

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Case No. 26-1619-PET

De Minimis Application of Bell Atlantic Mobile Systems,)
LLC d/b/a Verizon Wireless, for a Certificate of Public Good,)
pursuant to 30 V.S.A. § 248a, authorizing the modification)
of telecommunications equipment on an existing facility)
in Tunbridge, Vermont)

**DE MINIMIS APPLICATION OF BELL ATLANTIC MOBILE SYSTEMS, LLC, d/b/a
VERIZON WIRELESS, FOR A CERTIFICATE OF PUBLIC GOOD
PURSUANT TO 30 V.S.A. SECTION 248a**

By this Application, Bell Atlantic Mobile Systems, LLC, d/b/a Verizon Wireless (“applicant” or “Verizon”), represents:

1. The Applicant is a "company" as defined by 30 V.S.A. § 201 and, as such, is subject to the jurisdiction of the Vermont Public Utility Commission ("Commission") pursuant to 30 V.S.A. § 203.
2. The proposed Project involves a “telecommunications facility” as defined by 30 V.S.A. § 248a(b)(4).
3. Verizon proposes to modify an existing wireless telecommunication facility located on a 39’ above ground level (“AGL”) utility pole (“Pole”) located on VT Route 110 in the Town of Tunbridge. Verizon refers to the Project as “Tunbridge VT SC”. The coordinates of the Project are latitude 43.88716389 North and longitude 72.49443333 West. The location of the Project is shown on Exhibit RP-1 Permit Plans. The property owner has given Verizon permission to proceed with this application.
4. On June 22, 2017, the Public Utility Commission (“Commission”) approved the Petition of Bell Atlantic Mobile Systems of Allentown, Inc. and Cellco Partnership each d/b/a Verizon Wireless in Case No. 17-3144-PET authorizing the installation of a telecommunications

facility on the Pole at the site. This project consists of modifications to the equipment installed on the Pole pursuant to the Order and CPG.

5. Verizon currently has two (2) antennas and four (4) remote radio heads (“RRH”) installed on the Pole.

6. Verizon now proposes to remove the four (4) existing RRHs, two (2) of which each measure 20.9” tall by 11.8” wide (1.71 sq. ft.) and two (2) of which each measure 25.8” tall by 11.8” wide (2.11 sq. ft.). They will be replaced by four (4) new RRHs, which each measure 14.96” tall by 14.96” wide (1.55 sq. ft.). See Permit Plans at Sheet L-3. The RRHs will be mounted at centerline heights of 32.08’ AGL and 31.08’ AGL. The topmost height of the RRHs will extend to 33.33” AGL, therefore, none of the RRHs will extend above the top of the Pole.

7. The aggregate visible surface area of the existing equipment on the Pole is 17.08 square feet. Following the proposed modification, the aggregate visible facial surface area will be 15.38 square feet, a decrease of 1.7 square feet. Full and accurate specifications of the proposed RRHs are detailed in Exhibit MM-1.¹

8. SAI Communications prepared a Structural Analysis (See Exhibit RP-2) on behalf of Verizon for this project dated April 6, 2026, which concluded that the Pole has sufficient capacity to support the proposed modifications.

9. Verizon will gain access to the Pole using the existing access from Route 110.

10. No site clearing is necessary and there no new impervious surface area will be created.

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

11. There will be no changes to: (1) the property boundaries and setbacks, (2) utilities, (3) wetlands, (4) drainage or erosion control, (5) screening, landscaping, ground cover, fencing, exterior lighting and signage, or (6) access to the Pole.

12. The proposed Project involves the installation of wireless telecommunications equipment on an existing structure. The height and width of the support structure, excluding equipment, antennas, and ancillary equipment, will not increase. The Project will result no additional impervious surface. The Antennas, equipment, or ancillary improvements on the support structure will not extend, horizontally or vertically, more than ten (10) feet from the Pole. Therefore, the Project will not increase the height or width of the Tower by more than 10 feet. The aggregate visible surface area of the faces of the Antennas, RRHs, and OVP following the modification will decrease to 15.83 square feet. Therefore, under the definition set out in 30 V.S.A. § 248a(b)(2), the proposed Project qualifies as a "de minimis modification."

13. Verizon has neither applied for, obtained, nor been denied a permit or permit amendments under applicable provisions of Title 24 or chapter 151 of Title 10 for the proposed improvements covered by the current application or substantially similar improvements.

14. As referenced above, on June 22, 2017, the Commission approved the Petition of Bell Atlantic Mobile Systems of Allentown, Inc. and Cellco Partnership each d/b/a Verizon Wireless in Case No. 17-3144-PET authorizing the installation of a telecommunications facility on the Pole at the site.

15. There are no conditions contained in the CPG or accompanying order which could impact the proposed improvements.

16. The Project will promote the general good of the State by improving wireless telecommunication infrastructure to increase capacity and support state-of-the-art wireless

services in the community; improving high speed data services for businesses and residents; providing competitive choices for consumers; and providing the opportunity to improve economic development within the State – all in conformance with the substantive criteria under 30 V.S.A. § 248a.

17. Concurrently with the filing of this Application, Verizon has provided a copy of this Application, with accompanying exhibits and testimony, to the Property Owner, the Selectboard and Planning Commission of the Town of Tunbridge and two (2) copies to the Department of Public Service.

18. In support of this Application, the Applicants submit the Prefiled Testimony and exhibits sponsored by the following witnesses:

<u>Witness</u>	<u>Subject</u>
Maria Montrose, Senior RF Engineer	Description of the installation and the Project's purpose and impact on the existing Verizon network.
Renita Patel, P.E.	Description of proposed Project and existing permits.

WHEREFORE, Applicant respectfully requests that the Commission:

1. Find that the Application complies with all applicable notice requirements set out in 30 V.S.A. § 248a(k);
2. Find that the Application meets the requirements set out in 30 V.S.A. § 248a(b)(2), and, therefore, qualifies as a "de minimis modification";
3. Find that the Project will promote the general good of the State of Vermont and authorize Applicant to undertake the actions as described herein and in its exhibits;

4. Issue an Order and Certificate of Public Good; and
5. Take such other measures as may be required for the expeditious review and approval of this Application.

Dated in Burlington, Vermont this 4th day of August, 2026

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

By: 

W. Cooper Hayes
MSK Attorneys
275 College Street
Burlington, VT 05401
(802) 861-7000
Chayes@mskvt.com

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pursuant to 30 V.S.A. § 248a, authorizing the modification)
of telecommunications equipment on an existing facility)
in Tunbridge, Vermont)

Order entered:

I. INTRODUCTION

In this Order, the Vermont Public Utility Commission (“Commission”) approves the application filed on August 4, 2026, by Bell Atlantic Mobile Systems LLC (the “Petitioner”), pursuant to 30 V.S.A. § 248a and the Commission’s Standards and Procedures Implementing 30 V.S.A. § 248a (“Standards and Procedures”), and grants the Petitioner a certificate of public good (“CPG”) authorizing modifications to a wireless telecommunications facility in Tunbridge, Vermont (the proposed “Project”).

II. BACKGROUND

This case involves a petition and prefiled testimony filed on August 4, 2026, requesting that the Commission issue a CPG approving *de minimis* modifications to the existing facility, pursuant to 30 V.S.A. § 248a(b)(2). Pursuant to § 248a(k), notice of the Project was provided to the host property owner, the Vermont Department of Public Service (“Department”), and the legislative body of the host municipality.

On _____, 2026, the Department filed comments on the Project. The Department recommends that the Commission approve the petition without further hearings or investigation.

No other comments on the application were received by the Commission.

No party has requested an evidentiary hearing or objected to the prefiled testimony and exhibits. The Commission has determined that the petition and prefiled testimony have effectively addressed the applicable substantive criteria of 30 V.S.A. § 248a. Consequently, we find that the procedure authorized by § 248a is sufficient to satisfy the public interest, and no hearings are required. Accordingly, the following prefiled testimony and exhibits are admitted as if presented

at a hearing: the prefiled testimony and affidavit of Renita Patel and exhibits 1- 2; and the prefiled testimony and affidavit of Maria Montrose and exhibit 1.

