

KENNETH C. BALDWIN

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Also admitted in Massachusetts
and New York

May 8, 2020

Thomas G. Dunn, Mayor
Town of Wolcott
Wolcott Town Hall
10 Kenea Avenue
Wolcott, CT 06716

Re: Submission of Technical Information Concerning a Proposal to Construct a Wireless Telecommunications Facility off Chestnut Hill Road, Wolcott, Connecticut

Dear Mayor Dunn:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”), in its proposal to construct a new wireless telecommunications facility on a 10.17 acre parcel off Chestnut Hill Road in Wolcott, Connecticut (the “Property”). The Property is owned by PAL Properties LLC. The proposed telecommunications facility is known as Cellco’s “Wolcott South Facility”.

This Technical Report is submitted pursuant to Connecticut General Statutes (“Conn. Gen. Stat.”) § 16-50l(g), which establishes local input requirements for the siting of a wireless telecommunications facility under the exclusive 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. Portions of the City of Waterbury (“Waterbury”) are located within 2,500 feet of the proposed Wolcott South Facility. As such, Waterbury officials will also be provided with a copy of this filing.

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

Andrew Candiello
Senior Manager – Real Estate/Regulatory
Cellco Partnership d/b/a Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492

Thomas G. Dunn, Mayor
May 8, 2020
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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 in the central portion of the Property. The Wolcott South Facility would provide improved wireless service (coverage) to portions of southwest Wolcott and northeast Waterbury, in the vicinity of the Property and significant capacity relief to Cellco's existing Waterbury, Wolcott and Wolcott North cell sites that are currently operating at or beyond their existing capacity limits. *See Site Vicinity Map and Site Schematic included in Attachment 1.* Coverage plots showing Cellco's existing wireless service in the area alone and together with the proposed Wolcott South Facility are included in *Attachment 2.*

Cell Site Information

Cellco proposes to install a 120-foot monopole tower within a 50' x 50' fenced compound and 75' x 75' leased area in the central portion of the Property. Cellco would install panel-type antennas and remote radio heads on a platform at a centerline height of 116 feet above ground level. Cellco's antennas would not extend above the top of the tower. Equipment associated with Cellco's antennas, a propane-fueled backup generator and a propane fuel tank would also be located within the fenced compound. Space on the tower and in the facility compound would be made available to other wireless carriers and the Town of Wolcott municipal and emergency service purposes, if needed. Access to the Wolcott South Facility would extend from Chestnut Hill Road along a new gravel driveway to the proposed tower site. Utilities would extend from existing utility service along Chestnut Hill Road. Included in Attachment 3 is a set of Project Plans including a tower elevation drawing.

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

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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.

Municipal Consultation Process

Pursuant to Section 16-50*l* 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 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 the area; 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, the municipality may, 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.

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Pursuant to Section 16-50l(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 Wolcott South Facility described in this Technical Report is needed so that Cellco can provide enhanced wireless services in southwest portions of Wolcott and northeast portions of Waterbury, Connecticut. More particularly, the Wolcott South Facility will also provide wireless "coverage" along portions of Route 69 and local roads in the vicinity of the Property in its 700, 1900 and 2100 MHz frequency ranges. The Wolcott South Facility will also provide significant capacity relief to Cellco's existing Waterbury (Alpha sector), Wolcott (Gamma sector) and Wolcott North (Beta sector) which are currently operating above, at or near their capacity limits resulting in significantly slower throughputs to customers in the service area.

Environmental Effects

In our experience, the primary impact of a wireless facility such as the proposed Wolcott South Facility is visual. The visual impact of the proposed Wolcott South Facility tower 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 or other structures (utility infrastructure) in the sight-line of the cell site.

To more fully assess the visual impact of the Wolcott South Facility, Cellco's consultant, All-Points Technology Corporation ("APT") has prepared a Preliminary Visual Assessment ("Visual Assessment") for the proposed tower location. This Visual Assessment indicates that predicted year-round visibility associated with the proposed Wolcott South Facility could include approximately 93 acres (1.2% of the 8,042 acre study area). A majority of the year-round visibility (60 of the 93 acres) are located over the open water of the Chestnut Hill Reservoir to the north of the Property. Some year round visibility may also occur to the south, at the Waterbury land fill and to the northwest, in Wolcott approximately 1.5 miles from the Property. Seasonal view, when leaves are off the deciduous trees may occur in select locations within $\frac{1}{2}$ mile of the tower site. (See Attachment 4).

Pursuant to the provisions of Conn. Gen. Stat. § 16-50p(a)(3)(G), new telecommunications facilities must be located at least 250 feet from buildings containing 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 Wolcott South Facility is not located within 250 feet of any building containing a

Thomas G. Dunn, Mayor

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school or commercial day care facility.

Based on field surveys, Cellco has determined that the construction of the Wolcott South Facility will have no direct impact on inland wetlands or watercourses, within or near either of the tower compound. Portions of the access driveway, extending from Chestnut Hill Road, will cross an existing wetland area on the Property. Cellco's project team has evaluated the existing wetland area and has designed the access driveway in a way to minimize permanent wetland impacts. 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 Wolcott South Facility. To ensure compliance with the Standard, Cellco has 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 would be 49.47% of the FCC Standard for the proposed 120-foot tower (116-foot antenna centerline). (See Attachment 5). 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 will be 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's Certificate Application.

Site Search Process

Cellco conducted a search for suitable cell site locations in southwest Wolcott 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 two (2) alternative locations

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in the area. A description of Cellco's Site Search process and a list of other potential cell sites investigated is included in Attachment 6.

Tower Sharing

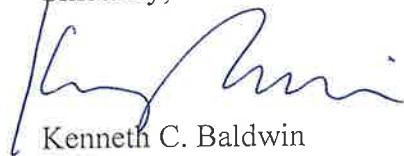
As stated above, Cellco intends to build a tower that is capable of supporting its antennas and those of other wireless telecommunications providers, the surrounding municipalities, and emergency service providers, if a need exists. The provision to share the tower is consistent with the intent of the General Assembly when it adopted Conn. Gen. Stat. § 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 the area for the foreseeable future.

Conclusion

This Technical Report is submitted in accordance with Conn. Gen. Stat. § 16-50l which requires Cellco to supply the Town with information regarding its proposed Wolcott South 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 Wolcott South 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

Copy to:

Raymond Mahoney, Jr., Chairman, Wolcott Town Planning and Zoning Commission

Mark Garrigus, Chairman, Wolcott Inland Wetlands, Water Courses & Conservation Commission

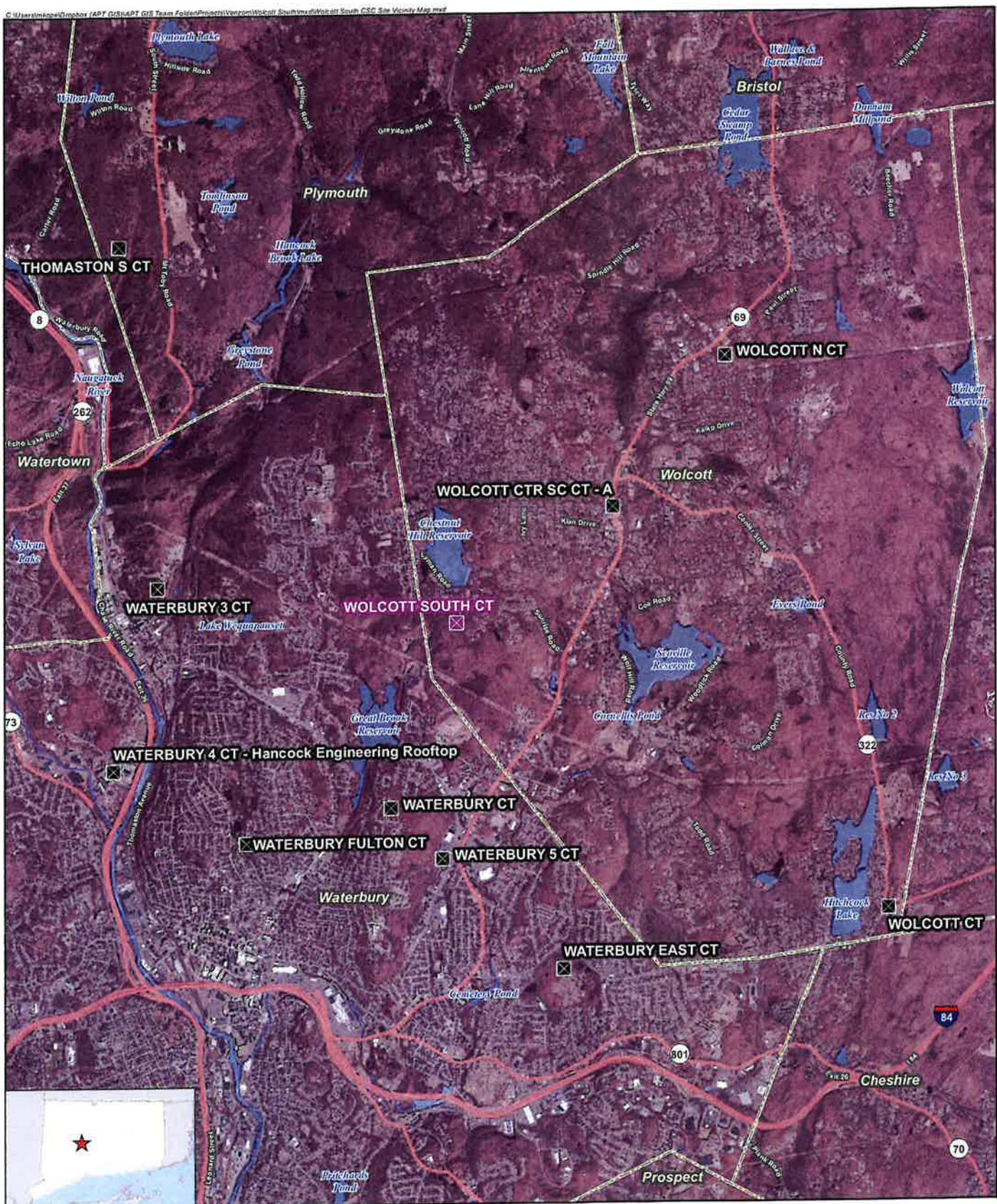
David Kalinowski, Wolcott Zoning Inspector

