STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

IN RE:	•		
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	*		
A DEPOSITION OF COUNTY CARTER AND		DETITION NO	

A PETITION OF CROWN CASTLE AND : PETITION NO. ____

CELLCO PARTNERSHIP D/B/A VERIZON :

WIRELESS FOR A DECLARATORY BUILDIC :

WIRELESS FOR A DECLARATORY RULING : ON THE NEED TO OBTAIN A SITING :

COUNCIL CERTIFICATE FOR THE MODIFICATION OF AN EXISTING

TELECOMMUNICATIONS FACILITY AT 845 : ETHAN ALLEN HIGHWAY, RIDGEFIELD, :

CONNECTICUT : DECEMBER 1, 2022

PETITION FOR A DECLARATORY RULING: INSTALLATION HAVING NO SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT

I. Introduction

Pursuant to Sections 16-50j-38 and 16-50j-39 of the Regulations of Connecticut State

Agencies ("R.C.S.A."), Crown Castle ("Crown") and Cellco Partnership d/b/a Verizon Wireless
("Cellco") (collectively the "Petitioners") hereby petition the Connecticut Siting Council (the
"Council") for a declaratory ruling ("Petition") that no Certificate of Environmental
Compatibility and Public Need ("Certificate") is required under Section 16-50k(a) of the
Connecticut General Statutes ("C.G.S.") to modify the existing wireless telecommunications
facility at 845 Ethan Allen Highway (Route 7) in Ridgefield, Connecticut. The proposed facility
modifications involve replacing the existing flagpole tower with a taller monopole structure, the
installation of Cellco antennas on a triangular antenna platform at the top of the tower and the

¹ Crown Site ID# 826927; Crown Site Name – Redding/RT7.

expansion of the facility compound to accommodate Cellco's ground-based wireless equipment and back-up generator. If approved, the modified facility would allow Cellco to provide its customers and emergency service providers with enhanced wireless service in eastern Ridgefield and northwest Redding. Cellco has identified this cell site as its "Ridgefield 2 Facility". The new monopole will also be designed to support full antenna platforms for Sprint, T-Mobile and AT&T if they choose to modify their existing antennas arrays.

II. Factual Background

On December 5, 2000, the Town of Ridgefield Planning and Zoning Commission approved a Special Permit Application filed by Omnipoint Communications/Voice Stream Wireless ("Omnipoint"), to establish a wireless telecommunications facility on an approximately 1.8-acre parcel at 845 Ethan Allen Highway (Route 7) in Ridgefield (the "Property"). The Property is owned by 845 LLC and, according to Town of Ridgefield ("Town") land records, is used for light industrial purposes. The Property is surrounded by other commercial and light industrial land uses, in commercial zoning districts to the north, south and east, along Route 7, and open space and residential uses to the west. An existing gravel access driveway extends from Ethan Allen Highway along the northerly side of the Property to the existing wireless facility. (See Site Aerial Photograph included in Attachment 1).

The existing Crown facility consists of a 100-foot unipole/flagpole tower shared by T-Mobile with antennas at the 97-foot level; Sprint with antennas at the 80-foot level; and AT&T with antennas at the 70-foot level. All of the existing antennas are located behind a Radio Frequency ("RF") transparent screening shroud. Radio equipment associated with the existing Sprint, T-Mobile and AT&T antennas is located within a 20-foot by 32-foot fenced facility compound, immediately adjacent to the north side of the building on the Property.

According to its on-line data base, the Council first exercised jurisdiction over the existing facility in 2001, when it approved certain facility modifications for Sprint (EM-Sprint-118-010427). Similar facility modifications were approved by the Council for AT&T in 2002 (EM-AT&T-118-020820), 2004 (EM-AT&T-118-080730) and 2011 (EM-AT&T-118-111107), and 2013 (EM-AT&T-118-131030), for T-Mobile in 2014 (EM-T-Mobile-118-141027), and for Sprint again in 2019 (EM-SPRINT-118-190502).

Cellco is licensed to provide wireless telecommunications services in the 700 MHz, 850 MHz, 1900 MHz, 2100 MHz, 3550 MHz and 3600 MHz (5G) frequency ranges in Ridgefield and throughout the State of Connecticut. Cellco's wireless service in eastern portions of Ridgefield is currently provided by four existing macro-cell facilities, identified as *Ridgefield CT*, a tower at the Ridgefield Police Department, 76 East Ridge Road; *Ridgefield 5*, a rooftop facility at 37 Danbury Road; *Ridgefield 3*, a tower at 320 Old Stagecoach Road; and *Topstone*, a tower at 100 Old Redding Road in Redding. Coverage Plots showing the extent of wireless service from these existing cell sites alone, and together with service from the proposed "Ridgefield 2" Facility are included in <u>Attachment 2</u>. As indicated on these plots, Cellco currently experiences a series of significant coverage gaps and areas of unreliable or non-existent wireless service along portions of Routes 7 and 35 and local roads in the surrounding area in each of its operating frequencies. The proposed Ridgefield 2 Facility would allow Cellco to fill these service gaps, improve existing wireless service in the area overall and provide capacity relief to each of Cellco's adjacent cell sites.

III. Proposed Ridgefield 2 Facility Modifications

To accommodate Cellco's needs in the area, Crown proposes to remove the existing 100-foot flagpole/unipole tower and replace it with a new 110-foot monopole tower. The new

monopole tower will be located approximately 25 feet to the northwest of the existing unipole tower. If the tower replacement is approved, Cellco will install nine (9) antennas on a triangular antenna platform at a centerline height of 106 feet above grade. Cellco's antennas would not extend above the top of the new tower. T-Mobile, Sprint and AT&T antennas will be relocated onto the new tower at the 96-foot, 79.5-foot and 69.5-foot levels, respectively.

To accommodate Cellco's ground-based equipment, Crown will need to expand the facility compound to the north, over a portion of the existing gravel access driveway. Cellco will install two equipment cabinets, a 50-kW backup generator, and three (3) vertically-mounted 120-gallon propane tanks, on a 11.3-foot x 19.5-foot steel equipment platform. A small (two to three feet tall) retaining wall will be installed along the north and west sides of the expanded facility compound so that Crown may maintain a level compound surface. Project plans for the modified wireless facility showing all proposed site improvements are included in <u>Attachment 3</u>.

IV. Discussion

A. The Proposed Facility Modifications Will Not Have A Substantial Adverse Environmental Effect

The Public Utility Environmental Standards Act (the "Act"), C.G.S. § 16-50g et seq., provides for the orderly and environmentally compatible development of telecommunications towers in the state to avoid "a significant impact on the environment and ecology of the State of Connecticut." C.G.S. § 16-50g. To achieve these goals, the Act established the Council, and requires a Certificate of Environmental Compatibility and Public Need for the construction of cellular telecommunication towers "that may, as determined by the council, have a substantial adverse environmental effect". C.G.S. § 16-50k(a).

1. Physical Environmental Effects

Crown respectfully submits that the proposed facility modifications will not involve a

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significant alteration in the physical and environmental characteristics of the Property or the surrounding area.

a. Wetland & Floodplain Impact Analysis

Dean Gustafson, Professional Soil Scientist with All-Points Technology Corporation ("APT") conducted a field investigation and completed a Wetland Inspection Report and a Wetland & Floodplain Impact Analysis for the proposed facility modifications. A copy of the Wetland Inspection Report and the Wetlands and Floodplain Impact Analysis is included in <a href="https://doi.org/10.25/10.25/2

In accordance with the Connecticut Soil Erosion Control Guidelines, as established by the Council for Soil and Water Conservation, adequate and appropriate soil erosion and sedimentation control measures will be established and maintained throughout the construction of the proposed facility modifications. In addition, Cellco will employ appropriate construction management practices to ensure that no pollutants would be discharged to any nearby watercourses or wetland areas or to area groundwater during the construction and operation of the modified telecommunications facility. Minor temporary wetland impacts may occur during construction of the facility modifications. These temporary impacts will be mitigated through the proper installation and maintenance of soil erosion and sedimentation control measures and the development and implementation of a Wetland Protection Plan. See Attachment 4.

b. Floodplain Impact Analysis

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), both the existing and the proposed facility compound would be located within a Special Flood Hazard Zone AE zone, with a Base Flood Elevation of 492 feet above mean sea level². See FEMA Flood Hazard Map included in Attachment 4. To compensate for fill and other improvements associated with the proposed facility modifications, Cellco intends to excavate a portion of the Property, to the west of the tower site to create a compensatory flood storage area. The total flood storage capacity volume lost with the proposed site improvements is approximately 23.4 cubic yards ("CY") (retaining wall, fill, equipment platform pier foundations etc.). A 59.7 CY compensatory flood storage area will be established on the western edge of the Property, providing an unrestricted hydraulic connection to the Norwalk River, increasing its flood storage capacity by approximately 36.3 CY. Also included in Attachment 4 is the Petitioners' submission to the National Flood Insurance Program (State NFIP coordinator) at the Connecticut DEEP.

c. Access and Utilities

Vehicular access to the expanded facility compound will remain substantially unchanged and will extend from Ethan Allen Highway (Route 7) over an existing gravel access driveway.

The access driveway will shift slightly to the north to accommodate the expanded facility compound. Utilities will extend from Ethan Allen Highway (Route 7) to a new multimeter utility backboard located to the east of Cellco's equipment platform. (See Attachment 3 Plan Sheet SP-1).

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² All of Cellco's site improvements will be installed on an antenna platform above the base flood elevation.

2. Visual Effects

As discussed in numerous other Council filings, visual impact of a tower is often the most significant and, in many cases, the only discernible environmental effect associated with such facilities. To assess these conditions, Crown asked All-Points Technologies ("APT") to assess the visual impact of the existing 100-foot flagpole tower and compare it to the visual impact of the proposed 110-foot monopole tower as described in the Petition. A copy of APT's Photo-Documentation & Simulations report (the "Visibility Report") is included in Attachment 5.

The Visibility Report concludes that the predicted visibility of the replacement tower is estimated to be nearly identical to the existing flagpole tower. Minor variations in visibility are a result of the lateral shift of the tower to the northwest. Year-round visibility, an area of only approximately five-acres, would occur along portions of Route 7 and other areas within ½ mile of the new tower, primarily to the north. Limited areas of year-round visibility may also occur to the west. Overall, the visibility of the existing and replacement tower will remain the same, approximately 24-acres, representing approximately 0.3% of the 8,042-acre study area.

3. Compliance with Radio Frequency Emissions Standards

Cumulative radio frequency ("RF") emissions from the proposed replacement tower will not exceed the Maximum Permissible Exposure ("MPE") standards adopted by the Federal Communications Commission ("FCC"). Included in <u>Attachment 6</u> is a Far Field RF Calculation for the new Cellco antennas on the modified tower and a Cumulative MPE Table confirming that the modified facility will operate well within MPE standards established by the FCC.

FAA Summary Report

Included in <u>Attachment 7</u> of this Petition is an Airspace Safety Analysis and Compliance (ASAC) Report verifying that the new 110-foot tower at the Property would not constitute an

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obstruction or hazard to air navigation. Therefore, notice to the FAA is not required.

In sum, the effect of the modified facility on the environment would be minimal and limited, rather than significant. This stands in contrast to typical proposals for new towers that frequently must be located on properties with no other approved towers, or with no development at all. Thus, the proposed replacement would not present a substantial adverse environmental effect and is not a modification for which the General Assembly intended to require a Certificate under C.G.S. § 16-50k(a).

Notice to the Town of Ridgefield, Property Owner and Abutting Landowners

On December 1, 2022, a copy of this Petition was sent to Ridgefield's First Selectman Rudy Marconi, Planning and Zoning Director Alice Dew and 845 LLC, the Property owner. Because the Property is within 2,500 feet of the Ridgefield Redding town line, a copy of the Petition was also sent to Redding's First Selectwoman, Julia Pemberton and Aimee Pardee, Redding's Land Use Director. Included in Attachment 8 is a copy of the letters sent to Mr.

Notice of Cellco's intent to file the Petition together with a copy of the Petition was also sent to those owners whose land abuts the Property. A sample abutter's notice letter, and the list of those abutting landowners who were sent notice and a copy of the Petition is included in

Marconi, Ms. Dew, Ms. Pemberton, Ms. Pardee and 845 LLC.

Attachment 9.

B.

C. A Conclusion That the Proposed Facility Modifications Will Not Have a

Substantial Adverse Environmental Effect Would Be Consistent With Siting

Council Precedent

The Council has previously determined, under similar circumstances, that the relocation and extension of an existing tower would have no substantial adverse environmental effect, does not require a Certificate and, most importantly, is preferable to the construction of a new tower in

a particular area.

V. Conclusion

Based on the information provided above, Cellco respectfully requests that the Council issue a determination in the form of a declaratory ruling that the relocation and extension of the existing tower at the Property from 100 feet to 110 feet, and the installation of Cellco antennas on a low-profile platforms will not have a substantial adverse environmental effect and does not require the issuance of a Certificate of Environmental Compatibility and Public Need pursuant to § 16-50k of the General Statutes.

Respectfully submitted,

CROWN CASTLE AND CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS

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Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 (860) 275-8200

Attorney for the Petitioners



Subject Property

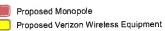
Proposed Verizon Wireless Lease Area Proposed Fence

---- Proposed Conduit

Proposed Retaining Wall







Existing Equipment (By Others)

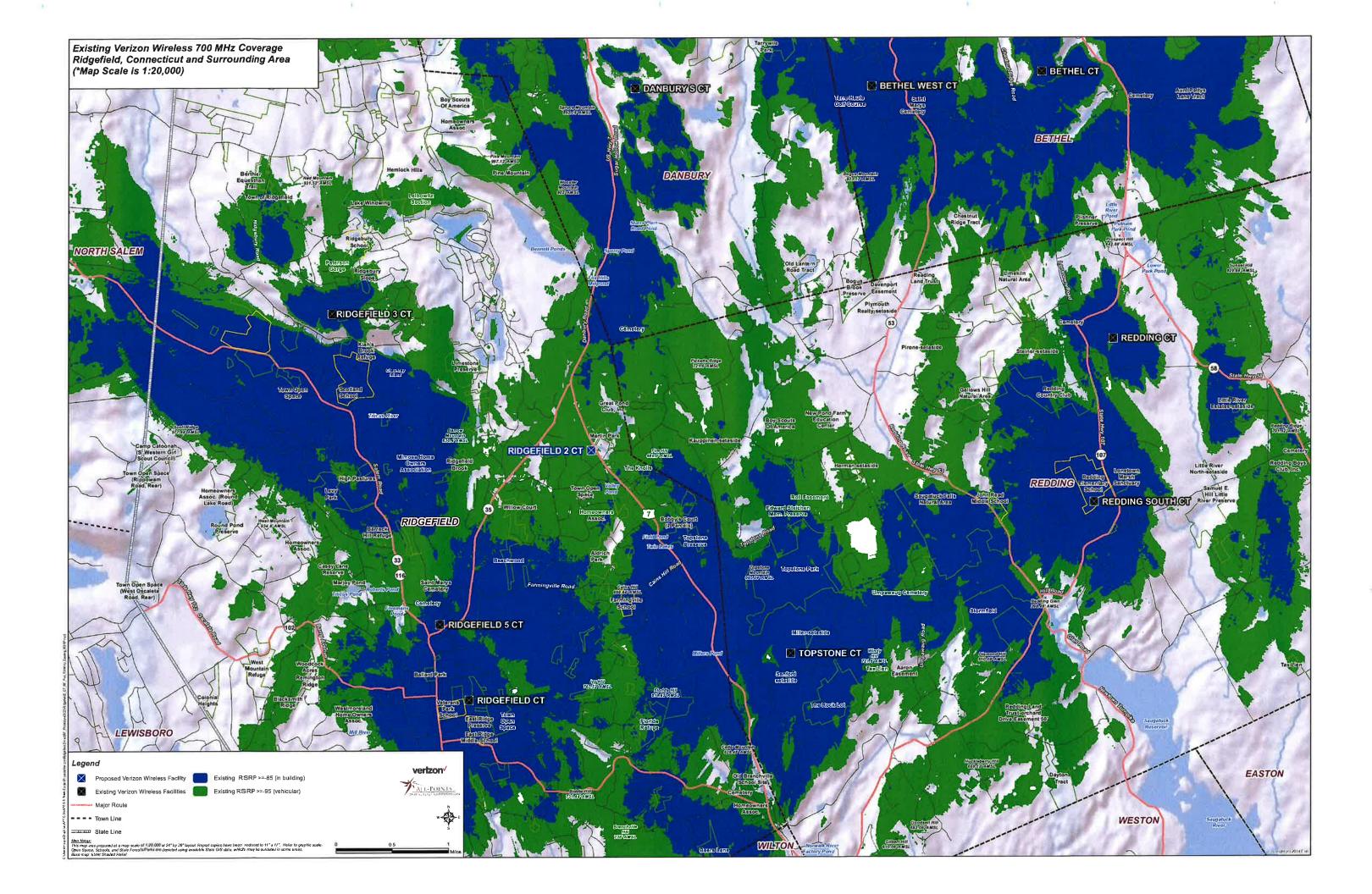
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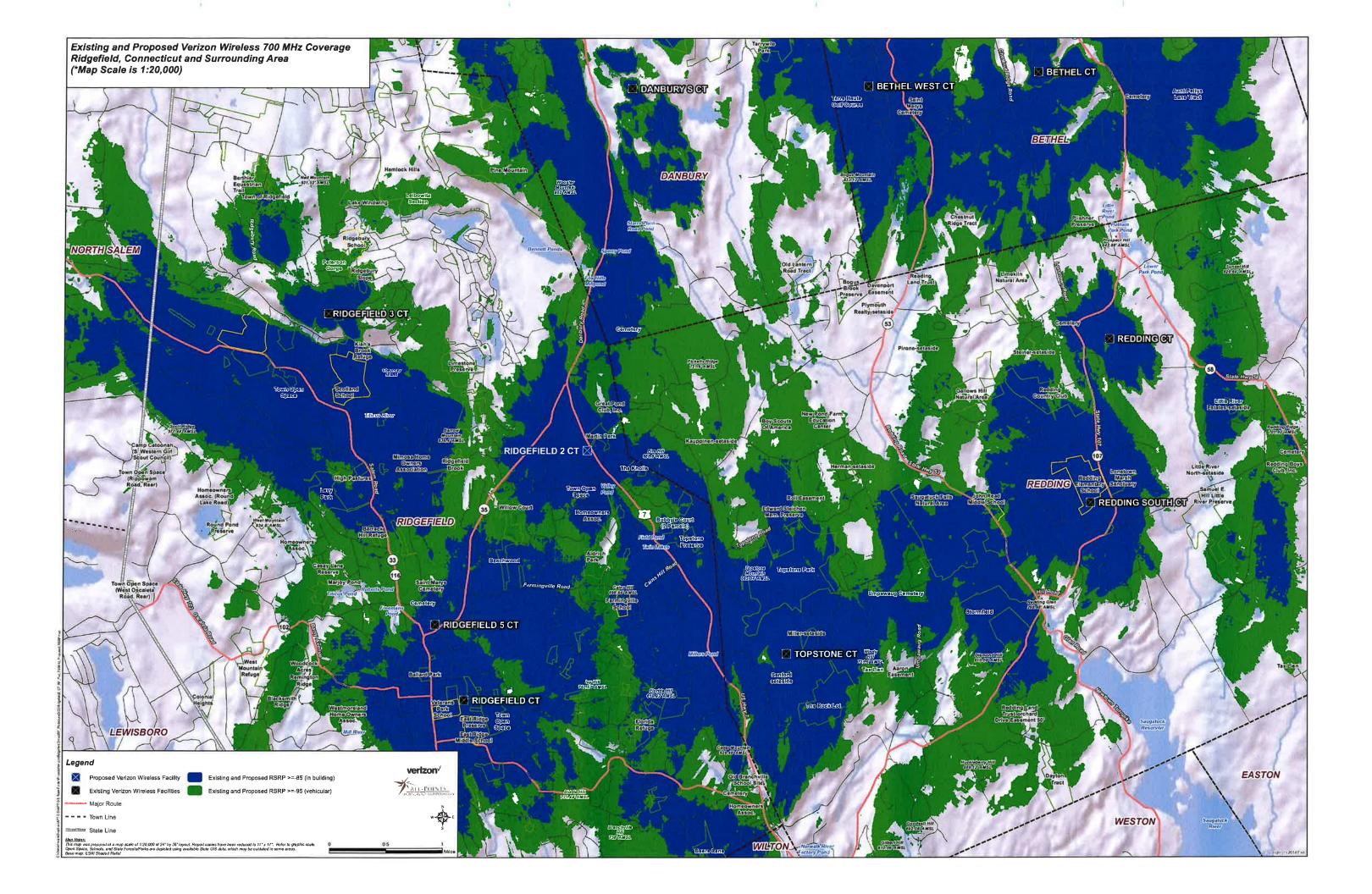


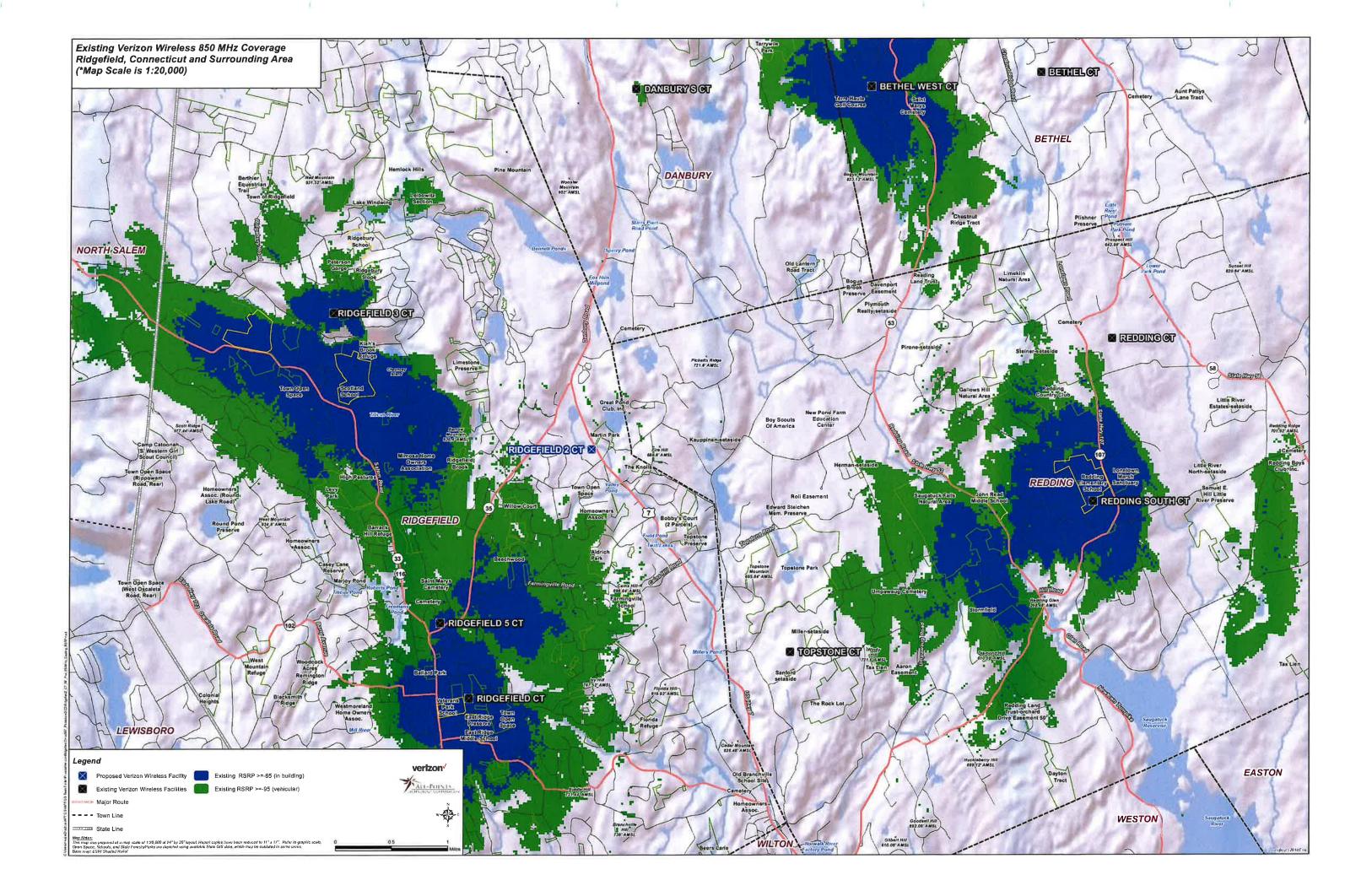
Proposed Wireless Telecommunications Facility Redding/RTE 7 845 Ethan Allen Highway Ridgefield, Connecticut

