Subject to the FCC Shot Clock of 150 days for an Application for Other than a Small Wireless Facility Using a New Structure - 83 Fed Reg 51867 codified at 47 CFR § 1.6003(c)(1)(iv)

PLANNING BOARD and ZONING BOARD OF APPEALS
OF THE TOWN OF BRUNSWICK
RENSSELAER COUNTY, NEW YORK

In the Matter of the Application of

BLUE SKY TOWERS II, LLC and
CELLCO PARTNERSHIP d/b/a Verizon Wireless
Lands n/f of Mary Alice Zouky
Creek Road
Town of Brunswick, Rensselaer County, New York
Section 113.00, Block 5, Lot 7.1 *(tower parcel)*
Section 113.00, Block 5, Lot 10.11 *(easement parcel)*

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

Submitted by:

Verizon Wireless
Kathy Pomponio, Principal Engineer – Real Estate/Regulatory
1275 John Street, Suite 100
West Henrietta, New York 14586
(585) 321-5435

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

Airosmith Development
Sara Colman, Site Acquisition Specialist
28 Clinton Street, Suite 1A
Saratoga Springs, NY 12866
(518) 461-7114

Young/Sommer LLC
David C. Brennan, Esq.
Five Palisades Drive
Albany, New York 12205
(518) 438-9907

Dated: May 9, 2019

Subject to the FCC Shot Clock of 150 days for an Application for Other than a Small Wireless Facility Using a New Structure - 83 Fed Reg 51867 codified at 47 CFR § 1.6003(c)(1)(iv)

PLANNING BOARD and ZONING BOARD OF APPEALS
TOWN OF BRUNSWICK
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In the Matter of the Application of

BLUE SKY TOWERS II, LLC and
CELLCO PARTNERSHIP d/b/a Verizon Wireless

Premises: Lands n/f of Mary Alice Zouky
Creek Road
Town of Brunswick, Rensselaer County, New York
Section 113.00, Block 5, Lot 7.1 *(tower parcel)*
Section 113.00, Block 5, Lot 10.11 *(easement parcel)*

STATEMENT OF INTENT and
APPLICATION FOR SPECIAL USE PERMIT, SITE PLAN APPROVAL
And ROSENBERG VARIANCE

I. Introduction

BLUE SKY TOWERS II, LLC and CELLCO PARTNERSHIP d/b/a Verizon Wireless ("Verizon Wireless") (referred to collectively as the "Applicant") propose the construction of an unmanned public utility/personal wireless service facility (a "communications facility") on a 100± ft. x 100± ft. (10,000± sq. ft.) portion of lands n/f owned by Mary Alice Zouky and located off Creek Road in the Town of Brunswick, County of Rensselaer, State of New York (Tax Map Parcel Nos. 113.00-5-7.1 and 113.00-5-10.11) (the "premises") **[TABS 1, 2 and 14]**.

Verizon Wireless is considered a public utility under New York decisional law (*Cellular Telephone Company v. Rosenberg*, 82 N.Y.2d 364 (1993)) **[TAB 3]**, and a provider of "personal wireless services" under the federal Telecommunications Act of 1996 (the "TCA") **[TAB 4]**. Verizon Wireless' 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 5]**.

The proposed communications facility consists of a 150± ft. monopole tower (154± ft. when including a 4± ft. lightning rod), one equipment cabinet on a 4± ft. x 7± ft. concrete pad, one (1) 30 kW generator on a 4± ft. x 7± ft. concrete pad and all associated antennas, improvements and access/utilities. The project is an allowable land use subject to the Applicant obtaining Special Use Permit and Site Plan Review approval from the Town of Brunswick Planning Board in accordance with the Town of Brunswick Telecommunication Towers Regulations (See Article 9: Personal Wireless Telecommunication Service Facilities, hereinafter referred to as the "Telecommunications Law"). In addition, since the telecommunications facility is proposed to be located in the R-25

zoning district, a Use Variance is required from the Zoning Board of Appeals. Therefore, an application is also submitted for a Use Variance, under the *Rosenberg* standard for relief.

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). The Applicant respectfully submits this Statement of Intent in support of its application for Special Use Permit and Site Plan approval, and the necessary Zoning Board of Appeals use variance under the *Rosenberg* Standard.

II. Purpose of Pinewoods (NY-5144) Communications Facility

The purpose of the Pinewoods communications facility is to provide an adequate and safe level of emergency and non-emergency Verizon Wireless 4G communications services to the southwestern portion of the Town of Brunswick. The facility will offer significant improvements in both coverage and capacity (ability for the network to adequately satisfy the demand for high speed wireless services) across the area generally bounded by McChesney Avenue Extension to the north, Eagle Mills Hamlet to the east, Menemsha Lane to the south, and the Troy Country Club area to the west. The proposed facility is specifically intended to improve wireless service (both in-vehicle and inside buildings) across 3.3± miles along NY-2, several linear miles along multiple other state routes, local and community roads (Pinewoods Avenue, McChesney Avenue Extension, Menemsha Lane, Creek Road, etc.), across the Hamlet of Eagle Mills, and into the homes and businesses throughout the southwestern portion of the Town of Brunswick.

Existing 4G/LTE service in the southwestern portion of town is limited and insufficient due to the localized widely-varying terrain and associated dense vegetation inherent across this section of the town. This substandard level of reliable 4G wireless service and network capacity originates from existing Verizon Wireless communications facilities, including: "Sycaway" (2.5± miles north on the Crown tower off NY-7 in the Town of Brunswick), "Cropseyville" (6.0± miles northeast on the Crown Tower off Palitsch Road in the Town of Brunswick), "Wynantskill" (1.9± miles south at 551 Main Avenue in the Town of North Greenbush), and "Troy" (2.4± miles northwest off Tibbits Avenue on the City of Troy water tank). Although these facilities are relatively close by and are successful in providing coverage within their intended localized areas, they do not provide sufficient reliable 4G/LTE coverage along the targeted network improvement area across the southwestern portion of Brunswick including to the residences, businesses, shopping areas and the traveling public living, visiting or passing through this portion of town.

Accordingly, construction of a new, locally-based communications facility is required to provide a dominant (i.e., continuous) level of advanced communications service to this area. *See*, RF Justification and Site Selection Analysis prepared by Verizon Wireless' Radio Frequency (RF) Engineer and Site Acquisition Specialist, detailing the purpose and need for this facility **[TAB 6]**. This project is part of a multi-million dollar comprehensive upgrade of the Verizon Wireless network in Rensselaer County, and serves as a suitable platform for future advanced wireless services expansion at the proposed site and deeper into the town's communities and commercial areas.

III. Description of Land Use

Applicant's communications facility will consist of the following general components: twelve (12) Verizon Wireless panel antennas mounted at the top position of a proposed 150± ft. monopole (154± ft. when including a 4± ft. lightning rod); an unmanned equipment cabinet and generator located within a 16± ft. x 22.5± ft. lease area; cabling connecting the antennas to the equipment platform; and associated cabling and all related ground equipment and utility services (power and telephone/fiberoptic services) **[see, Zoning Site Plan of Tectonic Engineering, included herewith at TAB 14]**.

The communications facility will be located on a 100± ft. x 100± ft. (10,000± sq. ft.) lease area and secured within a 75± ft. x 75± ft. fenced compound. A 50± ft. wide easement area will provide the Applicant with access and utility services to and from the premises. Access to the proposed facility will originate from Creek Road and will follow the northern property boundary line. An eight (8) foot chain link safety fence (with 3 strands of barbed wire on the top) will be installed to secure the tower site and protect the tower owner and Verizon Wireless' telecommunications equipment from unauthorized access.

The proposed communications facility is unmanned and will be visited for routine maintenance purposes approximately 2 - 3 times per year, as needed. As such, the project will not have any impact on existing water and sewage services. In addition, neither pedestrian nor vehicular access will be significantly impacted.

IV. Compliance with the Brunswick Telecommunications Law

Verizon Wireless' proposed communications facility complies in all material respects with the Town of Brunswick Telecommunications Law and Special Use Permit, Site Plan approval and issuance of a Use Variance under the *Rosenberg* standard is appropriate.

A. COMPLIANCE WITH ROSENBERG STANDARD:

1. **Facility is Necessary:** The Applicant has provided expert proof in the form of a report from its Radio Frequency (RF) Design Engineer demonstrating that (i) there is an inadequate and unsafe level of Verizon Wireless coverage in the Brunswick area **[TAB 6]**; and (ii) a new communications facility is necessary to provide adequate and safe hand-held coverage to this area. This report depicts the area where coverage issues exist and illustrates the geographic area that the communications facility needs to be located (the "search area") in order to provide adequate and safe signal strength and coverage to Brunswick.

2. **No Existing Viable Towers or Tall Structures:** In connection with this evaluation, the Applicant has retained the services of a real estate expert working in the telecommunications field to assist in the identification of existing towers in and around the search area. Based upon a thorough review of the search area, it is clear that there are no existing, viable towers (or other tall structures) that can be used to provide adequate and safe service to this area of Brunswick.

3. **Proposed Site Meets Coverage Objectives:** propagation analysis showing the adequate and safe level of coverage (in-building and mobile) that will be achieved from the proposed site is attached at **TAB 6.** As this analysis demonstrates, construction of a new 150± foot monopole at this location (154± ft. when including a 4± ft. lightning rod) will provide adequate and safe Verizon Wireless coverage to the southeastern portion of the Town Brunswick, to 3.3± miles along NY-2, along several miles of local and community roads in Brunswick and into the homes and businesses across the southwestern portion of the Town of Brunswick.

4. **Scale and Tower Height:** Verizon Wireless' antennas broadcast at extremely low power levels, and need to clear surrounding terrain and all natural and man-made objects to function properly. Accordingly, existing build conditions, dense mature vegetation, terrain and other factors necessitate a tower height of 150± ft. (154± ft. when including a 4± ft. lightning rod) to provide adequate and safe coverage and capacity to the Brunswick area **[TAB 6]**.

5. ***Rosenberg* Relief Necessary and Unavoidable:** Based upon the comprehensive evaluation completed by the Applicant's Radio Frequency (RF) Engineering and Real Estate experts, there are no existing towers or other tall structures of sufficient height within the designated search area (or surrounding vicinity) that can be used by Verizon Wireless to provide adequate and safe coverage and capacity to this area of the Town of Brunswick. Furthermore, based on the requirements of the Town of Brunswick Zoning Law and for the reasons described in **TAB 6,** the proposed property has been chosen as the most viable location for the proposed Pinewoods wireless facility.

B. COMPLIANCE WITH SPECIAL USE PERMIT REQUIREMENTS:

1. **Special Use Permit (Telecommunications Law § 160-69):** Pursuant to the application requirements for a Major Personal Wireless Telecommunications Service Facility, the Applicant submits the following:

   a. **Special Use Permit:** A completed town application form, signed by the property owner, is attached as **TAB 1.** (§ 160-69(A)(1)).

   b. **Full EAF:** 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") **[TAB 2]**. (§ 160-69(A)(2).

   c. **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 14.** (§ 160-69(A)(3).

d. **Detailed RF Justification and Site Selection Analysis:** A detailed report prepared by the Verizon Wireless Radio Frequency ("RF") engineer and Site Acquisition Specialist is included at **TAB 6.** The report provides, in substantial detail, precise reasons why the proposed tower is necessary, including information on the current coverage, topography, and alternative candidates that were considered within the search ring. (§ 160-69(A)(4),(7), (8), (9), (10), and (11).

e. **Structural Report:** Details on the height of the structure, tower's compliance with applicable structures standards and other details is attached at **TAB 7.** (§ 160-69(A)(5)).

f. **Visual Impact Assessment:** Please see the Visual EAF Addendum and the detailed Visual Resource Evaluation for the zone of visibility map and the before and after photographic simulations of the proposed tower from key locations surrounding the premises. **TAB 10.** (§ 160-69(A)(12)).

g. **Non-Interference:** The Applicant has submitted a letter from the Verizon Wireless RF Engineer, certifying that the proposed facility will not interfere with communications devices or other electronics operating in the surrounding vicinity **[TAB 9].** (§ 160-69(A)(13)).

h. **RF Safety/FCC Licenses (§ 160-69(A)(15)):** 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 8**, 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. Applicant's FCC licenses for the Rensselaer County area are provided at **TAB 5.**

C. COMPLIANCE WITH TELECOMMUNICATIONS SPECIFIC PROVISIONS (§ 160-70))

1. **Lot Area (§ 160-70(A)(1)).** The proposed property is 84.47 acres and therefore meets the minimum lot area requirement.

2. **Setbacks (§ 160-70(A)(2)):** Applicant's telecommunications tower and associated installations are located on a single parcel and will be set back from abutting parcels, public property or street lines a distance sufficient to contain on-site substantially all ice-fall or debris from a tower failure and preserve the privacy of the adjoining properties. The telecommunications

tower and all antennas and appurtenances will be setback from all lot lines sufficient distance to meet the setback requirements for a telecommunications tower.

3. **Maximum Height (§160-70(A)(3)):** The proposed height of 150 feet (154 feet when including the 4 ft. lightning tower) is the minimum height necessary to achieve the communication need and function they are intended to fulfill and will not require a variance from the maximum height that is permitted.

4. **Tower Design:** The telecommunications tower will be a monopole located on a single lot and designed to accommodate collocation of three additional future providers (§ 160-70(A)(4) and (5). As noted in **TAB 13**, an additional carrier (AT&T) has already expressed a desire to collocate at the site.

D. COMPLIANCE WITH SITE REQUIREMENTS (§ 160-71))

1. **Minimum Visual Impact (160-71)(A)(1)):** Based on the TOWAIR determination, the proposed tower will not require FAA lighting **(TAB 11)**. Verizon Wireless' equipment platform will not be significantly visible off site, and will blend with natural surroundings to the maximum extent practicable. Please note that the zone of visibility map located in **TAB 10** identifies that direct views of the tower are extremely limited.

2. **Lighting and Materials (160-71(A)(2) and (3):** The telecommunication law provides that towers shall not be marked or lit unless required by the FAA. The Applicant has attached the TOWAIR report which demonstrates that there is no requirement for lighting and therefore there will be no light on the top of the proposed tower **(TAB 11)**. The tower will consist of galvanized steel which will naturally weather to an unobtrusive gray.

3. **Signage:** The required emergency contact information and RF safety signage will be posted at the gate to the tower yard and/or affixed to Verizon Wireless' equipment platform. No portion of the telecommunications tower or site shall be used for advertising purposes (§ 160-71(A)(4)).

4. **Screening:** As noted, the existing tree cover at the 84.47± acre host parcel will not be significantly altered or disturbed during the construction process. Due to the site's separation from surrounding properties and the mature vegetation surrounding the property, additional landscaping is not proposed to screen the equipment platform or the lower portions of the tower from view (§ 160-71(A)(5)).

5. **Utility Service and Safe Zone:** The access easement area will be improved with a utility trench to provide utility services to and from the site and shall be underground. The tower is also designed so that in the event of failure it will fall within the setback area of the site. §160-71(A)(8) and (9).

6. **Security:** An eight (8) foot chain link safety fence (with 3 strands of barb

wire on the top) will be installed to secure the tower site and protect the tower and Verizon Wireless' telecommunications equipment from unauthorized access. (§ 160-71(A)(10)) **[TAB 14, Sheet C-2 and C-5]**.

7. **Access and Parking:** The 50 ft. wide easement from Creek Road will provide ingress and egress to and from the site. Parking for 1-3 vehicles is provided for infrequent maintenance visits and the facility will be unmanned and visited for routine maintenance purposes approximately 2-3 times per year (only as needed). As such, no pedestrian, vehicular access or parking issues exist. (§ 160-71(11)).

E. OPERATIONAL MATTERS

1. **Future Shared Use (§ 160-72):** Blue Sky Towers II, LLC shall negotiate in good faith concerning future requests for shared use of the new telecommunications tower. Please see the collocation commitment letter attached as **TAB 12**. As noted in **TAB 13**, AT&T has already expressed an interest in collocating on the tower.

2. **Removal and Bond (§ 160-74):** Blue Sky Towers II, LLC will also post a reasonable bond or other suitable undertaking, as set by the Planning Board, and shall remove the tower facility if inoperative or abandoned for a period of eighteen (18) consecutive months. **TAB 12.**

F. WAIVER REQUESTS

1. **Annual Engineering Inspection (§**160-76(A): The Applicant respectfully requests a waiver from the annual requirement to have the tower inspected by a licensed professional engineer. The Town will have the opportunity to review structural inspection reports for any collocation of equipment and/or modifications of existing equipment. An annual inspection is overly burdensome on the Applicant and unnecessary based on the location of the tower and the distance from nearby properties and residences. Towers are governed by the "Structural Standard for Antenna Supporting Structures, Antennas and Small Wind Turbine Support Structures" ANSI/TIA 222 Rev H (October 2017) which identifies that a tower inspection for a monopole is to be conducted every five (5) years (See Section 14.3(1)).

Public Necessity

As noted above and in **TABS 3 and 4**, Verizon Wireless is recognized as a public utility under New York law and a provider of personal wireless services under the federal Telecommunications Act of 1996. This project is a public necessity in that it is required to render adequate and safe coverage (mobile and in-building) to a significant portion of the Town of Brunswick. 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 Brunswick, demonstrates that Verizon Wireless' facility is a public necessity. Without the construction of the 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.

Compelling Reasons for Approval

There are compelling reasons, economic or otherwise, for approving Verizon Wireless' application for a Special Use Permit and Site Plan Review.

The Applicant's Radio Frequency (RF) Design Engineer has demonstrated that: (a) there are significant gaps in Verizon Wireless network coverage (mobile and in-building) in the Brunswick area; and (b) construction of a new 150± ft. monopole tower (154± ft. when including a 4± ft. lightning rod) at the above premises will provide adequate and safe Verizon Wireless coverage to the southwestern portion of the Town of Brunswick, including numerous roads, places of business and residences in the vicinity. Additionally, the proposed communications facility will integrate to the extent practicable with Verizon Wireless' existing network in in the nearby area. Notably, there are no existing tall structures nearby that can be used for collocation.

The proposed communications facility is located on a parcel of substantial size (84.47± acres) which primarily consists of dense wooded areas around the perimeter and open agricultural fields. In addition to providing meaningful opportunities for natural screening, this site will not impact any existing wetlands and will allow for the placement of the proposed telecommunications tower an adequate distance from adjoining properties.

In this context, the proposed communications facility will provide an essential public service, and has been sited to have the least practical adverse visual effect on the environment. Any resultant visual impact is minimal in nature and scope. And as noted above, the Applicant has proposed a facility that will enable Verizon Wireless to provide adequate and safe coverage to a significant portion of the Town of Brunswick, in accordance with its FCC licenses. In this regard, the proposed communications facility will not give rise to an undue visual impact.

V. Conclusion

Approval of the Pinewoods communications facility will enable Verizon Wireless to provide an adequate and safe level of hand-held wireless telephone service to the identified area of the Town of Brunswick and surrounding environs, within the confines of applicable technological and land use limitations. 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 its network and provide local businesses, residents and public service entities with safe and reliable wireless communications services. Based upon the foregoing, Applicant respectfully submits that this project complies in all material respects with the Special Use Permit and Site Plan Review standards of the Town of Brunswick Zoning Law, and any potential impact on the community created by this approval may properly be considered to be minimal and of no significant adverse effect.

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

1. Complete Special Use Permit and Use Variance Permit application forms;

2. Full Environmental Assessment Form ("Full EAF") prepared by Tectonic

Engineering & Surveying Consultants P.C.;

3. Documentation of Public Utility Status and Overview of the *Rosenberg* Decision;

4. Overview of Telecommunications Act of 1996;

5. Copy of Verizon Wireless' FCC Licenses for the Rensselaer County area;

6. RF Justification and Site Selection Analysis prepared by Rick Andras, RF Design Engineer with the Verizon Wireless Network Engineering Department and Sara Colman, Site Acquisition Specialist with Airosmith Development;

7. Structural Design Letter prepared by Steven Matthews, P.E., Tectonic Engineering & Surveying Consultants P.C.;

8. Radio Frequency (RF) Safety Report of Millennium Engineering, P.C. (Paul Dugan, P.E.);

9. Non-Interference Letter prepared by Rick Andras, RF Design Engineer;

10. Visual Resource Evaluation report and Visual EAF Addendum prepared by Tectonic Engineering;

11. TOWAIR Determination;

12. Collocation, Tower Removal & Bond Commitment Letter prepared by Sean Gormley, Project Manager for Blue Sky Towers II, LLC;

13. Letter of Intent to Lease Space on the Tower dated March 18, 2019 from AT&T; and

14. Zoning Site Plan Drawings prepared by Tectonic Engineering.

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

Thank you for your consideration.

Respectfully submitted,

BLUE SKY TOWERS II, LLC and
CELLCO PARTNERSHIP d/b/a Verizon Wireless

David C. Brennan /sdm

David C. Brennan, Esq.
Regional Local Counsel

Dated: May 9, 2019

Town of Brunswick
Planning Board
336 Town Office Road, Troy, New York, 12180

Application for a Special Use Permit

Application Number _____

Date Application Received _____

Hearing Scheduled Date _____

Application Fee _____

Approved Date _____ Conditions (Y/N) _____

Denial Date _____ Withdrawn Date _____

Planning Board Chairperson _____

General Information

Applicant:
Name: Blue Sky Towers II, LLC & Cellco Partnership d/b/a Verizon Wireless
c/o David C. Brennan, Esq.
Company: Young/Sommer LLC
Address: 5 Palisades Drive, Suite 300
Albany NY 12205
Phone: 518-438-9907 x 224 (office)
518-229-8699 (cell)

Property Owner:
Name: Mary Alice Zouky
Company: _____
Address: 275c Menemsha Lane
Wynantskill NY 12198
Phone: _____

Applicant is: Owner ___ Builder ___ Lessee X Architect/Engineer ___ Agent ___ Other ___
If other, explain: _____

Lot Information

Street Address of Lot: 275c Menemsha Lane

Parcel ID Number: 113.00-5-7.1 Zoning District R-25 and Ag Overlay
Irregular Shape of Lot (Y or N) N Corner Lot (Y or N) N
Existing: Lot Area _____ Frontage _____ Depth _____
Setbacks: Front _____ Rear _____ Left _____ Front _____
Proposed: Lot Area _____ Frontage _____ Depth _____
Setbacks: Front _____ Rear _____ Left _____ Front _____
Type of Water Service: N/A Type of Sanitary Disposal: N/A

Describe Existing Use: 84.47 acres of agricultural farmland and forest

Briefly describe the proposal: Personal Wireless Telecommunications Services Facility

Abutters-Adjacent Property Owners

List the name and addresses for each adjacent property owners. Use additional paper if needed.

	Name:	Address:	Property Use:
Front:			
Rear:			
Left:			
Right:			

Required Submittals

____ A plot plan showing all dimensions of buildings, yard (front, side and rear setbacks of building(s) (proposed and existing)), lot size, and streets.

____ Part 1 of the State Environmental Quality Review Act (SEQRA) Short Environmental Assessment Form

____ Application fee

NOTE: Additional submittals may be required by the Planning Board. Failure to submit all required documents may result in delay in the processing or denial of the application.

For Special Use Permit Applications, please complete the following:

Describe the requested use: Construction of an unmanned public utility/wireless service facility. Please see the attached Statement of Intent and Zoning Drawings for more details on the proposed communications facility.

1. Explain why the proposed Special Use is reasonably necessary for the public health or general interest of welfare.

A new, locally based communications facility is required to provide dominant (continuous) level of advanced communications service to this area. Please see Statement of Intent Section II.

2. Explain how the proposed Special Use is appropriately located with respect to transportation facilities, water supply, fire and police protection, waste disposal and other similar facilities.

This installation does not require transportation services, water, fire and police protection, or waste disposal. It is appropriately located given the other communication facilities in the area. See Statement of Intent Section II.

3. Explain how the proposed Special Use provides adequate parking spaces to handle expected public attendance.

There will be no public attendance. There is adequate parking for routine maintenance 2-3 times per year.

4. Explain how the proposed Special Use provides reasonable safeguards for neighborhood character and surrounding property values.

The existing foliage will not be significantly altered. Due to the site's separation from surrounding properties, additional landscaping is not necessary. Studies show that communication towers do not impact property values and that new homeowners purchase homes based on adequate cell service.

5. Explain why granting the requested Special Use will not cause undue traffic congestion or create a traffic hazard.

There will not be any traffic generated by the proposed facility.

6. Explain how the application for the Special Use Permit complies with standards prescribed in the Town of Brunswick Zoning Ordinance for a Major Personal Wireless Telecommunications Service Facility (use).

Please see Statement of Intent for a full discussion regarding the requirements as set forth in Article 9 of the zoning law.

7. Explain whether the applicant for the Special Use Permit has also applied for all other necessary permits and/or approvals from other governmental authorities.

All necessary permits and/or approvals have been and will be obtained, including the Applicant's FCC licenses.

Certification and Authorization

I certify that the information contained in this application is true to the best of my knowledge and I authorize the Town of Brunswick to process this application as provided by law.

I also authorize the Town of Brunswick Building Department and Planning Board to enter the property that is the subject of this application for the purpose of inspection and consideration of the application documents.

	Applicant:	Property Owner:
Name:	David C. Brennan, Esq.	Mary Alice Zoufy
Signature:	David C. Brennan	Mary Alice Zoufy
Date:	5/7/19	4-10-19

Application for a Site Plan Review

Date: May 10, 2019

Name of Business: Blue Sky Towers II, LLC and Cellco Partnership d/b/a Verizon Wireless

Town of Brunswick
Building Department
336 Town Office Road
Troy, New York 12180

	Name	Address	Business Phone	Home or Cell Phone
Applicant	Cellco Partnership	1275 John St., Ste 100, West Henrietta 14586	585-321-5435	
Owner	Mary Alice Zouky	88 Menemsha Lane, Wynantskill 12198		
Buyer	N/A			
Developer	N/A			
Attorney	David C. Brennan, Esq.	Young/Sommer LLC, 5 Palisades Drive, Albany 12205	518-438-9907 ext. 224	
Engineer	Steven Matthews	Tectonic Engineering, 36 British American Blvd., Latham 12110		518-783-1630
Surveyor	N/A			

NOTE: ANY OF THE ABOVE MAY BE CONTACTED BY THE REVIEWING OFFICER

Address of Site: Creek Road

Size of Original Parcel: 84.47 acres

Tax Map No.: 113.-5-7.1 (tower parcel) 113.-5-10.11 (easement parcel)

Sketch Plan Submitted: Attached Tab 14

[x] - All zoning in compliance.

[x] - Site Plan conforming to all requirements of Section 3(c).

[x] - Environmental Assessment Form filed.

[x] - Filing Fee* paid. Check one: Other - Telecom - $1,500

- [ ] - less than 1,000 sq. ft. - $750
- [ ] - 1,000 to 4,999 sq. ft. - $2,000
- [ ] - more than 4,999 sq. ft. - $2,500

*Filing Fee includes Application Fee and Planning Board Engineer Review Fee.

[ ] - $500 per Residential Unit/Lot Parks and Recreation paid.

Signature of Owner, Applicant or Agent

David C. Brennan, Esq.
Printed or Typed Copy of Above

NOTE: IF OWNER IS NOT THE APPLICANT, THE APPLICANT SWEARS THAT THE PROPOSED WORK IS AUTHORIZED BY THE OWNER AND THAT THE APPLICANT IS AUTHORIZED TO MAKE SUCH APPLICATION.

Approved: _____

Conditions: _____

Town of Brunswick
Zoning Board of Appeals
336 Town Office Road, Troy, New York 12180

Application for a Variance

Application Number _____

Date Application Received _____

Hearing Scheduled Date _____

Application Fee _____

Approved Date Conditions (y/n)

Denial Date _____ Withdrawn Date _____

Zoning Chairperson _____

General Information

Applicant: Name: Blue Sky Towers II, LLC & Cellco Partnership d/b/a Verizon Wireless c/o David C. Brennan, Esq.
Company: Young/Sommer LLC
Address: 5 Palisades Drive, Suite 300 Albany NY 12205
Phone: 518-438-9907 x 224 (office)/518-229-8699 (cell)

Property Owner: Name: Mary Alice Zouky
Company: _____
Address: 275c Menemsha Lane Wynantskill NY 12198
Phone: _____

Applicant is: Owner__ Builder __ Lessee X Architect/Engineer __ Agent __ Other __
If Other, Explain: _____

Lot Information

Street Address of Lot 275c Menemsha Lane

Parcel ID Number 113.00-5-7.1 Zoning District R-25 and Ag Overlay
Irregular Shape of Lot (Y or N) N Corner Lot (Y or N) N
Existing: Lot Area _____ Frontage _____ Depth _____
Setbacks: Front _____ Rear _____ Left _____ Right _____
Proposed: Lot Area _____ Frontage _____ Depth _____
Setbacks: Front _____ Rear _____ Left _____ Right _____
Type of Water Service: N/A Type of Sanitary Disposal: N/A

Describe Existing Use:
84.47 acres of agricultural farmland and forest

Type of Request: _____ Area Variance X Use Variance

Briefly describe the proposal: Construction of a 150 ft. (154 t. when including 4' lightning rod) monopole tower

Abutters-Adjacent Property Owners PLEASE SEE ZD'S @ TAB 13

List the name and address for each adjacent property owners. Use additional paper if needed.

	Name:	Address:	Property Use
Front			
Rear			
Left			
Right			

Required Submittals

X A plot plan showing all dimensions of buildings, yard (front, side and rear setbacks of
X building(s) (proposed and existing)), lot size, and streets.
X Part 1 of the State Environmental Quality Review Act (SEQRA) Short Environmental Assessment Form
____ Application fee

NOTE: Additional submittals may be required by the Zoning Board of Appeals. Failure to submit all required documents may result in a delay in the processing or denial of the application.

Have there been any other variances issued for this property? (Y or N) N
If yes, explain: _____

For Use Variance Applications, please complete the following:

Describe the requested use: Applicant proposes the construction of a 150 ft. (154 ft. when including 4 ft. lightning rod) monopole tower with Verizon Wireless equipment located at the top position.

1. **Explain why the applicant cannot realize a reasonable return from the property without the Use Variance, as demonstrated by competent financial evidence.**

The ordinary use variance standard does not apply. A cellular telephone company is considered a public utility under Rosenberg. Please see the Statement of Intent for a full description of the standard and how that standard has been met.

2. **Explain how the alleged hardship relating to the property is unique, and does not apply a substantial portion of the district or neighborhood.**

The ordinary use variance standard does not apply. A cellular telephone company is considered a public utility under Rosenberg. Please see the Statement of Intent for a full description of the standard and how that standard has been met.

3. **Describe why granting the requested Use Variance will not alter the essential character of the neighborhood.**

The ordinary use variance standard does not apply. A cellular telephone company is considered a public utility under Rosenberg. Please see the Statement of Intent for a full description of the standard and how that standard has been met.

4. **Explain whether the alleged hardship has been self-created.**

The ordinary use variance standard does not apply. A cellular telephone company is considered a public utility under Rosenberg. Please see the Statement of Intent for a full description of the standard and how that standard has been met.

Certification and Authorization

I certify that the information contained in this application is true to the best of my knowledge and I authorize the Town of Brunswick to process this application as provided by law.

I also authorize the Town of Brunswick Building Department and Zoning Board of Appeals to enter the property that is the subject of this application for the purpose of inspection and consideration of the application documents.

Applicant:

Name: David C. Brennan, Esq

Signature: David C. Brennan

Date: 5/7/19

Property Owner:

Mary Alice Zouky

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 applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Blue Sky Towers II, LLC & Verizon Wireless - Pinewoods - Unmanned Wireless Communications Facility		
Project Location (describe, and attach a general location map): Creek Road, Brunswick, Rensselaer County, NY 12180		
Brief Description of Proposed Action (include purpose or need): Blue Sky Towers II, LLC & Cellco Partnership, d/b/a Verizon Wireless ("verizon Wireless or the "Applicant") proposes the installation of an unmanned wireless communications facility located on the existing property. Said property being located approximately 0.33 miles north of the intersection of CR-139 (Creek Road) and Menemsha Lane. Access to the proposed facility will originate from CR-139 (Creek Road) utilizing a proposed 12' wide gravel access road. In general, the installation will consist of the following: a 150' tall monopole (154' including 4' lightning rod), twelve (12) antenna and related equipment to be mounted to the monopole at a center-line height of 146', a 30 kW diesel generator on a 4'x7' concrete pad, a 4x7' concrete pad and a 10' wide H-Frame, and all related coaxial cabling and utility services (power and telephone). All equipment is to be located inside a proposed 75'x75' fenced compound within a 100'x100' lease area.		
Name of Applicant/Sponsor: Blue Sky Towers II, LLC	Telephone: (508) 530-3580 E-Mail: seang@blueskytower.com	
Address: 352 Park Street, Suite 106		
City/PO: North Reading	State: MA	Zip Code: 01864
Project Contact (if not same as sponsor; give name and title/role): David C. Brennan, Esq. Managing Member, Young/Sommer LLC	Telephone: (518) 438-9907 Ext. 224 E-Mail: dbrennan@youngsommer.com	
Address: Executive Woods, Five Palisades Drive		
City/PO: Albany	State: NY	Zip Code: 12205
Property Owner (if not same as sponsor): Mary Alice Zouky	Telephone: - E-Mail: -	
Address: 275C Menemsha Lane		
City/PO: Brunswick	State: NY	Zip Code: 12180

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 Counsel, Town Board, or Village Board of Trustees ☐ Yes ☑ No		
b. City, Town or Village Planning Board or Commission ☑ Yes ☐ No	Site Plan Approval & Special Use Permit	TBD
c. City, Town or Village Zoning Board of Appeals ☑ Yes ☐ No	Use Variance	TBD
d. Other local agencies ☑ Yes ☐ No	Building Permit	TBD
e. County agencies ☑ Yes ☐ No	Department of Economic Development & Planning	TBD
f. Regional agencies ☐ Yes ☑ No		
g. State agencies ☐ Yes ☑ No		
h. Federal agencies ☐ Yes ☑ No		

i. Coastal Resources.
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐ Yes ☑ No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐ Yes ☑ No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐ Yes ☑ 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 only approval(s) which must be granted to enable the proposed action to proceed? ☐ Yes ☑ No

- **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 where the proposed action would be located? ☑ Yes ☐ No

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

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?) ☐ Yes ☑ No

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, or an adopted municipal farmland protection plan? ☑ Yes ☐ No

If Yes, identify the plan(s):

Agricultural and Farmland Protection Plan for Rensselaer County

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
R-25 (Residential), R-40 (Residential), AO (Agricultural Overlay), & A-40 (Agricultural)

b. Is the use permitted or allowed by a special or conditional use permit? Subject to receipt of a Use Variance ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Averill Park Central School District

b. What police or other public protection forces serve the project site?
Rensselaer County Sheriff's Department (Rensselaer County Jail, 4000 Main Avenue, Troy, NY 12180)

c. Which fire protection and emergency medical services serve the project site?
Eagle Mills Fire District No 1 (627 Brunswick Road, Troy, NY 12180)

d. What parks serve the project site?
N/A

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 public utility/personal wireless service facility

b. a. Total acreage of the site of the proposed action? 84.47 acres
b. Total acreage to be physically disturbed? 2.19 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 2.19 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
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: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 4 months
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? ☐Yes ☑No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				
At completion of all phases				

g. Does the proposed action include new non-residential construction (including expansions)? ☑Yes ☐No

If Yes,

i. Total number of structures 2

ii. Dimensions (in feet) of largest proposed structure: 154' TWR height; ____ width; and ____ length

iii. Approximate extent of building space to be heated or cooled: 0 square feet

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? ☐Yes ☑No

If Yes,

i. Purpose of the impoundment: ____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify: ____

iii. If other than water, identify the type of impounded/contained liquids and their source. ____

iv. Approximate size of the proposed impoundment. Volume: ____ million gallons; surface area: ____ acres

v. Dimensions of the proposed dam or impounding structure: ____ height; ____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): ____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐Yes ☑No

If Yes:

i. What is the purpose of the excavation or dredging? ____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): ____
- Over what duration of time? ____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. ____

iv. Will there be onsite dewatering or processing of excavated materials? ☐Yes ☐No

If yes, describe. ____

v. What is the total area to be dredged or excavated? ____ acres

vi. What is the maximum area to be worked at any one time? ____ acres

vii. What would be the maximum depth of excavation or dredging? ____ feet

viii. Will the excavation require blasting? ☐Yes ☐No

ix. Summarize site reclamation goals and plan: ____

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? ☐Yes ☑No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): ____

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 the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No

If Yes, describe: _____

iv. Will the 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: _____
- 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? ☐Yes ☐No

If Yes:

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

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

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), what is the 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: _____
- Name of district: _____
- 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? ☐Yes ☐No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will a 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 1.02 acres (impervious surface)

_____ Square feet or 84.5 acres (parcel size)

ii. Describe types of new point sources. Gravel access road and fenced compound

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)?

On-Site storm water management facilities out letting to corn fields on the parcel.

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☐Yes ☑No

iv. Does the 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)

Diesel generator

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_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (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)? ☐Yes ☑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? ☐Yes ☑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? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend
☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐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? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑Yes ☐No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____
Minimal increase in electrical power usage as necessary to operate the facility.

