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October 3, 2018

Via Hand Delivery

Michael C. Tetreau, First Selectman
Town of Fairfield
611 Old Post Road
Fairfield, CT 06824

**Re: Submission of Technical Information Concerning a Proposal to Construct a
Wireless Telecommunications Facility at 3135 Easton Turnpike, Fairfield,
Connecticut**

Dear Mr. Tetreau:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”), in its proposal to construct a new wireless telecommunications facility on an approximately 68-acre parcel at 3135 Easton Turnpike in Fairfield, Connecticut (the “Property”). The Property is the former General Electric Corporate Headquarters parcel, recently purchased by Sacred Heart University (“SHU”). The proposed facility would replace Cellco’s existing wireless facility located on the roof of Pierre Toussaint Hall (“Toussaint Hall”) on the SHU campus.

For the purposes of this filing, the proposed telecommunications facility is known as Cellco’s “Plattsville Relo Facility”. This Technical Report is submitted pursuant to Connecticut General Statutes (“Conn. Gen. Stat.”) § 16-50i(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. The Town of Easton may be located within 2,500 feet of the proposed Plattsville Relo Facility. Town of Easton officials will be provided with a copy of this filing.

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

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 in the southeast portion of the Property. The Plattsville Relo Facility would interact with Cellco's existing cell sites in Fairfield, Bridgeport and Trumbull, Connecticut.

The proposed Plattsville Relo Facility would provide wireless service in portions of Fairfield, Easton, Trumbull and Bridgeport, including portions of Routes 15 and 59 and local roads in the area and to residential, commercial and institutional land uses in the vicinity of the Property. Coverage plots showing Cellco's existing wireless service in the area, including service from its existing SHU roof-top facility and existing service with the proposed Plattsville Relo Facility at 700 MHz and 2100 MHz are included in Attachment 1.¹ The Plattsville Relo Facility will also off-load voice and data traffic from adjacent cell sites in the area.

Cell Site Information

Cellco proposes to install a 120-foot monopole tower and associated equipment platform within a 50' x 50' fenced compound and 100' x 100' leased area in the southeast portion of the Property. Cellco would install nine (9) panel-type antennas and remote radio heads on a triangular platform at the top of the tower. Equipment cabinets associated with Cellco's

¹ In order to replicate the wireless service that Cellco currently provides from the SHU roof-top facility, Cellco will need to develop at least one additional facility located generally to the east of the SHU campus.

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antennas and a diesel-fueled back-up generator would be located on a steel platform with canopy roof, within the fenced compound. Access to the facility compound would extend from Easton Turnpike over existing paved driveways on the Property, then over a new driveway extension to the proposed tower site. *See* Site Schematics and Lease Exhibit 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.

Municipal Consultation Process

Pursuant to Section 16-50j 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 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

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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 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.

Pursuant to Section 16-50~~(e)~~(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 principal need for the Plattsville Relo Facility is to replace the service that Cellco will lose when its existing SHU roof-top facility is removed.² The proposed Plattsville Relo Facility described in this Technical Report is needed so that Cellco can continue to provide enhanced wireless voice and data services in northeast Fairfield, including the SHU campus and portions of Easton, Trumbull, and Bridgeport, Connecticut. The Plattsville Relo Facility will also provide wireless service "coverage" along portions of Routes 15 and 59, and the area immediately surrounding the Property in its 700 and 2100 MHz frequency ranges.

Environmental Effects

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

² Cellco's lease term for the existing roof-top facility has expired. While Cellco has been permitted to maintain its antennas at this location, subject to the "hold over" provisions of its current lease, SHU has made it clear to Cellco that it will not extend Cellco's lease term for the existing roof-top facility. SHU did, however, agree to enter into a ground lease with Cellco for the development of a new replacement tower on the Property.

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To more fully assess the visual impact of the Plattsville Relo Facility, Cellco's consultant, All-Points Technology Corporation ("APT") has prepared a Preliminary Visual Assessment for the proposed tower location. This assessment indicates that a majority of the year-round visibility of the proposed 120-foot tower at the Property would be limited to the area in the immediate vicinity (within approximately 0.5 miles) of the proposed tower location, generally over portions of the Property to the north, residential areas to the south and east, and open space/undeveloped areas to the west. 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, within approximately 1.75 miles around the tower site. (*See Attachment 3*). A more detailed visual assessment report is being prepared and will be included in Cellco's Certificate 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 Plattsville Relo 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 Plattsville Relo Facility will have no direct impact on inland wetlands or watercourses, within or near either of 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 Plattsville Relo 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 22.61 % of the FCC Standard for the proposed 120' tower. (*See Attachment 4.*) Actual RF emissions levels from this facility will be far less than this "worst-case" approximation.