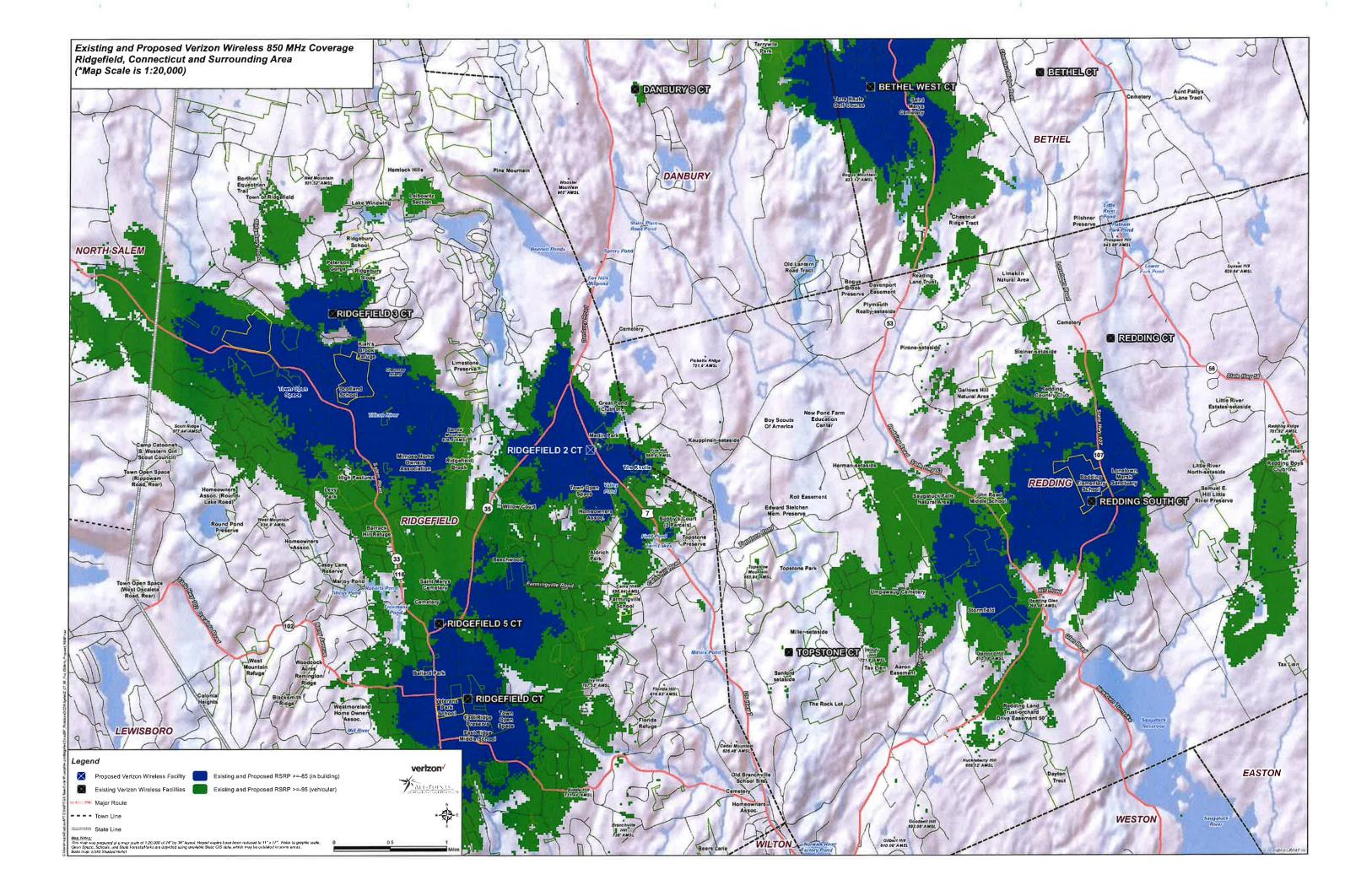


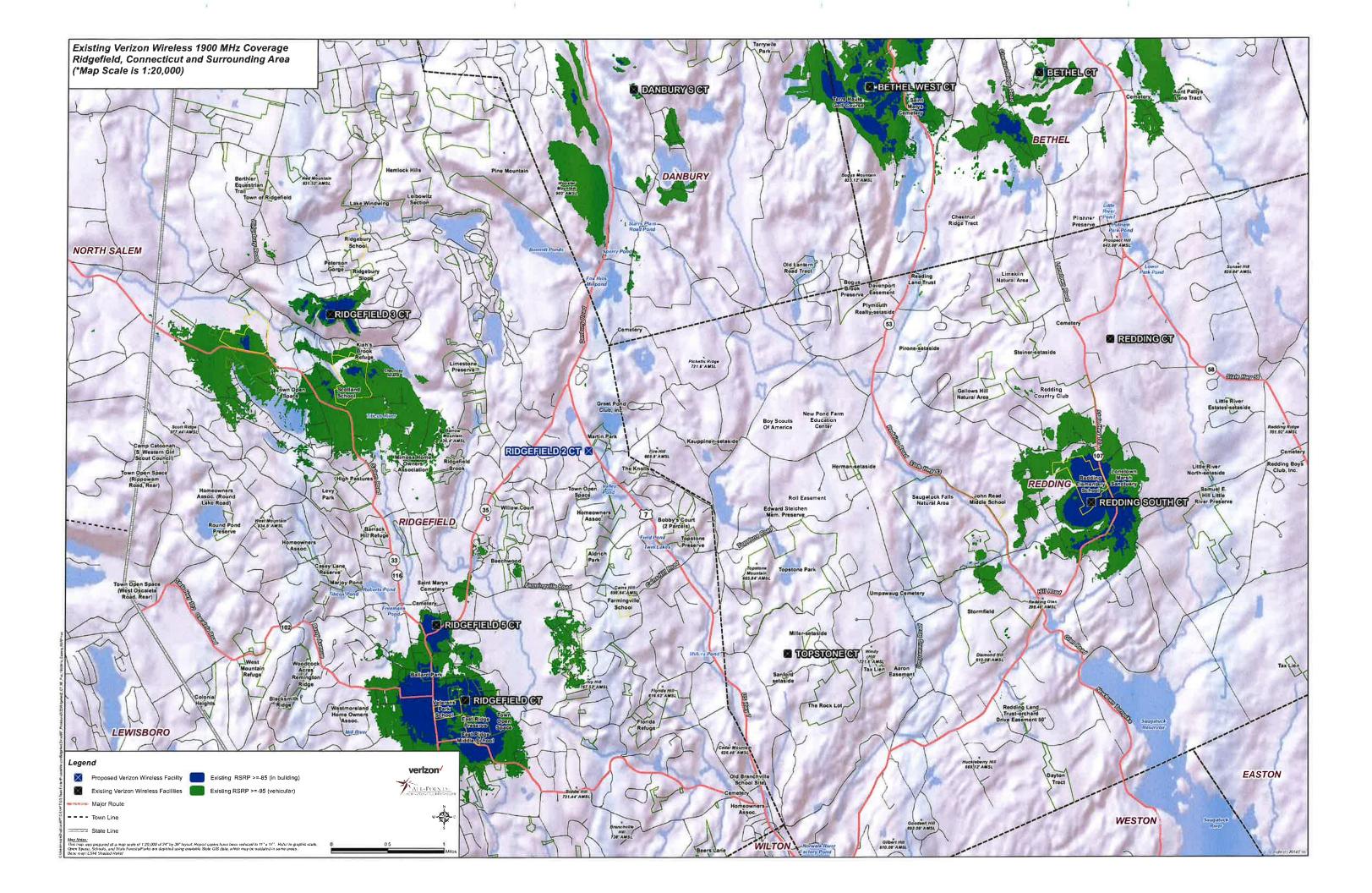


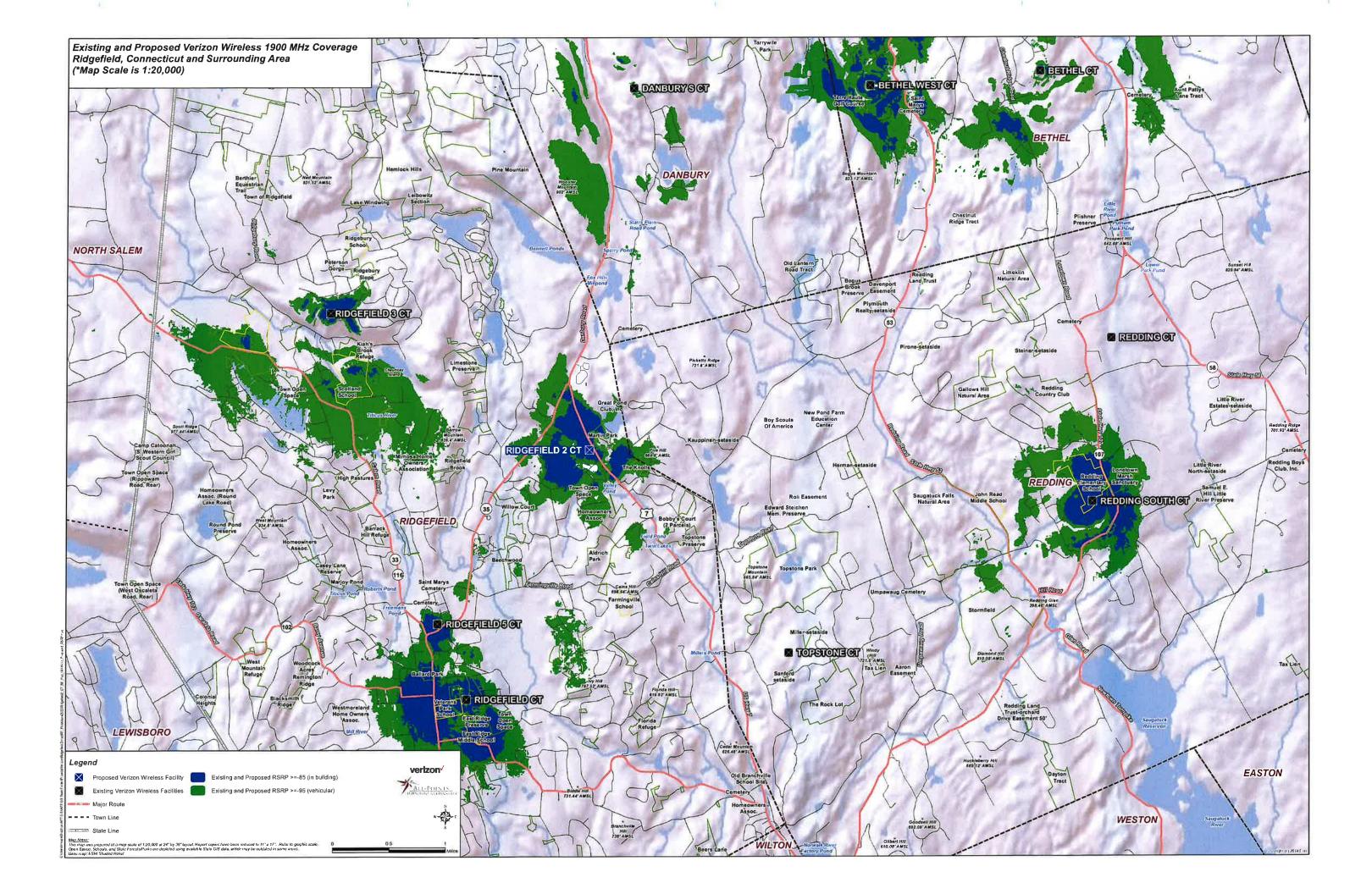


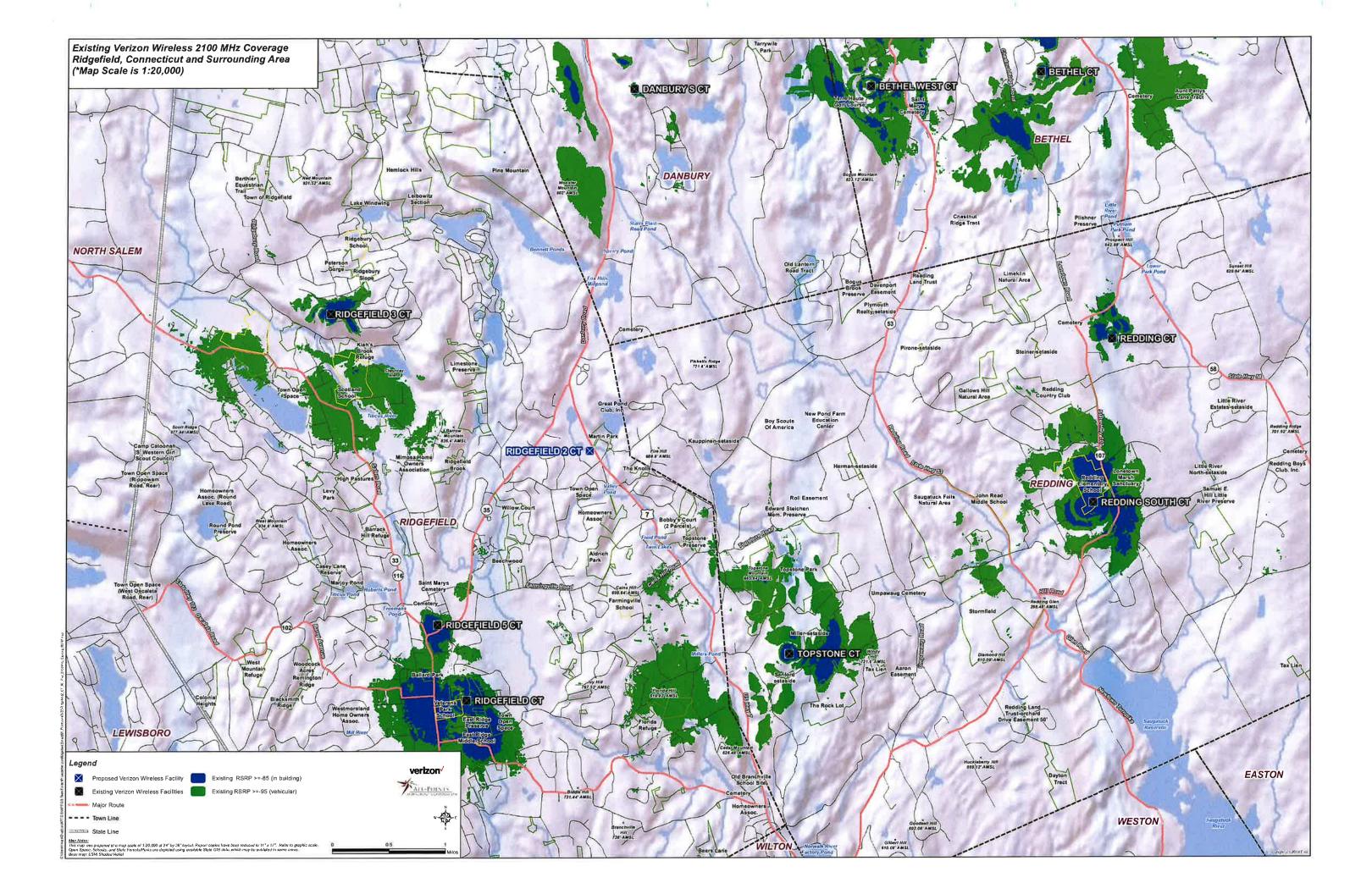


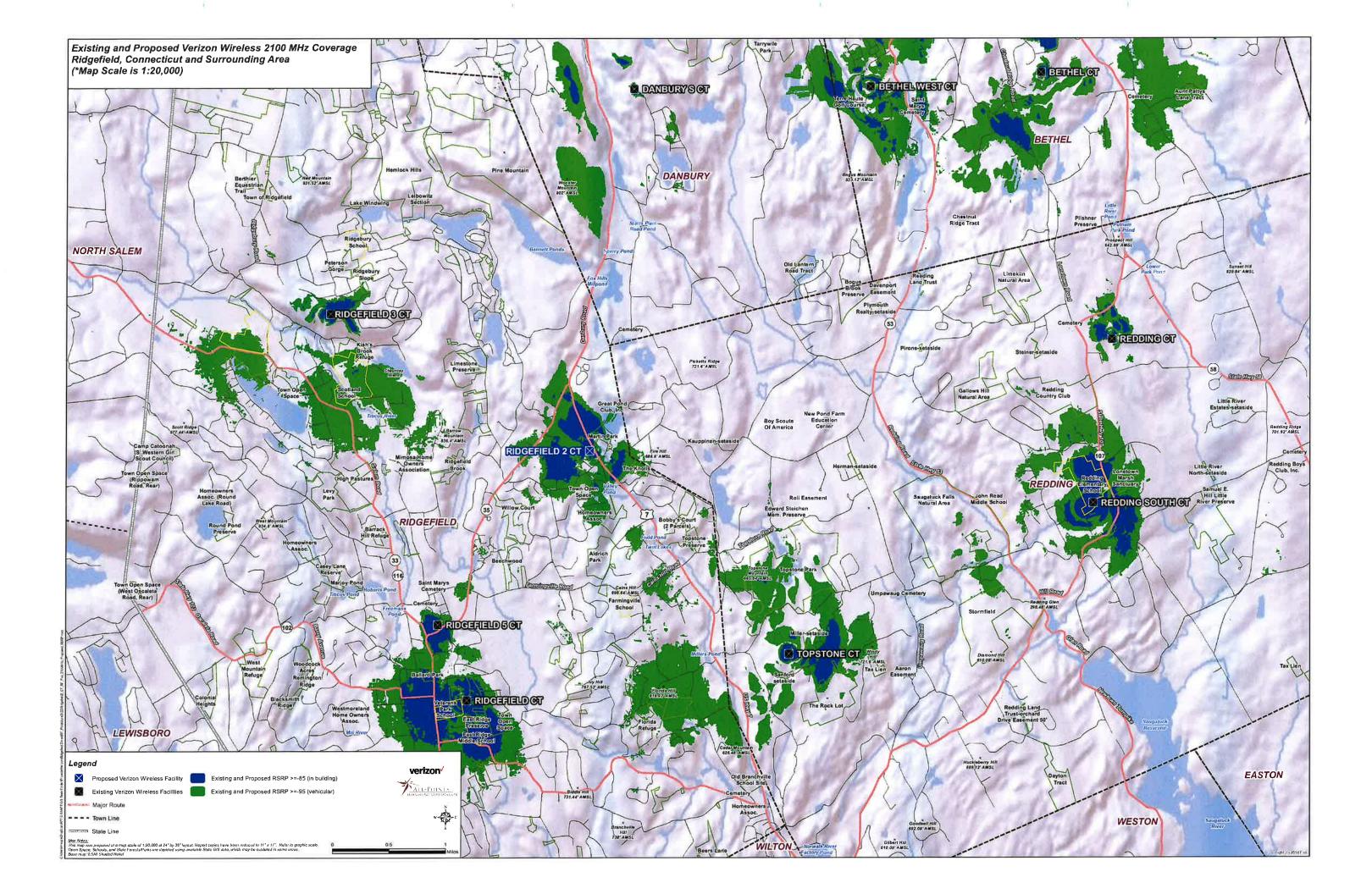


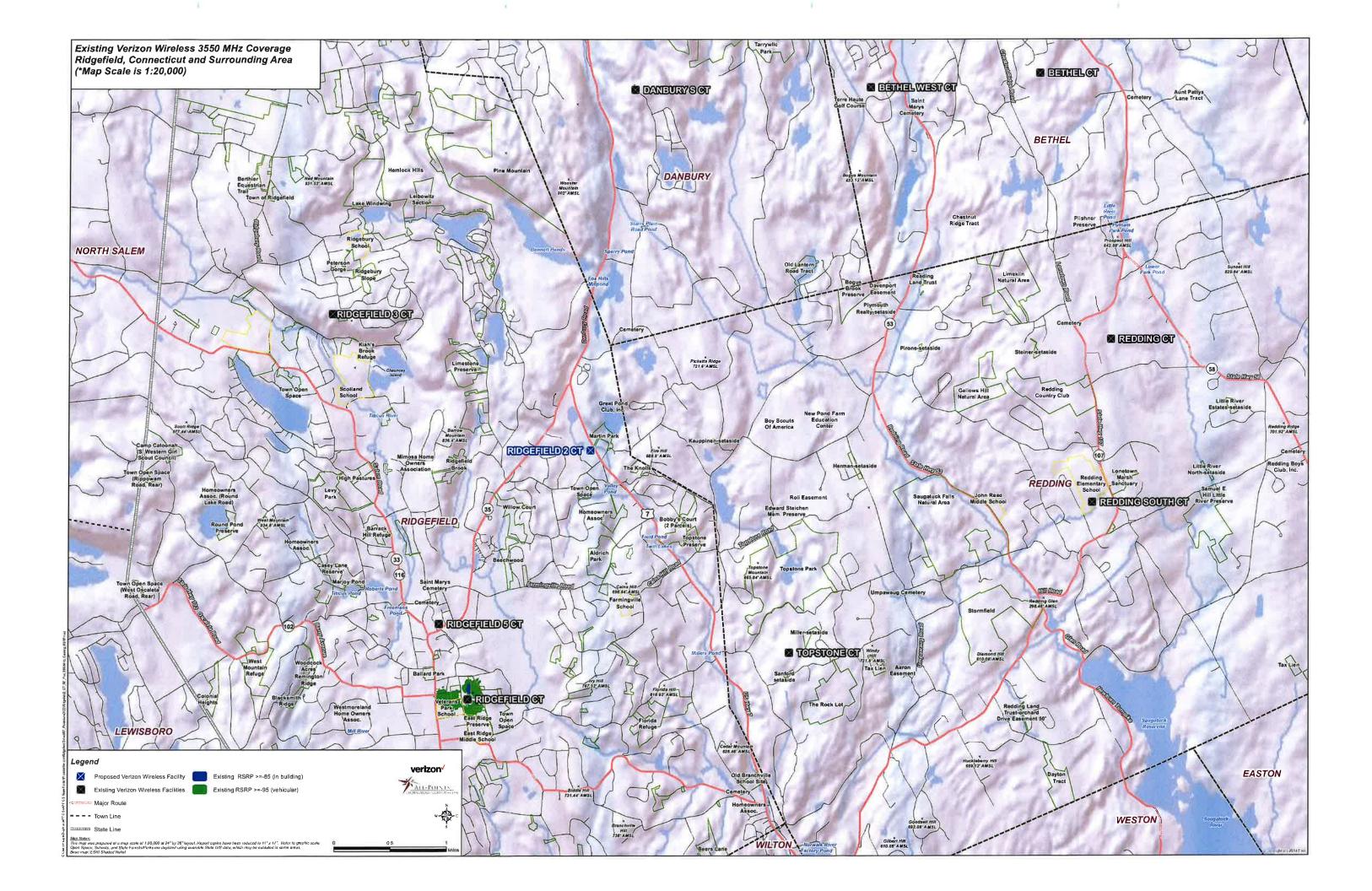


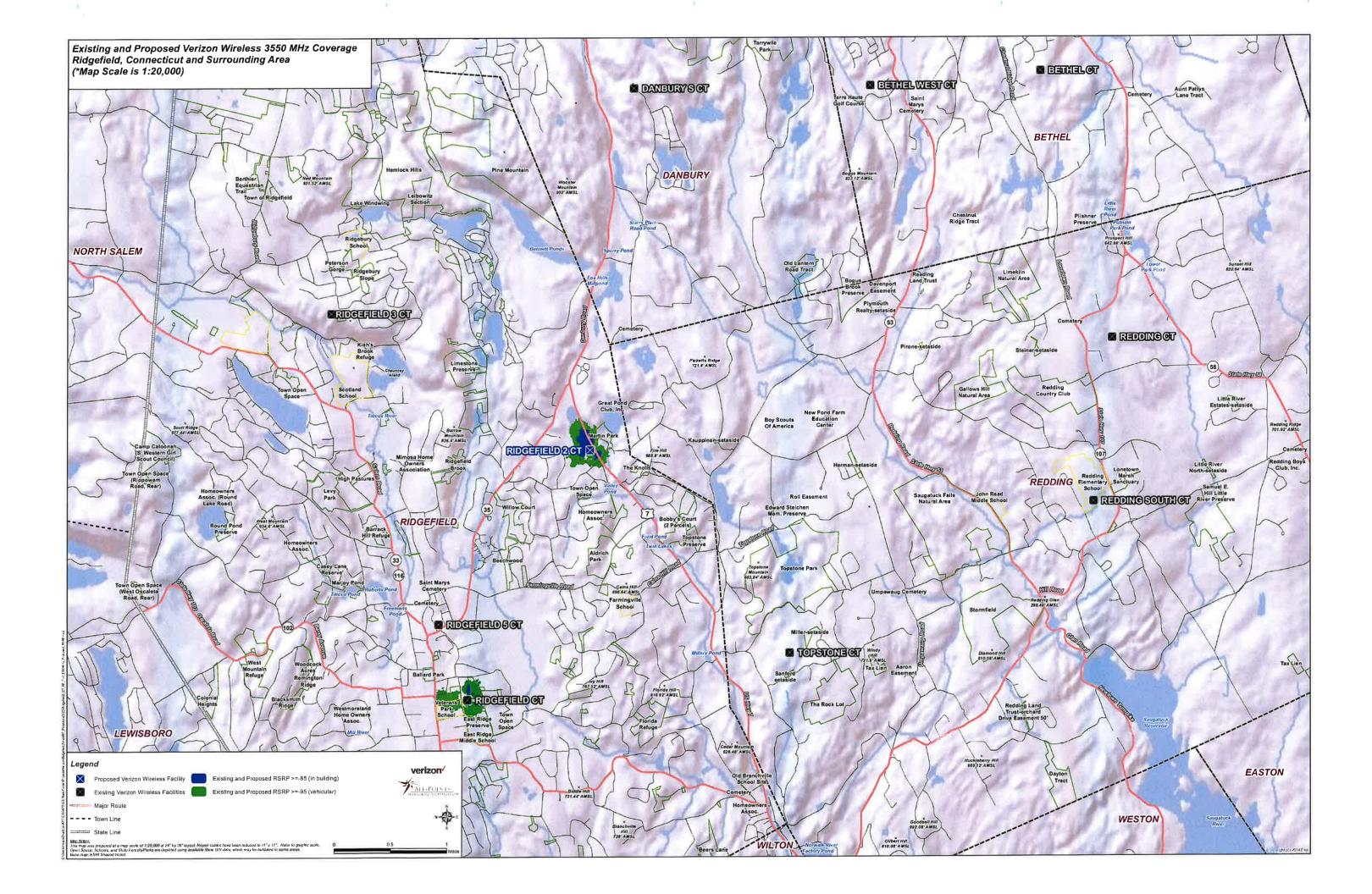


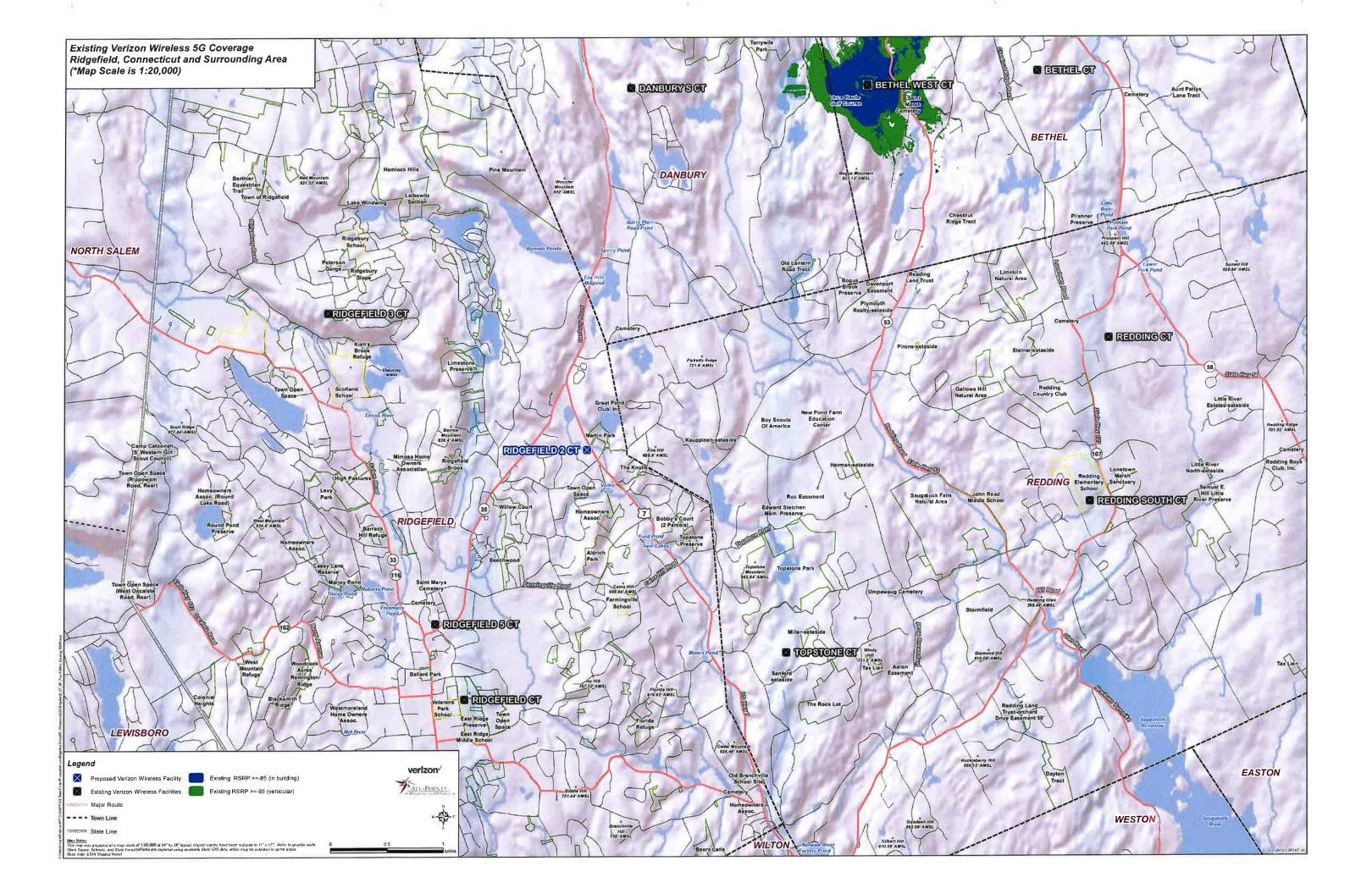


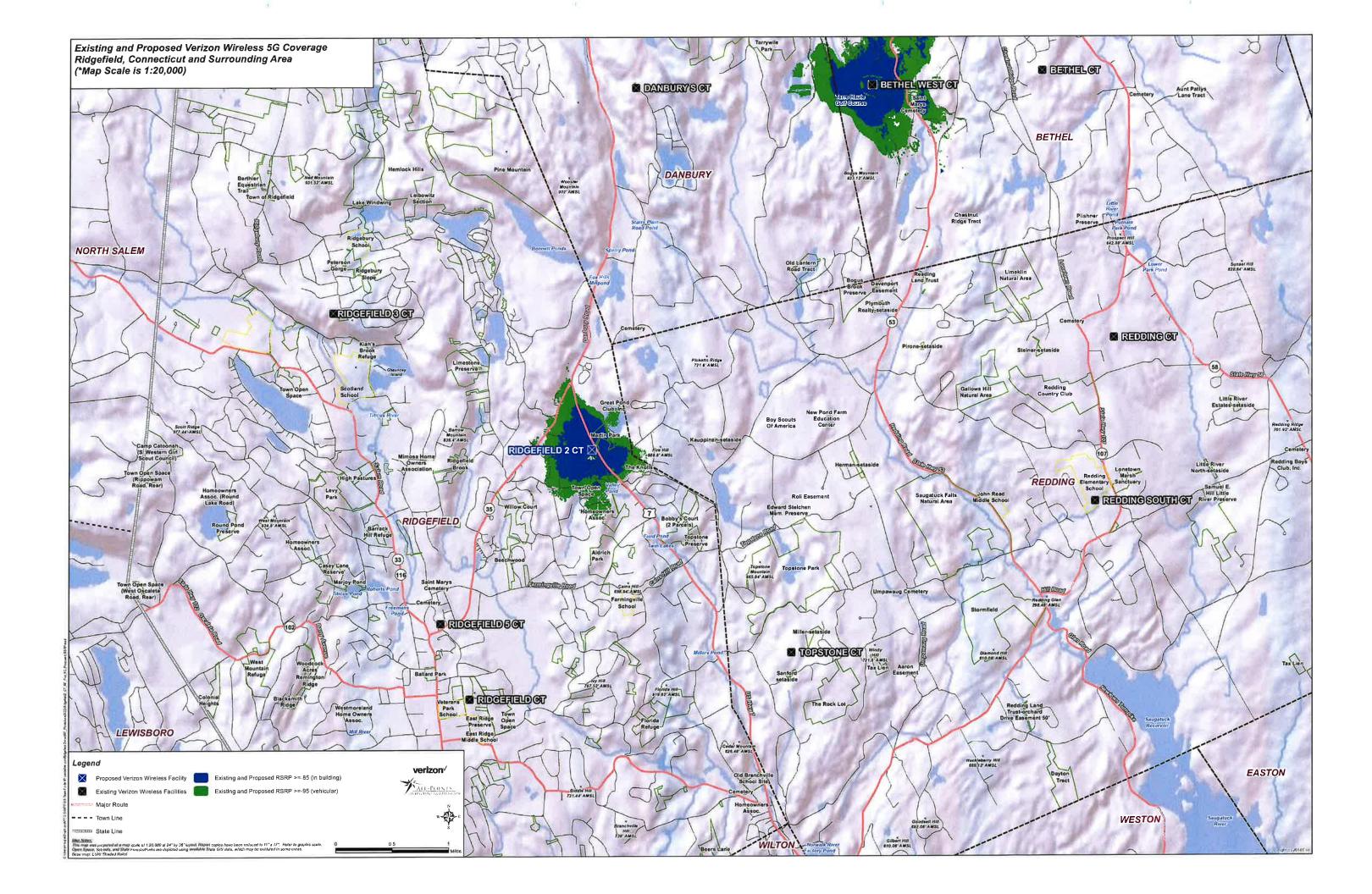








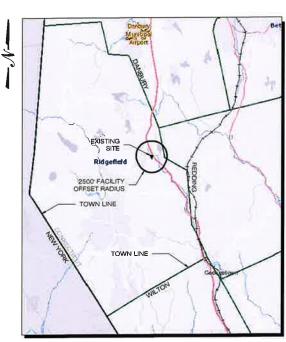




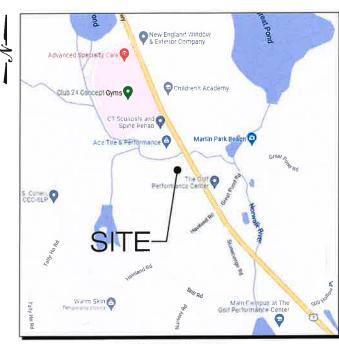


2000 CORPORATE DRIVE **CANONSBURG, PA 15317**

REDDING/RT7 845 ETHAN ALLEN HIGHWAY RIDGEFIELD, CT 06877



MUNICIPAL NOTIFICATION LIMIT MAP



LOCATION MAP

LIST OF DRAWINGS

T-1 TITLE SHEET

1 OF 1 PROPERTY & TOPOGRAPHIC SURVEY

R-1 ABUTTERS MAP

SP-1 COMPENSATORY FLOOD STORAGE PLANS & SECTIONS

A-1 COMPOUND PLAN

A-2 TOWER ELEVATION

C-1 SITE DETAILS

C-2 VERIZON EQUIPMENT PLAN & DETAILS

C-3 VERIZON ANTENNA PLAN & DETAILS

SITE INFORMATION

PROJECT LOCATION: 845 ETHAN ALLEN HIGHWAY RIDGEFIELD, CT 06877

PROJECT DESCRIPTION: NEW ANTENNAS & EQUIPMENT ON NEW 110'+ AGL MONOPOLE & NEW

GROUND EQUIPMENT WITHIN AN EXIST, EXPANDED FENCED COMPOUND.