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):
Local utilities

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☑No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 8-5
- Saturday: _____
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: 24 Hrs
- Saturday: 24 Hrs
- Sunday: 24 Hrs
- Holidays: 24 Hrs

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

During construction, noise associated with the operation of construction equipment, once construction of the proposed facility is complete, the on-site generator will be the only contributing factor to noise levels.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: _____

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

One (1) 25W Flood Light to be mounted approximately 8' above grade on the proposed H-Frame, designed to illuminate the area in and around the proposed equipment.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ 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? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑ 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? ☐ Yes ☑ No

If Yes:

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:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

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? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

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): _____

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	0.07	1.09	+ 1.02
• Forested	20.44	20.44	+/- 0.00
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	11.34	11.34	+/- 0.00
• Agricultural (includes active orchards, field, greenhouse etc.)	52.69	51.52	-1.17
• 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? ☐Yes ☑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? ☐Yes ☑No

If Yes,

i. Identify Facilities:

_____

_____

e. Does the project site contain an existing dam? ☐Yes ☑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? ☐Yes ☑No

If Yes:

i. Has the facility been formally closed? ☐Yes ☐ 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? ☐Yes ☑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? ☐Yes ☑ 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: ☐Yes ☐No

☐ Yes – Spills Incidents database Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____

☐ 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? ☐Yes ☐No

If yes, provide DEC ID number(s): _____

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? ☐ Yes ☐ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? 4.75 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site:

Ho - Hoosic gravelly sand loam	60 %
Be - Bermardston gravelly silt loam	20 %
Bn - Bermardston-Nassau Complex	20 %

d. What is the average depth to the water table on the project site? Average: 4.7 feet

e. Drainage status of project site soils:
☑ Well Drained: 100 % of site
☐ Moderately Well Drained: _____ % of site
☐ Poorly Drained _____ % of site

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 80 % of site
☑ 10-15%: 20 % of site
☐ 15% or greater: _____ % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ 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)? ☐ Yes ☑ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ 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? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name Poestenkill Classification C(T)
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name AP-4 Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☑ Yes ☐ No
If Yes:

i. Name of aquifer: Principal Aquifer

m. Identify the predominant wildlife species that occupy or use the project site:

Deer	Squirrels	Skunks
Rabbits	Opossums	Foxes
Birds	Raccoons	Chipmunks

n. Does the project site contain a designated significant natural community? ☐Yes ☑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:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

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? ☐ Yes ☑No

If Yes:

i. Species and listing (endangered or threatened): _____

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? ☐Yes ☑No

If Yes:

i. Species and listing: _____

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐Yes ☑No

If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

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? ☑Yes ☐No

If Yes, provide county plus district name/number: RENS002

b. Are agricultural lands consisting of highly productive soils present? ☑Yes ☐No

i. If Yes: acreage(s) on project site? 84.47

ii. Source(s) of soil rating(s): 2016 New York Agricultural Classification - Rensselaer

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐Yes ☑No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ 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? ☐Yes ☑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 the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ 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? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ 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? ☐ Yes ☑ 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? ☐ Yes ☐ 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 Peter P. Roma Date 4/19/2019

Signature _____ Title Staff Engineer II, E.I.T.

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e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ 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? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ 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? ☐ Yes ☑ 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? ☐ Yes ☐ 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 Peter P. Roma Date 4/19/2019

Signature _____ Title Staff Engineer II, E.I.T.

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

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) ☐NO ☐YES
If "Yes", answer questions a - j. If "No", move on to Section 2.

	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	☐	☐
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	☐	☐
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	☐	☐
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	☐	☐
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	☐	☐
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	☐	☐
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	☐	☐
h. Other impacts: _____		☐	☐

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	☐	☐
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	☐	☐
c. Other impacts: _____ _____		☐	☐

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	☐	☐
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	☐	☐
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	☐	☐
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	☐	☐
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	☐	☐
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	☐	☐
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	☐	☐
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	☐	☐
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	☐	☐
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	☐	☐
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	☐	☐

l. Other impacts: _____ _____		☐	☐

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	☐	☐
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	☐	☐
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	☐	☐
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	☐	☐
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	☐	☐
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	☐	☐
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	☐	☐
h. Other impacts: _____ _____		☐	☐

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	☐	☐
b. The proposed action may result in development within a 100 year floodplain.	E2j	☐	☐
c. The proposed action may result in development within a 500 year floodplain.	E2k	☐	☐
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	☐	☐
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	☐	☐
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	☐	☐

g. Other impacts: _____ _____		☐	☐

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) ☐NO ☐YES

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_2)	D2g	☐	☐
ii. More than 3.5 tons/year of nitrous oxide (N_2O)	D2g	☐	☐
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	☐	☐
iv. More than .045 tons/year of sulfur hexafluoride (SF_6)	D2g	☐	☐
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions	D2g	☐	☐
vi. 43 tons/year or more of methane	D2h	☐	☐
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	☐	☐
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	☐	☐
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	☐	☐
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	☐	☐
f. Other impacts: _____ _____		☐	☐

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.) ☐NO ☐YES

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	☐	☐
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	☐	☐
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	☐	☐
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	☐	☐

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	☐	☐
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	☐	☐
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	☐	☐
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	☐	☐
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	☐	☐
j. Other impacts: _____ _____		☐	☐

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	☐	☐
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, Elb	☐	☐
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	☐	☐
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	☐	☐
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	El a, E1b	☐	☐
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	☐	☐
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	☐	☐
h. Other impacts: _____		☐	☐

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.) ☐NO ☐YES

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

	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	☐	☐
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	☐	☐
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	☐ ☐	☐ ☐
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	☐ ☐	☐ ☐
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	☐	☐
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile ½ -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	☐	☐
g. Other impacts: _____ _____		☐	☐

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.) ☐NO ☐YES

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

	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 the National or State Register of Historical Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places.	E3e	☐	☐
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	☐	☐
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	☐	☐

d. Other impacts: _____ _____		☐	☐
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	☐	☐
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	☐	☐
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	☐	☐

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	☐	☐
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	☐	☐
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	☐	☐
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	☐	☐
e. Other impacts: _____ _____		☐	☐

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	☐	☐
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	☐	☐
c. Other impacts: _____ _____		☐	☐

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems. ☐ NO ☐ YES
(See Part 1. D.2.j)
If "Yes", answer questions a - f. If "No", go to Section 14.

	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	☐	☐
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	☐	☐
c. The proposed action will degrade existing transit access.	D2j	☐	☐
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	☐	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	☐	☐
f. Other impacts: _____ _____		☐	☐

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy. ☐ NO ☐ YES
(See Part 1. D.2.k)
If "Yes", answer questions a - e. If "No", go to Section 15.

	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	☐	☐
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	☐	☐
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	☐	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	☐	☐
e. Other Impacts: _____ _____		☐	☐

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting. ☐ NO ☐ YES
(See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

	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	☐	☐
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	☐	☐
c. The proposed action may result in routine odors for more than one hour per day.	D2o	☐	☐

d. The proposed action may result in light shining onto adjoining properties.	D2n	☐	☐
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	☐	☐
f. Other impacts: _____ _____		☐	☐

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.) ☐ NO ☐ YES

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

	Relevant Part I Question(s)	No,or small impact may cccur	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	☐	☐
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	☐	☐
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	☐	☐
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	☐	☐
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	☐	☐
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	☐	☐
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	☐	☐
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	☐	☐
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	☐	☐
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	☐	☐
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	☐	☐
m. Other impacts: _____ _____		☐	☐

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.) ☐ NO ☐ YES

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

	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	☐	☐
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	☐	☐
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	☐	☐
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	☐	☐
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, E1b	☐	☐
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	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	☐	☐
h. Other: _____ _____		☐	☐

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) ☐ NO ☐ YES

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

	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	☐	☐
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	☐	☐
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	☐	☐
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	☐	☐
g. Other impacts: _____ _____		☐	☐

PRINT FULL FORM

DOCUMENTATION OF PUBLIC UTILITY STATUS
and
OVERVIEW OF ROSENBERG DECISION

In *Cellular Tel. Co. v. Rosenberg*, 82 N.Y.2d 364 (1993), the New York Court of Appeals determined that cellular telephone companies are public utilities. The Court held that proposed cellular telephone installations are to be reviewed by zoning boards pursuant to the traditional standard afforded to public utilities, rather than the standards generally required for the necessary approvals:

> It has long been held that a zoning board may not exclude a utility from a community where the utility has shown a need for its facilities. There can be no question of [the carrier's] need to erect the cell site to eliminate service gaps in its cellular telephone service area. The proposed cell site will also improve the transmission and reception of existing service. Application of our holding in *Matter of Consolidated Edison* to sitings of cellular telephone companies, such as [the applicant], permits those companies to construct structures necessary for their operation which are prohibited because of existing zoning laws and to provide the desired services to the surrounding community. . . . Moreover, the record supports the conclusion that [the applicant] sustained its burden of proving the requisite public necessity. [The applicant] established that the erection of the cell site would enable it to remedy gaps in its service area that currently prevent it from providing adequate service to its customers in the . . . area.

Rosenberg, 82 N.Y.2d at 372-74 (citing *Consolidated Edison Co. v. Hoffman*, 43 N.Y.2d 598 (1978)).

This special treatment of a public utility stems from the essential nature of its service, and the fact that a public utility transmitting facility must be located in a particular area in order to provide service. For instance, water towers, electric switching stations, water pumping stations and telephone poles must be in particular locations (including within residential districts) in order to provide the utility to a specific area:

> [Public] utility services are needed in all districts; the service can be provided only if certain facilities (for example, substations) can be located in commercial and even in residential districts. To exclude such use would result in an impairment of an essential service.

Anderson, New York Zoning Law Practice, 3d ed., p. 411 (1984) (hereafter "Anderson"). See also, *Cellular Tel. Co. v. Rosenberg*, 82 N.Y.2d 364 (1993); *Payne v. Taylor*, 178 A.D.2d 979 (4th Dep't 1991).

Accordingly, the law in New York is that a municipality may not prohibit facilities, including towers, necessary for the transmission of a public utility. In *Rosenberg*, 82 N.Y.2d at 371, the court found that "the construction of an antenna tower... to facilitate the supply of cellular telephone service is a 'public utility building' within the meaning of a zoning ordinance." See also *Long Island Lighting Co. v. Griffin*, 272 A.D. 551 (2d Dep't 1947) (a municipal corporation may not prohibit the expansion of a public utility where such expansion is necessary to the maintenance of essential services).

In the present case, Verizon Wireless does not have reliable service coverage in areas of the Town of Brunswick. The communications facility proposed is necessary to remedy this service problem and to provide adequate and reliable wireless telecommunications service coverage to this area. Therefore, Verizon Wireless satisfies the requisite showing of need for the facility under applicable New York law.

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. LA. 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.

104TH CONGRESS
2d Session
HOUSE OF REPRESENTATIVES
REPORT
104–458

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.

22–327

[redacted] *tity 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 pole, duct, conduit, or right-of-way accessible.*

[redacted] *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.

[redacted]

RIERS.

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. If

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

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
KNKA246	0006672353
Radio Service CL - Cellular	
Market Numer CMA044	**Channel Block** B
Sub-Market Designator 0	

FCC Registration Number (FRN): 0003290673

Market Name
Albany-Schenectady-Troy, NY

Grant Date	Effective Date	Expiration Date	Five Yr Build-Out Date	Print Date
04-14-2015	04-14-2015	05-15-2025		04-14-2015

Site Information:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
2	43-08-54.3 N	073-47-03.4 W	215.0		

Address: SARATOGA: KINGS STATION ROAD
City: GREENFIELD **County:** SARATOGA **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	41.400	174.700	188.400	175.600	172.800	110.000	-41.500	-71.300
Transmitting ERP (watts)	100.000	57.540	7.760	0.630	0.160	0.630	7.760	57.540
Antenna: 2 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	41.500	174.700	188.400	175.600	172.800	110.000	-41.500	-71.000
Transmitting ERP (watts)	1.450	19.500	79.430	95.500	36.310	3.240	0.160	0.160
Antenna: 3 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	41.500	174.700	188.400	175.600	172.800	110.000	-41.500	-71.300
Transmitting ERP (watts)	1.450	0.160	0.160	3.240	36.310	95.500	79.430	19.500

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.

FCC 601-C
August 2007

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKA246 **File Number:** 0006672353 **Print Date:** 04-14-2015

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
3	42-37-39.4 N	074-00-37.4 W	554.7	46.3	

Address: THACHER PARK: 5 MILES SOUTHWEST OF CAMP PINNACLE ROAD
City: New Scotland **County:** ALBANY **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	479.100	506.400	512.200	439.300	211.900	133.200	261.500	223.800
Transmitting ERP (watts)	75.080	2.650	1.000	1.000	1.000	7.850	122.830	257.550
Antenna: 2 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	479.100	506.400	512.200	439.300	211.900	133.200	261.500	223.800
Transmitting ERP (watts)	37.050	79.470	71.390	28.640	1.470	0.930	0.930	1.810
Antenna: 3 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	479.100	506.400	512.200	439.300	211.900	133.200	261.500	223.800
Transmitting ERP (watts)	1.000	1.000	6.450	98.460	230.900	140.000	15.040	1.000

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
4	42-54-41.3 N	074-29-08.6 W	239.9	58.9	

Address: PALATINE BRIDGE: MORNING ROAD, 1.1 MILE NORTH OF ROUTE 90
City: PALATINE **County:** MONTGOMERY **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	1.800	113.800	153.300	-16.900	9.400	64.300	128.700	51.600
Transmitting ERP (watts)	79.850	41.860	4.450	0.990	0.990	0.990	24.680	85.260
Antenna: 2 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	1.800	113.800	153.300	-16.900	9.400	64.300	128.700	51.600
Transmitting ERP (watts)	1.060	62.500	403.500	403.500	71.750	2.380	0.990	0.990
Antenna: 3 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	1.800	113.800	153.300	-16.900	9.400	64.300	128.700	51.600
Transmitting ERP (watts)	0.990	0.990	0.990	6.230	129.570	368.520	230.740	26.950

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKA246 **File Number:** 0006672353 **Print Date:** 04-14-2015

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
5	43-10-40.3 N	073-55-44.5 W	469.7		

Address: ALPINE: LOCATED OFF ORMSBEE ROAD
City: GREENFIELD **County:** SARATOGA **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.800	242.900	307.900	353.300	310.900	80.200	60.700	59.100
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.
7	42-36-20.3 N	073-27-36.4 W			

Address: Fire Tower Road
City: Stephentown **County:** RENSSELAER **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	87.100	103.400	86.700	194.400	253.100	332.400	345.400	279.800
Transmitting ERP (watts)	44.000	75.960	35.390	2.610	0.290	12.190	72.680	58.030

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
8	42-58-16.3 N	074-40-50.5 W	352.4		

Address: MINDEN: 0.41 MILES FROM THE INTERSECTION OF ROUTE 5S AND SANDERS ROAD BEARING 4
City: MINDEN **County:** MONTGOMERY **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	5.500	-53.300	88.400	168.300	75.300	-3.700	45.400	124.100
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.
9	42-51-27.9 N	073-23-22.8 W	368.2	93.9	

Address: Le Barron Hill Rd.
City: Hoosick **County:** RENSSELAER **State:** NY **Construction Deadline:**

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	248.400	267.300	167.000	111.500	70.400	85.300	293.500	276.100
Transmitting ERP (watts)	72.440	19.050	7.240	20.420	81.280	97.720	97.720	95.500

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKA246 **File Number:** 0006672353 **Print Date:** 04-14-2015

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
10	42-17-05.3 N	074-15-53.9 W	911.7	34.8	

Address: Windham Ski Area - Base Lodge

City: Windham **County:** GREENE **State:** NY **Construction Deadline:** 10-27-2009

Antenna: 1 Azimuth (from true north)	**0**	**45**	**90**	**135**	**180**	**225**	**270**	**315**
Antenna Height AAT (meters)	310.800	465.300	318.700	266.900	255.100	310.100	350.200	327.100
Transmitting ERP (watts)	116.240	92.730	14.970	0.620	0.620	0.620	16.420	99.360
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	255.100	310.100	350.200	327.100
Transmitting ERP (watts)	0.800	39.870	112.180	115.180	66.580	4.670	0.620	0.620
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	255.100	310.100	350.200	327.100
Transmitting ERP (watts)	0.780	0.620	0.620	4.890	70.940	115.560	109.620	35.530

Control Points:

Control Pt. No. 1

Address: 500 W Dove Rd

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

Waivers/Conditions:

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).

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
WQCS418	0006668604
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
04-23-2015	04-23-2015	05-13-2025	04-24-2015

Market Number	Channel Block	Sub-Market Designator
BTA007	C	6

Market Name
Albany-Schenectady, NY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
05-13-2010			

Waivers/Conditions:

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).

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.

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
WQEM928	0007057132
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
03-11-2016	03-11-2016	03-08-2026	03-12-2016

Market Number	Channel Block	Sub-Market Designator
BTA007	C	5

Market Name
Albany-Schenectady, NY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
03-08-2011			

Waivers/Conditions:

Grant of the request to update licensee name is conditioned on it not reflecting an assignment or transfer of control (see Rule 1.948); if an assignment or transfer occurred without proper notification or FCC approval, the grant is void and the station is licensed under the prior name.

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).

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.

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	Effective Date	Expiration Date	Print Date
11-26-2008	03-26-2013	06-13-2019	

Market Number	Channel Block	Sub-Market Designator
REA001	C	0

Market Name
Northeast

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
06-13-2013	06-13-2019		

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.

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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	Effective Date	Expiration Date	Print Date
11-29-2006	03-12-2014	11-29-2021	05-09-2014

Market Number	Channel Block	Sub-Market Designator
REA001	F	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.

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
WQGA902	0006150136
Radio Service AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
11-29-2006	12-28-2013	11-29-2021	02-14-2014

Market Number	Channel Block	Sub-Market Designator
BEA005	B	5

Market Name
Albany-Schenectady-Troy, NY

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.

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verizon

CELLCO PARTNERSHIP D/B/A
VERIZON WIRELESS

PINEWOODS SITE

Creek Road
Town of Brunswick
Rensselaer County

RF JUSTIFICATION AND SITE SELECTION ANALYSIS
MAY 8, 2019

RF JUSTIFICATION AND SITE SELECTION ANALYSIS

CELLCO PARTNERSHIP d/b/a Verizon Wireless ("Verizon Wireless") submits this RF analysis in association with its proposed "Pinewoods" wireless communications facility. Verizon Wireless proposes to install and operate a new wireless telecommunications facility, including a new structure owned by Blue Sky Towers II, LLC, associated antennas, equipment platform and related appurtenances, off Creek Road in the Town of Brunswick, Rensselaer County, New York. The property is owned by Mary Alice Zouky and is a vacant 84.47-acre parcel used primarily for agricultural fields located in the R-25 Residential District and the Agricultural Overlay. The access road crosses the R-40 zoning district.

1. QUALIFICATIONS

This report was prepared by Verizon Wireless' in-house RF Engineering Department, which consists of experienced and properly credentialed radio frequency engineers. The RF Engineering Department designs Verizon Wireless' nationwide network to provide adequate and effective wireless communications services in compliance with all FCC requirements, including Verizon Wireless' licensure requirements. The RF Design Engineers use proprietary software and tools in addition to industry-standard RF propagation modeling and network performance simulation programs to identify network coverage, performance and capacity deficiencies, and develop and implement solutions based on these analyses with the goal of maximize network performance and efficiency.

2. WIRELESS TELECOMMUNICATIONS SYSTEMS

The FCC licenses a specific amount of RF spectrum to wireless service providers and stipulates that each carrier efficiently use that spectrum to provide adequate wireless communication to emergency services, businesses and individuals in the licensed areas. Wireless carriers achieve this mandate by continuously reusing the allocated radio frequencies throughout their licensed service area. This is accomplished by building small radio base stations, or cell sites, in a particular pattern (also known as a grid). The application of the grid concept affords a wireless carrier the ability to effectively and efficiently plan the reuse of radio frequencies. Indeed, it is the only way a cellular system can adequately function. Following proper planning techniques (as originally defined by Bell Labs and further refined by the wireless industry), the same radio frequency is reused at reasonably close intervals throughout the licensed area, without causing harmful interference (noisy or dropped calls or the inability to originate a call are typical manifestations of harmful interference), but only if placed properly. There is extremely limited flexibility as to where a cell site can be located, and limited flexibility as to the proper height.

When designing a wireless network, an RF Design Engineer starts with a theoretical grid pattern and applies it to the licensed area. Each licensed area has many variables that can affect the design and must be considered. These variables include terrain features, use of existing structures, traffic distribution, and many others. In order to provide effective coverage while maintaining an appropriate frequency reuse plan, the RF Design Engineer must perform a balancing test of all applicable technological variables. The primary variables that the engineer must balance/take into consideration are location, and the overall height of the cell sites. Sites located too close to one another will result in unacceptable network interference. If the sites are too far apart, service will significantly degrade in the area where the signal does not reach ultimately resulting in the potential for dropped calls or ineffective connection attempts. If a cell

site is too high, it will have increased coverage but will cause interference throughout the rest of the wireless network, thereby significantly affecting network efficiency. If a cell site is too low, it will not provide effective coverage to the target area.

Therefore, a properly designed wireless network begins with strategically located cell sites. A common denominator for each cell site involves a tall structure, typically a building, tower, water tank or other structure on which antennas are mounted. Typically, radio-transmitting equipment (base station) is located at the base of the structure. Radio signals leave the base station and travel through transmission lines to the antennas or to fiber optic cable to the remote radio head (RRH) at the top of structure and then to the antennas. Radio signals are broadcast through the antennas and travel to the customer's wireless device, thereby establishing a connection between the wireless network and the end user of the wireless device. When a wireless device transmits back to the cell site, the signal is received by the antennas, travels down the transmission line and into the base station. The base station converts the signal into digital data and combines it with all the other wireless calls and digital traffic at that cell site. This data is then sent over fiber optic digital lines to the main switching computer. The main switching computer or Mobile Switching Center (MSC) is interconnected to the national Public Switched Telephone Network (PSTN) and Internet service providers where calls are routed to other wireless or land-line phones, or Internet locations.

As this technology enables mobile calling, once a wireless call is originated and the customer travels away from the cell site of origination, the system tracks the changes and begins a process of determining if there is a better serving cell site (a "dominant server"). Upon determination of a stronger serving site, the system automatically switches the wireless customer over to the new cell site. This process is known as a handover and allows for seamless coverage within a wireless carrier's service area. By design, this process is supposed to happen so quickly, the wireless customer does not perceive it. If the network is designed properly, there is no interruption of service and connection quality remains adequate. Proper, effective RF design requires the location (and height) of cell sites in fairly rigid parameters to ensure that the above-described process works in an adequate manner.

3. PERFORMANCE METRICS

(a) Coverage

The critical issue for Verizon Wireless is the provision of "adequate and substantial" Radio Frequency (RF) service to serve its wireless customers. The wireless industry is governed by the Rules of the FCC. The FCC mandates in 47 CFR §22.940 and §24.16 that each carrier must provide "substantial service" in its licensed service area, or risk having their license revoked. The FCC defines "substantial service" as service which is sound, favorable, and substantially above a level of mediocre service. Similarly, New York State law, recognizing the importance of deploying the infrastructure for wireless communications, has deemed cellular transmitting facilities to be public utilities for purposes of zoning. As such, the facilities must be permitted in order to provide "safe and effective" service.

A metric called Reference Signal Received Power ("RSRP") is used to specify the coverage capabilities of wireless networks. This standard best represents the Long-Term Evolution ("LTE") data technology (also known as 4G) being utilized as well as the Voice-Over LTE ("VoLTE") technology, which is being deployed on 4G to augment and ultimately replace Verizon Wireless' legacy Third Generation (3G) voice services and capacity. RSRP is the average received power measured across an LTE broadband channel.

RSRP is measured in units of "decibels" referenced against 1 milliwatt, or dBm. The decibel is a logarithmic unit that allows ratios to be added or subtracted. The definition formula for decibels referenced against 1 milliwatt is $dBm = 10\log(P / 1mW)$ with P measured in milliwatts. So 10 mW would be 10dBm, 100 mW would be 20dBm, etc.

The service boundary of a 4G site is defined using a RSRP equating to an acceptable receiver signal threshold. This value is derived from industry standards, 4G receive signal levels and quality and acceptable signal to noise ratios, along with statistically quantifiable variations in terrain. This threshold must also take into account additional losses associated with location of the mobile user.

Verizon Wireless must provide adequate service to all of its users. In order to account for users within buildings, additional margin must be added to RSRP so that adequate coverage exists inside. Industry and Verizon Wireless engineering standards include an additional 10dB of margin to RSRP to be used for light suburban areas, with increasing values for higher density land usage. This additional margin is also required for in-vehicle service specifically to account for increased attenuation associated with the use of hands-free headsets, where the phone is typically placed on the seat or in the center console.

An industry standard RF computer-aided engineering tool is used in the design of wireless networks. This tool is used to generate a plot of RSRP that shows underlying geographic data (highways, arterial roads, etc.). The propagation map is drawn showing the region where the RSRP equates to the minimally acceptable received signal level for adequate service, as measured at the device's receiver. The propagation map depicts the RSRP of the surrounding environment including the attenuation of in-building and in-vehicle use of service and visually demonstrates existing coverage patterns. Plots can also be generated to demonstrate proposed coverage patterns.

With the preceding in mind, Verizon Wireless' network standard for reliable 4G LTE wireless service for highway and rural settings is -105 dBm RSRP. Network reliability and accessibility decreases dramatically for mobile devices operating in or traveling into RF environments outside (or weaker than) the -105 dBm RSRP coverage boundary (represented as white space in the provided coverage plots). Similarly, and as described above, -95 dBm RSRP is used in areas where additional signal strength is needed to penetrate into buildings (e.g., city centers, dense residential, commercial and industrial type environs). Although there are patches of dense residential communities across the target coverage area, the overall environment is more rural in nature so the -105 dBm RSRP signal strength standard was applied for the proposed Pinewoods facility.

Lastly, in addition to the sites shown on a propagation map, and toward the edges of these maps, there may be coverage from other more-distant sites but these sites are eliminated from this report as they do not impact the area surrounding the subject location.

(b) Capacity

Significant deficiencies in service can occur in Verizon Wireless' telecommunication network in and around the existing sites. These deficiencies can be a result of capacity demands that are taxing the surrounding sites in the Verizon Wireless network. The FCC mandates in 47 CFR §22.940 that when a Commercial Mobile Radio Service ("CMRS") licensee (i.e. "wireless carrier") is up for renewal, the carrier must demonstrate its proposal for expanding system capacity in a coordinated manner in order to meet anticipated increasing demand for both local and roamer service, or be at risk of license revocation.

Verizon Wireless regularly monitors customer traffic on each site in its network and identifies which sites are reaching 4G capacity limits or are projected to reach these limits over a rolling four-year window. Capacity is defined as the amount of customer data traffic (voice and data) a given site can process before significant performance degradation occurs. Performance issues include an inability to access the network (make a call), calls being abruptly dropped from the network (dropped calls), or poor call or data throughput performance while connected to the network (delayed upload or download speeds). Data volume, or throughput, is the main factor used to determine the existing 4G capacity for a given site and to project when that site is expected to run out of capacity (i.e., reach a point where it can no longer process the volume of data requested by local wireless devices). Capacity relief solutions, typically development of additional sites capable of "offloading" the "loaded" sites, are then required to solve the problem.

Forward Data Volume ("FDV"), a measure of usage (data throughput) on a particular site over a given period of time, is the performance metric used to evaluate the capacity of an existing facility. The "forward link" is used since there is generally more data being downloaded[1] (or transmitted) from a given site to the mobile devices within its coverage area, than uploaded. Therefore, it is the "forward link", not the "reverse link" that is used to determine the capacity limitations. Spikes resulting from anomalies such as seasonal events (tourist spikes, major outdoor concert venues or sporting events, etc.), college breaks, holiday sales events or celebrations, and major accidents or emergencies are accounted for as they can inflate the capacity demand and result in a premature capacity offload prediction. Trending actual and recorded throughput data over time for a site and comparing it to the theoretical maximum throughput capabilities for that site determines when that site will require capacity relief.

The above are some of the concepts and parameters used when determining adequacy of the existing network.

4. PERFORMANCE SOLUTIONS

When the Verizon Wireless Radio Frequency Engineer identifies coverage gaps in the system or sites that have or will reach data capacity exhaustion, they issue a "search area." A search area is a geographical area located within the inadequately serviced area, and it is designed such that if a wireless telecommunications facility is located within the search area, and at an appropriate height, it will likely provide the required coverage. For the most part, locations outside of the search area will fail to provide adequate service to the cell. Due to technological constraints, there is limited flexibility as to where a new facility can be located, and still function properly. The goal of the search area is to define the permissible location for placement of a cell site that will provide adequate service in the subject cell, and also work properly as part of the overall network.

5. VERIZON WIRELESS SERVICE AND PROPOSED SOLUTION IN THE PINEWOODS CELL

(a) Character of the Area

The Pinewoods search area is located between Menemsha Lane and Pinewoods Avenue in the R-25 Residential District/ Agricultural Overlay and R-40 Residential District in the southwestern portion of Town. The specific area in need of 4G network improvements (coverage and capacity) targets the 3.3± mile section along NY State Route 2 (NY-2 / Brunswick Road) from approximately Troy Country Club and passing thru the Hamlet of Eagle Mills and

[1] By comparison, the reverse link, or information transmitted from mobile devices to an associated wireless facility, generally carries in the order of 1/10th of the data volume as the forward or downlink path.

continuing east to White Church Road. The Pinewoods facility will also improve Verizon Wireless 4G services across several pockets of poor-to-no coverage in the lower elevation valleys and terrain depressions in the area generally bounded by Menemsha Lane to the south and McChesney Avenue Extension to the north. The area in and surrounding the Pinewoods Cell is mostly agricultural fields and open vacant parcels with patches of densely forested areas and several rural communities.

The terrain across the targeted coverage improvement area consists of rolling hills and stream valleys with lowest ground elevations of 350± ft. Above Mean Sea Level (AMSL) along NY-2 to the north and highest ground elevations of 620± ft. AMSL at the hilltop peak in the northwest corner of the Zouky property. The ground elevation at the proposed site location is 560± ft. AMSL, which is relatively close to highest elevation on the Zouky property but moved back from the hilltop and neighboring property line(s) to satisfy setback requirements and decrease visibility from the surrounding area. The negative impact of the 60 ft. decrease in ground elevation associated with moving away from the higher-elevation northwest corner of the Zouky property is that the proposed tower needs to be constructed a minimum of 60 ft. taller to compensate for lost elevation. Ultimately, Verizon Wireless' antennas need to be placed at an adequate height from which they can "see" over the higher terrain and associated tree canopy in the local area while maintaining radio line-of-site into the lower elevation locations across the targeted coverage improvement area.

A 3-dimensional topographical map in **Figure 1** below demonstrates the rolling hills and other terrain features that a wireless facility must overcome to provide adequate service to the NY-2 / Pinewoods Avenue / Menemsha Lane area of Brunswick. When viewing the map in **Figure 1**, the red circle is the search ring area and the purple dot in the southeast corner of the ring is the proposed location on the Zouky property. Due to distance to surrounding Verizon Wireless cell sites, and the inability for these surrounding facilities to overcome the local terrain features coupled with patches of dense tree canopy along and near Pinewoods, a new locally-based wireless facility is required.

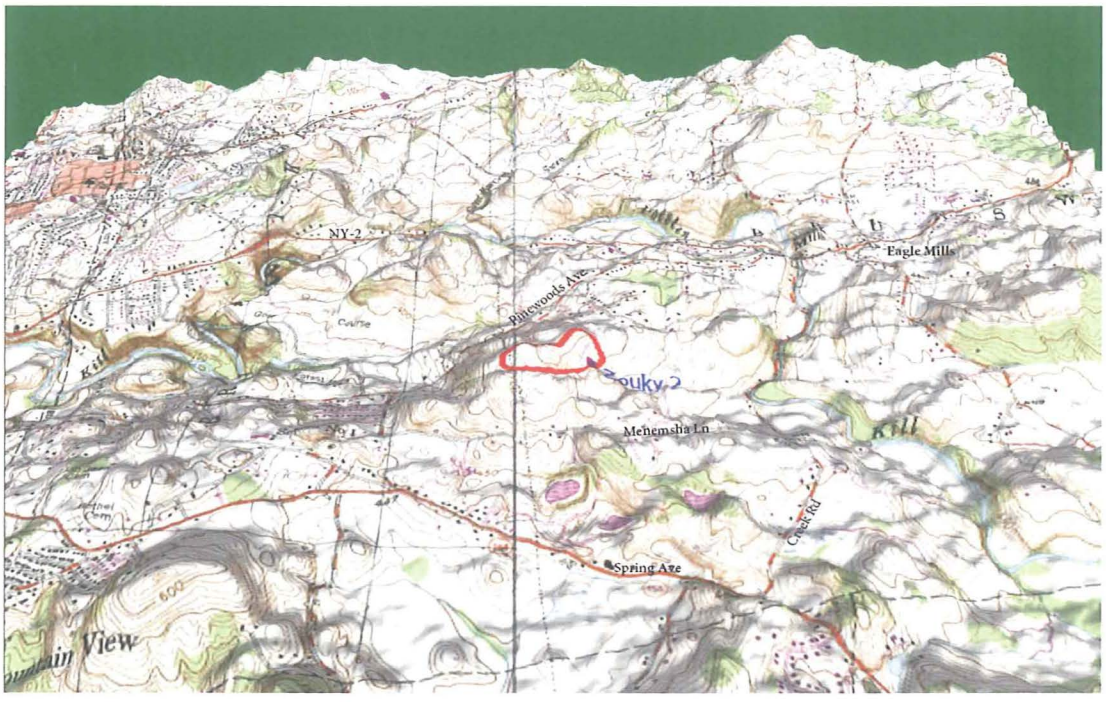

Figure 1. Pinewoods Area 3-Dimensional Topographical Map.

(b) RF Coverage Issues

Verizon Wireless' network in the Brunswick area is lacking reliable 700 MHz 4G LTE coverage in the southwestern portion of Town and specifically the areas along and surrounding NY-2, Pinewoods Avenue and Menemsha Lane. The area targeted for coverage and performance improvement is shown in the attached map at **Exhibit 1**. When viewing the map in **Exhibit 1**, the blue areas are those currently served (or covered) at an acceptable level while the areas in white are void of reliable 4G LTE high speed voice and data services (and are those in need of coverage improvement). As the coverage map demonstrates, the targeted network performance improvement area (i.e., areas of white) is generally bounded by McChesney Avenue Extension to the north, Eagle Mills Hamlet to the east, Menemsha Lane to the south, and the Troy Country Club area to the west. More specifically, the areas in need of improvement include approximately 3.3± miles along NY-2, several linear miles along multiple other state routes, local and community roads (Pinewoods Avenue, McChesney Avenue Extension, Menemsha Lane, Creek Road, etc.), across the Hamlet of Eagle Mills, and into the homes and businesses throughout the southwestern portions of the Town of Brunswick.

The sporadic level of reliable 4G wireless telecommunication coverage that currently exists in the Pinewoods area originates from Verizon Wireless' active wireless telecommunications facilities called "Sycaway" (located 2.5± miles north on the Crown tower off NY-7 in the Town of Brunswick), "Cropseyville" (located 6.0± mi. northeast on the Crown tower off Palitsch Road also in the Town of Brunswick), "Wynantskill" (located 1.9± mi. south at 551 Main Avenue in the Town of North Greenbush), and "Troy" (located 2.4± mi. northwest off Tibbits Avenue on the City of Troy's water tank). All other Verizon Wireless facilities are too far away (i.e., beyond this ring of neighboring wireless facilities) and/or are completely or partially blocked by surrounding local terrain features (including areas of rolling hills and dense mature vegetation) to provide reliable wireless telecommunication service to the targeted Pinewoods coverage improvement area.

The proposed Pinewoods wireless facility was specifically designed to resolve these unreliable service areas, as shown in the coverage map at **Exhibit 2**. New 4G coverage from the proposed site (as demonstrated by the Green coverage layer at **Exhibit 2**) will remedy the majority of the existing coverage gaps and provide Verizon Wireless with adequate coverage and network capacity for the Pinewoods Cell.

(c) RF Capacity Issues

Although not currently as significant an issue as the capacity concerns along the western border of town (i.e., closer to the City of Troy and RPI area), the proposed Pinewoods facility will provide significant capacity improvements across southwestern Brunswick and will enable the Verizon Wireless network to offer sufficient capacity for the projected 4G voice and data traffic growth near and neighboring the proposed Pinewoods facility. Therefore, the proposed facility will also provide "capacity relief" to Verizon Wireless' existing "Sycaway" and "Troy" sites (located 2.5± miles north and 2.4± miles northwest, respectively), which currently provide the existing 4G wireless coverage to the eastern portions of RPI and the commercial areas along NY-7 both in the City of Troy and crossing into the Town of Brunswick. When complete, the proposed Pinewoods facility will significantly improve 4G LTE service across southwestern Brunswick and offload customer traffic (usage) in the communities in and around the NY-2 / Pinewoods Avenue / Menemsha Lane area that are currently underserved by the existing (and increasingly capacity-limited) surrounding Verizon Wireless facilities. With customer traffic in the area described above routed through the proposed Pinewoods facility, the amount of

capacity (i.e., 4G network bandwidth) will be more than tripled in the southwestern portion of the Town of Brunswick.

(d) Solution

Based on the network deficiencies in the Pinewoods area described above, a search area was developed to define specific geographical locations from which a new wireless telecommunications facility, when also designed at an appropriate height, is most likely to provide the required coverage and capacity needs. The Pinewoods search ring is provided in the aerial map at **Figure 2** below, where the black boundary illustrates the search ring location and targets the higher elevation ridgeline / hilltop between Menemsha Ln and Pinewoods Ave. The proposed Pinewoods site location is also displayed in the map at **Figure 2** as the green dot in in the eastern end of the search area.