III. FINDINGS

Based upon the application and its accompanying documents, the Commission makes the following findings in this matter:

1. The Project involves modifications to an existing telecommunications facility on VT Route 110 in Tunbridge, Vermont. Patel pf. at 1-2.
2. The Project involves the removal and replacement of four new RRHs, each measuring approximately 14.96" by 14.96", at a centerline heights of 32.08' and 31.08' AGL on the existing 39' utility pole. The Project also involves the installation of associated operating and ancillary equipment. Patel pf. at 2-3.
3. The antennas and equipment will not extend above the pole and will extend a maximum of approximately 4' horizontally from the pole. The net decrease in aggregate surface area of the faces of the RRHs to be attached to the tower is approximately 1.7 square feet. Patel pf. at 3.
4. The Project, excluding equipment, antennas, or ancillary improvements, does not increase the height or width of the existing structure. The Project will not increase the amount of impervious surface at the existing facility site. Findings No. 2 and 3, above, and Patel pf. at 4.

IV. DISCUSSION and CONCLUSION

Pursuant to 30 V.S.A § 248a(b)(2), *de minimis* modification means:

the addition, modification, or replacement of telecommunications equipment, antennas, or ancillary improvements on a telecommunications facility or existing support structure..., or the reconstruction of such facility or support structure, provided:

- (a) the height and width of the facility or support structure, excluding equipment, antennas or ancillary improvements, are not increased;

(b) the total amount of impervious surface, including access roads, surrounding the facility or support structure is not increased by more than 300 square feet;

(c) the addition, modification, or replacement of an antenna or any other equipment on a facility or support structure does not extend vertically more than 10 feet above the facility or support structure and does not extend horizontally more than 10 feet from the facility or support structure;

(d) the additional equipment, antennas, or ancillary improvements on the support structure, excluding cabling, does not increase the aggregate surface area of the faces of the equipment, antennas, or ancillary improvements on the support structure by more than 75 feet.

Pursuant to the Procedures Order at Section II:

For the purpose of this definition, where the proposed ancillary improvements will be installed on, within, or at the base of a building, the ancillary improvements may be excluded from the aggregate surface area calculation in subsection (d) provided that: (1) the ancillary improvements comply with the limitations in subsection (c) measured from the outer walls of the building (for width) and the highest existing element of the building (for height); (2) the aggregate surface area of the antennas and equipment other than ancillary improvements does not exceed 75 square feet; and (3) any other additions, modifications, or replacements associated with the facility otherwise comply with subsections (a) and (b).

Further, pursuant to § 248a(k) and Section VIII of the Procedures Order, regarding *de minimis* modifications:

If no objections to the classification of the project are timely filed with the Commission, a CPG shall be issued without further proceedings.

The proposed Project will consist of modifications to an existing telecommunications facility that, excluding equipment, antennas, or ancillary improvements, will not increase the height or width of the facility, and will not create impervious surfaces surrounding the facility. The net increase in aggregate surface area of the faces of the antennas attached to the existing structure will not exceed 75 square feet, and the antennas will not extend vertically or horizontally from the structure by more than 10 feet. Therefore, the Project qualifies as “*de minimis* modifications” to an existing facility pursuant to § 248a(b)(2). Further, no objection to the classification of the Project as *de minimis* modifications has been filed with the Commission.

Based upon all of the above evidence, the public interest is satisfied by the procedures authorized in 30 V.S.A. § 248a and the proposed Project will promote the general good of the State.

V. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Utility Commission of the State of Vermont that:

1. The modifications to the wireless telecommunications facility at the location specified in the above findings, by Bell Atlantic Mobile Systems, LLC, d/b/a Verizon (“Verizon”), in accordance with the evidence and plans submitted in this proceeding, will promote the general good of the State of Vermont in accordance with 30 V.S.A. §248a(a) and a certificate of public good to that effect shall be issued in this matter.

2. As a condition of this Order, the Petitioners shall comply with all terms and conditions set out in the CPG issued in conjunction with this Order.

Dated at Montpelier, Vermont, this ____ day of _____, 2026.

_____	)	
_____	)	PUBLIC UTILITY
_____	)	COMMISSION
_____	)	OF VERMONT

OFFICE OF THE CLERK

FILED: _____

ATTEST: _____
Clerk of the Commission

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Commission (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: puc.clerk@vermont.gov)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Commission within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Commission or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Commission within ten days of the date of this decision and order.

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pursuant to 30 V.S.A. § 248a, authorizing the modification)
of telecommunications equipment on an existing structure)
in Tunbridge, Vermont)

Order entered:

**CERTIFICATE OF PUBLIC GOOD ISSUED
PURSUANT TO 30 V.S.A. SECTION 248a**

IT IS HEREBY CERTIFIED that the Vermont Public Utility Commission ("Commission") this day found and adjudged that the proposed site preparation, construction, operation, and maintenance of telecommunications equipment (the "Project") by Bell Atlantic Mobile Systems LLC ("CPG Holder") on VT Route 110, Tunbridge, Vermont will promote the general good of the State, subject to the following conditions:

1. Site preparation, construction, operation, and maintenance of the Project must be in accordance with the plans and evidence submitted in this proceeding. Any material deviation or substantial change in the Project is prohibited without prior Commission approval. Failure to obtain advance approval from the Commission for a material deviation or substantial change from the approved plans may result in the assessment of a penalty pursuant to 30 V.S.A. §§ 30 and 247.
2. The Project shall comply with all applicable existing and future statutory requirements and Commission Rules and Orders.
3. The CPG Holder must pay all invoices (if any) from any State agency that (a) are related to this proceeding and (b) are not still under review by the Commission.
4. This Certificate of Public Good may not be transferred without prior approval of the Commission.

Signatures on next page

Dated at Montpelier, Vermont, this ____ day of _____, 2026.

_____	)	
	)	PUBLIC UTILITY
	)	
_____	)	COMMISSION
	)	
	)	OF VERMONT
_____	)	

OFFICE OF THE CLERK

FILED: _____

ATTEST: _____
Clerk of the Commission

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Commission (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: puc.clerk@vermont.gov)

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CERTIFICATION OF NOTICE

I, W. Cooper Hayes, attorney for Bell Atlantic Mobile Systems, LLC, d/b/a Verizon Wireless, do hereby certify that on August 4, 2026, I complied with the Notice requirement of 30 V.S.A. § 248a(k) by causing a complete copy of the de minimis Application for a Certificate of Public Good, as filed, to be mailed, via First Class Mail, ePUC or by email, to the following:

Statutory Parties:

Holly Anderson, Clerk
Vermont Public Utility Commission
112 State Street, 4th Floor
Montpelier, VT 05620-2701

Amy Frost, Chair
Town of Tunbridge Planning Commission
271 Vermont Route 110
Tunbridge, VT 05077

Jim Porter, Dir. for Public Advocacy
c/o Benjamin Civiletti, Esq.
Vermont Department of Public Service
112 State Street, Drawer 20
Montpelier, VT 05620-2601

Gary Mullen, Chair
Town of Tunbridge Selectboard
271 Vermont Route 110
Tunbridge, VT 05077

Kerrick Johnson, Commissioner
Vermont Department of Public Service
112 State Street, Drawer 20
Montpelier, VT 05620-2601

Green Mountain Power Corporation
163 Acorn Lane
Colchester, VT 05446



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chayes@mskvt.com

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**PREFILED DIRECT TESTIMONY OF MARIA MONTROSE
ON BEHALF OF BELL ATLANTIC MOBILE SYSTEMS, LLC,
D/B/A VERIZON WIRELESS**

August 3, 2026

Summary:

Ms. Montrose's testimony will address the proposed installation and how the Project will promote the general good of the State of Vermont.

1 **Q1. Please state your name, employer and current position.**

2 A1. My name is Maria Montrose, I am the Principal Radio Frequency ("RF") Engineer
3 currently working for Bell Atlantic Mobile Systems, LLC d/b/a Verizon Wireless
4 ("Verizon").