David M. O'Leary, Mayor of the City of Waterbury

John Egan, Chair, Waterbury Planning and Zoning Commission

Samuel Leisring, Chair, Waterbury Inland Wetlands Commission

ATTACHMENT 1



Site Vicinity Map

Proposed Wireless
Telecommunications Facility
Wolcott South CT
Chestnut Hill Road
Wolcott, Connecticut

Legend

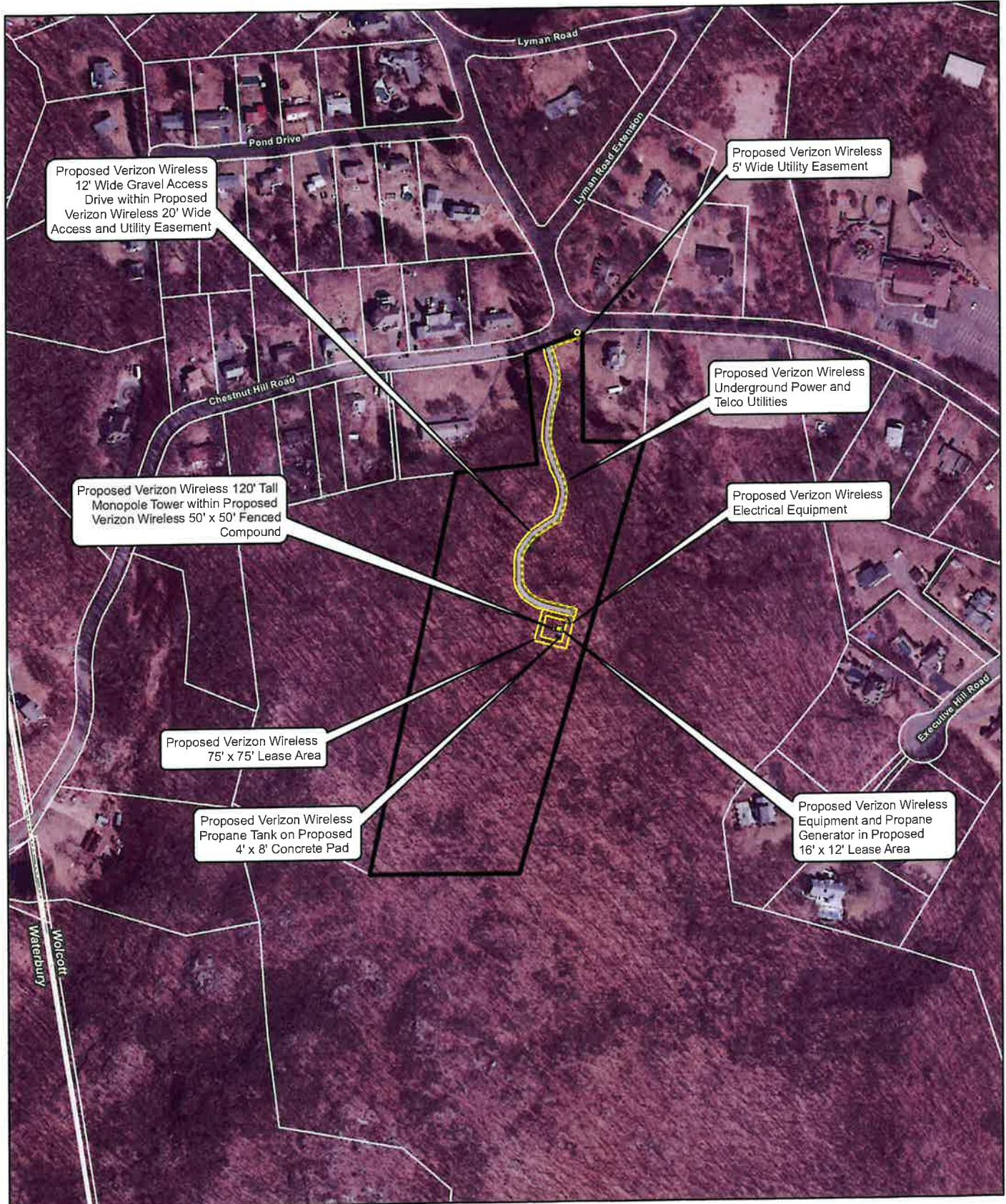
- Proposed Verizon Wireless Facility
- Surrounding Verizon Wireless Facilities
- Municipal Boundary

Base Map Source: CT ECO 2019 Imagery
Map Scale: 1 inch = 5,000 feet
Map Date: March 2020



verizon

ALL-POINTS
TECHNOLOGY CORPORATION



Legend

- Proposed Verizon Wireless Site Layout
- Proposed Verizon Wireless Equipment
- Proposed Verizon Wireless Utility Easement
- Proposed Verizon Power and Telco Service
- Proposed Verizon Wireless Gravel Access Drive
- ◎ Existing Utility Pole (By Others)

Map Notes:
Base Map Source: CT ECO 2019 Imagery
Map Scale: 1 inch = 300 feet
Map Date: March 2020

■ Subject Property
Approximate Parcel Boundary (CTDEEP GIS)