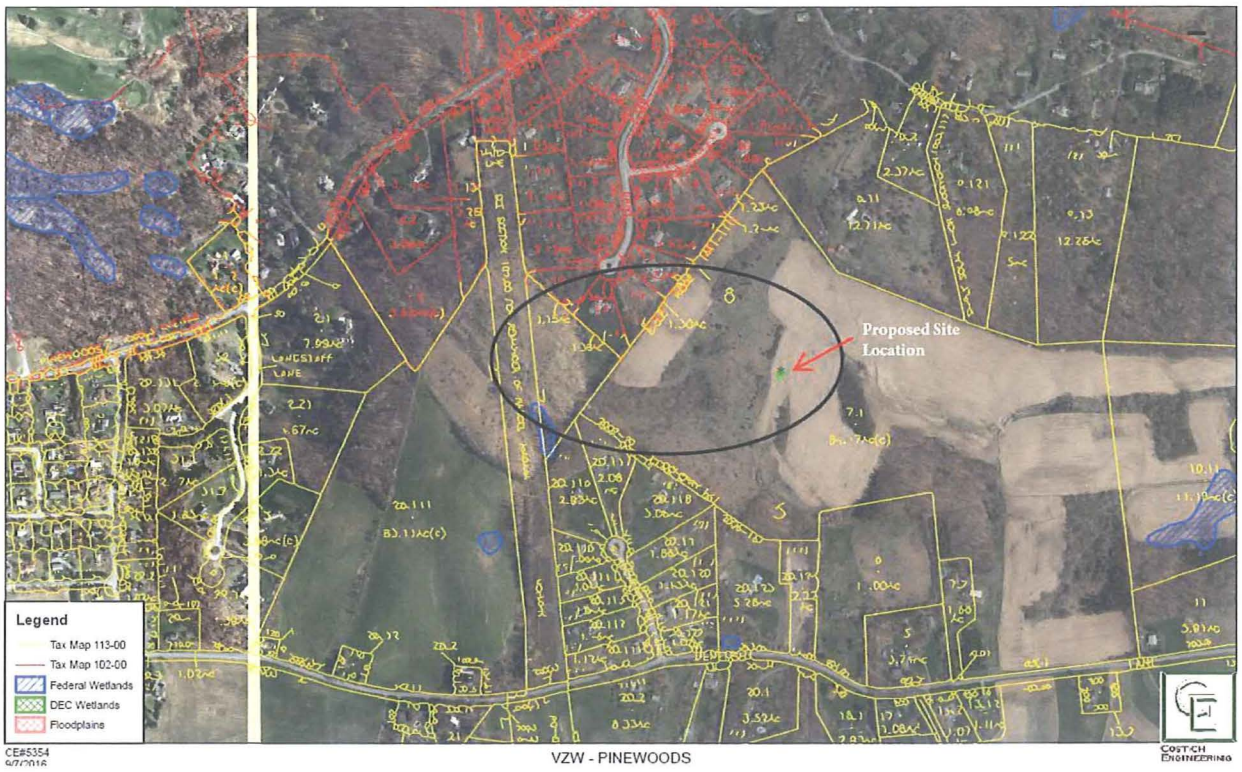

Figure 2. Pinewoods Search Ring Aerial Map Overlay.

The Pinewoods search area targets what has been determined by Verizon Wireless as the most suitable location for a wireless facility given the challenging terrain features across the targeted network performance improvement area and when considering the local zoning law. Given the local environment and topography, there are only a small number of feasible locations from which a reasonably tall wireless facility is able to overcome the local terrain variations and associated tree canopy while satisfying Verizon Wireless objectives and meeting property setbacks per the town zoning ordinance.

6. LAND USE AND ZONING CONSIDERATIONS

Before arriving at its decision to place a communications facility on the Zouky property, Verizon Wireless completed a thorough analysis of the Pinewoods Search Area. An effort was

made to identify potential locations that would be both technically appropriate and sensible from a zoning and land use perspective. Land Use considerations are described below, followed by the siting priorities used as the guidelines for ultimately determining that the Zouky property offered the most viable property to host the proposed Pinewoods wireless facility.

(a) Land Use

As described previously, the Pinewoods Search Ring extends across mostly agricultural farming fields along (north of) Menemsha Lane in the R-25 Residential District / AO Agricultural Overlay and the R-40 Residential District / Agricultural Overlay. **Figure 3** below contains a zoomed-in overlay of the Search Ring and tax map on an aerial photograph of the local area.

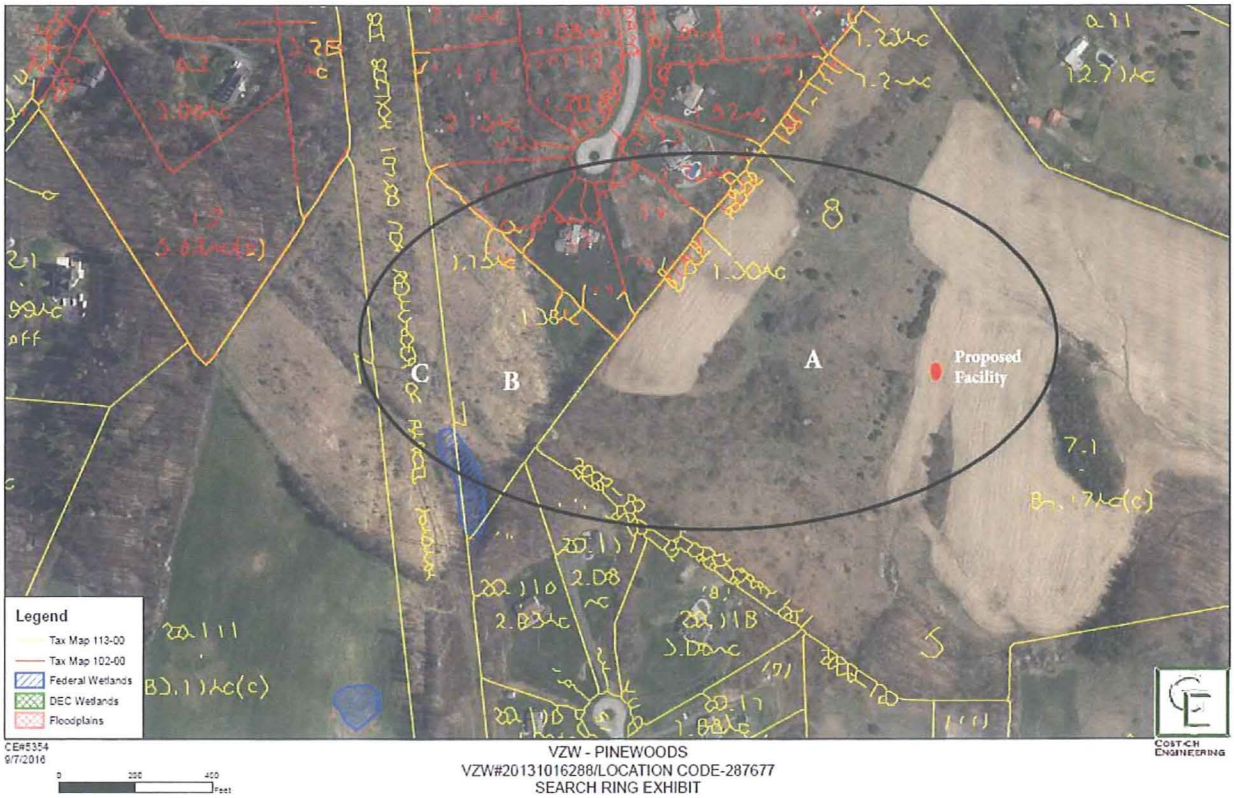

Figure 3. Pinewoods Search Ring Aerial Tax Map Overlay.

When viewing the map in **Figure 3**, the yellow and red lines indicate individual property boundaries, the blue shaded areas are designated wetlands, the black circle is the Pinewoods search area and the red dot on the parcel labeled "A" is the approximate proposed site location. As shown, two (2) large parcels (labeled "A" and "B") make up the majority of the search ring area, but also contains several residential housing parcels and a transmission utility Right of Way. The two larger parcels are more suitable for locating a wireless facility as the tower can be positioned at a greater distance from surrounding properties and offer additional tower siting options with the ultimate goal of satisfying setback requirements and lessening the aesthetic impact on the surrounding community. There is also a transmission line tower within the search ring (labeled "C" in the map in **Figure 3)** that was analyzed as a potential collocation opportunity.

(b) Collocation

Verizon Wireless routinely seeks to install its antennas and equipment on existing communications towers or other tall structures ("collocation"), whenever feasible. Local communities universally favor collocations because they can minimize the number of wireless telecommunications towers in an area and many municipalities even provide for a streamlined application review process. Collocation is often listed as the highest siting priority in a local municipality's Zoning Law, including the Town of Brunswick (Town of Brunswick Telecommunications Law listed under 'Minor Personal Wireless Telecommunications Service Facility' in Section 168-68). In addition to the possible streamlined zoning application process, wireless providers prefer collocation because it is generally a less expensive and timelier option, particularly compared to the time and cost involved in land acquisition, zoning, and installation of a new tower facility.

As part of the review process of the Pinewoods search area (see **Figure 3** above), the National Grid transmission towers running north and south through the search area were investigated as possible collocation options. In particular, the transmission tower located within the search ring and located approximately ¼ mile from the proposed facility was investigated as a potential colocation opportunity.

Coverage from a hypothetical 100 ft. colocation (the transmission tower height is estimated at 80 ft. so 100 ft. was chosen to represent a best-case antenna height scenario) is attached as **Exhibit 3**, where the brown-hatched coverage layer is coverage from the transmission line tower. The brown-hatching layer was used so the viewer can easily differentiate proposed coverage from the Zouky site (as described previously and depicted as the Green coverage layer in **Exhibit 2 and Exhibit 3**) compared to the hypothetical power line collocation. In other words, areas on the map in **Exhibit 3** where brown hatching overlaps with the green layer are locations that would be covered by both sites, whereas areas where the green layer extends out from beneath the brown hatched layer are areas covered by the proposed facility but not the hypothetical power structure colocation. As the resulting coverage plot at **Exhibit 3** demonstrates, significant gaps in coverage would remain across the targeted service improvement area, and most notably along NY-2 totaling 1.5± miles north of the proposed site and to the northeast in and around Eagle Mills Hamlet.

In addition to the coverage deficiencies that would remain even if antennas were installed on the transmission line tower, Verizon Wireless typically avoids mounting antennas and radio equipment on high-tension power lines due to safety concerns for construction and maintenance crews working on Verizon Wireless equipment beneath, on or near such power structures. Regardless, since coverage from a hypothetical colocation on the power structure does not satisfy Verizon Wireless' stated objectives for the Pinewoods cell, Verizon Wireless did not pursue colocation on the power line structure.

(c) New Structure on Municipally-owned Property

As its next priority, Verizon Wireless generally seeks to locate wireless telecommunication facilities on municipally-owned property. Municipalities often prefer these locations as the second preference behind collocation as it allows municipalities to benefit from a rental stream for the leased premises. After detailed investigation, there are no municipal properties in and around the Pinewoods search area.

(c) New Structure on Privately-owned Property

As is the case in the southwestern portion of the Town of Brunswick, when it is not feasible to collocate on an existing tower or tall structure, and there are no feasible municipally-owned properties in the area, Verizon Wireless must find a privately-owned property which is appropriate for and can accommodate a new communications structure. In doing so, the Site Acquisition Specialist attempts to identify properties in the search area large enough to accommodate the facility while satisfying any local area requirements such as set back and fall zone (Town of Brunswick Telecommunication Law, §160-70). In addition, other characteristics such as existing compatible land use and existing mature vegetation that can screen the facility are considered. Access, land use, constructability, the presence of wetlands, floodplains and other contributing factors are also examined.

The following section provides an analysis of each property evaluated and describes why the Zouky property was ultimately selected as the most appropriate location for the proposed Pinewoods wireless facility.

7. CANDIDATE/ALTERNATIVES ANALYSIS (WITHIN THE DESIGNATED SEARCH RING AREA)

The Applicant has investigated suitable properties within the Pinewoods search area with the goal of identifying a parcel which satisfies applicable land use requirements and local zoning law to the maximum extent possible while enabling Verizon Wireless to satisfy its stated coverage objectives from a reasonable tower height (to preserve local area aesthetics).

In total, two (2) parcels were identified as viable candidates for a new communications facility within the Pinewoods Search Ring. These parcels and identified in **Figure 3** and were briefly described in the previous section. The information provided below outlines consideration given to each property and explains why the Zouky property was ultimately selected as the host property for the proposed Pinewoods site.

(A) Zouky Property (Tax Parcel ID# 113-5-7.1 and 10.11)

The Zouky property is a large 84.47-acre parcel located off Creek Road and makes up approximately 60% of the search ring area (central and eastern half). The property contains mostly agricultural farming fields with some dense treed areas. Although in agricultural production, the property is largely contained in the R-25 Residential District / AO (including the targeted higher elevation areas where the proposed tower will be located) with the lower elevation eastern portion extending out to Creek Rd in the R-40 Residential District / AO zone. The Zouky parcel does not contain any designated wetlands, so a wireless facility can be developed and accessed without any wetland disturbance. Aesthetically, the proposed location offers natural background screening by way of surrounding rolling hills and patches of thickly-wooded areas across the property and along the majority of the property borders; these local features offer significant natural screening of the facility's ground equipment and the majority of the tower from most public viewing areas along nearby roads and the surrounding neighborhoods.

In addition to the inherently desirable features of the Zouky property described above, the proposed location also satisfies several other important local zoning law requirements, including the following:

- The tower facility is situated within a single lot, which meets Town of Brunswick Telecommunications Law, §160-70(A)(4).
- A tower placed toward the back (northern) property line is able to maintain at least the minimum setback from any adjoining property line (in this case, 150 ft. proposed tower height plus 30 ft. away from any property line), which meets the Town of Brunswick Telecommunications Law setback requirement of the overall tower height plus 30' (§ 160-70(A)(2)).
- Importantly, due to the large parcel size the proposed facility meets the setback requirement of being at least 750' away from the closest neighboring residence or dwelling (Telecommunications Law Section 160-70(A)(2)).

From an RF perspective, the Zouky property is located on a relatively high elevation ridgeline from which Verizon Wireless antennas are able to maintain radio-line-of-site across the majority of the targeted coverage improvement area, and as a result satisfies RF coverage and capacity objectives for the Pinewoods cell. New coverage from the proposed facility with antenna centerline height of 146 ft. on the 150 ft. tower was discussed previously and is displayed in the coverage map provided at **Exhibit 2**, attached to this report. As the results indicate, new reliable 4G coverage is extended across the majority of the targeted coverage and network performance improvement area, and generally across southeastern Brunswick.

Since a new wireless facility located on the Zouky property would satisfy Verizon Wireless performance improvement objectives in the Pinewoods area and meets the applicable Town of Brunswick Telecommunications Law objectives, this property was ultimately chosen for development of the proposed tower. As noted in the Statement of Intent, although the parcel is in agricultural use, it is largely in the R-25 / AO zoning district which does not permit telecommunications towers without a use variance application. While there are portions of the property that are zoned R-40 which allows towers by special use permit, that area is significantly lower in elevation and would require a tower well in excess of 200 feet tall. Given these alternatives, Verizon Wireless chose to maximize the distance from the residential uses while minimizing the tower height. This requires an application for a *Rosenberg* standard use variance, as discussed in the Statement of Intent.

As proposed, Verizon Wireless plans to develop a new 150 ft. (154± ft. including a 4 ft. lightning rod on top of the tower) wireless facility with associated ground based equipment in accordance with the Town of Brunswick Telecommunications Law requirement of Section 260-70(A)(3) which limits tower height to 200 feet. In addition, the tower will be designed to accommodate future shared use to conform to the Town of Brunswick Telecommunications Law Section 260-70(A)(5).

The only other property in the area of significant size within the designated search area is in the R-40 Residential District / AO. This property is labeled "B" in the tax map overlay at **Figure 3** on page 10 of this report. A brief description of why this property was removed from consideration in favor of the proposed Zouky location is provided below:

(B) R-40 Residential District / AO Candidate B (Tax Parcel ID# 113-5-28.111)

The Candidate B parcel is 83.11 acres in size and extends north of Menemsha Lane and into the western portion of the Search Ring. This property contains a single dwelling close to Menemsha Lane on the southern portion of the property. The majority of the parcel is agricultural fields with some open areas. Although the northern portions of this property exhibit potential to host a wireless facility capable of satisfying stated coverage and performance improvement objectives, the triangular shaped property lines in that portion of the property introduce significant challenges in meeting setback requirements. Notwithstanding its potential

as a host property, Verizon Wireless was not able to garner any interest from the landowner in leasing land on this parcel, so the property was removed from consideration.

Based on the analysis above, the Zouky property was selected as the most viable candidate for the proposed Pinewoods wireless facility.

8. SUPPLEMENTAL CANDIDATE/ALTERNATIVES ANALYSIS OUTSIDE THE DESIGNATED SEARCH RING AREA

In late 2016, the Laberge Group submitted a report to Brunswick ZBA Chairman Steinbach in connection with Verizon Wireless' proposed "Pinewoods" wireless facility. In their report, they requested that Verizon Wireless demonstrate why properties contained in the former A-40 zone, which will not require a use or area variance, are not suitable for the intended purpose and that the proposed site is more feasible than these potential alternate sites. The map at **Figure 4** below was provided to identify specific higher elevation areas within town that Verizon Wireless should evaluate.

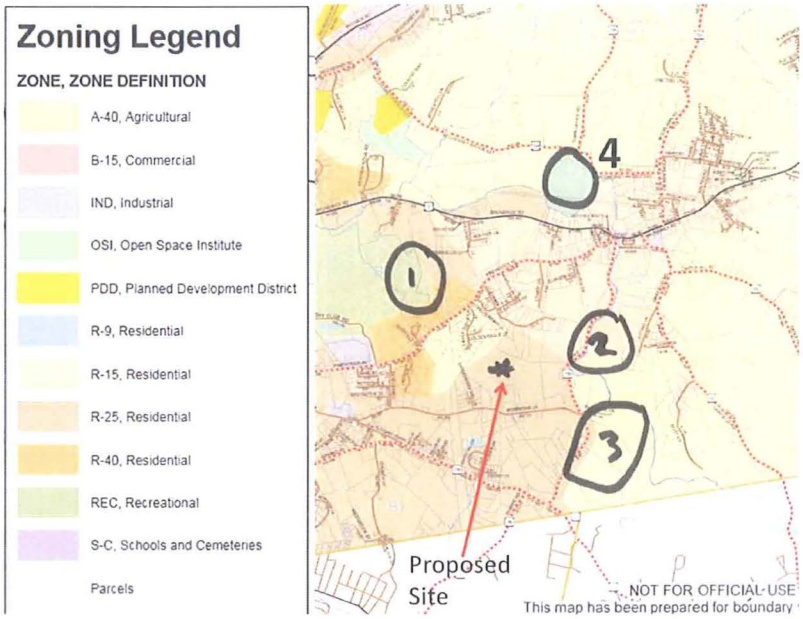

Figure 4. Map of Alternate Locations Evaluated for a Potential Wireless Facility on Former Zoning Map

At the outset, note that the Town of Brunswick adopted a revised Zoning Law in or about 2017 which, among other things, modified the location of certain zoning districts. The analysis provided below, therefore, focuses primarily on whether the suggested locations could work from an RF perspective. We recognize and appreciate that the Board was assisting Verizon Wireless in identifying potential alternative higher elevation areas throughout the Town for potential wireless facility development, but note that only Locations 2 and 3 (in reference to the map at **Figure 4** above) which previously were in the tower-friendly A-40 Zone are now in the Agricultural Overlay (AO) district which does not permit towers, Location 1 is in the Recreational Zone and Location 4 which was previously designated Open Space Institute Zone is now in the AO Overlay (again where wireless facilities are not an allowed use).

A topographic map was also provided and is shown on the left side of **Figure 5** below. This map identifies specific higher elevation areas that correspond with the four (4) locations identified in the Zoning map at **Figure 4** above, and are the areas the ZBA asked Verizon Wireless to assess as potential alternatives to the proposed Pinewoods site off Menemsha Ln.

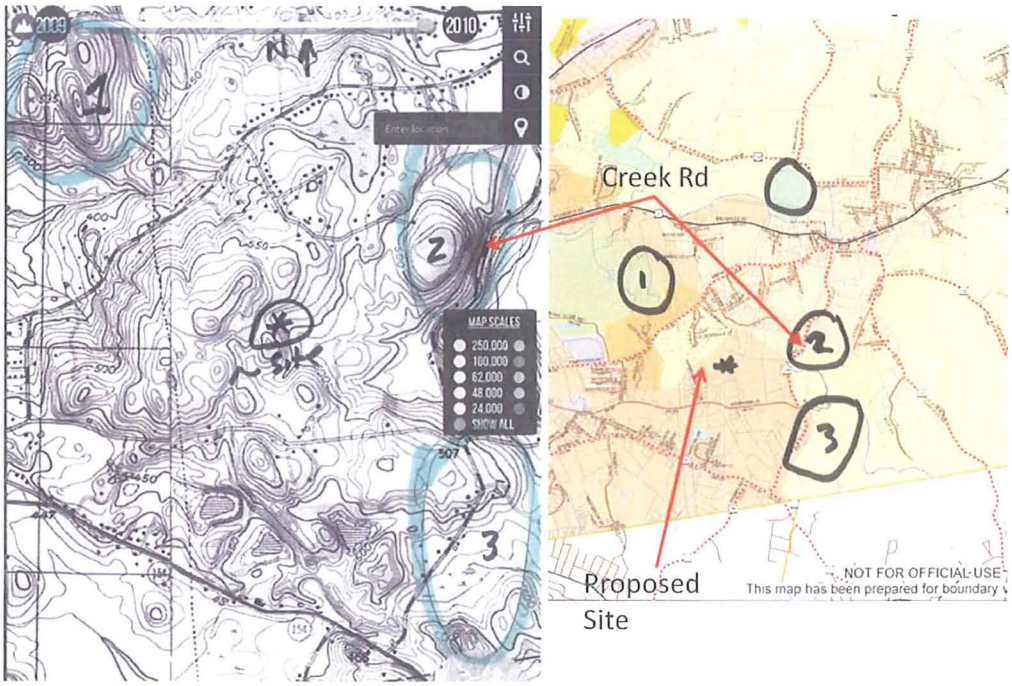

Figure 5. ZBA-Provided Alternate Locations on Topo and Zoning Maps

The following information describes why each of the four (4) locations do not offer a viable alternative to the proposed Pinewoods wireless facility:

Location 1. Former REC (Recreational Zone) (Now PDD Zone) – Hilltops East of Troy Country Club. The first area evaluated is the higher elevation hilltops on the eastern end of the former Recreational Zone (now PDD Zone) northwest of the proposed Pinewoods site and generally surrounding (and including) the Troy Country Club. Due to the dramatic elevation changes across this zone (e.g., the higher elevation hilltops on the eastern end extend to approximately 600 ft. AMSL, whereas the ground elevation near the golf course club house is significantly lower at approximately 375 ft. AMSL), a tower of reasonable height would need to be placed on the thickly-wooded higher elevation hilltops northeast of the golf course (i.e., the area circled and labeled 1 in the maps at **Figure 5** above).

When viewing the zoomed-in aerial and topo maps of the Location 1 hilltops in **Figure 6** below, the targeted hilltops fall within three large parcels owned by Country Club Properties Inc. Although a tower on one of the hilltops exhibits potential to satisfy coverage objectives along NY State Route 2 and Pinewoods Ave, the property owners were contacted in December 2018 and informed Verizon Wireless that they are not interested in leasing a portion of their property to Verizon. Since Verizon Wireless is unable to acquire the lease rights to develop a wireless facility on this higher elevation terrain, the areas in and around Location 1 do not offer a viable alternative to the proposed Pinewoods site off Menemsha Lane.

As a final note on Location 1, even if one of the hilltop parcels was available for tower development, this PDD zoned location does not allow a wireless facility by Special Permit (and would thus require a similar variance as the proposed facility of Menemsha Ln (or a PDD amendment)).

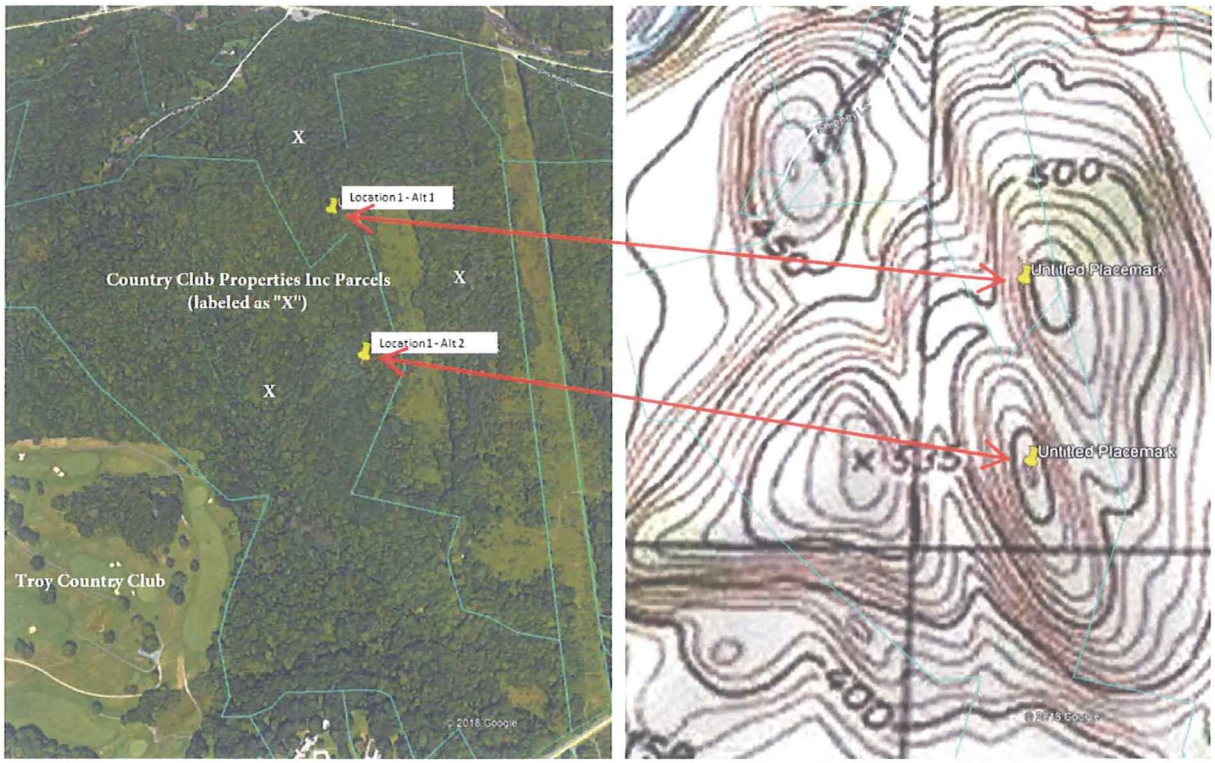

Figure 6. Map of Potential Alternate Locations within Town-Provided Location 1

Location 2 – Former R-15 and A-40 Zones (now Agricultural Overlay) along the Northern Portion of Creek Rd. In reference to the topo and zoning maps provided in **Figure 5** above, it is important to note that the higher terrain hilltop circled and labeled as location 2 in the topo map was drawn on the west side of Creek Rd and falls within the former R-15 Zone, whereas the circled location 2 on the right-side Zoning map of **Figure 5** encompasses portions of the R-15 and A-40 Zones on the east side of Creek Rd. Since the intent of the exercise was to analyze potential locations within "tower friendly" zones, for the Location 2 analysis a best case location was chosen on the east side of Creek Rd that falls within the former "tower-friendly" A-40 Zone. However, that location is now in the AO Overlay that does not permit towers.

Also, it is important to note that the higher elevation hilltop circled and labeled as "2" on the topo map portion of **Figure 2** (in the former R-15 Zone) reaches ground elevation of 600± ft., whereas higher elevation areas on the east side of Creek Rd in the former A-40 zone are significantly lower at ground elevation of 510± ft. So if a wireless facility were to be placed in the location 2 area within the former A-40 Zone it would need to be tall enough to overcome the 90± ft. terrain elevation difference as well as the associated tree canopy (estimated at 70 ft. to 80 ft. tall) in order to raise the antennas to the point where they are able to provide coverage to the west and northwest along NY-2 and Pinewoods Ave.

With the preceding information in mind, the location within the former A-40 Zone on the east side of Creek Rd shown in the aerial map at **Figure 7** below was selected as the best case tower development area within a reasonable distance of Location 2.

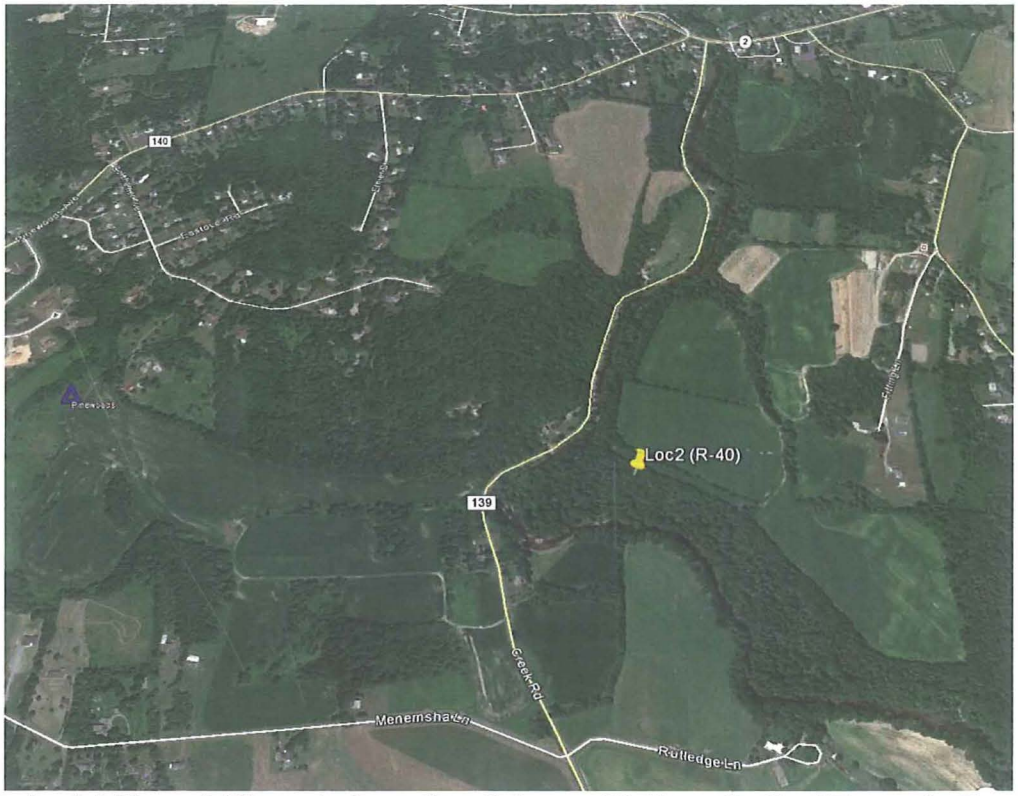

Figure 7. Aerial Map of Alternate Location 2 Area with Hypothetical Tower in Former R-40 Zone (now AO Overlay)

The RF coverage plot provided at **Exhibit 4** demonstrates the resultant coverage that would be realized from a hypothetical 195 ft. tower (at the yellow pin location in the aerial map at **Figure 7** above) along the higher elevation treed area (at 515± ft. AMSL) in the northern portion of the former A-40 Zone along Creek Rd. As the results demonstrate, coverage gaps would remain (at a minimum) for 1.5± miles along NY-2 (Brunswick Rd) including the surrounding residences and communities along Brunswick Rd. These remaining gaps would need to be resolved by deploying additional future wireless facilities in the Town of the Brunswick.

Location 3 – Former A-40 Zone (now AO Overlay) along the Southern Portion of Creek Rd. Referring again to the topo and zoning maps provided at **Figure 5** above, the higher elevation areas along the south end of Creek Rd in the A-40 Zone were analyzed for possible alternative locations for the proposed Pinewoods facility. The Yellow pin in the aerial map at **Figure 8** below was selected as the best-case tower development area within the former R-40 Zone (now AO Overlay) and within a reasonable distance of Location 3.

The RF coverage plot provided at **Exhibit 5** demonstrates the resultant coverage that would be realized from a hypothetical 195 ft. tower (at the yellow pin location in the aerial map at **Figure 8** below) along the higher elevation treed area (at 500± ft. AMSL) approximately 1/3 mile southeast of the Menemsha Ln / Creek Rd intersection in the former R-40 Zone along

Creek Rd. As the results demonstrate, coverage gaps would remain for over 2 miles along NY-2 (Brunswick Rd) including the majority of the Hamlet of Eagle Mills. These remaining gaps would need to be resolved by deploying multiple additional future wireless facilities in the Town of the Brunswick.

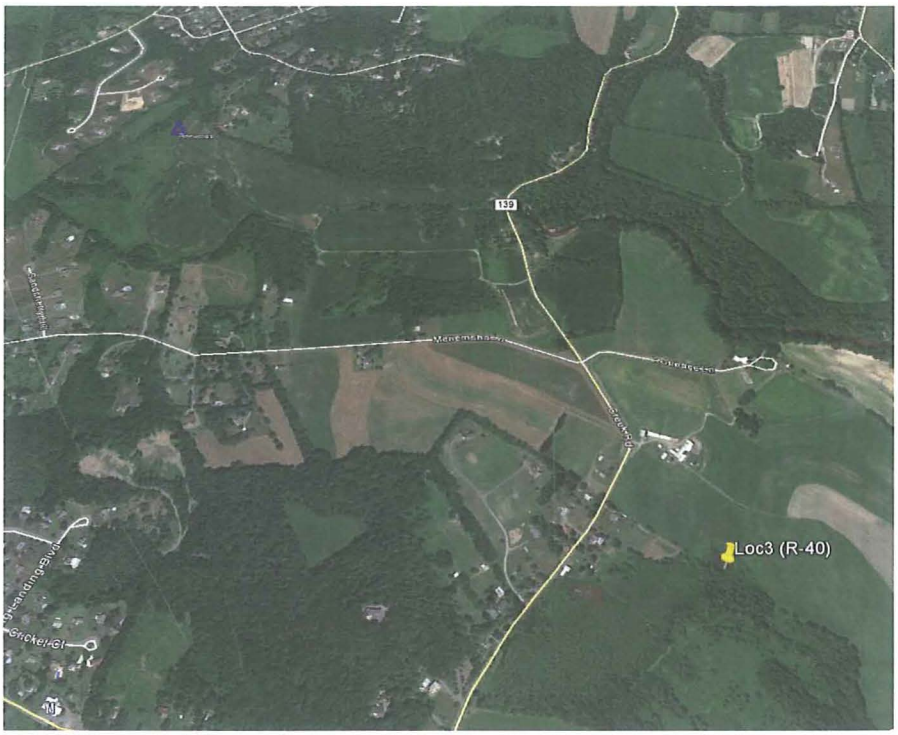

Figure 8. Aerial Map of Alternate Location 3 in the Former A-40 Zone (now AO Overlay) off the South End of Creek Rd.

Location 4 – Former OSI Zone (now AO Overlay) off McChesney Ave Ext North of Eagle Mills. Referring a final time to the topo and zoning maps provided at **Figure 5** above, the area circled and labeled Location 4 was analyzed for potential use as an alternative location for the proposed Pinewoods wireless facility. An aerial map of the location analyzed is provided at **Figure 9** below, with a best-case hypothetical tower location identified by the Yellow pin.

Figure 9. Aerial Map of Alternate Location 4 (former OSI Zone (now AO Overlay)) along McChesney Ave Ext

Although a tower of reasonable height and located at/near the Yellow pin on this property exhibits potential to satisfy the majority of Verizon Wireless' state coverage objectives, this property is not available for tower development. This parcel was deeded to the Town and the Town thereafter granted a Conservation Easement to the Open Space Institute, Inc. in 2014 (Book 1714 Page 83) as forever wild and not viable for wireless facility development. Due to its zoning classification as AO Overlay and the restrictions contained in the Conservation Easement, this property does not offer a feasible alternative to the proposed Pinewoods facility off Menemsha Ln.

9. MULTIPLE SITE SOLUTIONS

The 2016 Laberge Group report to Brunswick ZBA Chairman Steinbach also states that Verizon Wireless should analyze the potential of using two shorter towers within the targeted network performance improvement area. In order for wireless communications facilities to operate effectively the transmit and receive antennas must be placed at sufficient height such that radio signals are able to clear surrounding terrain, vegetation and man-made clutter (i.e., hills, trees, buildings, etc.) and maintain reliable 2-way wireless communications with all Verizon Wireless mobile devices within the targeted coverage area. To accomplish this objective, the Radio Frequency engineering rule-of-thumb is that the site's antennas must clear local clutter by 15 ft. to 20 ft. to provide uniform and reliable radio line-of-site coverage across the area in need of new and/or improved wireless service.

As described previously in this report, the Zouky property was selected (among other favorable reasons) for its higher elevation ridgeline location paralleling Pinewoods Ave and Menemsha Lane from which Verizon Wireless antennas are able to maintain radio-line-of-site

across the majority of the targeted coverage improvement area while keeping Verizon Wireless antennas a modest height above the ridgeline's highest ground elevations and associated tree canopy (generally between the proposed site and Golden Eagle Court). Ultimately the intent was to have Verizon Wireless' proposed facility satisfy stated network performance improvement objectives while minimizing the aesthetic impact to the surrounding area (particularly from views along Pinewoods Ave, NY-2, Eagle Bridge Hamlet, etc.).

With the preceding in mind, Verizon Wireless selected the Zouky property as a location from which a single site can satisfy 4G network improvement objectives from a minimum height above surrounding terrain and vegetative clutter, and with minimal local aesthetic impact. If Verizon Wireless were to build two or more wireless facilities, each facility would also be required to have its antennas placed 15 to 20 ft. above the local area clutter to function properly. In affect this approach would result in two areas within the town with similar or potentially more visibility to one of the wireless facilities than the proposed site.

For the reasons stated above, Verizon Wireless believes the single site solution is the most viable and least aesthetically invasive means to satisfy its Pinewoods site's coverage objectives within the Town of Brunswick.

10. CONCLUSION

Based on the requirements of the Town of Brunswick Telecommunications Law, the existing conditions and land use, three (3) locations were identified for consideration within the designated search ring. For the reasons described herein, as well as the results of RF review and analysis, the Zouky property was chosen as the most viable location for the proposed Pinewoods wireless facility.

Verizon Wireless has prepared an analysis of the existing cell sites and their respective RF coverage. With the existing sites, there is a substantial gap in coverage which restricts Verizon Wireless customers from originating, maintaining or receiving calls or data. It is our expert opinion that most locations within the search area, which are located at a technologically feasible height, will satisfy the coverage and capacity needs of Verizon Wireless and its subscribers in this portion of the Town of Brunswick. The proposed location depicted herein satisfies the coverage gap and is proposed at the minimum height necessary for adequate service in to the southwestern portion of town.

