

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE: :
 :
A PETITION OF CELLCO PARTNERSHIP : PETITION NO. _____
D/B/A VERIZON WIRELESS FOR A :
DECLARATORY RULING ON THE NEED TO :
OBTAIN A SITING COUNCIL CERTIFICATE :
FOR THE INSTALLATION OF A SMALL :
CELL TELECOMMUNICATIONS FACILITY :
AT 396 AND 412 MOUNT VERNON ROAD, :
SOUTHINGTON, CONNECTICUT : AUGUST 22, 2017

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

I. Introduction

Pursuant to Sections 16-50j-38 and 16-50j-39 of the Regulations of Connecticut State Agencies (“R.C.S.A.”), Cellco Partnership d/b/a Verizon Wireless (“Cellco”) hereby petitions the Connecticut Siting Council (the “Council”) for a declaratory ruling (“Petition”) that no Certificate of Environmental Compatibility and Public Need (“Certificate”) is required under Section 16-50k(a) of the Connecticut General Statutes (“C.G.S.”) to install a “small cell” telecommunications facility at the Mount Southington Ski Area, located at 396 and 412 Mount Vernon Road in Southington, Connecticut (the “Property”). The Property is owned by Mount Southington Limited Partnership and is used for recreational purposes. Cellco refers to the proposed facility as its “Mount Southington SC Facility”.

II. Factual Background

The Property is an approximately 98-acre parcel in Southington’s Residential (R-80) zone district. *See Attachment 1 – Site Vicinity and Site Schematic Maps (Aerial Photograph).* Cellco

is licensed to provide wireless telecommunications services in the 700 MHz, 850 MHz, 1900 MHz and 2100 MHz frequency ranges in Southington and throughout the State of Connecticut. Initially, the proposed Mount Southington SC Facility will provide wireless service in Cellco's 2100 MHz frequency range only.

A. Proposed Mount Southington SC Facility

The proposed Mount Southington SC Facility would consist of a single canister antenna (Model NH3600M-DG-2XR) mounted to the top of an existing privately-owned wood pole. The existing pole supports two lighting units and is used by Eversource to bring power to the Property. The wood pole is located on the Property, outside of the public right of way. The canister antenna at the top of the pole will extend to a height of approximately 31'-11" above ground level (AGL). Cellco will also install a remote radio head (RRH) (Model B66A-RRH-4x45) and related electrical equipment on the lower portion of the pole. (See Cellco's Project Plans included in Attachment 2). Power and telephone service to the Mount Southington SC Facility will extend from existing service on the pole. Specifications for the Mount Southington SC Facility antenna and RRH are included in Attachment 3.

III. Discussion

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

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

adverse environmental effect”. C.G.S. § 16-50k(a).

1. Physical Environmental Effects

Cellco respectfully submits that the installation of a single canister antenna, RRH and electrical equipment on an existing wood pole will not involve a significant alteration in the physical and environmental characteristics of the Property. No tree removal or ground disturbance of any kind is required to install the proposed small cell wireless facility.

2. Visual Effects

The visibility of the proposed “small cell” facility would be limited to locations primarily along Mount Vernon Road. Due to its location among existing Ski Area and utility infrastructure, Cellco has determined that the proposed small cell facility would not be highly conspicuous, will not have an adverse visual impact on the existing views and will not change the character of the community. (See Visual Assessment & Photo-Simulations (“Visual Assessment”) included in Attachment 4).

3. FCC Compliance

Radio frequency (“RF”) emissions from the proposed installation will be well below the standards adopted by the Federal Communications Commission (“FCC”). Included in Attachment 5 is a General Power Density table for Cellco’s “small cell” antenna at a centerline height of approximately 30 feet AGL. This worst-case calculation indicates that the Mount Southington SC Facility will operate well within (42.83% of the Standard) the RF emission standards established by the FCC.

4. FAA Summary Report

Included in Attachment 6 of this Petition is a Federal Airways & Airspace Summary Report verifying that the new tower and concealment structure described in this Petition would

not constitute an obstruction or hazard to air navigation and that notification to the FAA is not required.