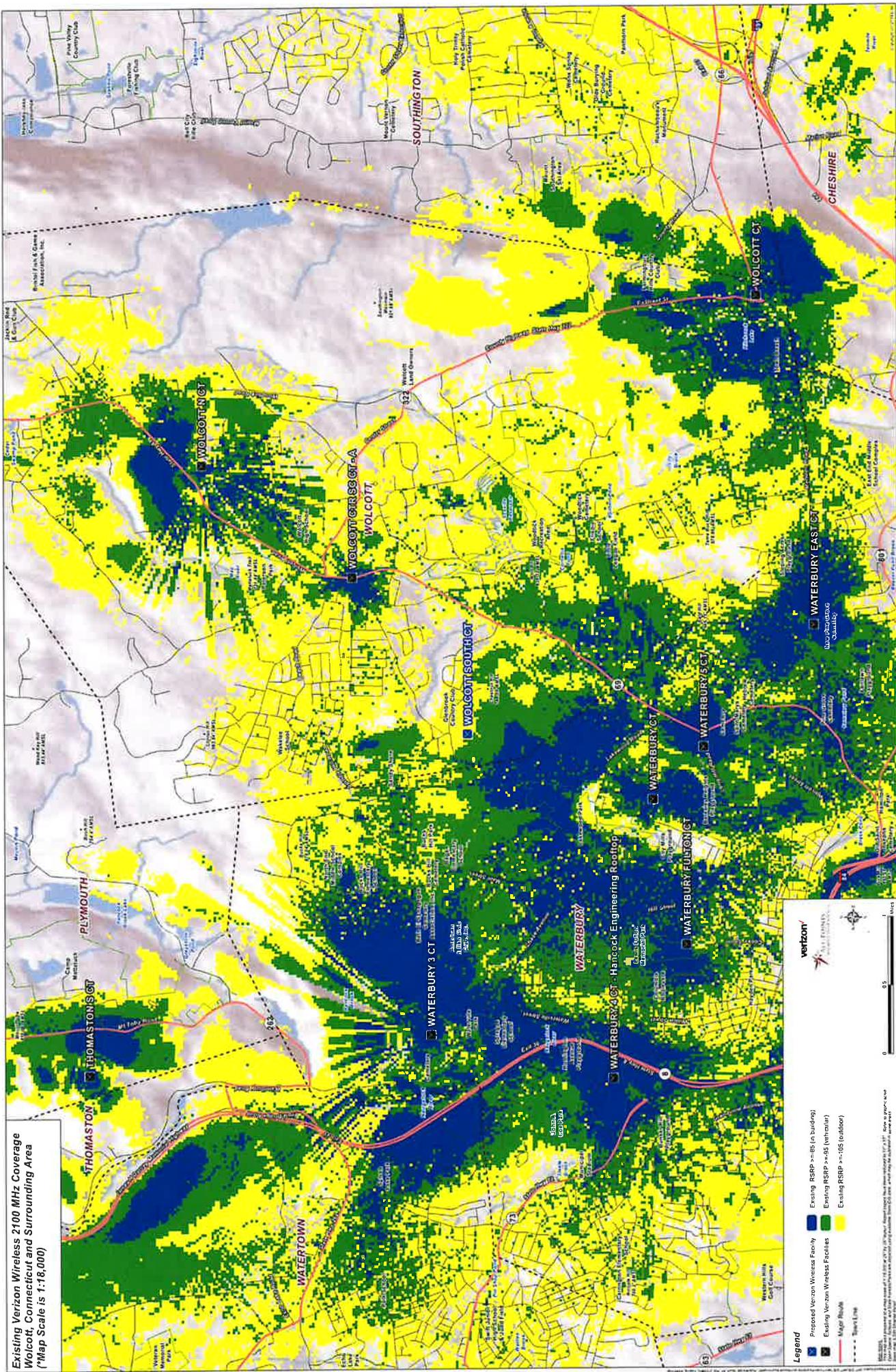
Site Schematic

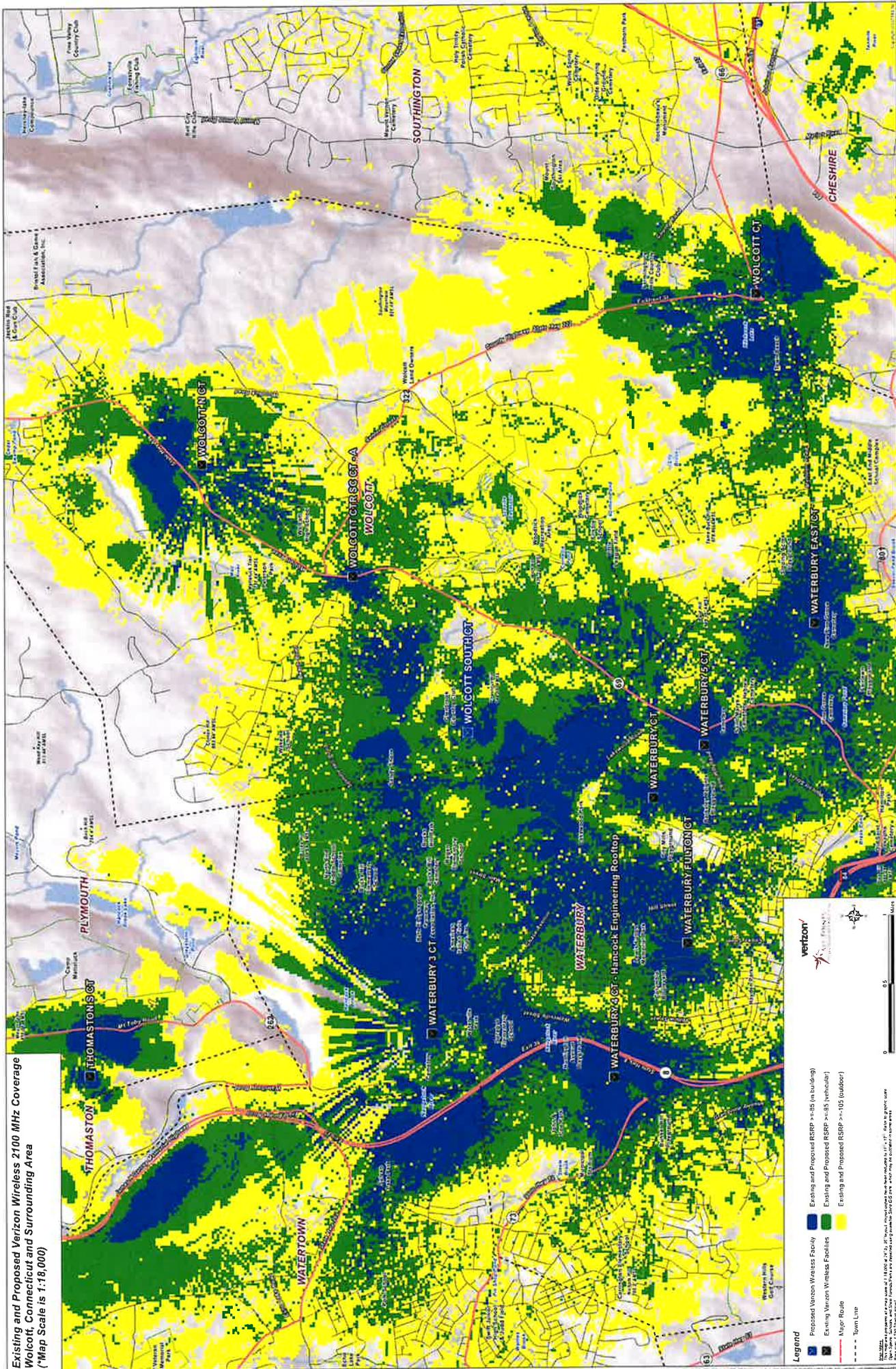
Proposed Wireless
Telecommunications Facility
Wolcott South CT
Chestnut Hill Road
Wolcott, Connecticut

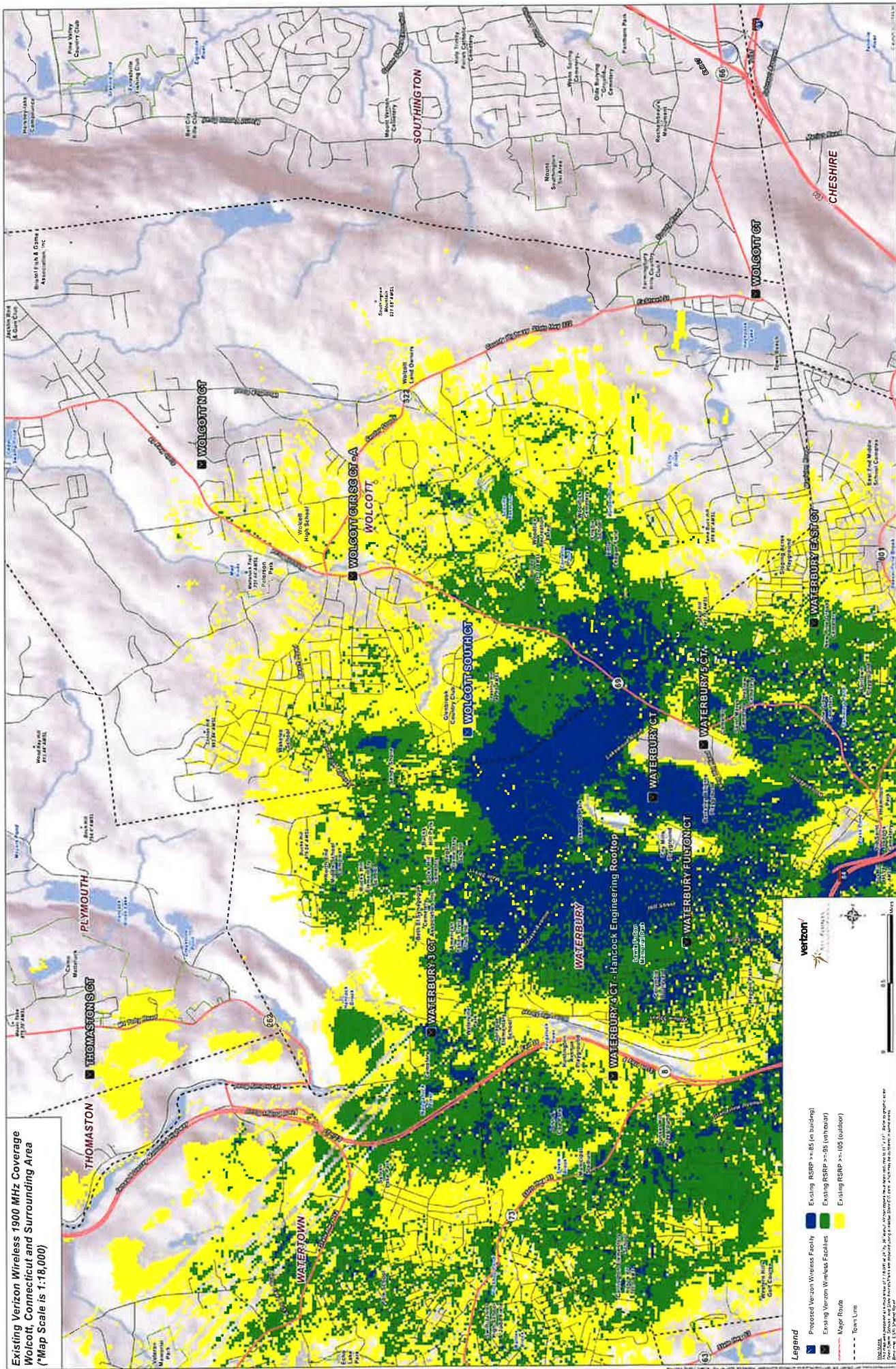
verizon

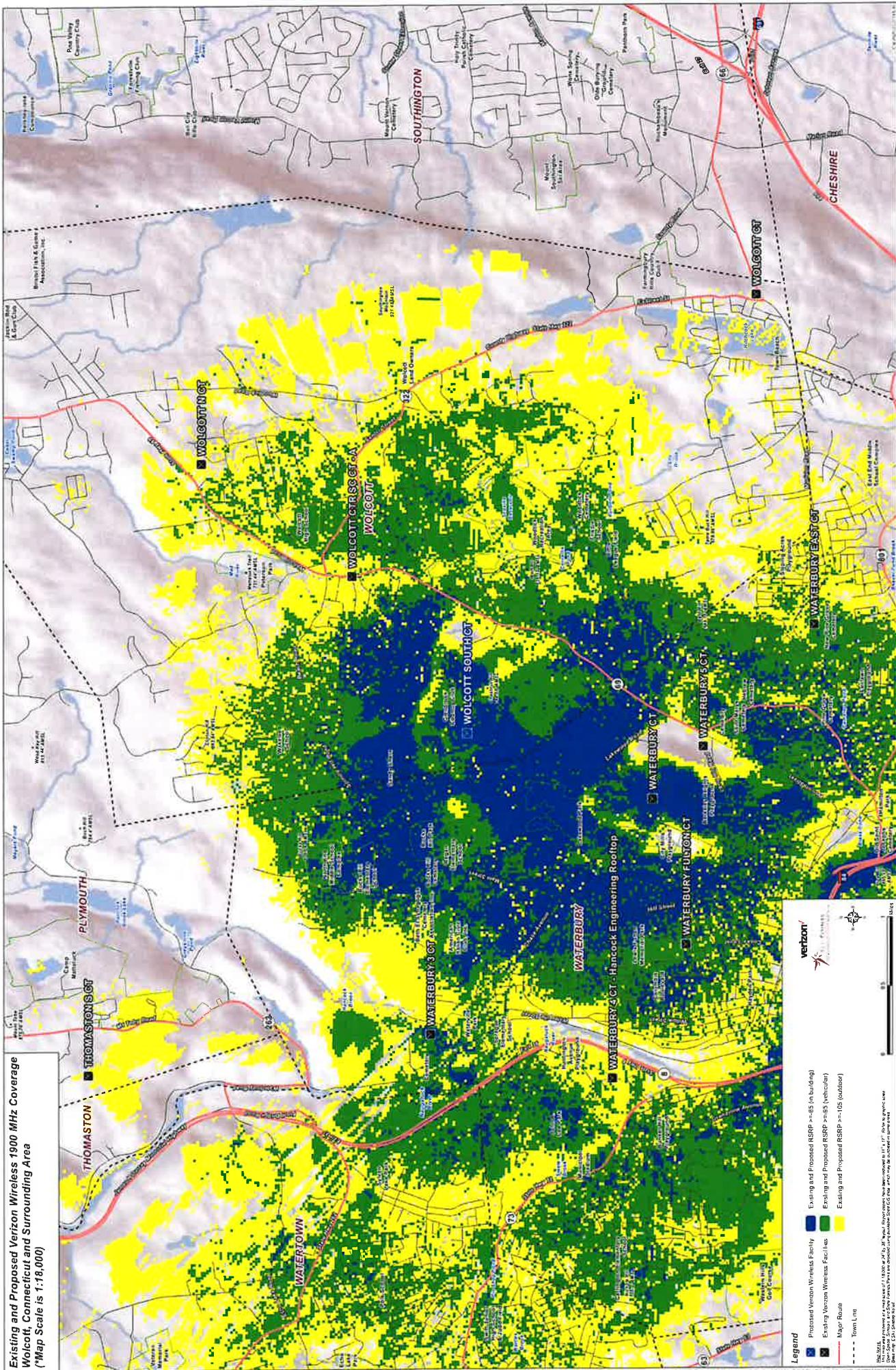
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TECHNOLOGY CORPORATION