In addition, the overall system plan for Verizon Wireless in the Town of Brunswick is sound and consistent with industry standards and practices.

Prepared by:

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Airosmith Development, Inc.
Consultant to Verizon Wireless

Rick Andras
Radio Frequency (RF) Design Engineer
Verizon Wireless

Exhibit 1. Existing Verizon Wireless 4G LTE Coverage in the Southwestern Portion of Brunswick

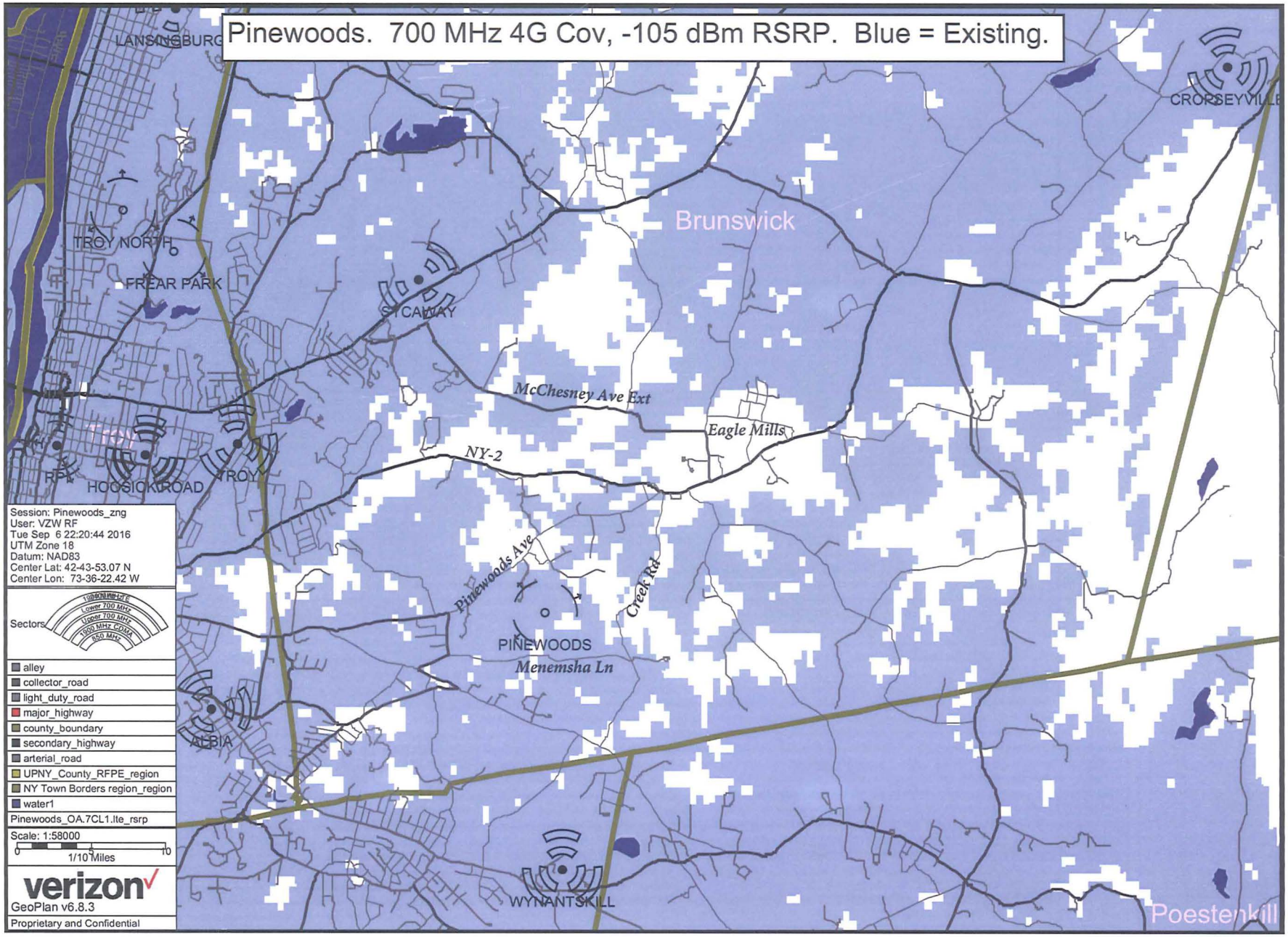


Exhibit 2. Proposed New VZW 4G LTE Coverage in the Town of Brunswick

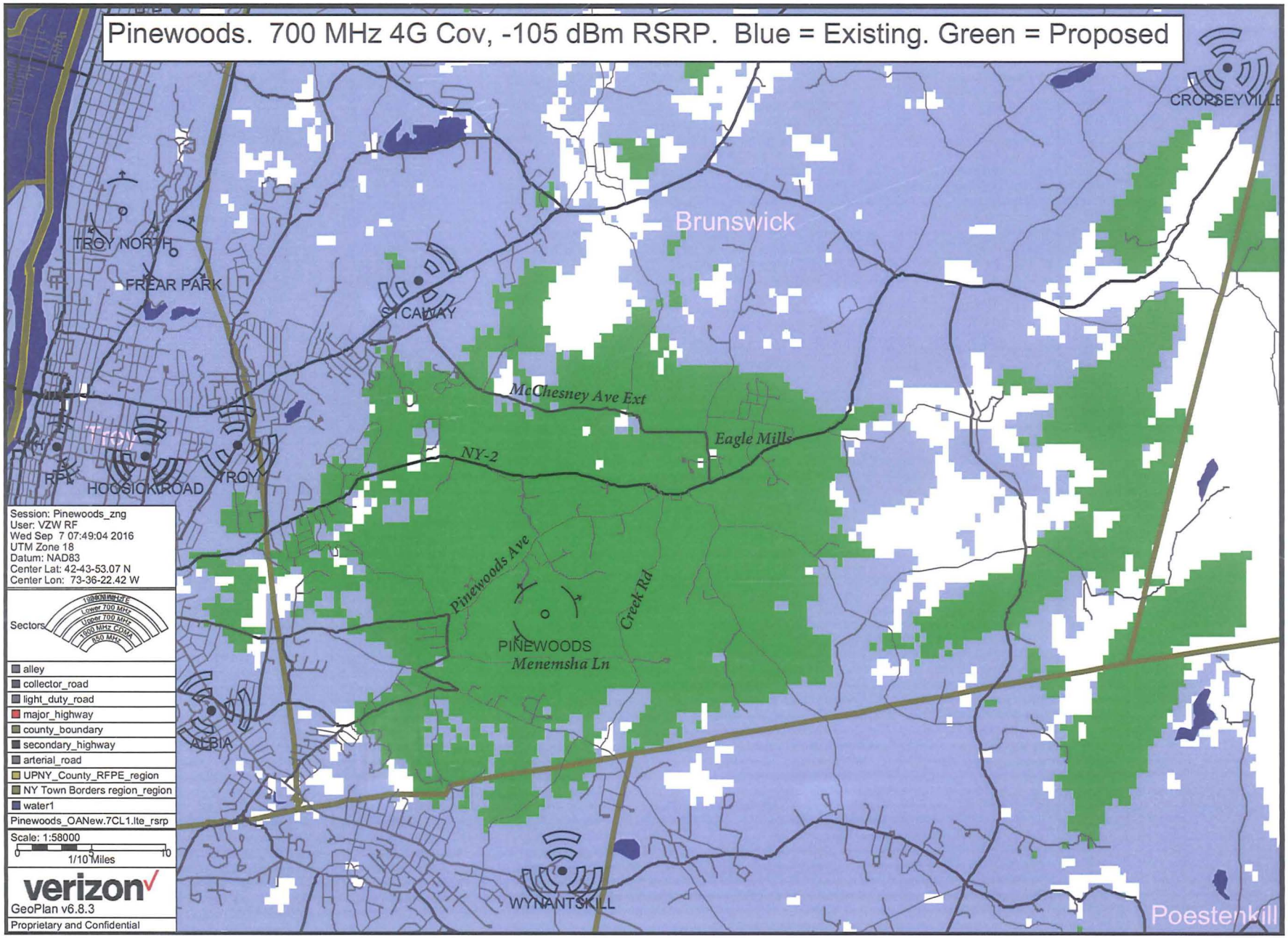


Exhibit 3. 4G Coverage from a Hypothetical 100 ft Transmission Tower Colocation (1/4 mi west of proposed tower)

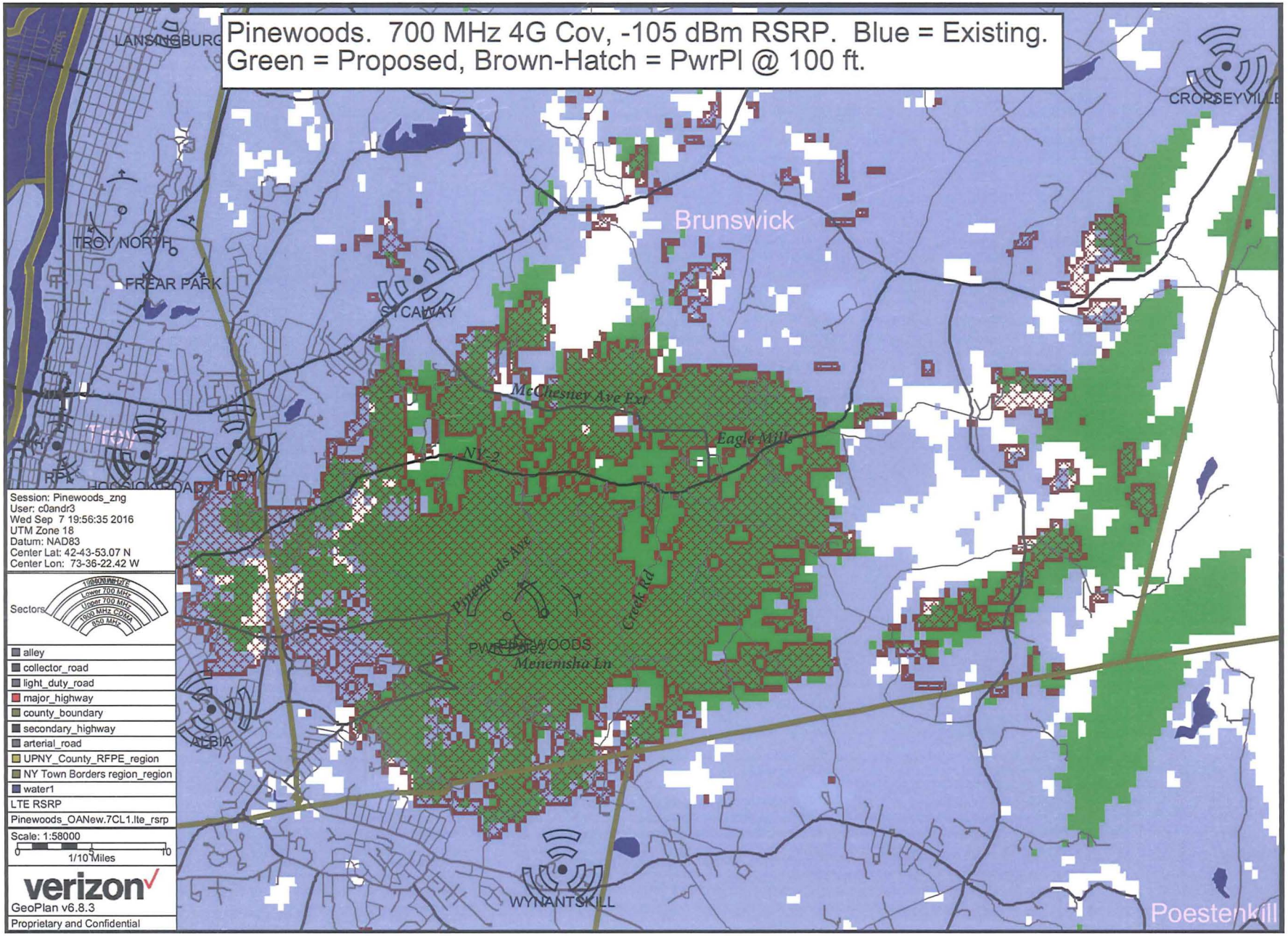


Exhibit 4. Coverage from a Hypothetical 195 ft. Tower at Location 2

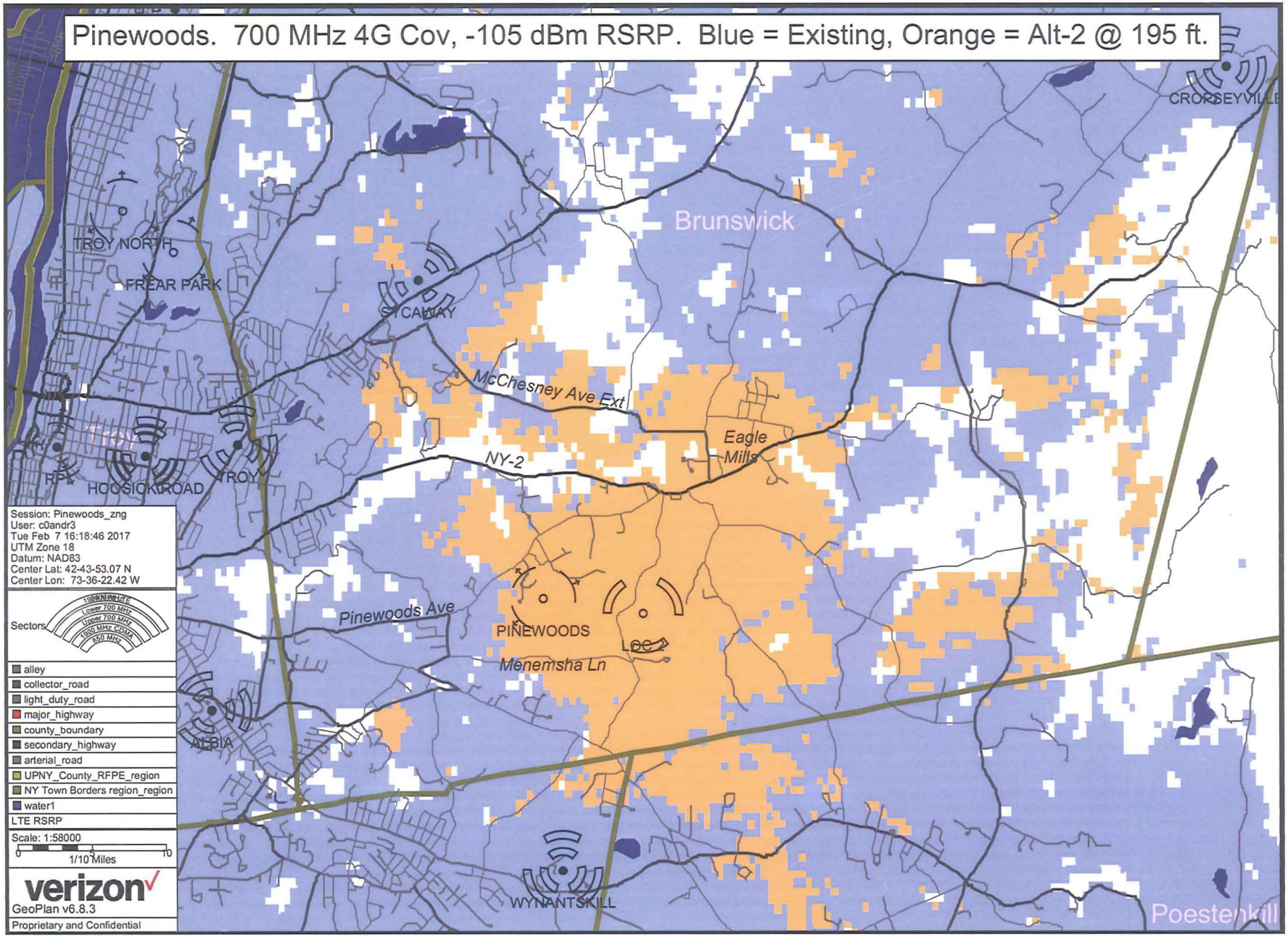
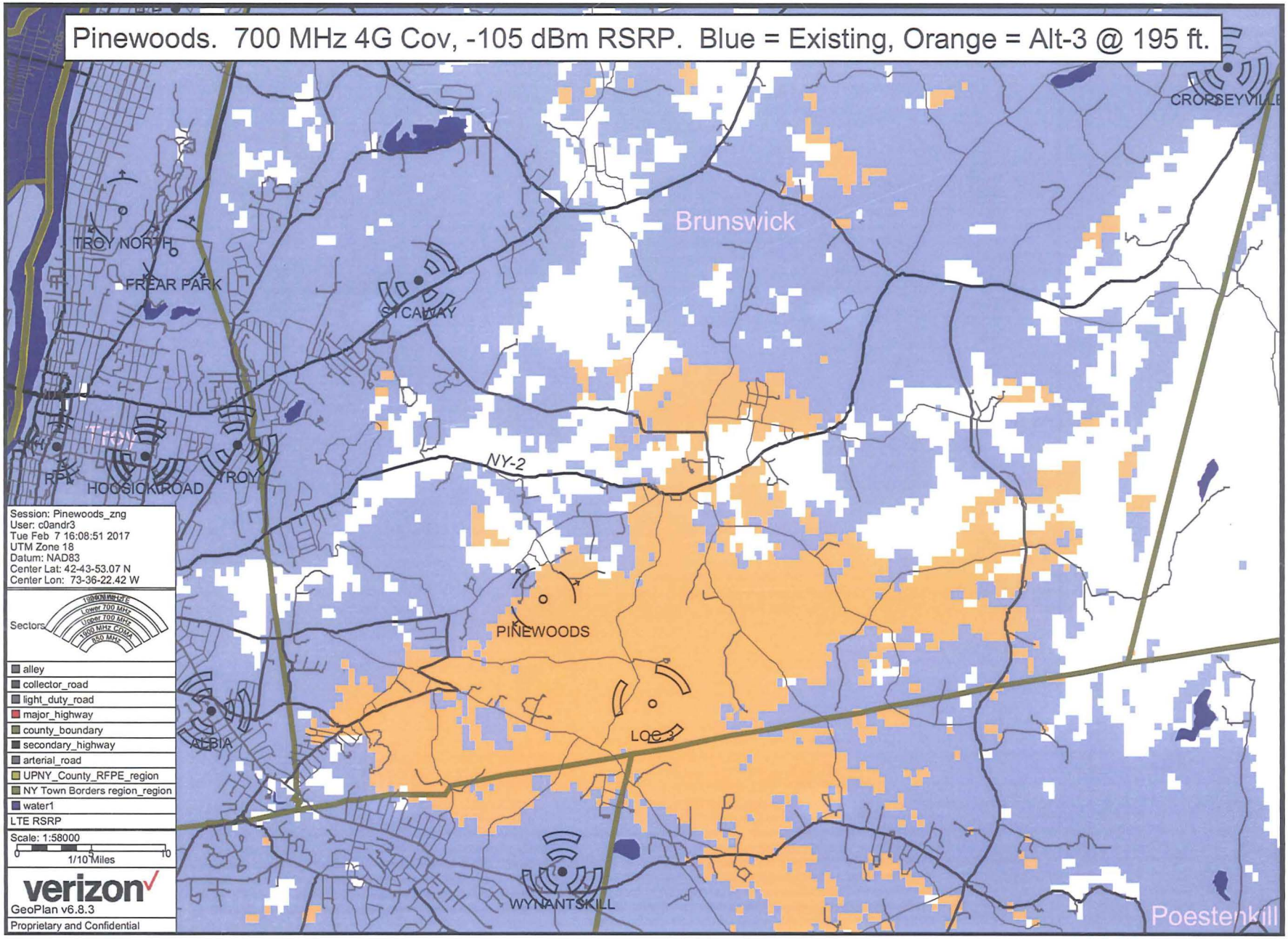


Exhibit 5. Coverage from a Hypothetical 195 ft. Tower at Location 3



Tectonic

PRACTICAL SOLUTIONS. EXCEPTIONAL SERVICE.

Blue Sky Towers II, LLC
352 Park Street, Suite 106
North Reading, MA, 01864
Attn: Mr. Sean Gormley

April 19, 2019

RE: STRUCTURAL DESIGN LETTER
PROPOSED TELECOMMUNICATIONS FACILITY

BLUE SKY TOWERS II, LLC SITE NAME:	**PINEWOODS**
BLUE SKY TOWERS II, LLC SITE NUMBER:	**NY-5144**
SITE ADDRESS:	**CREEK ROAD, BRUNSWICK**
	RENSSELAER COUNTY, NY 12180
TECTONIC W.O. NUMBER:	**8750.04**

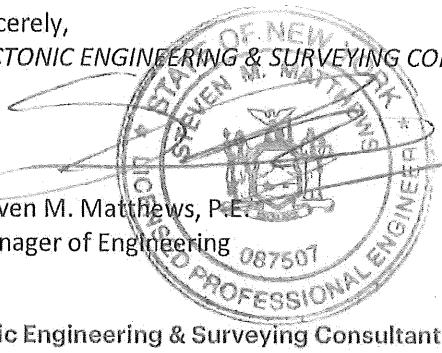
Dear Mr. Gormley,

Blue Sky Towers II, LLC is proposing a telecommunication facility at the above referenced address. The site includes the installation of the Verizon Wireless antenna array at a centerline height of 146' above ground level (AGL) on a proposed 150' tall monopole (154' including 4' lightning rod). The Verizon Wireless array will likely consist of twelve (12) panel antennas, six (6) remote radio head units, and one (1) OVP unit. The monopole will be designed to accommodate antenna arrays for future carriers in addition to the proposed Verizon Wireless installation. The future carriers design loading will be equal to that of the proposed Verizon Wireless loading. The make, model, and manufacturer of the proposed monopole will be provided as part of the construction documents to be submitted for the building permit application.

For the purpose of structural design of the monopole, foundation and antenna supports, the most stringent criteria of the 2017 New York State Uniform Code Supplement, the 2015 International Building Code and ANSI/TIA-222-G "Structural Standard for Antenna Supporting Structures and Antennas" will be applied. The proposed installation will be designed by a New York State licensed professional engineer and will meet all of the above listed criteria. The monopole will be designed to resist overturning, shear, and all other failure modes. The monopole will be designed such that, in the event of a failure, the monopole will fall within a fall zone setback of 154'.

Should you have any questions, please do not hesitate to contact me.

Sincerely,
TECTONIC ENGINEERING & SURVEYING CONSULTANTS P.C.



Steven M. Matthews, P.E.
Manager of Engineering

Tectonic Engineering & Surveying Consultants P.C.

36 British American Boulevard, Suite 101 I Latham, NY 12110
518.783.1630 Tel I 518.783.1544 Fax

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MILLENNIUM ENGINEERING, P.C.
132 Jaffrey Road
Malvern, Pennsylvania 19355
Cell: 610-220-3820 Fax: 610-644-4355
www.millenniumengineering.net Email: pauldugan@comcast.net

April 22, 2019

Attn: David C. Brennan, Esq.
Young / Sommer LLC
Executive Woods
Five Palisades Drive
Albany, NY 12205

Re: RF Safety FCC Compliance of Proposed Communications Facility
Site Name: Pinewoods, Proposed 150' Monopole (154' Overall Height)
Off Creek Road, Wynantskill, NY 12198 (Town of Brunswick, Rensselaer County)

Dear Mr. Brennan,

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 150' monopole (154' overall height – top of lightning rod). The proposed Verizon Wireless antenna configuration from the information furnished to me consists of (2) 700 MHz (LTE) antennas (A: JMA X7C-865-VR0, B/G: JMA X7C-FRO-860-VR0, or equivalent), (1) 850/1900 MHz (LTE) dual-band antenna (A: Commscope SBNHH-1D65C, B/G: Commscope SBNHH-1D45C or equivalent) and (1) 850/2100 MHz (LTE) dual-band antenna (A: Commscope SBNHH-1D65C, B/G: Commscope SBNHH-1D45C or equivalent) on each of three faces (total of 12 antennas) spaced with azimuths of 0/90/270 degrees on the horizontal plane with a centerline of 146' above ground level. Transmitting from these antennas initially will be up to (2) 700 MHz LTE wideband channels and up to (2) 2100 MHz LTE wideband channels per face. Verizon Wireless will not initially transmit in the 850 MHz and 1900 MHz frequency bands.

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

- (2) 700 MHz (LTE) transmit antennas per face at 0-10 degrees mechanical downtilt
- (1) 850/1900 MHz (LTE) dual-band transmit antenna per face at 0-10 degrees mechanical downtilt
- (1) 850/2100 MHz (LTE) dual-band transmit antenna per face at 0-10 degrees mechanical downtilt
- (2) 700 MHz LTE wideband channels/face at 2x60W max composite power/face before antenna gain
- (2) 850 MHz LTE wideband channels/face at 2x60W max composite power/face before antenna gain
- (2) 1900 MHz LTE wideband channels/face at 2x60W max composite power/face before antenna gain
- (2) 2100 MHz LTE wideband channels/face at 2x90W max composite power/face before 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 antennas is equal to $0.360(ERP)/R^2$ 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 (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 1 $\mu W/cm^2$ 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 $\mu W/cm^2$. The 850 MHz (cellular) "B Band" transmit frequencies (880-894 MHz), which Verizon Wireless is also licensed by the FCC to operate, have an uncontrolled/general population MPE FCC limit of 587 $\mu W/cm^2$. The 1900 MHz (PCS) "C4 Block" transmit frequencies (1980-1985 MHz), which Verizon Wireless is also licensed by the FCC to operate, have an uncontrolled/general population MPE FCC limit of 1000 $\mu W/cm^2$ or 1 mW/cm^2. The 2100 MHz (AWS) "E Block", "F Block", "G Block" and "J Block" transmit frequencies (2140-2145, 2145-2155, 2155-2160, 2170-2180 MHz), which Verizon Wireless is also licensed by the FCC to operate, have an uncontrolled/general population MPE FCC limit of 1000 $\mu W/cm^2$ or 1 mW/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.

From the standpoint of RF exposure, the presence of Verizon Wireless would not preclude the future addition of other tenants or licensees including emergency or other municipal services which benefit the public from collocation on this structure. There is a substantial margin of safety to allow for the addition of transmit antennas of other communications services. Keep in mind that continuous exposure at 100 % of standard is considered by the scientific community as just as safe as 1 % of standard since the exposure limits themselves contain a large margin of safety.

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) in all publicly accessible areas. 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 (EMF) 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, lattice tower, 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 antennas (accessibility) and transmit power levels.

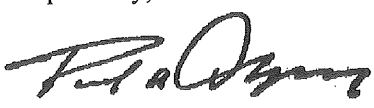
CONCLUSIONS:

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).**

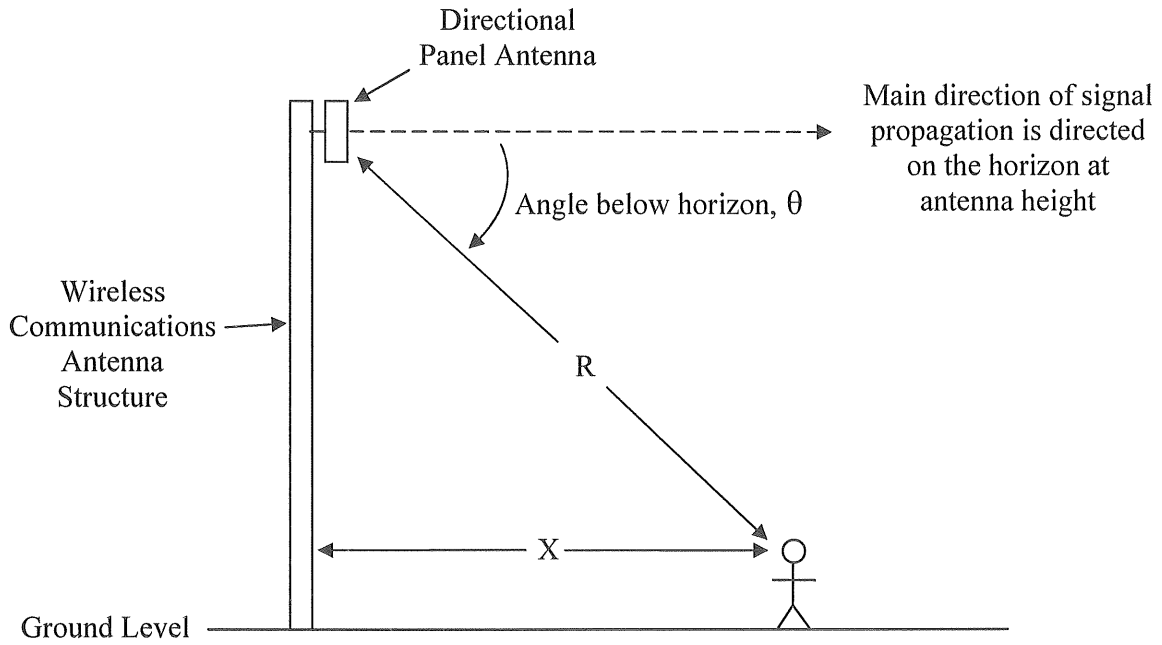
3) **In cases where such compliance exists, the subject of electromagnetic field safety is preempted.** The Telecommunications Act of 1996 states that: "No state or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities 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,



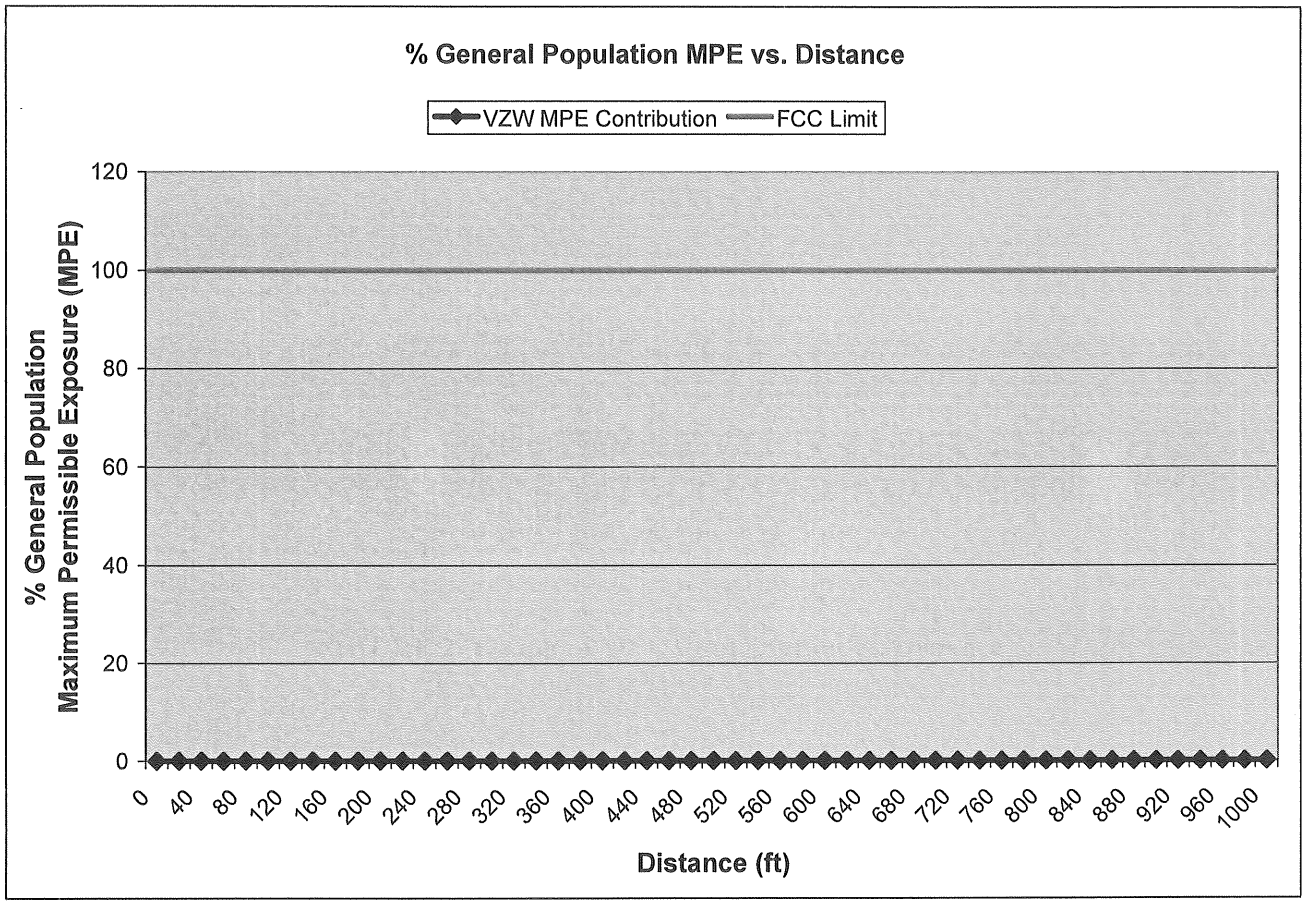
Paul Dugan, P.E.
Registered Professional Engineer
New York License Number 79144

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 panel 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 θ 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 22nd day of April, 2019.

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

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) 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) and the **Pennsylvania Society of Professional Engineers** (www.pspe.org) June 2003 to Present
Currently serving as State Director on the Board of Directors of the Valley Forge Chapter and the 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) 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) May 2001 to Present

Full Member of **The Radio Club of America** (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)

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

verizon

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

April 23, 2019

Town of Brunswick
336 Town Office Road
Troy, New York 12180

RE: Application of Blue Sky Towers II, LLC and Cellco Partnership d/b/a Verizon Wireless (Proposed Communications Tower located off Creek Road)

Ladies and Gentlemen:

With respect to the above application, and in accordance with applicable federal provisions, Cellco Partnership d/b/a Verizon Wireless ("Applicant") operates a telecommunications network authorized by the Federal Communications Commission (FCC) to provide state of the art digital and/or cellular wireless communications in many parts of the nation, including upstate New York. Verizon Wireless' operations and network are licensed and regulated by the FCC.

Verizon Wireless' radio equipment is designed to transmit frequencies only within the allocated frequency bands and each transmitter is carefully adjusted to comply with FCC regulations for power output and frequency. These procedures prevent interference with other radio services, public safety communications, airport navigation, cordless phones, computers and other community office or residential household appliances.

The incidence of these transmissions causing interference with other radio service is rare. All other radio communication services, including broadcast radio and television, are assigned to specific frequency bands, separate and distinct from cellular and other frequencies. For instance AM Radio operates between 0.5 -1.5 MHz and VHF Television operates between 54 - 215 MHz. In addition, receivers for other services are similarly designed to prevent interference from out of band service. In the unlikely event that malfunctioning equipment or improper settings are shown to cause interference with an existing service, Verizon Wireless would be required, under the conditions of its FCC license, to take immediate steps to correct any problems.

Thank you for considering this application.

Very truly yours,

Richard Andras
Radio Frequency (RF) Design Engineer

Writer's Direct Number:
Tel: 518-285-8045

VISUAL RESOURCE EVALUATION

PROPOSED 150' TALL TELECOMMUNICATIONS STRUCTURE

Pinewoods
Creek Road
Town of Brunswick
Rensselaer County
New York

Submitted by:

Blue Sky Towers II, LLC

352 Park Street, Suite 106
North Reading, MA 01864

verizon

1275 John Street, Suite 100
West Henrietta, NY 14586

Prepared by:

TECTONIC ENGINEERING & SURVEYING CONSULTANTS, P.C.
36 British American Blvd., Suite 101
Latham, New York 12110
518-783-1630
518-783-1544 FAX

Revised: April 19, 2019

VISUAL RESOURCE EVALUATION

Tectonic Engineering & Surveying Consultants, P.C., was contracted by Blue Sky Towers II, LLC. and Cellco Partnership, d/b/a Verizon Wireless to conduct a "Visual Resource Evaluation" to determine which areas within the Town of Brunswick will contain views of the proposed 150 foot tall wireless telecommunications structure.

At the October 17, 2016 Zoning Board of Appeals public hearing, the Board requested that Verizon Wireless evaluate the proposed monopole with additional carriers. This report restates the viewshed evaluation methodology and supplements the photographs with two different simulations the first (Sim A) showing a 150' monopole with a single carrier, the second (Sim B) showing a 150' monopine with three carriers and two microwave dishes

The antenna centerlines (ACL) for each proposal are as follows:

- Sim A – As previously proposed by Verizon Wireless, ACL at 146' AGL
- Sim B – ACL's at 126', 136' & 146' AGL plus two microwave dishes at 106' AGL

Setting:

The proposed site is located off of Creek Road in the Town of Brunswick, Rensselaer County, New York. The surrounding land use consists of residential, agricultural, and undeveloped forests. Within the study area the topography ranges in elevation from 200' +/- AMSL (Above Mean Sea Level) to 650' +/- AMSL. The predominant forest species are mixed deciduous and coniferous, with an estimated height of 30 to 60 feet. The field study for this visual resource evaluation was conducted in the summer season during 100% leaf on conditions.

Methodology:

On Friday, August 19, 2016, Tectonic Engineering & Surveying Consultants, P.C., conducted a field investigation for the purpose of evaluating the viewshed associated with the proposed installation of the 150 foot tall monopole (structure) with a 4 foot lightning rod. Conditions were partly cloudy and sunny, approximately 72°-85°, with wind speeds of approximately 4-6 mph. The study area consisted of a two (2) mile radius from the project site. The two (2) mile radius is generally consistent with current industry practices. Creating a viewshed greater than a two (2) mile radius is generally unwarranted. Due to the fact that objects tend to appear smaller the farther they are from the viewer, in this case, the structure would appear very small, if visible at all, from a distance of more than two (2) miles.

The methodology utilized during this field investigation is referred to as a "balloon test." The height of the proposed structure was simulated by floating a three-foot diameter, helium-filled weather balloon at 150 feet above ground level (AGL). The balloon is set at

the top of the structure (150'), as opposed to the top of the lightning rod (154') because the lightning rod is very narrow and is notably less visible than the antenna array. The balloon provided reference points for height as well as location and also provides a known dimension that later aids in the production of photo simulations.