5 **Q2. Please state briefly your educational and professional background.**

6 A2. I have worked as an RF engineer for Verizon since September 1995. My credentials as an
7 RF engineer include the following:

- 8 • Responsible for the design and implementation of cellular, AWS, PCS and LTE
9 base stations in Connecticut and Vermont. This entails site selection, antenna
10 selection, propagation analysis, cell site layout/design, frequency planning, and
11 coordination with neighbors and carriers in Canada for sites near the international
12 border.
- 13 • Responsible for filings with the Federal Aviation Administration and the Federal
14 Communications Commission ("FCC").
- 15 • Responsible for RF exposure and safety compliance checks and overall system
16 optimization.
- 17 • Responsible to provide engineering support for the deployment of all services
18 offered by Verizon including voice, high speed data, E-911, SMS (text messaging)
19 and mobile instant messaging.

20 In addition, I am a certified instructor/training facilitator for OSHA RF safety and
21 compliance.

22 **Q3. Have you ever testified before the Public Service Board or Public Utility Commission?**

23 A3. Yes. I have submitted prefiled testimony in Case No. 19-0248-PET (Burlington) among

1 others. In addition, I have testified before Act 250 District Commissions and Vermont
2 Zoning and Development Review Boards when those Commissions and Boards were
3 processing Verizon's applications. I have testified on many occasions before the
4 Connecticut Siting Council, which has jurisdiction over telecommunications facilities.

5 **Q4. Please identify the location of the Project that is the subject to this § 248a filing.**

6 A4. Verizon proposes to modify an existing wireless telecommunication facility located on a
7 39' above ground level ("AGL") utility pole ("Pole") located on VT Route 110 in the Town
8 of Tunbridge. Verizon refers to the Project as "Tunbridge VT SC". The coordinates of the
9 Project are latitude 43.88716389 North and longitude 72.49443333 West. The location of
10 the Project is shown on Exhibit RP-1 Permit Plans. The property owner has given Verizon
11 permission to proceed with this application.

12 On June 22, 2017, the Public Utility Commission ("Commission") approved the Petition
13 of Bell Atlantic Mobile Systems of Allentown, Inc. and Cellco Partnership each d/b/a
14 Verizon Wireless in Case No. 17-3144-PET authorizing the installation of a
15 telecommunications facility on the Pole at the site. This project consists of modifications
16 to the equipment installed on the Pole pursuant to the Order and CPG.

17 **Q5. From a Radio Frequency Engineer's prospective, please describe what site
18 improvements will be necessary for the proposed Project.**

19 A5. Verizon currently has two (2) antennas and four (4) remote radio heads ("RRH") installed
20 on the Pole.

21 Verizon now proposes to remove the four (4) existing RRHs, two (2) of which each
22 measure 20.9" tall by 11.8" wide (1.71 sq. ft.) and two (2) of which each measure 25.8"
23 tall by 11.8" wide (2.11 sq. ft.). They will be replaced by four (4) new RRHs, which each

1 measure 14.96” tall by 14.96” wide (1.55 sq. ft.). See Permit Plans at Sheet L-3. The RRHs
2 will be mounted at centerline heights of 32.08’ AGL and 31.08’ AGL. The topmost height
3 of the RRHs will extend to 33.33” AGL, therefore, none of the RRHs will extend above
4 the top of the Pole.

5 The aggregate visible surface area of the existing equipment on the Pole is 17.08 square
6 feet. Following the proposed modification, the aggregate visible facial surface area will be
7 15.38 square feet, a decrease of 1.7 square feet. Full and accurate specifications of the
8 proposed RRHs are detailed in Exhibit MM-1.¹

9 The Prefiled Testimony of Renita Patel discusses the structural capacity and the location
10 of the other equipment at the Site.

11 **Q6. Please address the level of radiation associated with the proposed equipment.**

12 A6. Under federal law, Verizon is required to comply with the radiofrequency ("RF") emission
13 levels established by the Federal Communications Commission ("FCC"). Calculations
14 using the most extreme assumptions, which could not possibly be duplicated at the site,
15 demonstrate that RF emission levels for each site will still be well below the Maximum
16 Permissible Exposure limits established by the FCC.

17 **Q7. Does this conclude your Prefiled Direct Testimony?**

18 A7. Yes.

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

Exhibits to Prefiled Testimony of Maria Montrose

Exhibit MM-1

RRH Specifications

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DECLARATION OF MARIA MONTROSE

**ON BEHALF OF BELL ATLANTIC MOBILE SYSTEMS, LLC, d/b/a VERIZON
WIRELESS**

Maria Montrose hereby states as follows pursuant to Commission Rule 2.213(C)(5):

1. The information in my prefiled testimony and all exhibits sponsored therein are true and accurate to the best of my personal knowledge and belief.
2. I have personal knowledge of and am able to testify as to the validity of the information contained in my prefiled testimony and all exhibits sponsored therein.
3. I understand I will be subject to sanctions for contempt and perjury if any statements are false.

Dated: 8/3/2026 _____

Signed by:
Maria Montrose _____
676A71B51F68418...
MARIA MONTROSE

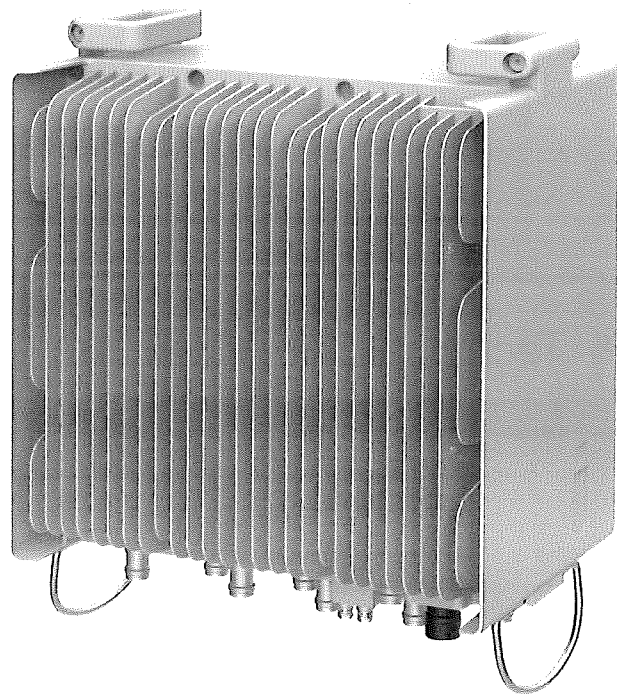
SAMSUNG

AWS/PCS MACRO RADIO

DUAL-BAND AND HIGH POWER
FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This AWS/PCS 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

Model Code RF4439d-25A



Homepage
samsungnetworks.com

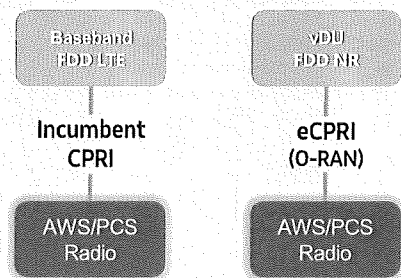


Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

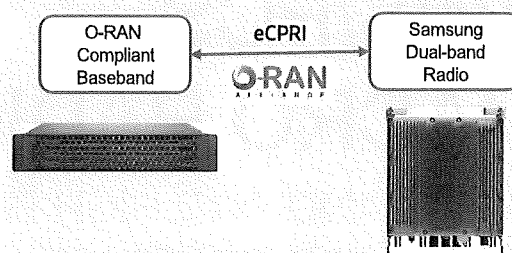
Samsung's AWS/PCS macro radio can support each incumbent CPRI interface as well as advanced eCPRI interfaces. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

A standardized O-RAN radio can help in implementing cost-effective networks, which are capable of sending more data without compromising additional investments.

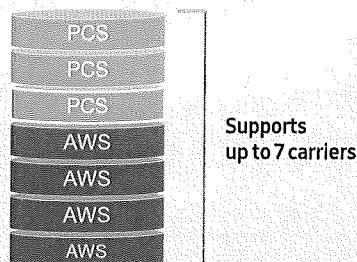
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

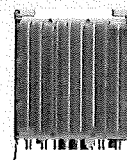
The number of required carriers varies according to site (region). Supporting many carriers is essential for using all frequencies that the operator has available.

