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

May 18, 2017

Via Hand Delivery

Craig Baldwin, First Selectman Town of Pomfret 5 Haven Road Pomfret, CT 06518

Re:

Submission of Technical Information Concerning a Proposal to Construct a Wireless Telecommunications Facility at 72 Ragged Hill Road, Pomfret, Connecticut

Dear Mr. Baldwin:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"), in its proposal to construct a new wireless telecommunications facility on an approximately 627-acre parcel at 72 Ragged Hill Road in Pomfret, Connecticut (the "Property"). For the purposes of this filing, the proposed telecommunications facility is known as Cellco's "Pomfret Center Facility". This Technical Report is submitted pursuant to Connecticut General Statutes ("Conn. Gen. Stat.") § 16-50½(g), which establishes local input requirements for the siting of a wireless telecommunications facility under the jurisdiction of the Connecticut Siting Council (the "Council"). This statutory provision requires the submission of technical information to officials in the municipality where the proposed facility will be located and any municipality within 2,500 feet of the proposed facility location. Both the Towns of Woodstock and Eastford are located within 2,500 feet of the proposed Pomfret Center Facility.

Correspondence and/or communications regarding the information contained in this report should be addressed to:

Craig Baldwin May 18, 2017 Page 2

Anthony Befera
Manager – Real Estate & Project Implementation
Cellco Partnership d/b/a Verizon Wireless
99 East River Drive
East Hartford, CT 06108

A copy of all such correspondence or communications should also be sent to Cellco's attorneys:

Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597

Cellco intends to submit an application to the Council for a Certificate of Environmental Compatibility and Public Need ("Certificate") for the construction, maintenance and operation of a wireless telecommunications facility at the Property. The Pomfret Center Facility would interact, to some extent, with Cellco's existing cell sites in Pomfret, Eastford, Ashford, Andover, Brooklyn, Union and Woodstock, Connecticut.

The proposed Pomfret Center Facility would fill existing gaps in wireless service in Cellco's existing network in Pomfret, Woodstock and Eastford, Connecticut and provide service along portions of Routes 198, 44 and 244 and local roads in the vicinity of the cell site. Coverage plots for Cellco's existing cell sites in the area, alone and together with the proposed Pomfret Center Facility are included in Attachment 1. These plots show areas of coverage from Cellco's existing cell sites (purple shading), existing gaps in reliable wireless service (light gray shading), and the coverage footprint from the Pomfret Center Facility (lighter purple shading) in each of Cellco's licensed frequencies. The Pomfret Center Facility will also off-load voice and data traffic from Cellco's Woodstock Relo (Gamma sector) and Pomfret East (Gamma sector) cell sites.

Cell Site Information

The proposed Pomfret Center Facility would be located in the westerly portion of an approximately 627-acre parcel at 72 Ragged Hill Road in Pomfret. The Property is owned by Raynham Inc. and is located in Pomfret's Rural Residential District. The Property is currently vacant and is used, in part, for agricultural purposes.

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The proposed Pomfret Center Facility will consist of a 150-foot monopole tower and related equipment located within a 50' x 50' fenced compound and 100' x 100' leased area. Cellco will install nine (9) panel-type antennas at the top of the tower. Equipment cabinets associated with Cellco's antennas and a diesel-fueled back-up generator would be located on a 16' x 9'-4" steel platform with canopy roof located near the base of the tower. Access to the Pomfret Center Facility would extend from Swedetown Road over a portion of an existing dirt driveway, a distance of approximately 50 feet then over a short driveway extension, an additional distance of 30 feet to the compound area. The 80-foot access driveway will maintain an improved gravel surface. Project plans for the Pomfret Center Facility are included in Attachment 2.

Connecticut Siting Council Jurisdiction

Municipal jurisdiction over the siting of the proposed telecommunications facility described in this report is pre-empted by provisions of the Public Utilities Environmental Standards Act ("PUESA"), Conn. Gen. Stat. § 16-50g et seq. The PUESA gives exclusive jurisdiction over the location, type and modification of telecommunications towers, to the Council (Conn. Gen. Stat. § 16-50x(a); 16-50i(a)(6)). Accordingly, the telecommunications facility described in this report is exempt from the Town's land use (zoning and inland wetlands) regulations.

Upon receipt of an application, the Council will assign a docket number and, following a completeness review, set the schedule for the docket, including a hearing date. At that time, the Town may choose to become an intervenor or party in the proceeding. Other procedures followed by the Council include serving the applicant and other participants with interrogatories, holding a pre-hearing conference, and conducting a public hearing. The public hearing would be held at a location in the Town. Following the public hearing, the Council will issue findings of fact, an opinion and a decision and order. Prior to construction, the Council will also require the Applicant to submit a development and management plan ("D&M Plan") which is, in essence, a final site development plan showing the details of the facility incorporating any conditions imposed by the Council. These procedures are also outside the scope of the Town's jurisdiction and are governed by the Connecticut General Statutes, the Regulations of Connecticut State Agencies, and the Council's Rules of Practice. If the Council approves the cell site described in this report, Cellco will submit to the Building Official an application for approval of a local building permit. Under Section 16-50x of the General Statutes, which provides for the exclusive jurisdiction of the Council, the building official must honor the Council's decision.

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Municipal Consultation Process

Pursuant to Section 16-50½ of the General Statutes, Town officials are entitled to receive technical information regarding the proposed telecommunications facility at least ninety (90) days prior to the filing of an application with the Council. This Technical Report is provided to the Town in accordance with these provisions and includes information on the need for improved reliable wireless service in the area; the location of existing wireless facilities in and around Pomfret; details of the proposed facility; the location of alternative sites considered and rejected; the location of schools and commercial day care facilities in the area and the aesthetic impacts of the facility on those schools and day care facilities, if any; a description of the site selection process; and a discussion of potential environmental effects associated with the proposed facility.

Not later than sixty (60) days after the initial consultation meeting, the municipality <u>may</u>, in cooperation with Cellco, hold a public information hearing on the facility proposal. If such a hearing is held, the applicant must notify all abutting landowners and publish notice of the hearing in a newspaper of general circulation in the municipality, at least fifteen (15) days prior to the hearing.

Not later than thirty (30) days after the initial consultation meeting, the municipality may present the prospective applicant with alternative sites, including municipal parcels, for its consideration. If not previously considered, these alternatives will be evaluated and discussed in its application to the Council.

Pursuant to Section 16-50*l*(e) of the General Statutes, Cellco must provide a summary of the Town's comments and recommendations, if any, to the Council within fifteen (15) days of the filing of an application.

Need for the Proposed Wireless Facility

The proposed Pomfret Center Facility described in this Technical Report is needed so that Cellco can provide enhanced wireless voice and data services in Pomfret, Woodstock and Eastford, Connecticut. The Pomfret Center Facility will provide wireless "coverage" along portions of Routes 198, 44 and 244, and the area immediately around the Property in its 700, 850, 1900, and 2100 MHz frequency ranges. The Pomfret Center Facility will also provide some capacity relief to Cellco's existing Woodstock Relo (Gamma sector) and Pomfret East (Gamma sector) cell sites.

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Environmental Effects

In our experience, the primary impact of a wireless facility such as the proposed Pomfret Center Facility is visual. The visual impact of the proposed Pomfret Center Facility will vary from place to place around the site location, depending upon factors such as vegetation, topography, distance from the tower, and the location of buildings in the sight-line of the cell site.

To more fully assess the visual impact of the Pomfret Center Facility, Cellco's consultant, All-Points Technology Corporation ("APT") has prepared a Preliminary Visual Assessment. This assessment indicates that a majority of the year-round visibility of the proposed 150-foot tower at the Property would be limited to the area in the immediate vicinity of the proposed tower location, generally over undeveloped land to the north and east of the cell site. These year-round views encompass an area of approximately 182 acres. When the leaves are off the trees, views of the proposed tower through the trees (a/k/a seasonal views) may occur over a larger area (approximately 501 acres) around the tower site. (See Attachment 3). A more detailed visual assessment report is being prepared and will be included in Cellco's application to the Council.

Pursuant to the provisions of Conn. Gen. Stat. § 16-50p(a)(3)(G), new telecommunications facilities must be located at least 250 feet from schools (defined in C.G.S. §10-154a) and commercial day care facilities (defined in C.G.S. §19a-77(a)(1)) unless the location selected is acceptable to the Town's chief elected official or the Council finds that the facility will not have a substantial adverse effect on the aesthetics or scenic quality of the neighborhood where the school or commercial day care use is located. The proposed Pomfret Center Facility is not located within 250 feet of any building containing a school or commercial day care facility.

Based on field surveys, Cellco has determined that the construction of the Pomfret Center Facility will have no direct impact on inland wetlands or watercourses, within or near the tower compound. Cellco anticipates that all other physical environmental effects associated with the proposed facility would be minimal.

Radio Frequency Emissions

The Federal Communications Commission ("FCC") has adopted a standard (the "Standard") for exposure of radio frequency ("RF") emissions from telecommunications base stations like the Pomfret Center Facility. To ensure compliance with the Standard, Cellco has

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performed a worst-case RF emissions calculation for the proposed facility according to the methodology described in FCC Office of Science and Technology Bulletin No. 65 ("OST Bulletin 65"). This calculation is a conservative, worst-case approximation of RF emissions at the closest accessible point to the antenna (i.e., the base of the tower), and assumes that all antennas are transmitting simultaneously on all channels at full power. The worst-case calculated RF emissions level for Cellco's antennas at the 150-foot level on the proposed tower would be 30.45% of the FCC Standard. (*See Attachment 4.*) Actual RF emissions levels from this facility will be far less than this "worst-case" approximation.

Scenic Natural Historic or Recreational Impacts

To further assess the environmental impacts of the proposed facility, Cellco is working with its consultant team to prepare a National Environmental Policy Act ("NEPA") Environmental Screening Checklist (the "NEPA Checklist") and other related environmental reviews to determine if the facility will have any significant adverse environmental effects. The NEPA Checklist will include information from the Environmental and Geographic Information Center of the Connecticut Department of Energy and Environmental Protection ("DEEP"), the U.S. Fish and Wildlife Service ("USFWS") and the State Historic Preservation Officer ("SHPO"). Copies of the DEEP, USFWS and the SHPO determinations will also be submitted as a part of the Council Application.

Site Search Process

Cellco conducted a search for suitable cell site locations in portions of Pomfret and identified the Property as a site that would satisfy its wireless service objectives in the area. In addition to the proposed location, Cellco identified and investigated thirteen (13) alternative facility locations in the area. With the exception of the Pomfret Center Facility location, each of the alternative sites considered were rejected by Cellco's RF engineers due to the location of the site either being too far outside the site search ring or too low to allow Cellco to satisfy its wireless service objectives in the area. A complete list of other potential cell sites considered and/or investigated is included in Attachment 5.

Tower Sharing

As stated above, Cellco intends to build a tower that is capable of supporting its antennas and those of additional wireless telecommunications providers, including the Town of Pomfret emergency service providers, if the Town determines a need exists. The provision to share the tower is consistent with the intent of the General Assembly when it adopted Conn. Gen. Stat. §

Craig Baldwin May 18, 2017 Page 7

16-50aa and with Council policy. The availability of space on the proposed tower may reduce, if not eliminate, the need for additional towers in Pomfret for the foreseeable future.