The participants then proceeded with a review of the proposed structure's visual impact by noting those areas on a USGS 7.5 Minute Series Topographic Quadrangles Map that fall within the study area and marking those points from which, in theory, one might see the structure upon its completion. The terrain represented in the topographic map, was then analyzed to determine those areas from which views would be "blocked by topography," and therefore from which one would not see the structure upon its completion.

Tectonic drove the study area to confirm the potential visibility of the structure based on the viewshed map. Areas delineated as "blocked by topography" were confirmed by viewing the site from public roadways within the two (2) mile radius and it was found that the topography only viewshed map first produced was correct and accurate, and that the balloon was in fact not visible from areas indicated to be blocked by topography. During the "in field" review, the participants conducted a second analysis to determine those areas from which views of the structure may be "visible" or "concealed by vegetation." The resulting data from this second analysis was reviewed and referenced on the "Viewshed Analysis Map" attached. Colors are used to differentiate between areas from which the structure will be visible (Green), concealed by vegetation (Yellow) and areas from which a view of the structure will be blocked by topography (Red). The viewshed analysis resulted in the discovery that the proposed structure would be visible from only very few locations within the two (2) mile radius. The structure will only be visible from areas along Creek Road, CR-134, Eagle Ridge Drive, Fitting Lane, Menemsha Lane, Church Street and Sandcherry Hill. Overall, the viewshed map confirms that the proposed structure will not result in any significant visual impacts.

Photographs were taken from various vantage points within the study area to document the actual view towards the proposed structure, as well as the general character of the viewshed. Each photograph attached includes a brief description of the location and orientation from which it was taken, as summarized below:

1. *View from 186 Creek Road, looking west towards the proposed structure from approximately 2,850' away.*

2. *View from the intersection of Parsonage Lane & Brunswick Road, looking southwest towards the proposed structure from approximately 6,550' away.*

3. *View from 511 CR-134, looking southwest towards the proposed structure from approximately 7,700' away.*

4. *View from 475 CR-134, looking south towards the proposed structure from approximately 7,450' away.*

5. *View from 405 CR-134, looking south towards the proposed structure from approximately 9,300' away.*

6. *View from the intersection of South Lake Avenue & Brunswick Road, looking east towards the proposed structure from approximately 10,300' away.*

7. *View from the intersection of Brunswick Road & West Road, looking southeast towards the proposed structure from approximately 8,350' away.*

8. *View from the intersection of Troy Country Club Road & Pinewoods Avenue, looking east towards the proposed structure from approximately 3,900' away.*

9. *View from the intersection of Cole Lane & Pinewoods Avenue, looking east towards the proposed structure from approximately 8,975' away.*

10. *View from 11 Eagle Ridge Drive, looking southeast towards the proposed structure from approximately 1,000' away.*

11. *View from the intersection of Pinewoods Avenue & Colehammer Road, looking south towards the proposed structure from approximately 2,700' away.*

12. *View from the intersection of CR-140 & Ethier Drive, looking southwest towards the proposed structure from approximately 3,800' away.*

13. *View from 63 Fitting Lane, looking west towards the proposed structure from approximately 5,500' away.*

14. *View from the intersection of Creek Road & Menemsha Lane, looking northwest towards the proposed structure from approximately 3,450' away.*

15. *View from 57 Menemsha Lane, looking 2,375' towards the proposed structure from approximately 2,375' away.*

16. *View from 106 Menemsha Lane, looking north towards the proposed structure from approximately 1,750' away.*

17. *View from the intersection of Lansing Road & Spring Avenue, looking northeast towards the proposed structure from approximately 7,400' away.*

18. *View from the intersection of CR-130 & Church Street, looking northeast towards the proposed structure from approximately 4,850' away.*

19. *View from the intersection of Church Street & Westbrook Street, looking northeast towards the proposed structure from approximately 6,975' away.*

These photo locations are presented on the "Photo Log Map" attached.

Process:

Photographs of the weather balloon from the view points noted were taken with a Canon EOS Digital Rebel XT 8 mega pixel camera using a 55mm focal length lens to mimic the view as observed from the human eye. A three (3) foot diameter red helium filled balloon was floated to a height of 150'. The 3' diameter was checked with the algebraic formula of circumference = pi x diameter where (pi = 3.14) x (diameter = 3') = 9.42' around.

In order to analyze the potential visual impacts of the proposed structure, Tectonic took photographs of the balloons from locations within the search area for the purpose of preparing simulations of the proposed structure. Photographs for which there is a corresponding simulated view (#1, 4, 5, 10, 13, 14, 15, 16 & 19) of the proposed structure were produced by first photographing an existing similar type structure, then photographing the view towards the proposed site where the marker balloon was set to a height of 150' AGL. The digital images of the balloons and similar structure were then merged and scaled through the use of the image editing software, "Adobe Photoshop CS5." With this process, the structure is scaled to the correct height and width by scaling the similar type structure using measurements from the marker balloon. The similar type structure used has an antenna array that spans twelve feet (12'). By measuring the balloon width of three feet (3'), one can determine the proper width of the antenna array by multiplying the balloon width by four (4). The composite is printed out directly on a color printer, producing the final image.

Conclusion:

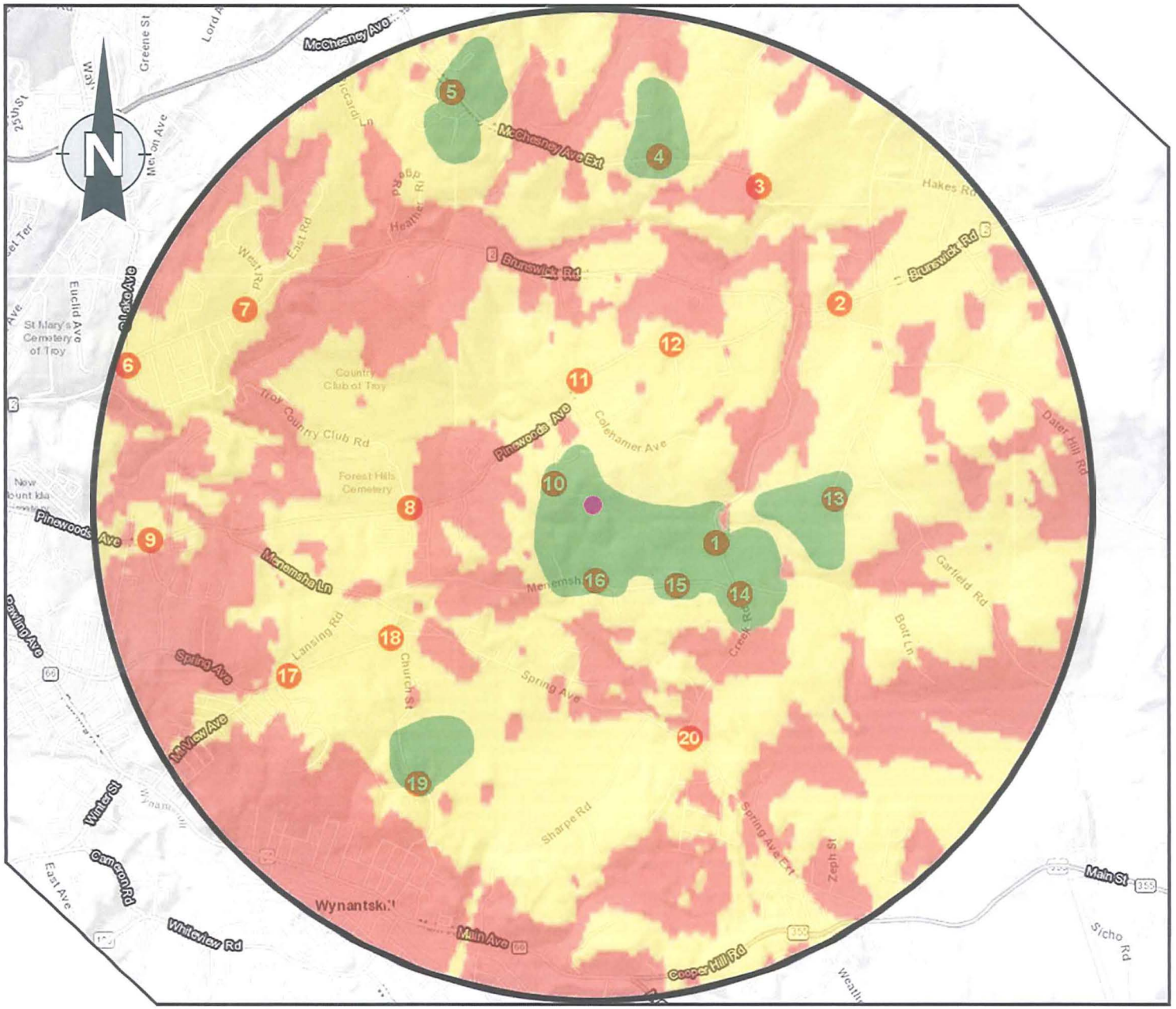
The Viewshed Analysis Map presents a conservative delineation of the viewshed within the study area, along the public and roadways. Therefore, any area from which any part of the structure may be visible is presented as a "visible area." In actuality, the views from many of these areas will be partially obscured by the mature vegetation and/or only the top of the structure may be visible. The installation of this telecommunications structure will not have a significant impact on the viewshed and surrounding area.

Sincerely,

TECTONIC ENGINEERING & SURVEYING CONSULTANTS, P.C.

By: _____
Phil Cocca
Visual Technician

By: _____
Ed Frawley
Vice President



VIEWSHED ANALYSIS MAP

2 Mile Radius

PROPOSED 150' TALL TELECOMMUNICATIONS STRUCTURE

Pinewoods
Creek Road
Town of Brunswick
Rensselaer County
New York

Prepared For:

verizon

1275 John Street, Suite #100
West Henrietta, NY 14586

Legend

Site	
Visible	
Not Visible Due To Topography	
Concealed Due To Vegetation or Structures	

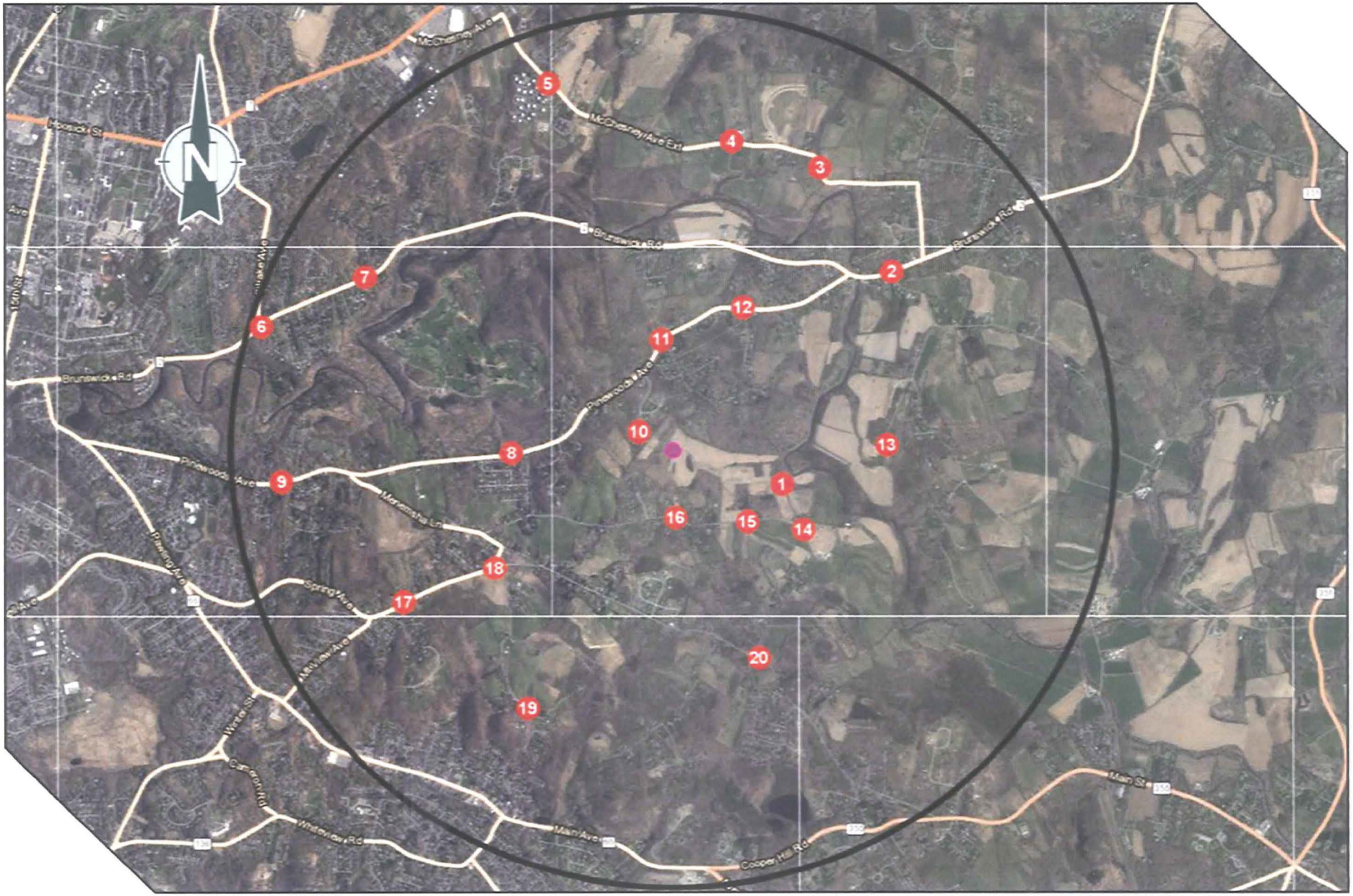
Prepared By:

TECTONIC

Practical Solutions, Exceptional Service

36 British American Blvd., Suite 101
Latham, NY 12110
518-783-1630

November 3, 2016
W.O. #7072.35



TECTONIC
Practical Solutions, Exceptional Service

Pinewoods
Creek Road
Brunswick, New York 12198

PHOTO LOG
7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking west from 186 Creek Road.
Proposed structure will be visible from this location.

Distance from the photographic location to the proposed site is 2,850'±

P-1

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking west from 186 Creek Road.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 2,850'±

S-1a

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking west from 186 Creek Road.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 2,850'±

S-1b

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking southwest from the intersection of Parsonage Lane & Brunswick Road.
Proposed structure will not be visible from this location.

Distance from the photographic location to the proposed site is 6,550'±

P-2

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking southwest from 511 CR-134.
Proposed structure will not be visible from this location.

Distance from the photographic location to the proposed site is 7,700'±

P-3

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking south from 475 CR-134.
Proposed structure will be visible from this location.

Distance from the photographic location to the proposed site is 7,450'±

P-4

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking south from 475 CR-134.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 7,450'±

S-4a

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking south from 475 CR-134.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 7,450'±

S-4b

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking south from 405 CR-134.
Proposed structure will be visible from this location.

Distance from the photographic location to the proposed site is 9,300'±

P-5

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking south from 405 CR-134.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 9,300'±

P-5a

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking south from 405 CR-134.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 9,300'±

P-5b

7072.35

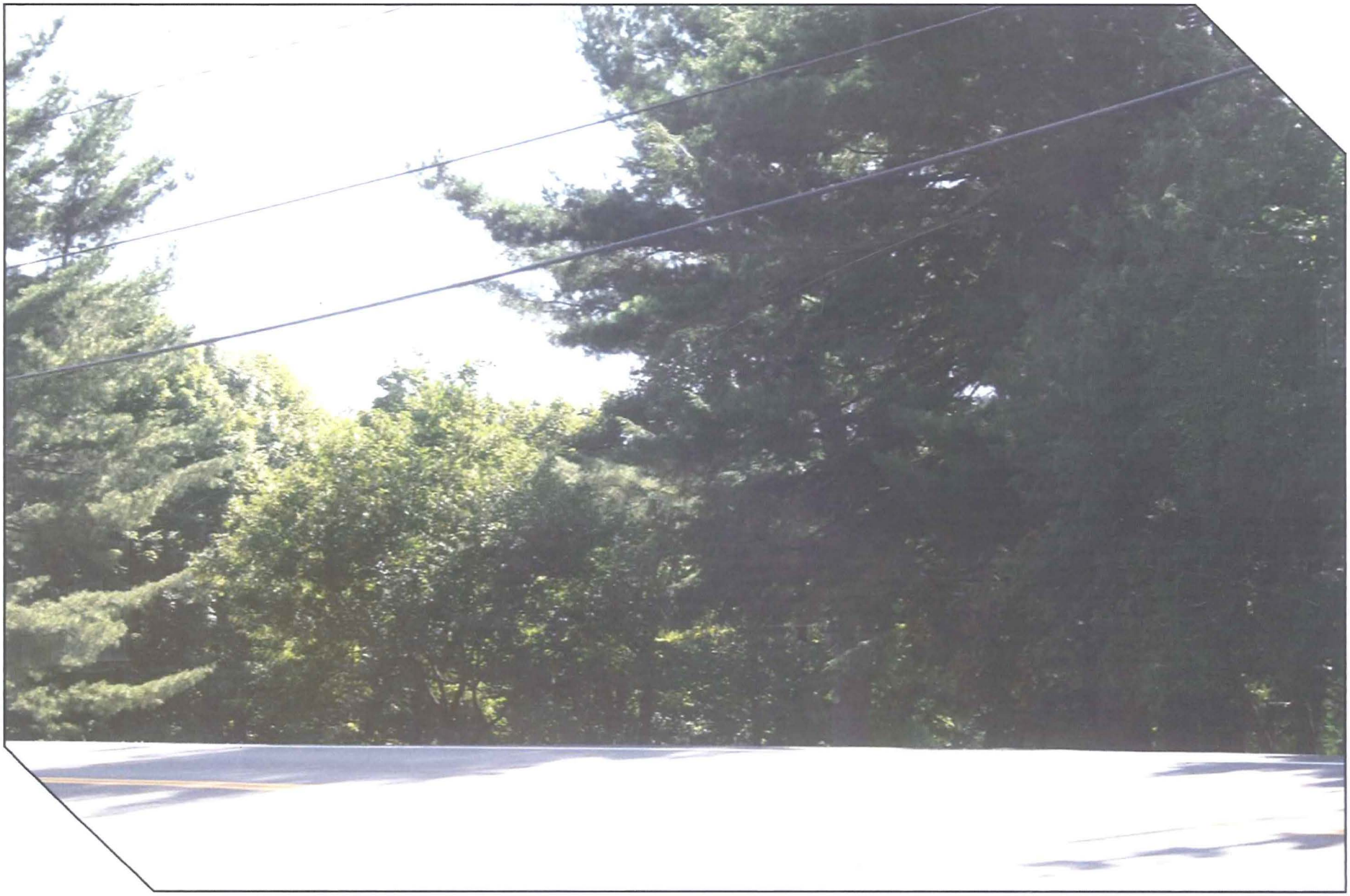
TECTONIC
Practical Solutions, Exceptional Service

Looking east from the intersection of South Lake Avenue & Brunswick Road.
Proposed structure will not be visible from this location.

Distance from the photographic location to the proposed site is 10,300'±

P-6

7072.35



TECTONIC
Practical Solutions, Exceptional Service

Looking southeast from the intersection of Brunswick Road & West Road.
Proposed structure will not be visible from this location.

Distance from the photographic location to the proposed site is 8,350'±

P-7

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking east from the intersection of Troy Country Club Road & Pinewoods Avenue. Proposed structure will not be visible from this location.

Distance from the photographic location to the proposed site is 3,900'±

P-8

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking east from the intersection of Cole Lane & Pinewoods Avenue.
Proposed structure will not be visible from this location.

Distance from the photographic location to the proposed site is 8,975'±

P-9

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking southeast from 11 Eagle Ridge Drive.
Proposed structure will be visible from this location.

Distance from the photographic location to the proposed site is 1,000'±

P-10

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking southeast from 11 Eagle Ridge Drive.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 1,000'±

S-10a

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking southeast from 11 Eagle Ridge Drive.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 1,000'±

S-10b

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking south from the intersection of Pinewoods Avenue & Colehamer Road.
Proposed structure will not be visible from this location.

Distance from the photographic location to the proposed site is 2,700'±

P-11

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking southwest from the intersection of CR-140 & Ethier Drive.
Proposed structure will not be visible from this location.

Distance from the photographic location to the proposed site is 3,800'±

P-12

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking west from 63 Fitting Lane.
Proposed structure will be visible from this location.

Distance from the photographic location to the proposed site is 5,500'±

P-13

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking west from 63 Fitting Lane.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 5,500'±

S-13a

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking west from 63 Fitting Lane.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 5,500'±

S-13b

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking northwest from the intersection of Creek Road & Menemsha Lane.
Proposed structure will be visible from this location.

Distance from the photographic location to the proposed site is 3,450'±

P-14

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking northwest from the intersection of Creek Road & Menemsha Lane.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 3,450'±

P-14a

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking northwest from the intersection of Creek Road & Menemsha Lane. Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 3,450'±

P-14b

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking northwest from 57 Menemsha Lane.
Proposed structure will be visible from this location.

Distance from the photographic location to the proposed site is 2,375'±

P-15

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking northwest from 57 Menemsha Lane.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 2,375'±

S-15a

7072.35

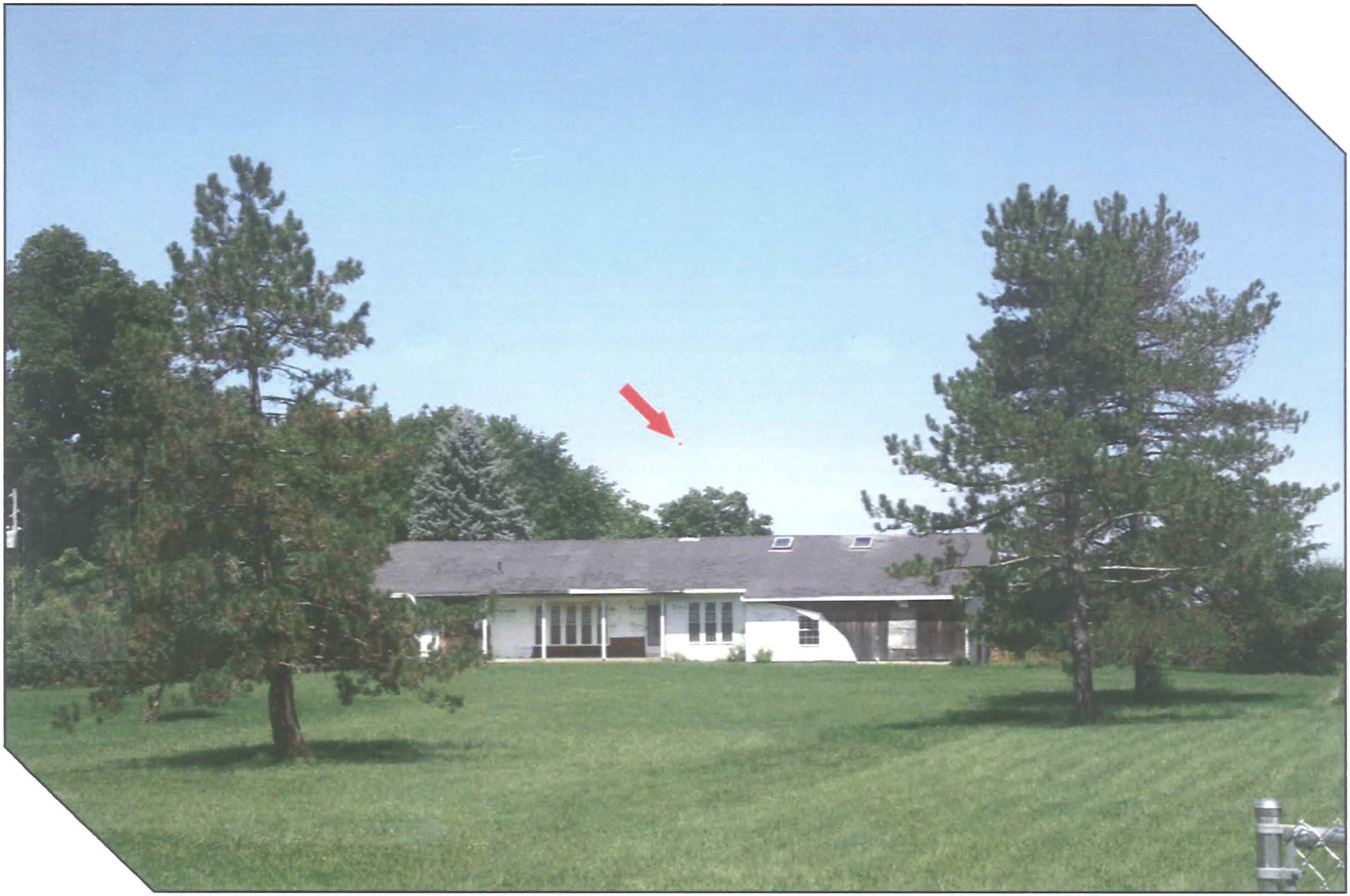
TECTONIC
Practical Solutions, Exceptional Service

Looking northwest from 57 Menemsha Lane.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 2,375'±

S-15b

7072.35



TECTONIC
Practical Solutions, Exceptional Service

Looking north from 106 Menemsha Lane.
Proposed structure will be visible from this location.

Distance from the photographic location to the proposed site is 1,750'±

P-16

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking north from 106 Menemsha Lane.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 1,750'±

S-16a

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking north from 106 Menemsha Lane.
Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 1,750'±

S-16b

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking northeast from the intersection of Lansing Road & Spring Avenue.
Proposed structure will not be visible from this location.

Distance from the photographic location to the proposed site is 7,400'±

P-17

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking northeast from the intersection of CR-130 & Church Street.
Proposed structure will not be visible from this location.

Distance from the photographic location to the proposed site is 4,850'±

P-18

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking northeast from the intersection of Church Street & Westbrook Street. Proposed structure will be visible from this location.

Distance from the photographic location to the proposed site is 6,975'±

P-19

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking northeast from the intersection of Church Street & Westbrook Street. Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 6,975'±

S-19a

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking northeast from the intersection of Church Street & Westbrook Street. Proposed structure is visible from this location.

Distance from the photographic location to the proposed site is 6,975'±

S-19b

7072.35

TECTONIC
Practical Solutions, Exceptional Service

Looking north from the intersection of CR-139 & Creek Road.
Proposed structure will not be visible from this location.

Distance from the photographic location to the proposed site is 5,125'±

P-20

7072.35

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)

Visibility

		Distance Between Project and Resource (in Miles)				
1.	Would the project be visible from:	0-¼	¼-½	½-3	3-5	5+
!	*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?*	☐	☐	☐	☐	☐
!	*An overlook or parcel of land dedicated to public observation, enjoyment and appreciation of natural or man-made scenic qualities?*	☐	☐	☐	☐	☐
!	*A site or structure listed on the National or State Registers of Historic Places?*	☐	☐	☐	☐	☐
!	*State Parks?*	☐	☐	☐	☐	☐
!	*The State Forest Preserve?*	☐	☐	☐	☐	☐
!	*National Wildlife Refuges and State Game Refuges?*	☐	☐	☐	☐	☐
!	*National Natural Landmarks and other outstanding natural features?*	☐	☐	☐	☐	☐
!	*National Park Service lands?*	☐	☐	☐	☐	☐
!	*Rivers designated as National or State Wild, Scenic or Recreational?*	☐	☐	☐	☐	☐
!	*Any transportation corridor of high exposure, such as part of the Interstate System, or Amtrak?*	☐	☐	☐	☐	☐
!	*A governmentally established or designated interstate or inter-county foot trail, or one formally proposed for establishment or designation?*	☐	☐	☐	☐	☐
!	*A site, area, lake, reservoir or highway designated as scenic?*	☐	☐	☐	☐	☐
!	*Municipal park, or designated open space?*	☐	☐	☐	☐	☐
!	*County road?* Creek Road (CR-139)	☑	☐	☐	☐	☐
!	*State road?*	☐	☐	☐	☐	☐
!	*Local road?* Menemsha ln., Sandcherry Hill Rd., Eagle Ridge Dr., Golden Eagle Ct., Rutledge Ln., Church St., Overlook Dr., Fitting Ln., Westbrook St., McChesney Ave. Ext., and Country Way	☑	☐	☐	☐	☐

2. *Is the visibility of the project seasonal? (i.e., screened by summer foliage, but visible during other seasons)*

☑ *Yes* ☐ *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?*

☑ *Yes* ☐ *No*

DESCRIPTION OF EXISTING VISUAL ENVIRONMENT

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

	Within *¼ mile	*1 mile
Essentially undeveloped	☐	☐
Forested	☑	☐
Agricultural	☑	☐
Suburban Residential	☑	☐
Industrial	☐	☐
Commerical	☐	☐
Urban	☐	☐
River, Lake, Pond	☐	☐
Cliffs, Overlooks	☐	☐
Designated Open Space	☐	☐
Flat	☑	☐
Hilly	☐	☑
Mountainous	☐	☐
Other	☐	☐

***NOTE:** add attachments as needed*

5. Are there visually similar projects within:

*½ 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 617,580 *?*

***NOTE:** When user data is unavailable or unknown, use best estimate.* Per NYS Traffic Data Viewer - Creek Road (CR-139)

CONTEXT

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

	FREQUENCY			
Activity	***Daily***	***Weekly***	***Holidays/ Weekends***	***Seasonally***
Travel to and from work	◉	○	○	○
Involved in recreational activities	◉	○	○	○
Routine travel by residents	◉	○	○	○
At a residence	◉	○	○	○
At worksite	◉	○	○	○
Other _____	○	○	○	○

Reset

TOWAIR Determination Results

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(50:1): NO FAA REQ-RWY 10499 MTRS OR LESS & 3957.82 MTRS (3.95780) KM AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	42-41-42.00N	073-34-54.00W	RENSSELAER COUNTY	RENSSELAER TROY, NY	132.9	813.79999999999995

Your Specifications

NAD83 Coordinates

Latitude	42-43-01.5 north
Longitude	073-37-10.5 west

Measurements (Meters)

Overall Structure Height (AGL)	46.9
Support Structure Height (AGL)	45.7
Site Elevation (AMSL)	165.5

Structure Type

POLE - Any type of Pole

Tower Construction Notifications

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

CLOSE WINDOW

May 7, 2019

Planning Board
Town of Brunswick
336 Town Office Road
Troy, New York 12180

RE: **Application for Special Use Permit and Site Plan Review** - Application of Blue Sky Towers II, LLC and Cellco Partnership d/b/a Verizon Wireless (Property located off Creek Road (113.00-5-7.1 and 113.00-5-10.11))

Ladies and Gentlemen:

With respect to the above application, and in accordance with Article 9 ("Telecommunications Law") of the Zoning Code of the Town of Brunswick, the Applicant is proposing to construct a monopole tower at the above-mentioned property.

The Applicant proposes to construct a public utility / personal wireless service facility that is designed with capacity for collocation (shared use) by up to three (3) additional wireless providers having panel antenna arrays comparable to those of Verizon Wireless. Should the public utility / personal wireless service facility be approved and constructed, Blue Sky Towers II, LLC, as the facility owner, will negotiate in good faith with other licensed wireless service providers for future shared use of the subject structure. All future collocations shall be subject to the involved parties reaching agreement on reasonable terms and conditions, in accordance with all then-applicable agreements, customs and procedures in the wireless industry, and there being adequate structural capacity and space to accommodate such collocation. (Telecommunications Law §§ 160-72).

In accordance with § 160-74 of the Telecommunication Law, the Applicant, prior to issuance of the building permit, will post a removal bond in a reasonable amount to be set by the Planning Board. This security will ensure that there are sufficient funds available to remove the telecommunications facility (foundations excluded) should it no longer be in use for a period of eighteen (18) consecutive months.

Thank you for considering our application.

Sincerely,

Sean Gormley
Project Manager
Blue Sky Towers II, LLC

AT&T Mobility
2875 Union Road, Ste. 356
Cheektowaga, NY 14227

3/18/2019

Town of Brunswick
336 Town office Road
Troy, NY 12180

Re: New Cingular Wireless PCS, LLC ("AT&T") Letter of Intent to lease space on proposed Blue Sky Towers II, LLC Telecommunications Tower ("Tower") located at 275c Menemsha Lane, Brunswick, NY 12180 in the Town of Brunswick.

Town of Brunswick:

Blue Sky Towers II, LLC is proposing to construct a Tower at the above-referenced location in the Town of Brunswick. AT&T intends to enter into a Tower Sublease Agreement with Blue Sky Towers II, LLC to install and operate a Telecommunications Facility at the above-referenced Tower.

Sincerely,

Amy Giambanco

Amy Giambanco
Sr. Real Estate & Construction Manager
AT&T Mobility – Upstate New York

Blue Sky Towers II, LLC

SITE NAME:

PINEWOODS

NY-5144

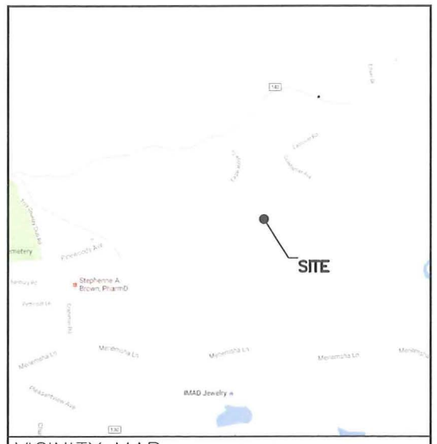
verizon

SITE NAME:

PINEWOODS

RE PROJECT NUMBER: 20181802366

LOCATION CODE: 287677



VICINITY MAP

SITE ADDRESS:	CREEK RD BRUNSWICK, NY 12180
MUNICIPALITY:	TOWN OF BRUNSWICK
COUNTY:	RENSSELAER
TAX MAP NUMBER:	113.00-5-7.1 & 113.00-5-10.11
ZONING DISTRICT:	R-40, RESIDENTIAL/ R-25, RESIDENTIAL/ AO, AGRICULTURAL OVERLAY/ A-40, AGRICULTURAL
STRUCTURE COORDINATES:	N 42° 43' 01.53" W 73° 37' 10.51"
GROUND ELEVATION:	542.7'± AMSL
PROPERTY OWNER:	MARY ALICE ZOUKY 275C MENEMSHA LN BRUNSWICK, NY 12180
APPLICANT:	BLUE SKY TOWERS II, LLC 352 PARK STREET, SUITE 106 NORTH READING, MA 01864
CONTACT PERSON:	SEAN GORMLEY
CONTACT PHONE:	(508) 530-3580
TENANT:	VERIZON WIRELESS 1275 JOHN STREET, SUITE 100 WEST HENRIETTA, NY 14586

PROJECT SUMMARY

DIRECTIONS

DIRECTIONS TO SITE:

FROM NORTH READING, MA,

MERGE ONTO I-93 N AND FOLLOW FOR 8.0± MILES. TAKE EXIT 44B TO MERGE ONTO I-495 S AND FOLLOW FOR 32.2± MILES. TAKE EXIT 25B TO MERGE ONTO I-290 W AND FOLLOW FOR 19.8± MILES. TAKE EXIT 7 TO MERGE ONTO I-90 W AND FOLLOW FOR 91.2± MILES. TAKE EXIT B3 FOR TO TURN RIGHT ONTO NY-22 N AND FOLLOW FOR 7.7± MILES. TURN LEFT ONTO HWY-20 W AND FOLLOW FOR 6.6± MILES. SLIGHT RIGHT ONTO NY-66 N AND FOLLOW FOR 7.5± MILES. SLIGHT LET ONTO NY-43 W/NY-66 N AND FOLLOW FOR 8.5± MILES. TURN RIGHT ONTO NY-355 E AND FOLLOW FOR 1.1± MILES. TURN LEFT ONTO SPRING AVE AND FOLLOW FOR 1.2± MILES. TURN RIGHT ONTO CREEK RD AND FOLLOW FOR 1.0± MILE. THE SITE WILL BE ON THE LEFT.

PROJECT DESCRIPTION

THE PROPOSED WORK CONSISTS OF INSTALLING CELLULAR ANTENNA AND RELATED EQUIPMENT ON A PROPOSED MONOPOLE AND THE INSTALLATION OF AN EQUIPMENT CONCRETE PAD WITHIN A PROPOSED FENCED COMPOUND. PROJECT INCLUDES CONSTRUCTION OF A PROPOSED GRAVEL ACCESS DRIVE AND POWER & FIBER UTILITIES.

SHT. NO.	DESCRIPTION	REV NO	REVISION DATE
T-1	TITLE SHEET	4	4/26/19
SU-1	PARTIAL TOPOGRAPHIC SURVEY	0	8/29/16
AD-1	ADJOINERS PLAN	4	4/26/19
AD-2	ADJOINERS LIST	4	4/26/19
SB-1	SETBACK PLAN	4	4/26/19
C-1	OVERALL SITE PLAN	4	4/26/19
C-2	SITE DETAIL PLAN	4	4/26/19
C-3	ELEVATION	4	4/26/19
C-4	ANTENNA MOUNTING DETAILS	4	4/26/19
C-5	SITE DETAILS	4	4/26/19
C-6	SITE DETAILS	4	4/26/19
C-7	EQUIPMENT ELEVATIONS	4	4/26/19
C-8	FOUNDATION PLAN & DETAILS	4	4/26/19
C-9	PIER DETAILS	4	4/26/19
E-1	UTILITY DIAGRAMS & DETAILS	4	4/26/19
E-2	UTILITY BACKBOARD DETAIL	4	4/26/19
E-3	GROUNDING PLAN	4	4/26/19
E-4	GROUNDING RISER DIAGRAM	4	4/26/19
E-5	GROUNDING DETAILS	4	4/26/19

SHEET INDEX

THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL ITEMS OF CONCERN HAVE BEEN ADDRESSED AND EACH OF THE DRAWINGS HAS BEEN REVISED AND ISSUED "FOR CONSTRUCTION".

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 working days notice, but not more than ten days notice.

DIG SAFELY - NEW YORK

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED FOR 22"x34" FULL SIZE AND 11"x17" 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.