B. Notice to the Town, Property Owner and Abutting Landowners

On August 22, 2017, a copy of this Petition was sent to Southington's Town Manager, Garry Brumback; Robert Phillips, Southington's Director of Planning and Community Development; and Mount Southington Limited Partnership, the owner of the Property. Notice of Cellco's intent to file the Petition was also sent to the owners of land that abuts the Property. Included in Attachment 7 are copies of the letters sent to Mr. Brumback, Mr. Phillips and Mount Southington Limited Partnership. Included in Attachment 8 is a sample abutter's letter and the list of those abutting landowners who were sent notice of the filing of the Petition.

IV. Conclusion

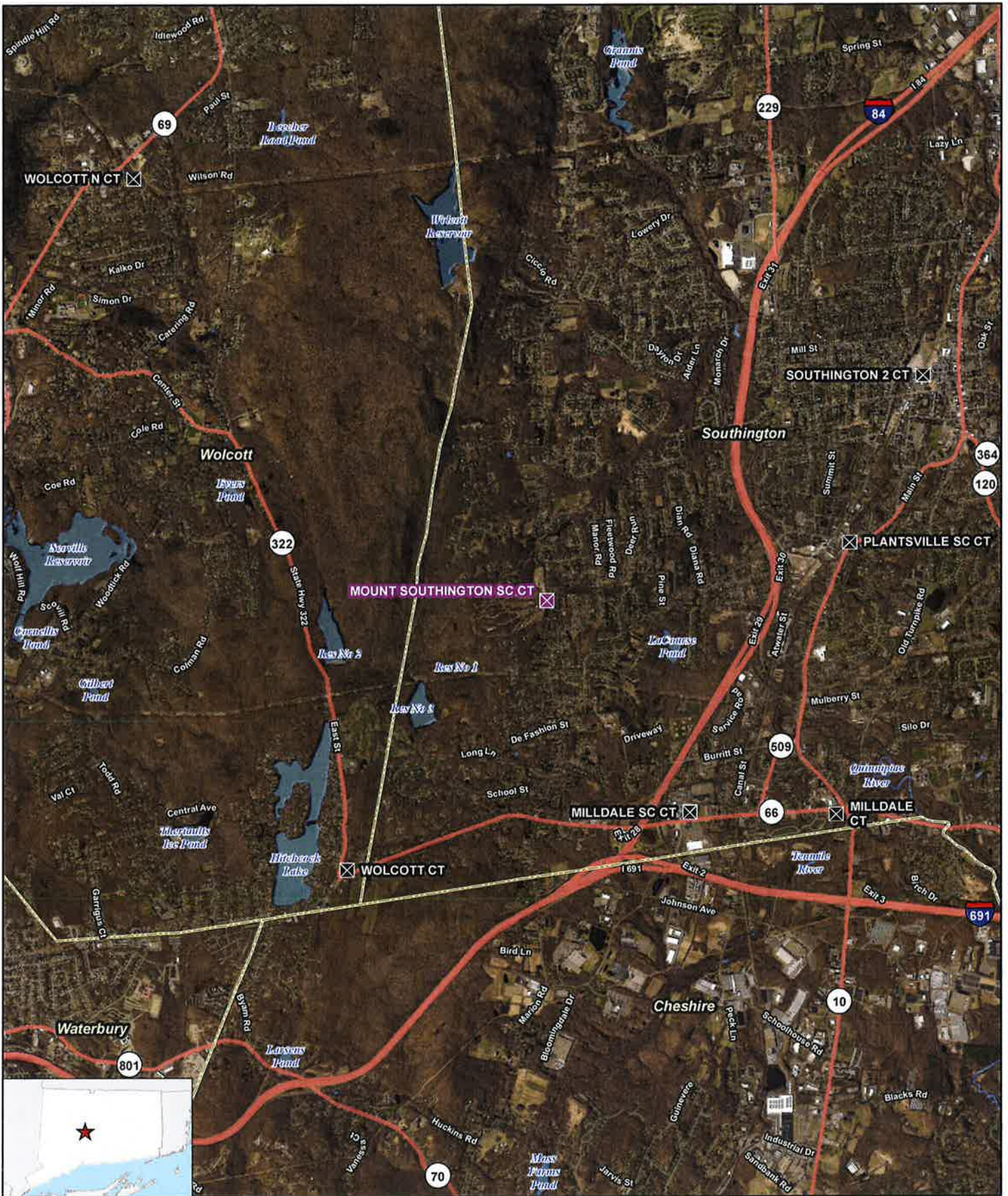
Based on the information provided above, Cellco respectfully requests that the Council issue a determination in the form of a declaratory ruling that the installation of a small cell wireless telecommunications facility at the Mount Southington Ski Area will not have a substantial adverse environmental effect and does not require the issuance of a Certificate of Environmental Compatibility and Public Need pursuant to § 16-50k of the General Statutes.