PROJECT DEVELOPER: CROWN CASTLE

2000 CORPORATE DRIVE CANONSBURG, PA 15317

COUNTY: FAIRFIELD

MAP: G10 LOT: 15 ZONE: "B-2"

LATITUDE: 41° 18' 46.9793" N LONGITUDE: 73° 28' 20,7094" W ELEVATION: 491,5'± AMSL

PROPERTY OWNER: 845 LLC

107 LORDS HWY WESTON, CT 06883

APPLICANT: CROWN CASTLE

2000 CORPORATE DRIVE CANONSBURG, PA 15317

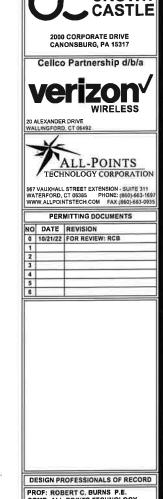
LEGAL: ROBINSON & COLE, LLP KENNETH C. BALDWIN

HARTFORD, CT 06103

SITE ENGINEER: ALL-POINTS TECHNOLOGY CORP. 567 VAUXHALL STREET EXTENSION SUITE 311

280 TRUMBULL STREET

WATERFORD, CT 06385 (860) 663-1697



COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C. ADD: 567 VAUXHALL STREET EXT. SUITE 311 WATERFORD, CT 06385

DEVELOPER: CROWN CASTLE ADDRESS: 2000 CORPORATE DRIVE CANONSBURG, PA 15317

REDDING/RT7

SITE 845 ETHAN ALLEN HIGHWAY ADDRESS: RIDGEFIELD, CT 08877

APT FILING NUMBER: CT1051300

DRAWN BY: CSH DATE: 10/21/22 CHECKED BY: RCB

TITLE SHEET

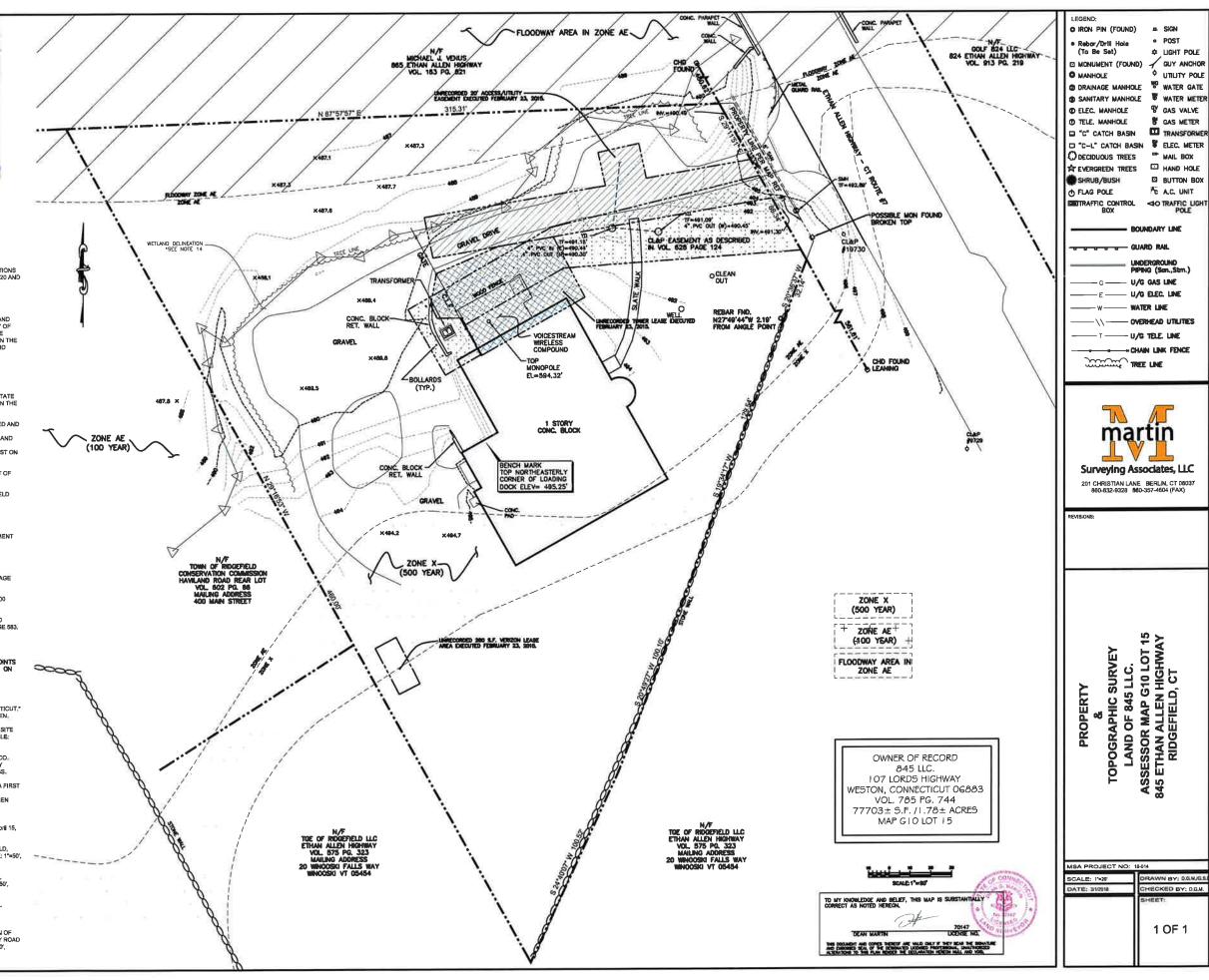


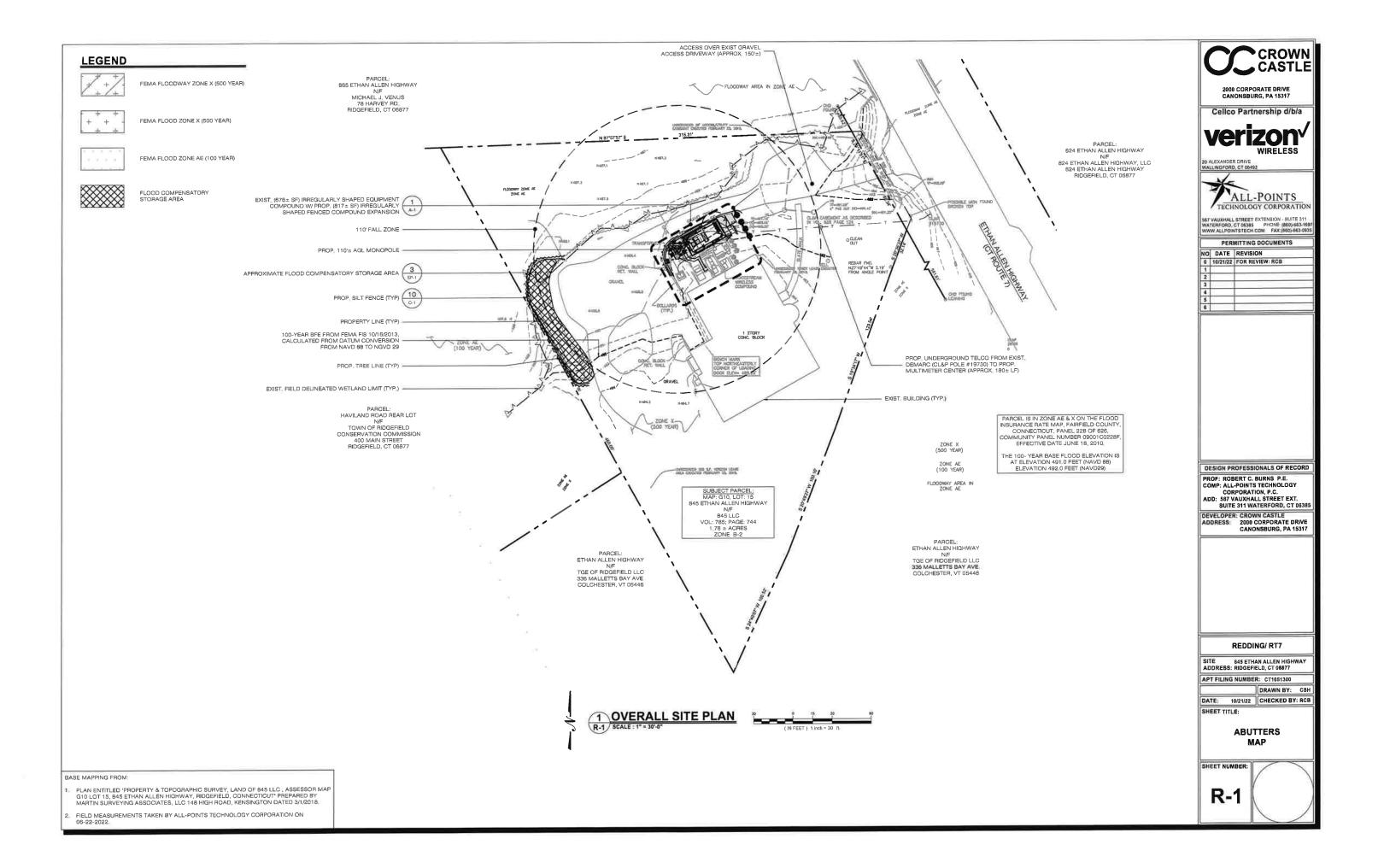
MAP NOTE

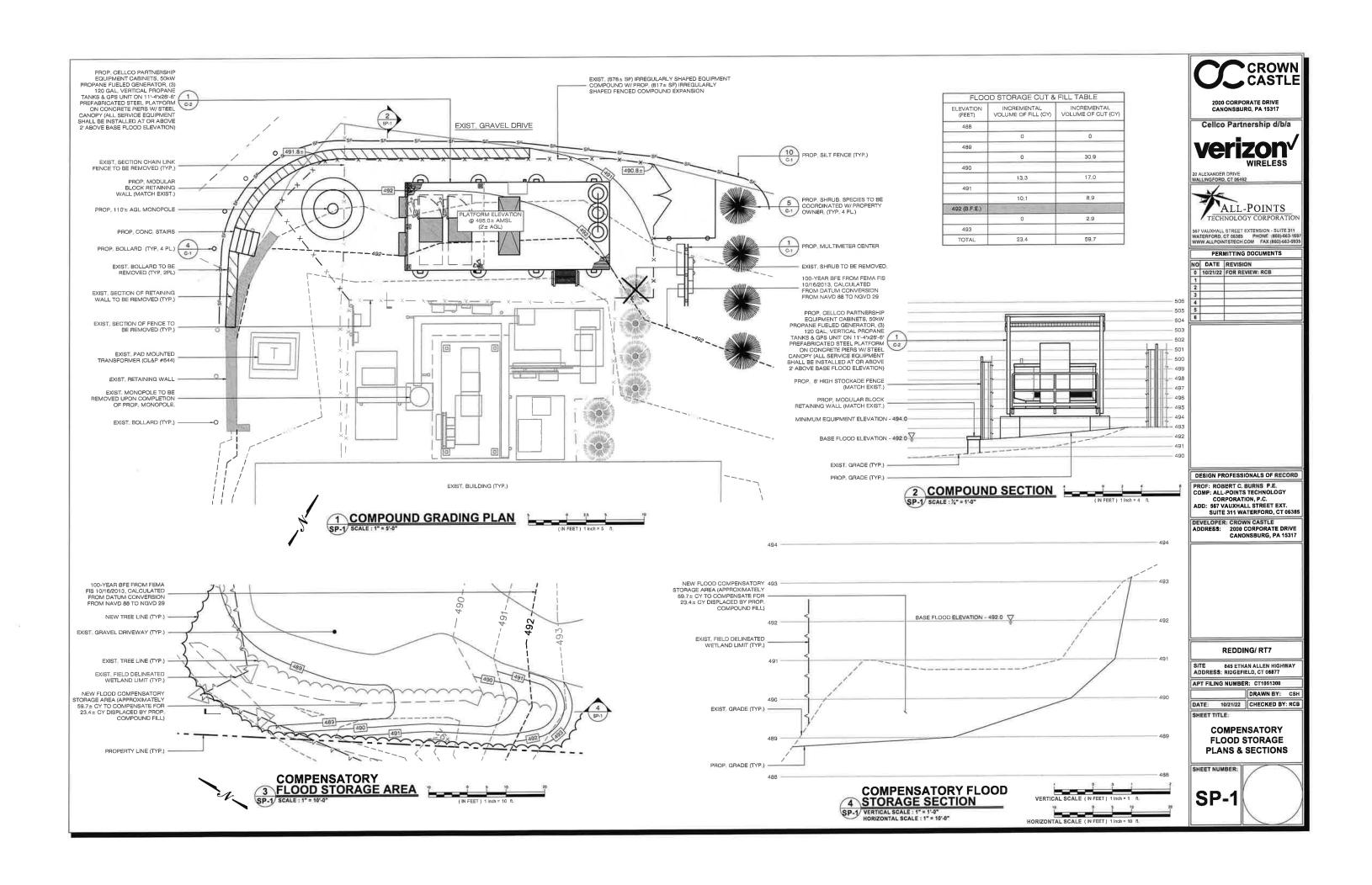
- THIS MAP AND SURVEY HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIÉS SECTIONS 20-300b-1 THROUGH 20-300b-20 AND 'THE MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS ON SEPTEMBER 26, 1996.
- 2. THE TYPE OF SURVEY PERFORMED AND THE MAPPED FEATURES DEPICTED HEREON ARE IN ACCORDANCE WITH THE REQUIREMENTS OF A PROPERTY AND TOPOGRAPHIC SURVEY, THE PROPERTY DEPICTED HEREON IS A RESURVEY OF MAP REFERENCE "A". THE TOPOGRAPHIC FEATURES DEPICTED HEREON ARE INTENDED TO DEPICT THE LOCATION OF CELLULAR EQUIPMENT LOCATED ON THE SUBJECT PARCEL AND TOPOGRAPHIC FEATURES WITH A 100' RADIUS OF SAID CELLULAR EQUIPMENT.
- 3. THE HORIZONTAL BASELINE CONFORMS TO A CLASS A-2 ACCURACY. THE VERTICAL BASELINE CONFORMS TO A CLASS V-2 ACCURACY. THE TOPOGRAPHIC FEATURES CONFORM TO A CLASS T-2 ACCURACY.
- 4. THE NORTH ARROW AND BEARINGS ARE BASED UPON THE CONNECTICUT STATE COORDINATE SYSTEM N.A.D. 1963 (2011). THE ELEVATIONS ARE BASED UPON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).
- 5. UNDERGROUND UTILITIES, STRUCTURES AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE COMPANIES OR GOVERNIMENTAL AGENCIES AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE WHICH IS UNKNOWN TO MARTIN SURVEYING ASSOCIATES, LLC. ALL CONTRACTORS ARE REQUIRED TO CONTACT CALL-BEFORE-YOU-DIG AT 1-800-922-4455 FOR LOCATION AND OR STAKEOUT OF ANY UTILITY PRIOR TO ANY EXCAVATION.
- 6. PARCEL IS IN ZONE AE AND X ON THE FLOOD INSURANCE RATE MAP, FAIRFIELD COUNTY, CONNECTICUT, PANEL 228 OF 625, COMMUNITY PANEL NUMBER 0800100228F, EFFECTIVE DATE JUNE 18, 2010
- 7. PARCEL SUBJECT TO A LEASE AS DESCRIBED IN VOLUME 1012 PAGE 743
- PARCEL IS SUBJECT TO SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT AGREEMENT AS DESCRIBED IN VOLUME 1014 PAGE 290.
- PARCEL IS SUBJECT TO MEMORANDUM AND RESTATED STANDARD LEASE AGREEMENT AS DESCRIBED IN VOLUME 1014 PAGE 302.
- 10, PARCEL IS SUBJECT TO A CL&P EASEMENT AS DESCRIBED IN VOLUME 628 PAGE 124.
- 11. PARCEL IS SUBJECT TO A CL&P RIGHT OF WAY AS DESCRIBED IN VOLUME 100
- 12.PARCEL IS SUBJECT TO, IF ANY, RIGHTS TO LITCHFIELD ELECTRIC LIGHT AND POWER COMPANY AS DESCRIBED IN VOLUME 56 PAGE 385 & VOLUME 53 PAGE 583.
- 13. PARCEL IS PARCEL, IF ANY, RIGHTS TO THE AMERICAN TELEPHONE AND TELEGRAPH AS DESCRIBED IN VOLUME 38 PAGE 59.
- 14.THE WETLANDS DEPICTED HEREON HAVE BEEN PROVIDED BY ALL POINTS TECHNOLOGY CORPORATION AND NOTED TO HAVE BEEN DELINEATED ON MARCH 28, 2018.

REFERENCE IS MADE TO THE FOLLOWING MAPS

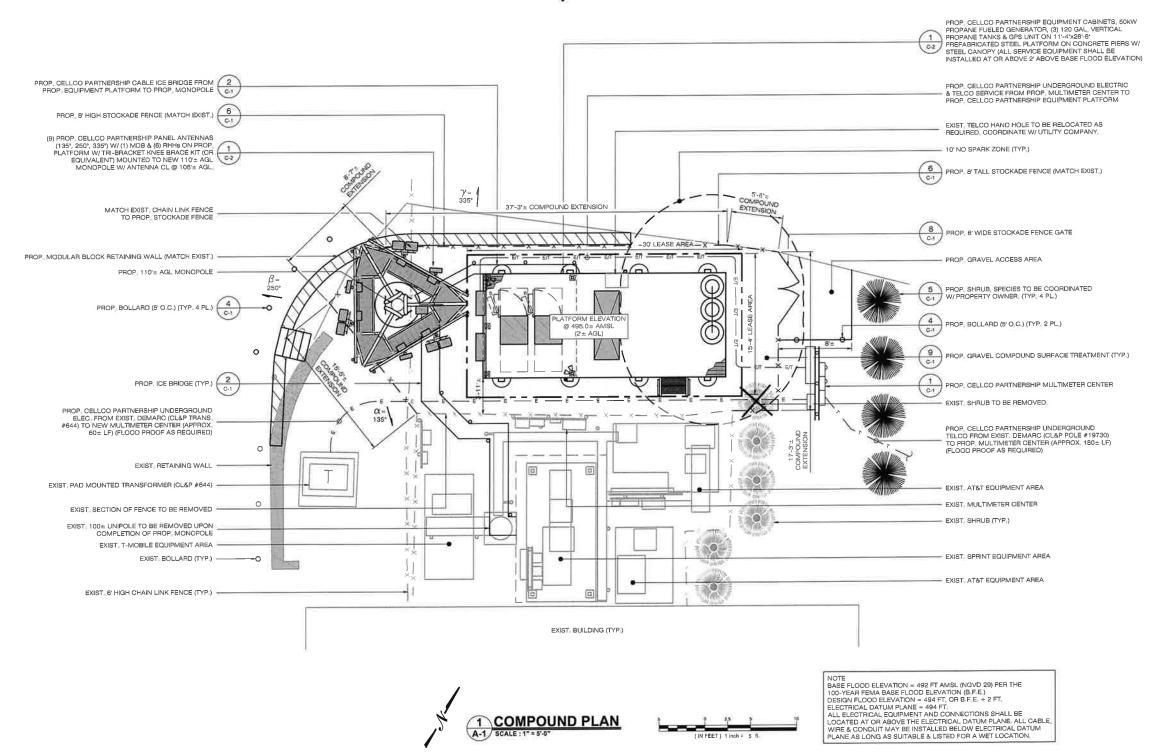
- "MAP PREPARED FOR ARMA TOOL &DIE COMPANY, RIDGEFIELD, CONNECTICUT." SCALE: 1"=40', DATED DECEMBER 13, 1974, BY OFFICE OF MOODY & O'BRIEN.
- "GENERAL LOCATION SURVEY PREPARED FOR VOICESTREAM WIRELESS SITE CT-11112H 845 ETHAN ALLEN HIGHWAY RIDGEFIELD, CONNECTICUT." SCALE: 1"-40" DATED OCTOBER 30, 2001, BY DESIGN PROFESSIONALS, INC..
- "PLAN SHOWING EASEMENT GRANTED TO CLEP BY ARMA TOOL AND DIE CO. VOICESTREAM WIRELESS SITE ID: CT-11-112H 845 ETHAN ALLEN HIGHWAY RIDGEFIELD, CT" SCALE: 1"=20", DATED MAY 22", 2001, BY CARTER BURGESS.
- PROPERTY SURVEY MAP PREPARED FOR THE ESTATE OF LUCILLE GAETA FIRST UNION BANK OF CONNECTICUT, ADMIN. HAVILAND ROAD RIDGEPIELD, CONNECTICUT.* SCALE: 1°=60°, DATED JANUARY 27, 1997, BY KRISTOFERSEN LAND SURVEYING.
- "MAP PREPARED FOR GLEN ACRES RIDGEFIELD, CONNECTICUT R-1 RESIDENTIAL ZONE TOTAL AREA-36.397ACRES." SCALE: 1"=100", DATED April 15, 1963, BY HENRCI ASSOCIATES.
- "FIRST DIVISION MAP PREPARED FOR TGE OF RIDGEFIELD, LLC RIDGEFIELD, CONNECTICUT R-AA RESIDENCE & B-2 ZONE AREA 4-8.485 ACRES." SCALE: 1"=50", DATED DECEMBER 29, 1998, BY RKW LAND SURVEYING.
- "SUBDIVISION MAP PREPARED FOR TOB OF RIDGEFIELD, LLC RIDGEFIELD, CONNECTICUT "R-AA RESIDENCE ZONE AREA = 16.159 ACRES." SCALE: 1"=50", DATED MARCH 5, 1999, BY RIW LAND SURVEYING.
- "MAP PREPARED FOR MICHAEL VENUS RIDGEFIELD, CONNECTICUT TOTAL AREA=2,381 ACRES." SCALE: 1"=40", DATED JUNE 27, 1974, BY ROBERT M. HENRICI.
- "CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP TOWN OF RIDGEFIELD NORWALK-DANBURY ROAD FROM THE RIDGEFIELD-DANBURY ROAD SOUTHERLY ABOUT 4,100 FEET ROUTE U.S. 7." SHEET 1 OF 2, SCALE: 1"=40", DATED DECEMBER 30, 1930 AND REVISED TO SEPTEMBER 8, 1987.













2000 CORPORATE DRIVE CANONSBURG, PA 15317

Cellco Partnership d/b/a



20 ALEXANDER DRIVE WALLINGFORD, CT 06492



567 VAUXHALL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385 PHONE: (860)-663-1697 WWW ALLPOINTSTECH COM FAX (660)-663-0935

PERMITTING DOCUMENTS					
Ю	DATE	REVISION			
0	10/21/22	FOR REVIEW: RCB			
1					
2					
3					
-					

DESIGN PROFESSIONALS OF RECORD

PROF: ROBERT C. BURNS P.E.
COMP: ALL-POINTS TECHNOLOGY
CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT.
SUITE 311 WATERFORD, CT 06385

DEVELOPER: CROWN CASTLE ADDRESS: 2000 CORPORATE DRIVE CANONSBURG, PA 15317

REDDING/RT7

SITE 845 ETHAN ALLEN HIGHWAY ADDRESS: RIDGEFIELD, CT 08877

APT FILING NUMBER: CT1051300

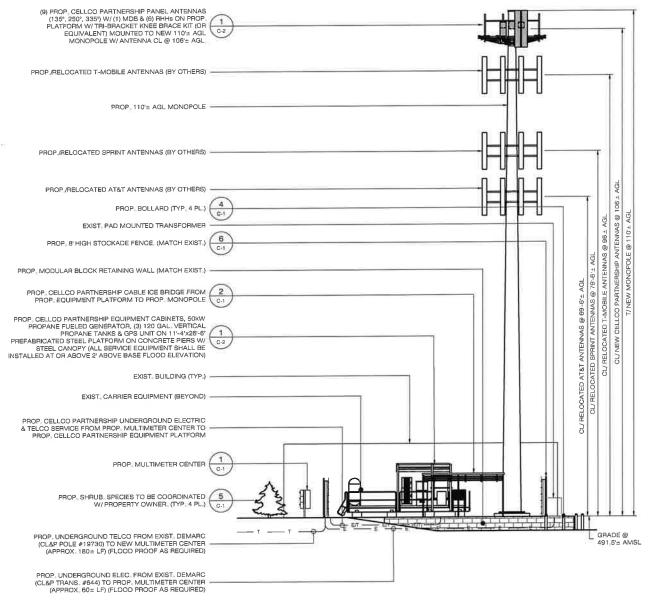
DATE: 10/21/22 CHECKED BY: RCB

SHEET TITLE:

COMPOUND PLAN

SHEET NUMBER

۱-1



1 NORTH ELEVATION

(IN FEET) 1 inch = 10 ft.

NOTE
BASE FLOOD ELEVATION = 492 FT AMSL (NGVD 29) PER THE
100-YEAR FEMA BASE FLOOD ELEVATION (8, F.E.)
DESIGN FLOOD ELEVATION = 494 FT, OR B.F.E. + 2 FT.
ELECTRICAL DATUM PLANE = 494 FT.
ALL ELECTRICAL EQUIPMENT AND CONNECTIONS SHALL BE
LOCATED AT OR ABOVE THE ELECTRICAL DATUM PLANE. ALL CABLE,
WIRE & CONDUIT MAY BE INSTALLED BELOW ELECTRICAL DATUM
PLANE AS LONG AS SUITABLE & LISTED FOR A WET LOCATION.