Blue Sky Towers II, LLC

352 PARK ST, SUITE 106
NORTH READING, MA 01864

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) 829-8531
Latham, NY 12110
www.tectonicengineering.com

WORK ORDER NUMBER	DRAWN BY
8750.04	TLS

NO.	DATE	ISSUE
1	8/30/16	FOR ZONING
2	11/11/16	PER TOWN COMMENTS
3	4/19/19	PER COMMENTS
4	4/26/19	FOR ZONING

RELEASED BY	DATE

STATE OF NEW YORK
STEPHEN M. MATTHEWS
LICENSED PROFESSIONAL ENGINEER
087507

0 1 2 3
ORIGINAL SIZE IN INCHES

BLUE SKY SITE INFORMATION

PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION

PINEWOODS
RE PN: 20181802366
LC: 287677

SITE ADDRESS

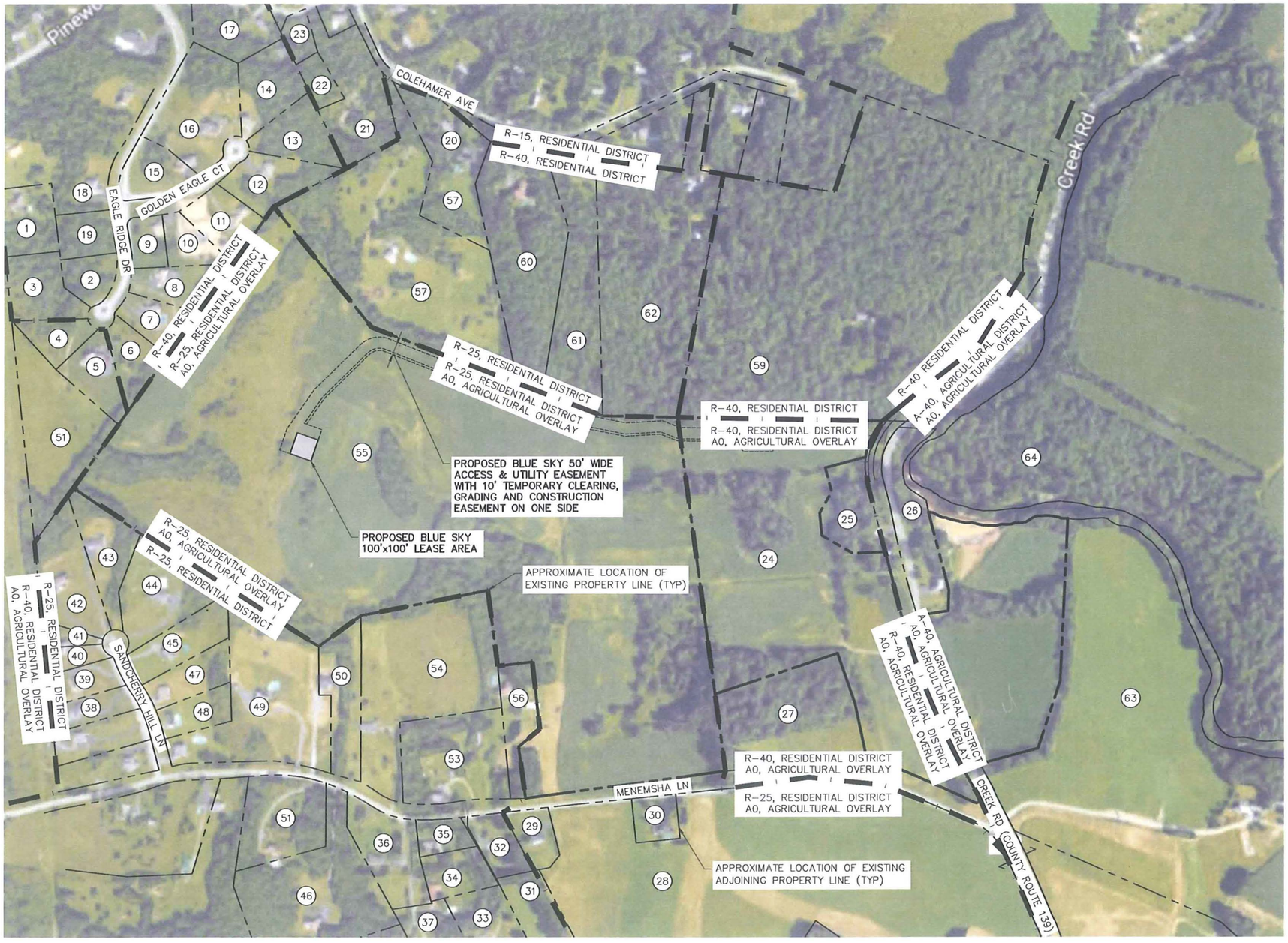
CREEK RD
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1



1 AD-1 ADJOINERS PLAN

SCALE: 1" = 400' (11x17 SIZE)
1" = 200' (22x34 SIZE)

Blue Sky Towers II, LLC

352 PARK ST, SUITE 106
NORTH READING, MA 01864

verizon

1275 JOHN STREET, SUITE 100
WEST HENRIETTA, NY 14586

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RELEASED BY | DATE

STATE OF NEW YORK
STEVEN M. MATTHEWS
LICENSED PROFESSIONAL ENGINEER
087507

0 1 2 3
ORIGINAL SIZE IN INCHES

BLUE SKY SITE INFORMATION
PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION
PINEWOODS
RE PN: 20181802366
LC: 287677

SITE ADDRESS
CREEK RD
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

SHEET TITLE
ADJOINERS PLAN

SHEET NUMBER
AD-1

ID	SBL	OWNER	ADDRESS
1	102.00-5-1.141	TOZZI BARBARA J	510 PINEWOODS AVE TROY, NY, 12180
2	102.00-6-10	MACALUSO, ANNE D & WILLIAM G	5 VALLEY VIEW BLVD RENSSELAER, NY, 12144
3	102.00-6-11	ER LAND DEVELOPMENT CORP	63 DEVITT RD WATERFORD, NY, 12188
4	102.00-6-12	EAMES, STEPHEN G & MARIE A	15 EAGLE RIDGE DR TROY, NY, 12180
5	102.00-6-13	EAMES, STEPHEN G & MARIE A	15 EAGLE RIDGE DR TROY, NY, 12180
6	102.00-6-14	PATERNIANI, DAVID & MADELINE T	13 EAGLE RIDGE DR TROY, NY, 12180
7	102.00-6-15	MCDONALD, LISA M & TODD J	11 EAGLE RIDGE DR TROY, NY, 12180
8	102.00-6-16	MAGEE, JAMES H & BARBARA	9 EAGLE RIDGE DR TROY, NY, 12180
9	102.00-6-17	BARBUTO, ANTHONY T & MARGARET H	2 GOLDEN EAGLE CT TROY, NY, 12180
10	102.00-6-18	MAGEE, JAMES H & BARBARA	4 GOLDEN EAGLE CT BRUNSWICK, NY, 12180
11	102.00-6-19	KARATNYCKY, ADRIAN P & LISA	6 GOLDEN EAGLE CT BRUNSWICK, NY, 12180
12	102.00-6-20	GRAHAM, JOHN C & DAWN M	8 GOLDEN EAGLE CT BRUNSWICK, NY, 12180
13	102.00-6-21	ER LAND DEVELOPMENT CORP	63 DEVITT RD WATERFORD, NY, 12188
14	102.00-6-22	PELOV, CHRISTOPHER & MARY	9 GOLDEN EAGLE CT TROY, NY, 12180
15	102.00-6-23	DUNBAR, MARTIN C & SARAH R	1 GOLDEN EAGLE COURT TROY, NY, 12180
16	102.00-6-24	SPEICH, JEREMY H & BRINKMAN, MICHELE L	3 GOLDEN EAGLE CT TROY, NY, 12180
17	102.00-6-25	ER LAND DEVELOPMENT CORP	63 DEVITT RD WATERFORD, NY, 12188
18	102.00-6-8	BROWN, CHRISTOPHER H & MEGAN B	8 EAGLE RIDGE DR TROY, NY, 12180
19	102.00-6-9	ER LAND DEVELOPMENT CORP	63 DEVITT RD WATERFORD, NY, 12188
20	102.04-11-33	BURKE, JOSEPH J & MARY J	48 COLEHAMER AVE TROY, NY, 12180
21	102.04-12-8.11	SINGLETON, MICHAEL J & MICHELE D	40 COLEHAMER AVE TROY, NY, 12180
22	102.04-12-8.13	ARAM, WILLIAM J & PATRICIA K	11 CHECKERBERRY LN TROY, NY, 12180

ID	SBL	OWNER	ADDRESS
23	102.04-12-9	ARAM, WILLIAM J & PATRICIA K	11 CHECKERBERRY LN TROY, NY, 12180
24	113.00-5-10.11	ZOUKY, MARY A	CREEK RD BRUNSWICK, NY, 12180
25	113.00-5-10.12	NOVAK, JOHN W JR.	193 CREEK RD BRUNSWICK, NY, 12180
26	113.00-5-10.13	GILCHRIST, TIMOTHY J & KATHLEEN M	186 CREEK RD BRUNSWICK, NY, 12180
27	113.00-5-11	DOUGHNEY, EDWARD D	46 MENEMSHA LN BRUNSWICK, NY, 12180
28	113.00-5-13.11	ORECKI, JR JOHN W & PETER M	41 RUTLEDGE LN WYNANTSKILL, NY, 12198
29	113.00-5-13.12	ORECKI, PETER M & MARY J	81 MENEMSHA LN WYNANTSKILL, NY, 12198
30	113.00-5-13.2	WENDELL, ROBERT C & JEANNINE L	57 MENEMSHA LN WYNANTSKILL, NY, 12198
31	113.00-5-14.1	PURCELL, RICHARD A & JANE B	93 MENEMSHA LN WYNANTSKILL, NY, 12198
32	113.00-5-14.2	ROGERS DANIEL	91 MENEMSHA LN WYNANTSKILL, NY, 12198
33	113.00-5-15	PURCELL, RICHARD A & JANE B	93 MENEMSHA LN WYNANTSKILL, NY, 12198
34	113.00-5-16	DURIVAGE FAMILY IRVC TRUST & DURIVAGE, REBECCA M	103 MENEMSHA LN WYNANTSKILL, NY, 12198
35	113.00-5-17	MCGUIRK, MICHAEL L & DIANE W	95 MENEMSHA LN WYNANTSKILL, NY, 12198
36	113.00-5-18.1	DURIVAGE, ELIZABETH T	107 MENESHMA LN WYNANTSKILL, NY, 12198
37	113.00-5-18.2	MAMMEN, ROBERT P & ELAINE E	105 MENEMSHA LN WYNANTSKILL, NY, 12198
38	113.00-5-20.112	WARD, ROBERT F & LINDA G	3 SANDCHERRY HILL LN WYNANTSKILL, NY, 12198
39	113.00-5-20.113	JR 1ST PARTY SUPL & JOHNSON III - TRUSTEE ROBERT	5 SANDCHERRY HILL LN WYNANTSKILL, NY, 12198
40	113.00-5-20.114	DEVINE, GRANT M & ALICIA M	7 SANDCHERRY HILL LN WYNANTSKILL, NY, 12198
41	113.00-5-20.115	MIKLIC, MICHAEL F & TRISHA E	9 SANDCHERRY HILL LN WYNANTSKILL, NY, 12198
42	113.00-5-20.116	ANTOLICK, GREGORY C & LORI P	11 SANDCHERRY HILL LN WYNANTSKILL, NY, 12198
43	113.00-5-20.117	GABRIEL, LEO & TUCKER, DOUGLAR	12 SANDCHERRY HILL LN WYNANTSKILL, NY, 12198
44	113.00-5-20.118	OBRIEN, CHRISTOPHER M	10 SANDCHERRY HILL LN WYNANTSKILL, NY, 12198

ID	SBL	OWNER	ADDRESS
45	113.00-5-20.119	HAYATI, ABDUL A & NILOFAR	8 SANDCHERRY HILL LN WYNANTSKILL, NY, 12198
46	113.00-5-20.12	DEANGELIS, JOHN G & NANCY J	119 MENEMSHA LN WYNANTSKILL, NY, 12198
47	113.00-5-20.120	MEEKS, JASON & ALEXIS	6 SANDCHERRY HILL LN WYNANTSKILL, NY, 12198
48	113.00-5-20.121	CHANGA, DAWN M & GUY A	4 SANDCHERRY HILL LN WYNANTSKILL, NY, 12198
49	113.00-5-20.123	DAWSON, RONALD F III	120 MENEMSHA LN WYNANTSKILL, NY, 12198
50	113.00-5-20.124	ASHE, ROBERT B	484 TAMRAC RD TROY, NY, 12180
51	113.00-5-20.16	BOVENZI, CHRISTOPHER A & KARI, WIDG	121 MENEMSHA LN WYNANTSKILL, NY, 12198
52	113.00-5-28.111	IRWIN, ROBERT W & BENTLEY, RANDAL A	269 MENEMSHA LN WYNANTSKILL, NY, 12198
53	113.00-5-5	FERRARA RVC LIVING TRUST & FERRARA, ELYSA P	96 MENEMSHA LN WYNANTSKILL, NY, 12198
54	113.00-5-6	BARR, JEFFREY M	26 HAVEN LN COHOES, NY, 12047
55	113.00-5-7.1	ZOUKY, MARY ALICE	275C MENEMSHA LN WYNANTSKILL, NY, 12198
56	113.00-5-7.2	ZOUKY, MARY ALICE	88 MENEMSHA LN WYNANTSKILL, NY, 12198
57	113.00-5-8.11	COLLINS, JOHN A	21 RUSSELL ST READFIELD, ME, 04355
58	113.00-5-8.2	WINCKLER JAMES A	50 COLEHAMER AVE TROY, NY, 12180
59	113.00-5-9.11	RELYEA, RICKY A & CHRISTINE M	229 CREEK RD WYNANTSKILL, NY, 12180
60	113.00-5-9.121	LONDON, ERIC N & RUSSO BARBARA	52 COLEHAMER AVE BRUNSWICK, NY, 12180
61	113.00-5-9.122	TRISCARI, THOMAS & CONCETTA L	64 COLEHAMMER AVE TROY, NY, 12180
62	113.00-5-9.13	DUGGAN, ALEXANDER F & ALEXANDRA M	70 COLEHAMER AV TROY, NY, 12180
63	113.00-6-12	HILLIE, HENRY H	82 CREEK RD WYNANTSKILL, NY, 12198
64	114.00-1-1.1	ENGELKE, IRVC TRUST ROSE	188 SPACKENKILL RD POUGHKEEPSIE, NY, 12603

1 AD-2 ADJOINERS LIST
SCALE: NTS

Blue Sky Towers II, LLC
352 PARK ST, SUITE 106
NORTH READING, MA 01864

verizon
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STATE OF NEW YORK * STEVEN M. MATTHEWS * 087507 LICENSED PROFESSIONAL ENGINEER

BLUE SKY SITE INFORMATION
PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION
PINEWOODS
RE PN: 20181802366
LC: 287677

SITE ADDRESS
CREEK RD
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

SHEET TITLE
ADJOINERS LIST

SHEET NUMBER
AD-2

1 SB-1 SETBACK PLAN

SCALE: 1" = 200' (11x17 SIZE)
1" = 100' (22x34 SIZE)

Blue Sky Towers II, LLC

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STEVEN M. MATTISON
087507
LICENSED PROFESSIONAL ENGINEER

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ORIGINAL SIZE IN INCHES

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VERIZON WIRELESS SITE INFORMATION
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RE PN: 20181802366
LC: 287677

SITE ADDRESS
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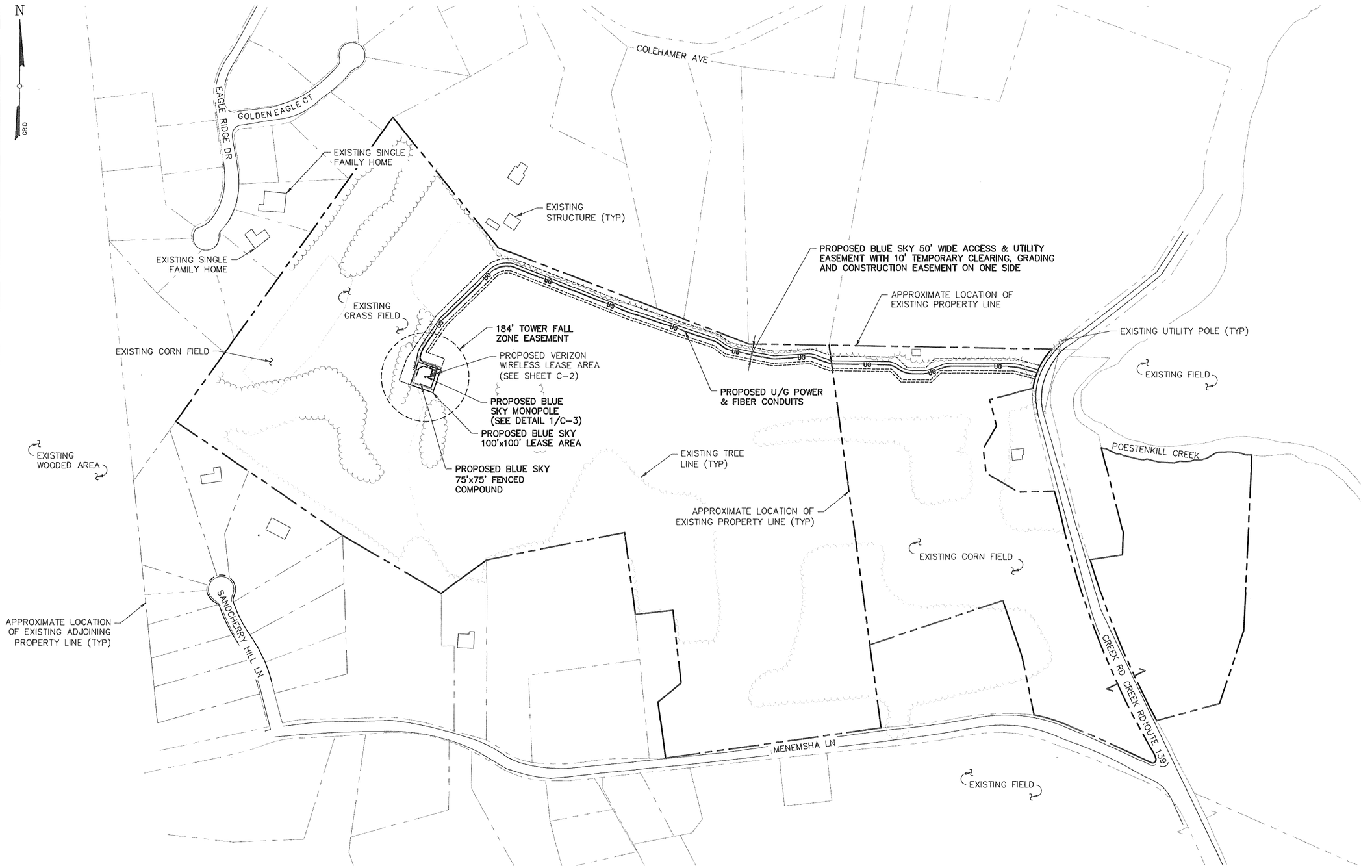
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

SHEET TITLE
SETBACK PLAN

SHEET NUMBER
SB-1



1 / C-1 OVERALL SITE PLAN

SCALE: 1" = 120' (11x17 SIZE)
1" = 60' (22x34 SIZE)

PROPOSED U/G UTILITY LENGTH = 2,880'±

PROPOSED ACCESS ROAD LENGTH = 2,860'±

AREA OF DISTURBANCE = 95,609 SF ± (2.19 ACRES)

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STATE OF NEW YORK · STEPHEN M. MATTHEWS · LICENSED PROFESSIONAL ENGINEER · 087507

0 1 2 3
ORIGINAL SIZE IN INCHES

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PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION
PINEWOODS
RE PN: 20181802366
LC: 287677

SITE ADDRESS
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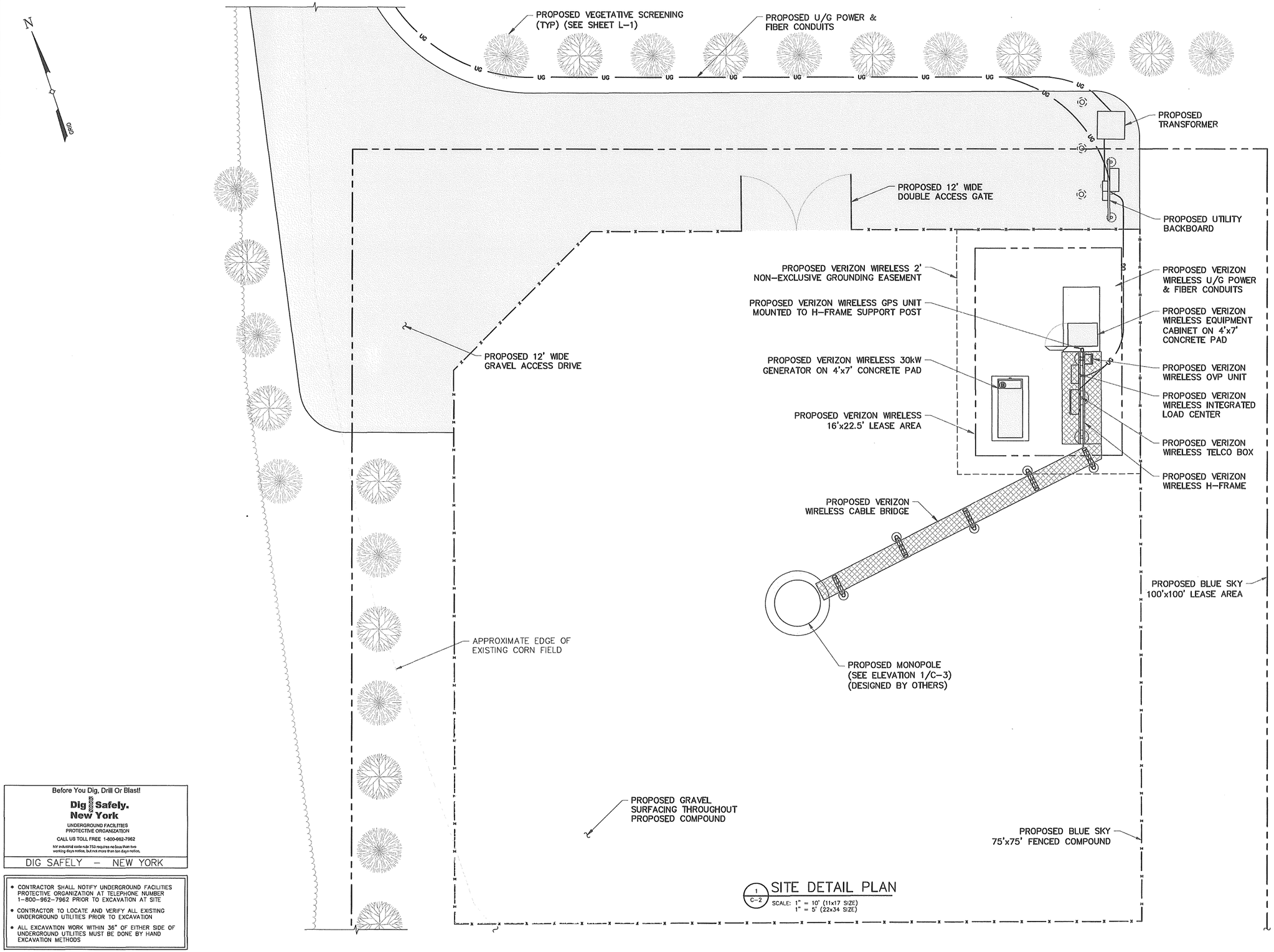
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

SHEET TITLE
OVERALL SITE PLAN

SHEET NUMBER
C-1



1/C-2 SITE DETAIL PLAN

SCALE: 1" = 10' (11x17 SIZE)
1" = 5' (22x34 SIZE)

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 working days notice, but not more than ten days notice.

DIG SAFELY – NEW YORK

- CONTRACTOR SHALL NOTIFY UNDERGROUND FACILITIES PROTECTIVE ORGANIZATION AT TELEPHONE NUMBER 1-800-962-7962 PRIOR TO EXCAVATION AT SITE
- CONTRACTOR TO LOCATE AND VERIFY ALL EXISTING UNDERGROUND UTILITIES PRIOR TO EXCAVATION
- ALL EXCAVATION WORK WITHIN 36" OF EITHER SIDE OF UNDERGROUND UTILITIES MUST BE DONE BY HAND EXCAVATION METHODS

Blue Sky Towers II, LLC

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verizon

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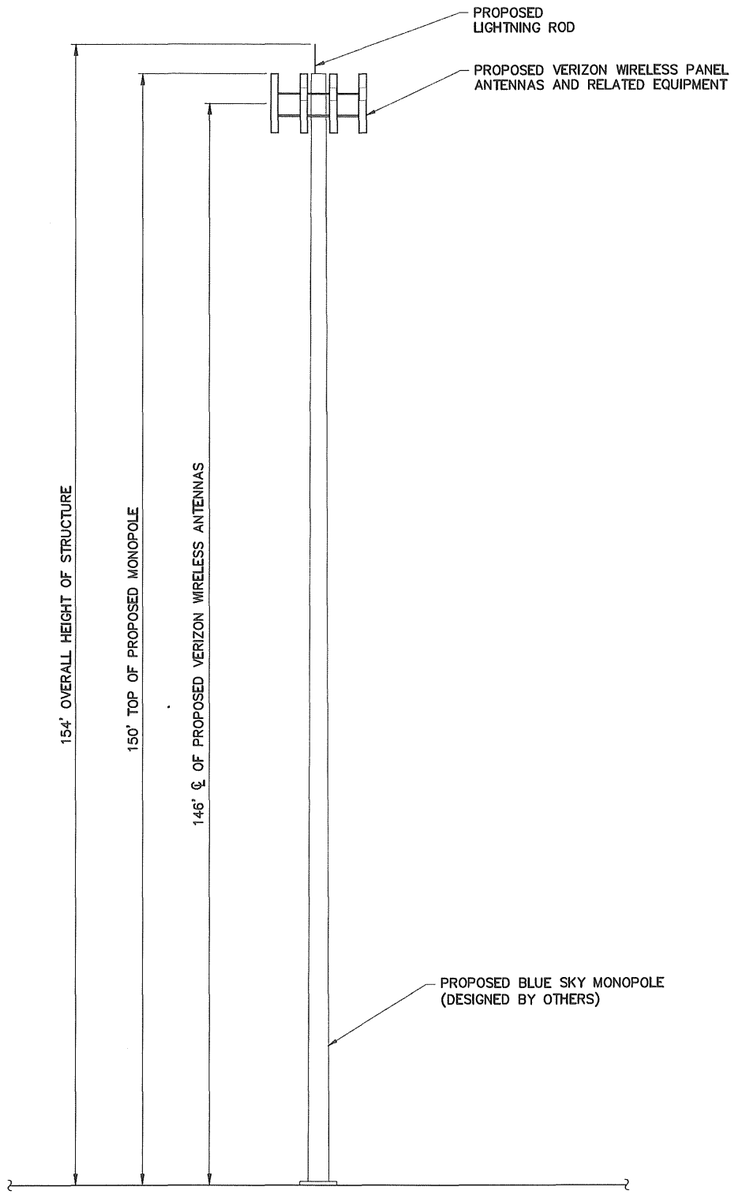
RENSSELAER COUNTY
NY 12180

SHEET TITLE

SITE DETAIL PLAN

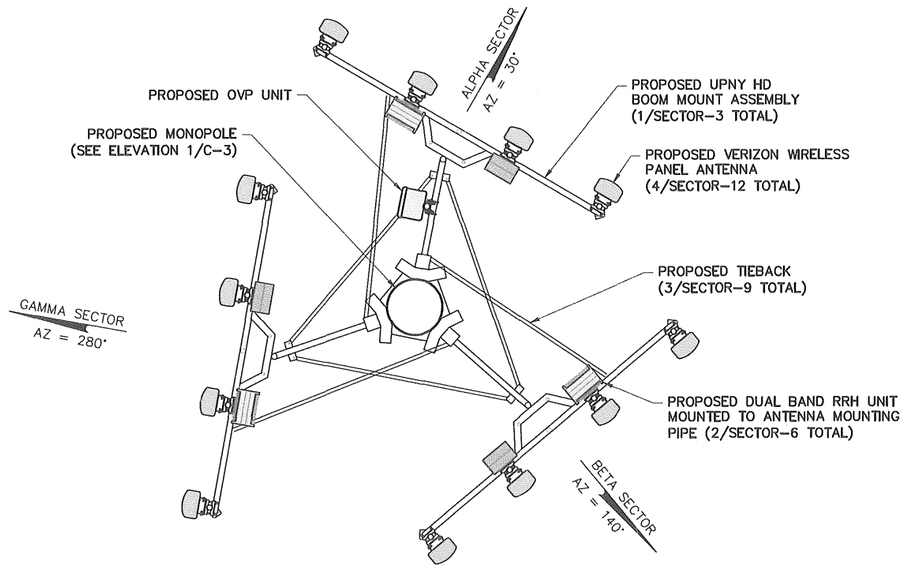
SHEET NUMBER

C-2



1/C-3 ELEVATION

SCALE: 1" = 40' (11x17 SIZE)
1" = 20' (22x34 SIZE)



2/C-3 ANTENNA ORIENTATION

SCALE: 3/4" = 1'-0" (11x17 SIZE)
3/8" = 1'-0" (22x34 SIZE)

Blue Sky Towers II, LLC

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NY-5144

VERIZON WIRELESS SITE INFORMATION

PINEWOODS
RE PN: 20181802366
LC: 287677

SITE ADDRESS

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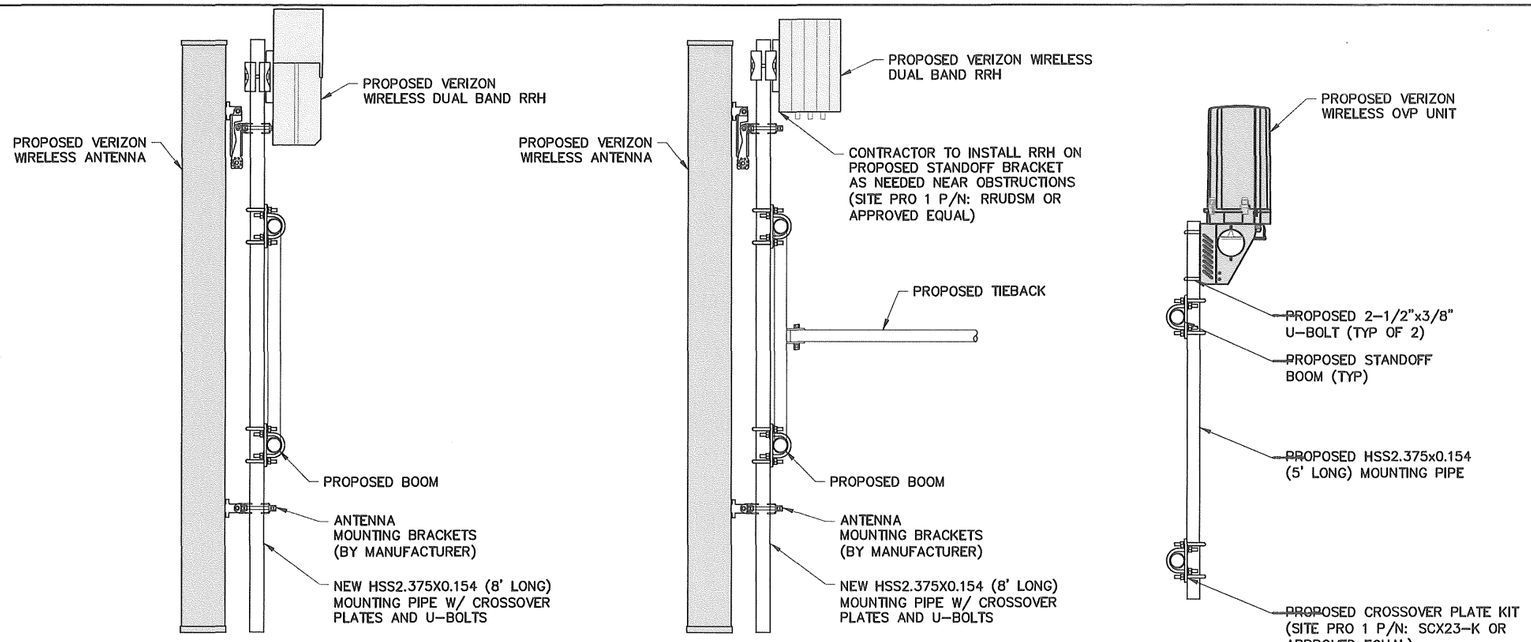
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

SHEET TITLE

ELEVATION

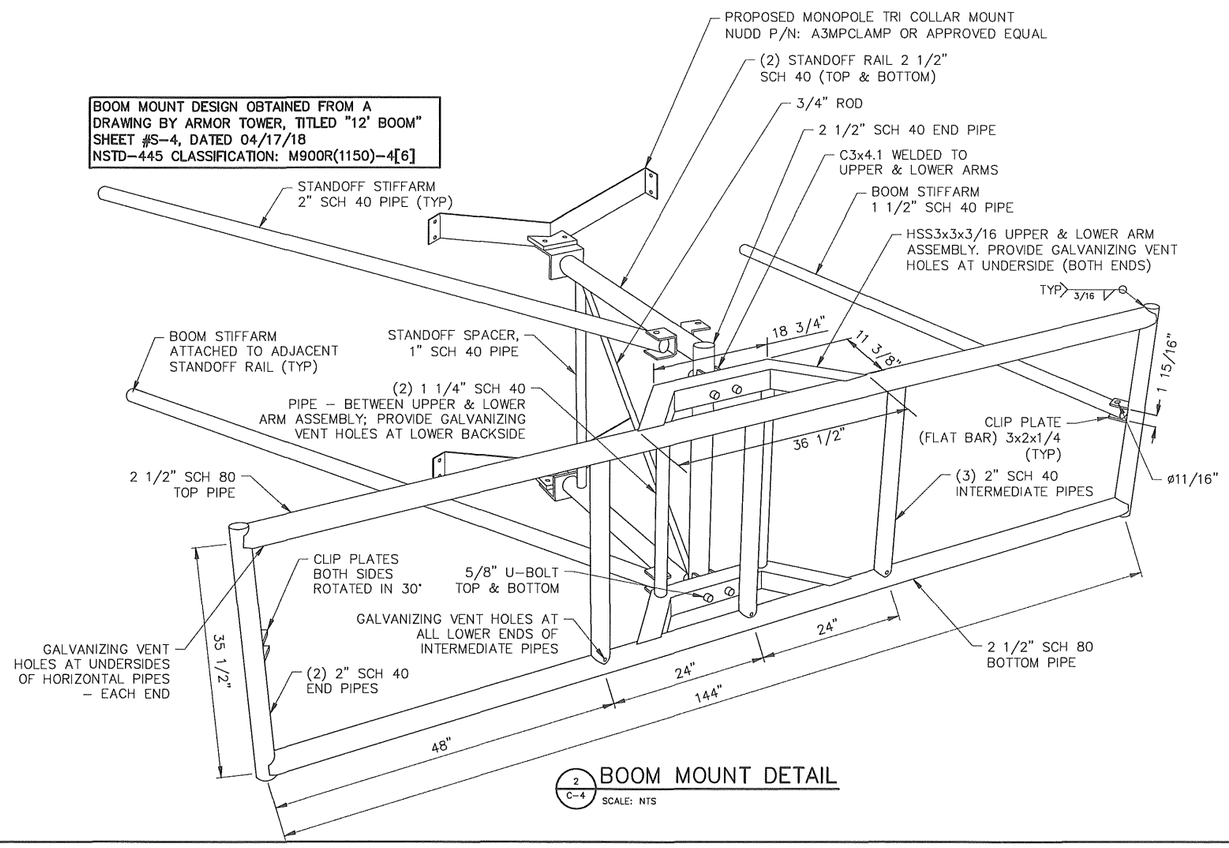
SHEET NUMBER

C-3



1 / C-4 ANTENNA/RRH/OVP MOUNTING SECTION

SCALE: 1/2" = 1'-0" (11x17 SIZE)
1" = 1'-0" (22x34 SIZE)



2 / C-4 BOOM MOUNT DETAIL

SCALE: NTS

Blue Sky Towers II, LLC

352 PARK ST, SUITE 106
NORTH READING, MA 01864

verizon

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LICENSED PROFESSIONAL ENGINEER

0 1 2 3
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BLUE SKY SITE INFORMATION

PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION

PINEWOODS
RE PN: 20181802366
LC: 287677

SITE ADDRESS

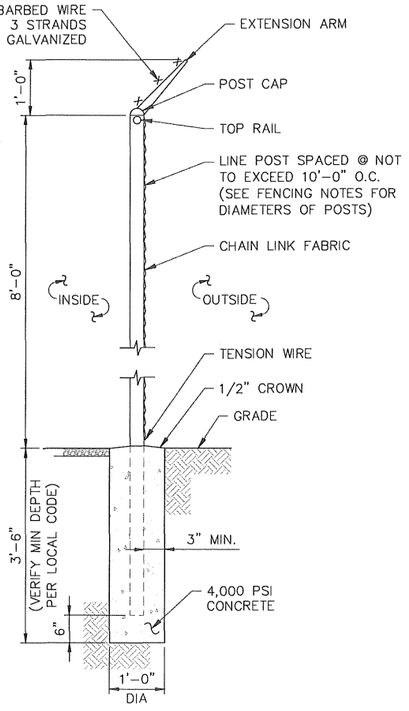
CREEK RD
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