Respectfully submitted,

CELLCO PARTNERSHIP d/b/a VERIZON
WIRELESS

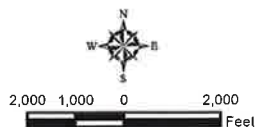
By 
Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597
(860) 275-8200
Its Attorneys

ATTACHMENT 1



- Legend**
- ✕ Proposed Verizon Wireless Facility
 - ⊠ Surrounding Verizon Wireless Facilities
 - ▭ Municipal Boundary

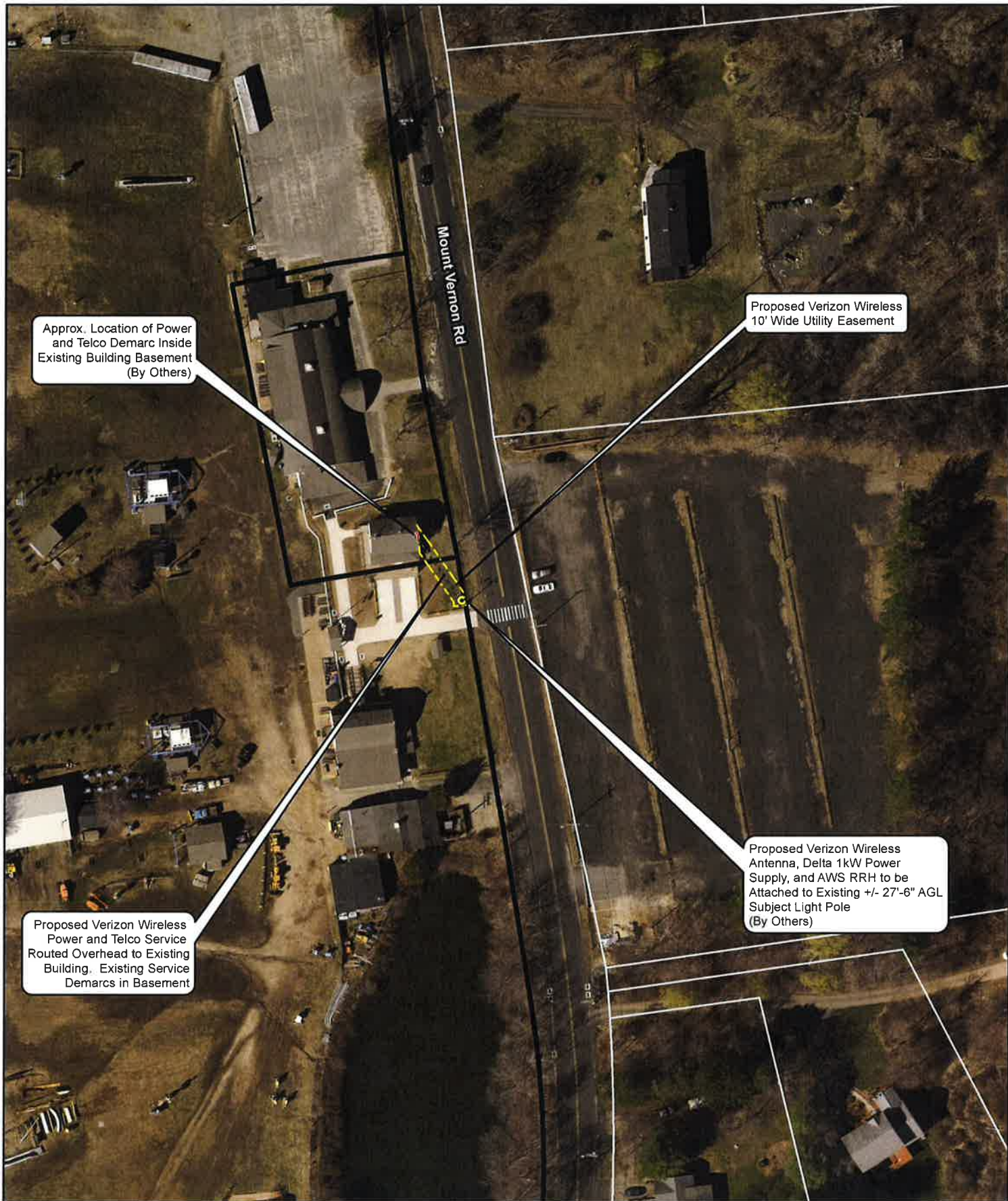
Base Map Source: 2016 Aerial Photograph (CTECO)
 Map Scale: 1 inch = 4,000 feet
 Map Date: August 2017