The new AWS/PCS dual-band radio can support up to 3 carriers in the PCS (1.9GHz) band and 4 carriers in the AWS (2.1GHz) band, respectively.



Brand New Features in a Compact Size

Samsung's AWS/PCS macro radio offers several features, such as dual connectivity for baseband for both CDU and vDU, O-RAN capability, more carriers and an enlarged PCS spectrum, combined into an incumbent radio volume of 36.8L.



+

- 2 FH connectivity
- O-RAN capability
- More carriers and spectrum

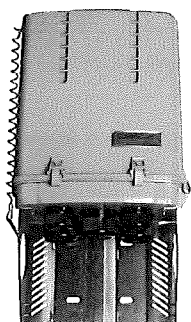
Same as an incumbent radio volume

Technical Specifications

Item	Specification
Tech	LTE/NR
Brand	B25(PCS), B66(AWS)
Frequency Band	DL: 1930 – 1995MHz, UL: 1850 – 1915MHz DL: 2110 – 2200MHz, UL: 1710 – 1780MHz
RF Power	(B25) 4 × 40W or 2 × 60W (B66) 4 × 60W or 2 × 80W
IBW/OBW	(B25) 65MHz / 30MHz (B66) DL 90MHz, UL 70MHz / 60MHz
Installation	Pole, Wall
Size/Weight	14.96 x 14.96 x 10.04inch (36.8L) / 74.7lb

Product Specifications

COMMScope®



RCMDC-6627-PF-48

Raycap OVP box for 12 RRUs, 12 strikesorb modules, voltage indicator, large box, UL

Product Classification

Portfolio	CommScope®
Product Type	Outdoor junction box
Regional Availability	North America

Construction Materials

Material Type	High-impact polycarbonate, UV resistant

Dimensions

Depth	320.04 mm 12.60 in
Height	749.30 mm 29.50 in
Width	419.10 mm 16.50 in
Weight	14.51 kg 32.00 lb

Environmental Specifications

Environmental Space	Indoor Outdoor
Qualification Standards	IEC 60529:2001, IP67

General Specifications

Application	Used as a fiber/power junction box
Color	Gray
Includes	Mounting kit
Mount Type	Pipe, 44–114 mm (1.75–4.5 in) OD Wall

Mechanical Specifications

Cable Entry, quantity, maximum, bottom 6

Regulatory Compliance/Certifications

Agency	Classification
UL/ETL Certification	
RoHS 2011/65/EU	Compliant
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

Product Specifications

COMMScope®

RCMDC-6627-PF-48



Samsung Forecast Planning

verizon

Confidential and proprietary materials for authorized Verizon personnel and outside agencies only. Use, disclosure or distribution of this material is not permitted to any unauthorized persons or third parties except by written agreement.

Product transition: ORAN Macro 700/850 (New Filter)

	WxHxD (mm)	WxHxD (in)	Volume	Weight	Power consumption
Macro ORAN LL	380 x 380 x 230	14.96 x 14.96 x 9.05	33.2L	31.9kg	1121W
Macro ORAN LL New Filter	380 x 380 x 260	14.96 x 14.96 x 10.24	37.5L	35.9kg	1230W

Current:

SFG-ARR27201VZ/1900413090 O-RAN 700/850 B13/B5
(RF4440d-13A)

New Filter:

SFG-ARR57201VZ/MMID TBD ORAN 700/850 B13/B5 New
Filter (RF4461d-13A)

- Dimension Changes / Impacts: Yes
- Timing: ~Q1'2024 (design change required)
- Ancillary Change: No

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

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of telecommunications equipment on an existing facility)
in Tunbridge, Vermont)

**PREFILED DIRECT TESTIMONY OF RENITA PATEL
ON BEHALF OF BELL ATLANTIC MOBILE SYSTEMS, LLC
d/b/a VERIZON WIRELESS**

July 31, 2026

Summary:

Ms. Patel's testimony will describe the Project and address the Project's conformance with de minimis requirements.

Q1. Please state your name, employer and current position.

A1. My name is Renita Patel. I am an Architect and Project Manager employed by Site Acquisition, Inc. (“SAI”) in Salem, New Hampshire, which provides site acquisition, engineering and consulting services to Verizon Wireless and other wireless telecommunications service providers with an emphasis on utility pole installations.

Q2. Please briefly state your professional background.

A2. I graduated from D.C. Patel School of Architecture (APIED), with Bachelor's Degree in Architecture. I have worked as a Project Manager with SAI since July 2021. My tasks and duties at SAI include:

- Design and produce drawings for telecommunications networks.
- Review design deliverables for a variety of telecom projects and scopes.
- Perform structural analysis of utility poles to which telecommunications equipment is to be attached.

Q3. Have you ever testified before the Public Service Board or Public Utility Commission?

A3. Yes, I previously submitted prefiled testimony in Case No. 22-2161-PET.

Q4. Please identify the location of the Project that is the subject to this § 248a filing.

A4. Verizon proposes to modify an existing wireless telecommunication facility located on a 39’ above ground level (“AGL”) utility pole (“Pole”) located on VT Route 110 in the Town of Tunbridge. Verizon refers to the Project as “Tunbridge VT SC”. The coordinates of the Project are latitude 43.88716389 North and longitude 72.49443333 West. The location of the Project is shown on Exhibit RP-1 Permit Plans. The property owner has given Verizon permission to proceed with this application.

1 On June 22, 2017, the Public Utility Commission (“Commission”) approved the Petition
2 of Bell Atlantic Mobile Systems of Allentown, Inc. and Cellco Partnership each d/b/a
3 Verizon Wireless in Case No. 17-3144-PET authorizing the installation of a
4 telecommunications facility on the Pole at the site. This project consists of modifications
5 to the equipment installed on the Pole pursuant to the Order and CPG.

6 **Q5. Please describe, in detail, the design of the proposed Project.**

7 A5. Verizon currently has two (2) antennas and four (4) remote radio heads (“RRH”) installed
8 on the Pole.

9 Verizon now proposes to remove the four (4) existing RRHs, two (2) of which each
10 measure 20.9” tall by 11.8” wide (1.71 sq. ft.) and two (2) of which each measure 25.8”
11 tall by 11.8” wide (2.11 sq. ft.). They will be replaced by four (4) new RRHs, which each
12 measure 14.96” tall by 14.96” wide (1.55 sq. ft.). See Permit Plans at Sheet L-3. The
13 RRHs will be mounted at centerline heights of 32.08’ AGL and 31.08’ AGL. The
14 topmost height of the RRHs will extend to 33.33” AGL, therefore, none of the RRHs will
15 extend above the top of the Pole.

16 The aggregate visible surface area of the existing equipment on the Pole is 17.08 square
17 feet. Following the proposed modification, the aggregate visible facial surface area will
18 be 15.38 square feet, a decrease of 1.7 square feet. Full and accurate specifications of the
19 proposed RRHs are detailed in Exhibit MM-1.¹

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

SAI Communications prepared a Structural Analysis (See Exhibit RP-2) on behalf of Verizon for this project dated April 6, 2026, which concluded that the Pole has sufficient capacity to support the proposed modifications.

Verizon will gain access to the Pole using the existing access from Route 110.

Existing on-site utilities will provide services to the site.

No site clearing is necessary and there no new impervious surface area will be created.

There will be no changes to: (1) the property boundaries and setbacks, (2) utilities, (3) wetlands, (4) drainage or erosion control, (5) screening, landscaping, ground cover, fencing, exterior lighting and signage, or (6) access to the Pole.

Q6. Will the installation increase the height or width of the support structure?

A6. No. Excluding equipment, antennas and ancillary improvements, there will be no change to the height or width of the Pole. *See* Exhibit RP-1.

Q7. Will the addition of the antennas and improvements extend vertically above the height of the support structure to which they are attached by more than ten feet?

A7. No. The proposed RRHs will extend to a topmost height of approximately 33.33' AGL, therefore none of the improvements will extend more than ten feet from the structure to which they are attached. *See* Exhibit RP-1 at Sheet L-2.

Q8. Will the addition of the antennas and improvements extend horizontally from the support structure or the facility by more than ten feet (10')?