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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's search for suitable cell site locations to replace its existing SHU roof-top facility focused exclusively on the Property. After notifying Cellco for its desire to relocate carriers off the existing residence hall roof-top, SHU offered to host the replacement facility (tower) on the Property. No other alternative parcels in the vicinity of SHU were evaluated.

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 surrounding municipalities, and emergency service providers, if a need exists.³ 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. § 16-50~~l~~ which requires Cellco to supply the Town with information regarding its proposed Plattsville Relo 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 Plattsville Relo 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

³ In addition to Cellco, Toussaint Hall on the SHU campus also support T-Mobile and AT&T antennas. Each of these carriers will be notified that existing wireless lease agreements will not be renewed and that space on the new tower will be made available to them.

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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 (*via hand delivery*):

Matthew Wagner, Chair, Fairfield Town Plan and Zoning Commission

Kevin J. Gumpfer, Chair, Fairfield Inland Wetlands Agency/Conservation Commission

Adam Dunsby, Easton First Selectman

Robert Maquat, Chair, Easton Planning and Zoning Commission

Phillip Doremus, Wetlands Enforcement Officer, Easton Conservation
Commission/Inland Wetlands Agency

Dr. John J. Petillo, President, Sacred Heart University

Michael D. Larobina, J.D., LL.M., Secretary and General Counsel, Sacred Heart
University

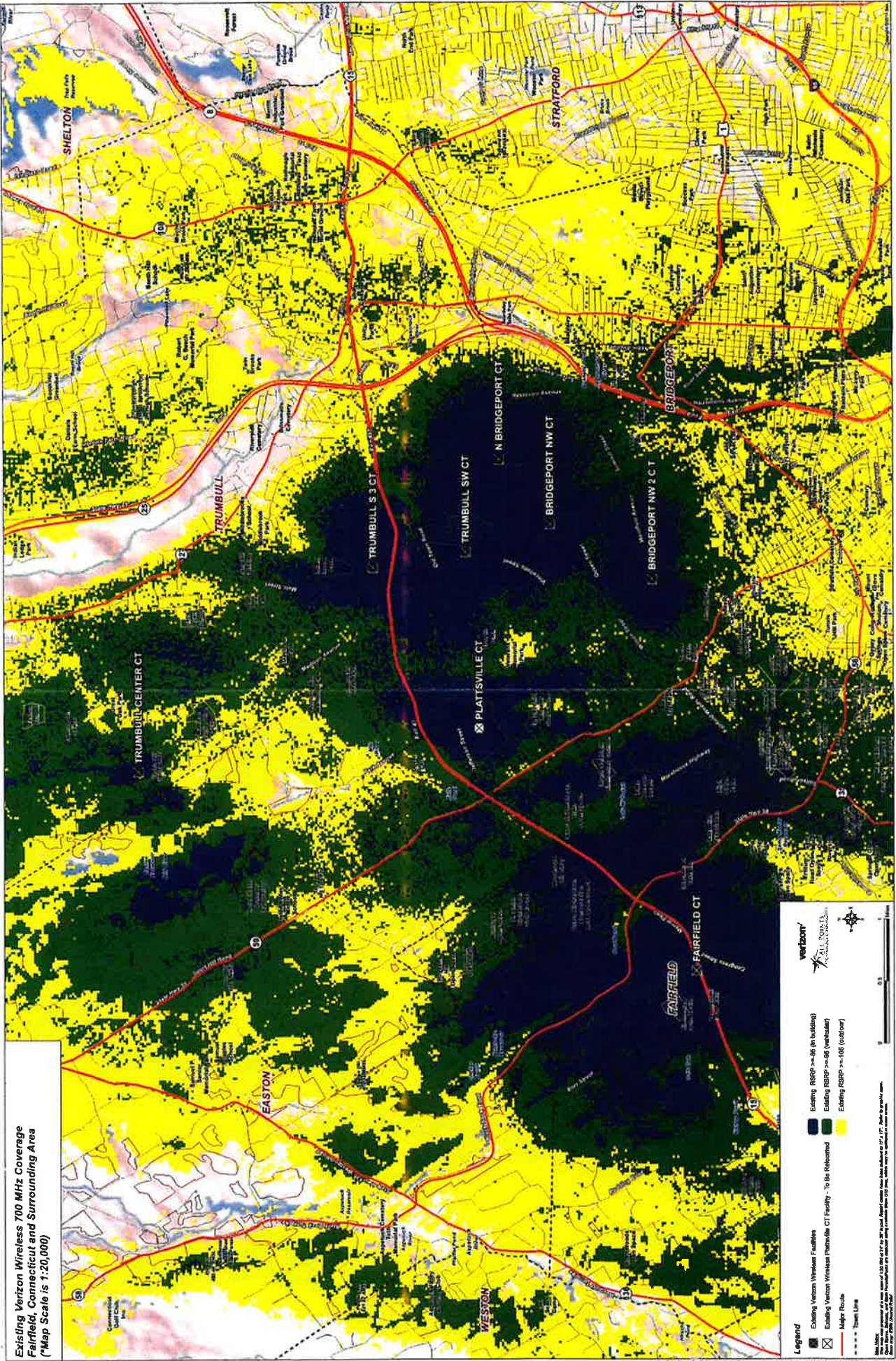
John W. Cannavino, Esq.