SHEET TITLE

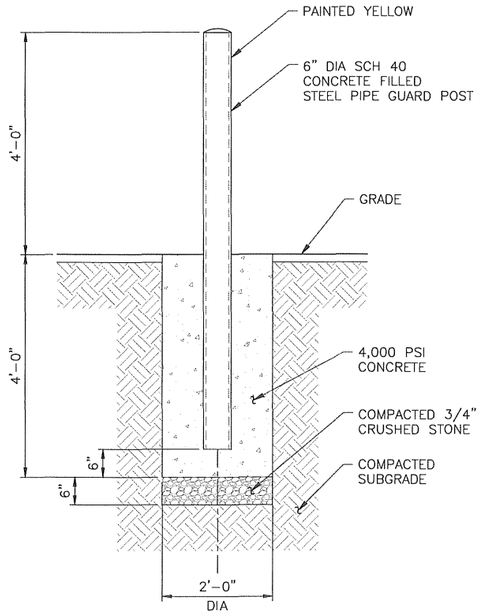
ANTENNA MOUNTING DETAILS

SHEET NUMBER

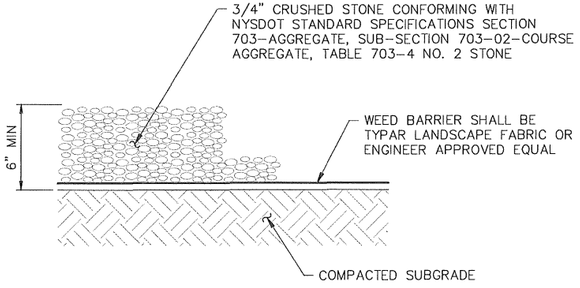
C-4



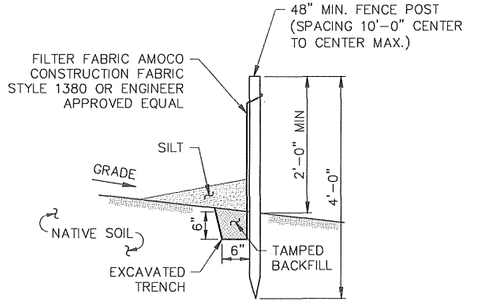
1 C-5 FENCE DETAIL
SCALE: 3/8" = 1'-0" (11x17 SIZE)
3/4" = 1'-0" (22x34 SIZE)



2 C-5 BOLLARD DETAIL
SCALE: 3/8" = 1'-0" (11x17 SIZE)
3/4" = 1'-0" (22x34 SIZE)



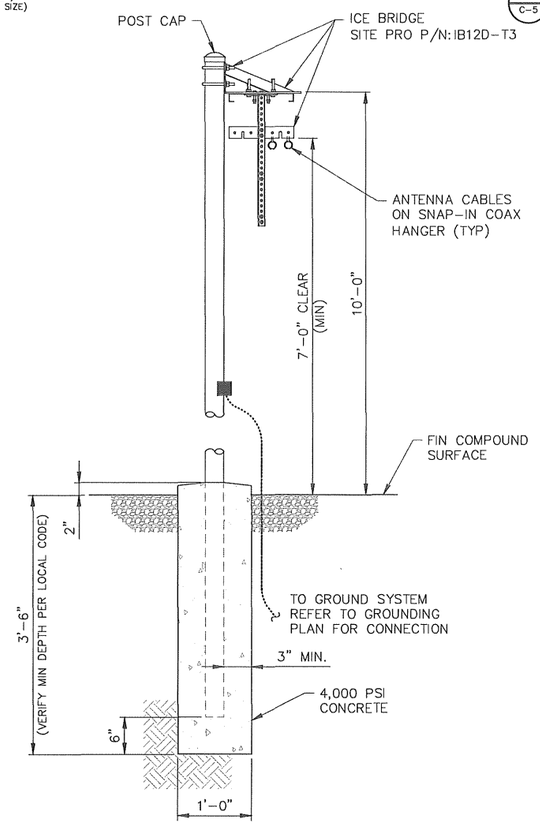
3 C-5 GRAVEL SURFACING TREATMENT
SCALE: 1/2" = 1'-0" (11x17 SIZE)
1 1/2" = 1'-0" (22x34 SIZE)



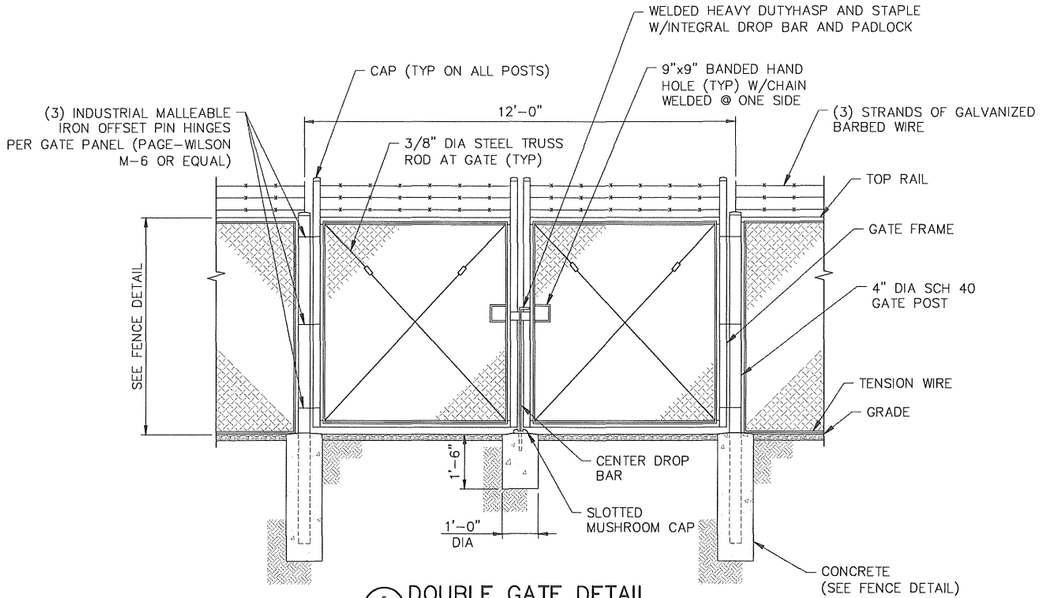
NOTES:

1. SILT FENCE SHALL BE MAINTAINED IN PLACE DURING CONSTRUCTION AND SOIL STABILIZATION PERIOD.
2. CONTRACTOR SHALL CONSTRUCT SILT FENCE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.
3. EXCAVATE TRENCH 6" WIDE X 6" DEEP. BURY BOTTOM 12" OF FABRIC AND TAMP IN PLACE.
4. WHEN FENCE IS NO LONGER NEEDED, THE ACCUMULATED SILT, ALL THE POSTS AND FABRIC SHALL BE REMOVED AND TRENCH BACK FILLED WITH TOPSOIL AND SEEDED.

3 C-5 SILT FENCE DETAIL
SCALE: NTS



6 C-5 CABLE BRIDGE DETAIL
SCALE: 1/2" = 1'-0" (11x17 SIZE)
1" = 1'-0" (22x34 SIZE)



5 C-5 DOUBLE GATE DETAIL
SCALE: 1/4" = 1'-0" (11x17 SIZE)
1/2" = 1'-0" (22x34 SIZE)

Blue Sky Towers II, LLC
352 PARK ST, SUITE 106
NORTH READING, MA 01864

verizon
1275 JOHN STREET, SUITE 100
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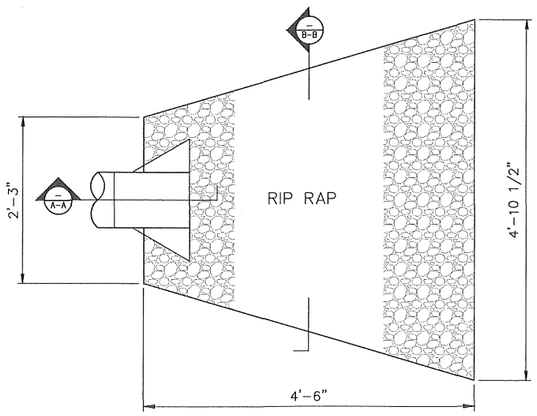
BLUE SKY SITE INFORMATION
PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION
PINEWOODS
RE PN: 20181802366
LC: 287677

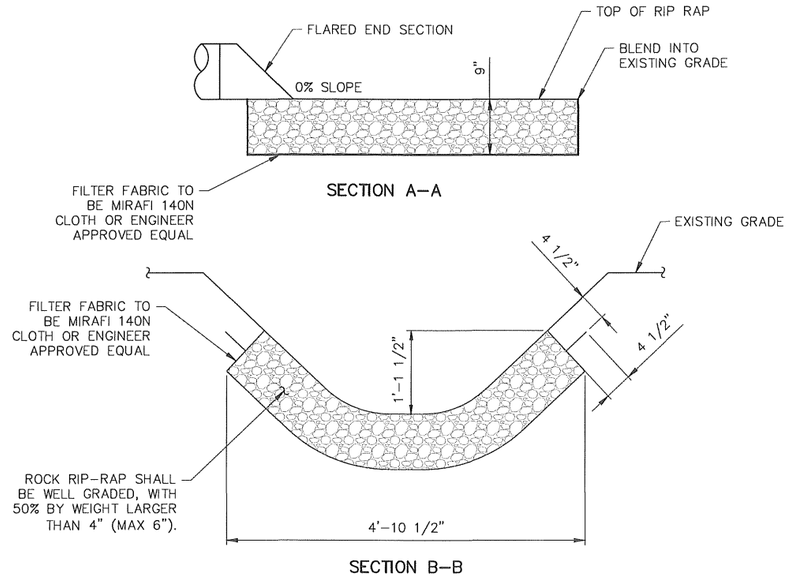
SITE ADDRESS
CREEK RD
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

SHEET TITLE
SITE DETAILS

SHEET NUMBER
C-5



PLAN

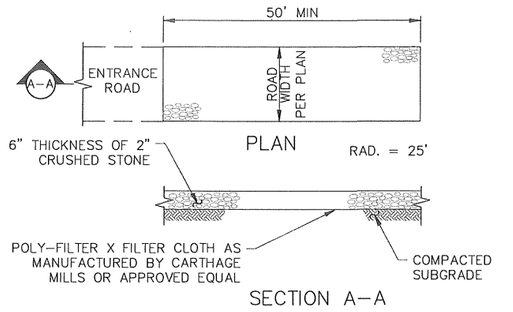


SECTION A–A

SECTION B–B

1 C–6 OUTLET PROTECTION

SCALE: 1/2" = 1'-0" (11x17 SIZE)
1" = 1'-0" (22x34 SIZE)



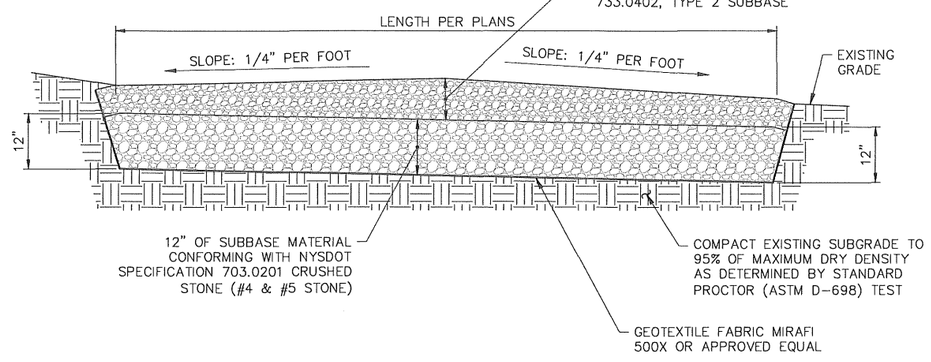
SECTION A–A

NOTES:

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET
3. THICKNESS – NOT LESS THAN SIX INCHES
4. WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY. IF ACCUMULATED SOIL DOES NOT COME OFF BY WAY OF STABILIZED CONSTRUCTION ENTRANCE, THE CONTRACTOR SHALL KNOCK OFF ACCUMULATED SOIL BY MANUAL METHODS UPSLOPE OF A SILT FENCE BARRIER.
9. SEDIMENT TRAPPING – SILT FENCE BARRIER SHALL BE INSTALLED DOWN SLOPE OF CONSTRUCTION ENTRANCE TO CATCH ANY SEDIMENT THAT COULD POTENTIALLY FALL OFF OF CONSTRUCTION EQUIPMENT AND/OR VEHICLES.
10. PERIODIC INSPECTIONS AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

1 C–6 STABILIZED CONSTRUCTION ENTRANCE

SCALE: NTS

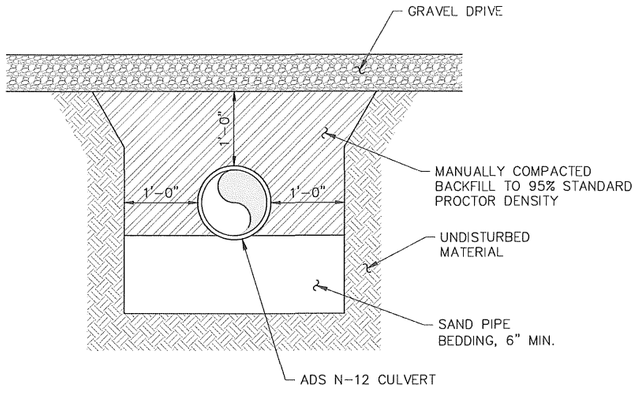


EARTH WORK SUBGRADE COMPACTION & SELECT GRANULAR FILL

1. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING & GRUBBING THE CONSTRUCTION SITE AND ROADWAY AREAS. THE CONTRACTOR SHALL COMPLY WITH THE RECOMMENDATIONS CONTAINED WITHIN THE GEOTECHNICAL REPORT, AS PREPARED FOR THIS SITE, WHEN NECESSARY, FOR SITE WORK PREPARATION, & FOUNDATION WORK. AS A MINIMUM THE TOP 3" OF GRADE SHALL BE REMOVED, THE EXPOSED SUBGRADE COMPACTED AND GEOTEXTILE FABRIC INSTALLED AS REQUIRED FOR UNSTABLE SOIL CONDITION.
2. ALL SELECT GRANULAR FILL SHALL BE COMPACTED TO A 95% COMPACTION AT A MAXIMUM DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR TEST (ASTM D–1557) AND WITHIN PLUS OR MINUS 3% OF OPTIMUM MOISTURE CONTENT.
3. CONTRACTOR TO ASSURE THAT EXISTING DRAINAGE PATTERNS ARE MAINTAINED.

3 C–6 GRAVEL DRIVE CROSS SECTION

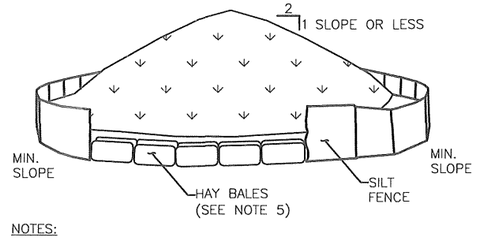
SCALE: 3/8" = 1'-0" (11x17 SIZE)
3/4" = 1'-0" (22x34 SIZE)



NOTES:
1. OVEREXCAVATE FOR BELLS.
2. ADDITIONAL BEDDING MAY BE USED AS ORDERED BY ENGINEER.
3. ALL EXCAVATION AND TRENCHING SHALL MEET OSHA REQUIREMENTS.

4 C–6 CULVERT TRENCH DETAIL

SCALE: 1/2" = 1'-0" (11x17 SIZE)
1" = 1'-0" (22x34 SIZE)



NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1V:2H.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.
5. HAYBALES TO BE USED WHERE STOCKPILES ARE LOCATED ON PAVED AREAS.

5 C–6 TEMPORARY SOIL STOCKPILE DETAIL

SCALE: NTS

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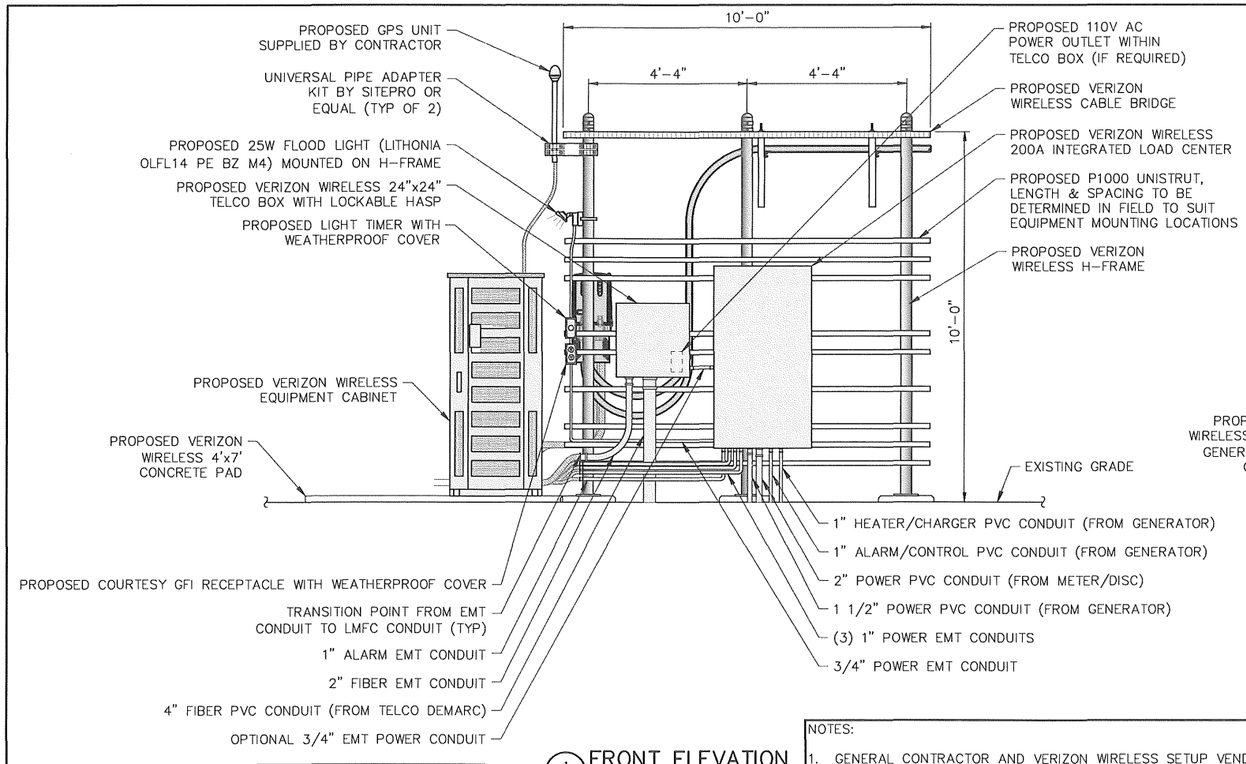
BLUE SKY SITE INFORMATION
PINEWOODS
NY–5144

VERIZON WIRELESS SITE INFORMATION
PINEWOODS
RE PN: 20181802366
LC: 287677

SITE ADDRESS
CREEK RD
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

SHEET TITLE
SITE DETAILS

SHEET NUMBER
C–6



LEGEND

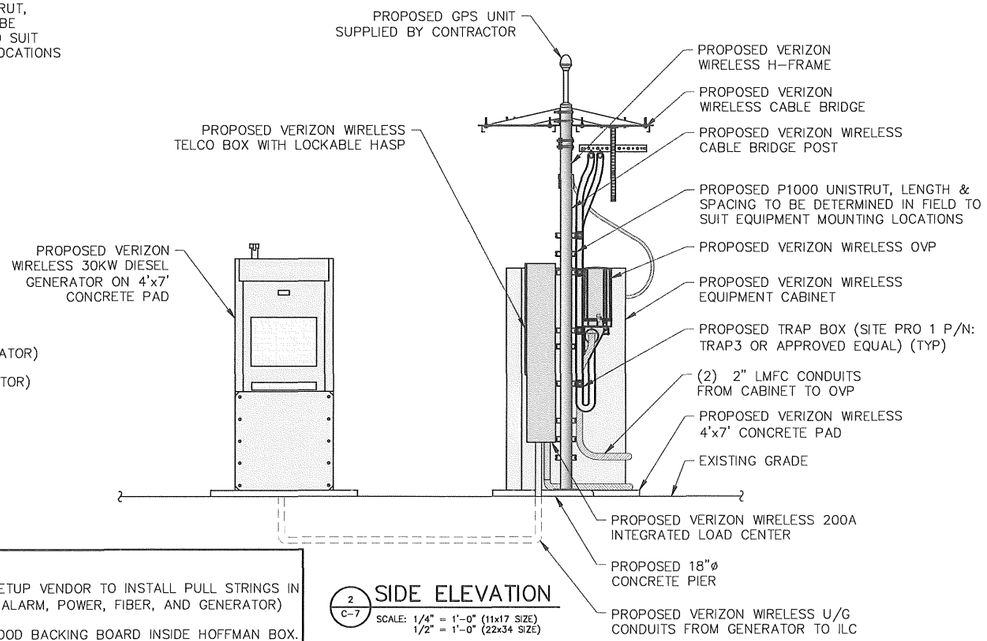
EMT CONDUIT

LMFC. CONDUIT

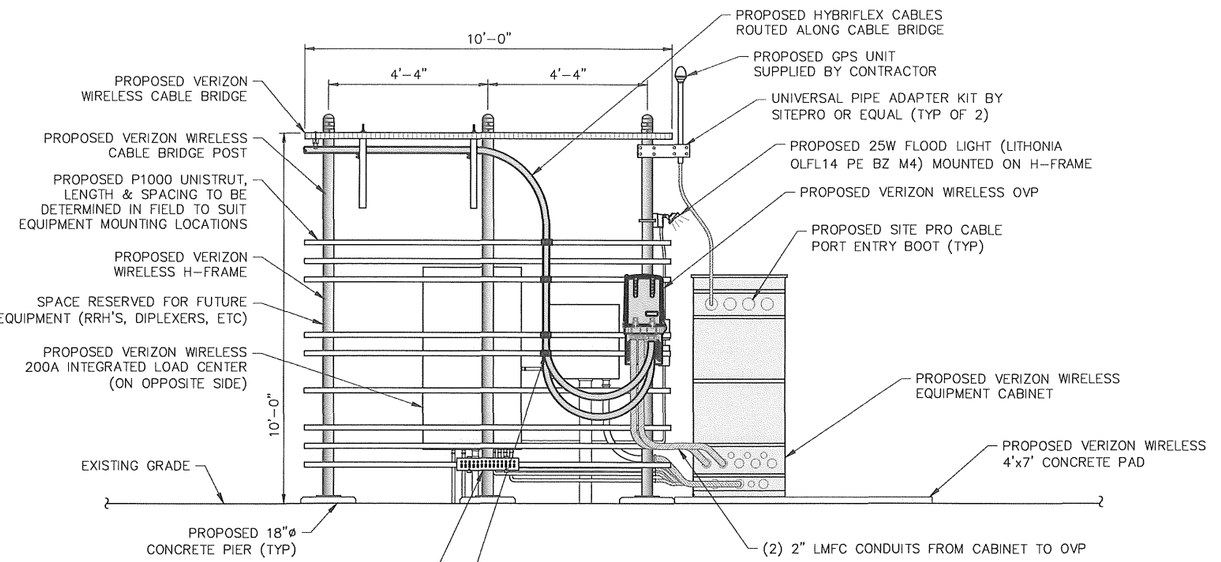
1 C-7 **FRONT ELEVATION**
SCALE: 1/4" = 1'-0" (11x17 SIZE)
1/2" = 1'-0" (22x34 SIZE)

NOTES:

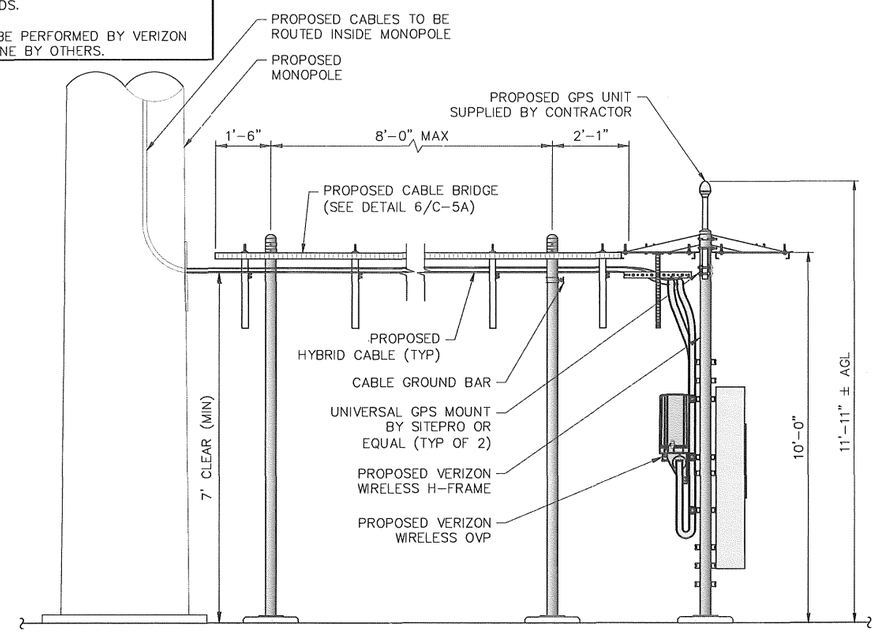
1. GENERAL CONTRACTOR AND VERIZON WIRELESS SETUP VENDOR TO INSTALL PULL STRINGS IN ALL EQUIPMENT CONDUITS AS APPLICABLE (OVP, ALARM, POWER, FIBER, AND GENERATOR)
2. VERIZON WIRELESS SETUP VENDOR TO ADD PLYWOOD BACKING BOARD INSIDE HOFFMAN BOX.
3. VERIZON WIRELESS SETUP VENDOR TO PROVIDE AND INSTALL CAT6 ETHERNET CABLING FOR ALL ALARM POINTS REQUIRED BY VERIZON WIRELESS STANDARDS.
4. ALL CIVIL SITE WORK (CONDUITS, GROUNDING, CONCRETE) TO BE PERFORMED BY VERIZON WIRELESS GENERAL CONTRACTOR. ALL OTHER WORK TO BE DONE BY OTHERS.



2 C-7 **SIDE ELEVATION**
SCALE: 1/4" = 1'-0" (11x17 SIZE)
1/2" = 1'-0" (22x34 SIZE)



3 C-7 **REAR ELEVATION**
SCALE: 1/4" = 1'-0" (11x17 SIZE)
1/2" = 1'-0" (22x34 SIZE)



4 C-7 **EQUIPMENT ELEVATION**
SCALE: 1/4" = 1'-0" (11x17 SIZE)
1/2" = 1'-0" (22x34 SIZE)

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STATE OF NEW YORK
STEVEN M. MATTINA
087507
LICENSED PROFESSIONAL ENGINEER

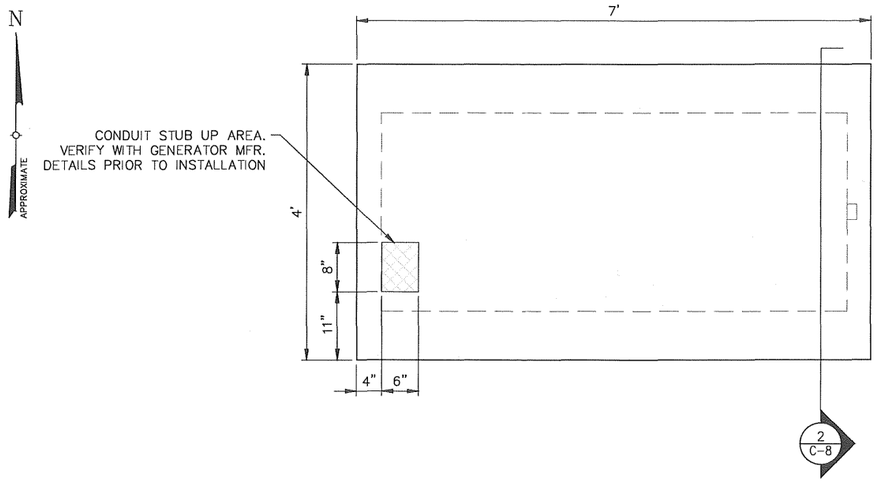
BLUE SKY SITE INFORMATION
PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION
PINEWOODS
RE PN: 20181802366
LC: 287677

SITE ADDRESS
CREEK RD
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

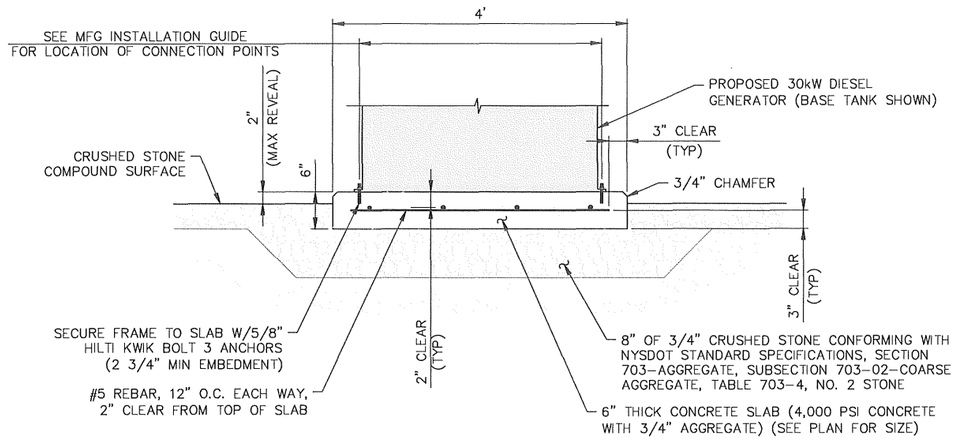
SHEET TITLE
EQUIPMENT ELEVATIONS

SHEET NUMBER
C-7



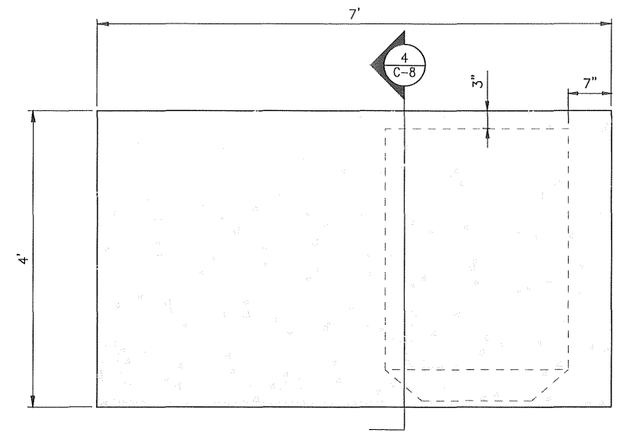
1 C-8 CONCRETE SLAB PLAN

SCALE: 1" = 2" (11x17 SIZE)
1" = 1" (22x34 SIZE)



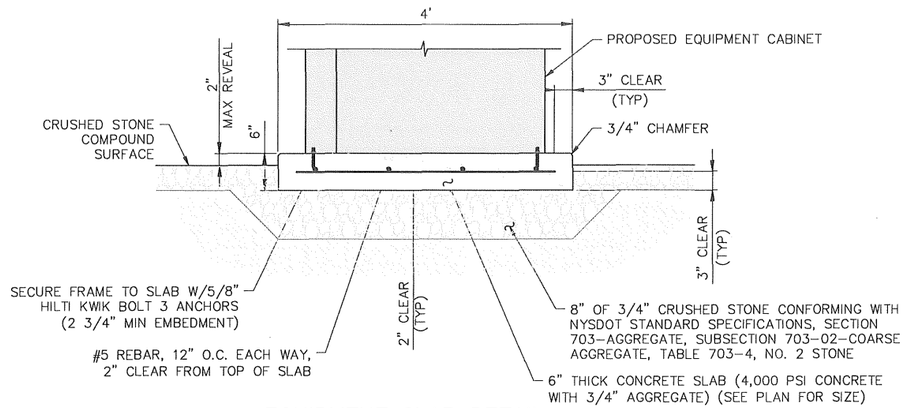
2 C-8 DIESEL GENERATOR SLAB DETAIL

SCALE: 1" = 2" (11x17 SIZE)
1" = 1" (22x34 SIZE)



3 C-8 EQUIPMENT SLAB PLAN

SCALE: 1" = 2" (11x17 SIZE)
1" = 1" (22x34 SIZE)



4 C-8 EQUIPMENT SLAB DETAIL

SCALE: 1" = 2" (11x17 SIZE)
1" = 1" (22x34 SIZE)

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verizon

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WEST HENRIETTA, NY 14586

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0 1 2 3
ORIGINAL SIZE IN INCHES

BLUE SKY SITE INFORMATION

PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION

PINEWOODS
RE PN: 20181802366
LC: 287677

SITE ADDRESS

CREEK RD
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

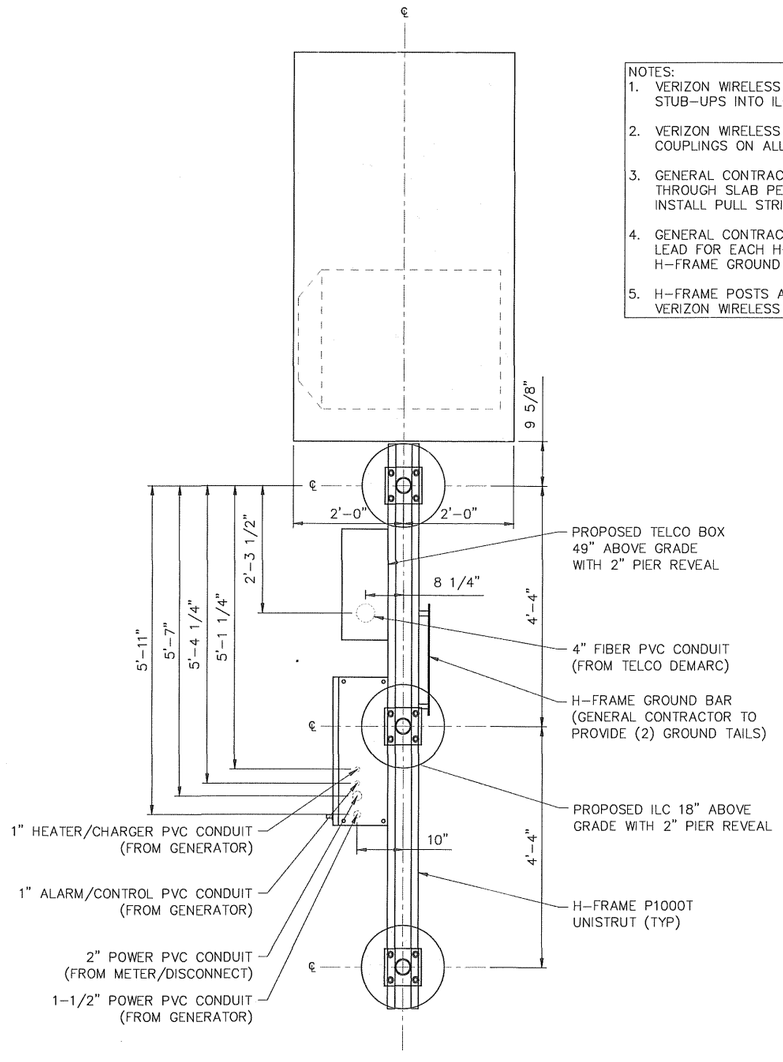
SHEET TITLE

FOUNDATION PLAN & DETAILS

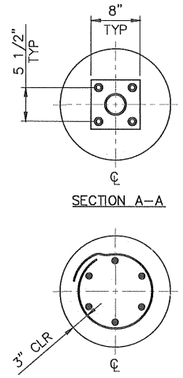
SHEET NUMBER

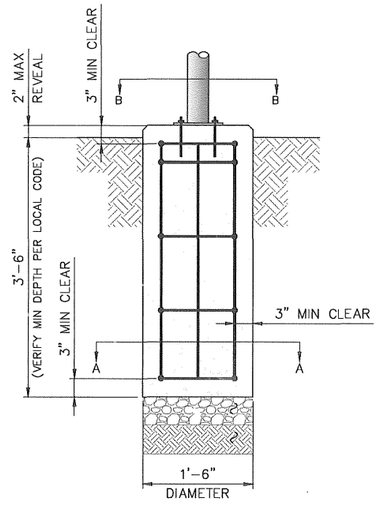
C-8

NOTES:
1. VERIZON WIRELESS SETUP VENDOR TO INSTALL RISERS ON STUB-UPS INTO ILC AND FIBER ENCLOSURE.
2. VERIZON WIRELESS SETUP VENDOR TO UTILIZE EXPANSION COUPLINGS ON ALL RISERS.
3. GENERAL CONTRACTOR TO INSTALL GENERATOR CONDUITS THROUGH SLAB PER MANUFACTURER CONDUIT LAYOUT. GC TO INSTALL PULL STRINGS IN GENERATOR CONDUITS.
4. GENERAL CONTRACTOR TO PROVIDE #2 SOLID TINNED GROUND LEAD FOR EACH H-FRAME POST AND TWO TAILS FOR H-FRAME GROUND BAR.
5. H-FRAME POSTS AND GROUND BAR LEAD TERMINATIONS BY VERIZON WIRELESS SETUP VENDOR.