2000 CORPORATE DRIVE CANONSBURG, PA 15317

Cellco Partnership d/b/a



ALEXANDER DRIVE



567 VAUXHALL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385 PHONE: (860)-663-1697 WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

PERMITTING DOCUMENTS

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NO	DATE	REVISION		
0	10/21/22	FOR REVIEW: RCB		
1				
2				
3				
4				
5				
6				

DESIGN PROFESSIONALS OF RECORD

PROF: ROBERT C. BURNS P.E.
COMP: ALL-POINTS TECHNOLOGY
CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT.
SUITE 311 WATERFORD, CT 08385

DEVELOPER: CROWN CASTLE ADDRESS: 2000 CORPORATE DRIVE CANONSBURG, PA 15317

REDDING/RT7

SITE 845 ETHAN ALLEN HIGHWAY ADDRESS: RIDGEFIELD, CT 08877

APT FILING NUMBER: CT1051300

DRAWN BY: CSH
DATE: 10/21/22 CHECKED BY: RCB

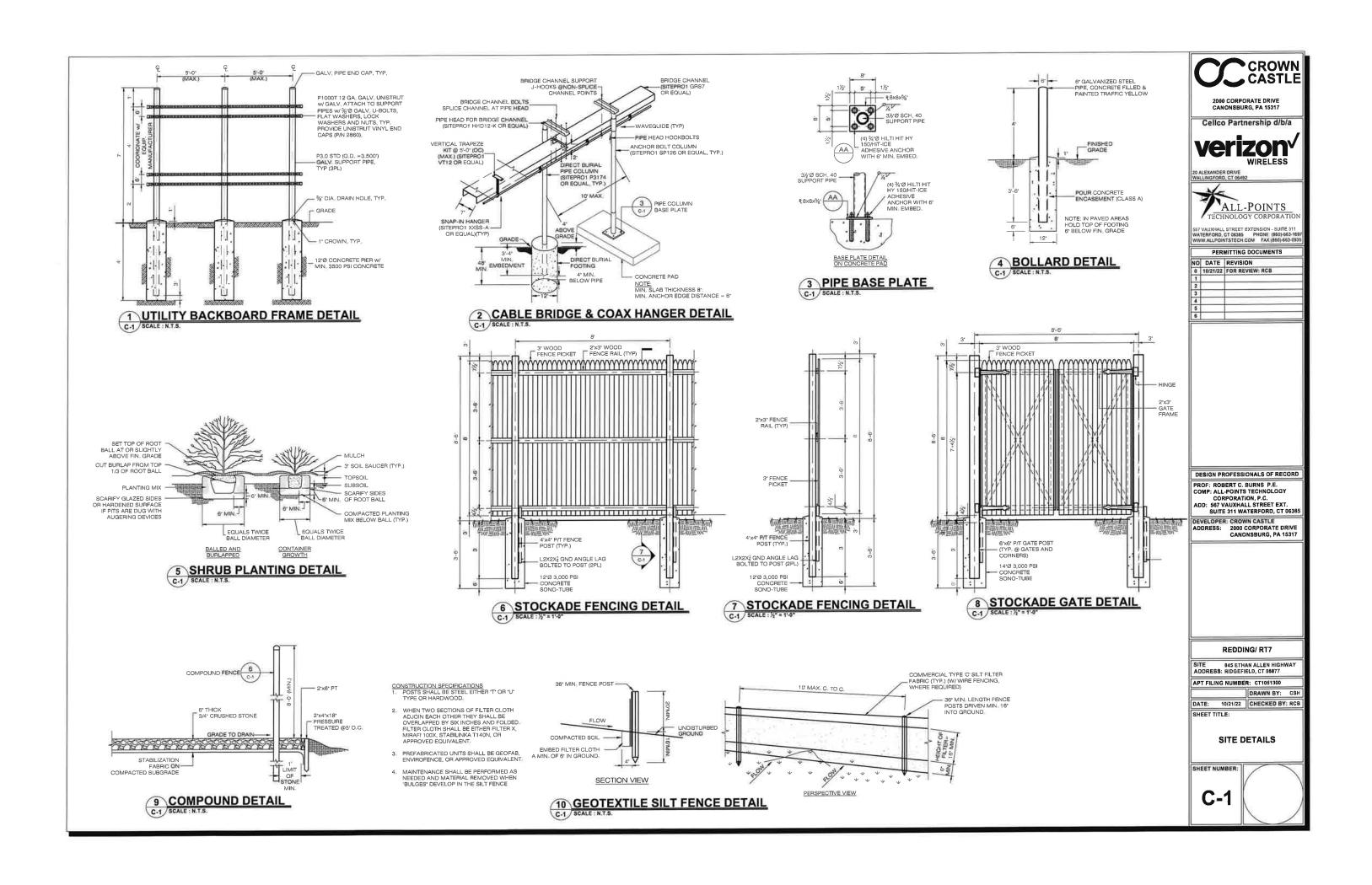
CHEST PITE

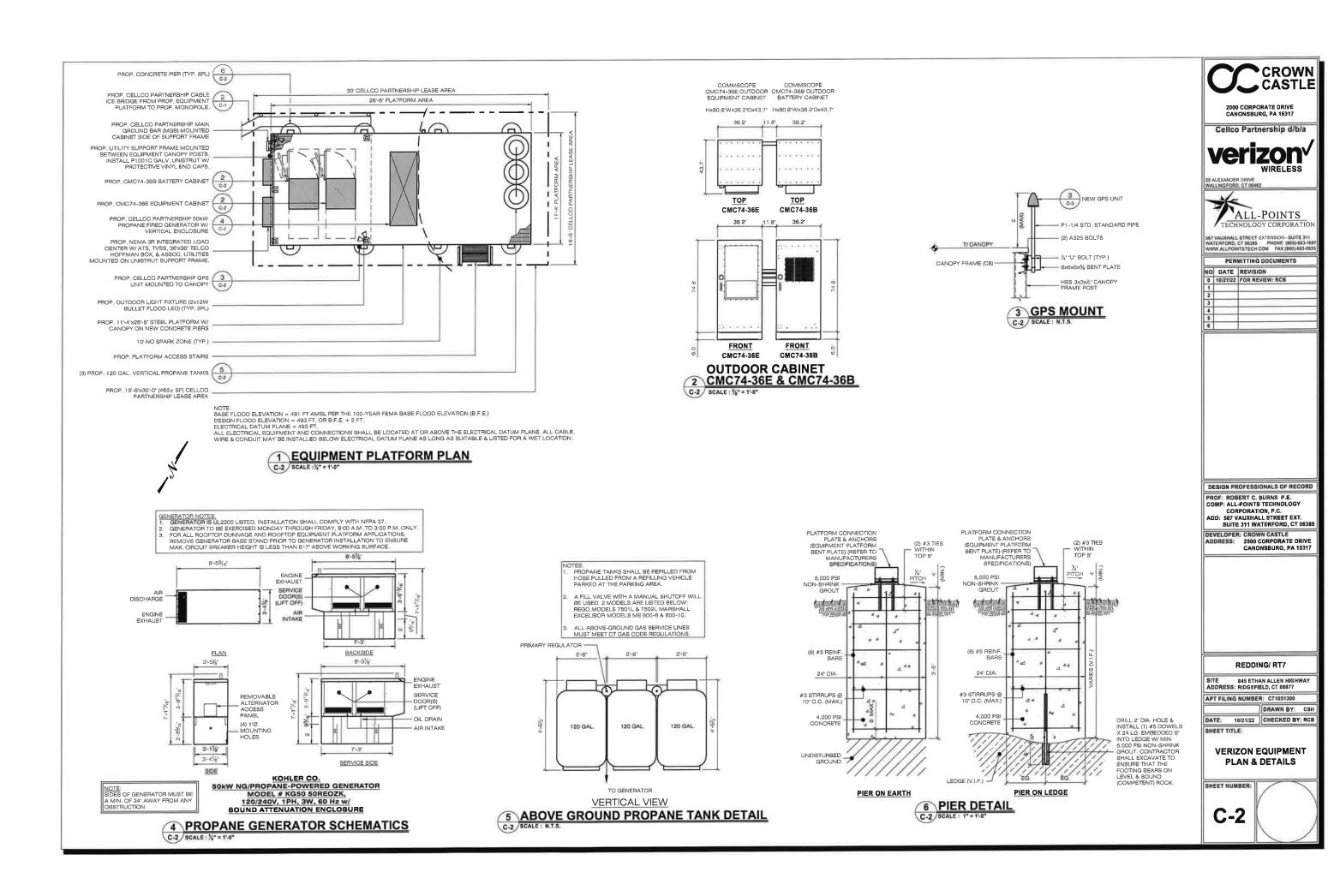
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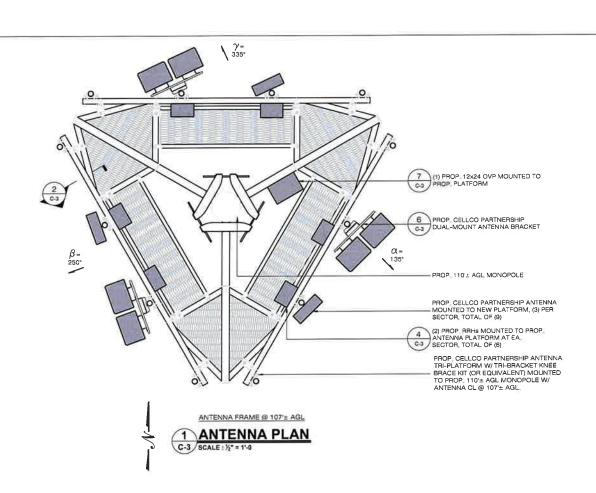
TOWER ELEVATION

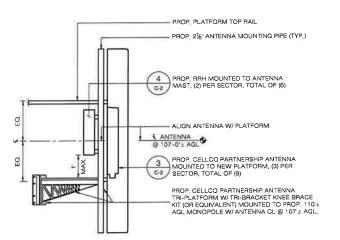
A-2



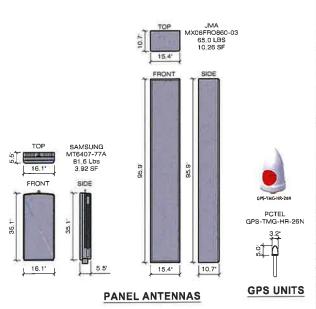








2 ANTENNA MOUNTING DETAIL



3 ANTENNA DETAILS



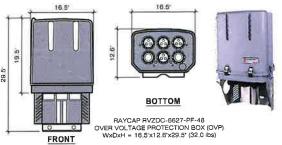
DESIGN PROFESSIONALS OF RECORD PROF. ROBERT C. BURNS P.E. COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C. ADD: 567 VAUXHALL STREET EXT, SUITE 311 WATERFORD, CT 06385

SAMSUNG DUAL HIGH BAND B2/B66A (RF4439d-25A) RRH PCS/AWS REMOTE RADIO HEAD (RRH) HxWxD=15,0'x15,0'x10,1' (97,5 Lbs)

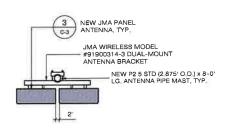
SAMSUNG DUAL LOW BAND B5/B13 (RF4440d-13A) RRH 850/700 REMOTE RADIO HEAD (RRH) HxWxD=15_0'x15_0'x9_1' (82_0 Lbs)

NOTE: WEIGHTS INCLUDE SOLAR SHEILD & MOUNTING BRACKET

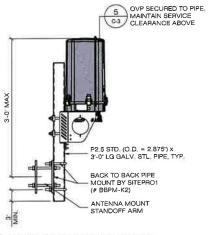




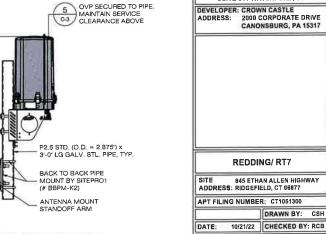
5 MAIN DISTRIBUTION BOX (12 OVP)



DUAL-MOUNT
6 BRACKET DETAIL



7 OVP TOWER MOUNT
C-3 SCALE: ½" = 1'-9"



VERIZON ANTENNA PLAN & DETAILS SHEET NUMBER

DRAWN BY: CSH



WETLAND INSPECTION

August 17, 2022 APT Project No.: CT1051300

Client: Crown Castle Atlantic LLC

2000 Corporate Drive Canonsburg, PA 15317

Project Name: Redding/Rte 7

Site Address: 845 Ethan Allen Highway, Ridgefield, Connecticut

Project Description: Client proposes replacement of an existing 100' tall unipole

telecommunications tower with a 110' tall monopole tower and

expansion of an existing equipment compound.

Date of Investigation: 6/30/2022

Field Conditions: Weather: sunny, mid 80's

Soil Moisture: dry to moist

Wetland/Watercourse Delineation Methodology1:

☑Connecticut Inland Wetlands and Watercourses

□Connecticut Tidal Wetlands

Municipal Upland Review Area:

Parcher Lustof

Wetlands: 100 feet Watercourses: 100 feet

The wetlands inspection was performed by²:

Matthew Gustafson, Registered Soil Scientist

Enclosures: Wetland Delineation Field Form & Wetland Inspection Map

This report is provided as a brief summary of findings from APT's wetland investigation of the referenced Study Area that consists of proposed development activities and areas generally within 200 feet.³ If applicable, APT is available to provide a more comprehensive wetland impact analysis upon receipt of site plans depicting the proposed development activities and surveyed location of identified wetland and watercourse resources.

Wetlands and watercourses were delineated in accordance with applicable local, state and federal statutes, regulations and guidance.

2 All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.

³ APT has relied upon the accuracy of information provided by Crown Castle and its contractors regarding proposed lease area and access road/utility easement locations for identifying wetlands and watercourses within the study area.

Attachments

- > Wetland Delineation Field Form
- Wetland Inspection Map

Wetland Delineation Field Form

Wetland I.D.:	Wetland 1				
Flag #'s:	WF 1-01 to 1-18				
Flag Location Method:	Site S	te Sketch ⊠ GPS (sub-meter) located ⊠		S (sub-meter) located ⊠	
VETLAND HYDROLOG	Y:				
IONTIDAL 🗵		a 116 - Lally Plandad [Permanently Flooded □	
Intermittently Flooded □		Artificially Flooded □		Temporarily Flooded □	
Semipermanently Flooded □				Seasonally Saturated/perched	
Permanently Saturated □		Seasonally Saturated/seepage Seasonally Saturated/perch of seasonally saturated bordering wetlands along the southern b			
Comments: Wetland 1 of the Norwalk River within	consists n its flo	s of seasonally saturated bord oodplain margins.	ering w	edands along the southern bank of	
CIC NOIVIGIN NIVEL VIICIII	11 100 110	ouplant margine.			
IDAL 🗆					
Subtidal 🗆		Regularly Flooded □		Irregularly Flooded □	
Irregularly Flooded 🗆					
Irregularly Flooded ☐ Comments: None					
Comments: None VETLAND TYPE: SYSTEM:		Riverine □	P	alustrine ⊠	
Comments: None VETLAND TYPE: SYSTEM: Estuarine		Riverine Marine	P	alustrine ⊠	
Comments: None VETLAND TYPE: SYSTEM: Estuarine Lacustrine		Riverine Marine	P	alustrine ⊠	
Comments: None VETLAND TYPE: SYSTEM: Estuarine Lacustrine			P	alustrine ⊠	
Comments: None VETLAND TYPE: YSTEM: Estuarine Lacustrine Comments: None		Marine □			
Comments: None VETLAND TYPE: SYSTEM: Estuarine Lacustrine Comments: None				alustrine ⊠ orested ⊠	
Comments: None VETLAND TYPE: SYSTEM: Estuarine Lacustrine Comments: None CLASS: Emergent Open Water		Marine □ Scrub-shrub ⊠ Disturbed ⊠	F	orested ⊠ Vet Meadow □	
Comments: None VETLAND TYPE: SYSTEM: Estuarine Lacustrine Comments: None CLASS: Emergent Open Water Comments: Wetland sy	pen wa	Marine □ Scrub-shrub ⊠ Disturbed ⊠ s dominated by a complex outer resources. Delineated both	F V	orested ⊠	
Comments: None VETLAND TYPE: SYSTEM: Estuarine Lacustrine Comments: None CLASS: Emergent Open Water Comments: Wetland sy interior forested and op associated with the exist	pen wa sting si	Marine □ Scrub-shrub ⊠ Disturbed ⊠ s dominated by a complex outer resources. Delineated both	F V	orested ⊠ Vet Meadow □ gent and scrub/shrub habitats with	
Comments: None VETLAND TYPE: SYSTEM: Estuarine Lacustrine Comments: None CLASS: Emergent Open Water Comments: Wetland sy interior forested and op associated with the exist	pen wa sting si	Marine □ Scrub-shrub ⊠ Disturbed ⊠ s dominated by a complex outer resources. Delineated both	F V f emerg undary	orested ⊠ Vet Meadow □ gent and scrub/shrub habitats with	
Comments: None VETLAND TYPE: SYSTEM: Estuarine Lacustrine Comments: None CLASS: Emergent Open Water Comments: Wetland sy interior forested and or associated with the existence VATERCOURSE TYPE: Perennial	pen wa sting si	Scrub-shrub Scrub-shrub Disturbed s dominated by a complex of the resources. Delineated botte development. Intermittent Intermittent	F V f emerg undary	orested ⊠ Vet Meadow □ Jent and scrub/shrub habitats with is characterized by toe of fill slope	
Comments: None VETLAND TYPE: SYSTEM: Estuarine Lacustrine Comments: None CLASS: Emergent Open Water Comments: Wetland sy interior forested and or associated with the existence VATERCOURSE TYPE: Perennial Watercourse Name: No	pen wa sting si	Marine □ Scrub-shrub ⊠ Disturbed ⊠ s dominated by a complex of the resources. Delineated botte development. Intermittent □ River	F V f emergundary	orested ⊠ Vet Meadow □ Jent and scrub/shrub habitats with is characterized by toe of fill slope	

Wetland Delineation Field Form (Cont.)

SPECIAL AQUATIC HABITAT:

DI ECIAL AQUALLE III III	
Vernal Pool Yes □ No 図 Potential □	Other
Vernal Pool Habitat Type: None	
Comments: None	

SOTLS:

501E51					
Are field identified soils generally consistent with NRCS mapped soils?	Yes ⊠	No □			
Wetland soils: Saco silt loam (soil unit 108); Catden and Freetown soils (soil unit 18)					
Wetland soils: Saco silt loam (soil unit 108); Catdell and Preetown soils (soil unit 10)					
Upland soils: Canton and Charlton fine sandy loams (soil unit 60); Sutton fine sandy loam (soil unit					
50); Udorthents-Urban land complex (soil unit 306)					

DOMINANT PLANTS:

Broad-Leaf Cattail (Typha latifolia)	Silky Dogwood (Cornus amomum)		
Skunk Cabbage (Symplocarpus foetidus)	Spicebush (Lindera benzoin)		
Green Ash (Fraxinus pennsylvanica)	Sphagnum moss (Sphagnum spp.)		
Common Reed* (Phragmites australis)	Red Maple (Acer rubrum)		
Eastern Cottonwood (Populus deltoides)	Multiflora Rose* (Rosa multiflora)		

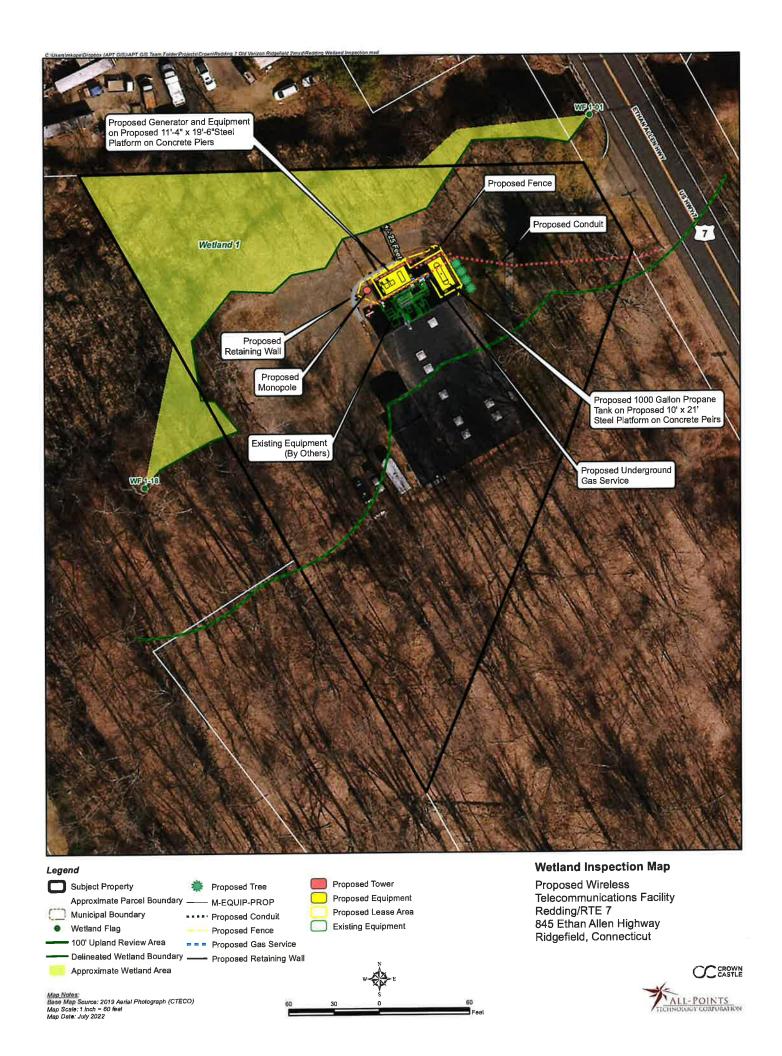
^{*} denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

One wetland, identified as Wetland 1, was identified on the subject property in proximity to the existing and proposed wireless telecommunications facility. Wetland 1 consists of a complex of hillside seep wetlands draining to the Norwalk River, bordering floodplain wetlands, and backwater wetlands to the riverine resource. A majority of the wetland is forested and scrub/shrub. Hillside seep areas occur to the west of the Project Area with a disturbed/fill slope marking the wetland boundary. This wetland drains east under State Route 7.

Based on APT's current understanding of the proposed tower replacement and compound expansion project, the proposed activities would not directly impact nearby wetlands or the Norwalk River. Activities associated with expansion of the compound would occur ± 25 feet south of the nearest wetland boundary. An existing gravel access that currently services the property's existing development, including the existing telecommunications facility, will continue to be used for access.

Minor temporary wetland impacts may be associated with construction activities due to the close proximity to wetlands. Provided sedimentation and erosion controls are designed, installed and maintained during construction in accordance with the 2002 Connecticut Guidelines For Soil Erosion and Sediment Control, temporary impacts would be anticipated to be minimal. APT will provide a complete wetland assessment once site plans are finalized in order to evaluate the project's impact to nearby wetland resources.





WETLAND & FLOODPLAIN IMPACT ANLYSIS

November 21, 2022

Ms. Sarah Brown, Sr. Business Analyst Crown Castle 6325 Ardrey Road, Suite 600 Charlotte, NC 28277

Re: Crown Castle Redding/RT7 Telecommunications Facility 845 Ethan Allen Highway Ridgefield, Connecticut 06877

Dear Ms. Brown,

On behalf of Crown Castle, All-Points Technology Corporation, P.C. ("APT") is pleased to provide this wetland and floodplain impact analysis for the referenced telecommunications replacement project. APT understands that Crown Castle has designated this telecommunications site as the "Redding/RT7" facility and is referenced herein as the "Replacement Facility". This document provides an analysis of the proposed Replacement Facility's impact to wetland and floodplain resources that are located on the subject property based on APT's wetland investigation performed on June 30, 2022 and a review of site plans prepared by APT dated 10/21/22.

Project and Site Description

The subject property consists of an approximately 1.8-acre parcel developed with a commercial office building identified as 845 Ethan Allen Highway in Ridgefield, Connecticut. Access to the subject property and Replacement Facility is currently provided by an existing gravel driveway that serves the office building and existing unipole wireless communications facility. The surrounding land-use consists of commercial properties to the north, east and south and residences to the west. The subject property is surrounded by commercial, agricultural and open space uses.

The subject property currently contains a 100-foot tall flagpole style wireless communications tower ("unipole") and associated equipment compound located along the north side of an existing office building that occupies the property. The unipole tower is not capable of supporting new wireless communications antenna and supporting equipment, requiring upgrading to a standard monopole design. Crown Castle proposes to construct the Replacement Facility (consisting of a self-supporting, monopole tower) in the same general location as the existing tower. The existing fenced compound

surrounding the flagpole tower requires a minor expansion to accommodate the proposed Replacement Facility and Verizon's equipment, which will be installed on an elevated steel platform.

Wetland Impact Analysis

One wetland area was delineated along the north and west parcel boundaries, consisting of the Norwalk River (to the north) and bordering forested floodplain wetlands. Please refer to the enclosed Wetland Delineation Map provided in Attachment A - Figures for the location of the identified wetland resource area. This riparian wetland system consists of a nearly level forested floodplain bordering along the south bank of the Norwalk River. Both mineral floodplain soils and organic soils comprise the identified swamp. The delineated jurisdictional edge is characterized by a shallow fill slope associated with the subject property development, resulting in disturbance along the boundary of this wetland system.

Based on APT's understanding of the proposed Replacement Facility and a review of the project site plans, no direct impact to wetlands is associated with the proposed Replacement Facility development. The proposed compound would be located ±25 feet south of Wetland at its nearest point from the northeast side of the proposed retaining wall. Although the proposed Replacement Facility would be slightly closer to wetlands than existing conditions, an existing gravel drive is currently located between the existing facility and Wetland 1 so the proposed development would not encroach closer to nearby wetlands than the existing site development footprint. No improvements are required to the existing gravel drive for the Replacement Facility development activities. A new underground utility conduit is proposed south of the existing gravel drive from CL&P pole #19730 located along Ethan Allen Highway to the existing transformer located within the existing facility compound.

As will be discussed in the subsequent Floodplain Impact Analysis section, a compensatory flood storage area is proposed near the west property boundary to compensate for flood volume loss associated with expansion of the existing compound due to its location within a flood hazard AE zone. The compensatory flood storage area is proposed in a fill area located immediately adjacent to the wetland boundary along the western property boundary. Although no direct permanent impact to wetlands will occur due to construction of the compensatory flood storage area, work will occur along the wetland boundary in order to provide an unrestricted hydraulic connection to the Norwalk River. Appropriate erosion controls will be installed along the perimeter of the compensatory flood storage area, including some just within wetlands, to protect adjoining wetland resources and the Norwalk River. Any temporary disturbance to wetlands associated with the installation of erosion controls will be properly restored. The majority of the compensatory flood storage area will be planted with native wetland forbs and shrubs, resulting in both an increase in flood storage volume and wetland habitat on the subject property. The area within the proposed 489 foot grading line of the compensatory flood storage area (refer to Sheet No. SP-1) is located at the same elevation as the adjoining wetland and is anticipated to sustain wetland hydrology for a sufficiently long enough period during the growing season to support wetland vegetation. This area would be planted with a New England

wetland seed mix containing various native wetland sedges, rushes and other forbs. The side slopes of the compensatory flood storage area and areas above proposed grade elevation 489 would be planted with a conservation seed mix containing various native upland grasses and forbs.

Minor temporary impacts may occur during construction of the Replacement Facility due to the close proximity to wetlands. Provided sedimentation and erosion controls are designed, installed and maintained during construction activities in accordance with the *2002 Connecticut Guidelines For Soil Erosion and Sediment Control*, temporary impacts would be minimized/avoided. APT recommends that a wetland protection plan be implemented to provide additional protective measures to avoid temporary wetland impacts during construction. A proposed wetland protection plan is provided in Attachment B.

The wetland system currently experiences a high level of human activity associated with past and ongoing development activities including both on the subject property and on adjoining commercial properties as well as along State Route 7. Long term secondary impacts to wetland resources possibly associated with the operation of this facility are minimized by the fact the development is unmanned, it minimizes the creation of impervious surfaces with the use of a gravel compound, and it creates minimal traffic.

Provided these recommendations are implemented, it is APT's opinion that the proposed Replacement Facility development would not result in a likely adverse impact to wetland resources or the Norwalk River.

Floodplain Impact Analysis

The Replacement Facility is located within a Special Flood Hazard Zone AE with a 100-year Base Flood Elevation ("BFE") of 491 feet (NAVD 1988 datum; NGVD 1929 conversion = 492.0 feet) based on information from FIRM Panel 228, Map 09001C0228F, Effective Date June 18, 2010 and Flood Insurance Study, Volume 5 of 6, Fairfield County, Connecticut, Effective Date October 16, 2013. The FEMA map is provided in Attachment A – Figures. The BFE of 492.0 feet was used for evaluating the Replacement Facility's floodplain impacts and for calculating the total cubic yards of compensatory storage for proposed development located at and above this BFE. No work is proposed within the Norwalk River floodway.

A section of the existing facility retaining wall will be removed and replaced to support the proposed Replacement Facility's compound expansion. The proposed retaining wall will be designed in accordance with the CT Building Code and to withstand the subject flood event. A compensatory flood storage area will be installed along the western property line of the subject property as a means to offset the displaced volume from the proposed retaining wall, compound fill and equipment platform pier foundations. The bottom of the steel for the proposed equipment platform is at elevation 494.0 feet, placing it 2 feet above the BFE of 492.0 feet. The grade around the tower foundation is 492.0

feet and above; therefore, the concrete foundation for the tower is not included in the displacement

calculation.

The total floodplain storage volume loss has been calculated to be $23.4\pm$ cubic yards for the

Replacement Facility compound (new retaining wall, associated fill, equipment platform pier

foundations). A $59.7\pm$ cubic yard compensatory flood storage area is proposed along the west

property boundary within an existing fill area that will provide unrestricted hydraulic access to the

Norwalk River and adjoining floodplain wetlands. This will generally provide compensatory flood

storage on an equal volume, equal elevation basis to the project's floodplain displacement. The result

of these activities will increase the Norwalk River's flood storage capacity by 36.3± cubic yards.

Based on the proposed design that minimizes impact to floodplain resources in combination with the

compensatory storage area, the Replacement Project will not result in an adverse effect to the

hydraulic characteristics of the Norwalk River floodplain.

As the Connecticut Siting Council's jurisdiction supersedes local jurisdiction, the proposed project will

not be securing a floodplain development permit under local zoning regulations that would typically

evaluate compliance with National Flood Insurance Program ("NFIP") regulations. Therefore, Crown

Castle will request a review of the project's floodplain activities for compliance with the NFIP

regulations and applicable design standards from the NFIP State Coordinator located at the

Connecticut Department of Energy & Environmental Protection's office. The results of the NFIP

compliance determination request will be forwarded to the Council upon receipt.

If you have any questions regarding this wetland and floodplain impact analysis, please feel free to

contact me by telephone at (860) 552-2033 or dgustafson@allpointstech.com

Sincerely,

All-Points Technology Corp., P.C.

Dean Lustafon

Dean Gustafson

Senior Wetland Scientist

Enclosures

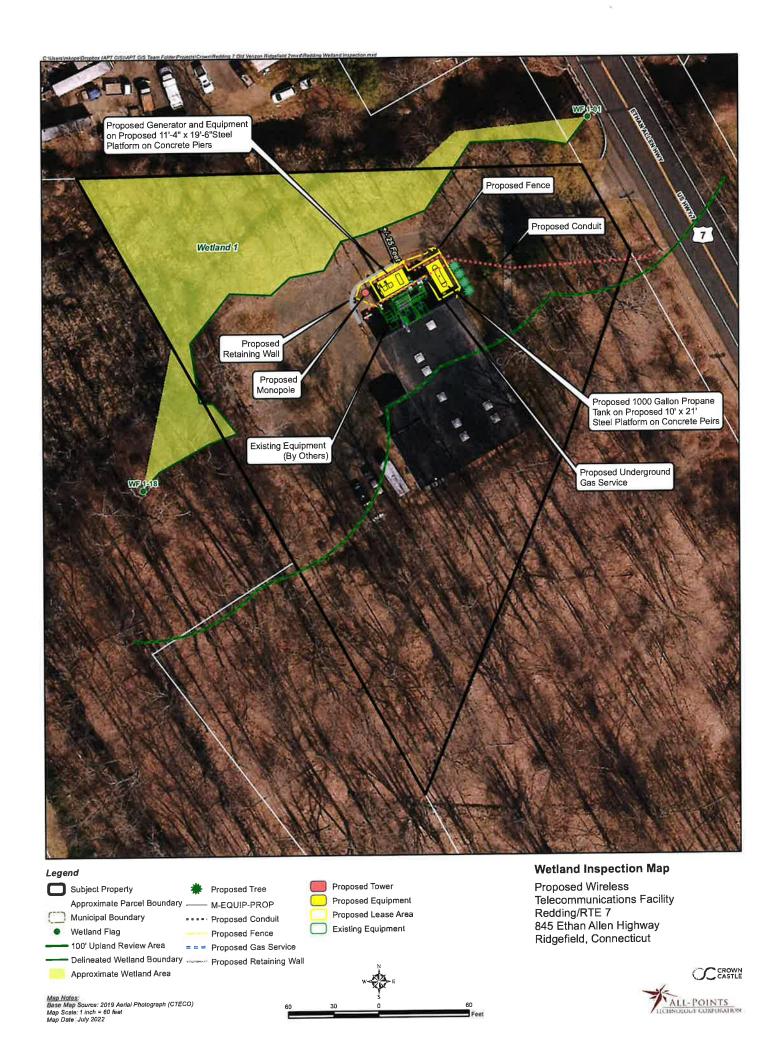
cc:

Kenneth C. Baldwin, Robinson & Cole LLP

Robert Burns, APT

Attachment A Figures

- > Wetland Inspection Map
- > FEMA FIRMette Map



National Flood Hazard Layer FIRMette



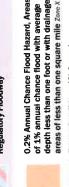
490 FEET eplacement 1:6,000 **IAZARD** AREA OF MINIMAL FI 1,500 MOOO Zone AE 1,000 490 FEET TownofaRidgeffeld 500 090013 250

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



Without Base Flood Elevation (BFE) Zone A, V, A99 With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway



Area with Reduced Flood Risk due to Future Conditions 1% Annual Chance Flood Hazard Zone X Levee. See Notes, Zone X



Area with Flood Risk due to Levee Zone D

Area of Minimal Flood Hazard Zone X

Area of Undetermined Flood Hazard Zone D **Effective LOMRs**

OTHER AREAS

Channel, Culvert, or Storm Sewer STRUCTURES | 111111 Levee, Dike, or Floodwall

Cross Sections with 1% Annual Chance Water Surface Elevation Coastal Transect

Base Flood Elevation Line (BFE) Jurisdiction Boundary Limit of Study more \$13 more

Coastal Transect Baseline Hydrographic Feature Profile Baseline

OTHER FEATURES

Digital Data Available

No Digital Data Avallable Unmapped MAP PANELS

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map compiles with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown compiles with FEMA's basemap

authoritative NFHL web services provided by FEMA. This map reflect changes or amendments subsequent to this date and was exported on 11/21/2022 at 12:35 PM and does not time. The NFHL and effective information may change or The flood hazard information is derived directly from the become superseded by new data over time. This map image is void if the one or more of the following map legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for elements do not appear: basemap Imagery, flood zone labels, unmapped and unmodernized areas cannot be used for

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Attachment B Wetland Protection Program

ENVIRONMENTAL NOTES - RESOURCES PROTECTION MEASURES

WETLAND AND NORWALK RIVER PROTECTION PROGRAM

As a result of the project's location in the vicinity of sensitive wetland resources and the Norwalk River, the following Protection Program shall be implemented by the Contractor to avoid unintentional impacts to proximate wetland resources during construction activities.

