes to help protect the community. If a complaint is filed with the FCC, the FCC would investigate the complaint and notify the licensee to resolve any issues whether actual or perceived. Failure to comply or negligence on the part of the licensee may result in stiff fines.

**In summary, the proposed communications facility will not cause any disruptive interference with any transmitter or receiver that will co-exist at, on or near the same communications structure.**

Respectfully,



Paul Dugan, P.E.  
Registered Professional Engineer  
New York License Number 79144



## DECLARATION OF ENGINEER

Paul Dugan, P.E., declares and states that he is a graduate telecommunications consulting engineer (BSE/ME Widener University 1984/1988), whose qualifications are a matter of record with the Federal Communications Commission (FCC). His firm, Millennium Engineering, P.C., has been retained by Verizon Wireless to perform a collocation interference analysis for an existing or proposed communications facility.

Mr. Dugan also states that the calculations or measurements made in the evaluation were made by himself or his technical associates under his direct supervision, and the summary letter certification of FCC compliance associated with the foregoing document was made or prepared by him personally. Mr. Dugan is a registered professional engineer in the Jurisdictions of Pennsylvania, New Jersey, Delaware, Maryland, Virginia, New York, Connecticut, District of Columbia, West Virginia and Puerto Rico with over 30 years of engineering experience. Mr. Dugan is also an active member of the Association of Federal Communications Consulting Engineers, the National Council of Examiners for Engineering, the National Society of Professionals Engineers, the Pennsylvania Society of Professional Engineers, and the Radio Club of America. Mr. Dugan further states that all facts and statements contained herein are true and accurate to the best of his own knowledge, except where stated to be in information or belief, and, as to those facts, he believes them to be true. He believes under penalty of perjury the foregoing is true and correct.



Paul Dugan, P.E.

Executed this the 11<sup>th</sup> day of February, 2017.

**PAUL DUGAN, P.E.**  
132 Jaffrey Road  
Malvern, Pennsylvania 19355

Cell: 610-220-3820  
Fax: 610-644-4355  
Email: pauldugan@comcast.net  
Web Page: [www.millenniumengineering.net](http://www.millenniumengineering.net)

---

**EDUCATION:** Widener University, Chester, Pennsylvania  
**Master of Business Administration**, July 1991  
**Master of Science, Electrical Engineering**, December 1988  
**Bachelor of Science, Electrical Engineering**, May 1984

**PROFESSIONAL ASSOCIATIONS:** **Registered Professional Engineer** in the following jurisdictions:  
Pennsylvania, License Number PE-045711-E  
New Jersey, License Number GE41731  
Maryland, License Number 24211  
Delaware, License Number 11797  
Virginia, License Number 36239  
Connecticut, License Number 22566  
New York, License Number 079144  
District of Columbia, License Number PE-900355  
West Virginia, License Number 20258  
Puerto Rico, License Number 18946

Full member of **The Association of Federal Communications Consulting Engineers** ([www.afcce.org](http://www.afcce.org)) January 1999 to Present  
**Elected to serve on the Board of Directors for 2006-2007**

Full member of **The National Society of Professional Engineers** ([www.nspe.org](http://www.nspe.org)) and the **Pennsylvania Society of Professional Engineers** ([www.pspe.org](http://www.pspe.org)) June 2003 to Present  
Currently serving on the Board of Directors of the Valley Forge Chapter and as South East Region Vice-Chair for the “Professional Engineers in Private Practice” Executive Committee

Actively participate in **Chester County ARES/RACES** (CCAR [www.w3eoc.org](http://www.w3eoc.org)) which prepares and provides emergency backup communications for Chester County Department of Emergency Services, March 2005 to Present

Full member of **The National Council of Examiners for Engineering** ([www.ncees.org](http://www.ncees.org)) May 2001 to Present

Full Member of **The Radio Club of America** ([www.radio-club-of-america.org](http://www.radio-club-of-america.org)) December 2003 to present

**PROFESSIONAL EXPERIENCE:** Millennium Engineering, P.C., Malvern, Pennsylvania  
Position: **President**, August 1999 to Present ([www.millenniumengineering.net](http://www.millenniumengineering.net))

Verizon Wireless, Plymouth Meeting, Pennsylvania  
Position: **Cellular RF System Design/Performance Engineer**, April 1990 to August 1999

Communications Test Design, Inc., West Chester, Pennsylvania  
Position: **Electrical Engineer**, May 1984 to April 1990



Network Engineering - UPNY  
1275 John Street, Suite 100  
West Henrietta, New York 14586

March 2, 2017

Planning Board  
Town of Marlborough  
21 Milton Turnpike  
Milton, New York 12547

RE: Application for Special Use Permit and Site Plan Review - Application of Cellco Partnership d/b/a Verizon Wireless (Property located at 3 Young Avenue (109.1-3-26.2))

Ladies and Gentlemen:

With respect to the above application, and in accordance with § 152-6(H) of the Wireless Telecommunications Facilities Law for the Town of Marlborough, this statement will verify that Verizon Wireless' proposed Marlboro 9W ODAS (Node 9) communications facility, foundation and attachments are designed and will be constructed to meet all local, county, state and federal structural requirements for loads, including wind and ice loads. If the wireless facility is subsequently approved and constructed, as-built certification indicating that the facility has been constructed in accordance with all standards shall be furnished to the Town prior to issuance of any certificate of occupancy or compliance.

The applicant's proposed wireless telecommunications facility will be maintained in a safe manner and in compliance with all conditions of the special use permit, without exception, unless specifically granted relief by the Board in writing, as well as all applicable and permissible local codes, ordinances and regulations, including any and all applicable county, state and federal laws, rules and regulations. (§ 152-6(D)(1)). The construction of the wireless telecommunications facilities is legally permissible, including but not limited to the fact that the applicant is authorized to do business in New York State. (§ 152-6(D)(2)).

After construction and prior to receiving a certificate of compliance, the applicant will furnish written certification that the wireless telecommunications facilities are grounded and bonded so as to protect persons and property and installed with appropriate surge protectors. (§ 152-6(I)).

The proposed telecommunications facility will not be available for future collocations and a waiver is respectfully requested. Shared usage of the proposed facility is not technologically feasible based on the kind of wireless telecommunications facility site and structure proposed. (§ 152-6(V)(2)).

In accordance with § 152-22 of the Wireless Telecommunications Facilities Law, the Applicant, prior to issuance of the building permit, will post a removal bond in a

reasonable amount to be set by the board, which will ensure that there are sufficient funds available to remove the telecommunications facility should it no longer be in use.

Thank you for considering our application.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Eckel".

Peter Eckel  
Director  
Tilson