Anthony Befera

Aleksey Tyurin

Maria Montrose

Attachment 1



Existing Verizon Wireless 700 MHz Coverage
 Fairfield, Connecticut and Surrounding Area
 (*Map Scale is 1:20,000)

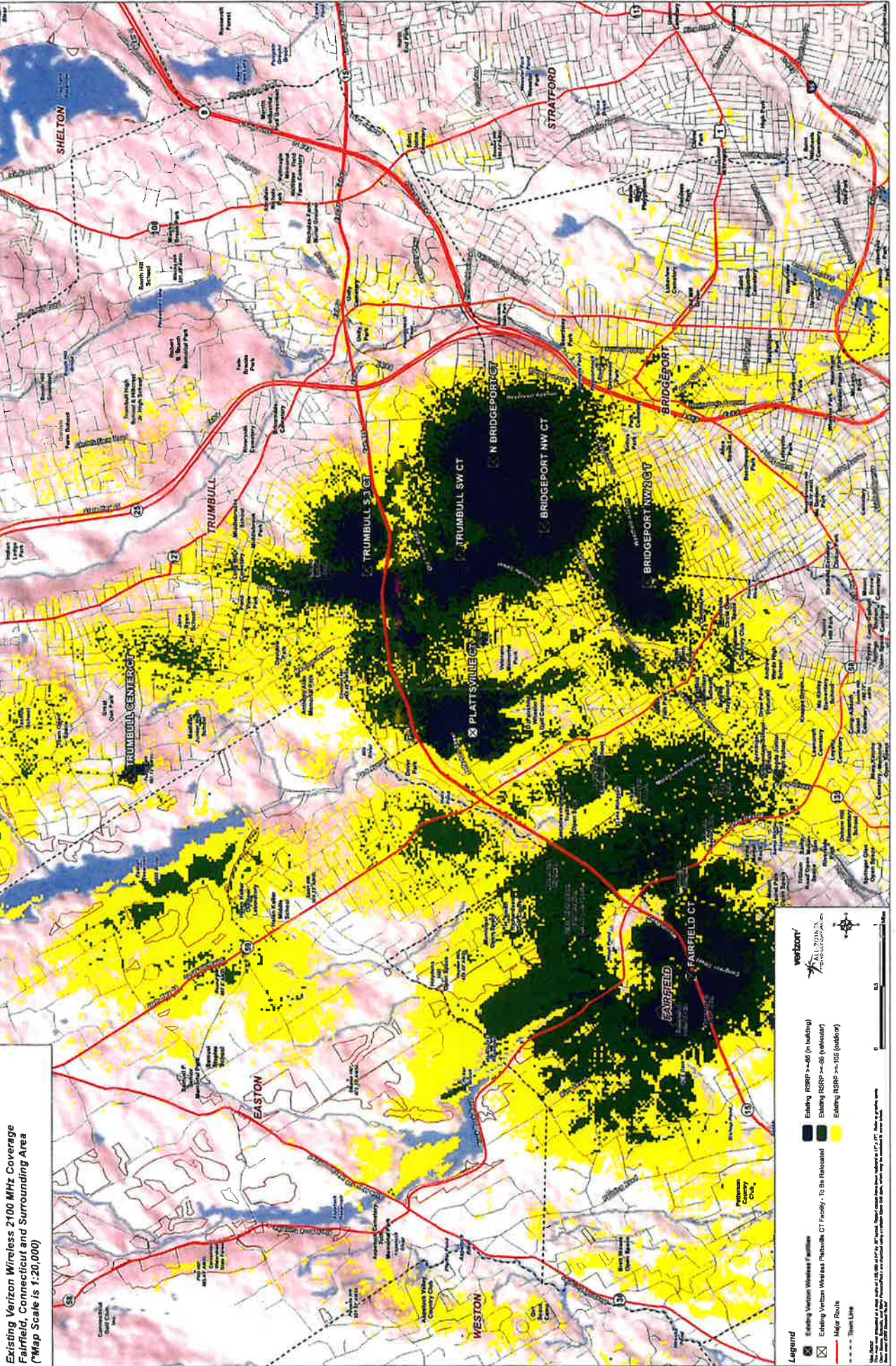
Legend

- Existing Verizon Wireless Facilities
- Existing RSP > -86 (in building)
- Existing RSP > -88 (outdoors)
- Existing RSP > -105 (outdoors)
- Major Roads
- Thru Lines

Verizon
 ALL THINGS
 WIRELESS

Scale: 0 0.5 1 Miles

Map data provided by Mapbox, OpenStreetMap contributors, and the GIS User Community. Coverage information is for informational purposes only. Coverage not available in all areas. © 2014 Verizon Wireless. All rights reserved.