It is of the utmost importance that the Contractor complies with the requirement for the installation of protective measures and the education of its employees and subcontractors performing work on the project site. The wetland protection measures shall be implemented and maintained throughout the duration of construction activities until permanent stabilization of site soils has occurred.

All-Points Technology Corporation, P.C. ("APT") will serve as the Environmental Monitor for this project to ensure that these protection measures are implemented properly and will provide an education session on the project's proximity to sensitive wetland resources prior to the start of construction activities and typical amphibians and reptiles associated with these habitats that may be encountered during construction. The Contractor shall contact Dean Gustafson, Senior Wetland Scientist at APT, at least 5 business days prior to the pre-construction meeting. Mr. Gustafson can be reached by phone at (860) 552-2033 or via email at dgustafson@allpointstech.com.

This resources protection program consists of several components including: education of all contractors and sub-contractors prior to initiation of work on the site; installation of erosion controls; petroleum materials storage and spill prevention; protective measures; rare species protection measures; herbicide, pesticide, and salt restrictions; and, reporting.

1. Contractor Education:

- a. Prior to work on site and initial deployment/mobilization of equipment and materials, the Contractor shall attend an educational session at the preconstruction meeting with APT. This orientation and educational session will consist of information such as, but not limited to: identification of wetland resources proximate to work areas and the environmentally sensitive nature of the development site.
- b. The Contractor will be provided with cell phone and email contacts for APT personnel to immediately report any releases or impacts to nearby wetland resource areas. Educational poster materials of the environmentally sensitive nature of the work area will be provided by APT and displayed on the job site to maintain worker awareness as the project progresses.

2. Erosion and Sedimentation Controls/Isolation Barriers

a. Plastic netting used in a variety of erosion control products (i.e., erosion control blankets, fiber rolls [wattles], reinforced silt fence) has been found to entangle wildlife, including reptiles, amphibians, birds and small mammals. No permanent erosion control products or reinforced silt fence will be used on the project. Temporary erosion control products that will be exposed at the ground surface and represent a potential for wildlife entanglement will use either erosion control blankets and fiber rolls

- composed of processed fibers mechanically bound together to form a continuous matrix (netless) or netting composed of planar woven natural biodegradable fiber to avoid/minimize wildlife entanglement.
- b. The extent of the erosion controls will be as shown on the site plans. The Contractor shall have additional sedimentation and erosion controls stockpiled on site should field or construction conditions warrant extending devices. In addition to the Contractor making these determinations, requests for additional controls will also be at the discretion of the Environmental Monitor.
- c. Installation of erosion and sedimentation controls, required for erosion control compliance and creation of a barrier to possible migrating/dispersing wildlife, shall be performed by the Contractor. The Environmental Monitor will inspect the work zone area prior to and following erosion control barrier installation. In addition, work zones will be inspected prior to and following erosion control barrier installation to ensure the area is free of wildlife and satisfactorily installed. The intent of the barrier is to segregate the majority of the work zone from possible migrating wildlife, in addition to serving as an erosion control device. Oftentimes complete isolation of a work zone is not feasible due to accessibility needs and locations of staging/material storage areas, etc. In those circumstances, the barriers will be positioned to deflect migrating/dispersal routes away from the work zone to minimize potential encounters with wildlife at the discretion of the Environmental Monitor.
- d. The Contractor shall be responsible for daily inspections of the sedimentation and erosion controls for tears or breeches and accumulation levels of sediment, particularly following storm events that generate a discharge, as defined by and in accordance with applicable local, state and federal regulations. The Contractor shall notify the APT Environmental Monitor within 24 hours of any breeches of the sedimentation and erosion controls and any sediment releases beyond the perimeter controls that impact wetlands or areas within 100 feet of wetlands. The APT Environmental Monitor will provide periodic inspections of the sedimentation and erosion controls throughout the duration of construction activities only as it pertains to their function to protect nearby wetlands. Such inspections will generally occur once per month. The frequency of monitoring may increase depending upon site conditions, level of construction activities in proximity to sensitive receptors, or at the request of regulatory agencies. If the Environmental Monitor is notified by the Contractor of a sediment release, an inspection will be scheduled specifically to investigate and evaluate possible impacts to wetland resources.
- e. Third party monitoring of sedimentation and erosion controls will be performed by other parties, as necessary, under applicable local, state and/or federal regulations and permit conditions.
- f. No equipment, vehicles or construction materials shall be stored within 100 feet of wetland resources outside of the established work zone.
- g. All silt fencing and other erosion control devices shall be removed within 30 days of completion of work and permanent stabilization of site soils. If

fiber rolls/wattles, straw bales, or other natural material erosion control products are used, such devices will not be left in place to biodegrade and shall be promptly removed after soils are stable so as not to create a barrier to wildlife movement. Seed from seeding of soils should not spread over fiber rolls/wattles as it makes them harder to remove once soils are stabilized by vegetation.

3. Petroleum Materials Storage and Spill Prevention

- a. Certain precautions are necessary to store petroleum materials, refuel and contain and properly clean up any inadvertent fuel or petroleum (i.e., oil, hydraulic fluid, etc.) spill due to the project's location in proximity to wetland resources.
- b. A spill containment kit consisting of a sufficient supply of absorbent pads and absorbent material will be maintained by the Contractor at the construction site throughout the duration of the project. In addition, a waste drum will be kept on site to contain any used absorbent pads/material for proper and timely disposal off site in accordance with applicable local, state and federal laws.
- c. Servicing of machinery shall not occur within 100 feet of wetlands.
- d. At a minimum, the following petroleum and hazardous materials storage and refueling restrictions and spill response procedures will be adhered to by the Contractor.
 - i. Petroleum and Hazardous Materials Storage and Refueling
 - 1. Refueling of vehicles or machinery shall occur a minimum of 100 feet from wetlands. If refueling within 100 feet from wetlands is required, it shall take place on an impervious pad with secondary containment designed to contain fuels.
 - 2. Any fuel or hazardous materials that must be kept on site shall be stored on an impervious surface utilizing secondary containment a minimum of 100 feet from wetlands.
 - ii. Initial Spill Response Procedures
 - 1. Stop operations and shut off equipment.
 - 2. Remove any sources of spark or flame.
 - 3. Contain the source of the spill.
 - 4. Determine the approximate volume of the spill.
 - 5. Identify the location of natural flow paths to prevent the release of the spill to sensitive nearby wetlands.
 - 6. Ensure that fellow workers are notified of the spill.

iii. Spill Clean Up & Containment

- Obtain spill response materials from the on-site spill response kit. Place absorbent materials directly on the release area.
- 2. Limit the spread of the spill by placing absorbent materials around the perimeter of the spill.
- 3. Isolate and eliminate the spill source.
- 4. Contact appropriate local, state and/or federal agencies, as necessary.

 Contact a disposal company to properly dispose of contaminated materials.

iv. Reporting

- 1. Complete an incident report.
- 2. Submit a completed incident report to local, state and federal agencies, as necessary, including the Connecticut Siting Council.

4. Herbicide, Pesticide, and Salt Restrictions

- a. The use of herbicides and pesticides at the Facility shall be minimized. If herbicides and/or pesticides are required at the Facility, their use will be used in accordance with current Integrated Pest Management ("IPM") principles with particular attention to avoid/minimize applications within 100 feet of wetland resources.
- b. Maintenance of the facility during the winter months shall minimize the application of chloride-based deicers salt with use of more environmentally friendly alternatives.

5. Reporting

- a. Compliance Monitoring Reports (brief narrative and applicable photos) documenting each APT inspection will be submitted by APT to Crown Castle and its Contractor for compliance verification of these protection measures. These reports are not to be used to document compliance with any other permit agency approval conditions (i.e., DEEP Stormwater Permit monitoring, etc.). Any non-compliance observations of erosion control measures or evidence of erosion or sediment release will be immediately reported to Crown Castle and its Contractor and included in the reports along with any observations of wildlife.
- b. Following completion of the construction project, APT will provide a final Compliance Monitoring Report to Crown Castle documenting implementation of the wetland protection program and monitoring observations. Crown Castle is responsible for providing a copy of the final Compliance Monitoring Report to the Connecticut Siting Council for compliance verification.
- c. Any observations of rare species will be reported to CTDEEP by APT, with photo-documentation (if possible) and with specific information on the location and disposition of the animal.



NFIP CONSULTATION

November 21, 2022

via Email: diane.ifkovic@ct.gov

Ms. Diane Ifkovic, NFIP State Coordinator
Connecticut Department of Energy & Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127

Re: NFIP Compliance Determination Crown Castle Redding/RT7 Telecommunications Facility 845 Ethan Allen Highway Ridgefield, Connecticut 06877

Dear Ms. Ifkovic,

On behalf of Crown Castle, All-Points Technology Corporation, P.C. ("APT") is pleased to submit this letter requesting a determination from the National Flood Insurance Program ("NFIP") State Coordinator that the referenced telecommunications replacement project complies with applicable NFIP regulations. Crown Castle has designated this telecommunications site as the "Redding/RT7" Facility and is referenced herein as the "Replacement Facility".

As the proposed project would fall under Connecticut Siting Council's jurisdiction, which supersedes local jurisdiction, the proposed project will not secure a floodplain development permit under local zoning regulations that would otherwise evaluate compliance with NFIP regulations. Therefore, a review of the project's floodplain activities for compliance with the NFIP regulations is respectfully requested from your office.

Background

This project is similar to a previous December 22, 2015 NFIP consultation that APT performed on behalf of Cellco Partnership dba Verizon Wireless ("Verizon") for a facility identified at that time as "Ridgefield 2". Comments were received by the NFIP State Coordinator's office on January 19, 2016 via email and then in February 2016 Verizon Wireless decided to remove the project from its build program at that time, suspending the NFIP consultation. APT has reviewed the January 19th comments and incorporated them into the consultation request contained herein.

Project and Site Description

The subject property consists of an approximately 1.8-acre parcel developed with a commercial office building identified as 845 Ethan Allen Highway in Ridgefield, Connecticut. One wetland, identified as Wetland 1, was identified on the subject property in proximity to the existing and proposed wireless telecommunications facility, separated by an existing gravel access drive. Wetland 1 consists of a complex of hillside seep wetlands draining to the Norwalk River, bordering floodplain wetlands, and backwater wetlands to the riverine resource. Although close to Wetland 1 (±25 feet from the nearest wetland boundary), the proposed Replacement Facility would not result in permanent direct wetland impacts.

Access to the subject property and Replacement Facility is currently provided by an existing gravel driveway that serves the office building and existing unipole wireless communications facility. The surrounding land-use consists of commercial properties to the north, east and south and residences to the west. The subject property is surrounded by commercial, agricultural and open space uses.

Please refer to Site Location Map, Site Schematic, Wetland Inspection Map, and FEMA FIRMette Map provided in Attachment A - Figures. Photographs of the subject property and existing wireless communications facility are also enclosed in Attachment B – Photo Documentation.

The subject property currently contains a 100-foot tall flagpole style wireless communications tower ("unipole") and associated equipment compound located along the north side of an existing office building that occupies the property. The unipole tower is not capable of supporting new wireless communications antenna and supporting equipment, requiring upgrading to a standard monopole design. Crown Castle proposes to construct the Replacement Facility (consisting of a self-supporting, monopole tower) in the same general location as the existing tower. The Replacement Facility tower would rise to a total height of 110 feet above ground level to accommodate Verizon's new antenna array. Antennas owned and operated by others on the existing tower would be swapped over to the Replacement Facility. The existing fenced compound surrounding the flagpole tower requires a minor expansion to accommodate the proposed Replacement Facility and Verizon's equipment, which will be installed on an elevated steel platform.

Verizon will install antennas to be mounted at a centerline elevation of 107 feet ("AGL") on a 110 foot proposed steel monopole tower which will replace the existing 100 foot unipole tower. Verizon will install its equipment that includes cabinets, a propane fueled emergency backup power generator, and propane tank on an elevated steel platform. Power and telco utilities shall be routed underground to the proposed telecommunications equipment shelter from an existing utility backboard located with the existing fenced compound. All improvements developed as a part of this proposal will occur within the limits of the existing lease area. Crown Castle's project site plans prepared by APT, dated 10/21/22 are provided in Attachment C.

NFIP Floodplain Impact Analysis

The Replacement Facility is located within a Special Flood Hazard Zone AE with a 100-year Base Flood Elevation ("BFE") of 491 feet (NAVD 1988 datum; NGVD 1929 conversion = 492.0 feet) based on information from FIRM Panel 228, Map 09001C0228F, Effective Date June 18, 2010 and Flood Insurance Study, Volume 5 of 6, Fairfield County, Connecticut, Effective Date October 16, 2013. The BFE of 492.0 feet was used for evaluating the Replacement Facility's floodplain impacts and for calculating the total cubic yards of compensatory storage for proposed development located at and above this BFE. No work is proposed within the Norwalk River floodway. The proposed Replacement Facility is depicted on the FEMA FIRMette Map enclosed in Attachment B. A copy of the Norwalk River Flood Profile Panel 281P with the location of the Replacement Facility noted is provided in Attachment D.

A section of the existing facility retaining wall will be removed and replaced to support the proposed Replacement Facility's compound expansion. The proposed retaining wall will be designed in accordance with the CT Building Code and to withstand the subject flood event. A compensatory flood storage area will be installed along the western property line of the subject property as a means to offset the displaced volume from the proposed retaining wall, compound fill and equipment platform pier foundations. The bottom of the steel for the proposed equipment platform is at elevation 494.0 feet, placing it 2 feet above the BFE of 492.0 feet. The grade around the tower foundation is 492.0 feet and above; therefore, the concrete foundation for the tower is not included in the displacement calculation.

The total floodplain storage volume loss has been calculated to be 23.4± cubic yards for the Replacement Facility compound (new retaining wall, associated fill, equipment platform pier foundations). A 59.7± cubic yard compensatory flood storage area is proposed along the west property boundary within an existing fill area that will provide unrestricted hydraulic access to the Norwalk River and adjoining floodplain wetlands. This will generally provide compensatory flood storage on an equal volume, equal elevation basis to the project's floodplain displacement. The result of these activities will increase the Norwalk River's flood storage capacity by 36.3± cubic yards. A copy of APT's Flood Zone Displacement letter summarizing the floodplain displacement calculations, dated November 18, 2022, is provided in Attachment D.

Conclusion

Based on the results of the floodplain impact analysis and the compensatory storage area as detailed herein, the Replacement Project will not result in an adverse effect to the hydraulic characteristics of the Norwalk River floodplain.

Thank you for your consideration of this NFIP compliance determination request. Please feel free to contact me with any questions or if additional information is required at (860) 552-2033 or dgustafson@allpointstech.com

Sincerely,

All-Points Technology Corp., P.C.

Dean Gustafson

Senior Environmental Scientist

Dean Yustapan

Enclosures

CC:

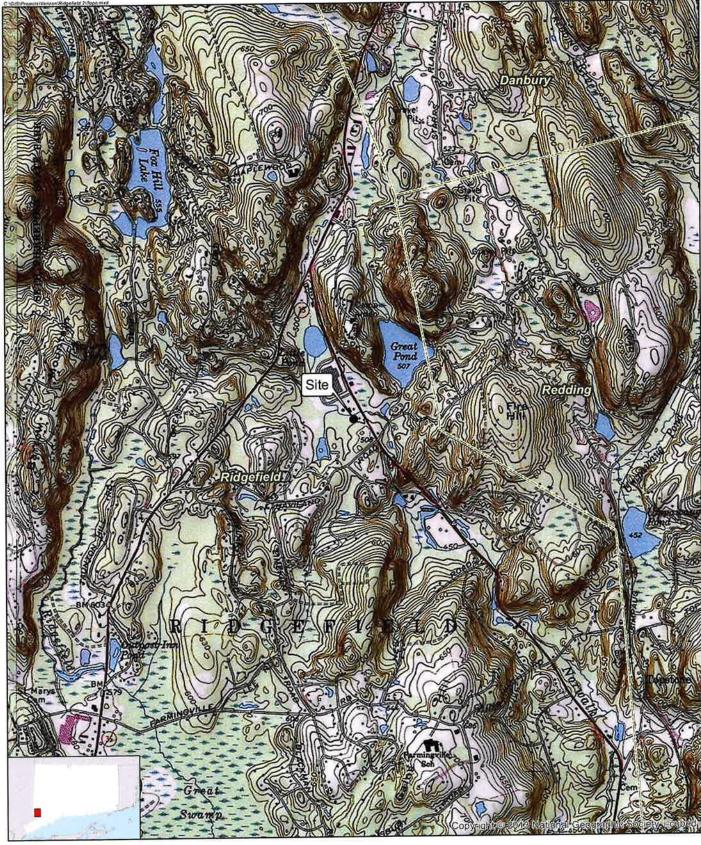
Sarah Brown, Crown Castle

Kenneth C. Baldwin, Robinson & Cole LLP

Robert Burns, APT

Attachment A Figures

- > Site Location Map
- > Site Schematic
- > Wetland Inspection Map
- > FEMA FIRMette Map



Legend

Site

Municipal Boundary

Map Notes: Base Map Source: USGS 7.5 Minute Topographic Quadrangle Map, Bethel, CT (1984) Map Scali: 1:24,000 Map Date: June 2015



Site Location Map

Proposed Wireless Telecommunications Facility Redding/RT7 845 Ethan Allen Highway Ridgefield, Connecticut





Legend

Subject Property

Proposed Tree (By Others)

Proposed Conduit (By Others) Proposed Fence (By Others)

= = = Proposed Verizon Wireless Gas Service

Proposed Retaining Wall (By Others)

Proposed Monopole (By Others)

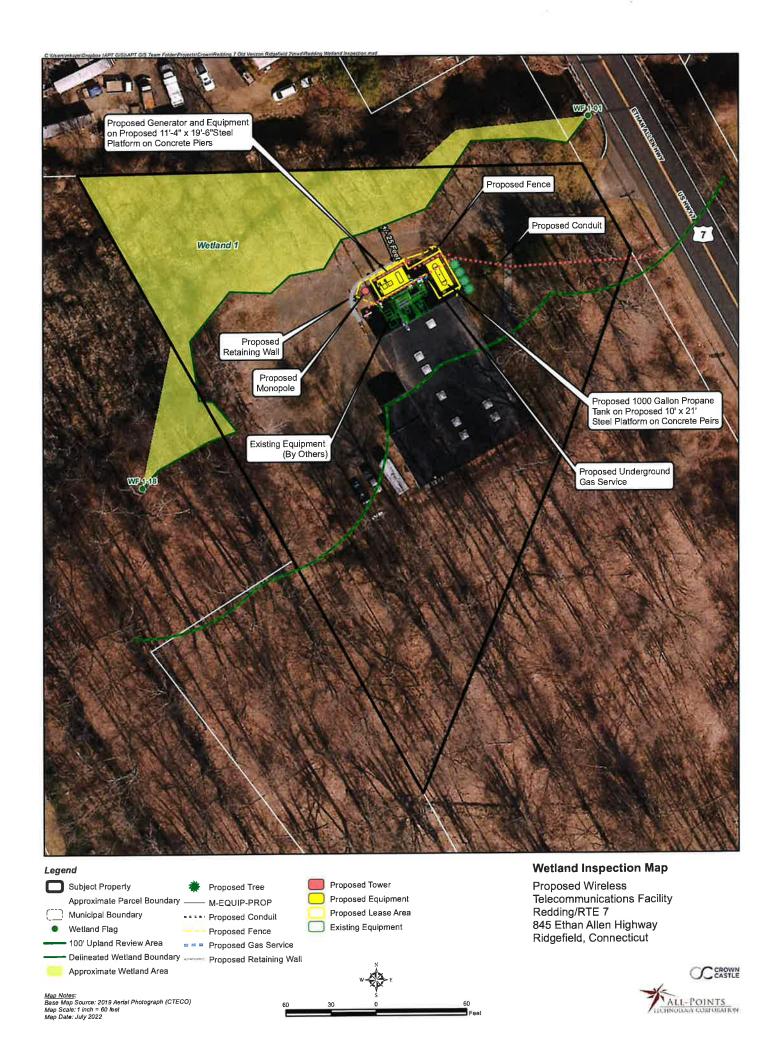
Proposed Verizon Wireless Equipment

Existing Equipment (By Others) Approximate Parcel Boundary



Proposed Wireless Telecommunications Facility Redding/RT7 845 Ethan Allen Highway Ridgefield, Connecticut





National Flood Hazard Layer FIRMette



OTHER AREAS OF FLOOD HAZARD eff. 6/18/2010 39001C0229F 490 FEET eplacement 1:6,000 AREA OF MINIMAL FLOOD eff. 6/18/2010 09001C0236F Zone AE 1,500 Zone AE MOOOL 1,000 491 FEET **Town of Ridge field** 500 090013 250

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



of 1% annual chance flood with average depth less than one foot or with drainage 0.2% Annual Chance Flood Hazard, Areas areas of less than one square mile Zone X With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway



Area with Flood Risk due to Levee Zone D Area with Reduced Flood Risk due to Levee. See Notes. Zone X



No screen Area of Minimal Flood Hazard Zone X **Effective LOMRs**

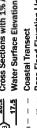


Area of Undetermined Flood Hazard Zone D

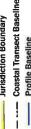
OTHER AREAS















OTHER FEATURES



No Digital Data Available Unmapped

MAP PANELS

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not vold as described below. The basemap shown compiles with FEMA's basemap accuracy standards

authoritative NFHL web services provided by FEMA. This map reflect changes or amendments subsequent to this date and was exported on 11/21/2022 at 12:35 PM and does not time. The NFHL and effective information may change or The flood hazard information is derived directly from the become superseded by new data over time. This map image is void if the one or more of the following map elements do not appear: basemap Imagery, flood zone labels, FIRM panel number, and FIRM effective date. Map Images for legend, scale bar, map creation date, community identifiers, regulatory purposes.

Basemap: USGS National Map: Ortholmagery: Data refreshed October, 2020

Attachment B Photo Documentation

PHOTO DOCUMENTATION Crown Castle Redding/RT7 845 Ethan Allen Highway, Ridgefield, CT

Photos taken on June 30, 2022



Photo 1: View of existing wireless telecommunications facility looking south.



Photo 2: View of existing wireless telecommunications facility looking west.





Photo 3: View of Norwalk River looking northwest.



Photo 4: View of Wetland 1 near west property boundary looking northwest.

Attachment C Project Site Plans



S CROWN

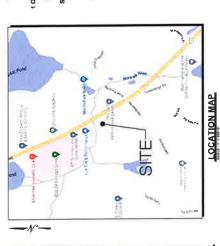
Verizon^V Cellco Partnership dibia

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ALL-POINTS 15) VALIET ALL STREET EXTLANDING SULE 27 WATER DRID C. 26,85 P. DAL (\$5) 653 WHEN ALIPDA STEET COM PAR (\$1) 657 C

> 2000 CORPORATE DRIVE CANONSBURG, PA 15317

845 ETHAN ALLEN HIGHWAY RIDGEFIELD, CT 06877 **REDDING/RT7**



- 1 OF 1 PROPERTY & TOPOGRAPHIC SURVEY T-1 TITLE SHEET
 - R-1 ABUTTERS MAP
- SP-1 COMPENSATORY FLOOD STORAGE PLANS & SECTIONS

SITE INFORMATION

PROJECT DESCRIPTION NEW TO FACE MONOPOLE & NEW GROUND EQUIPMENT WITHIN AN EXPENSE OF COUNTRY OF THE PROPERTY O PROJECT LOCATION 845 ETHAN ALLEN HIGHWAY

PROJECT DEVELOPER CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317 COUNTY FAIRFIELD

LATITUDE 4" 846 9783 N LONGITUDE 73 28 20 7094" W ELEVATION 49" 5". AMSL

PROPERTY OWNER 845 LLC 07 LOHDS HWY WESTON CT 05883

APP CANT CROSSICATE DRIVE 2000 CORPORATE DRIVE CANONSBURG: PA:53'?

LEGAL ROBINSON & COLE, LLP KENNETH C BALDWIN 280 TRUMBULL STREET HARTFORD, CT 05 03 SITE ENCASER!