Conclusion

This Technical Report is submitted in accordance with Conn. Gen. Stat. § 16-50½ which requires Cellco to supply the Town with information regarding its proposed Pomfret Center Facility. This report includes information regarding the site selection process, public need, and the potential environmental impacts of the facility. Cellco submits that its proposed Pomfret Center Facility would not have any significant adverse environmental effects. Moreover, Cellco submits that the public need for high quality wireless service, and a competitive framework for providing such service has been determined by the FCC to be in the public interest and that such public need far outweighs any perceived environmental effects of the proposed facility.

Please contact me if you have any additional questions regarding the proposed facility.

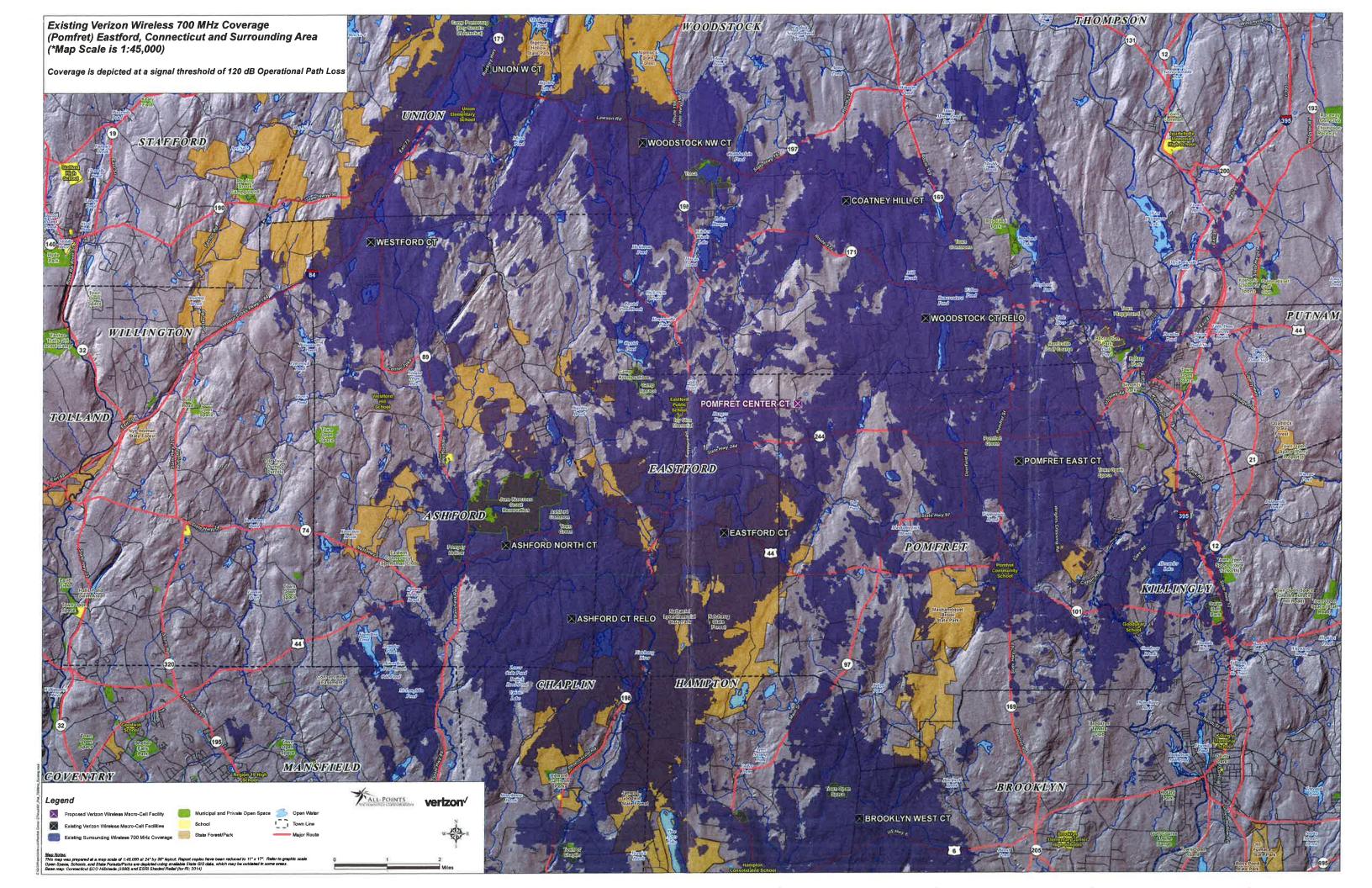
Sincerely,

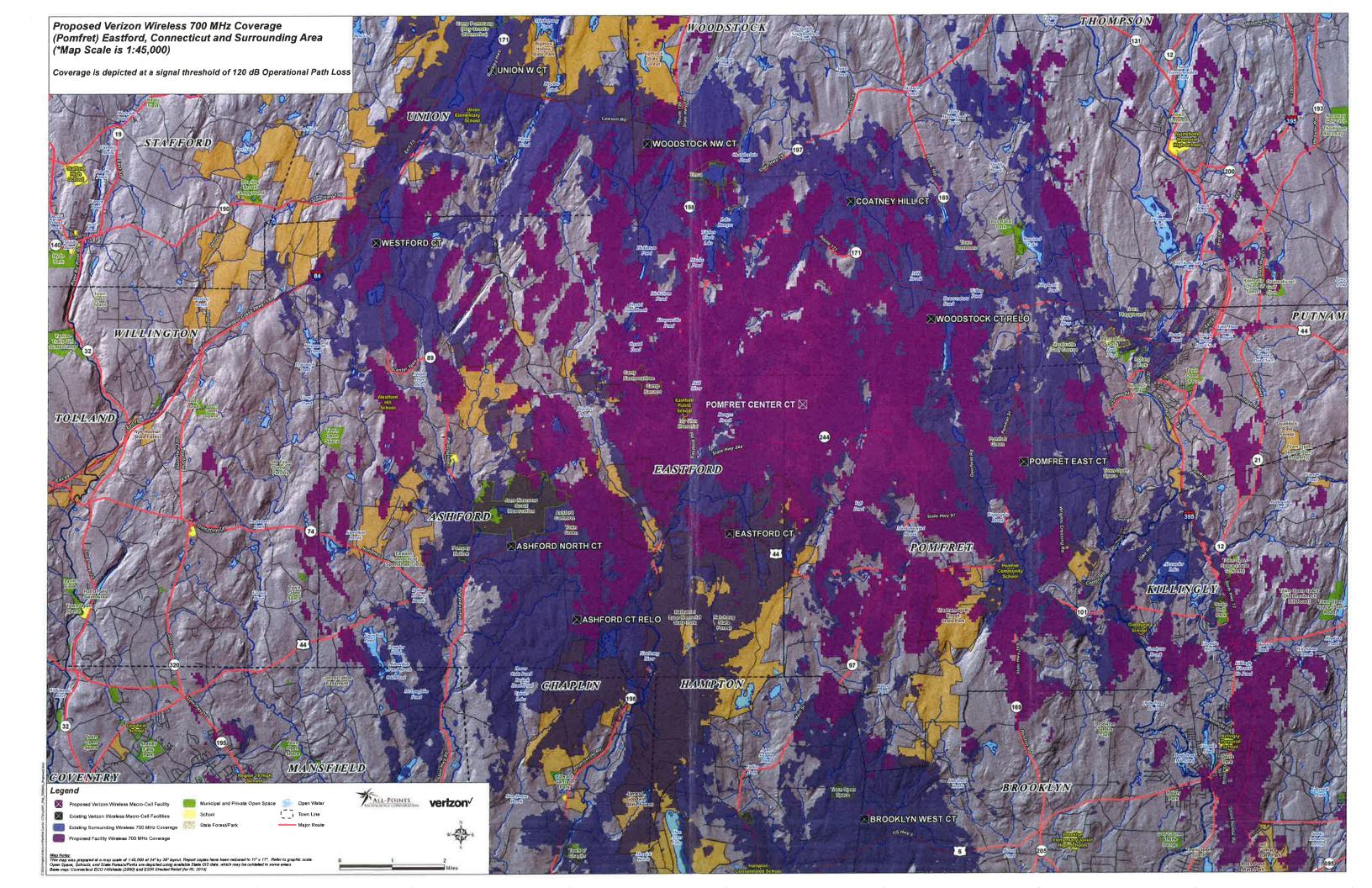
Kenneth C. Baldwin

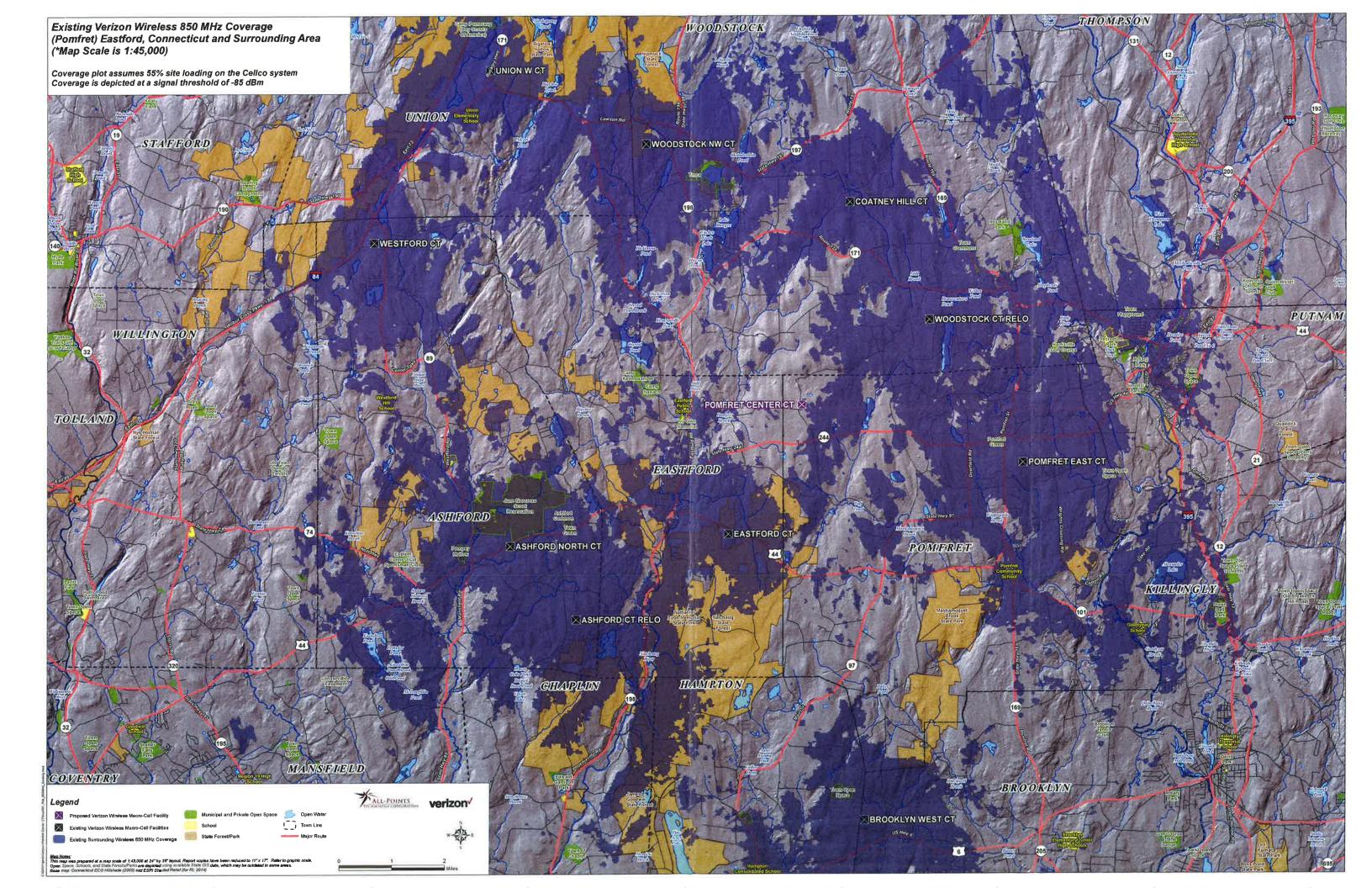
KCB/kmd Enclosures

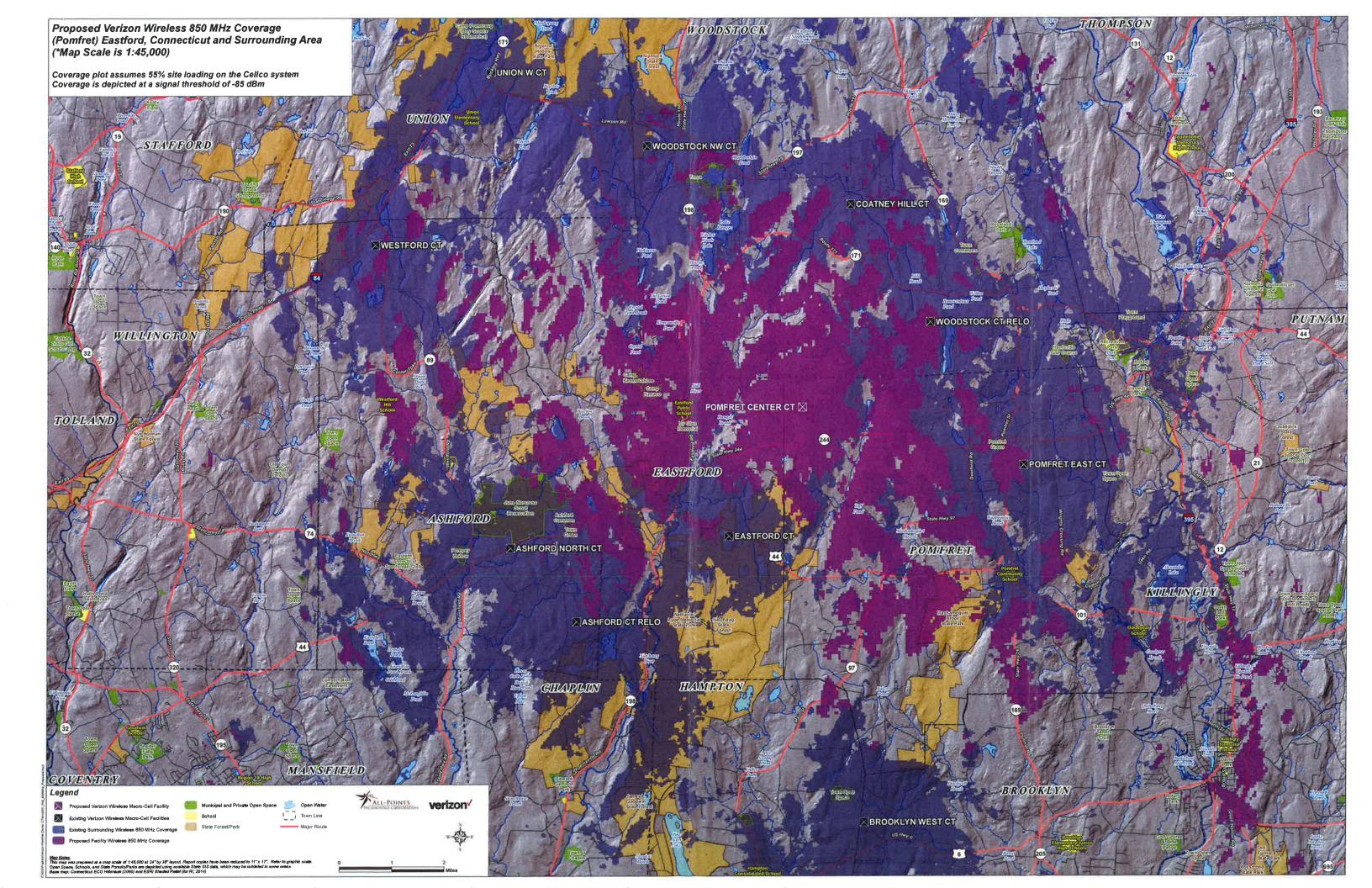
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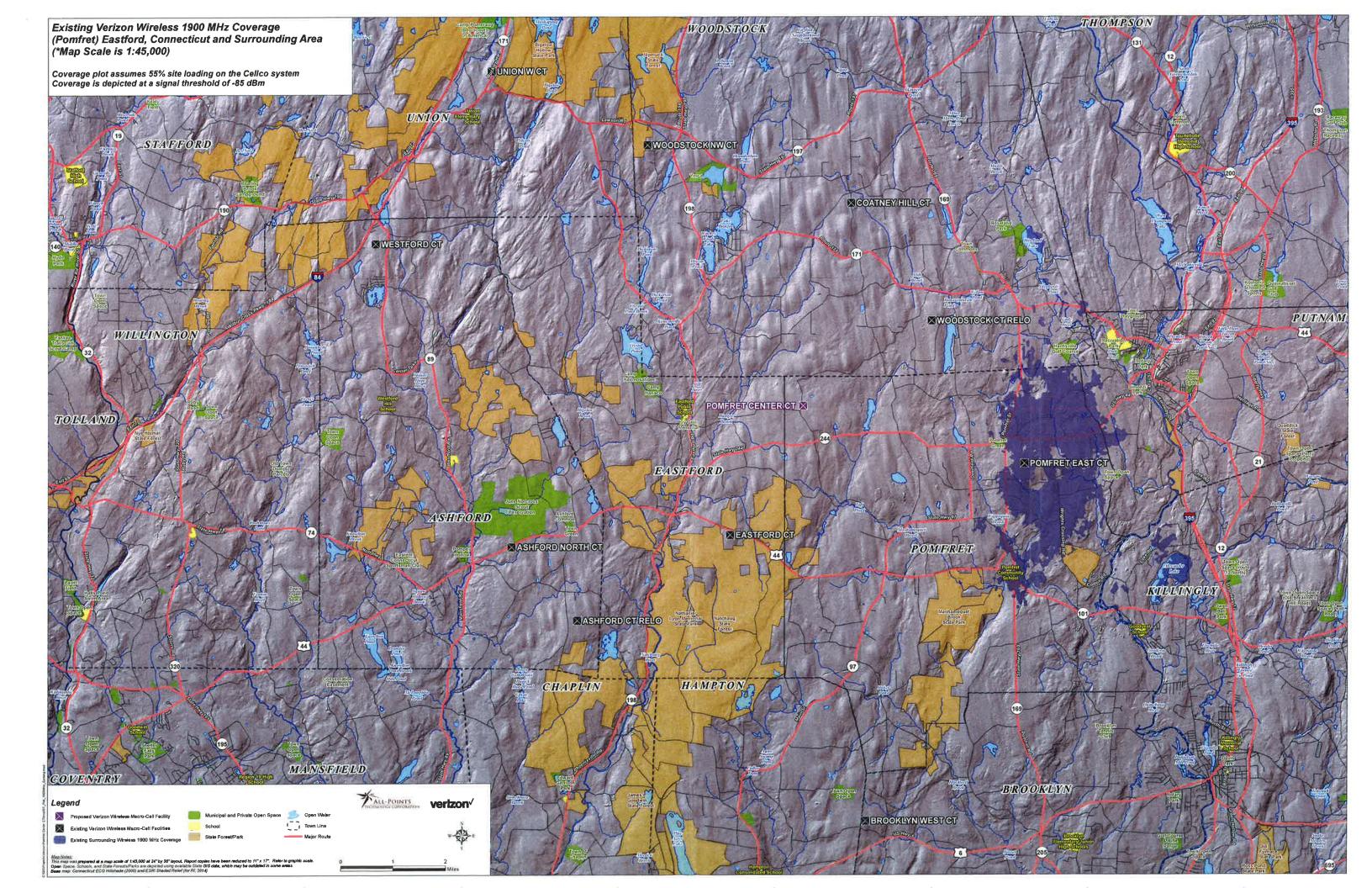
Walter P. Hinchman, Chairman, Pomfret Planning and Zoning Commission
John Folsom, Chair, Pomfret Inland Wetlands & Watercourses Commission
Allan D. Walker, Jr., Woodstock First Selectman
Jeffrey Gordon, Chair, Woodstock Planning and Zoning Commission
Mark Parker, Chairperson, Woodstock Inland Wetlands and Watercourses Agency
Arthur Brodeur, Eastford First Selectman
Effie Vinal, Chair, Eastford Planning Commission
Thomas DeJohn, Chair, Eastford Inland Wetlands and Watercourses Agency
Anthony Befera
Elizabeth Jamieson
Ray Luke Paradis