Existing Verizon Wireless 2100 MHz Coverage
 Fairfield, Connecticut and Surrounding Area
 (Map Scale is 1:20,000)

Legend

- Existing Verizon Wireless Facilities
- Existing Verizon Wireless Facilities - To Be Relocated
- Existing RSRP >= -85 (in building)
- Existing RSRP >= -85 (vehicular)
- Existing RSRP >= -105 (vehicular)
- Major Route
- Town Line

Verizon Wireless
 CONNECTICUT

Scale: 0 0.5 1 Miles

North Arrow

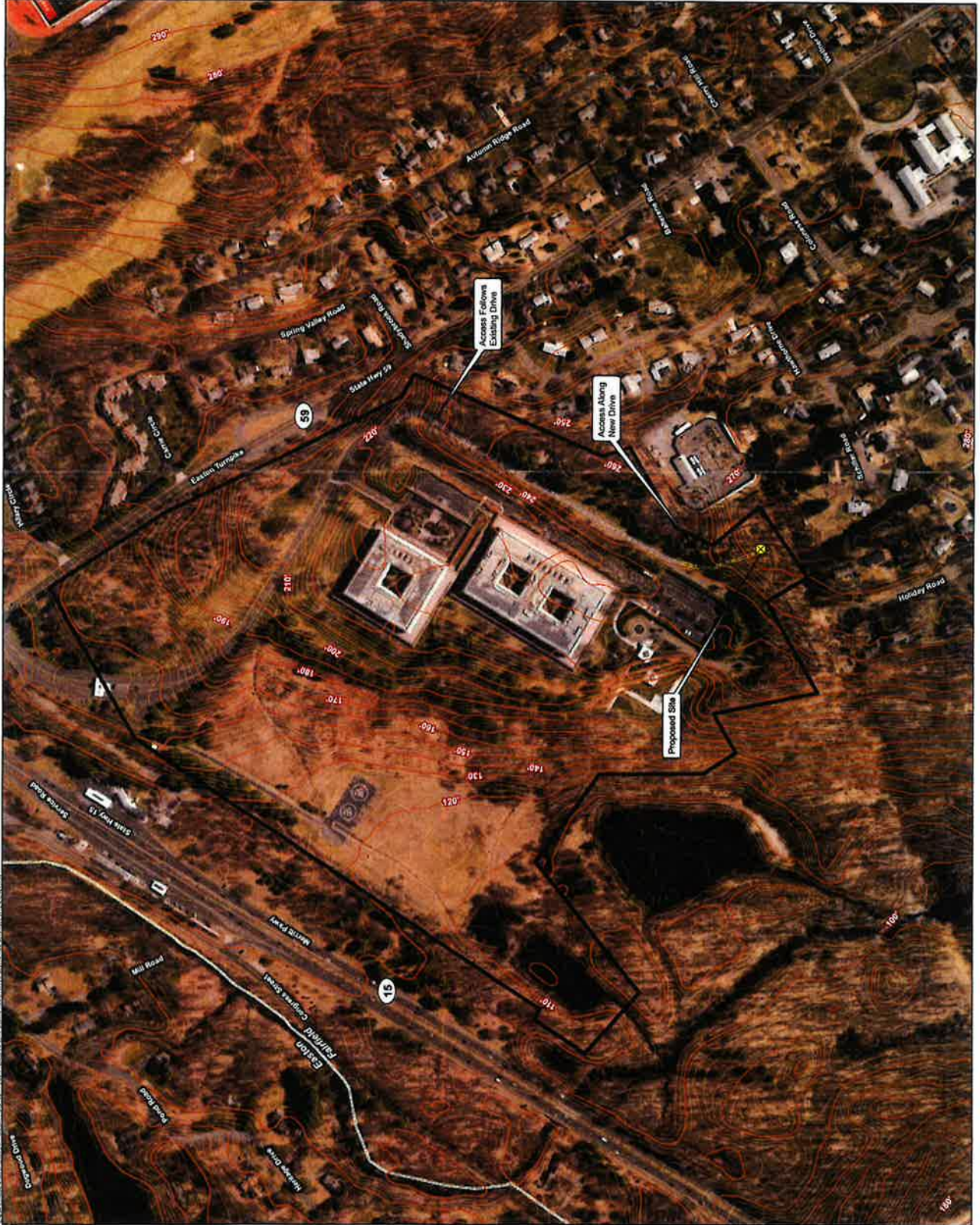
Map Data: © 2007 Verizon Wireless. All rights reserved. This map is a general representation of the service area and does not constitute an offer of service. Service availability is subject to change without notice. Coverage may vary and is not guaranteed. For more information, please visit us online at www.verizonwireless.com.