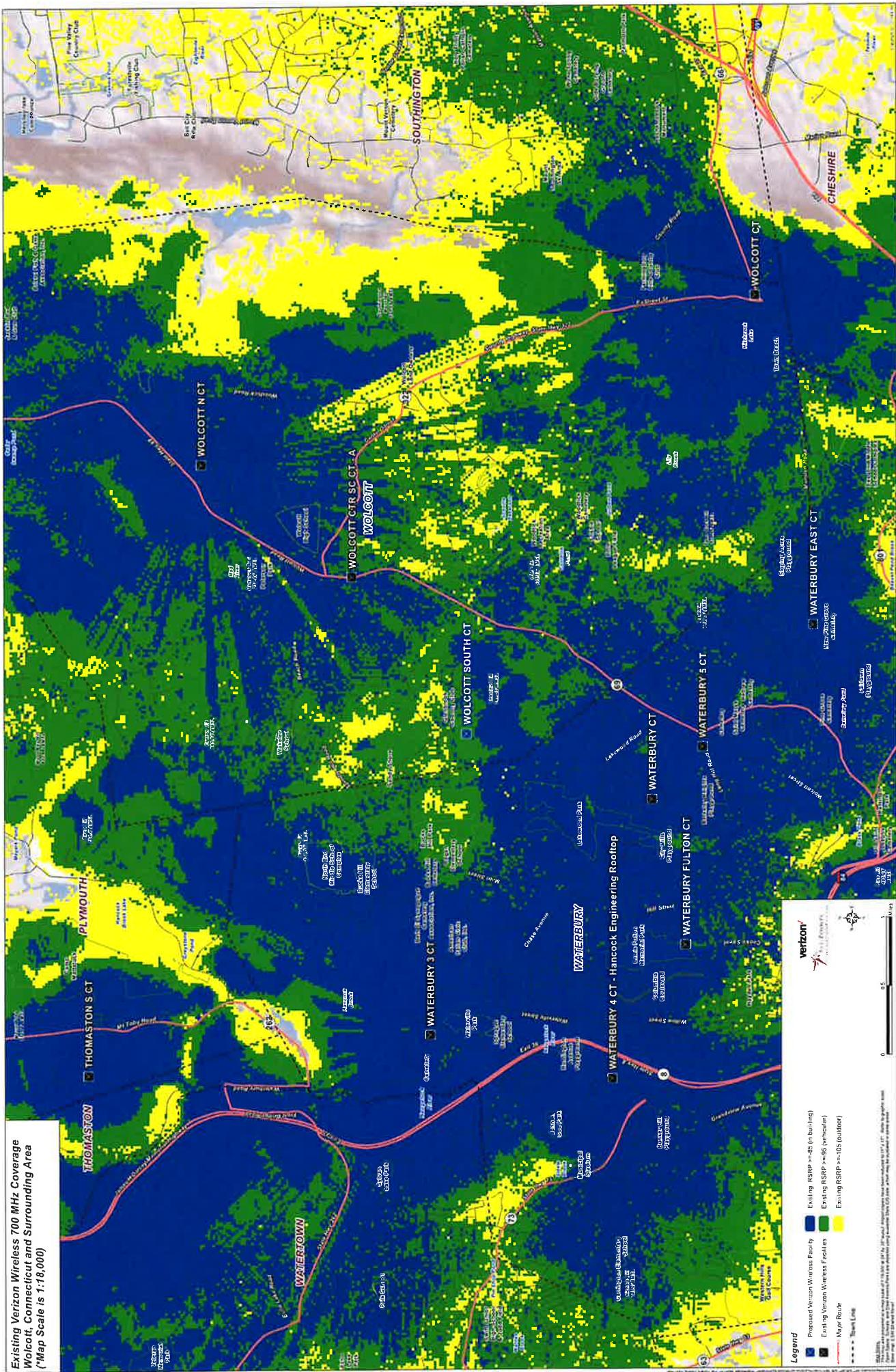
ATTACHMENT 2

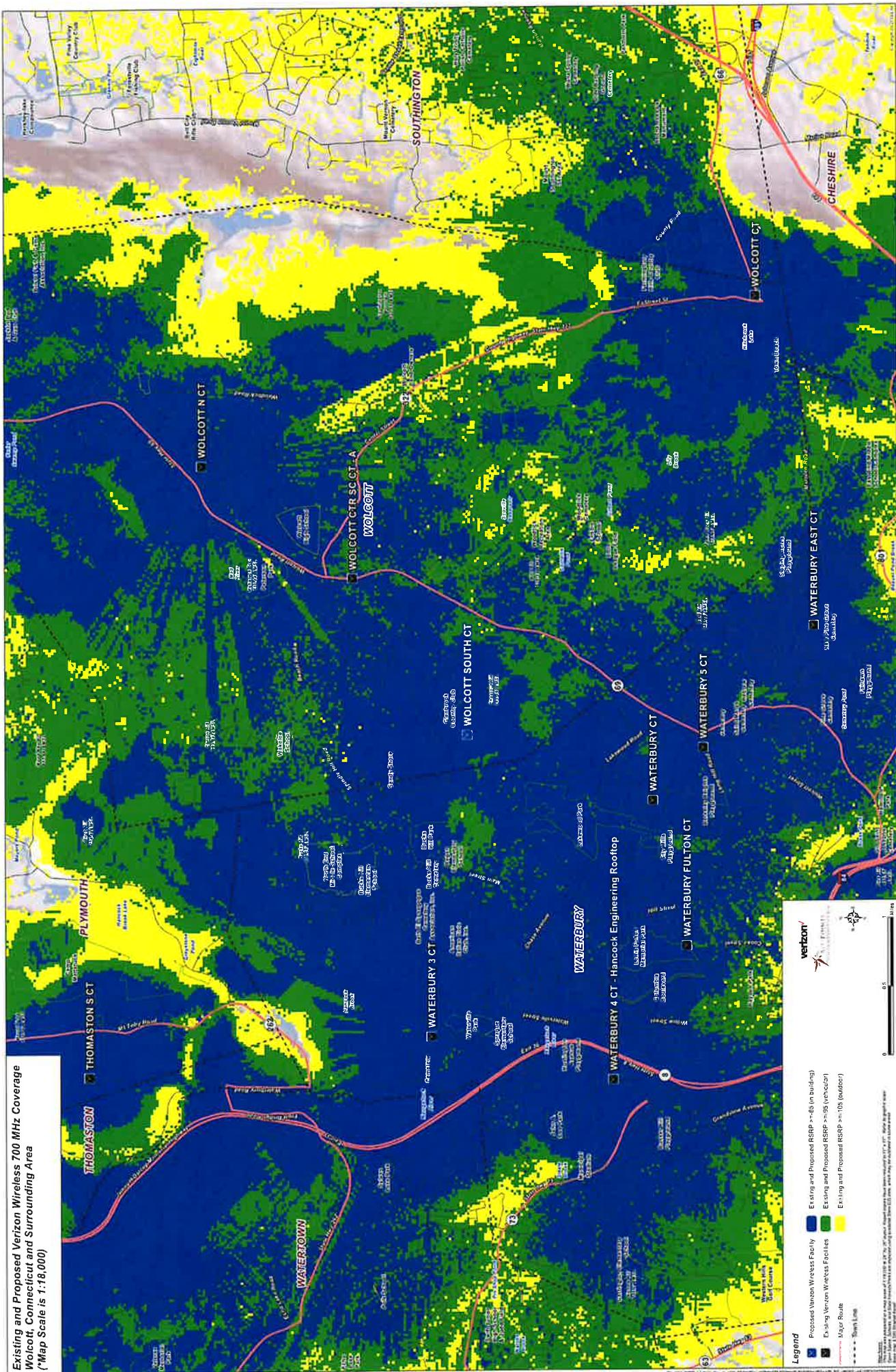












ATTACHMENT 3

verizon



Know what's below.
Call before you dig.

TELCO PARTNERSHIP d/b/a **VERIZON WIRELESS**
20 ALEXANDER DRIVE, 2nd FLOOR
WALLINGFORD, CT 06492

NAME: _____

WOLCOTT SOUTH CT

LOCATION CODE:

SITE ADDRESS:
CHESTNUT HILL ROAD
WOLCOTT, CT 06716

THEODORE WILSON

SITE NAME: WOLCOTT, SOUTH - CT
 LOCATION CODE: 4989356
 SITE ADDRESS: CHESTNUT HILL ROAD
 COUNTY: WOLCOTT, CT 06716
 STATE: NEW HAVEN COUNTY
 ZIP CODE: 06716
 LATITUDE: 41° 35' 24.03" N (WGS84)
 LONGITUDE: 73° 00' 31.02" W (NAD83)
 ELEVATION: 786 A.M.S.L. (NAVD83)
 PROPERTY OWNER: PAL PROPERTIES, LLC
 PROPERTY NUMBER: 1A141
 APARTMENT NUMBER: 100
 BUILDING NUMBER: 1
 STRUCTURE TYPE: MONOPOLE
 GREATEST APARTMENT: 120'-0" x 120'-0"
 LEAST APARTMENT: 120'-0" x 120'-0"
 LIGHTING: 120'-0" x 120'-0" x 120'-0" x 120'-0"

VICINITY MAP



CERTIFIED AND INDEXED
BY THE CLERK OF THE COURT

- 1. THIS IS AN UNSTAFFED TELECOMMUNICATION FACILITY AND NOT FOR HUMAN HABITATION.**

1.1. HANDICAPPED ACCESS IS NOT REQUIRED.
1.2. NO POTABLE WATER OR SANITARY SERVICE IS NOT REQUIRED.
1.3. NO OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES REQUIRED.

2. CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON THE JOB SITE. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. FAILURE TO NOTIFY THE ARCHITECT/ENGINEER OF THESE DISCREPANCIES IN WRITING WILL RESULT IN THE CONTRACTOR BEING CHARGED FOR THE EXPENSES INCURRED BY THE CONTRACTOR'S EXPENSES AS IF THE CONTRACTOR'S EXPENSES WERE INCURRED BY THE CONTRACTOR.

3. DEVELOPMENT AND USE OF THE SITE WILL CONFORM TO ALL APPLICABLE CODES, ORDINANCES, AND SPECIFICATIONS.

3.1 BUILDING CODE: 2018 CONNECTICUT STATE BUILDING CODE (AC 2015)

3.2 ELECTRICAL CODE: NATIONAL ELECTRIC CODE 2017

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

3.4. AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRONGHOLD CONCRETE INSTITUTE OF STEEL CONSTRUCTION (ASC), MANUAL OF STEEL CONSTRUCTION, INDUSTRY ASSOCIATION (TIA) TIA-222-G, STRUCTURAL STANDARDS FOR STEEL ANTENNA SUPPORTING STRUCTURES, AND ANTENNAS, WITH ADDENDUM A, B, C, D, E, F, G, H, I, J, K, L, M, AND GND-1.