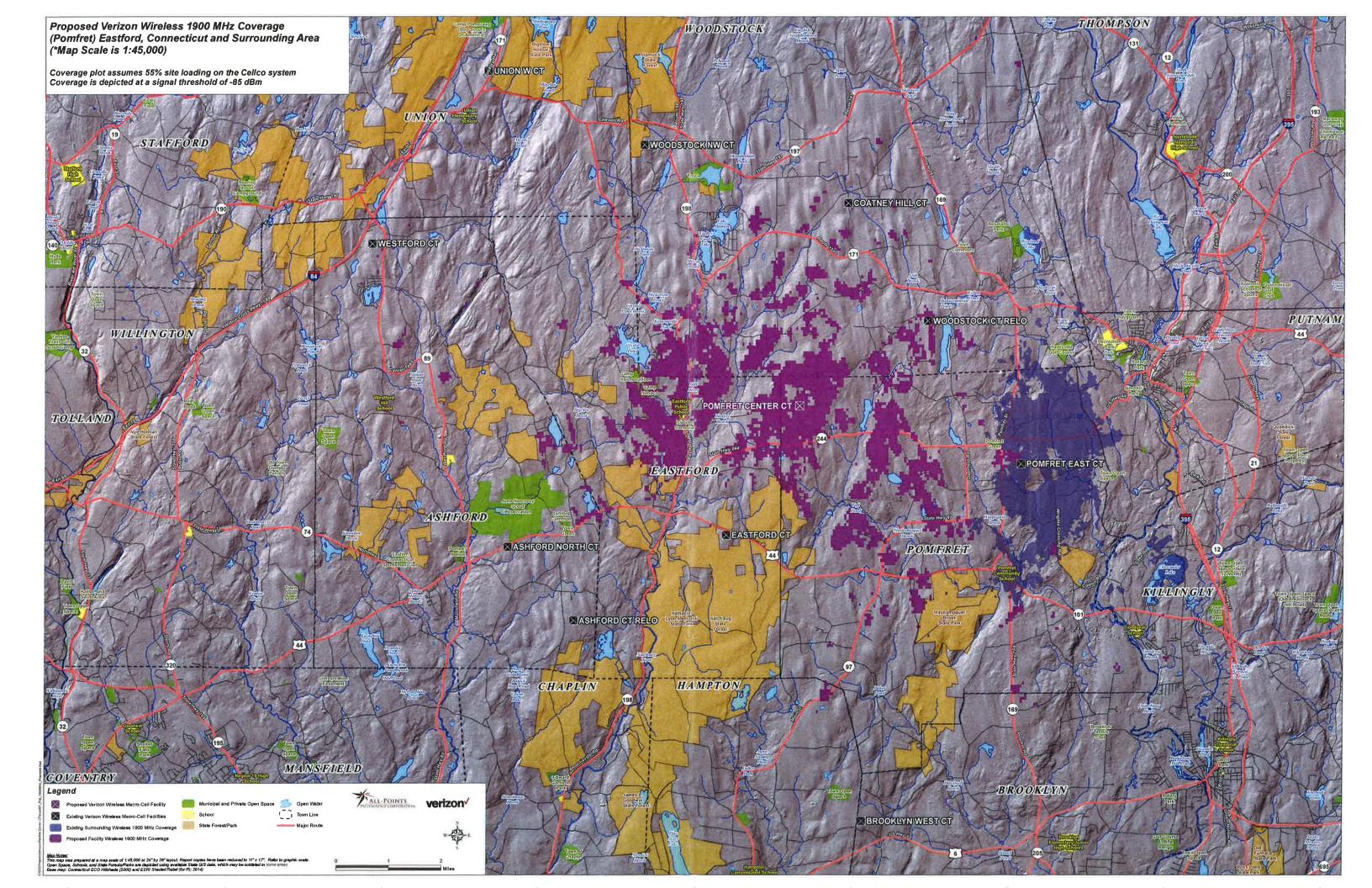


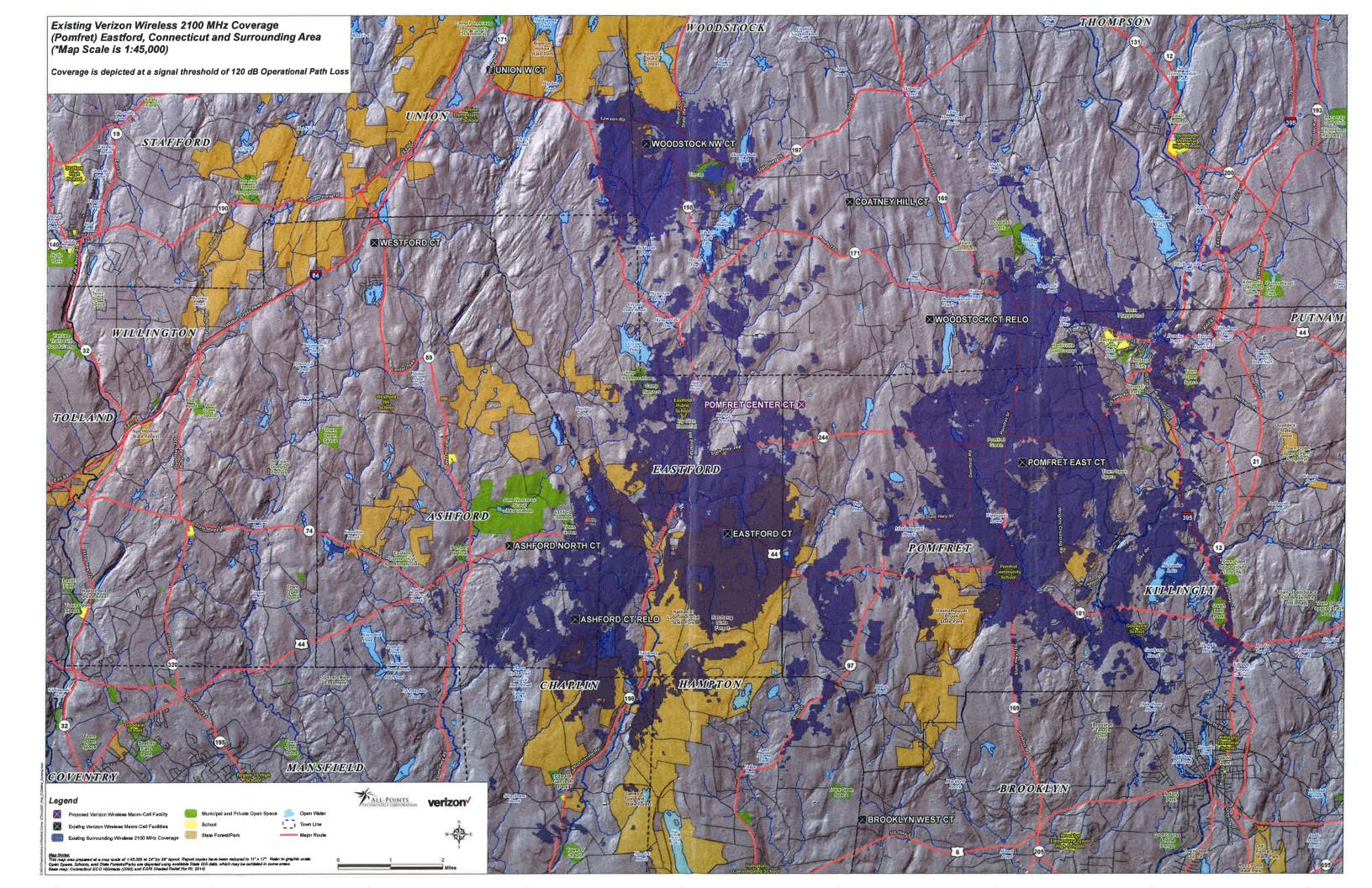


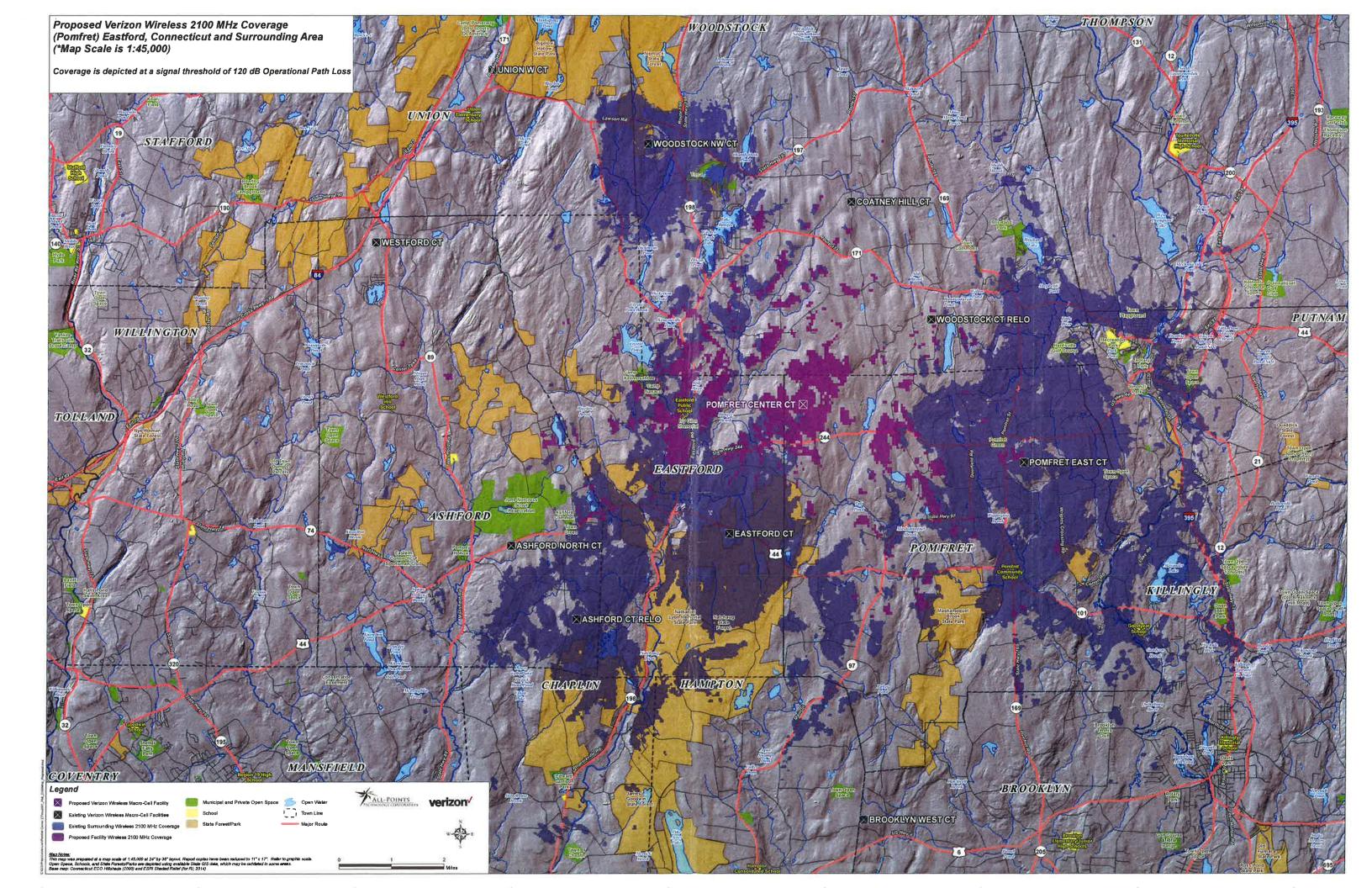












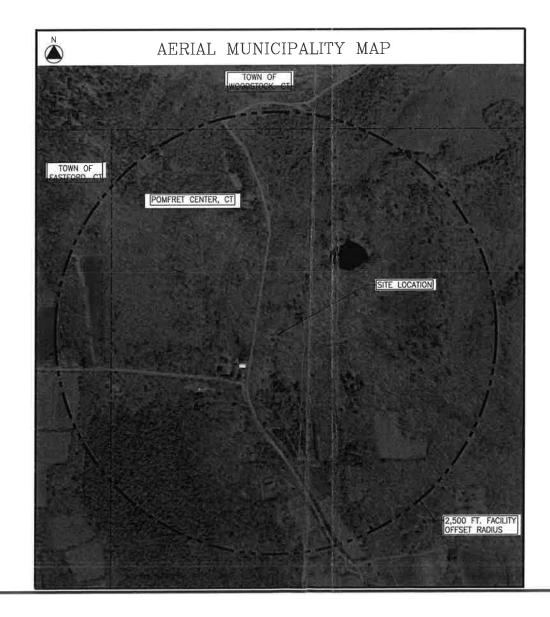


WIRELESS COMMUNICATIONS FACILITY

SITE NAME: POMFRET CENTER CT

72 RAGGED HILL RD. POMFRET CENTER, CT 06259

RAW LAND



PRO.	JECT SUMMARY
SITE NAME:	POMFRET CENTER CT
SITE ADDRESS:	72 RAGGED HILL RD. POMFRET CENTER, CT 06259
PROPERTY OWNER & MAILING ADDRESS:	RAYNHAM INC 783 LAWRENCE RD. POWNAL, ME 04069
PARCEL/GIS ID:	CT-112-06-B-001.00
TOWER COORDINATES:	41° 54′ 23.62″ N 72° 02′ 13.39″ W
APPLICANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DR., 9TH FL. EAST HARTFORD, CT 06108
VERIZON WIRELESS CONTACTS:	JOHN TIERNEY - CONSTRUCTION (860) 999-1179 STEVE SCHADLER- SITE ACQ. (508) 887-0357
LEGAL/REGULATORY COUNSEL;	KENNETH C. BALDWIN, ESQ. ROBINSON & COLE, LLP (860) 275-8345