Attachment 2

Site Schematic
Plattsville Reo
Wireless Telecommunications Facility
3135 Easton Turnpike
Fairfield, Connecticut

verizon

- Legend**
-  Proposed Site Location
 -  Subject Property
 -  Proposed Access Drive
 -  Follows Existing Drive
 -  New Access Drive
 -  10-foot Contour Line
 -  2-foot Contour Line
 -  Municipal Boundary



1 in = 300 ft



Map Sources:
 Ortho Image: Map: State of Connecticut 2016 aerial imagery
 100-foot ground resolution, provided by CTCEP Map Services
 Elevation contours derived from 2000 LIDAR data provided by CTCEP
 CTCEP's data library (<http://www.ct.gov/ctcep>)
 All other data and symbols are updated by CTCEP and represent
 the most recent publications.
 Map Date: August, 2018

REF: 04-10-2010



H2G
HUDSON
Design Group LLC
 TEL: (978) 250-0240
 FAX: (978) 250-0288

CHECKED BY: DJR
 APPROVED BY: DJC

SUBMITTALS	
REV	DESCRIPTION
0	06/27/10 ISSUED FOR REVIEW

SITE NAME:
PLATTSVILLE
RELO CT

SITE ADDRESS:
 31.35 EASTON TURNPIKE
 FAIRFIELD, CT 06825

SHEET TITLE
SITE PLAN

SHEET NUMBER
L-1

LEASE EXHIBIT

THIS LEASE PLAN IS DIAGRAMMATIC IN NATURE AND IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING THE LOCATION AND SIZE OF THE PROPOSED WIRELESS COMMUNICATION FACILITY. THE SITE LAYOUT WILL BE FINALIZED UPON COMPLETION OF SITE SURVEY AND FACILITY DESIGN.

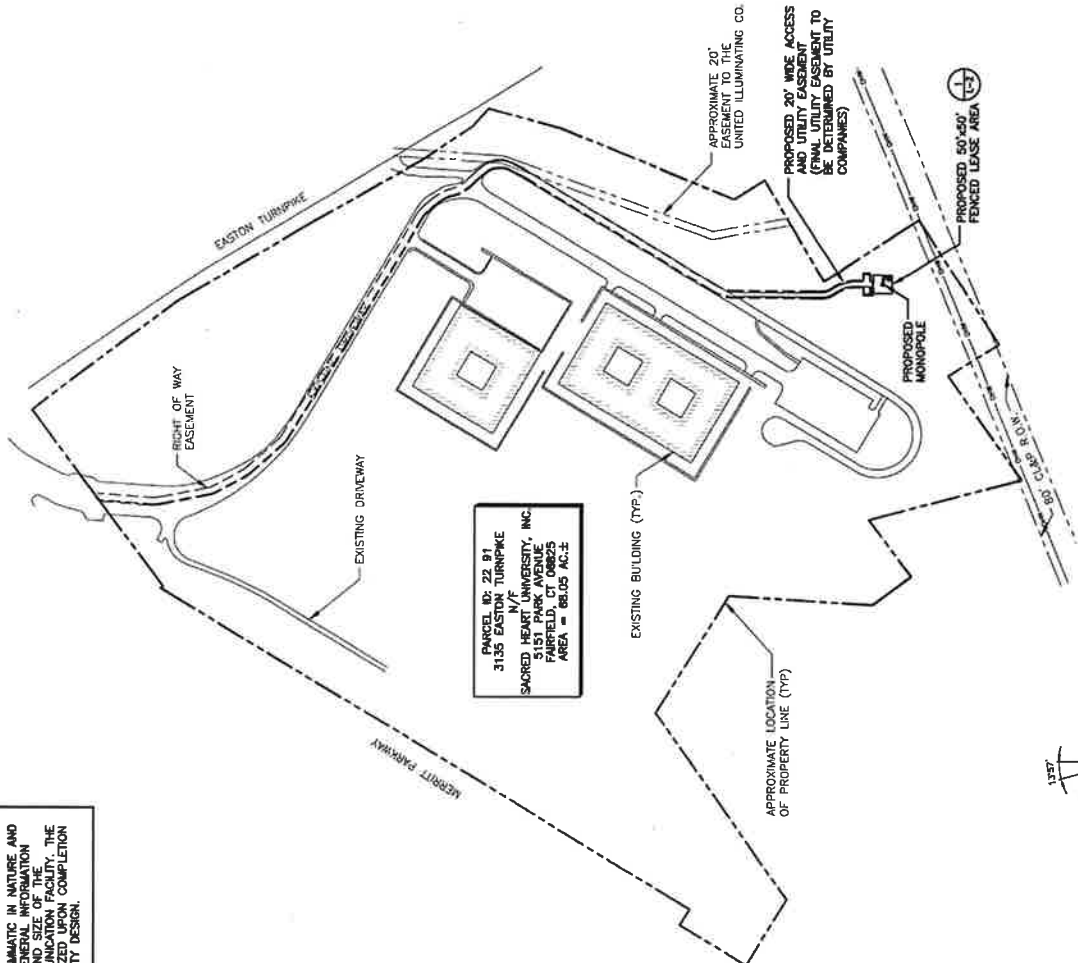


VICINITY MAP
 SCALE: N.T.S.