3.6. TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) TIA-1100-12, GROUNDING SYSTEMS FOR ELECTRICAL AND ELECTRONICS EQUIPMENT (EEE).

3.6.1. EARTH SURFACE MEASUREMENTS FOR MEASURING EARTH RESISTANCE, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUNDING SYSTEM.

3.6.2. EARTHING FOR CUSTOMER PREMISES.

3.7. INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) IEEE-B1, GUIDE FOR MEASURING EARTH RESISTANCE, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUNDING SYSTEM.

3.7.1. IEEE 1100-12, RECOMMENDED PRACTICE FOR POWERING AND GNDING SYSTEMS FOR COMMUNICATING EQUIPMENT.

3.7.2. IEEE 1100-12, RECOMMENDED PRACTICE FOR POWERING AND GNDING SYSTEMS FOR COMMUNICATING EQUIPMENT.

3.7.3. IEEE 1100-12, RECOMMENDED PRACTICE FOR POWERING AND GNDING SYSTEMS FOR COMMUNICATING EQUIPMENT.

3.8. TELCORDIA, GR-1275, GENERAL INSTALLATION REQUIREMENTS, GR-1503, COAXIAL CONNECTORS, GR-1511, TELECOMMUNICATORS — DC POWER SYSTEMS —

3.9. TELCORDIA, GR-1503, COAXIAL CONNECTORS.

3.10. TIA-311, TELECOMMUNICATORS — DC POWER SYSTEMS —

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL COVER, WHERE THERE IS CONFLICT, BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

CONTINUITY

APPROVALS

THE FOLLOWING PARTS HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZED THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS.

LANDLORD: _____ DATE: _____
VERIZON WIRELESS CM: _____ DATE: _____

T-1

<p>PREPARED BY: Michael J. O'Connell, P.E.</p>		<p>verizon</p> <p>AKC OFFICE 300 APOLLO DRIVE SUITE 7 CHEMSTORY, MA 0124 (1978) 923 2165</p> <p>APPLICANT: CELLCO PARTNERSHIP dba 20 ALEXANDER DRIVE, 2ND FLOOR WALLINGFORD, CT 06492</p>													
<p>LEGEND:</p> <p>N/F NOW OR FOREVER 25-4520852 ASSESSOR'S ID CALCULATED POINT IRON PIPE/ROD FOUND BOUND ROUND MANHOLE CATCH BASIN LIGHT POLE LIGHT POLE TREE / BUSH LOTUS PROPERTY LINE (A) ABUTTER'S PROPERTY LINE (A) DRIVEWAY WHEELBARROW CONCRETE LANE STRETCH WALL</p>		<p>SITE SPECIFIC NOTES:</p> <ol style="list-style-type: none"> FIELD SURVEY DATE: 12-3-2010 HORIZONTAL DATUM: NAD 1983 HARNAS VERTICAL DATUM: NORTH AMERICAN Vertical Datum of 1988 (NAVD88) OWNER: INL PROPERTIES LLC 1141 WOLCOTT HILL ROAD WOLCOTT, CT 06716 SITE NAME: WOLCOTT HILL (C) SITE ADDRESS: CHESTNUT HILL ROAD WOLCOTT, CT 06716 APPLICANT: CELLCO PARTNERSHIP d/b/a VERIZON VERIZON MAIL BOX 260 1008 WALLINGFORD, CT 06492 ADJACENT TO: TOWN OF WOLCOTT NEW HAVEN COUNTY PARCEL ID: 104-1-78 PLAN REFERENCE: Book 488, Page 301 PLAN PERIODIC: N/A ZONING DISTRICT: R-40 & I HORIZONTAL DATA AND VERTICAL DATUM WERE DERIVED FROM AN AK GPS SURVEY. ALL UNDEVELOPED PROPERTY OWNED PRESENTED IS OWNED BY THE APPLICANT. THE APPLICANT SHOULD BE LOCATED IN THE FIELD PRIOR TO COMMENCEMENT OF WORK. THE APPLICANT IS RESPONSIBLE FOR MAINTAINING A MINIMUM OF 72 HOURS PRIOR TO PLANNED ACTIVITY. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), THE PROPOSED IMPROVEMENTS ON THIS PROPERTY ARE LOCATED IN A HAZARD ZONE X. AREA OF HAZARD CODE HAZARD ZONE X AREAS ARE LOCATED IN THE COMMUNITY PANEL NO. 09009 C 0105 H. FIELD SURVEY BY TOW TOTAL SURVEY & RTK GPS. THIS IS NOT A BOUNDARY SURVEY. ALL PROPERTY LINES SHOWN ARE FROM DEEDS AND PLANS OF RECORD AND FROM THE TOWN OF WOLCOTT GS AND PLAT BOOKS. NO RECORDS OF DEEDS, PLANS, OR PLAT BOOKS FOR THE PROPERTY LOCATED ON THIS PROPERTY WERE LOCATED. NO RECORDS OF DEEDS, PLANS, OR PLAT BOOKS FOR THE PROPERTY LOCATED ON THIS PROPERTY WERE LOCATED. TO THE BEST OF MY KNOWLEDGE, AND BELIEF, THIS LAND IS SUBSIDIARILY OWNED AS PART OF WOLCOTT HILL. 													
<p>STATE OF CONNECTICUT THE CONSTITUTION OF THE STATE OF CONNECTICUT LAND SURVEYORS PROFESSIONAL STANDARDS COMMISSION</p>		<p>SITE INFO:</p> <table border="1"> <thead> <tr> <th>SITE NAME:</th> <th>WOLCOTT SOUTH CT</th> </tr> </thead> <tbody> <tr> <td>LOCATION CODE:</td> <td>WOLCOTT, CT 06716</td> </tr> <tr> <td>SITE ADDRESS:</td> <td>CHESTNUT HILL ROAD WOLCOTT, CT 06716</td> </tr> <tr> <td>SUBJECT TITLE:</td> <td>CELLCO PARTNERSHIP d/b/a VERIZON</td> </tr> <tr> <td>NEAREST TOWN NO:</td> <td>WOLCOTT</td> </tr> <tr> <td>SHIET NUMBER:</td> <td>CT-1</td> </tr> </tbody> </table> <p>ABUTTERS PLAN</p> <p>CHECKED BY: Charles E. O'Connell, P.E. 01/27/2020</p>		SITE NAME:	WOLCOTT SOUTH CT	LOCATION CODE:	WOLCOTT, CT 06716	SITE ADDRESS:	CHESTNUT HILL ROAD WOLCOTT, CT 06716	SUBJECT TITLE:	CELLCO PARTNERSHIP d/b/a VERIZON	NEAREST TOWN NO:	WOLCOTT	SHIET NUMBER:	CT-1
SITE NAME:	WOLCOTT SOUTH CT														
LOCATION CODE:	WOLCOTT, CT 06716														
SITE ADDRESS:	CHESTNUT HILL ROAD WOLCOTT, CT 06716														
SUBJECT TITLE:	CELLCO PARTNERSHIP d/b/a VERIZON														
NEAREST TOWN NO:	WOLCOTT														
SHIET NUMBER:	CT-1														