	DRAWING SCHEDULE
SHEET NO.	SHEET DESCRIPTION
T-1	TITLE SHEET
C-1	KEY MAP & ENLARGED SITE LAYOUT
C-2	COMPOUND PLAN, WEST ELEVATION & ANTENNA PLAN
C-3	ABUTTERS MAP & PROPERTY OWNER LIST

verizon/

WIRELESS COMMUNICATIONS FACILITY

99 EAST RIVER DRIVE EAST HARTFORD, CT 06108



88 Foundry Pond Rd. Cold Spring, NY 10516 onair@optonline.net 201-456-4624

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POMFRET CENTER CT

NEW BUILD MACRO

72 RAGGED HILL RD. POMFRET CENTER, CT 06259

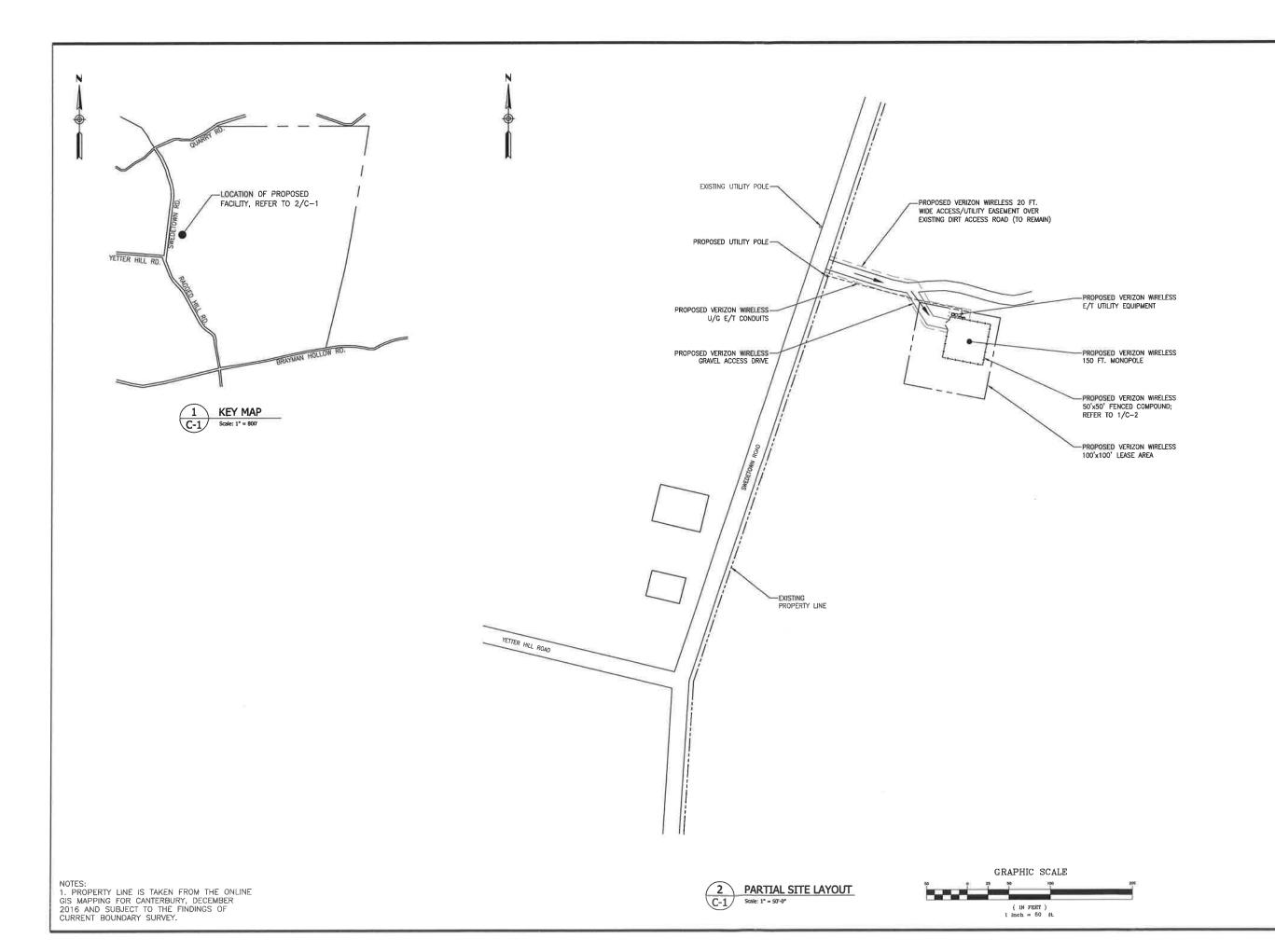
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TITLE SHEET

T-1

PROJECT DESCRIPTION

- INSTALLATION OF A 150 FT. MONOPOLE/TOWER AND FENCED—IN COMPOUND AT GRADE
 INSTALLATION OF OUTDOOR CABINETS AND A DIESEL FUELED BACK—UP EMERGENCY GENERATOR
 ON A 16'-0"x9'-4" EQUIPMENT PLATFORM WITHIN THE COMPOUND
 INSTALLATION OF (9) PANEL ANTENNAS AND ASSOCIATED DEVICES ON THE MONOPOLE
 INSTALLATION OF CABLING FROM EQUIP. CABINETS TO ANTENNAS
- ELECTRICAL & TELEPHONE CONNECTIONS TO EXISTING UTILITY DEMARCATION POINTS



verizon/

WIRELESS COMMUNICATIONS FACILITY

99 EAST RIVER DRIVE EAST HARTFORD, CT 06108

On Air Engineering, LLC

88 Foundry Pond Rd. Cold Spring, NY 10516 onair@optonline.net 201-456-4624

LICENSURE

DAVID WEINPAHL, P.E. CT LIC. NO. 22144

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AS CHECKED BY:

DW

SITE NAM

POMFRET CENTER CT

PROJECT DESCRIPTION:

NEW BUILD MACRO

DJECT INFORMATION

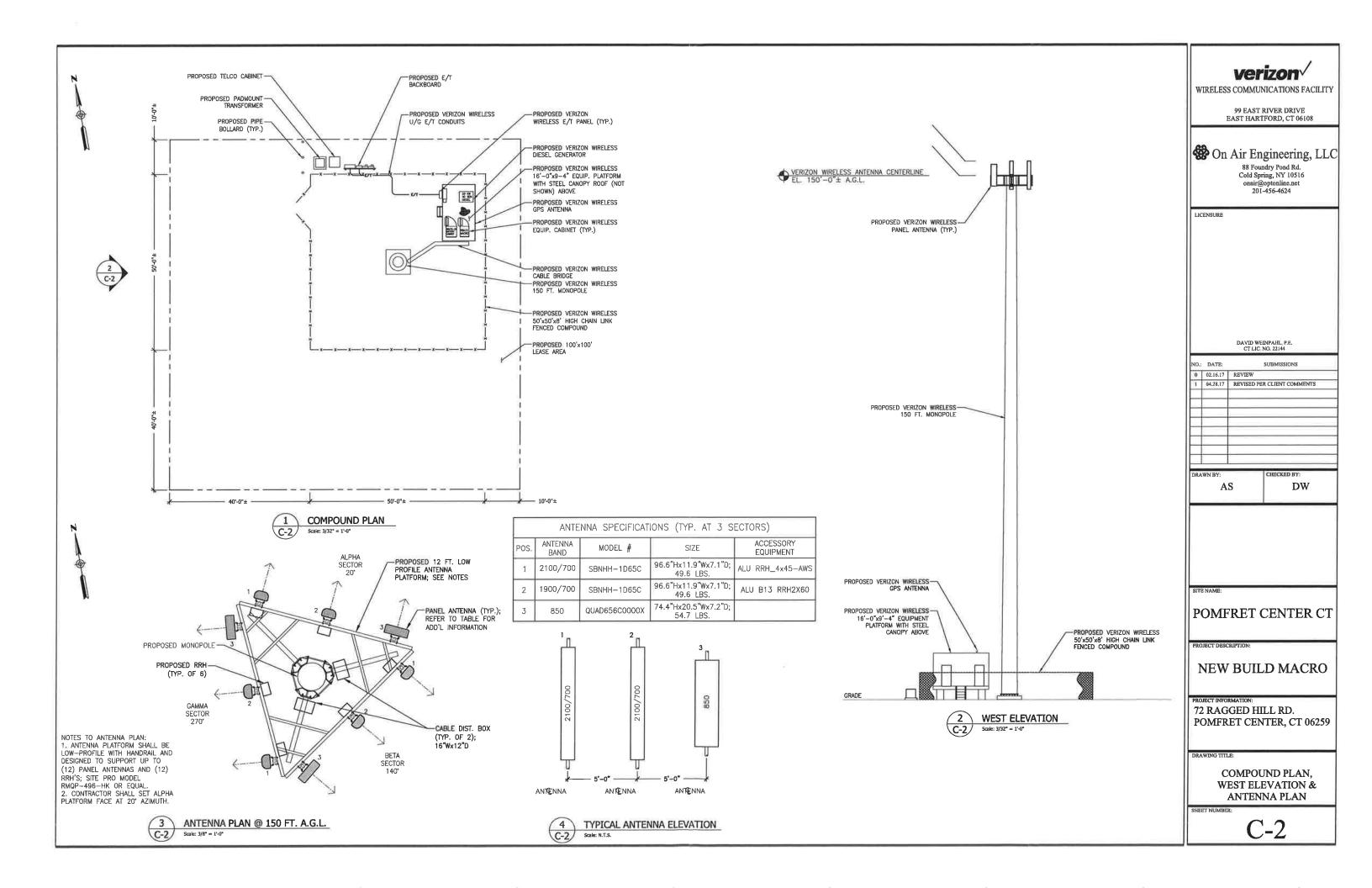
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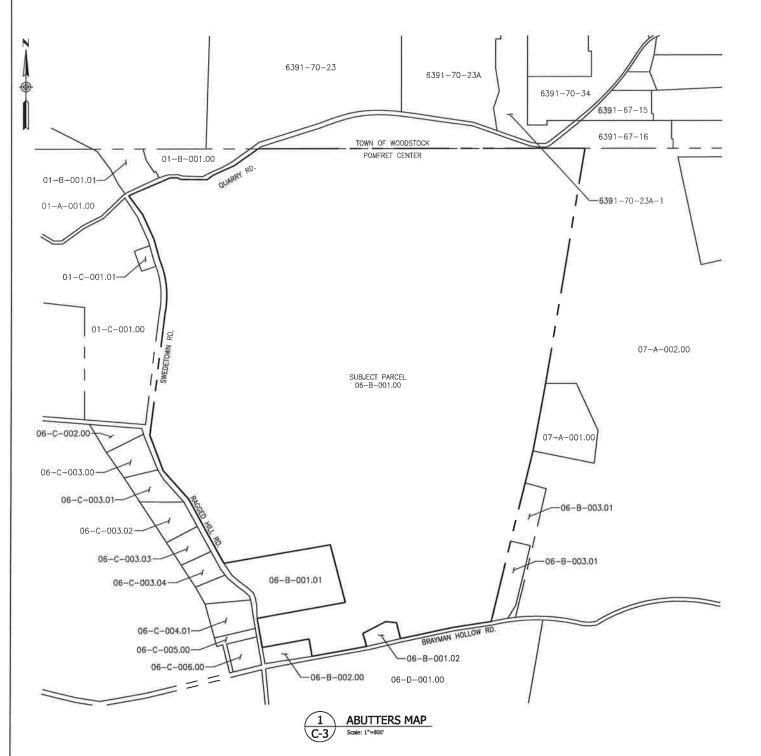
DRAWING TITLE:

KEY MAP & PARTIAL SITE LAYOUT

SHEET NUMBER

C-1





	ABUTT	ERS LIST FROM PARCEL 06-B-001.00	
PARCEL#	OWNER NAME	OWNER MAILING ADDRESS	PROPERTY ADDRESS
	Pi	OMFRET CENTER ABUTTER LIST	
07-A-002.00	ABBOTT CLAUDIA S ET ALS	439 BRAYMAN HOLLOW RD, POMFRET CTR, CT 06259	439 BRAYMAN HOLLOW RD.
07-A-001.00	ABBOTT CLAUDIA S ET ALS	439 BRAYMAN HOLLOW RD, POMFRET CTR, CT 06259	521 BRAYMAN HOLLOW RD.
06-B-003.01	DESALVO MICHAEL A	517 BRAYMAN HOLLOW RD, POMFRET CTR, CT 06259	517 BRAYMAN HOLLOW RD
06-B-003.00	CYR CHRISTOPHER C	525 BRAYMAN HOLLOW RD, POMFRET CTR, CT 06259	525 BRAYMAN HOLLOW RD.
06-D-001.00	RAYNHAM INC	783 LAWRENCE RD, POWNAL, ME 04069	634 BRAYMAN HOLLOW RD.
06-B-001.02	GREENE SCOTT & TONYA	589 BRAYMAN HOLLOW RD, POMFRET CTR, CT 06259	589 BRAYMAN HOLLOW RD.
06-B-002.00	TOWNSHEND HENRY H JR POMFRET TRUST	709 TOWNSHEND AVE, NEW HAVEN, CT 06512	633 BRAYMAN HOLLOW RD.
06-C-006.00	AMBERAZZI LLC	C/O 16 WINDSOR AVE, PLAINFIELD, CT 06374	13 RAGGED HILL RD.
06-C-005.00	AMBERAZZI LLC	C/O 16 WINDSOR AVE, PLAINFIELD, CT 06374	17 RAGGED HILL RD.
06-C-004.01	HEROUX DAVID M & JEAN MARIE	25 RAGGED HILL RD, POMFRET CTR, CT 06259	25 RAGGED HILL RD.
06-B-001.01	TOWNSHEND TIMOTHY K & SUSAN M	36 RAGGED HILL RD, POMFRET CTR, CT 06259	36 RAGGED HILL RD.
06-C-003.04	CERRONE MARC B & KATHLEEN	52 RAGGED HILL RD, POMFRET CTR, CT 06259	53 RAGGED HILL RD.
06-C-003.03	CANALIS ERNESTO	99 FALLVIEW DR, GLASTONBURY, CT 06033	69 RAGGED HILL RD.
06-C-003.02	SCHNEIDER JOHN E & JILL M	87 RAGGED HILL RD, POMFRET CTR, CT 06259	87 RAGGED HILL RD.
06-C-003.01	HEARN JAMES E & KARYN G	105 RAGGED HILL RD, POMFRET CTR, CT 06259	105 RAGGED HILL RD.
06-C-003.00	POLAND MICHAEL J & BETH A	123 RAGGED HILL RD, POMFRET CTR, CT 06259	123 RAGGED HILL RD.
06-C-002.00	JONES DONALD SCOTT	151 RAGGED HILL RD, POMFRET CTR, CT 06259	151 RAGGED HILL RD.
01-C-001.00	POTRZEBA JAMES W & JOANN	50 SWEDETOWN RD, POMFRET CTR, CT 06259	140 RAGGED HILL RD.
01-C-001.01	POTRZEBA JAMES W & JOANN	50 SWEDETOWN RD, POMFRET CTR, CT 06259	50 SWEDETOWN RD.
01-A-001.00	POTRZEBA JAMES W & JOANN	50 SWEDETOWN RD, POMFRET CTR, CT 06259	62 SWEDETOWN RD.
01-B-001.01	QUIET CORNER PROPERTY ACQUISITIONS	65 HAMLET HILL RD, POMFRET CTR, CT 06259	66 SWEDETOWN RD.
01-B-001.00	DIIORIO SARA I	78 SWEDETOWN RD, POMFRET CTR, CT 06259	78 SWEDETOWN RD.
		WOODSTOCK ABUTTER LIST	
6391-70-23	JACQUES, GEORGE J & NANCY L	116 MARYANNE DR, COVENTRY, CT 06238	QUARRY RD, WOODSTOCK,
6391-70-23A	CARTIER, JOHN C	PO BOX 657, WOODSTOCK, CT 06281	QUARRY RD, WOODSTOCK, (
6391-70-23A-1	CARTIER, JEFFREY A	35 MARLIN RD, HARWICH, MA 02645	QUARRY RD, WOODSTOCK,
6391-70-34	TOWN OF WOODSTOCK	415 RT 169, WOODSTOCK, CT 06281	QUARRY RD, WOODSTOCK, (
6391-67-15	TOWN OF WOODSTOCK	415 RT 169, WOODSTOCK, CT 06281	QUARRY RD, WOODSTOCK, (
6391-67-16	MCGOVERN, JOHN	120 LOYOLA RD, WOODSTOCK, CT 06281	QUARRY RD, WOODSTOCK, O



WIRELESS COMMUNICATIONS FACILITY

99 EAST RIVER DRIVE EAST HARTFORD, CT 06108



LICENSURE

DAVID WEINPAHL, P.E. CT LIC. NO. 22144

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I.	04.28.17	REVISED PER CLIENT COMMENTS
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POMFRET CENTER CT

NEW BUILD MACRO

72 RAGGED HILL RD. POMFRET CENTER, CT 06259

ABUTTERS MAP & PROPERTY OWNER LIST

NOTES TO ABUTTERS MAP & OWNERS LIST:

1. ALL INFORMATION TAKEN FROM THE "NECCOG" 'GIS' WEBSITE FOR POMFRET CENTER, DECEMBER 2016.



PRELIMINARY VISUAL ASSESSMENT

To:

Verizon Wireless

99 East River Drive

East Hartford, Connecticut

Re:

Proposed Telecommunications Facility

72 Ragged Hill Road Pomfret, Connecticut

Date: February 13, 2017

From: Michael Libertine

Cellco Partnership d/b/a Verizon Wireless ("Verizon") has identified a proposed location for development of a new wireless telecommunications facility ("Facility") at 72 Ragged Hill Road in Pomfret Center, Connecticut. The proposed Facility would include a 150-foot tall monopole within a 50-foot by 50-foot fenced compound on the west side of the property ("Site").

At the request of Verizon, All-Points Technology Corporation, P.C. ("APT") has prepared preliminary viewshed mapping to evaluate the visibility associated with the proposed Facility. To conduct this assessment, a predictive computer model was developed specifically for this project. The predictive model provides an initial estimate of potential visibility throughout a pre-defined Study Area, in this case a two-mile radius surrounding the proposed Facility location.

Computer modeling tools were used to predict those areas where at least the top of the Facility is estimated to be visible including TerrSet, an image analysis program developed by Clark Labs at Clark University. Project- and Study Area-specific data were incorporated into the computer model, including the Site location, its ground elevation and the proposed Facility height, as well as the surrounding topography and existing vegetation, which are the primary features that can block direct lines of sight.

Information used in the model included LiDAR¹-based digital elevation data and customized land use data layers developed specifically for this analysis. The LiDAR-based Digital Elevation Model represents topographic information for the state of Connecticut that was derived through the spatial interpolation of airborne LiDAR-based data collected in the year 2010 and has a horizontal resolution of one (1) meter (3.28 feet) and a vertical horizontal resolution of less than one meter. In addition, multiple land use data layers were created from the Natural Resources Conservation Service (through the USDA) aerial photography (1-meter resolution, flown in 2012 [leaf-on] and 2016 [leaf off]) using IDRISI image processing tools. The IDRISI tools develops light reflective classes defined by statistical analysis of individual pixels, which are then grouped based on common reflective values such that distinctions can be made automatically between deciduous and coniferous tree species, as well as grassland, impervious

¹ LiDAR is an acronym for Light Detection and Ranging. It is a technology that utilized lasers to determine the distance to an object or surface. LiDAR is similar to radar, but incorporates laser pulses rather than sound waves. It measures the time delay between transmission and reflection of the laser pulse.

surface areas, surface water and other distinct land use features. This information is manually cross-checked with the recent USGS topographic land characteristics to quality assure the imaging analysis.