APPROXIMATE TOWER COORDINATES: LAT: N41° 12' 48.48" LONG: W73° 15' 08.25"

LEGEND

	PROPERTY LINE - SUBJECT PARCEL
	ADJUTERS PROPERTY LINE
	EXISTING CONTOUR LINE
	TREE LINE
	BARBED WIRE FENCE REMAINS
	OVERHEAD WIRE (TRANSMISSION LINE)
	EXISTING CHAIN LINK FENCE
	EXISTING BUILDING
	CATCH BASIN
	CONIFEROUS TREE
	DECIDUOUS TREE
	STONEWALL
	WELL
	UTILITY POLE
	PROPOSED CONTOUR LINE
	PROPOSED CONSTRUCTION SILT SOCK



PARCEL ID: 22 91
 31.35 EASTON TURNPIKE
 N/F
 SACRED LEASING UNIVERSITY, INC
 5151 PARK WENHAM
 FAIRFIELD, CT 06825
 AREA = 66.05 AC.±



SITE PLAN
 22x34 SCALE: 1"=160'-0"
 11x17 SCALE: 1"=320'-0"

Attachment 3



PRELIMINARY VISUAL ASSESSMENT

To: Verizon Wireless
20 Alexander Drive
Wallingford, Connecticut

Date: August 29, 2018

Re: Proposed Relocation of an
Existing Telecommunications Facility
Fairfield, Connecticut

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 3135 Easton Turnpike in Fairfield, Connecticut (“Host Property”). The proposed Facility is intended to replace existing antennas on nearby buildings located on a separate property. The Host Property is developed with two, multi-story commercial office buildings on its eastern side. The remainder of the Host Property is a mix of open fields and wooded land. The proposed Site would be located in the southeast corner of the Host Property and consist of a 120-foot tall monopole.

At the request of Verizon, All-Points Technology Corporation, P.C. (“APT”) has prepared initial viewshed mapping to provide a preliminary evaluation of the visibility associated with the proposed relocation 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 Site location. The existing forest cover represents about 65% of the Study Area.

Computer modeling tools were used to predict those areas where 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. A Digital Elevation Model was created to represent the Study Area’s terrain by incorporating topographic information for the state of Connecticut that was derived through the spatial interpolation of airborne LiDAR-based data collected in the year 2010 with a horizontal accuracy of 0.7 meter (about 2.23 feet) or less. In addition, multiple land use data layers were

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.

created from the Natural Resources Conservation Service (through the USDA) aerial photography (1-foot pixel resolution flown in 2016 [leaf-on] and 0.34-foot pixel resolution flown in 2016 [leaf off]) using image processing tools. These tools develop 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 surface areas, surface water and other distinct land use features.

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 maps 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. The shaded areas of predicted visibility shown on the maps denote locations within the Study Area from which the proposed Facility may potentially be visible year-round (in yellow) above the tree canopy and seasonally, through the trees (during "leaf-off" conditions when the leaves are off the deciduous trees; 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 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 or intervening 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 could extend out to distances of approximately 1.75 mile from the Site for seasonal views and approximately 0.5 mile for year-round views.