M. HOMIS TECHNOLOGY CORP BAT VALUE M. ETFETTENTING ON SUITE 311 WATERFORD, CT 06385 (860) 663 * 697

1:1

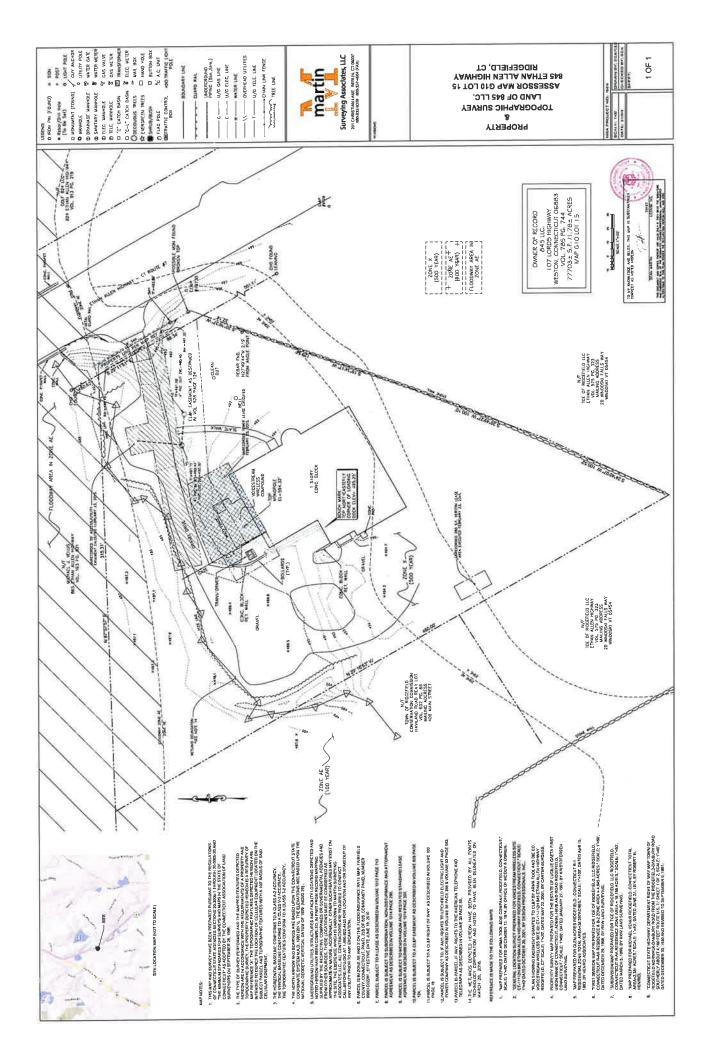
MUNICIPAL NOTIFICATION LIMIT MAP

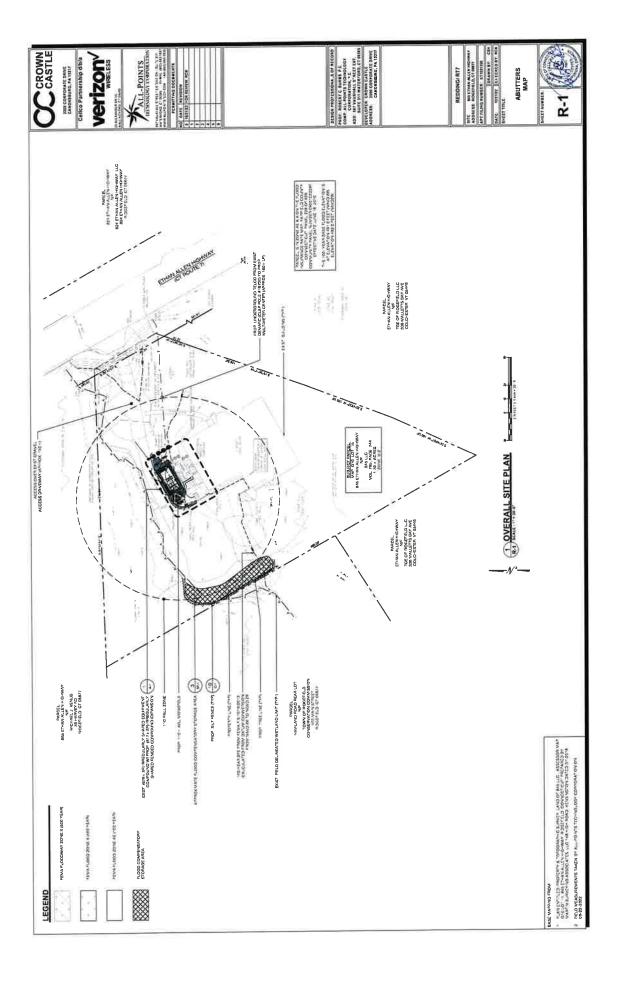
LIST OF DRAWINGS

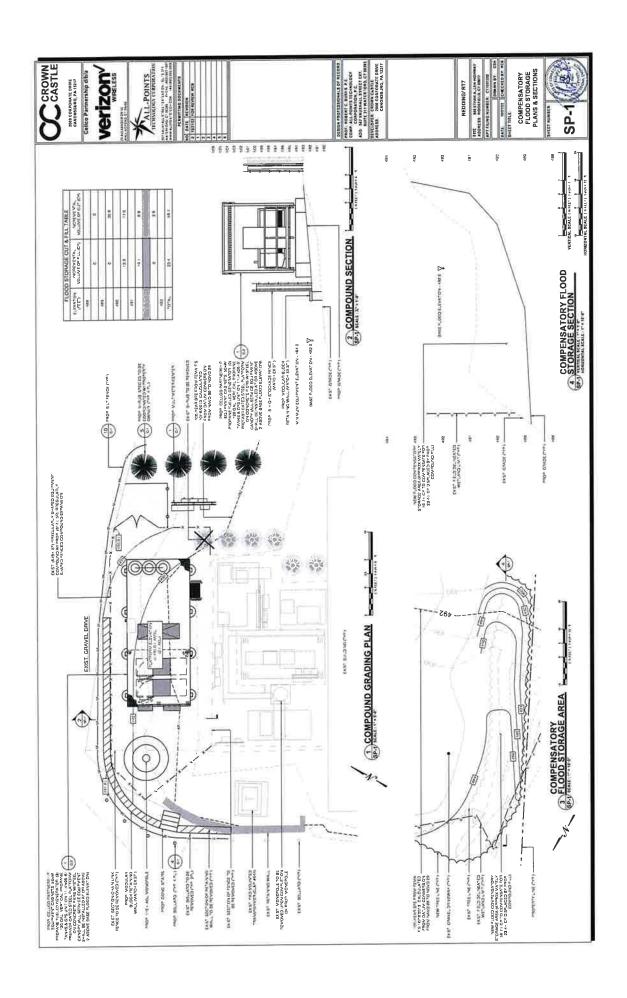
- - A-1 COMPOUND PLAN
- A-2 TOWER ELEVATION C-1 SITE DETAILS
- C-2 VERIZON EQUIPMENT PLAN & DETAILS
 - C-3 VERIZON ANTENNA PLAN & DETAILS

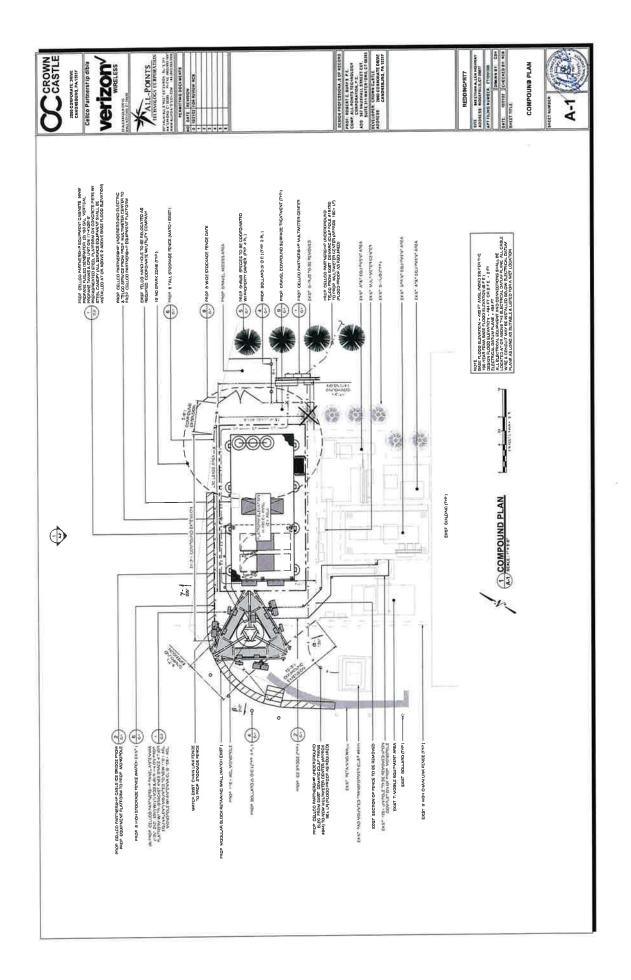
- SITE BEST FROM ALLEN HOR ADDRESS BOOKER, CT 0887 MONTHER CT 1887 WE WILLIAM BY CONTRACT OF THE STATES OF THE STATE REDDING/ RT7

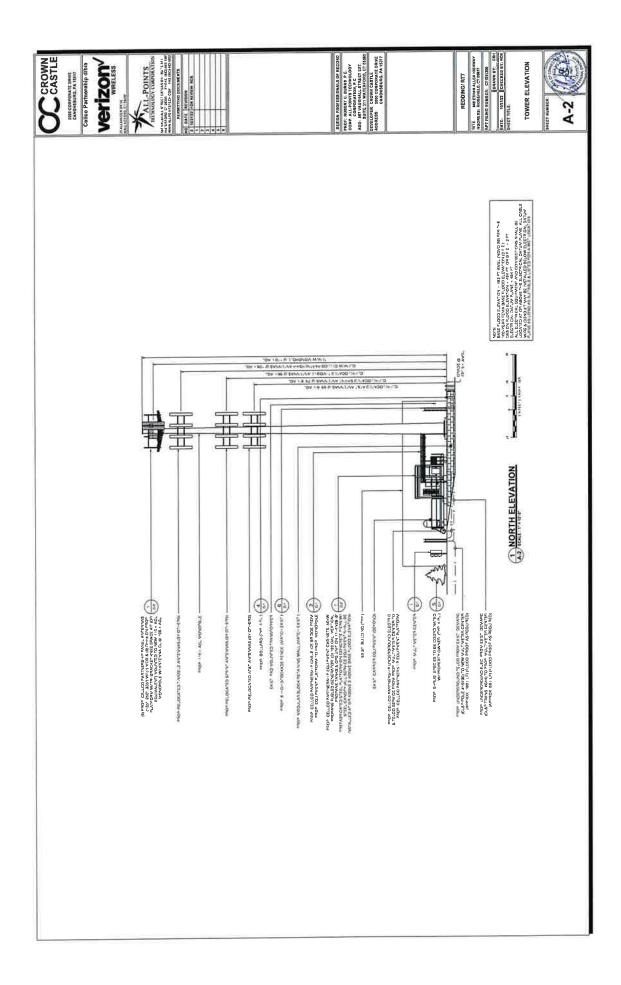
TITLE SHEET

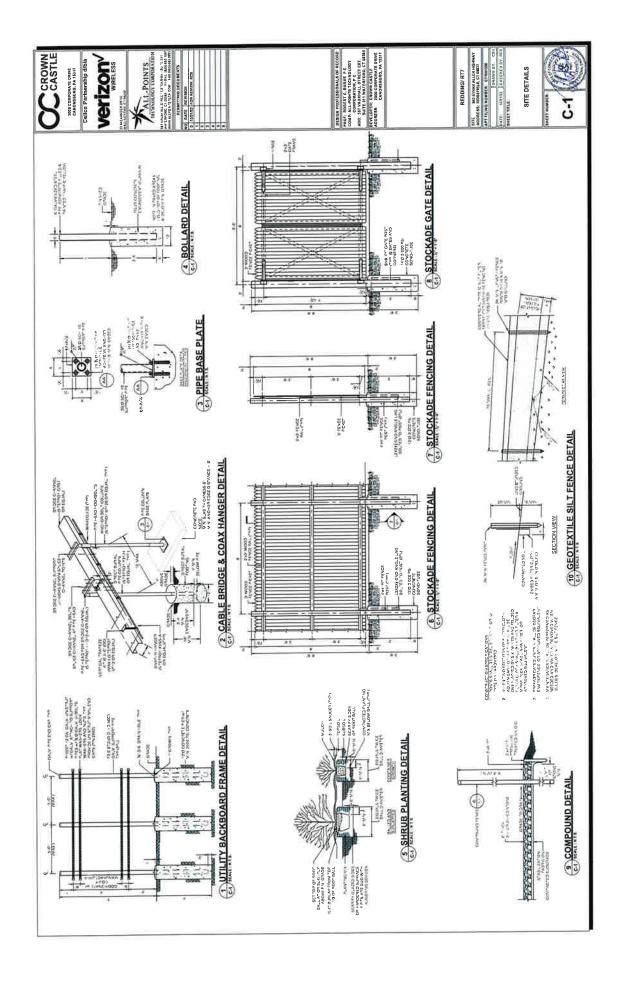


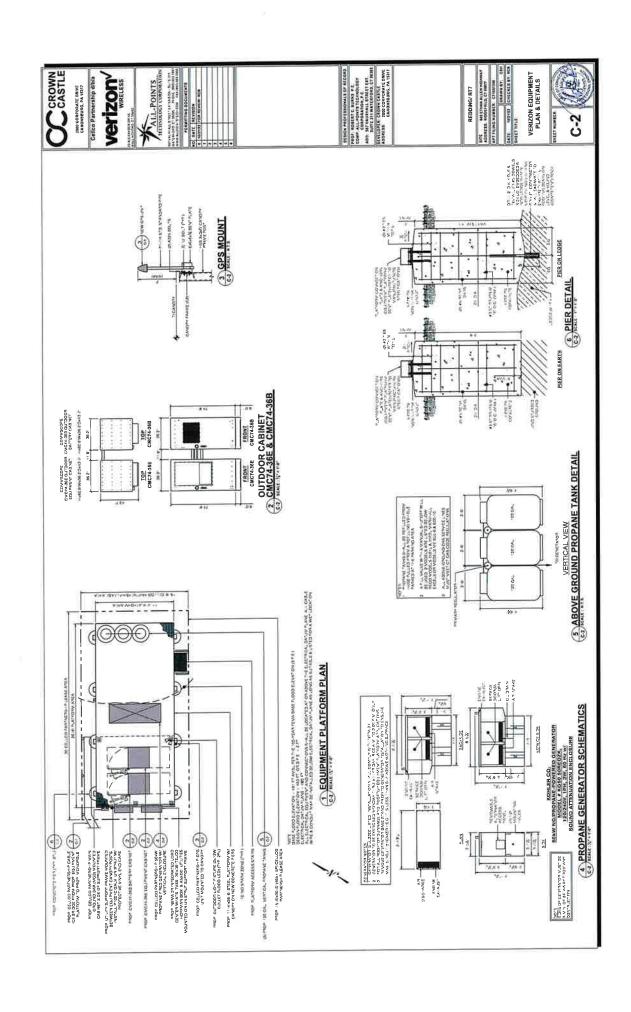


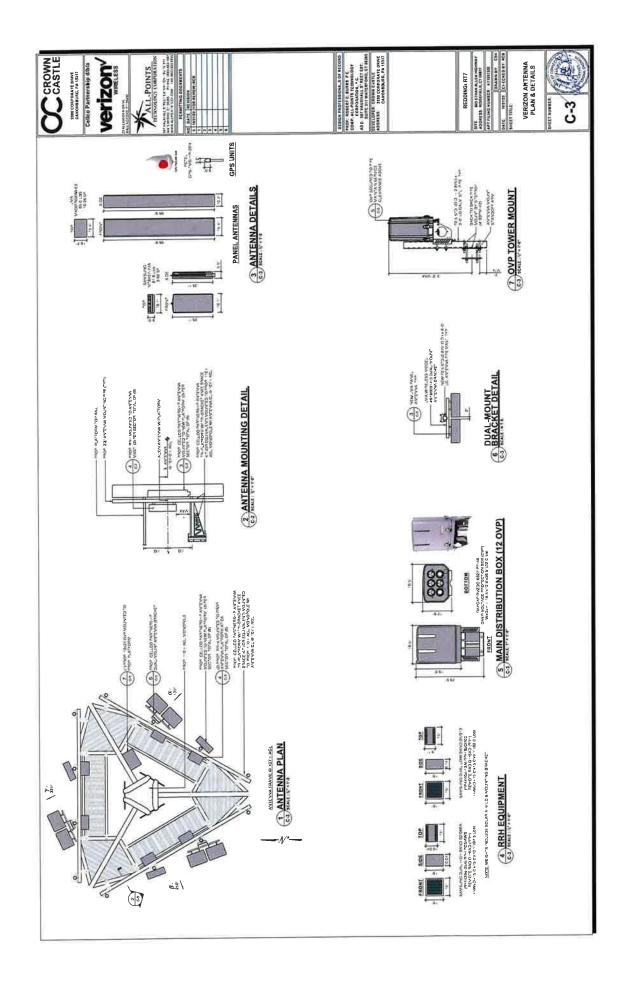






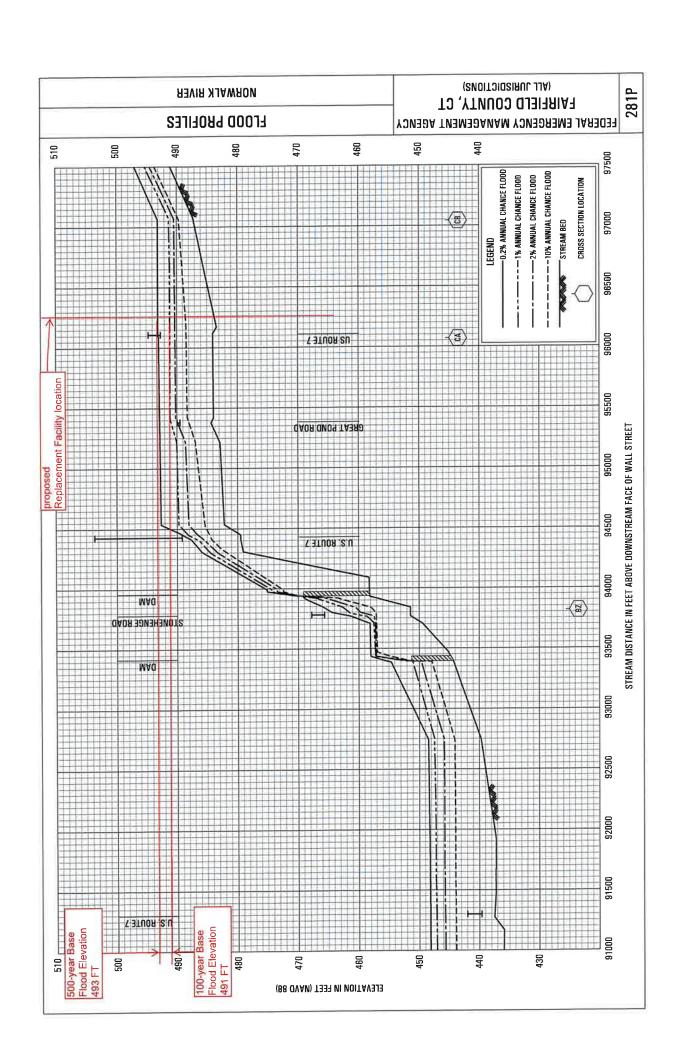






Attachment D Floodplain Info

- > Norwalk River Flood Profile Panel 281P
- > APT's Flood Zone Displacement letter, dated November 18, 2022





November 18, 2022

Ms. Sarah Brown Sr. Business Analyst Crown Castle 6325 Ardrey Road Suite 600 Charlotte, NC 28277

Re: Flood Zone Displacement Statement
Wireless Communication Facility
Crown Castle Site Reference – Redding/Rt 7
845 Ethan Allen Highway
Ridgefield, CT

Dear Ms. Brown,

Crown Castle is proposing to replace an existing 100' AGL flagpole tower with a 110' AGL monopole tower while expanding the existing compound to facilitate Cellco Partnerships equipment platform.

The facility is located within FEMA Flood Zone AE, Base Flood Elevation (BFE) of 491.0 (NAVD 1988 datum, NGVD 1929 datum conversion = 492.0) based on information from FIRM Panel 228 of 626, Map 09001C0228F, Effective Date June 18, 2010.

A section of the existing facility retaining wall will be removed and replaced to support the proposed compound expansion. The proposed retaining wall will be designed in accordance with the CT Building Code and to withstand the subject flood event. A compensatory flood storage area shall be installed along the western property line of the subject parcel as a means to offset the displaced volume from the proposed retaining wall, compound fill and equipment platform pier foundations. The bottom of the steel for the proposed equipment platform is at elevation 494.0, placing it 2' above the BFE. The grade around the tower foundation is 492.0 and greater, therefore the concrete foundation for the tower is not included in the displacement calculation. The displaced and compensatory storage volumes are summarized below:

Facility Component	<u>Volume</u>
Retaining Wall	2.0 CY
Compound Fill	19.4 CY
Compound Foundation (Equip. Platform Piers)	<u>2.0 CY</u>
Total Displacement	23.4 CY
Compensatory Storage Provided	<u>59.7 CY</u>
Net Flood Displacement	-36.3 CY

Flood Zone Displacement Statement Page 2 November 18, 2022

The compensatory flood storage area is provided in the same hydraulic reach of the Norwalk River with unrestricted hydraulic connection to the river. In conclusion, the compensatory storage volume increases the Norwalk River flood storage capacity in this reach of the river by exceeding the floodplain displacement volume due to the proposed retaining wall, compound fill and the equipment platform foundation piers.

Feel free to contact me should anything further be required.

Sincerely.

All Points Technology Corp.

Robert C. Burns, P.E. Program Manager



ATTACHMENT 5

& Simulations Photo-Documentation

REDDING/ RT7 845 ETHAN ALLEN HIGHWAY RIDGEFIELD, CT All-Points Technology Corporation, P.C. 567 Vauxhall Street Extension – Suite 311 Waterford, CT 06320

Prepared for Crown Castle



VISUAL ASSESSMENT & PHOTO-SIMULATIONS

Crown Castle ("Crown") is seeking approval for the replacement of an existing wireless communications facility (the "Facility") at 845 Ethan Allen Highway in Ridgefield, Connecticut ("Site"). At the request of Crown, All-Points Technology Corporation, P.C. ("APT") completed this assessment to evaluate the potential visual effects of the proposed replacement Facility from within a 2-mile radius (the "Study Area"), including the preparation of computergenerated photo-simulations.

Project Setting

The existing Facility is located on a ± 1.78 -acre property west of Ethan Allen Highway (U.S. Route 7). The property is bordered by commercial development along Route 7 to the north and east, and wooded areas and residential development to the south and west. The eastern part of the Study Area includes portions of the neighboring municipalities of Danbury to the northeast and Redding to the east and southeast. Route 7 extends generally north-south through the central part of the Study Area.

The topography within the Study Area consists of hilly terrain. Ground elevations range from 396' above mean sea level ("AMSL") in the southeastern portion of the Study Area to approximately 907 feet AMSL in the northwestern portion of the Study Area. Tree cover within the Study Area (consisting primarily of mixed deciduous hardwoods) occupies approximately 5,642 acres ($\pm 70.2\%$) of the 8,042-acre Study Area.

Project Undertaking

The existing Facility consists of an ±100′ tall steel unipole tower, with internally-mounted antennas. The proposed replacement Facility would be a 110′ tall monopole located approximately 27′ northwest of the existing Facility, with a retaining wall to the north and west of the monopole location. Three existing wireless service providers currently utilizing the unipole would relocate to the new tower, installing external antenna arrays. Related ground equipment would be placed within an expansion of the existing compound, and 8′ tall stockade fencing would be installed to match existing fencing. Four shrubs will be added to existing landscaping on the northeast side of the expanded compound.

Please refer to the Site Drawings prepared by APT, dated October 21, 2022, and provided under separate cover, for details regarding the proposed installation.

Methodology

APT used the combination of a predictive computer model, in-field analysis, and a review of various data sources to evaluate the visibility associated with the proposed Facility on both a quantitative and qualitative basis. The predictive model provides a measurable assessment of visibility throughout the entire Study Area, including private properties and other areas inaccessible for direct observations. The in-field analysis consisted of field reconnaissance of the Study Area to record existing conditions, verify results of the model, inventory seasonal and year-round view locations, and provide photographic documentation from publicly accessible areas. A description of the procedures used in the analysis is provided below.

Preliminary Computer Modeling

To conduct this assessment, a predictive computer model was developed specifically for this project using ESRI's ArcMap GIS¹ software and available GIS data. The predictive model incorporates Project and Study Area-specific data, including the Facility locations, ground elevations and heights, as well as the surrounding topography, existing vegetation, and structures (the primary features that can block direct lines of sight).

A digital surface model ("DSM"), capturing both the natural and built features on the Earth's surface, was generated for the extent of the Study Area utilizing State of Connecticut 2016 LiDAR² LAS³ data points. LiDAR is a remote-sensing technology that develops elevation data by measuring the time it takes for laser light to return from the surface to the instrument's sensors. The varying reflectivity of objects also means that the "returns" can be classified based on the characteristics of the reflected light, normally into categories such as "bare earth," "vegetation," "road," "surface water" or "building". Derived from the 2016 LiDAR data, the LAS datasets contain the corresponding elevation point data and return classification values. The Study Area DSM incorporates the first return LAS dataset values that are associated with the highest feature in the landscape, typically a treetop, top of a building, and/or the highest point of other tall structures.

Once the DSM was generated, ESRI's Viewshed Tool was utilized to identify locations within the Study Area where the proposed Facility extension may be visible. ESRI's Viewshed Tool predicts visibility by identifying those cells⁴ within the DSM that can be seen from an observer location. Cells where visibility was indicated were extracted and converted from a raster dataset to a polygon feature which was then overlaid onto aerial photograph and topographic base maps.

 $^{^{1}}$ ArcMap is a Geographic Information System desktop application developed by the Environmental Systems Research Institute for creating maps, performing spatial analysis, and managing geographic data.

² Light Detection and Ranging

 $^{^{3}}$ An LAS file is an industry-standard binary format for storing airborne LiDAR data.

⁴ Each DSM cell size is 1 square meter.

Since the DSM includes the highest relative feature in the landscape, isolated "visible" cells are often indicated within heavily forested areas (e.g., from the top of the highest tree) or on building rooftops during the initial processing. It is recognized that these areas do not represent typical viewer locations and overstate visibility. As such, the resulting polygon feature is further refined by extracting those areas. The viewshed results are also cross-checked against the most current aerial photographs to assess whether significant changes (a new housing development, for example) have occurred since the time the LiDAR-based LAS datasets were captured.

The results of the preliminary analysis are intended to provide a comparative representation of those areas where portions of the existing and extended Facility may potentially be visible to the human eye without the aid of magnification, based on a viewer eye-height of five (5) feet above the ground and the combination of intervening topography, trees and other vegetation, and structures. However, the Facility may not necessarily be visible from all locations within those areas identified by the predictive model, which has its limitations. For instance, the computer model cannot account for mass density, tree diameters and branching variability of trees, or the degradation of views that occur with distance. As a result, some areas depicted on the viewshed maps as theoretically offering potential visibility of the extended Facility may be over-predictive because the quality of those views is not sufficient for the human eye to recognize the Facility or discriminate it from other surrounding or intervening objects.

Seasonal Visibility

Visibility also varies seasonally with increased, albeit obstructed, views occurring during "leaf-off" conditions. Beyond the variabilities associated with density of woodland stands found within any given Study Area, each individual tree also has its own unique trunk, pole timber and branching patterns that provide varying degrees of screening in leafless conditions which, as introduced above, cannot be precisely modeled. Seasonal visibility is therefore estimated based on a combination of factors including the type, size, and density of trees within a given area; topographic constraints; and other visual obstructions that may be present. Considering these dynamics, areas depicting seasonal visibility on the viewshed maps are intended to represent locations from where there is a potential for views through intervening trees, as opposed to indicating that leaf-off views will exist from within an entire seasonally-shaded area.

Field Reconnaissance and Photographic Documentation

To supplement and fine tune the results of the computer modeling efforts, APT completed infield verification activities on November 3, 2022 consisting of vehicular and pedestrian reconnaissance, and photo-documentation within the Study Area.

Using the combination of the preliminary predictive viewshed mapping and the known landmark of the existing tower, APT compiled an inventory of locations where the existing tower is visible. Visual observations from along local and State roads and other publicly accessible locations were used to evaluate the results of the preliminary viewshed mapping and identify any discrepancies in the initial modeling. During the reconnaissance, APT captured photographs from locations within and beyond the areas of predicted visibility. Collectively, the selection of photographs represents the general extent of visibility of the existing Facility and proposed Facility throughout the Study Area.

Photographic Simulations

Photographic simulations were generated to portray scaled renderings of the proposed Facility. Using field data, site plan information and 3-dimensional (3D) modeling software, spatially referenced models of the existing unipole and the proposed monopole were generated and merged. The geographic coordinates of the photograph locations and existing features observed in the field (e.g., roads, utility poles, catch basins, buildings and other structures) were incorporated into the model to produce virtual camera positions within the spatial 3D model. Photo-simulations were then created by merging these virtual scenes with corresponding existing conditions photographs and composited using image editing software. The scales of the subjects in the photograph and their corresponding simulation (in this case, the proposed Facility) are proportional to their surroundings.

Photo-documentation of the field reconnaissance and photo-simulations of the proposed Facility are presented in the attachment at the end of this report and are intended to provide the reader with a general comparison of existing and proposed view characteristics. Photographs were taken from publicly accessible areas and chosen to present direct view lines towards the proposed Facility (unobstructed where possible).

For presentation purposes in this report, the photographs were produced in an approximate 7-inch by 10.5- inch format. This format size allows for the inclusion of key contextual landscape elements (existing development, street signs, utility poles, etc.) so that the viewer can understand the proportionate scale of each object within the scene.

The table on the following page summarizes the photographs and simulations presented in the attachment to this report, and includes a description of each location, view orientation, and distance from where the photo was taken relative to the Facility. The photo locations are depicted on the photolog provided as an attachment to this report.

Table 1 - Photo Locations

Photo	Location	Orientation	Distance to Site	Height of Facility Visible Above Tree Canopy	Visibility
1	Haviland Road	Northeast	<u>+</u> 0.29 Mile	N/A	Not Visible
2	Mill View Terrace	North	<u>+</u> 0.32 Mile	N/A	Not Visible
3	Ethan Allen Highway	Northwest	<u>+</u> 0.31 Mile	N/A	Not Visible
4	Great Pond Road	Northwest	<u>+</u> 0.13 Mile	N/A^	Seasonal
5	Great Pond Road	West	<u>+</u> 0.14 Mile	N/A^	Seasonal
6	Great Pond Road	West	± 0.30 Mile	N/A	Not Visible
7	Ethan Allen Highway	Northwest	<u>+</u> 0.12 Mile	N/A^	Seasonal
8	Ethan Allen Highway*	Northwest	<u>+</u> 330 Feet	N/A^	Seasonal
9	Ethan Allen Highway**	Southwest	<u>+</u> 224 Feet	80'-90'	Year Round
10	Ethan Allen Highway*	South	<u>+</u> 339 Feet	40'-50'	Year Round
11	Ethan Allen Highway	South	<u>+</u> 0.12 Mile	20'-30'	Year Round
12	Ethan Allen Highway	Southeast	+ 0.28 Mile	N/A	Not Visible
13	Old Pierce Road	Southeast	<u>+</u> 0.28 Mile	N/A^	Seasonal
14	Ritch Drive	East	<u>+</u> 0.31 Mile	втс	Year Round

^{*}Photograph was taken at 35 mm focal length.

Conclusions

BTC Below Tree Canopy

As presented on the attached comparative viewshed maps, predicted visibility is estimated to be nearly identical to visibility of the existing Facility. Minor variations are the result of the lateral move of the tower. Year-round visibility (approximately 5 acres) will be experienced along Route 7 in the immediate vicinity of the Facility and in locations up to ½ mile to the north. See photos 9, 10, and 11. Year-round visibility will also be experienced to the west, as depicted on photo 14, where the Facility will be viewed against a backdrop of trees. Seasonal visibility of the proposed Facility is estimated to remain similar, with approximately 19 acres of predicted visibility.

The design of the replacement Facility will represent an exterior change from existing conditions. However, the external antenna arrays would be prominently visible only within 500 feet of the Site, and primarily along Route 7, within a commercially developed area.

^{**}Photograph was taken at 24 mm focal length.

[^]Facility visible through trees in leaf-off conditions

All locations photographed during this assessment are in Ridgefield.

The overall predicted visibility of the proposed Facility (± 24 acres, equal to that of the existing Facility) represents approximately 0.3% of the 8,042-acre Study Area. There is no significant difference in the visibility footprint between the existing and proposed Facilities and therefore the replacement Facility would not significantly alter the characteristics of the area.

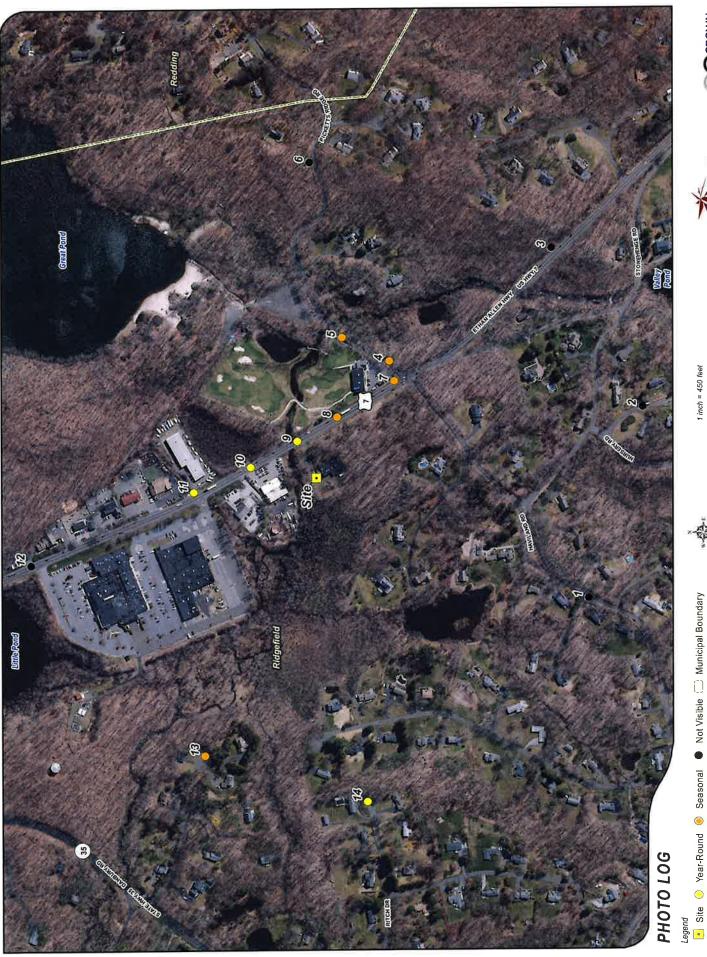
Proximity to Schools And Commercial Child Day Care Centers

No schools or commercial child day care centers are located within 250 feet of the proposed Facility. Farmingville Elementary School is located approximately 1.4 miles southeast of the Site at 324 Farmingville Road in Ridgefield. The existing Facility is not visible at the Farmingville Elementary School, nor is the proposed Facility predicted to be visible. The nearest commercial child care center, Children's Academy, is located at 890 Ethan Allen Highway in Ridgefield, approximately 0.15 mile north of the Site. The viewshed mapping depicts that the Facility may be visible from the entrance and parking area of Children's Academy, but will not be visible from the building or the play area behind the building.