PREPARED BY

PRAKED BY

AGE OFFICE
300 APOLLO DRIVE, SUITE 7
CHELMSFORD, MA 01824
1-800-222-7065

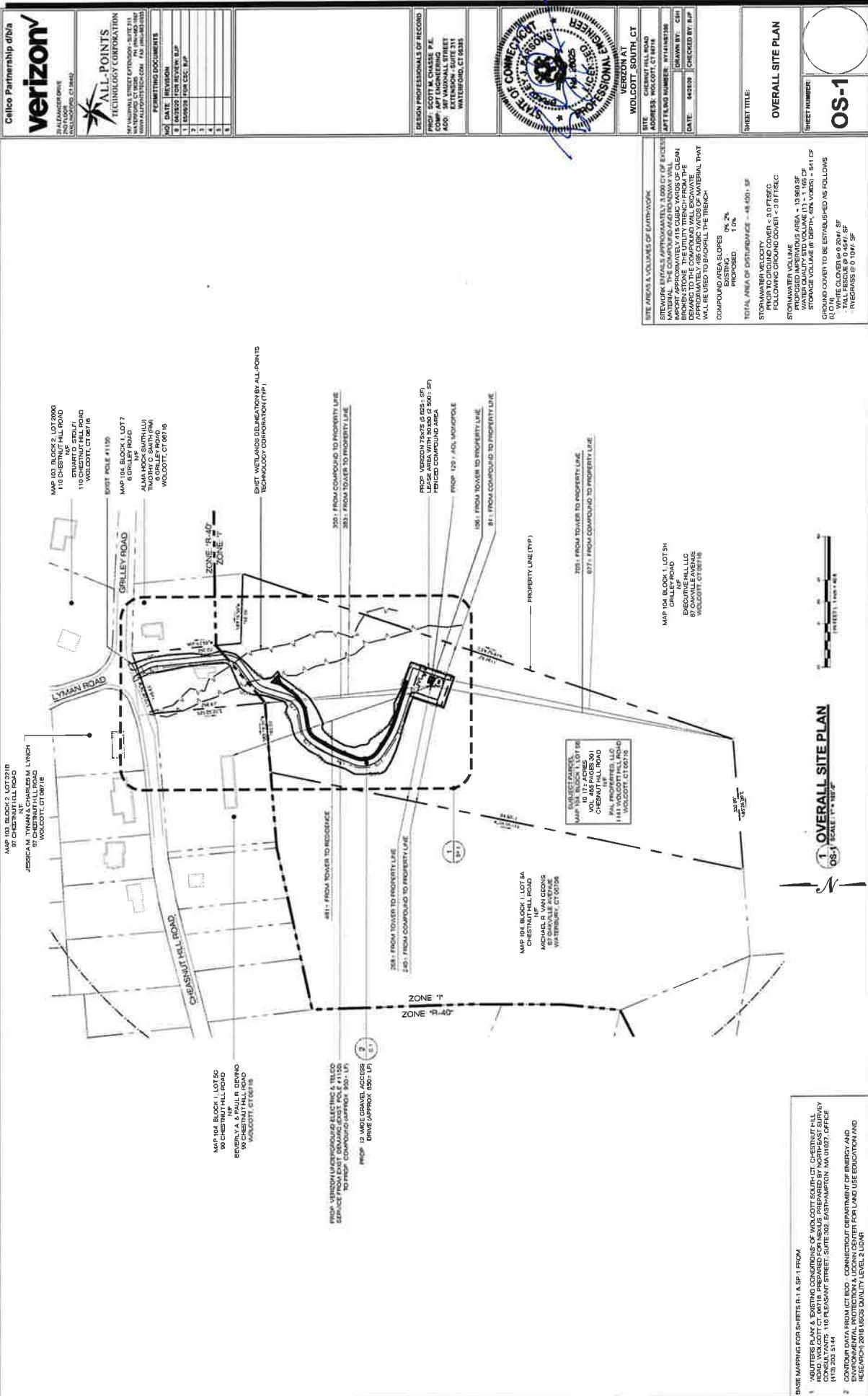
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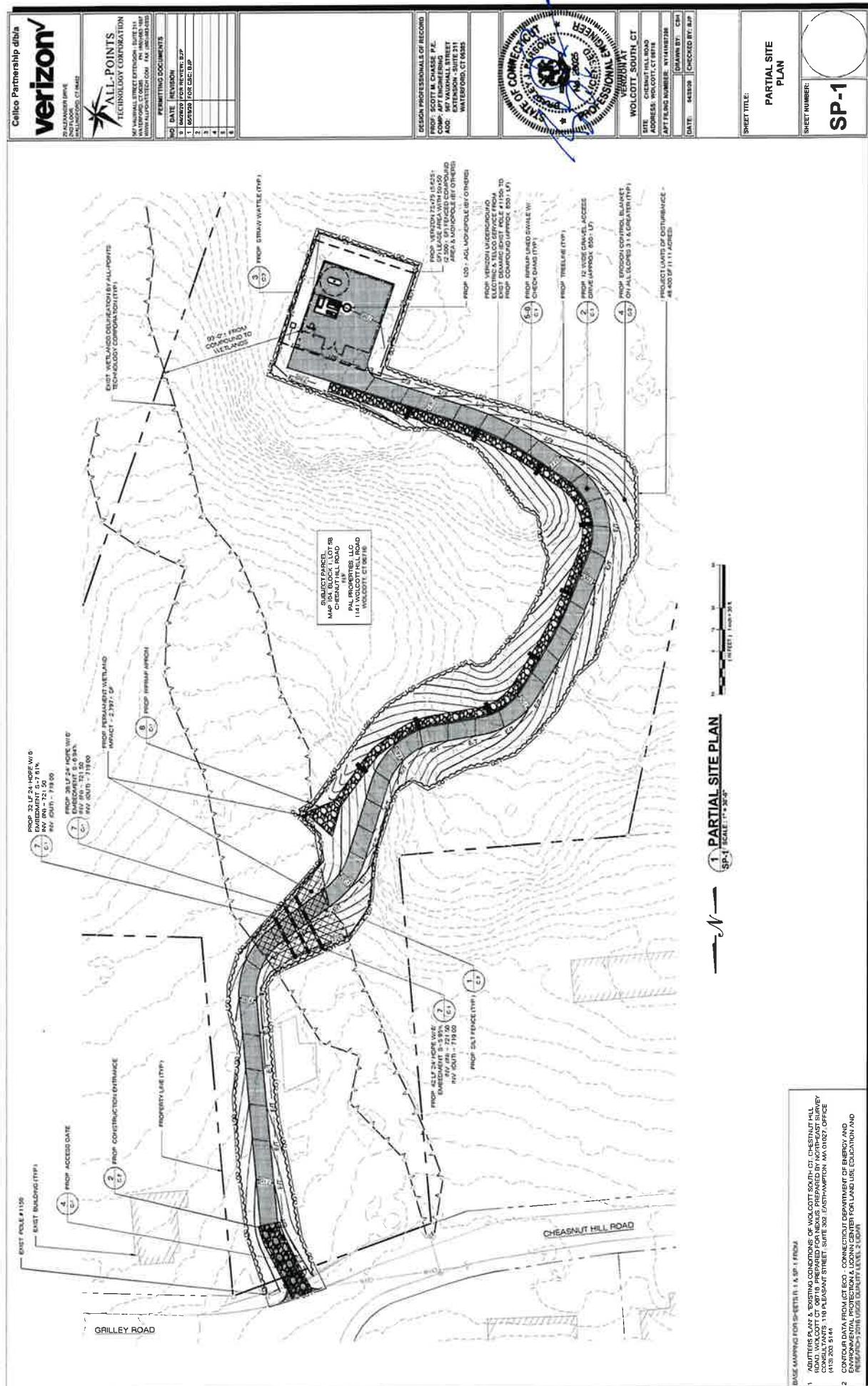
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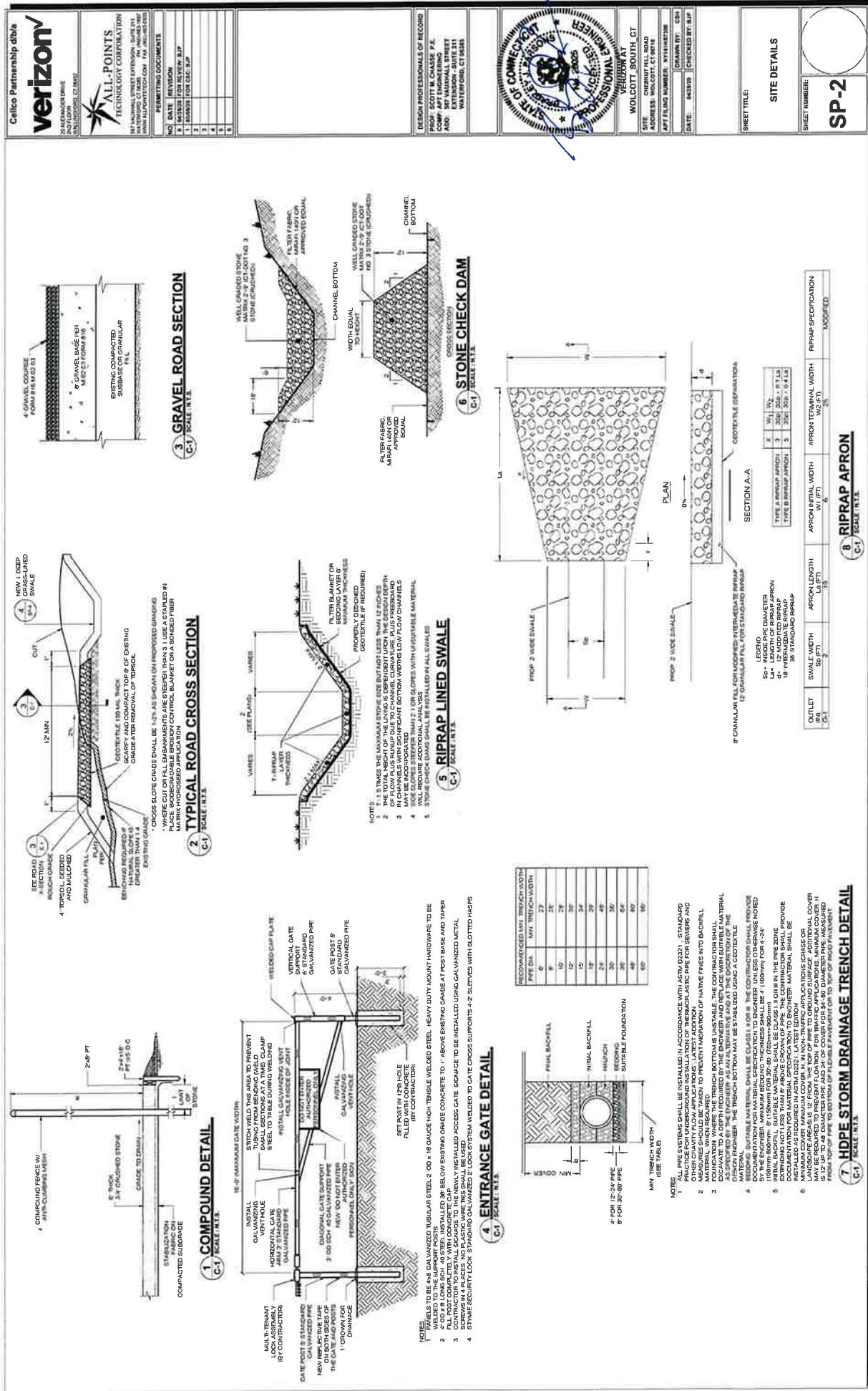
20 ALEXANDER DRIVE, 2ND FLOOR
WALINGFORD, CT 06492