A8. No. The Antennas will extend less than 10' horizontally from the Tower. *See* Exhibit RP-1 at Sheet L-4.

Q9. Will the addition of the antennas and improvements on the support structure, excluding cabling, increase the aggregate visible surface area of the faces of the

1 **antennas on the support structure by more than 75 square feet?**

2 A9. No. The aggregate visible surface area of the faces of the Antennas and improvements
3 following the modification will decrease to 15.38 square feet.

4 **Q10. Will there be any increase in the impervious surface area at this location?**

5 A10. No, this project will result in no additional impervious surface.

6 **Q11. Please identify all existing permits relating to the facility and any conditions**
7 **contained in those permits that could impact the proposed improvements.**

8 A11. As referenced above, on June 22, 2017, the Commission approved the Petition of Bell
9 Atlantic Mobile Systems of Allentown, Inc. and Cellco Partnership each d/b/a Verizon
10 Wireless in Case No. 17-3144-PET authorizing the installation of a telecommunications
11 facility on the Pole at the site. There are no conditions contained in the CPG or
12 accompanying order which could impact the proposed improvements.

13 **Q12. Does this conclude your Prefiled Direct Testimony?**

14 A12. Yes.

Exhibits to Prefiled Testimony of Renita Patel

Exhibit RP-1	Permit Plans
Exhibit RP-2	Structural Analysis

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Case No. 26-1619-PET

De Minimis Application of Bell Atlantic Mobile Systems,)
LLC d/b/a Verizon Wireless, for a Certificate of Public Good,)
pursuant to 30 V.S.A. § 248a, authorizing the modification)
of telecommunications equipment on an existing facility)
in Tunbridge, Vermont)

DECLARATION OF RENITA PATEL

**ON BEHALF OF BELL ATLANTIC MOBILE SYSTEMS, LLC, d/b/a VERIZON
WIRELESS**

Renita Patel hereby states as follows pursuant to Commission Rule 2.213(C)(5):

1. The information in my prefiled testimony and all exhibits sponsored therein are true and accurate to the best of my personal knowledge and belief.
2. I have personal knowledge of and am able to testify as to the validity of the information contained in my prefiled testimony and all exhibits sponsored therein.
3. I understand I will be subject to sanctions for contempt and perjury if any statements are false.

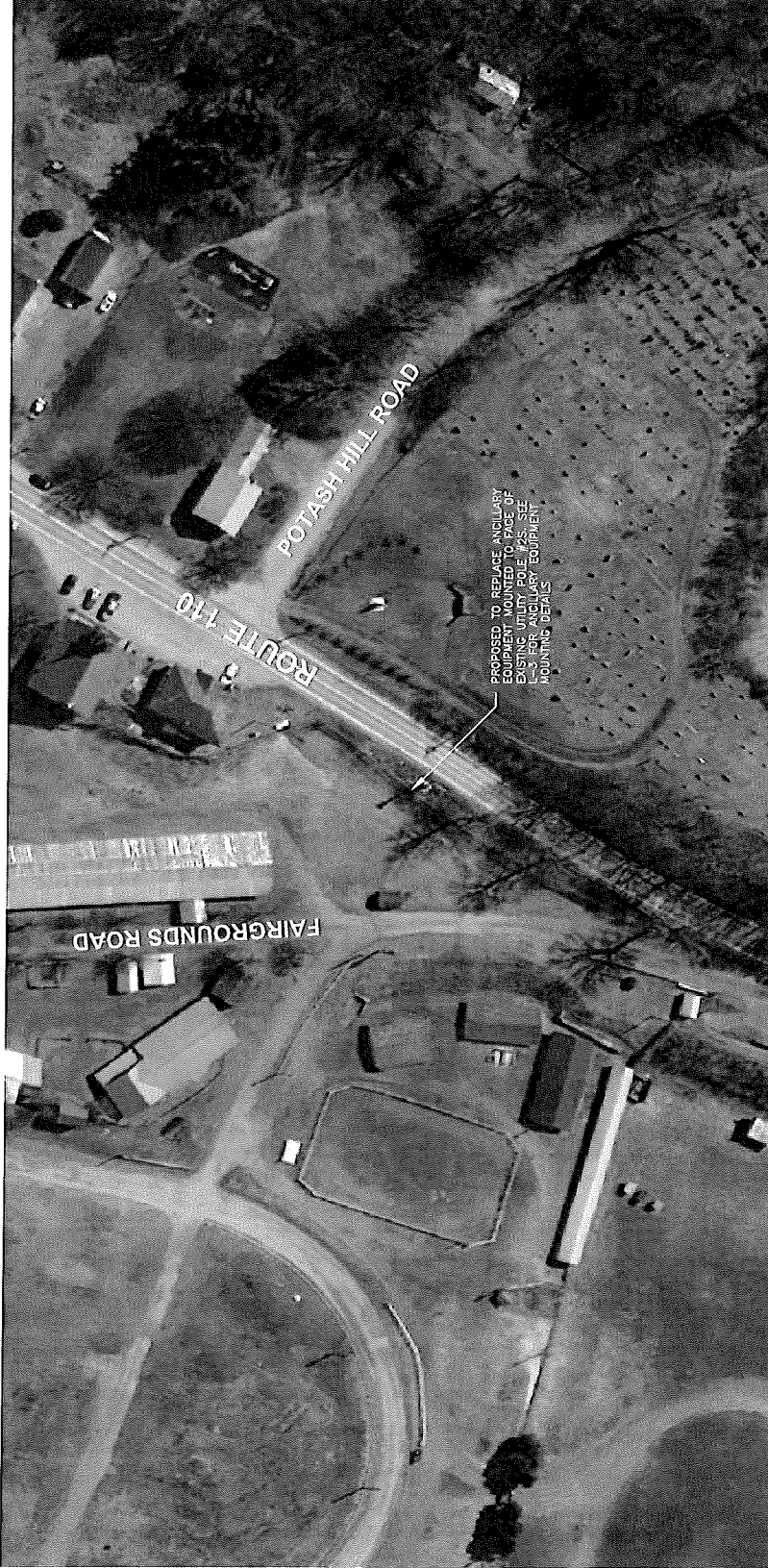
Dated: 07/31/2026



Renita Patel

SITE NAME: TUNBRIDGE VT SC - ESNAP

UTILITY POLE #: 2S
ROUTE 110 (NEAREST 265 ROUTE 110)
TUNBRIDGE, VT 05077



SITE CONTROL POINT:
UTILITY POLE # 2S
EASTING: 435513.79'N (43.887163)
LONGITUDE: 722939.86'W (-72.494433)
APPROX. GROUND ELEV.: ±579' AMSL



SHEET INDEX	
SHEET NUMBER	DESCRIPTION
L-1	LOCATION PLAN / AERIAL IMAGE
L-2	UTILITY POLE PHOTOGRAPH AND ELEVATION
L-3	EQUIPMENT MOUNTING DETAILS & ONE-LINE DIAGRAM
L-4	EQUIPMENT INFORMATION & DIMENSION TABLE