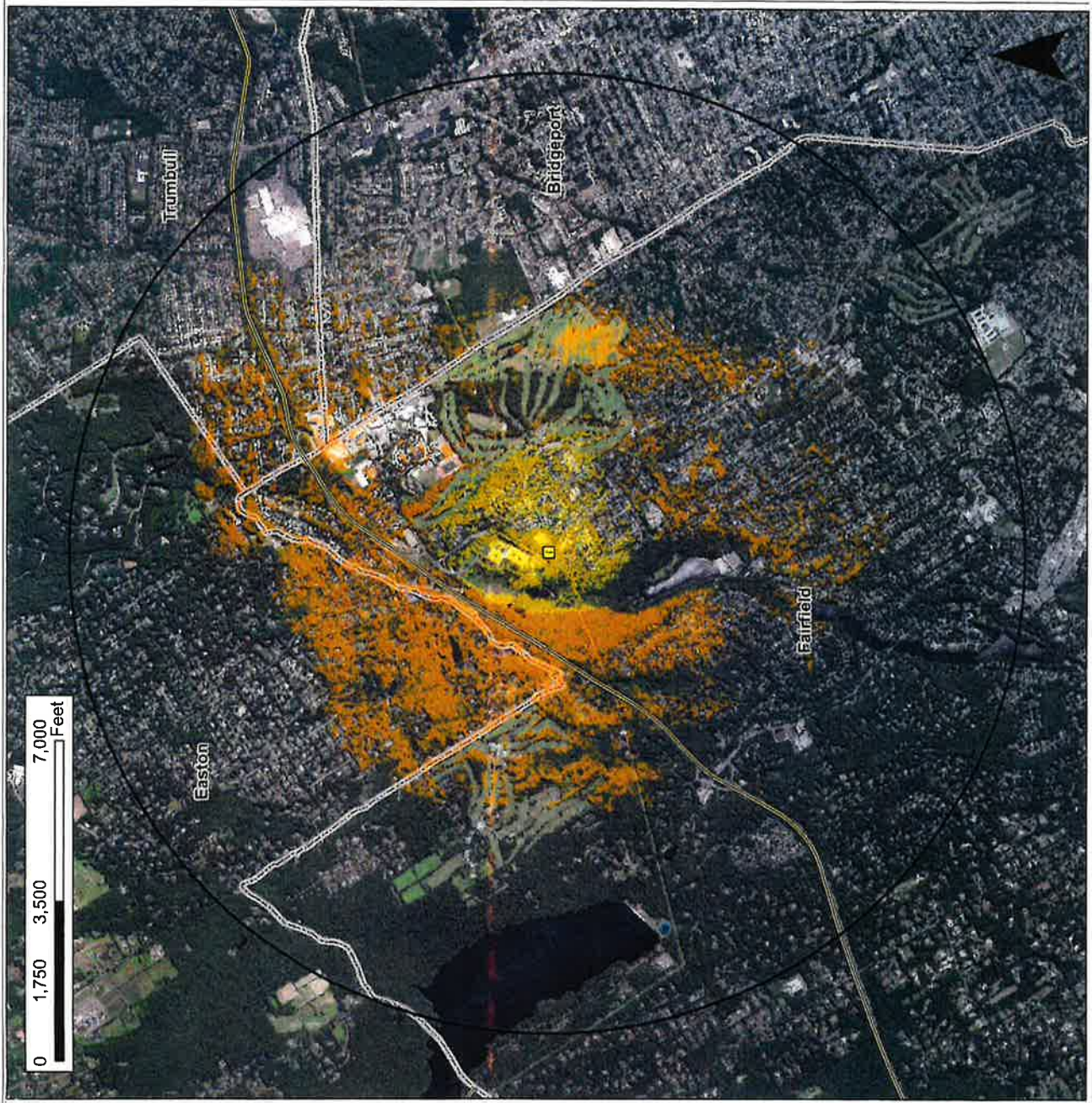
The maps provide a preliminary basis for understanding the extent of visibility that may occur throughout the Study Area, but it does not address the character of those potential views. Note that the results of the computer model have not been field verified. The variability in tree dimensions combined 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 at the Site location. Once the balloon is aloft and 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 photograph areas where the balloon can be seen (as well as locations it is not visible) 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 submission to the Connecticut Siting Council.

Attachments

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

3 SADDLEBROOK DRIVE · KILLINGWORTH, CT 06419 · PHONE 860-663-1697 · FAX 860-663-0935



Preliminary Viewshed Map – Aerial Base

Proposed Wireless Telecommunications Facility
 Plattsville Relo, 3135 Easton Turnpike, Fairfield, 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

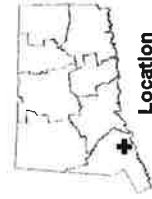
- Viewshed analysis conducted using Clark University's TerrSet.
- Areas of potential visibility are calculated based on facility location and height, Study Area topography, and Study Area vegetation.
- Proposed facility height is 120 feet AGL.
- Forest canopy height is derived from lidar data.
- Study area encompasses a two-mile radius and includes 8,042 acres of land.