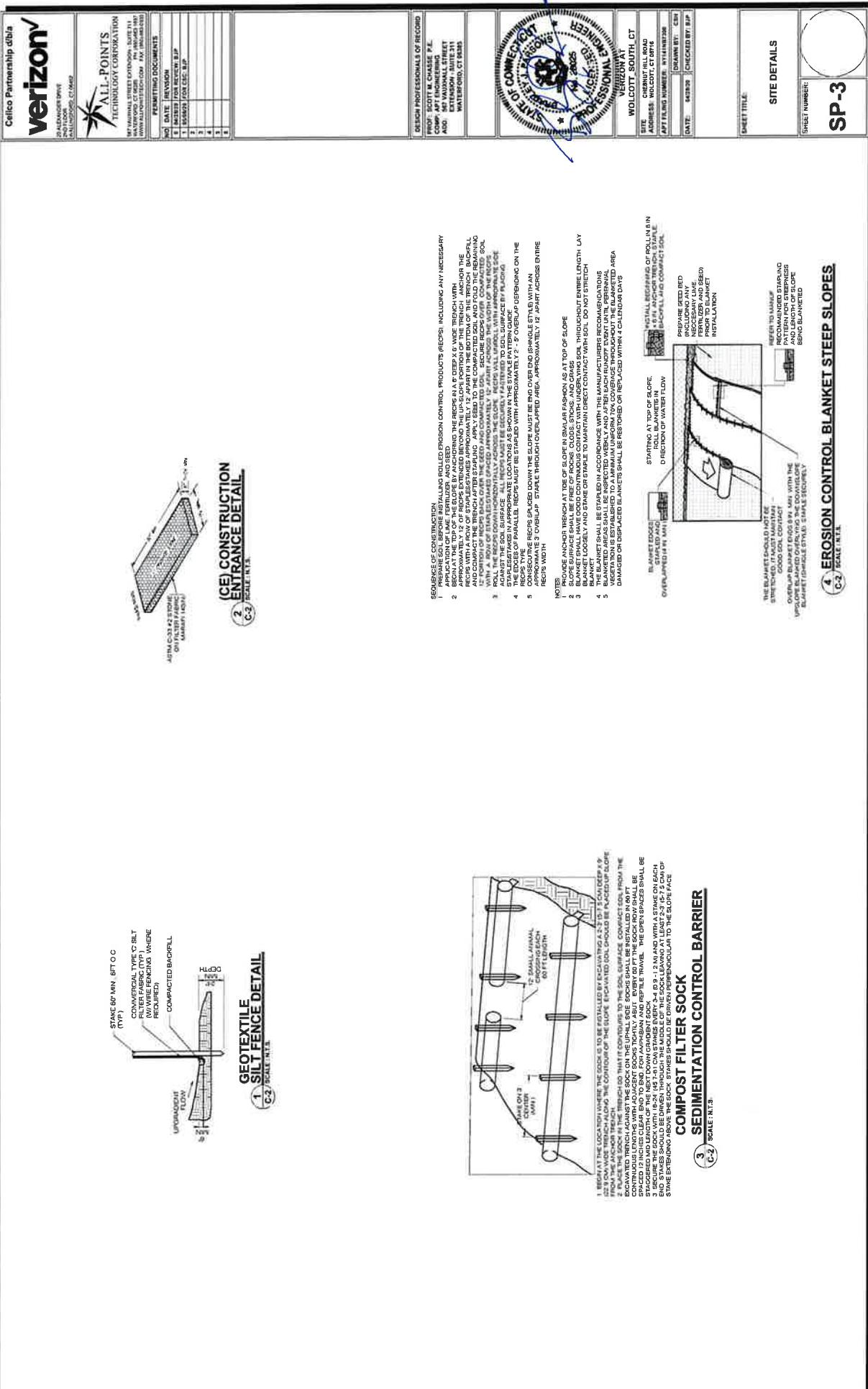


WIRELESS 312









ATTACHMENT 4



PRELIMINARY VISUAL ASSESSMENT

To: Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492

Date: March 23, 2020

Re: Wolcott South CT
Proposed Telecommunications Facility
Chestnut Hill Road
Wolcott, Connecticut

From: Michael Libertine

At the request of Verizon Wireless, All-Points Technology Corporation, P.C. ("APT") has completed preliminary viewshed mapping to provide an initial evaluation of potential visibility associated with the proposed Facility. For purposes of this assessment, APT established a two-mile "Study Area" which includes portions of the neighboring municipalities of Waterbury (to the west and south) and Plymouth (to the northwest). The municipal boundary of the City of Waterbury is located approximately 1,000 feet west of the Site.

The Host Property is located in the southwestern portion of Wolcott, south of Chestnut Hill Road near its intersection with Grilley Road. Land use in the immediate vicinity consists primarily of residentially-developed properties and undeveloped, wooded land. The majority of the Study Area consists of hilly terrain, with ground elevations ranging from approximately 300 feet AMSL in the southwestern portion of the Study Area to approximately 1,026 feet AMSL in the northern portion. Tree cover within the Study Area (consisting of mixed deciduous hardwoods and conifers) occupies approximately 3,496 acres ($\pm 43.5\%$) of the 8,042-acre Study Area. The waterbodies Chestnut Hill Reservoir and Scovill Reservoir in Wolcott and Great Brook Reservoir in Waterbury occupy approximately 264 acres ($\pm 3.2\%$) of the Study Area.

To conduct this assessment, a predictive computer model was developed specifically for this project using ESRI's ArcMap Geographic Information System ("GIS")¹ software and available GIS data. 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. The predictive model incorporates Project and Study Area-specific data, including the Facility location, its ground elevation and the proposed Facility height, 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

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.

"returns" can be classified based on the characteristics of the reflected light, normally into categories such as "bare earth," "vegetation," "road," 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.

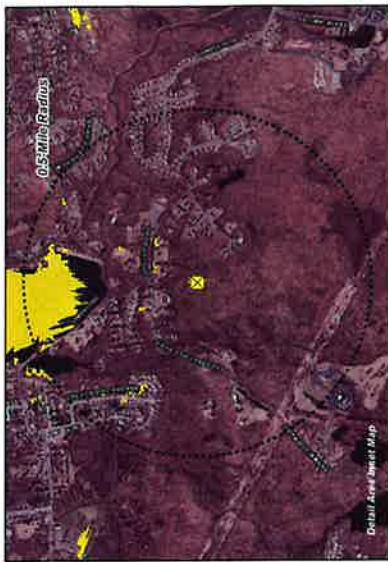
Once the DSM was generated, ESRI's Viewshed Tool was utilized to identify locations within the Study Area where the proposed Facility may be visible. ESRI's Viewshed Tool predicts visibility by identifying those cells⁴ within the DSM that can be seen from an observer location. Cells where visibility was indicated were extracted and converted from a raster dataset to a polygon feature which was then overlaid onto an aerial photograph and topographic base map. 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 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 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 limitations. For instance, it is important to note that the computer model cannot account for mass density, tree diameters and branching variability of trees, or the degradation of views that occurs with distance. As a result, some areas depicted on the viewshed maps as theoretically offering potential visibility of the Facility may be over-predicted 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.

The preliminary viewshed mapping results indicate that predicted year-round visibility associated with the proposed Facility could include up to approximately 93 acres ($\pm 1.2\%$ of the 8,042-acre Study Area). Approximately 60 acres of the predicted year-round visibility is located over the Chestnut Hill Reservoir, north of the Host Property. The map offers 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.

⁴ Each DSM cell size is 1 square meter.

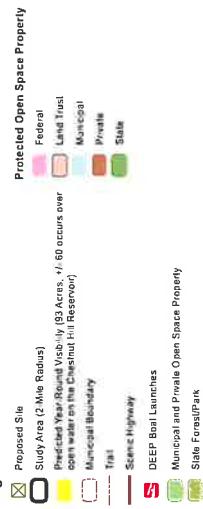
ATTACHMENTS



Preliminary Viewshed Analysis Map

Proposed Wireless Telecommunications Facility
Wolcott South CT
Chesnut Hill Road
Wolcott, Connecticut

Proposed facility height is 120 feet AGL.
Forest canopy height is derived from LiDAR data.
Study area encompasses a two-mile radius and includes 8,042 acres.
Base Map Source: 2019 Aerial Photography (CTECO)
Man Date: March 2020



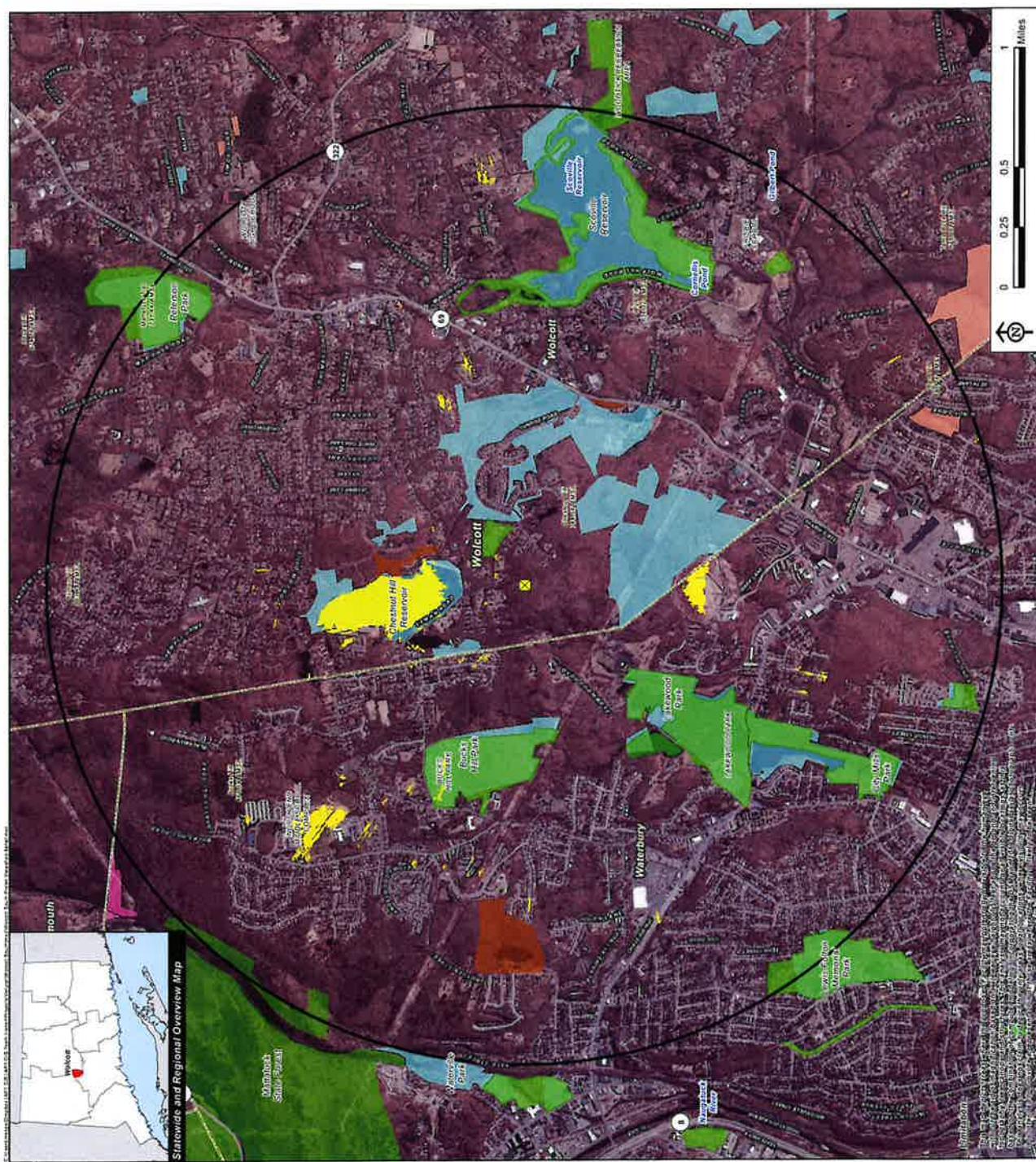
Data Sources:

A digital surface model (DSM) was created from the State of Connecticut 2015 LiDAR LAS data points. The DSM captures a digital representation of all the above-ground features on the Earth's surface.