Limitations

The photo-simulations provide a representation of the Facility under similar settings as those encountered during the field review and reconnaissance. Views can change throughout the seasons and the time of day, and are dependent on weather and other atmospheric conditions (e.g., haze, fog, clouds); the location, angle and intensity of the sun; and the specific viewer location. Weather conditions on the day of the field review included clear skies.

ATTACHMENTS





ALL-POINTS CROWN





























VISIBILITY
NOT VISIBLE

DISTANCE TO SITE +/- 0.29 MILE

NORTHEAST

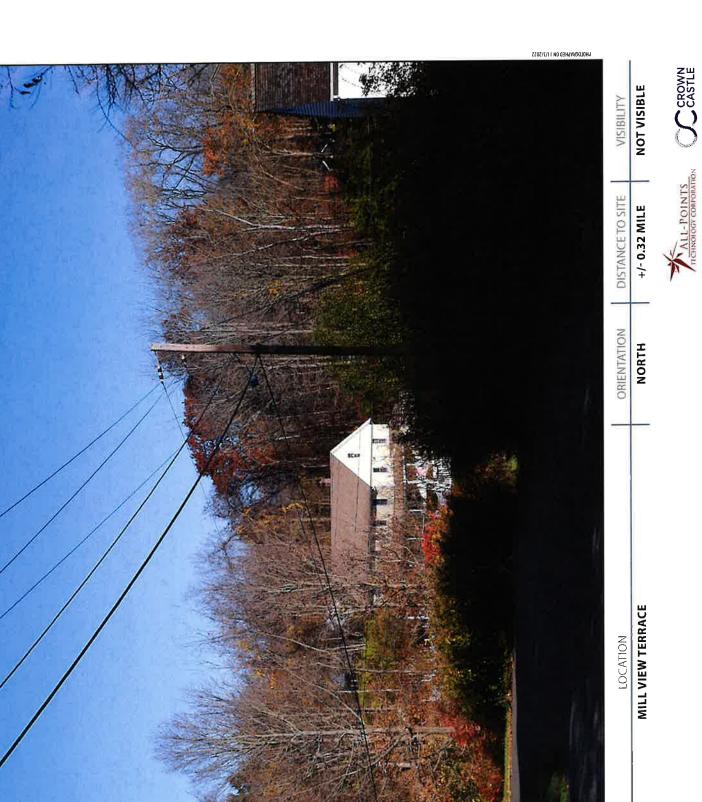
ORIENTATION

HAVILAND ROAD

LOCATION

EXISTING

РНОТО



EXISTING

РНОТО







VISIBILITY NOT VISIBLE

+/- 0.31 MILE

DISTANCE TO SITE

NORTHWEST

ORIENTATION

ETHAN ALLEN HIGHWAY

EXISTING

PHOTO

LOCATION





















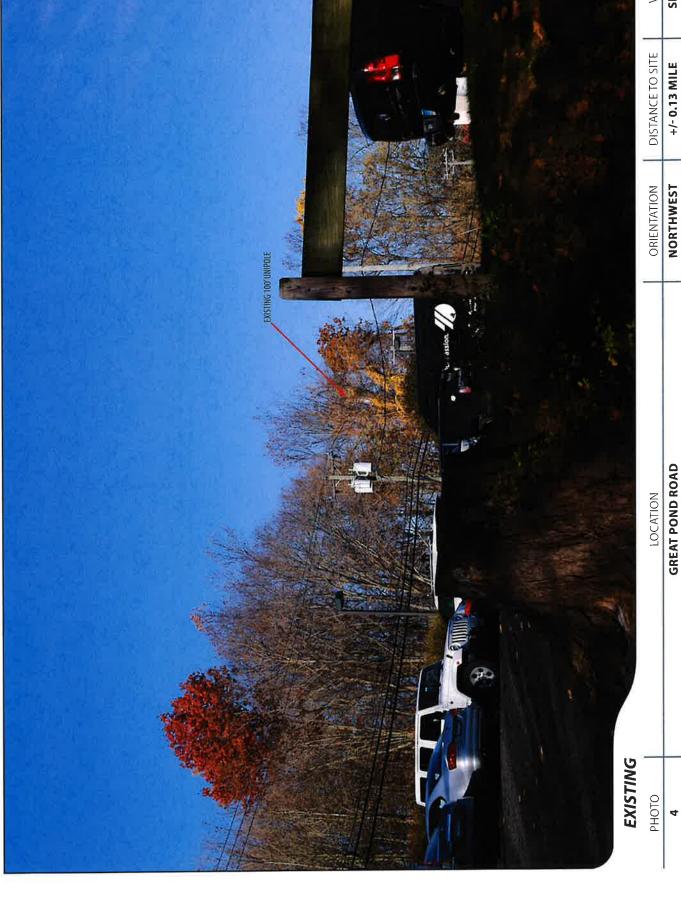




VISIBILITY

PHOTOGRAPHED ON 11/3/2022

NORTHWEST

















VISIBILITY

DISTANCE TO SITE +/- 0.14 MILE

ORIENTATION

WEST

LOCATION

GREAT POND ROAD

EXISTING

PHOTO







DISTANCE TO SITE +/- 0.14 MILE

ORIENTATION

WEST

PROPOSED

РНОТО

LOCATION



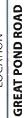














































NOT VISIBLE VISIBILITY

> DISTANCE TO SITE +/- 0.30 MILE

ORIENTATION

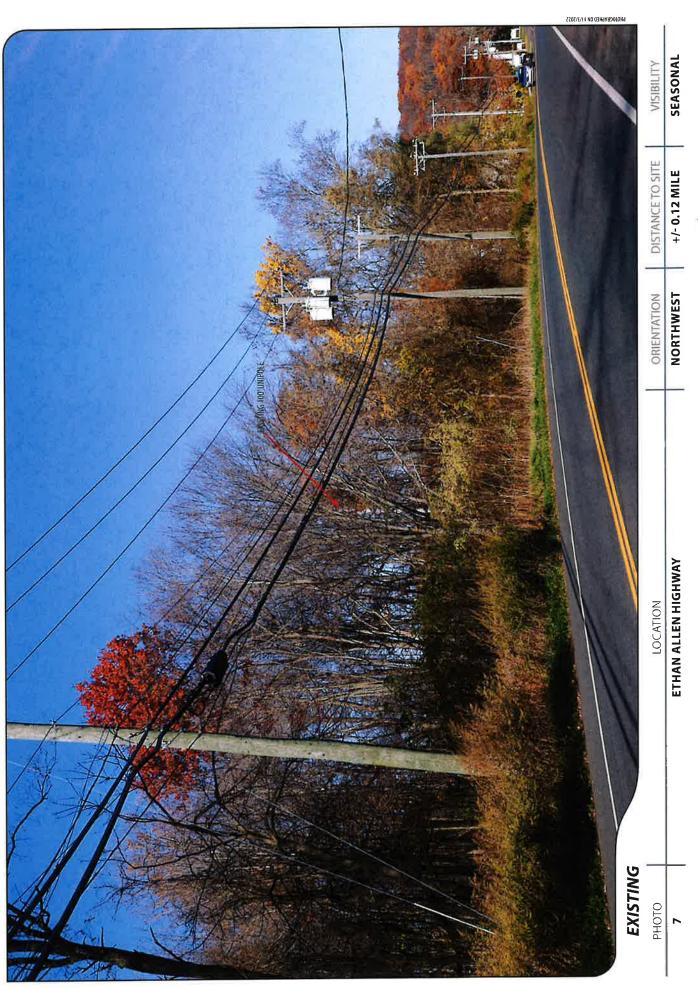
WEST

GREAT POND ROAD

LOCATION

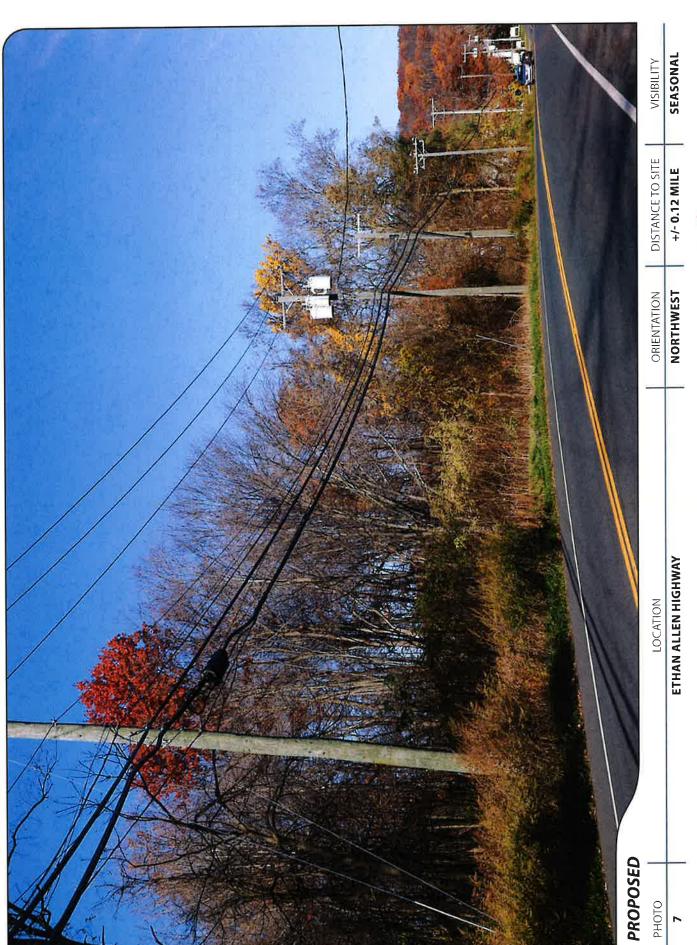
EXISTING

PHOTO





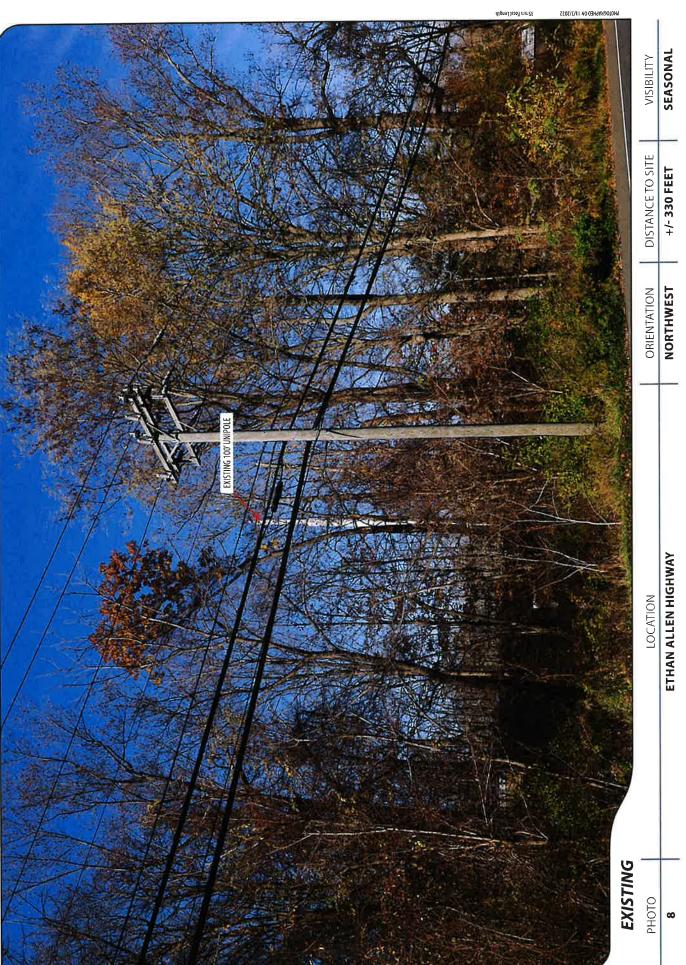








РНОТО



















VISIBILITY

YEAR ROUND

+/- 224 FEET

DISTANCE TO SITE

ORIENTATION SOUTHWEST

LOCATION

ETHAN ALLEN HIGHWAY

EXISTING

PHOTO







VISIBILITY
YEAR ROUND

+/- 224 FEET

DISTANCE TO SITE

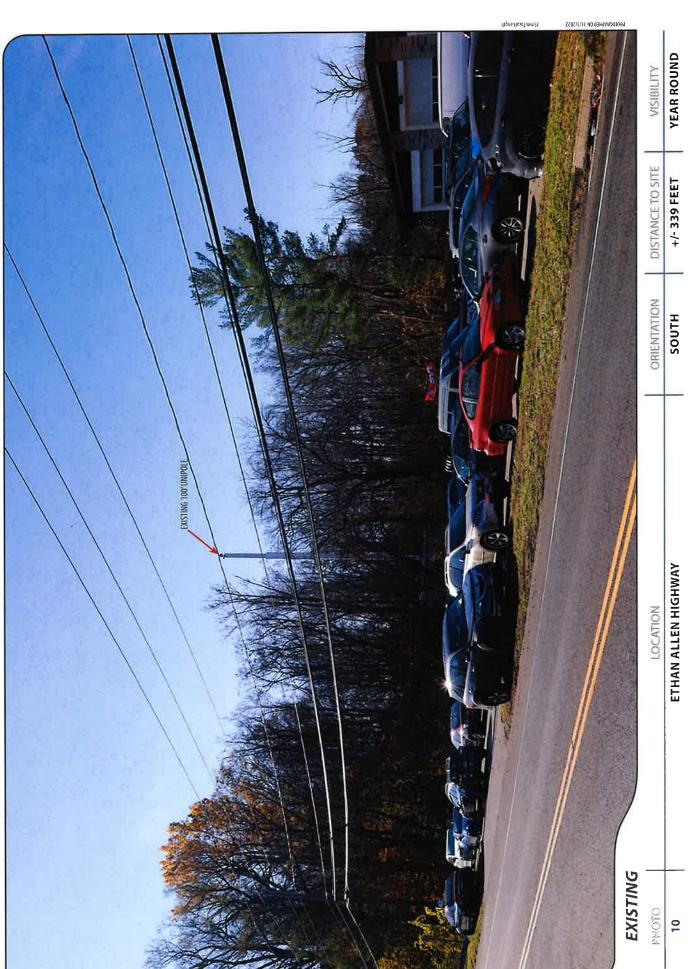
ORIENTATION

ETHAN ALLEN HIGHWAY

LOCATION

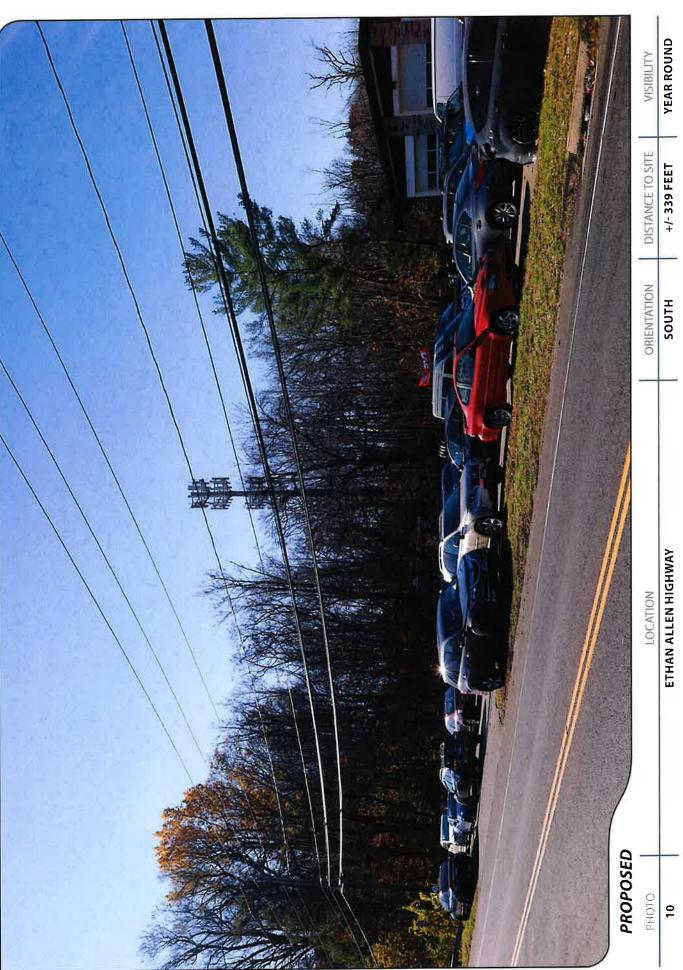
PROPOSED

PHOTO 0



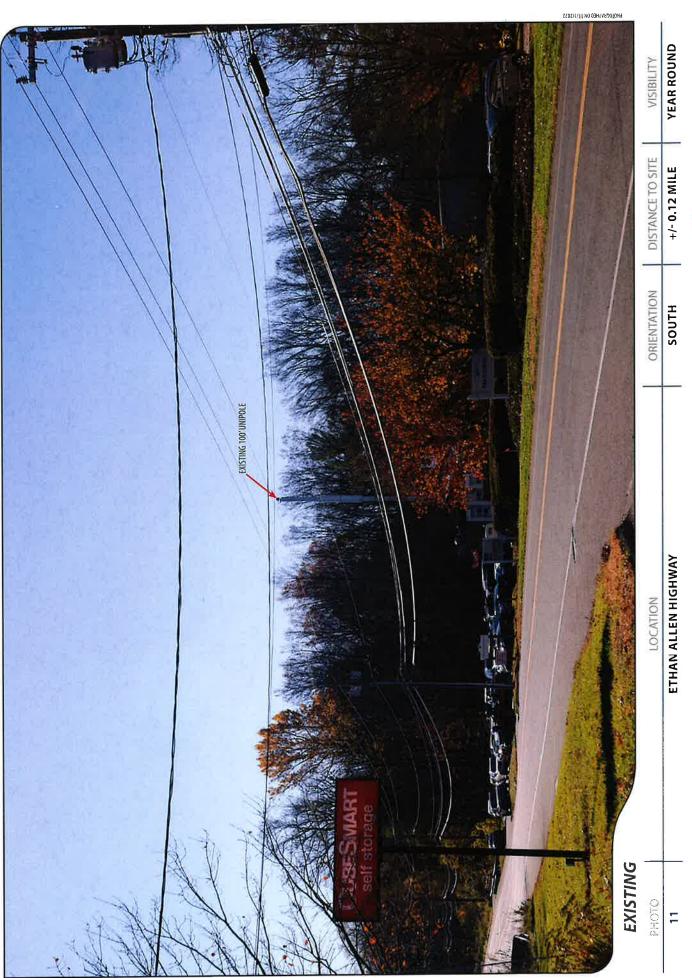






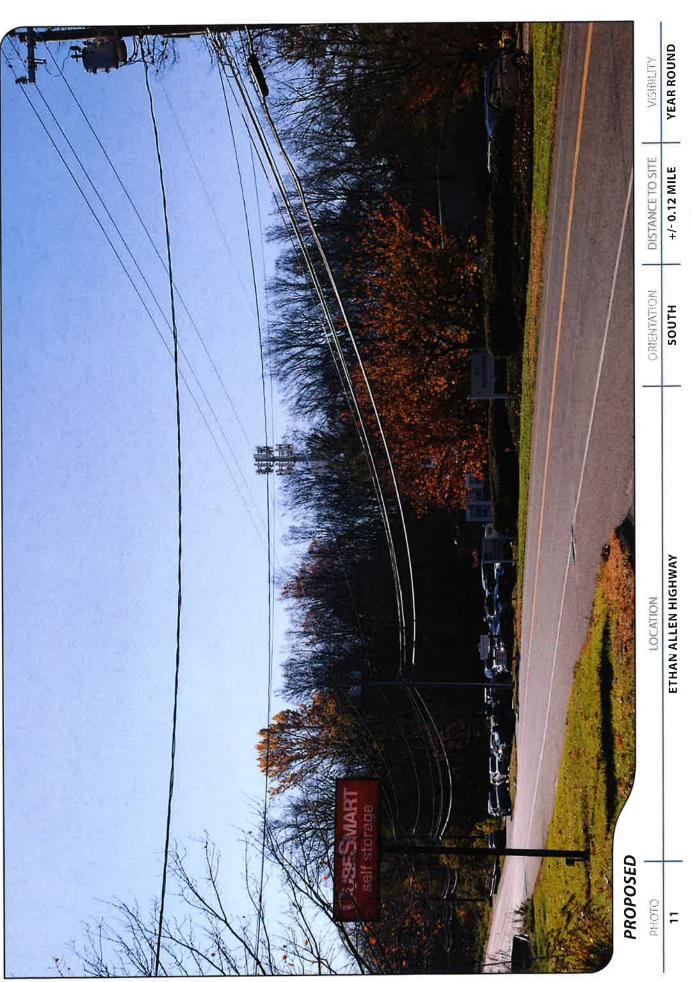


ALL-POINTS



















VISIBILITY

+/- 0.28 MILE

DISTANCE TO SITE

SOUTHEAST

ORIENTATION

ETHAN ALLEN HIGHWAY

LOCATION

РНОТО

12

EXISTING



ALL-POINTS TICHNOLOGY CORFORATION



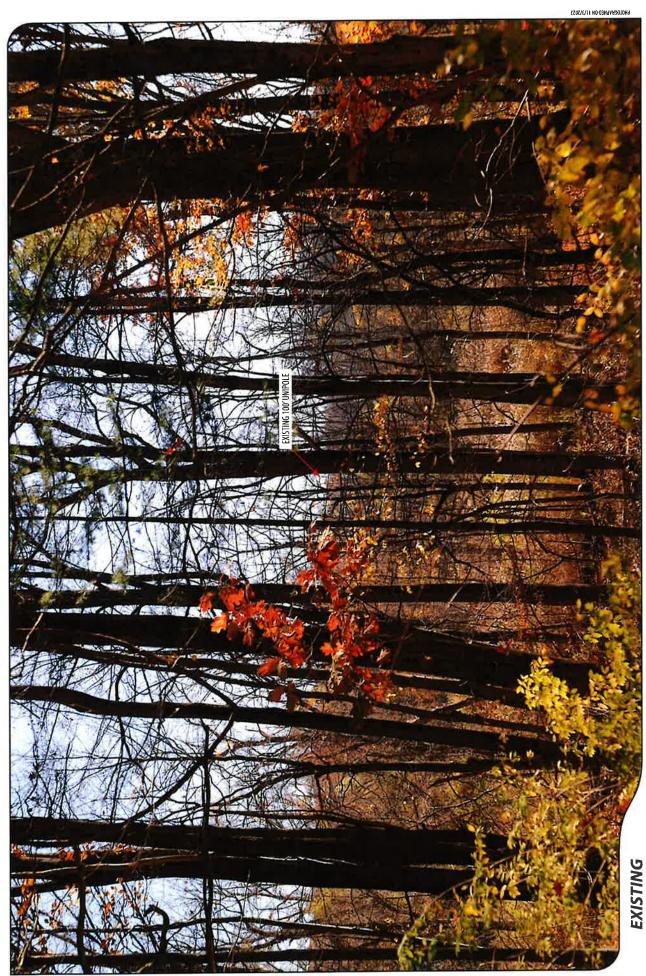


VISIBILITY

DISTANCE TO SITE +/- 0.28 MILE

ORIENTATION SOUTHEAST







ALL-POINTS TICHNOLOGY CORPORATION



VISIBILITY

DISTANCE TO SITE +/- 0.28 MILE

SOUTHEAST

ORIENTATION

OLD PIERCE ROAD

LOCATION

PROPOSED

PHOTO

2









VISIBILITY
YEAR ROUND

PHOTOGRAPHED ON 11/3/2022

DISTANCE TO SITE +/- 0.31 MILE

RITCH DRIVE LOCATION





































EXISTING РНОТО











DISTANCE TO SITE +/- 0.31 MILE

















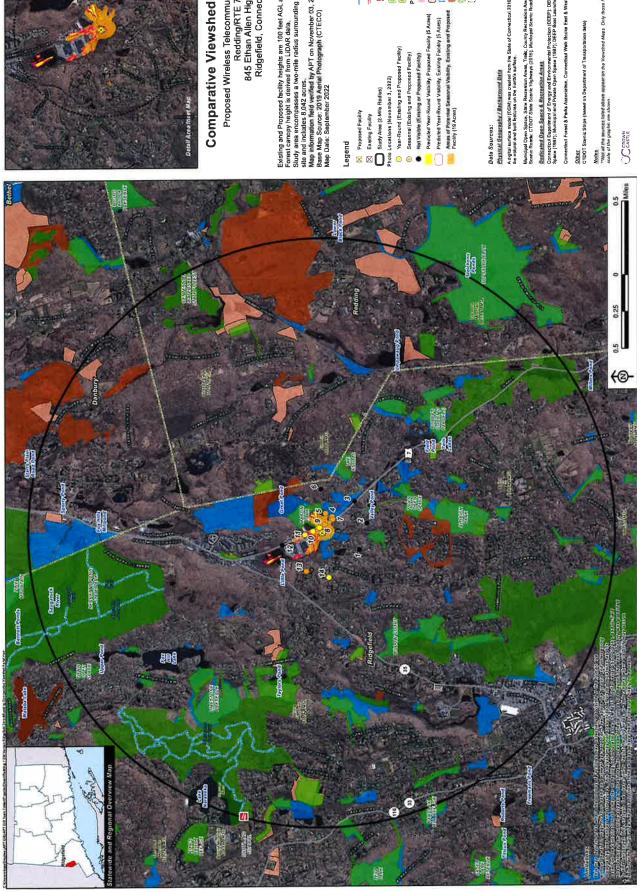








РНОТО 14





Comparative Viewshed Analysis Map

Proposed Wireless Telecommunications Facility
Redding/RTE 7
845 Ethan Allen Highway
Ridgefield, Connecticut

Existing and Proposed bacility heights are 100 feet AGL and 110 feet AGL, respectively. Forest cannopy height is derived from LIDAR data. Study area encompasses a two-mile radius surrounding each stand includes 8,042 acres. Map information field verified by APT on November 03, 2022 Base Map Source: 2019 Auril Photograph (CTECO) Map Date: September 2022.

- Proposed Facility
 Exating Facility
 Study Area (2-Mile Radius)
 Photo Locations (November 3, 2022)
- Year-Round (Existing and Proposed Facility)
 Seasonal (Existing and Proposed Facility)
 Nat Visible (Existing or Proposed Facility)

(m) Municipal and Private Open Space Property
(p) State Forest/Park
Protected Open Space Property

DEEP Boat Launches Scenic Highway

- Predicted Year-Round Vislbility, Proposed Facility (5 Acres)
- Predicted Year-Round Visibility, Proposed Facility (5 Acres)
 Predicted Year-Round Visibility, Existing Facility (5 Acres)
 Areas of Proposed Sessions Vindings, Existing and Propose Areas of Potential Seasonal Visibity, Existing and Propo-Facility (19 Acros)
- Acted .
 Federal
 Land Trust
 Muncin

Physical Geography / Background Data

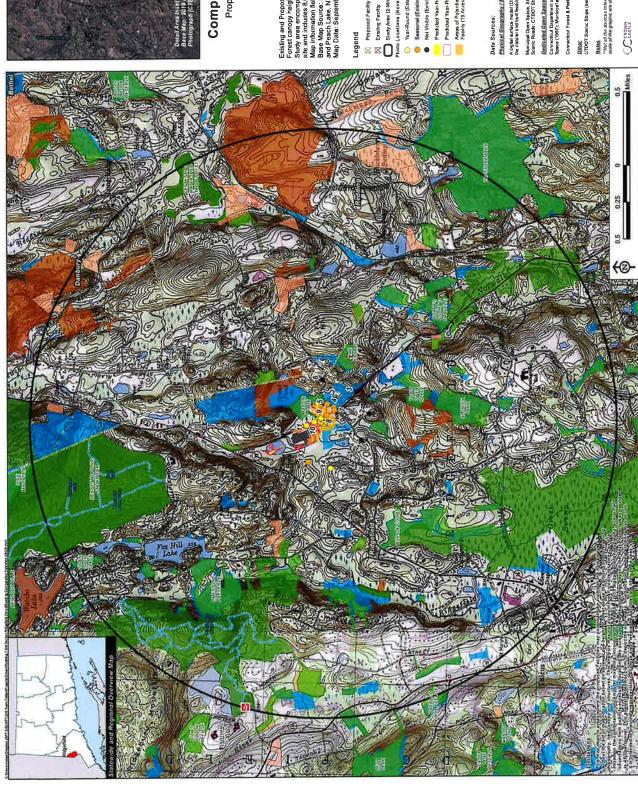
Adigital surface mode (IOSM) was created hom the State of Connecticul 2016 LIDAR LAS data points. The DSM captures the natural and built feetures on the Earth's surface.