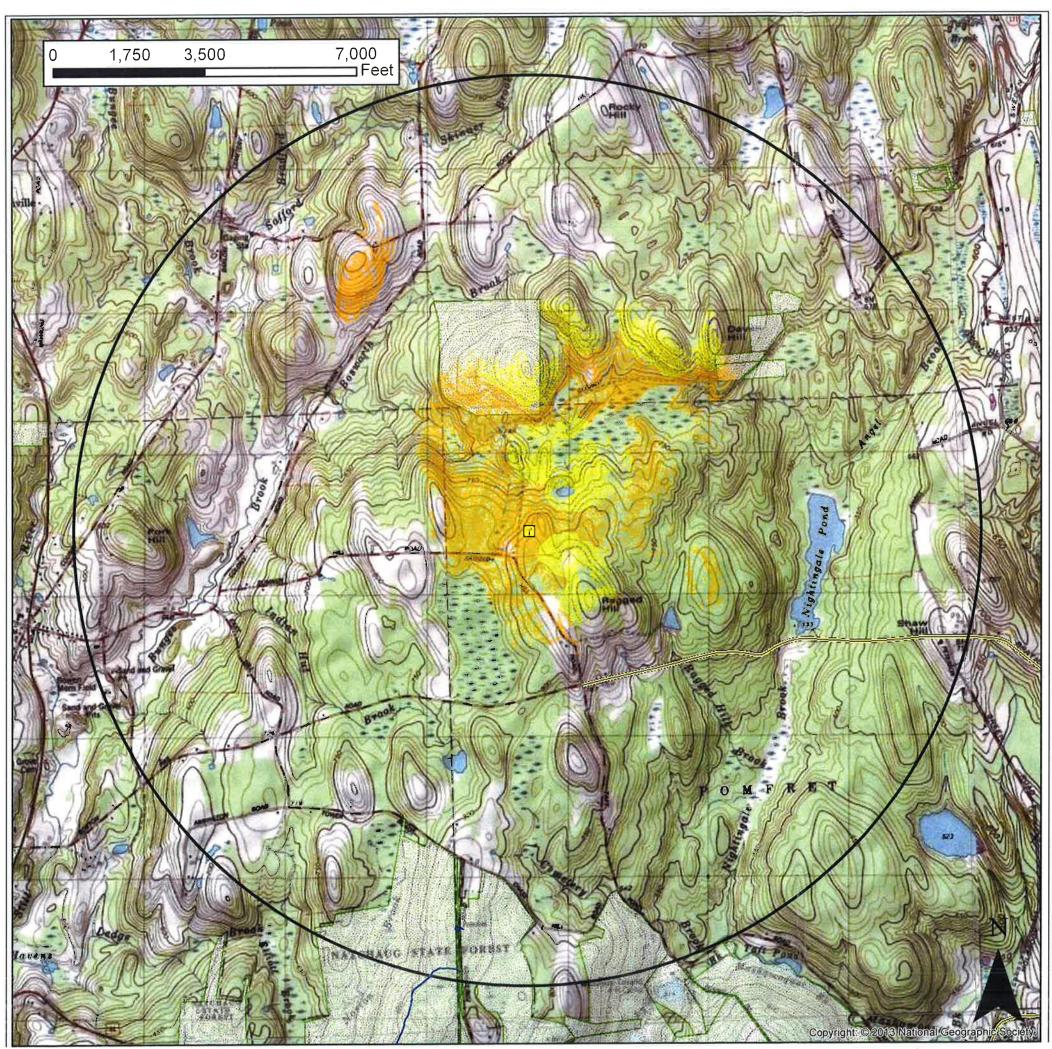
With these data inputs, the model is then queried to determine where the top of the Facility can be seen from any point(s) within the Study Area, given the intervening existing topography and vegetation. The results of the preliminary analysis are depicted on the attached map and are intended to provide a representation of those areas where portions of the Facility may potentially be visible to the human eye without the aid of magnification, based on a viewer eye-height of 5 feet above the ground and the combination of intervening topography and tree canopy (year-round) and tree trunks (seasonally, when the leaves are off the deciduous trees). The shaded areas of predicted visibility shown on the map denote locations from within the Study Area which the proposed Facility may potentially be visible year-round (in yellow) above the tree canopy and/or seasonally, through the trees (during "leaf-off" conditions; depicted in orange). The Facility however may not necessarily be visible from all locations within those shaded areas. It is important to note that the computer model cannot account for mass density, the height, diameter and branching variability of the trees, or the degradation of views that occur with distance. In addition, each point – or pixel - represents about one meter in area, and thus is not predicting visibility from all viewpoints through all possible obstacles. Although large portions of the predicted viewshed may theoretically offer visibility of the Facility, because of these unavoidable limitations the quality of those views may not be sufficient for the human eye to recognize the tower or discriminate it from other surrounding objects. Visibility also varies seasonally with increased, albeit obstructed, views occurring during "leaf-off" conditions. Beyond the density of woodlands found within the given Study Area, each individual tree has its own unique trunk, pole timber and branching pattern characteristics that provide varying degrees of screening in leafless conditions which cannot be adequately modeled. Thus, modeling for seasonal variations of visibility generally over-predicts the viewshed in "leaf-off" conditions, even when incorporating conservative constraints into the model (i.e., assuming each tree is simply a vertical pole of varying width, depending upon species, with no distinct branching pattern). Therefore, field verification remains an important component for cross-checking the model's initial results.

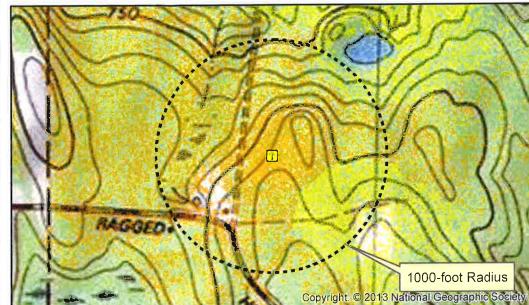
The preliminary viewshed mapping results indicate that visibility associated with the proposed Facility would extend primarily over undeveloped locations north and east of the Site, with limited views southward on Ragged Hill. On a purely quantitative basis, the proposed Facility is predicted to be visible year-round from some locations within an approximate 182-acre area. Seasonal views through the intervening pole timber and branches are anticipated to occur over some locations within an area measuring 501± acres.

The map provides a preliminary basis for understanding the extent of visibility that may occur throughout the Study Area, but it does not address the character of those potential views. Note that the results of the computer model have not been field verified. The variability in tree heights combined with the model's sensitivity typically result in the initial model to be over-predictive of the Facility's viewshed.

Our preliminary results will be field-verified via a balloon test to supplement and fine tune the results of the preliminary computer modeling. The balloon test activities consist of raising an approximately four-foot diameter, helium-filled balloon tethered to the proposed Facility height. Once the balloon is secured, APT performs a Study Area reconnaissance by driving along the local and State roads and inventorying those locations where the balloon is seen above/through the trees. Visual observations will be used to evaluate the results of the preliminary viewshed mapping and identify any discrepancies in the initial modeling. During the field activities, APT will also photo-document areas where the balloon can be seen and will prepare photographic simulations from several vantage points to depict scaled renderings of the proposed Facility. This information will be included in Verizon's application to the Connecticut Siting Council for a Certificate of Environmental Compatibility and Public Need.

Attachments





Preliminary Viewshed Map - Topo Base

Proposed Wireless Telecommunications Facility
Pomfret Center CT – 72 Ragged Hill Road, Pomfret, CT

This Visibility Analysis map relies solely on computer modeling and interpretation of aerial photographs and topographic maps. The information presented herein has not been field verified.

NOTES

- Viewshed analysis conducted using Clark University's TerrSet.
- Areas of potential visibility are calculated based on facility location and height, Study Area topography, and Study Area vegetation.
- Proposed facility height is 150 feet AGL.
- Forest canopy height is derived from lidar data.
- Study area encompasses a two-mile radius and includes 8,042 acres of land. DATA SOURCES
- Digital elevation model (DEM) derived from lidar data obtained from NOAA which has a raster resolution of 0.3 m and horizontal accuracy of 1 meter or less.
- Forest areas are generated with TerrSet (Clark University) image processing from 2012 and 2016 NRCS/NAIP digital orthophotos with 1-foot pixel resolution.
- Municipal Open Space, State Recreation Areas, Trails, County Recreation Areas, and Town Boundary data obtained from CT DEEP and the towns.

Legend

Proposed Tower

Predicted Seasonal Visibility (501 Acres)

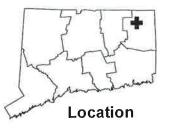
Predicted Year-Round Visibility (182 Acres)

Towns

2-Mile Study Area

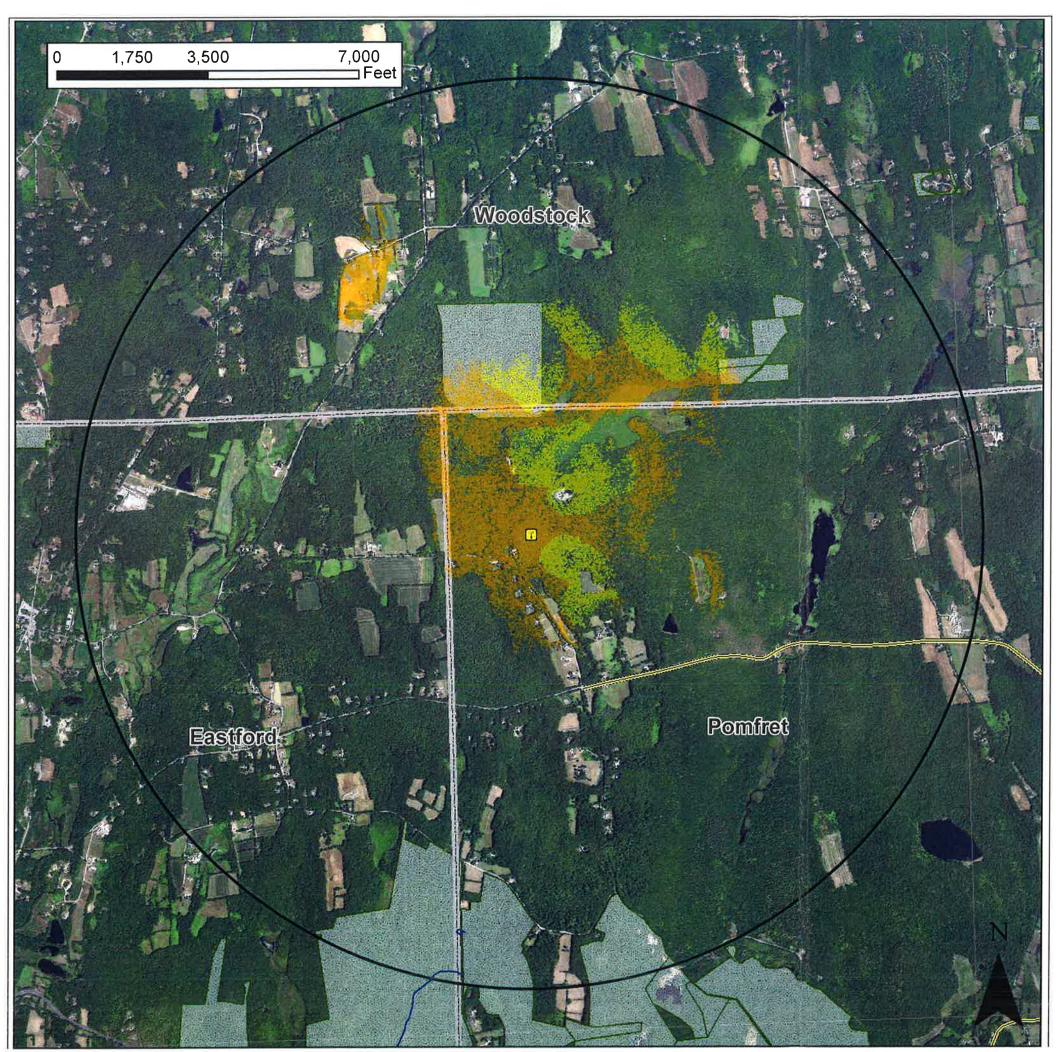
Open Space

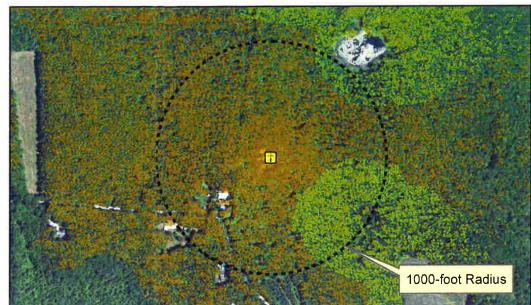
■ Scenic Roads











Preliminary Viewshed Map – Topo Base

Proposed Wireless Telecommunications Facility
Pomfret Center CT – 72 Ragged Hill Road, Pomfret, CT