Bridgewater Green Space & Recreation Area
Connecticut Department of Energy and Environmental Protection (DEEP) DEEP Property (May 2007, Federal Open Space (1997); Municipal and Private Open Space (1997); DEEP Boat Launches (1994)

Connecticut Forests & Parks Association | Connecticut Walk Books East & West

Notes **Not all the sources listed above appear on the Variable Name Only sheet because within the S-1000 the names of the countries shown



ATTACHMENT 5

Site Name: Wolcott South CT
Cumulative Power Density

Operator	Operating Frequency (MHz)	Number of Trans.	ERP Per Trans. (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm^2)	Maximum Permissible Exposure* (mW/cm^2)	Fraction of MPE (%)
VZW 700	746	4	622	2,486	116	0.0664	0.497333333	13.36%
VZW Cellular	880	4	211	843	116	0.0225	0.586666667	3.84%
VZW PCS	1970	4	1,525	6,100	116	0.1630	1.0	16.30%
VZW AWS	2145	4	1,493	5,973	116	0.1596	1.0	15.96%
Total Percentage of Maximum Permissible Exposure							49.47%	

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Section 1.13101 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, including the following assumptions:

1. closest accessible point is distance from antenna to base of pole;
2. continuous transmission from all available channels at full power for indefinite time period; and,
3. all RF energy is assumed to be directed solely to the base of the pole.

ATTACHMENT 6

Cellco Partnership d/b/a Verizon Wireless
Chestnut Hill Road
Wolcott, Connecticut

Wolcott South Facility

Site Search Summary

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 telecommunications facility in southern Wolcott are provided below.

Site Search Process

To initiate its site selection process in an area where wireless service problems have been identified, Cellco first establishes a “site search ring” or “site search area”. In any search ring or search area, Cellco seeks to avoid the unnecessary proliferation of towers and to reduce the potential adverse environmental effects of the 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 site search area. If any are found, they are evaluated to determine whether they can support Cellco’s telecommunications antennas and related equipment at a location and satisfies its technical requirements.

The list of available locations may be further reduced if, after preliminary negotiations, the property owners withdraw 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; those with substantial adverse environmental impacts, or in densely populated residential areas; and those with limited ability to share space with other public or private telecommunications service providers). 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 Wolcott South Facility

Within approximately four (4) miles of the proposed Wolcott South Facility, Cellco maintains ten (10) macro-cell and one (1) small cell telecommunications facilities. These facilities are identified as Cellco’s Waterbury 4, Waterbury 5, Waterbury, Wolcott, Waterbury Fulton, Waterbury East, Wolcott North, Thomaston S, Waterbury 3 and Wolcott Center Small Cell (SC) cell sites. Cellco’s Waterbury 4 facility consists of antennas on a building rooftop at

150 East Aroura Street in Waterbury. Cellco's Waterbury 5 facility consists of antennas on a building rooftop at 835 Wolcott Street in Waterbury. Cellco's Waterbury facility consists of antennas on the tower off Garden Circle (Farmdale Drive) in Waterbury. Cellco's Wolcott facility consists of antennas on a tower at 347 East Street in Wolcott. Cellco's Waterbury Fulton facility consists of antennas on a rooftop at 330 Bishop Street in Waterbury. Cellco's Waterbury East facility consists of antennas on the existing tower at 940 Meriden Road in Waterbury. Cellco's Wolcott North facility consists of antennas on a tower at 1140 Wolcott Road in Wolcott. Cellco's Thomaston South facility consists of antennas on a tower at 170 Mount Tobe Road in Thomaston. Cellco's Waterbury 3 facility consists of antennas on a tower at 299 Sheffield Street in Waterbury. Cellco's Wolcott Center SC facility consists of antennas attached to a utility pole in the public right-of-way near 720 Wolcott Road in Wolcott.

These existing facilities currently provide some wireless service in the area around the proposed Wolcott South Facility location. Gaps in reliable wireless service and signal level deficiencies persist, however, along portions of Route 69, to the east and more generally in areas to the north and west of the proposed Wolcott South Facility. In addition, a perhaps more importantly, Cellco's existing Waterbury (Alpha sector), Wolcott (Gamma sector) and Wolcott North (Beta sector) facilities are currently operating above, at or near their current capacity limits, resulting in a significant reduction in reliable wireless service in the area. Unfortunately, there are no other existing towers or other sufficiently tall structures available in this area that would help Cellco satisfy its need for service and reliability improvements. Construction of a new tower, therefore, is required to resolve Cellco's wireless service problems.

Identification of the Wolcott South Search Area

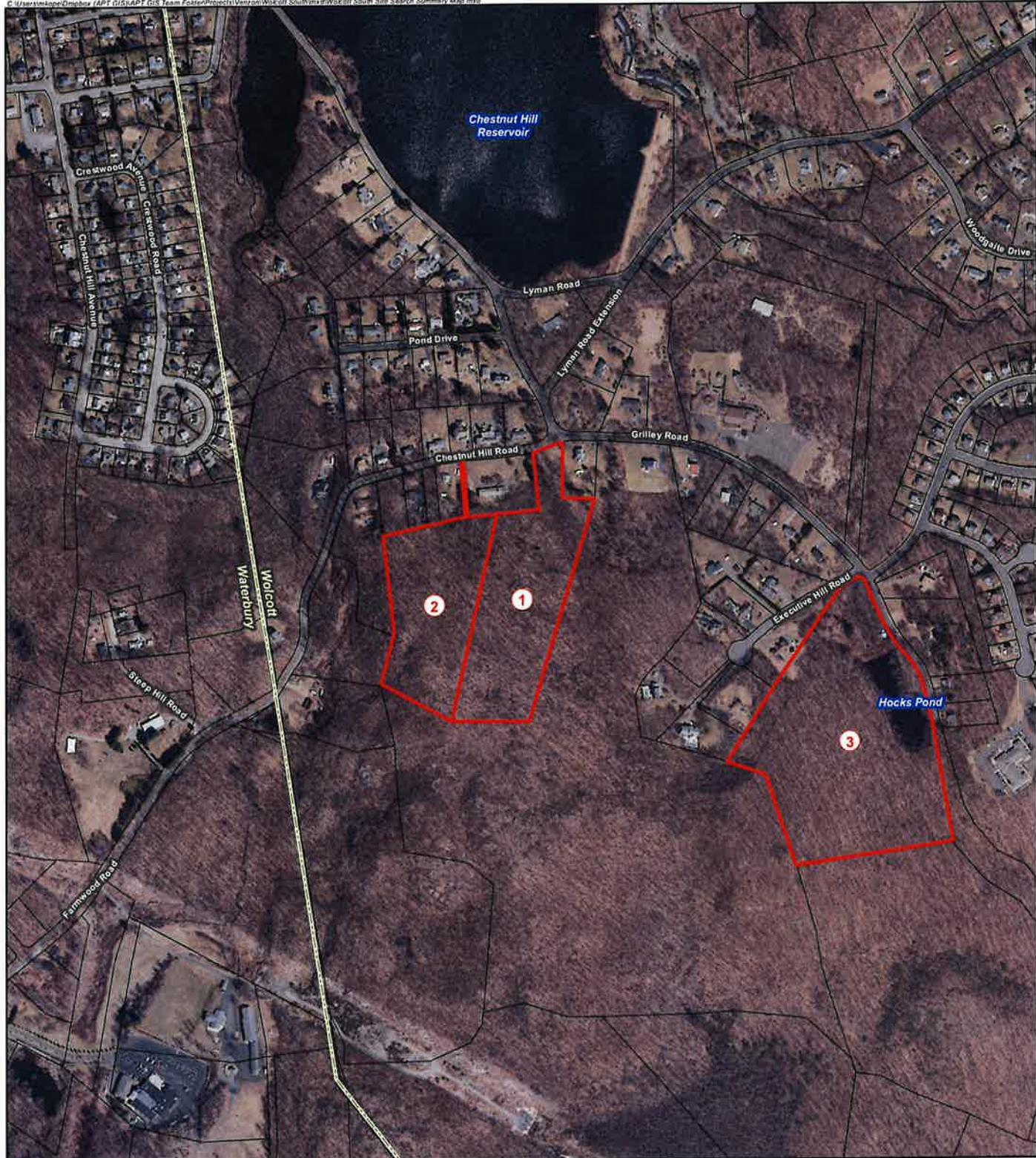
The purpose of the proposed Wolcott South Facility is to provide improved wireless service in southwest Wolcott and northeast Waterbury in each of Cellco's operating frequencies (700 MHz, 1900 MHz and 2100 MHz). The Wolcott South Facility will also provide significant capacity relief to existing Cellco facilities in Wolcott and Waterbury. The Wolcott South site search was initiated in 2015.

Sites Investigated

Cellco identified and investigated a total of three (3) sites in southwest Wolcott. A listing of the sites investigated is provided below.

1. **Chestnut Hill Road, Wolcott, CT (Parcel ID 104-1-5B)**: Cellco entered into a lease agreement with the property owner, PAL Properties LLC, for the development of a new tower site on this 10-acre vacant parcel and is zoned Industrial.
2. **Chestnut Hill Road, Wolcott, CT (Parcel ID 104-1-5A)**: This is a 10.25-acre parcel owned by Michael Van Geons and is zoned Industrial. The parcel is located to the west of the selected candidate and west of the search area for the Wolcott South Facility.

3. **124 Grilley Road, Wolcott, CT (Parcel ID 108A-3-341E)**: This is a 13.9-acre parcel owned by David Fekete. This parcel is zoned Industrial but is used for residential purposes.



Legend

- Site Investigated
- Approximate Parcel Boundary

Sites Investigated:

- ① Chestnut Hill Road, Wolcott, CT (Parcel ID 104-1-5B)
- ② Chestnut Hill Road, Wolcott, CT (Parcel ID 104-1-5A)
- ③ 124 Grilley Road, Wolcott, CT (Parcel ID 108A-3-341E)

Site Search Summary Map

Proposed Wireless
Telecommunications Facility
Wolcott South CT
Chestnut Hill Road
Wolcott, Connecticut