1 / C-9 CONCRETE PIER LAYOUT
SCALE: 3/8" = 1'-0" (11x17 SIZE)
3/4" = 1'-0" (22x34 SIZE)





2 / C-9 CONCRETE PIER DETAIL
SCALE: 1/2" = 1'-0" (11x17 SIZE)
1" = 1'-0" (22x34 SIZE)

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verizon
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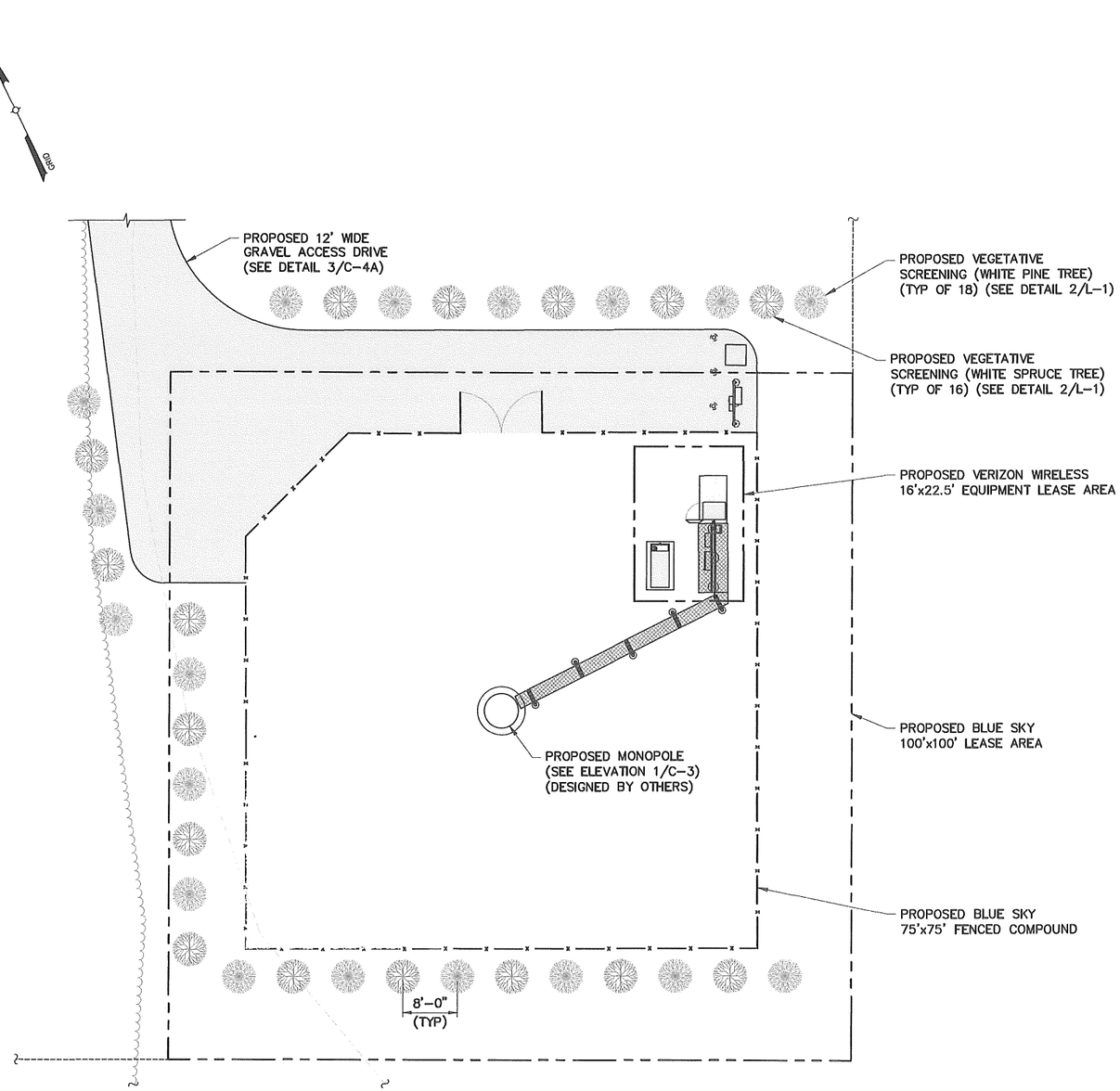
BLUE SKY SITE INFORMATION
PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION
PINEWOODS
RE PN: 20181802366
LC: 287677

SITE ADDRESS
CREEK RD
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

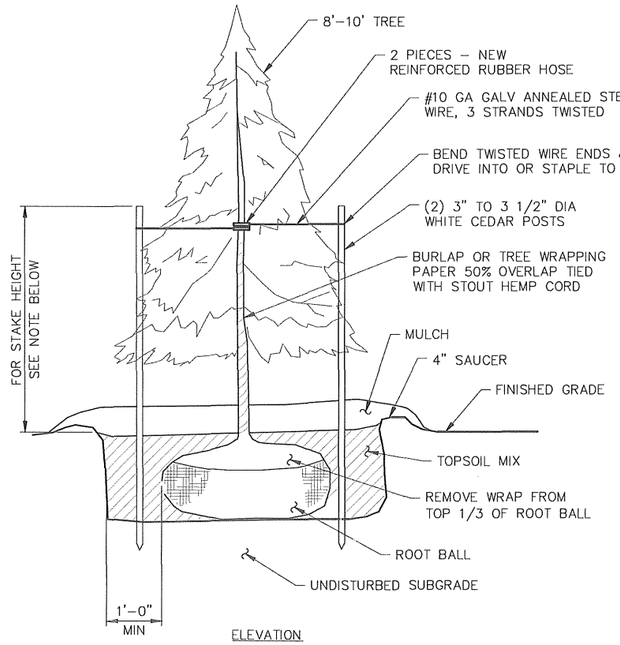
SHEET TITLE
PIER DETAILS

SHEET NUMBER
C-9



1/L-1 LANDSCAPE PLAN

SCALE: 1" = 10' (11x17 SIZE)
1" = 5' (22x34 SIZE)



ELEVATION

NOTE:
FOR TREES 2'-5' HIGH, USE 2 STAKES, 1/2 HT. OF TREE + 1-1/2'.
FOR TREES 6'-9' HIGH, USE 2 STAKES, 1/2 HT. OF TREE + 2'.

2/L-1 TREE PLANTING DETAIL

SCALE: NTS

Blue Sky Towers II, LLC

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verizon

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STATE OF NEW YORK
STEVEN M. MATTHEWS
087507
LICENSED PROFESSIONAL ENGINEER

0 1 2 3
ORIGINAL SIZE IN INCHES

BLUE SKY SITE INFORMATION

PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION

PINEWOODS
RE PN: 20181802366
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SITE ADDRESS

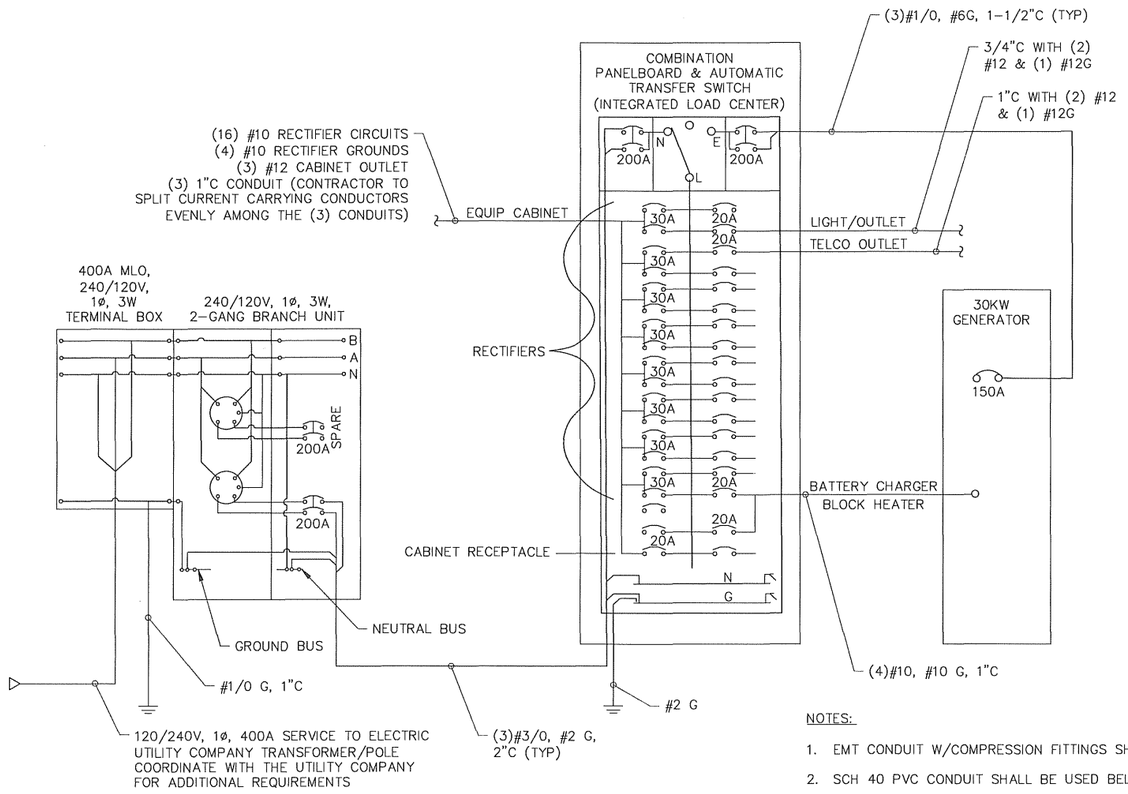
CREEK RD
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

SHEET TITLE

LANDSCAPE PLAN
& DETAIL

SHEET NUMBER

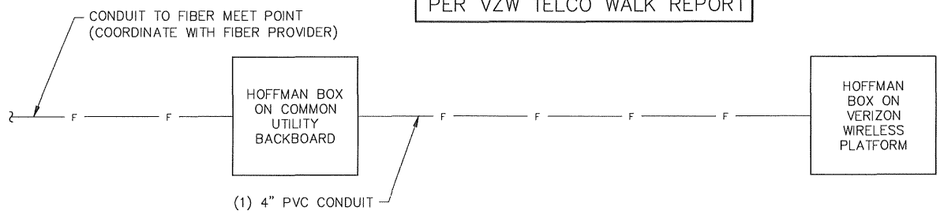
L-1



1 E-1 SINGLE LINE DIAGRAM

SCALE: NTS

DESIGN TO BE CONFIRMED
AND UPDATED AS NEEDED
PER VZW TELCO WALK REPORT

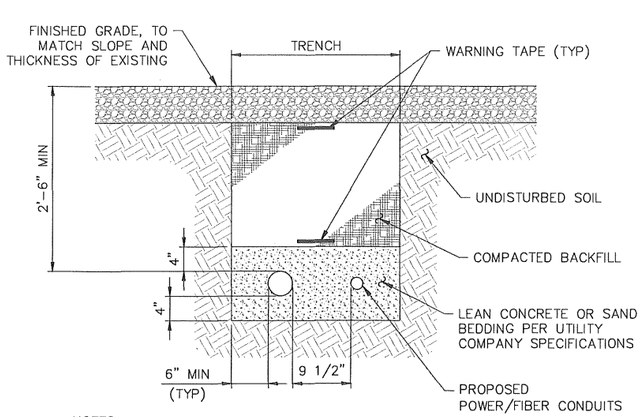


2 E-1 TELEPHONE LINE DIAGRAM

SCALE: NTS

NOTES:

1. EMT CONDUIT W/COMPRESSION FITTINGS SHALL BE USED ABOVE GRADE.
2. SCH 40 PVC CONDUIT SHALL BE USED BELOW GRADE.
3. SCH 80 PVC CONDUIT SHALL BE USED UNDER ROADWAY.

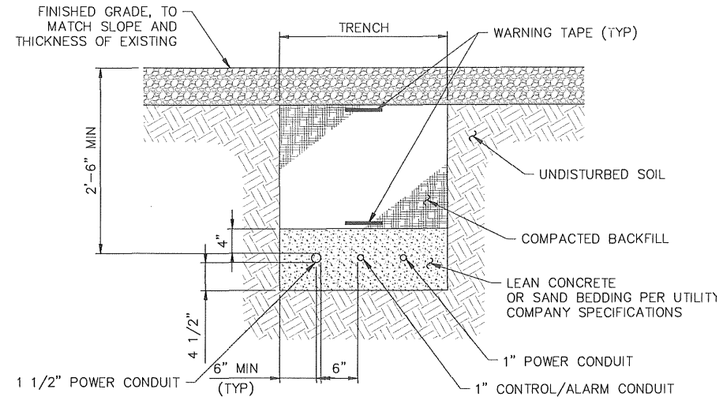


NOTES:

1. BACKFILL SHALL BE CLEAN FILL WITHOUT STONES AND SHALL BE THOROUGHLY COMPACTED IN 12" LAYERS BY TAMPING OR APPROVED EQUAL METHOD. NO BELLYING OF TRENCH SHALL BE ALLOWED.
2. SCH 40 PVC CONDUIT SHALL BE USED BELOW GRADE.
3. SCH 80 PVC CONDUIT SHALL BE USED UNDER ROADWAY.

3 E-1 ELECTRIC/TELEPHONE TRENCH DETAIL

SCALE: 1/2" = 1'-0" (11x17 SIZE)
1" = 1'-0" (22x34 SIZE)

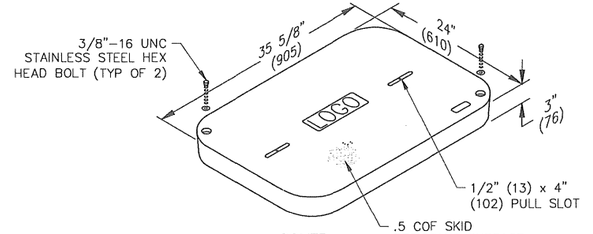


NOTES:

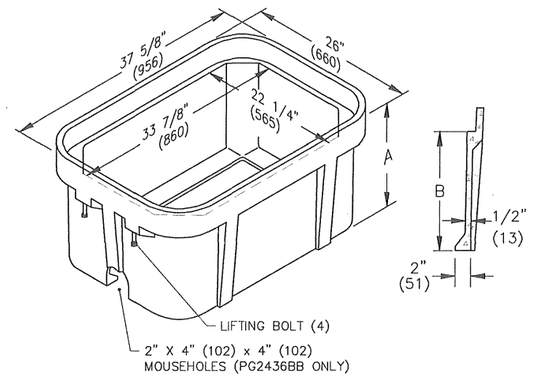
1. BACKFILL SHALL BE CLEAN FILL WITHOUT STONES AND SHALL BE THOROUGHLY COMPACTED IN 12" LAYERS BY TAMPING OR APPROVED EQUAL METHOD. NO BELLYING OF TRENCH SHALL BE ALLOWED.
2. SCH 40 PVC CONDUIT SHALL BE USED BELOW GRADE.
3. SCH 80 PVC CONDUIT SHALL BE USED UNDER ROADWAY.

4 E-1 GENERATOR TRENCH DETAIL

SCALE: 1/2" = 1'-0" (11x17 SIZE)
1" = 1'-0" (22x34 SIZE)



COVER



BOX

5 E-1 PULL BOX DETAIL

SCALE: NTS

Blue Sky Towers II, LLC

352 PARK ST, SUITE 106
NORTH READING, MA 01864

verizon

1275 JOHN STREET, SUITE 100
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WORK ORDER NUMBER	DRAWN BY
8750.04	TLS

NO.	DATE	ISSUE
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2	11/11/16	PER TOWN COMMENTS
3	4/19/19	PER COMMENTS
4	4/26/19	FOR ZONING

RELEASED BY | DATE

STATE OF NEW YORK
STEVEN M. MATTHEWS
LICENSED PROFESSIONAL ENGINEER
087507

BLUE SKY SITE INFORMATION

PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION

PINEWOODS
RE PN: 20181802366
LC: 287677

SITE ADDRESS

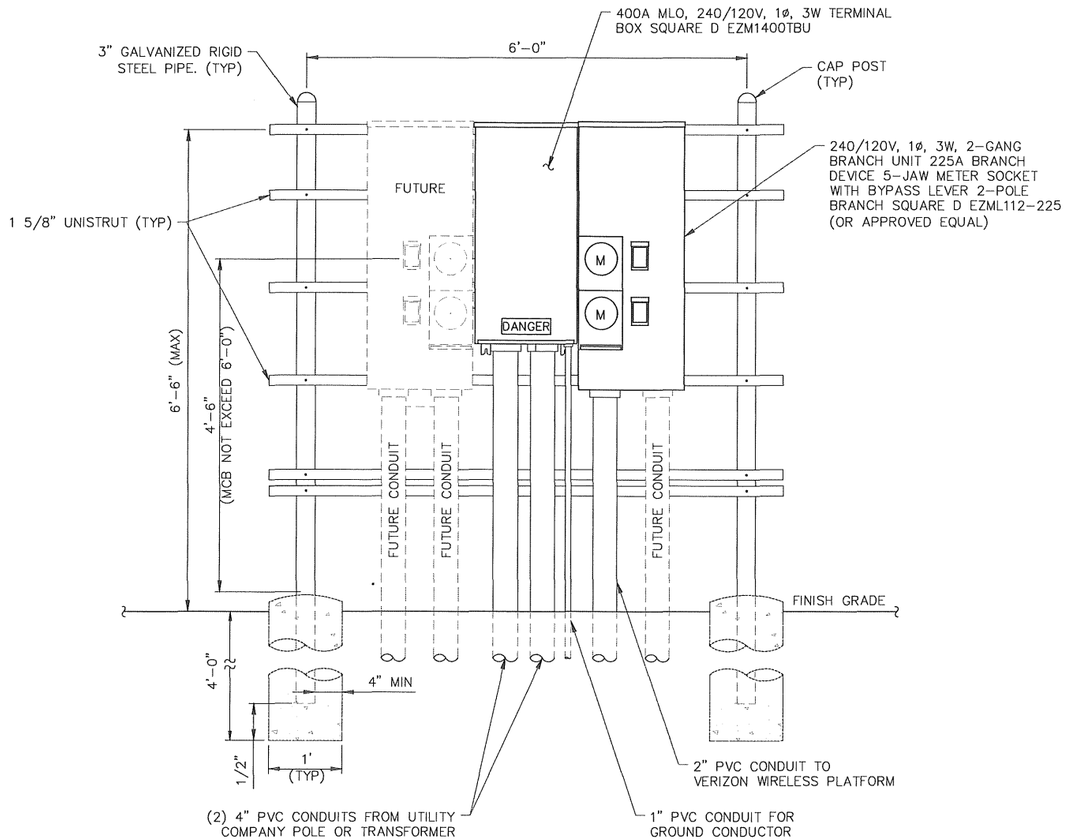
CREEK RD
TOWN OF BRUNSWICK
RENSSELAER COUNTY
NY 12180

SHEET TITLE

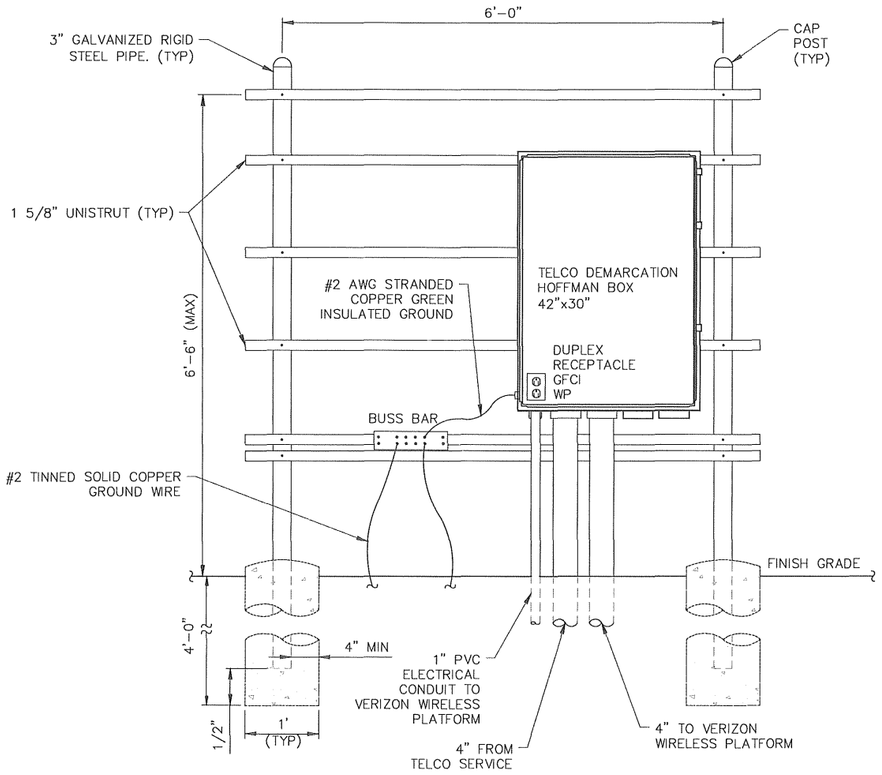
UTILITY DIAGRAMS & DETAILS

SHEET NUMBER

E-1



FRONT



REAR

NOTES:

1. CONDUIT SHALL BE SCHEDULE 40 PVC CONDUIT 30" BELOW GRADE.
2. CONDUIT FROM 30" BELOW GRADE, INCLUDING THE SWEEP, SHALL BE SCHEDULE 80 PVC FOR ABOVE GRADE AND UNDER ALL ROADWAYS (UNLESS CONCRETE ENCASED).
3. ALL CONDUITS SHALL HAVE EXPANSION FITTINGS ABOVE GRADE.

1/E-2 UTILITY BACKBOARD DETAIL

SCALE: NTS

Blue Sky Towers II, LLC

352 PARK ST, SUITE 106
NORTH READING, MA 01864

verizon

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087507

0 1 2 3
ORIGINAL SIZE IN INCHES

BLUE SKY SITE INFORMATION

PINEWOODS
NY-5144

VERIZON WIRELESS SITE INFORMATION

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LC: 287677

SITE ADDRESS

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NY 12180

SHEET TITLE

UTILITY BACKBOARD DETAIL

SHEET NUMBER

E-2

LEGEND

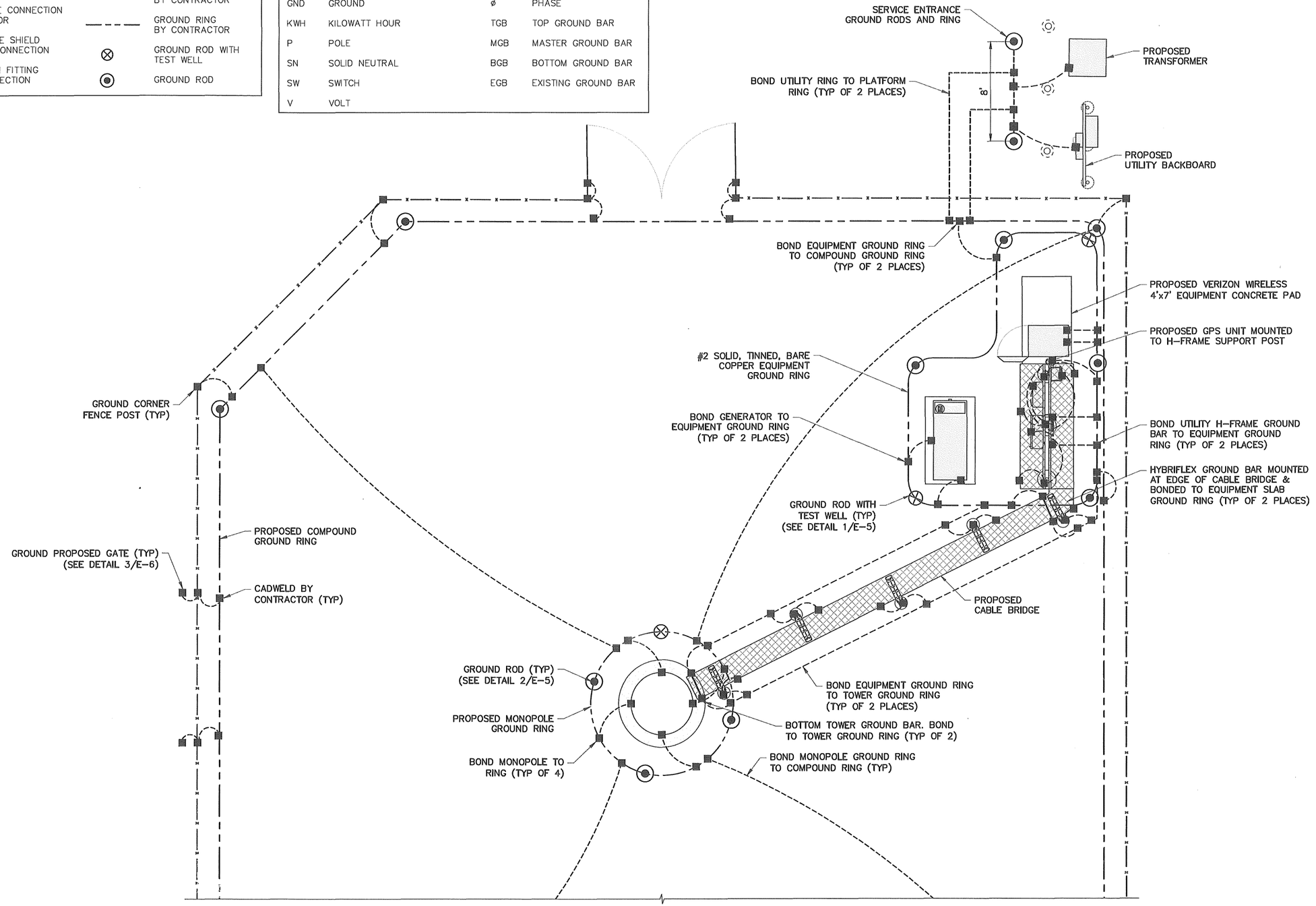
METER	COPPER GROUND BAR
CIRCUIT BREAKER	GROUND CONDUCTOR BY CONTRACTOR
CADWELD TYPE CONNECTION BY CONTRACTOR	GROUND RING BY CONTRACTOR
COAXIAL CABLE SHIELD GROUND KIT CONNECTION	GROUND ROD WITH TEST WELL
COMPRESSSION FITTING GROUND CONNECTION	GROUND ROD

ABBREVIATIONS

A	AMPERE	W	WIRE
C	CONDUIT	WP	WEATHERPROOF
GND	GROUND	ø	PHASE
KWH	KILOWATT HOUR	TGB	TOP GROUND BAR
P	POLE	MGB	MASTER GROUND BAR
SN	SOLID NEUTRAL	BGB	BOTTOM GROUND BAR
SW	SWITCH	EGB	EXISTING GROUND BAR
V	VOLT		

N

APPROX



1/E-3 GROUNDING PLAN

SCALE: 1" = 10' (11x17 SIZE)
1" = 5' (22x34 SIZE)

NOTE:

GROUNDING SYSTEM SHOWN IS PRELIMINARY AND IS NOT BASED UPON SOIL RESISTIVITY TEST DATA. CONTRACTOR SHALL CONFIRM FINAL GROUNDING DESIGN WITH VERIZON WIRELESS PRIOR TO CONSTRUCTION.

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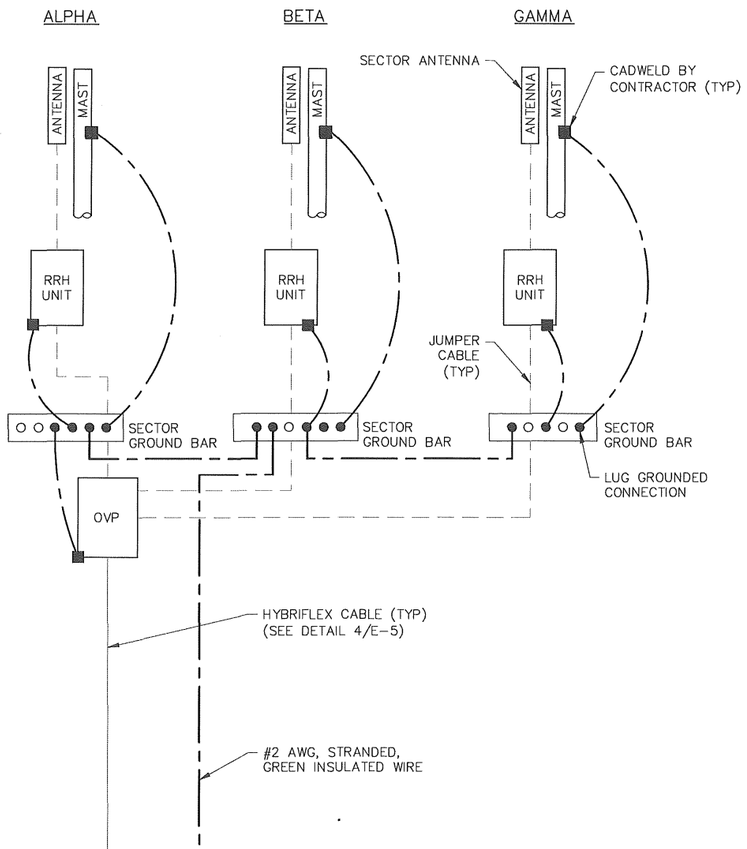
NY 12180

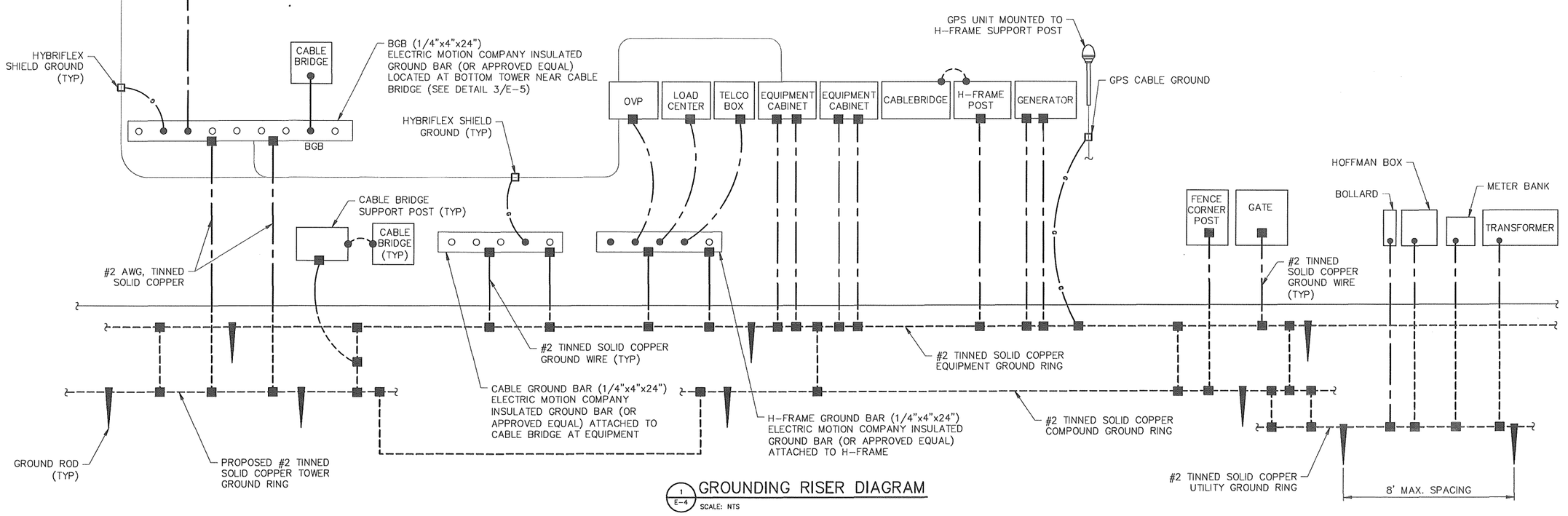
SHEET TITLE

GROUNDING PLAN

SHEET NUMBER

E-3





1/E-4 GROUNDING RISER DIAGRAM
SCALE: NTS

Blue Sky Towers II, LLC
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NORTH READING, MA 01864

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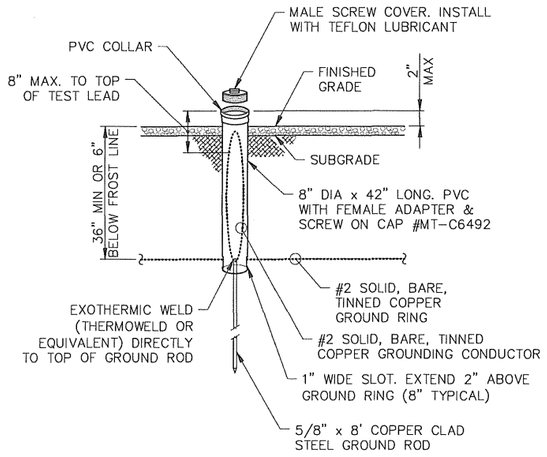
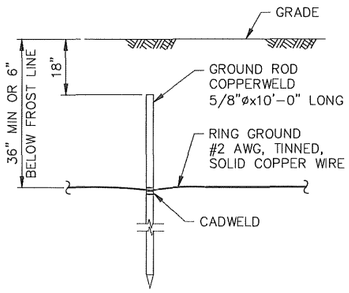
NY 12180

SHEET TITLE
GROUNDING RISER DIAGRAM

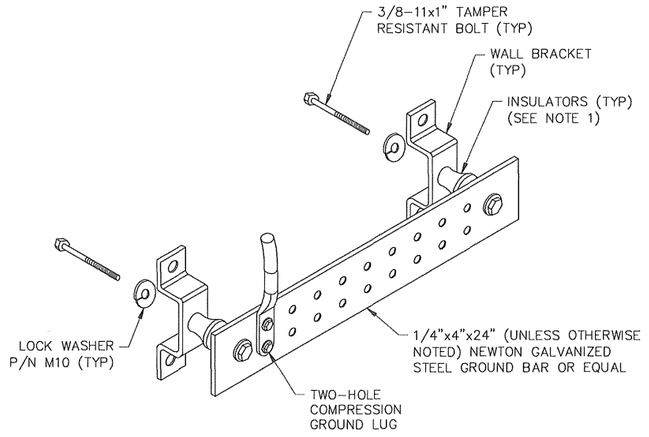
SHEET NUMBER
E-4



1 E-5 GROUND ROD WITH TEST WELL
SCALE: NTS



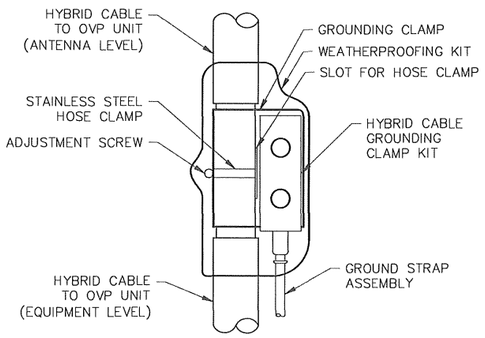
2 E-5 GROUND ROD
SCALE: NTS



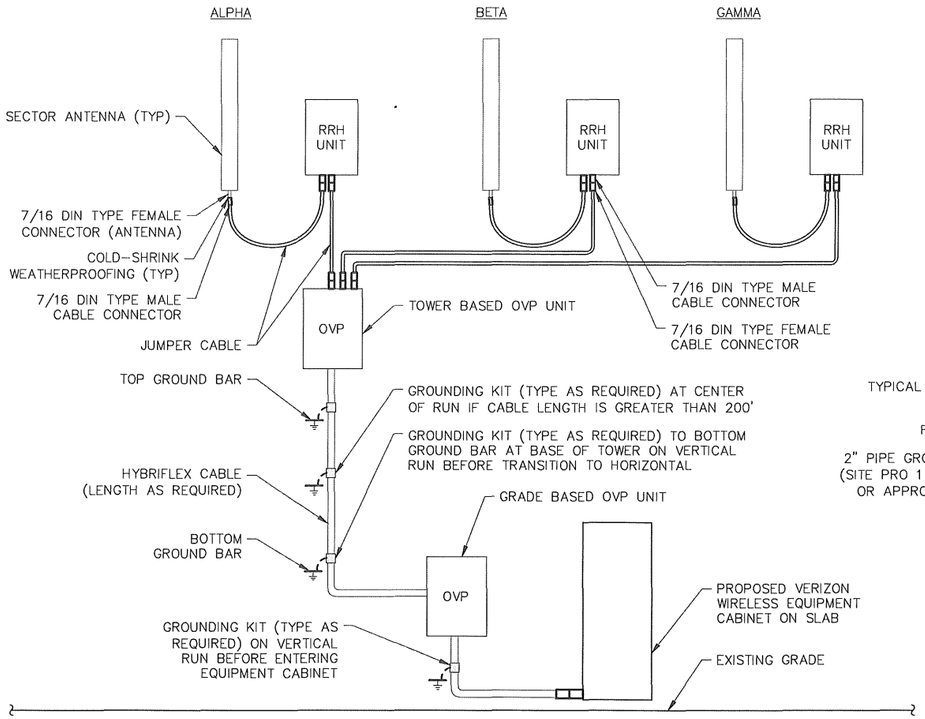
NOTE:

1. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL. USE INSULATOR WHEN ATTACHING TO BUILDING OR SHELTERS.

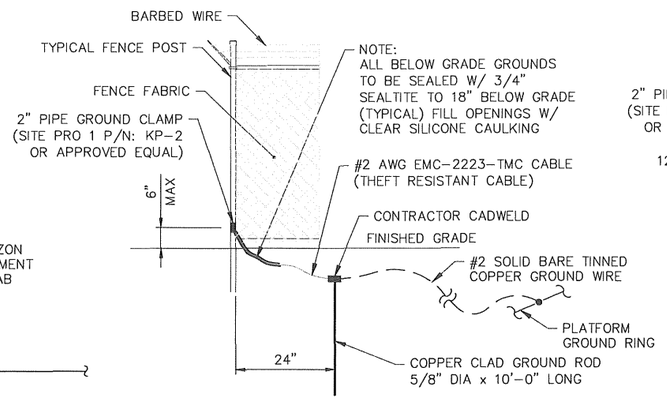
3 E-5 GROUND BUS BAR DETAIL
SCALE: NTS



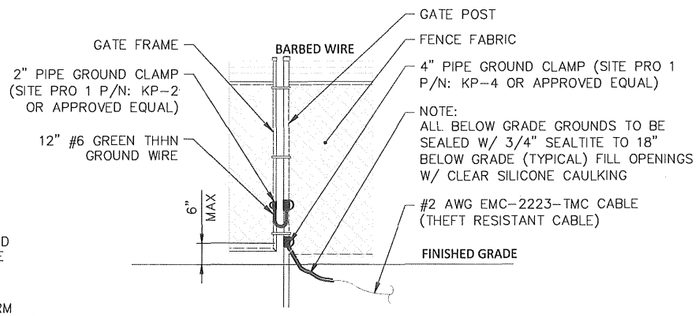
4 E-5 HYBRID CABLE GROUNDING DETAIL
SCALE: NTS



5 E-5 HYBRID CABLE SCHEMATIC
SCALE: NTS



6 E-5 FENCE CORNER GROUNDING DETAIL
SCALE: NTS



NO-OX-ID SHALL BE APPLIED TO ALL MECHANICAL GROUND CLAMPS

7 E-5 GATE GROUNDING DETAIL
SCALE: NTS

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