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Legend

Proposed Tower

Predicted Seasonal Visibility (501 Acres)

Predicted Year-Round Visibility (182 Acres)

To

Towns

2-Mile Study Area



Open Space

Scenic Roads



Location



Site Name: Pomfret Center, CT **Cumulative Power Density**

Operator	Operating Frequency	Number of Trans.	Number ERP Per of Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissable Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
VZW PCS	1970	_	2904	2904	150	0.0464	1.0	4.64%
VZW Cellular	698	တ	283	2549.192	150	0.0407	0.57933333	7.03%
VZW AWS	2145	1	6971	6971	150	0.1114	1.0	11.14%
VZW 700	746	_	2374	2374	150	0.0379	0.497333333	7.63%

Total Percentage of Maximum Permissible Exposure

30.45%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm^2 = milliwatts per square centimeter ERP = Effective Radiated Power

Absolute worst case maximum values used.

Site Search Summary

Pomfret Center Facility 72 Ragged Hill Road Pomfret, Connecticut

Section 16-50j-74(j) of the Regulations of Connecticut State Agencies requires the submission of a statement that describes "the narrowing process by which other possible sites were considered and eliminated." In accordance with this requirement, descriptions of the general site search process, the identification of the applicable search area and the alternative locations considered for development of the proposed Pomfret Center telecommunications facility are provided below.

Site Search Process

To initiate its site selection process in an area where a coverage or capacity problem has been identified, Cellco first establishes a "cell site search area." In any search area, Cellco seeks to avoid the unnecessary proliferation of towers and to reduce the potential adverse environmental effects of a cell site, while at the same time maximizing the quality of service provided from a particular facility. These objectives are achieved by initially locating existing towers and other sufficiently tall structures within and near the particular search area. If any are found, they are evaluated to determine whether they are capable of supporting Cellco's telecommunications equipment at a location and elevation that satisfies its technical requirements.

The list of available locations may be further reduced if, after preliminary negotiations, a property owner withdraws a site from further consideration. From among the remaining locations, the proposed sites are selected by eliminating those that have greater potential for adverse environmental effects and fewer benefits to the public (i.e., those requiring taller towers, possibly with lights; those with substantial adverse impacts on wetlands; those located or near densely populated residential areas; and those with limited ability to share space with other public or private telecommunications entities). It should be noted that in any given site search, the weight afforded to factors considered in the selection process will vary depending upon the availability and nature of sites within the search area.

Need for the Pomfret Center Facility

Cellco currently maintains four (4) telecommunications facilities within approximately five (5) miles of the proposed Pomfret Center Facility. These facilities are identified as Cellco's Eastford, Pomfret East, Woodstock Relo and Coatney Hill cell sites. Cellco's existing Eastford Facility consists of antennas on a tower at 35 Old Route 44 in Eastford, Connecticut. Cellco's existing Pomfret East Facility consists of antennas on a tower at 398 Pomfret Street in Pomfret, Connecticut. Cellco's existing Woodstock Relo Facility consists of antennas on a tower at 87 West Quasset Road in Woodstock, Connecticut. Cellco's existing Coatney Hill Facility consists

of antennas on a tower at 215 Coatney Hill Road in Woodstock, Connecticut. Today, these existing facilities provide wireless service in portions of Pomfret, Eastford and Woodstock but cannot provide service to those areas where service is needed.

Identification of the Pomfret Search Area

The purpose of the proposed Pomfret Center Facility is to provide reliable wireless service to significant coverage gaps along portions of Routes 198, 44 and 244, and local roads in northwest Pomfret, northeast Eastford and southern Woodstock. *See* Coverage Plots included in Attachment 1.

Cellco originally issued its Pomfret search area in January of 2009 and commenced the municipal consultation process for the Pomfret Center Facility in May of 2010. Shortly thereafter, Cellco put this proposed tower site on hold. The site search was recently reactivated.

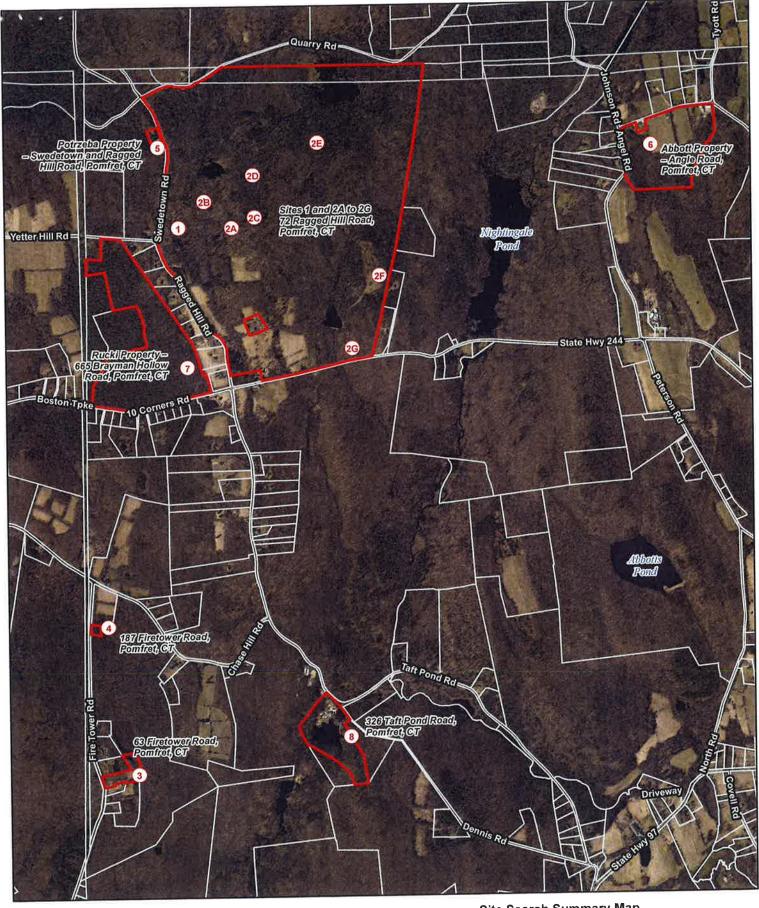
Sites Investigated

Cellco identified and investigated a total of fourteen (14) potential tower locations in Pomfret, including eight (8) different locations on the 650 acre parcel at 72 Ragged Hill Road (the "Property"). The sites investigated are listed and described below and located on the attached Site Search Map.

- 1. Raynham, Inc. Property 72 Ragged Hill Road, Pomfret, Connecticut (the "Property"). Cellco investigated and ultimately signed a lease for a cell site in the westerly portion of this 650 acre parcel at 72 Ragged Hill Road. Cellco can satisfy its wireless service objectives from this location with antennas at 150 feet above ground level.
- 2. Raynham, Inc. Property 72 Ragged Hill, Pomfret, Connecticut. In addition to the facility location described above, Cellco investigated seven (7) additional potential cell site locations on the 650 acre Ragged Hill Road parcel.
 - A. This location is approximately 1,000 feet east of the proposed cell site. Cellco's landlord was not willing to lease this portion of the Property for the development of a tower site.
 - B. This location is approximately 400 feet to the northeast of the proposed cell site. Cellco's RF engineers determined that its wireless service objectives could not be satisfied from this location.
 - C. This location is approximately 1,300 feet east of the proposed cell site. Access to this portion of the property would require two significant wetland crossings, and the construction of a lengthy access road. In addition, Cellco's RF engineers determined that its wireless service objectives could not be satisfied from this location.

- D. This location is approximately 1,850 feet northeast of the proposed cell site. Access to this site would require two significant wetland crossings and a lengthy access road and was, therefore, rejected.
- E. This location is approximately 3,200 feet northeast of the proposed cell site. Access to this site would require several significant wetland crossings and a lengthy access road and was, therefore, rejected.
- F. This location is along the easterly edge of the Property, approximately 2,600 feet north of Brayman Hollow Road (Route 244). Cellco could not satisfy its wireless service objectives from this location.
- G. This location is in the southeast corner of the Property. Cellco could not satisfy its wireless service objectives to the west and northwest from this location.
- 3. 63 Firetower Road, Pomfret, Connecticut. The site is approximately 2.2 miles south of the proposed cell site. Cellco investigated the use of an existing lattice tower on this parcel but determined that the existing tower was not structurally capable of supporting additional antennas. Cellco also considered the development of a new tower on this parcel. This parcel would not, however, provide wireless service comparable to the proposed cell site. While this location would provide coverage along portions of Route 244, it would also not connect with coverage from Cellco's existing Woodstock Facility to the north.
- 4. 187 Firetower Road, Pomfret, Connecticut. This site is located approximately 1.6 miles south of the proposed cell site. Similar to the 63 Firetower Road site, this location would provide for coverage along portions of Route 244, but would not connect with coverage from Cellco's existing Woodstock Facility to the north.
- 5. Potrzeba Property Swedetown and Ragged Hill Road, Pomfret, Connecticut. This parcel is located to the north and west of the proposed cell site on the west side of Swedetown Road. This site was rejected by RF engineers because it is located too far to the north of Route 244.
- 6. Abbott Property Angle Road, Pomfret, Connecticut. This site is located to the east of the proposed cell site and was rejected because Cellco could not provide service that connects with its existing Eastford Facility to the west from this location. The parcel also contains significant wetland areas that would limit development options on the parcel.

- 7. Rucki Property 665 Brayman Hollow Road, Pomfret, Connecticut. This parcel is located on the north side of Brayman Hollow Road (Route 244), immediately west of Ragged Hill Road. The only portion of the property offered by the landlord was an area adjacent to Brayman Hollow Road. A 150-foot tower at this location would have more significant visual impacts on area residences along Brayman Hollow and Ragged Hill Roads and was, therefore, rejected.
- 8. 326 Taft Pond Road, Pomfret, Connecticut. This site is located approximately 2.0 miles south of the proposed cell site. This location would provide for coverage along portions of Route 244, but would not connect with coverage from Cellco's existing Woodstock Facility to the north.



Legend

Site Investigated (Numbered and Labeled by Location)

Approximate Parcel Boundary (CTDEEP GIS Parcels Last Updated 2010)

Site Search Summary Map

Proposed Wireless Telecommunications Facility Pomfret Center CT 72 Ragged Hill Road Pomfret, Connecticut

2.000

verizon\(^{}