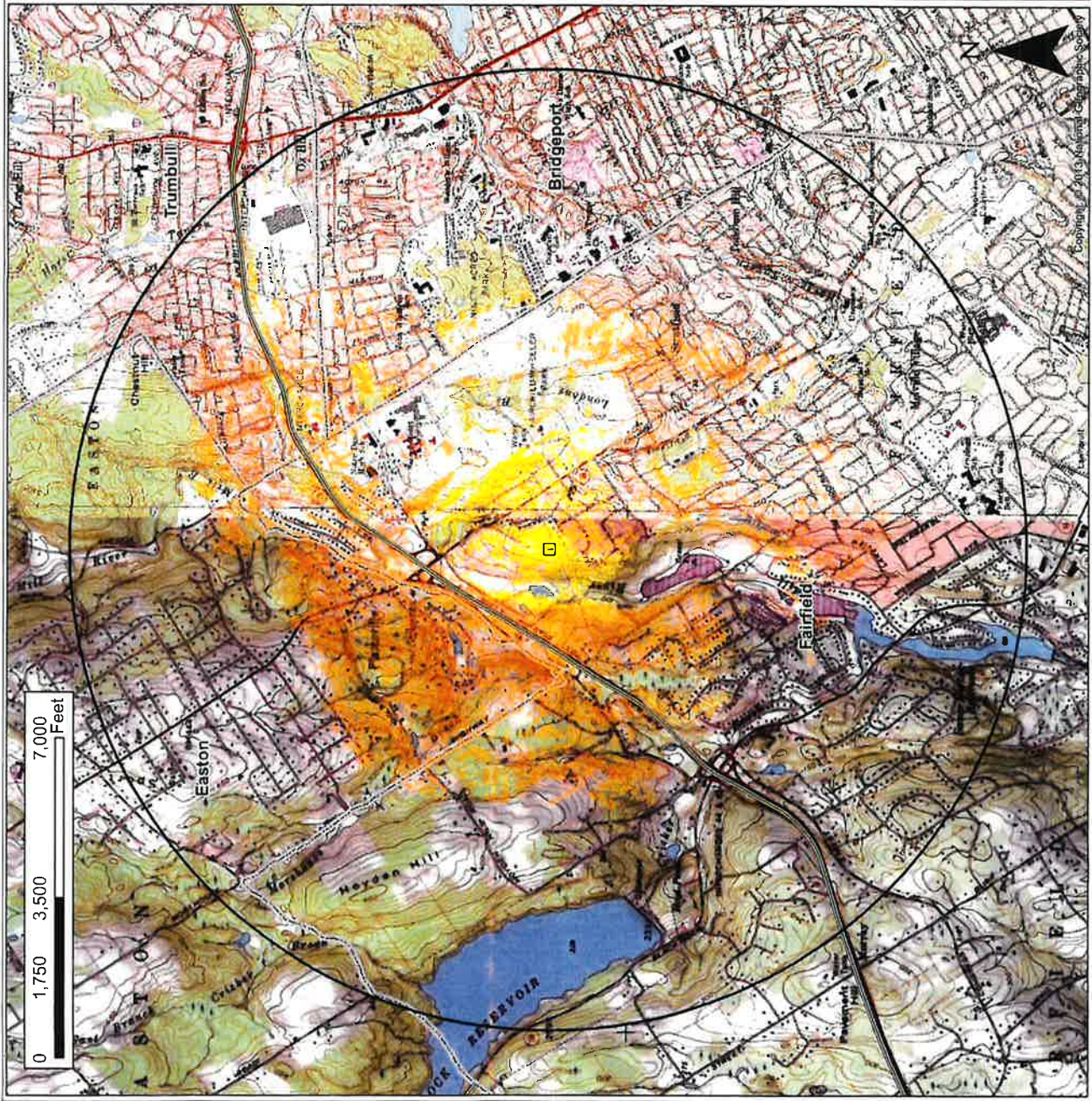
DATA SOURCES

- Digital elevation model (DEM) derived from lidar data obtained from NOAA which has a raster resolution of 0.3 m and horizontal accuracy of .7 meter or less.
- Forest areas are generated with TerrSet (Clark University) image processing from 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
- Trails
- Predicted Seasonal Visibility (878 acres)
- Predicted Year-Round Visibility (210 acres)
- Towns
- 2-Mile Study Area
- Scenic Roads





Preliminary Viewshed Map – Topo Base

Proposed Wireless Telecommunications Facility
 Plattsville Relo, 3135 Easton Turnpike, Fairfield, 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

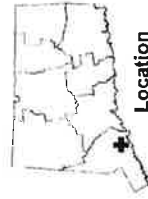
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- Proposed facility height is 120 feet AGL.
- Forest canopy height is derived from lidar data
- Study area encompasses a two-mile radius and includes 8,042 acres of land.

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 7 meter or less.
- Forest areas are generated with TerrSet (Clark University) image processing from 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
- Trails
- Predicted Seasonal Visibility (878 acres)
- Predicted Year-Round Visibility (210 acres)
- 2-Mile Study Area
- Scenic Roads



Location



Copyright © 2013 National Geographic Society

Attachment 4

General Power Density

Site Name: Plattsville RELO, 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 PCS	1970	0	6749	0	120	0.0000	1.0	0.00%
VZW Cellular	869	0	3709	0	120	0.0000	0.5793333333	0.00%
VZW AWS	2145	1	4906	4906	120	0.1225	1.0	12.25%
VZW 700	746	1	2062	2062	120	0.0515	0.4973333333	10.35%
Total Percentage of Maximum Permissible Exposure								22.61%

*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/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case maximum values used.