• Enclosure Battery Address •



VERMONT ELECTRIC COOP
GREEN MOUNTAIN POWER

ELCO:
TELCO:
VERMONT ELECTRIC COOP
GREEN MOUNTAIN POWER

FIELD INSPECTIONS
REV DATE DESCRIPTION BY

1 1/16/2020 INITIAL SURVEY RP

SUBMITTALS
REV DATE DESCRIPTION BY

1 1/16/2020 AS-BUILT PROJECT INFORMATION & DIMENSION TABLE RP

0 1/16/2020 FOR REVIEW RP

SITE NAME:
TUNBRIDGE VT SC

SITE ADDRESS:
UTILITY POLE #2S
ROUTE 110 (NEAREST 265 ROUTE 110)
TUNBRIDGE, VT 05077
ORANGE COUNTY

PUZE NUMBER:
16254931
MOG ID:
5000128677

SHEET TITLE:
LOCATION PLAN

SHEET NUMBER:
L-1

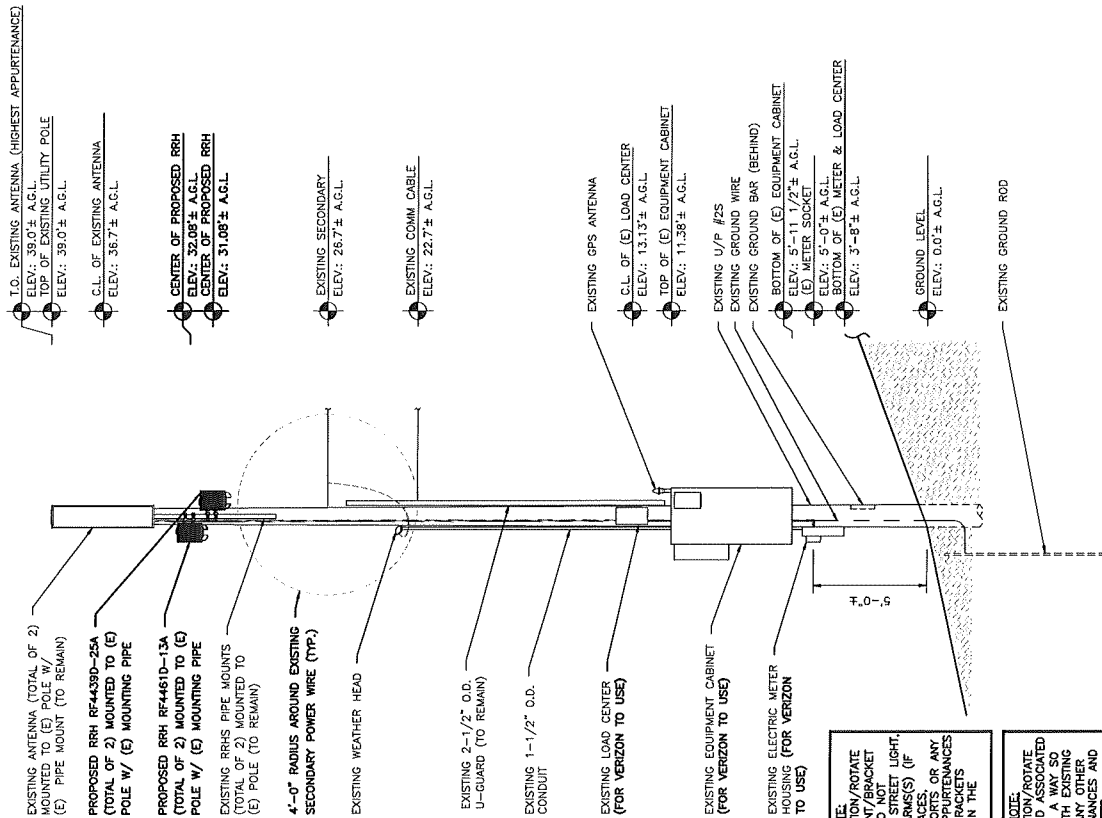
- GENERAL NOTES:**
1. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO PROVIDE GENERAL INFORMATION REGARDING THE PROPOSED WIRELESS TELECOMMUNICATION EQUIPMENT INSTALLATION ON THE UTILITY POLE. THE CONTRACTOR SHALL PLACE WEATHER RESISTANT PNEUMATIC PLACARDS ON THE UTILITY POLE AND ANCHILLARY EQUIPMENT TO IDENTIFY EQUIPMENT OWNERSHIP & CONTACT INFORMATION TO BE UTILIZED IN THE CASE OF EMERGENCY. AN ANALYSIS OF THE CAPACITY OF THE EXISTING UTILITY POLE TO SUPPORT THE PROPOSED LOADING HAS BEEN CONDUCTED. THESE DRAWINGS ARE SUBJECT TO CHANGE PENDING THE OUTCOME OF A STRUCTURAL ANALYSIS TO BE PERFORMED BY THE CONTRACTOR.
 2. VERIZON WIRELESS GENERAL CONTRACTOR SHALL EXTEND EFFORTS TO ENSURE THAT ALL PROPOSED EQUIPMENT MEETS THE REQUIREMENTS OF THE EXISTING UTILITY COMPANY OR COMPANIES CURRENTLY OCCUPYING THE UTILITY POLE AND THE 2018 NATIONAL ELECTRIC SAFETY CODE.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND GUIDANCE FROM THE UTILITY OWNER AND CLIENT'S STANDARDS.



UTILITY POLE #2S PHOTOGRAPH (EXISTING CONDITION)

SCALE: N.T.S.

1
L-2



ANTENNA AND MOUNT NOTE:
CONTRACTOR SHALL POSITION/ROTATE PROPOSED ANTENNA MOUNT/BRACKET IN SUCH A WAY SO AS TO NOT INTERFERE WITH EXISTING UTILITY LIGHT, PRIMARY POWER CROSS ARMS(S) (IF PRESENT), BRACKETS, BRACES, SECONDARY POWER SUPPORTS OR ANY OTHER MISCELLANEOUS APPURTENANCES ENCOUNTERED LOCATED ON THE EXISTING UTILITY POLE.

EQUIPMENT AND MOUNT NOTE:
CONTRACTOR SHALL POSITION/ROTATE PROPOSED EQUIPMENT AND ASSOCIATED MOUNT/BRACKET IN SUCH A WAY AS TO NOT INTERFERE WITH EXISTING WIRES/PANELS ETC. OR ANY OTHER MISCELLANEOUS APPURTENANCES AND ENCOUNTERED LOCATED ON THE FACE OF THE EXISTING UTILITY POLE.

NOTE:
UTILITY POLE, EXISTING APPURTENANCES AND DETAILS OF THE PROPOSED INSTALLATION SHOWN SCHEMATICALLY.

UTILITY POLE #2S ELEVATION (PROPOSED CONDITION)

223234 SCALE: 3/8"=1'-0"
11X17 SCALE: 3/16"=1'-0"

0 2'-8" 5'-4" 10'-8" 16'-0"

2
L-2

verizon

* Secure Better Networks

SAI

SAI

ELCO:

VERMONT ELECTRIC COOP

GREEN MOUNTAIN POWER

TELCO:

FIELD INSPECTIONS

REV DATE DESCRIPTION

1 11/20/20 INITIAL SURVEY

SUBMITTALS

REV DATE DESCRIPTION

1 07/20/20 AS-BUILT PROJECT INFORMATION

0 06/20/20 FOR REVIEW

SITE NAME:

TUNBRIDGE VT SC

SITE ADDRESS:

ROUTE 110 NEARBY 265 ROUTE 110
TUNBRIDGE, VT 05477
SHARPE COUNTY

FUZE NUMBER:

16254931

MDG ID:

5000128677

SHEET TITLE:

UTILITY POLE
PHOTOGRAPH &
ELEVATION

SHEET NUMBER:

L-2

verizon

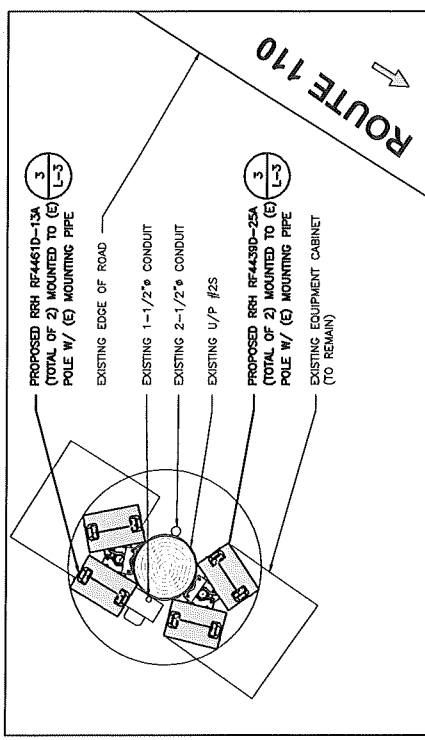
* Bluetooth Enabled Antenna *

SAI

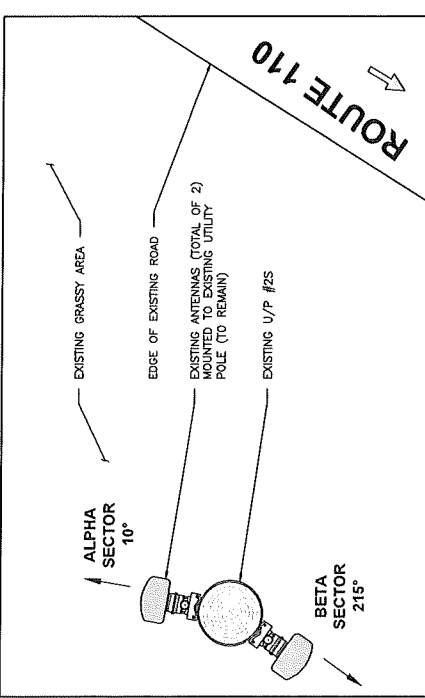
12700 ROUTE 110
TUNBRIDGE, VT 05477

ELCO:
VERMONT ELECTRIC COOP

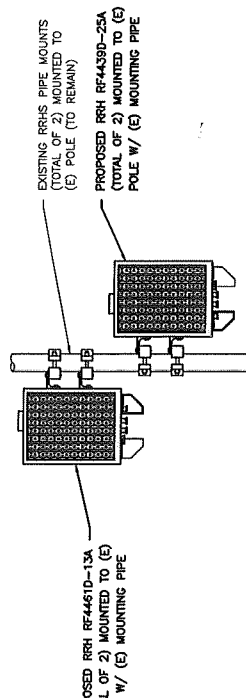
TELCO:
GREEN MOUNTAIN POWER



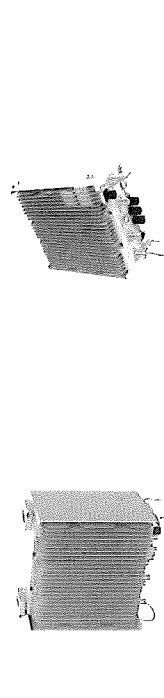
ANCILLARY EQUIPMENT ORIENTATION PLAN
22X34 SCALE: 3/8"=1'-0"
11X17 SCALE: 3/16"=1'-0"



ANTENNA ORIENTATION PLAN
22X34 SCALE: 3/8"=1'-0"
11X17 SCALE: 3/16"=1'-0"



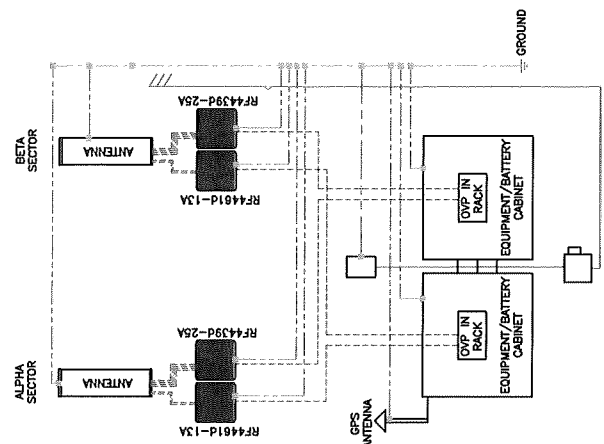
PROPOSED RRH MOUNTING DETAIL
22X34 SCALE: 3/4"=1'-0"
11X17 SCALE: 3/8"=1'-0"



REMOTE RADIO HEAD UNIT	
DIMENSIONS:	14.96"±H X 14.96"±W X 10.23"±D
WEIGHT:	79.1± LBS
QUANTITY:	TOTAL OF 1

REMOTE RADIO HEAD UNIT	
DIMENSIONS:	14.96"±H X 14.96"±W X 10.04"±D
WEIGHT:	74.7± LBS
QUANTITY:	TOTAL OF 1

TYPICAL REMOTE RADIO HEAD (RRH) UNIT DIMENSION
SCALE: N.T.S.



FIBER/ELECTRICAL ONE-LINE DIAGRAM
SCALE: N.T.S.

LEGEND:	
BLUE	FIBER BUNDLE/JUMPER
RED	AC POWER
ORANGE	DC POWER
GREEN	GROUND
BLUE	1/2" SUPERFLEX SIGNAL CABLES

ONE-LINE DIAGRAM NOTES:
1. PROVIDE WEATHER TIGHT SEAL CONNECTORS ON ALL CONNECTIONS EACH SIDE OF ENCLOSURE HOUSING.
2. COORDINATE CONDUIT RUNS WITH VERIZON WIRELESS AND ELECTRIC COMPANY.

FIELD INSPECTIONS	
REV	DESCRIPTION
1	11/05/05 INITIAL SURVEY
2	11/05/05 INITIAL SURVEY
3	11/05/05 INITIAL SURVEY
4	11/05/05 INITIAL SURVEY
5	11/05/05 INITIAL SURVEY
6	11/05/05 INITIAL SURVEY
7	11/05/05 INITIAL SURVEY
8	11/05/05 INITIAL SURVEY
9	11/05/05 INITIAL SURVEY
10	11/05/05 INITIAL SURVEY

SITE NAME:
TUNBRIDGE VT SC

SITE ADDRESS:
UTILITY POLE # 23
ROUTE 110
TUNBRIDGE, VT 05477
ORANGE COUNTY

PLATE NUMBER:
16254931
MOD ID:
5000128677

SHEET TITLE:
EQUIPMENT MOUNTING
DETAILS & ONE-LINE
DIAGRAM

SHEET NUMBER:
L-3



Because Better Matters.™



VERMONT ELECTRIC COOP

ELCO:

TEL CO:

GREEN MOUNTAIN POWER

FIELD INSPECTIONS

REV DATE DESCRIPTION BY

1 11/05/2018 INITIAL SURVEY RP

SUBMITTALS

REV DATE DESCRIPTION BY

1 07/05/2018 ASSESSED PROJECT INFORMATION & RP

2 07/05/2018 FOR REVIEW RP

SITE NAME:

TUNBRIDGE VT SC

SITE ADDRESS:

ROUTE 118 (NEAREST 240 ROUTE 118)

TUNBRIDGE VT 05477

ORANGE COUNTY

FUZE NUMBER:

16254931

MOD ID:

5000128677

SHEET TITLE:

PROJECT INFORMATION
AND DIMENSION TABLE

SHEET NUMBER:

L-4

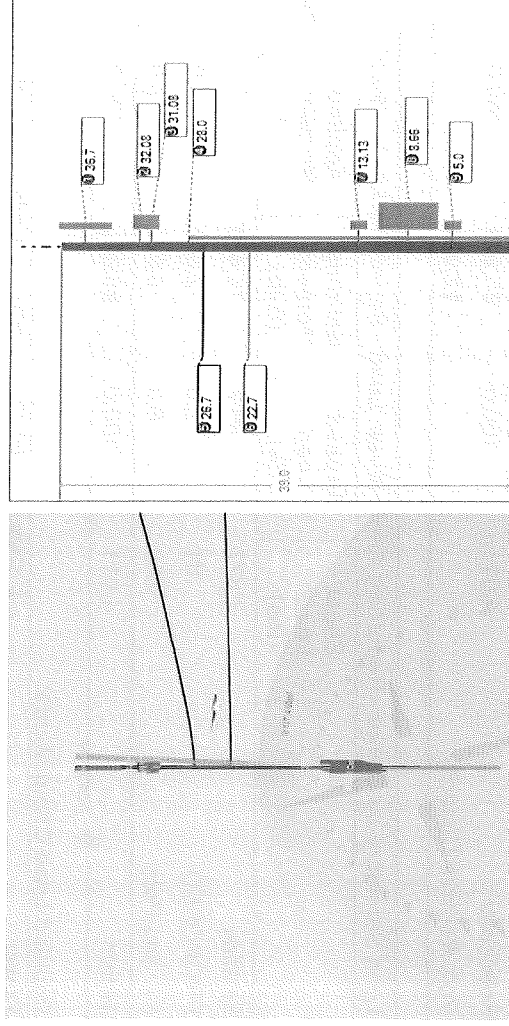
PROJECT INFORMATION & DIMENSIONS														
	EXISTING (APPROVED)			PROPOSED					VISIBLE AREA (SQ. FT)	NET INCREASE (SQ. FT)				
	EQUIPMENT	DIMENSIONS (INCHES)		QTY.	VISIBLE AREA (SQ. FT)	EQUIPMENT	DIMENSIONS (INCHES)				QTY.			
		H	W				H	W						
SURFACE AREA OF THE FACES OF ANTENNAS ON SUPPORT STRUCTURE	ANTENNA: 50NHH-100SA	54.99	x	11.06	(2)	9.07	ANTENNA:	0	x	0	(0)	0		
	RRU: UHBA B13 RBN 4X20	20.9	x	11.8	(2)	3.4253	RRU: 50NHH-100SA RBN 050M (RF4354-22A)	14.98	x	14.98	(2)	3.1084		
	RRU: UHBA B13 RBN 4X20	20.9	x	11.8	(2)	3.4253	RRU: 50NHH-100SA RBN 050M (RF4354-22A)	14.98	x	14.98	(2)	3.1084		
TOTAL VISIBLE AREA										16.73	TOTAL VISIBLE AREA:		15.29	-1.4399
VERTICAL EXTENSION FROM EXISTING SUPPORT STRUCTURE	0 FT					0 FT					0'			
HORIZONTAL EXTENSION FROM EXISTING SUPPORT STRUCTURE	APPROX. <2'-0"					APPROX. <2'-0"					0'			
AMOUNT OF IMPERVIOUS SURFACE BEING ADDED TO SITE	N/A					N/A					0'			
NOTES: 1. ADDITIONAL VEGEATION CLEARING IS REQUIRED FOR SCOPE OF WORK. 2. NO PROPOSED SCREENING EXTERIOR LIGHTING, LANDSCAPING OR SIGNAGE. 3. THE PROJECT COMPLIES WITH THE LOW RISK HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL ISSUED BY THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION REGARDLESS OF ANY PROVISIONS IN THE HANDBOOK THAT LIMIT ITS APPLICABILITY. 4. THE EXISTING COMPOUND IS IMPROVED AND THEREFORE NEW WORK INSIDE THE COMPOUND DOES NOT RESULT IN ADDITIONAL IMPROVEMENTS TO THE SITE.														

PROJECT INFORMATION AND DIMENSION TABLE

SCALE: N.T.S.

1
L-4

Pole Num:	2S	Pole Length (Mfg) / Class:	50 (55) / 2	Code:		NESC	Structure Type:	Deadend
Street Address	ROUTE 110 (NEAREST 265 ROUTE 110)	Species:	SOUTHERN PINE	NESC Rule:		Rule 250B	Status	Unguyed
City, State	TUNBRIDGE, VT	Setting Depth (ft):	11.0	Construction Grade:		B	Pole Strength Factor:	0.65
Zip Code	05077	G/L Circumference (in):	41.61	Loading District:		Heavy	Transverse Wind LF:	2.50
County	ORANGE	G/L Fiber Stress (psi):	8,000	Ice Thickness (in):		0.50	Wire Tension LF:	1.65
Aux Data 5	Unset	Allowable Stress (psi):	5,200	Wind Speed (mph):		39.53	Vertical LF:	1.50
Aux Data 6	Unset	Fiber Stress Ht. Reduc:	No	Wind Pressure (psf):		4.00		
Latitude:	43.887163	Longitude:	-72.494433	Elevation:		579'		



Pole Capacity Utilization (%)	Height (ft)	Wind Angle (deg)
Maximum	87.3	117.0
Groundline	87.3	117.0
Vertical	6.1	117.0

Pole Moments (ft-lb)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	85,879	117.0
Groundline	85,879	117.0
GL Allowable	98,863	
Overturb	511,371	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 122.2°

	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
Powers	98	2.4	2,620	3.1	2.7	138	30	0	138	2.7
Comms	2,734	68.2	61,842	72.0	62.6	3,262	-75	-1	3,261	62.7
GenericEquipments	660	16.5	11,421	13.3	11.6	602	1,024	7	610	11.7
Pole	353	8.8	6,902	8.0	7.0	364	2,310	17	381	7.3
Risers	166	4.1	3,083	3.6	3.1	163	84	1	163	3.1
Insulators	0	0.0	10	0.0	0.0	1	9	0	1	0.0
Pole Load	4,011	100.0	85,879	100.0	86.9	4,529	3,381	25	4,554	87.6
Pole Reserve Capacity			12,984		13.1	671			646	12.4

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 122.2°

	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
Existing	3,577	89.2	76,439	89.0	77.3	4,031	610	4	4,036	77.6
PROPOSED	81	2.0	2,538	3.0	2.6	134	461	3	137	2.6
Existing Pole	353	8.8	6,902	8.0	7.0	364	2,310	17	381	7.3
Totals:	4,011	100.0	85,879	100.0	86.9	4,529	3,381	25	4,554	87.6

Detailed Load Components:

Power	Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Secondary	TRIPLEX 6 AWG	Existing	26.70	7.27	0.5800	0.55	50.0	124.0	50.0	60	2,609	15	3	2,627
Totals:										2,609	15	3	2,627	

Comm	Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Telco	TELE 1.0	Existing	22.70	7.76	1.0000	0.59	50.0	124.0	50.0	1,663	62,057	-51	4	62,010
Totals:										62,057	-51	4	62,010	

GenericEquipment	Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)

O-Calculc® Pro Analysis Report

Imported	Verizon SBNHH-1D65A	Existing	36.70	10.36	10.0	0.0	33.42	-	-	-	-16	2,534	2,518
Imported	Verizon SBNHH-1D65A	Existing	36.70	10.36	215.0	0.0	33.42	-	-	-	-2	2,646	2,644
Box	SAMSUNG RF4461D-13A	PROPOSED	32.08	9.81	45.0	0.0	79.10	14.96	10.23	-	22	561	582
Box	SAMSUNG RF4461D-13A	PROPOSED	32.08	9.81	220.0	0.0	79.10	14.96	10.23	-	-13	551	538
Box	Samsung RF4439d-25A	PROPOSED	31.08	9.78	150.0	0.0	74.70	14.96	10.04	-	81	705	786
Box	Samsung RF4439d-25A	PROPOSED	31.08	9.78	325.0	0.0	74.70	14.96	10.04	-	-84	723	639
Box	LOAD CENTER	Existing	13.13	8.33	202.0	0.0	77.00	17.50	5.00	-	14	129	143
Box	RBC-36 Cabinets	Existing	8.66	21.10	32.0	0.0	77.00	62.00	30.00	-	-1	1,783	1,782
Box	RBC-36 Cabinets	Existing	8.66	21.10	202.0	0.0	77.00	62.00	30.00	-	36	1,781	1,817
Box	Electric Service Meter	Existing	5.00	8.82	286.0	0.0	77.00	17.50	5.00	-	-82	85	4
Totals:										-46	11,498	11,452	

Riser	Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Riser 0.0° H:28.0	Existing	28.00	7.04	0.0	0.0	28.00	336.00	4.00	4.00	336.00	-8	1,546	1,537
Riser 180.0° H:28.0	Existing	28.00	7.04	180.0	180.0	28.00	336.00	4.00	4.00	336.00	8	1,546	1,554
Totals:										0	3,091	3,091	

Insulator		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at Gl * (ft-lb)
Spool Bolt	Spool 2.5" Three Bolt	Existing	26.70	0.00	124.0	124.0	1.00	2.50	2.12	0	10	10
		Existing	22.70	0.00	124.0	124.0	5.00	3.00	0.10	0	0	0
Totals:										0	10	10

Pole Buckling													
Buckling Constant	Buckling Column Height* (ft)	Buckling Section Height (% Buckling Col. Hgt.)	Buckling Section Diameter (in)	Minimum Buckling Diameter at GL (in)	Diameter at Tip (in)	Diameter at GL (in)	Modulus of Elasticity (psi)	Pole Density (pcf)	Ice Density (pcf)	Pole Tip Height (ft)	Buckling Load Capacity at Height (lbs)	Buckling Load Applied at Height (lbs)	Buckling Load Factor of Safety
2.00	19.61	32.67	12.48	6.59	8.56	13.25	1.60e+6	60.00	57.00	39.00	55,098	554.34	16.39