Municipal Open Space, Stale Recretion Area, Traits, County Recretion Areas, and Town Boundary dals obtained from CT DEEP. Scenic Roats: CTDOT Stale Scenic Highways (2015); Municipal Scenic Roads (compiled by APT) Dedicated Open Space & Recreation Areas

Connecticul Department of Energy and Environmental Protection (DEEP): DEEP Property (May 2007; Faderal Open Space (1997); Municipal and Private Open Space (1997); DEEP Boat Launches (1994)

<u>Other</u> CTDOT Sænic Strips (based on Department of Transpartation data)







Comparative Viewshed Analysis Map

Proposed Wireless Telecommunications Facility Redding/RTE 7 845 Ethan Allen Highway Ridgefield, Connecticut

Existing and Proposed facility heights are 100 feet AGL and 110 feet AGL, respectively. Forset taxopy height is chevred from LIDAR data.

Site and includes 8.042 extres,—remain radius surrounding each site and includes 8.042 extres.—Remain remains a surrounding each site and includes 8.042 extres.—Respectively 8.052 F. Minute Topographic Quadrangle Map: Bethel, CT (1984) Map Date. September 2022.

DEEP Boat Launches Municipal and Private Open Space Slate Forest/Perk Protected Open Space Property ---- Trail Federal Land Trust Municipal Private Areae of Potential Seesonal Visibility, Existing and Proposed Facility (19 Acres) Predicted Year-Round Visibility, Proposed Feclify (5 Acros) Predicted Year-Round Visibility, Existing Facility (5 Acres) Year-Round (Existing and Proposed Facility) Seasonal (Existing and Proposed Facility) Not Visible (Existing or Proposed Facility) Proposed Facility Exating Facility Study Area (2-Mire Radius) Photo Locations (November 2, 2022)

Physical Geography / Background Dafa

A draptiles turseco model (DSM) was created from the State of Connecticul 2016 LIDAR LAS dela points. The DSM captures the natural and built belianes on the Earth's eurface. Municipal Open Space, Sürle Recreation Anass, Treits, County Recreation Arress, and Town Boundary Scenic Roads: CTDOT State Scenic Highways (2015); Municopal Scenic Roads (compiled by APT)

Gedictind Open State & Recention Areas
Connected Department of Energy and Environmental Protection (DEEP): DEEP Property
Space (1997); Wurkipal and Private Open Space (1997); DEEP Boat Launchee (1994)

Connecticul Forest & Perka Association, Connecticul Welk Books East & West

Other CTDOT Scene: Strips (based on Department of Transportation



ATTACHMENT 6

CUMULATIVE MPE TABLE

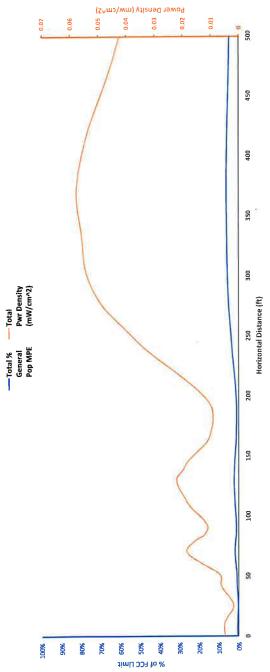
Carrier	MPE %
Sprint	9.28%
AT&T	8.28%
T-Mobile	1.87%
*Verizon Wireless	6.3 %
Site Total	25.66 %

^{*}See attached Verizon Wireless far field tables for full detail.

Note: the data for the carriers in the above table was compiled from the EBI Consulting Radio Frequency Emissions Analysis Report, dated April 8, 2019 submitted by Crown Castle on May 1, 2019 (EM-SPRINT-118-190502).

Location			RIDGEFIELD 2 CT	LD 2 CT		
Date			10/30	0/30/2022		
Band	C-Band	CBRS	AWS	PCS	850-LTE	200
Operating Frequency (MHz)	3,700	3,550	2,145	1,970	880	746
General Population MPE (mW/cm^2)	-	1	1	1	0.586666667	0 49733333
ERP Per Transmitter (Walts)	13,032	54	1,622	1,549	741	813
Number of Transmitters	2	4	4	4	4	4
Antenna Centerline (feet)	106	106	106	106	106	106
Total ERP (Watts)	26,064	216	6,488	6,196	2,964	3,252
Total ERP (dBm)	74	53	89	89	65	65
Monitoring Scot Scenarial				100		





Below			A ANSWER PRINCIPAL	nW/cm^2j						District Commis	AND ROBBISTO						NAME .	
uozu	C-Band	CBRS	AWS	204	H1-058	700 MHz	mali	New Year	Same	Samo	3000	200	official c	DISSE	DHASON	Distance	Pwr Density (mW/cm/2)	Sec.
90	0,004633241	2.82031E-06	1,23867E-06	3.8015E-07	5.18468E-05	3.45139E-05	0.00%	%00'0	0.46%	%00'0	%00.0	0.00%	0.01%	%00'0	0.01%	0	0.004761653	0.48%
88	0.00463275	3,3904E-06	2,23825E-06	6.60555E-08	5.08951E-05	3.53141E-05	%00"0	0.00%	0.46%	0.00%	%00.0	%00'0	0,01%	%00'0	0.01%	1,029848831	0.004763843	0.48%
88	0,004739151	3.63173E-06	5,31827E-06	3.1679E-07	4.94923E-05	3.36364E-05	%00'0	0.00%	0.47%	0.00%	0.00%	%00.0	0.01%	%00.0	0.01%	2.0603254	0.004872037	0.49%
87	0.004802528	3,98E-06	1,01986E-05	1.2177E-06	4.7131E-05	3,01009E-05	0.00%	0.00%	0.48%	%00"0	%00"0	%00.0	0,01%	0.00%	0.01%	3.092058978	0.004936635	0.50%
98	0.004910733	4,36073E-06	1,52481E-05	2,41667E-06	4,35495E-05	2,58378E-05	0.00%	0.00%	0.49%	0.00%	%00.0	%00'0	0,01%	%00.0	0.01%	4.125681905	0.005044185	0.51%
85	0.00490602	5.00198E-06	1,82725E-05	3.71364E-06	3,90451E-05	2,19199E-05	0.00%	%00"0	0.49%	%00.0	9,000	0.00%	0.01%	%00"0	0,00%	5,161831148	0.005036125	0.51%
84	0,005014389	6.00663E-06	1,76721E-05	5.7715E-06	3.43602E-05	1.88073E-05	9600.0	0.00%	%05'0	%000	%00.0	0.00%	0.01%	0.00%	0.00%	6.201149881	0.005138647	0.52%
83	0,005007393	8.27989E-06	1.3762E-05	9.24021E-06	3.03004E-05	1,66235E-05	0,00%	%00"0	0.50%	0.00%	%00.0	%00.0	0.01%	%00.0	%00'0	7.244289093	0.005126126	0.52%
82	0.004999299	1,16767E-05	8.95321E-06	1.3489E-05	2.7717E-05	1,54532E-05	0.00%	%00"0	0.50%	%00'0	%00'0	%00'0	0.00%	%00"0	%00'0	8.291909247	0.005115374	0.52%
81	0.004990097	1,60887E-05	6.00038E-06	1,68337E-05	2,72864E-05	1,53539E-05	0.00%	%00.0	0.50%	%00'0	0.00%	0.00%	%00.0	%00'0	0.00%	9,344681979	0.005108536	0.51%
80	0.004866423	2.11652E-05	6,08527E-06	1.87189E-05	2.92447E-05	1.611B3E-05	0.00%	0.00%	0.49%	%00.0	0.00%	0.00%	0.00%	0.00%	%00.0	10.40329186	0.004991904	0.50%
67	0.004744714	2.72034E-05	7.B3935E-06	2.02899E-05	3,38881E-05	1,75113E-05	%00'0	0.00%	0.47%	%00.0	0.00%	%00"0	0.01%	0.00%	9600"0	11,46843824	0,004885642	0.49%

0.47% 0.43% 0.43% 0.43% 0.33% 0.33% 0.23% 0.22% 0.20% 0.22% 0.02% 0.02% 0.02% 0.02% 0.03%	11.47% 11.59% 11.83% 11.83% 11.83% 11.83% 11.78% 11.78% 11.73% 11.13% 11
0,0004684985 0,0004234531 0,0003245128 0,0003674128 0,0003674764 0,0003674763 0,000364244 0,0003643132 0,000364313 0,000364313 0,0003694313 0,0003694318 0,0003694318 0,0003694318 0,0003694318 0,0003694318 0,0003694318 0,0003694318 0,000563488 0,0003694388 0,0003694388 0,0003694388 0,0003694388 0,0003694388 0,0005634888 0,0005634888 0,0006363488 0,000636348 0,0006363488 0,0006363488 0,0006363488 0,0006363488 0,0006363488 0,0006363488 0,0006363488 0,0006363488 0,0006363488 0,0006363488 0,0006363488 0,0006363489 0,0006363489 0,0006363489 0,0006363489	0.001329112 0.001366784 0.001366645 0.001366645 0.00136645 0.00136643185 0.0013739403 0.0013739403 0.0013739403 0.00137396 0.001364935 0.001364935 0.00137390 0.00137390 0.00137390 0.00137393
	61,09628851 61,09628851 61,09628851 61,28633289 61,28173603 70,31431963 70,31431963 70,3143133 72,286448 81,2063331 81,2063331 81,2063324 91,4173721 91,124894 91,4173721 91,124894 91,4173721 91,124894 91,4173721 91,124899 91,4173721 91,5161697
	0.10% 0.03%
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0,00% 0,00%	0.02% 0.02% 0.03% 0.03% 0.03% 0.03% 0.03% 0.03% 0.03% 0.03% 0.03% 0.00%
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0.00% 0.00%	0.013% 0.025% 0.065% 0.066% 0.066% 0.066% 0.066% 0.066% 0.074% 0.035% 0.659% 0.
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4,13947E-05 5,18487F-05 7,06162E-05 7,06162E-05 0,00011807 0,00011807 0,00011807 0,00011807 8,59081E-05 8,59081E-05 8,59081E-05 8,59081E-05 8,59081E-05 8,59081E-05 8,156E-05 8,156E-05 8,156E-05 8,156E-05 8,156E-05 8,13894E	0.0003956931 0.0005956931 0.000347741 0.000347741 0.000347741 0.000347743 0.00037742 0.00037732 0.00037732 0.00037732 0.00037732 0.00037312
2.28128E-05 2.65443E-05 3.18169E-05 3.118169E-05 3.17101E-05 8.77101E-05 8.77101E-05 8.000175443 0.000175442 0.000134954 0.000134954 0.000134954 0.000134954 0.000134954 0.000134954 0.000134954 0.000134958 0.000136956 0.000136959 0.000136959 0.000136959 0.000136959 0.000136959 0.000136959 0.000136959 0.000136929 0.000136929 0.000136929 0.000136929 0.000136929 0.000136929 0.000136925 0.000136929 0.000136929 0.000136929 0.000136929 0.000136929 0.000136929 0.000136929 0.000136929 0.0001376835	0.00048678 0.000526678 0.000526678 0.00052678 0.00053644 0.000336744 0.000336744 0.000336744 0.000336744 0.00033674 0.000370859 0.000370859 0.00032335 0.00032335 0.00032335 0.00032335 0.00032335 0.00032335 0.00032335 0.00032335
8 87519E-06 5 81644E-06 5 81644E-06 2 40824E-06 2 40463E-06 3 88401E-06 6 4343E-06 7 21731E-06 5 56393F-08 2 23902E-08 2 13903E-08 2 13903E-08 2 13903E-08 2 13903E-08 2 13903E-09 2 13903E-08 3 1373E-07 3 1	0.004292711 0.004383397 0.00458148 0.004697146 0.004697146 0.0046371478 0.000546183 0.0005646211 0.0015778 0.000566831 0.00056683 0.0015778 0.00056832 0.00056832 0.00056832 0.00056832 0.00056832 0.00056832 0.00056832 0.00056832 0.00056832 0.00056832 0.00056832 0.00056832 0.00056832 0.00056832 0.00056833 0.00056833 0.00056833 0.00057386 0.00057386 0.00057386 0.00057386 0.00057386 0.00057386 0.00057386 0.00057386 0.00057386 0.00057388
3.41602E-05 4.00234E-05 5.24258E-05 5.24258E-05 5.297574E-05 5.59574E-05 5.59574E-05 5.5953E-05 5.13711E-05 4.8637E-05 5.30534E-05 6.30278	0.00023082 0.00023182 0.00023182 0.00023182 0.00032645 0.00032647 0.00013283 0.00013287
0,004519661, 0,004519661, 0,00318552 0,00318552 0,00318652 0,003186547 0,0013186447 0,0013186447 0,00131862 0,00131862 0,00131862 0,00131826 0,00131826 0,00131826 0,00131826 0,00131826 0,00131826 0,00131826 0,00131826 0,00131826 0,00131826 0,0031826 0,0031826 0,0031826 0,0031826 0,0031826 0,0031826 0,0031826 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031829 0,0031823	0.00218562 0.004347512 0.004347401 0.00655463 0.006651021 0.006651021 0.006823147 0.00823147 0.00426283 0.00426289 0.00426289 0.00426289 0.00426289 0.004363947 0.01181945 0.01093363 0.00162862 0.00052448 0.00162862 0.00052448 0.00162862 0.00162862 0.00162862 0.00162862 0.00162862 0.001628643 0.00162868 0.001628643 0.00162866 0.001628643 0.00162866 0.001628643 0.00162866 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643 0.001628643
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6.26%	5.93%	5.03%	4.10%	2,98%	1,98%	1.18%	0.54%	0.13%
0.0577308	0.053859459	0.044825492	0.036010179	0.025610281	0.016841644	0.009950708	0.004509762	0.001122834
372.5113394	419 8068136	480.5164393	561.3475028	674.3730859	843,7393091	1125.787065	1689.538944	3380.107736
0.54%	0.58%	0.56%	0.51%	0.41%	0.29%	0.18%	0.08%	0.02%
0.16%	0.19%	0.20%	0.20%	0.17%	0.13%	0.09%	0.04%	0.01%
0.36%	0.42%	0.43%	0.40%	0.33%	0.24%	0.14%	0.06%	0.02%
0.05%	0.06%	0.03%	0.01%	0.01%	0.04%	0.06%	0.05%	0.02%
0.02%	0.05%	0.05%	0.02%	0.00%	0.02%	0,05%	0.05%	0.02%
0.05%	0.04%	0.03%	0.02%	0.02%	0.01%	0.01%	0.00%	9,000
4.94%	4.49%	3.63%	2,88%	1.99%	1.23%	0.64%	0.24%	0.05%
0,15%	0.11%	0.08%	0.07%	0.04%	0.03%	0.02%	0.01%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.002676052	0.002863694	0.002806498	0.002517461	0.002040553	0.001460561	0.000886479	0.000408262	0.000102036
0.002119445	0.00245841	0.002540343	0.002342558	0.001925198	0.001381171	0.000826792	0.000372106	8.98423E-05
0.000505191	0.000606579	0.000348438	5.17516E-05	7.580698-05	0.000391274	0.00062608	0.000509214	0.000176082
0.000168056	0.000465465	0.000480978	0.000206501	3.26368E-05	0.000199287	0.000466261	0.000455931	0.000174467
0.000498652	0.000407596	0.000322454	0.000238927	0,000163324	0.00010276	5.41966E-05	2,2555E-05	5.03566E-06
0.049361122	0.044855651	0.036312423	0.028830569	0.019936015	0.012257736	0.006420357	3.002431251	0.000495044

ATTACHMENT 7



ASAC SITE SPECIFIC EVALUATION FOR

Site Name: Redding Site Number: 826927 Site Location: South Salem, NY

Requestors Name: Melissa Robertson Company Name: Crown Castle Street Address: 2000 Corporate Drive City and Zip: Canonsburg, PA. 15317

This is an evaluation based on application of surfaces identified in Federal Aviation Regulation (FAR) Part 77 and Federal Communication Commission (FCC) Rules Part 17.

EXECUTIVE SUMMARY

- The max height that can be built at this site without notice to the FAA is 200 feet AGL or 692 feet AMSL.
- ♣ The max No Extended Study height at this site is 254 AGL, or 746 AMSL.
- The max no hazard height at this site is 499 AGL, or 991 AMSL.
- ♣ The max no marking and lighting height at this site is 200 AGL, or 692 AMSL.

SITE DATA

Structure Type: Antenna Tower

Coordinates of site:

Lat:

41°18'46.86"

Long:

73°28'20.48"

Datum:

NAD 83

Site ground elevation:

492

Total height above the ground of the entire structure (AGL):

118

Total height above mean sea level (AMSL):

610

AIRPORT/HELIPORT INFORMATION

Nearest public use or Government Use (DOD) facility: Danbury Municipal.

This structure will be located 3.5 NM or 21539 FT from the airport on a bearing of 352 degrees true to the airport.

Nearest private use landing facility is: Danbury Hospital.

This structure will be located 5.6 NM from the helipad on a bearing of 12 degrees true to the helipad.

STUDY FINDINGS

FAA FAR Part 77 paragraph 9 (FAR 77.9): (Construction or Alteration requiring notice.) (These are the imaginary surfaces that the FAA has implemented to provide general criteria for notification purposes.)

This structure does not require notification to the FAA.

FAA FAR Part 77 paragraph 17(FAR 77.17): (Standards for Determining Obstructions.)(These are the imaginary surfaces that the FAA has implemented to protect aircraft safety. If any of these surfaces are penetrated, the structure may pose a Hazard to Air Navigation.)

This structure does not exceed these surfaces.

FCC Notice Requirements:

(FCC Rules, Part 17)

This structure does not require notification to the FAA or FCC based on these rules.

FAA EMI:

(The FAA protects certain air navigational aids, radio transmitters, and RADAR facilities from possible interference. The distance and direction are dependent on the type of facility being evaluated. Some of these transmission and receiver facilities are listed in the National Flight Data Center (NFDC) database.)

This site would not affect any FAA air navigational aids or transmitters.

Military Airspace

(This would include low level visual and instrument routes along with operations areas and special use airspace.)

This structure will not affect this airspace.

AM Facilities:

(The FCC protects AM radio stations from possible interference for a distance of 3.0 km for directional facilities, and 1.0 km for non-directional facilities. New changes to the FCC critical distances are calculated based on the AM transmission Movement Method Proof evaluation.)

This site was evaluated against the FCC's AM antenna database using the Movement Method proof calculations and no further action is required.

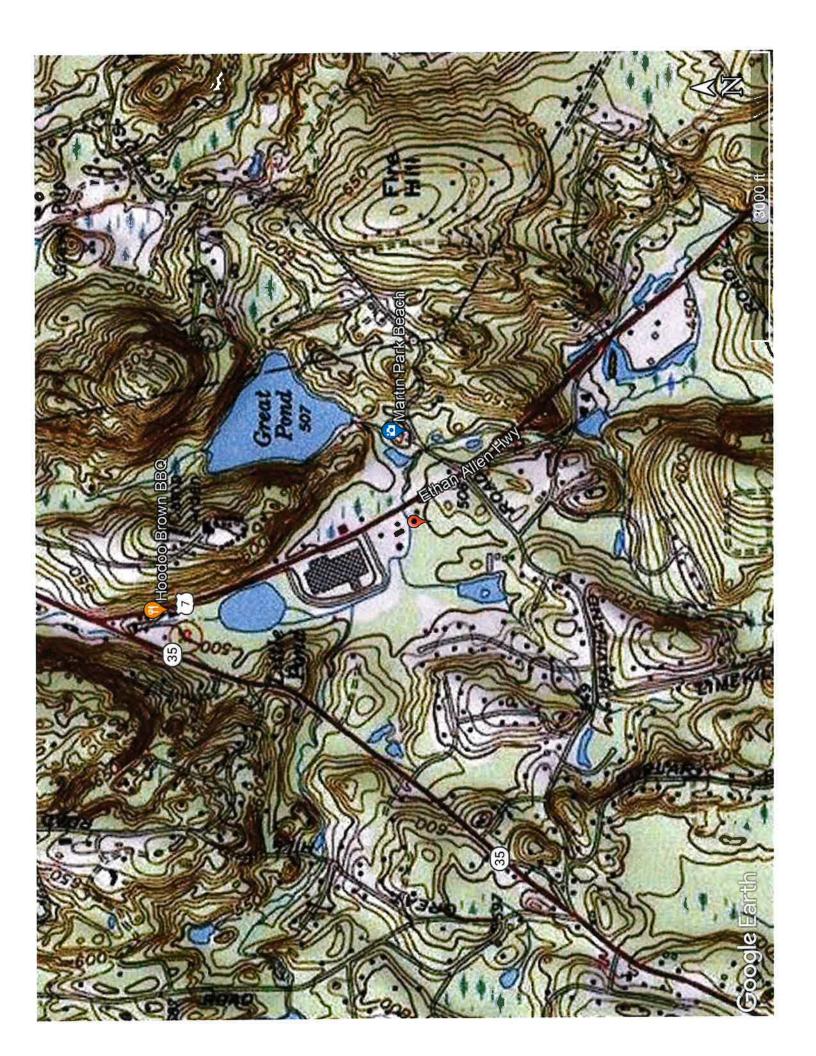
MARKING AND LIGHTING

FAA Advisory Circular 70/7460-1:

Marking and lighting is not required for this structure.

RECOMMENDATIONS

This site was evaluated in accordance with the requirements specified by the FAA under Federal Aviation Rules part 77, and found not to be a hazard to air navigation.



ATTACHMENT 8

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts and New York

December 1, 2022

Via Certificate of Mailing

Rudy Marconi, First Selectman Town of Ridgefield 400 Main Street Ridgefield, CT 06877

Re: Crown Castle and Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling Filed with the Connecticut Siting Council for the Modification of an Existing Telecommunications Facility at 845 Ethan Allen Highway, Ridgefield, Connecticut

Dear First Selectman Marconi:

This firm represents the Crown Castle ("Crown") and Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Crown and Cellco filed a joint Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to modify the existing wireless telecommunications facility at 845 Ethan Allen Highway in Ridgefield, Connecticut (the "Property"). The modifications involve the removal of the existing 100-foot flagpole tower and the installation of a new 110-foot monopole tower within an expanded facility compound. The new replacement tower would support antennas owned and operated by Sprint, AT&T, T-Mobile and Cellco. Equipment associated with Cellco's antennas would be located on the ground near the base of the tower within the expanded facility compound. Once construction of the new tower is complete, the existing 100-foot flagpole tower would be removed from the Property.

Rudy Marconi, First Selectman December 1, 2022 Page 2

A copy of the full Petition is attached for your review. If you have any questions regarding this Petition, please contact me or the Siting Council directly at (860) 827-2935.

Sincerely,

Kenneth C. Baldwin

KCB/kmd Attachment

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts and New York

December 1, 2022

Via Certificate of Mailing

Alice Dew Planning and Zoning Director Town of Ridgefield 66 Prospect Street Ridgefield, CT 06877

Re: Crown Castle and Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling Filed with the Connecticut Siting Council for the Modification of an Existing Telecommunications Facility at 845 Ethan Allen Highway, Ridgefield, Connecticut

Dear Ms. Dew:

This firm represents the Crown Castle ("Crown") and Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Crown and Cellco filed a joint Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to modify the existing wireless telecommunications facility at 845 Ethan Allen Highway in Ridgefield, Connecticut (the "Property"). The modifications involve the removal of the existing 100-foot flagpole tower and the installation of a new 110-foot monopole tower within an expanded facility compound. The new replacement tower would support antennas owned and operated by Sprint, AT&T, T-Mobile and Cellco. Equipment associated with Cellco's antennas would be located on the ground near the base of the tower within the expanded facility compound. Once construction of the new tower is complete, the existing 100-foot flagpole tower would be removed from the Property.

Alice Dew, Planning and Zoning Director December 1, 2022 Page 2

A copy of the full Petition is attached for your review. If you have any questions regarding this Petition, please contact me or the Siting Council directly at (860) 827-2935.

Sincerely,

Kenneth C. Baldwin

KCB/kmd Attachment

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts and New York

December 1, 2022

Via Certificate of Mailing

Julia Pemberton, First Selectwoman Town of Redding 100 Hill Road P.O. Box 1028 Redding, CT 06875

Re: Crown Castle and Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling Filed with the Connecticut Siting Council for the Modification of an Existing Telecommunications Facility at 845 Ethan Allen Highway, Ridgefield, Connecticut

Dear First Selectwoman Pemberton:

This firm represents the Crown Castle ("Crown") and Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Crown and Cellco filed a joint Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to modify the existing wireless telecommunications facility at 845 Ethan Allen Highway in Ridgefield, Connecticut (the "Property"). The modifications involve the removal of the existing 100-foot flagpole tower and the installation of a new 110-foot monopole tower within an expanded facility compound. The new replacement tower would support antennas owned and operated by Sprint, AT&T, T-Mobile and Cellco. Equipment associated with Cellco's antennas would be located on the ground near the base of the tower within the expanded facility compound. Once construction of the new tower is complete, the existing 100-foot flagpole tower would be removed from the Property.

Julia Pemberton, First Selectwoman December 1, 2022 Page 2

A copy of the full Petition is attached for your review. You are receiving this notification because the facility is located within 2,500 feet of the Redding town boundary. If you have any questions regarding this Petition, please contact me or the Siting Council directly at (860) 827-2935.

Sincerely,

Kenneth C. Baldwin

Kunie gmu-

KCB/kmd Attachment

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts and New York

December 1, 2022

Via Certificate of Mailing

Aimee Pardee, Land Use Director Town of Redding Old Town House, 23 Cross Highway P.O. Box 1028 Redding, CT 06875

Re: Crown Castle and Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling Filed with the Connecticut Siting Council for the Modification of an Existing Telecommunications Facility at 845 Ethan Allen Highway, Ridgefield, Connecticut

Dear Mr. Barrett:

This firm represents the Crown Castle ("Crown") and Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Crown and Cellco filed a joint Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to modify the existing wireless telecommunications facility at 845 Ethan Allen Highway in Ridgefield, Connecticut (the "Property"). The modifications involve the removal of the existing 100-foot flagpole tower and the installation of a new 110-foot monopole tower within an expanded facility compound. The new replacement tower would support antennas owned and operated by Sprint, AT&T, T-Mobile and Cellco. Equipment associated with Cellco's antennas would be located on the ground near the base of the tower within the expanded facility compound. Once construction of the new tower is complete, the existing 100-foot flagpole tower would be removed from the Property.

Aimee Pardee, Land Use Director December 1, 2022 Page 2

A copy of the full Petition is attached for your review. You are receiving this notification because the facility is located within 2,500 feet of the Redding town boundary. If you have any questions regarding this Petition, please contact me or the Siting Council directly at (860) 827-2935.

Sincerely,
Kun & Mu

Kenneth C. Baldwin

KCB/kmd Attachment

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts and New York

December 1, 2022

Via Certificate of Mailing

845 LLC 107 Lords Highway Weston, CT 06883

Re: Crown Castle and Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling Filed with the Connecticut Siting Council for the Modification of an Existing Telecommunications Facility at 845 Ethan Allen Highway, Ridgefield, Connecticut

Dear Sir or Madam:

This firm represents the Crown Castle ("Crown") and Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Crown and Cellco filed a joint Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to modify the existing wireless telecommunications facility at 845 Ethan Allen Highway in Ridgefield, Connecticut (the "Property"). The modifications involve the removal of the existing 100-foot flagpole tower and the installation of a new 110-foot monopole tower within an expanded facility compound. The new replacement tower would support antennas owned and operated by Sprint, AT&T, T-Mobile and Cellco. Equipment associated with Cellco's antennas would be located on the ground near the base of the tower within the expanded facility compound. Once construction of the new tower is complete, the existing 100-foot flagpole tower would be removed from the Property.

845 LLC December 1, 2022 Page 2

A copy of the full Petition is attached for your review. If you have any questions regarding this Petition, please contact me or the Siting Council directly at (860) 827-2935.

Sincerely,

Kenneth C. Baldwin

KCB/kmd Attachment

ATTACHMENT 9

Robinson - Cole

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts and New York

December 1, 2022

Via Certificate of Mailing

«Name and Address»

Re: Petition for Declaratory Ruling Filed with the Connecticut Siting Council for the Modification of an Existing Telecommunications Facility at 845 Ethan Allen Highway, Ridgefield, Connecticut

Dear «Salutation»:

This firm represents the Crown Castle ("Crown") and Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Crown and Cellco filed a joint Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to modify the existing wireless telecommunications facility at 845 Ethan Allen Highway in Ridgefield, Connecticut (the "Property"). The modifications involve the removal of the existing 100-foot flagpole tower and the installation of a new 110-foot monopole tower within an expanded facility compound. The new replacement tower would support antennas owned and operated by Sprint, AT&T, T-Mobile and Cellco. Equipment associated with the Cellco's antennas would be located on the ground near the base of the tower within the expanded facility compound. Once construction of the new tower is complete, the existing 100-foot flagpole tower would be removed from the Property.

This notice is being sent to you because you are identified on the Town Assessor's records as an owner of land that abuts the Property. If you have any questions regarding the Petition, the Council's process for reviewing the Petition or the details of the filing itself, please feel free to contact me at the number listed above. You may also contact the Council directly at 860-827-2935.

December 1, 2022 Page 2

> Sincerely, Kun & MM—

Kenneth C. Baldwin

Attachment

CROWN CASTLE AND CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

ABUTTING PROPERTY OWNERS

845 ETHAN ALLEN HIGHWAY RIDGEFIELD, CONNECTICUT

	Property Address	Owner's and Mailing Address
1.	865 Ethan Allen Highway	Michael J. Venus 78 Harvey Road Ridgefield, CT 06877
2.	19 Great Pond Road	Town of Ridgefield 400 Main Street Ridgefield, CT 06877
3.	824 Ethan Allen Highway	824 Ethan Allen Highway LLC Of 824 Ethan Allen Highway Ridgefield, CT 06877
4.	Ethan Allen Highway	TGE of Ridgefield 336 Malletts Bay Avenue Colchester, VT 05446
5.	Ethan Allen Highway	TGE of Ridgefield 336 Malletts Bay Avenue Colchester, VT 05446
6.	Haviland Road	Town of Ridgefield 400 Main Street Ridgefield, CT 06877