Site Vicinity Map

Proposed Wireless
 Telecommunications Facility
 Mount Southington SC CT
 396 and 412 Mount Vernon Road
 Southington, Connecticut





Approx. Location of Power and Telco Demarc Inside Existing Building Basement (By Others)

Proposed Verizon Wireless 10' Wide Utility Easement

Proposed Verizon Wireless Power and Telco Service Routed Overhead to Existing Building. Existing Service Demarcs in Basement

Proposed Verizon Wireless Antenna, Delta 1kW Power Supply, and AWS RRH to be Attached to Existing +/- 27'-6" AGL Subject Light Pole (By Others)

Legend

- ⊙ Existing Subject Light Pole (By Others)
- Proposed Verizon Wireless Power and Telco Service
- ▭ Proposed Verizon Wireless Utility Easement
- Existing Equipment (By Others)
- Subject Property

Approximate Parcel Boundary Approximate Parcel Boundary (CTDEEP GIS Parcels Last Updated 2010)



Site Schematic

Proposed Wireless Telecommunications Facility
 Mount Southington SC CT
 396 and 412 Mount Vernon Road
 Southington, Connecticut

Map Notes:
 Base Map Source: 2016 Aerial Photograph (CTECO)
 Map Scale: 1 inch = 100 feet
 Map Date: July 2017



ATTACHMENT 2

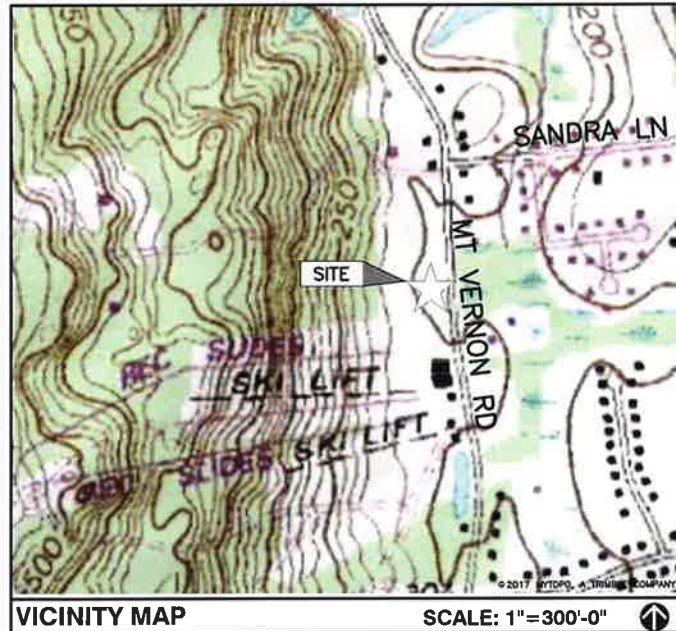
CELLCO PARTNERSHIP

d.b.a. **verizon**

WIRELESS COMMUNICATIONS FACILITY

MOUNT SOUTHINGTON CT

396 AND 412 MOUNT VERNON ROAD SOUTHINGTON, CT 06479



DIRECTIONS TO SITE:

FROM VERIZON EAST HARTFORD OFFICE:--

GET ON I-84 FROM E RIVER DR AND CONNECTICUT BLVD
 HEAD NORTHEAST ON E RIVER DR TOWARD DARLIN ST
 TURN LEFT TO STAY ON E RIVER DR
 TURN LEFT AT THE 1ST CROSS STREET ONTO CONNECTICUT BLVD
 TURN LEFT ONTO THE ROUTE 84 W RAMP TO HARTFORD/ROUTE 91
 FOLLOW I-84 TO MARION AVE IN SOUTHINGTON. TAKE EXIT 30 FROM I-84
 MERGE ONTO I-84
 KEEP LEFT TO STAY ON I-84
 TAKE EXIT 30 FOR MARION AVE TOWARD W MAIN ST
 CONTINUE ON MARION AVE.
 TAKE FROST ST TO MT VERNON RD
 TURN RIGHT ONTO MARION AVE
 TURN RIGHT ONTO FROST ST
 TURN RIGHT ONTO MT VERNON RD
 DESTINATION WILL BE ON THE LEFT
 396 MT VERNON RD SOUTHINGTON, CT

CONSULTANT TEAM	
PROJECT ENGINEER	
HUDSON DESIGN GROUP, LLC 1600 OSGOOD STREET BUILDING 20 NORTH, SUITE 3090 NORTH ANDOVER, MA 01845 TEL: 1-(978)-557-5553 FAX: 1-(978)-336-5586	
MEP ENGINEER	
HUDSON DESIGN GROUP, LLC 1600 OSGOOD STREET BUILDING 20 NORTH, SUITE 3090 NORTH ANDOVER, MA 01845 TEL: 1-(978)-557-5553 FAX: 1-(978)-336-5586	

PROJECT SUMMARY	
SITE NAME:	MOUNT SOUTHINGTON SC CT
SITE ADDRESS:	396 AND 412 MOUNT VERNON ROAD SOUTHINGTON, CT 06479
PROPERTY OWNER:	MT SOUTHINGTON LIMITED PO BOX 347 SOUTHINGTON, CT 06489
APPLICANT:	CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
SITE ACQUISITION CONTACT:	ALEKSEY TYURIN VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108 PHONE: (860) 803-8213
LEGAL/REGULATORY COUNSEL:	KENNETH C. BALDWIN ESQ. ROBINSON + COLE LLP (860)275-8345
LATITUDE:	N 41° 34' 56.70"
LONGITUDE:	W 72° 55' 28.60"

SHEET INDEX	
SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
C-1	ABUTTERS PLAN
A-1	ELEVATION AND EQUIPMENT PLAN

SCOPE OF WORK INFO.
VERIZON WIRELESS IS PROPOSING TO INSTALL THE FOLLOWING IMPROVEMENTS ON PROPOSED TELECOMMUNICATION SITE:
<ul style="list-style-type: none"> (1) NEW SMALL CELL ANTENNA WITH ASSOCIATE CABLING AND APPURTENANCES. (1) NEW RRH WITH DELTA 1KW POWER SUPPLY AND ROUTER (SAR-0). ITEMS LISTED ABOVE TO BE MOUNTED ON EXISTING UTILITY POLE. NEW POWER AND TELCO SERVICES WILL BE ROUTED OVERHEAD FROM EXISTING BUILDING TO PROPOSED EQUIPMENT ON UTILITY POLE WITHIN PROPOSED UTILITY EASEMENT.

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.



Hudson Design Group LLC

1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845

TEL: (978) 557-5553
FAX: (978) 336-5586

CHECKED BY: DJR

APPROVED BY: DPH

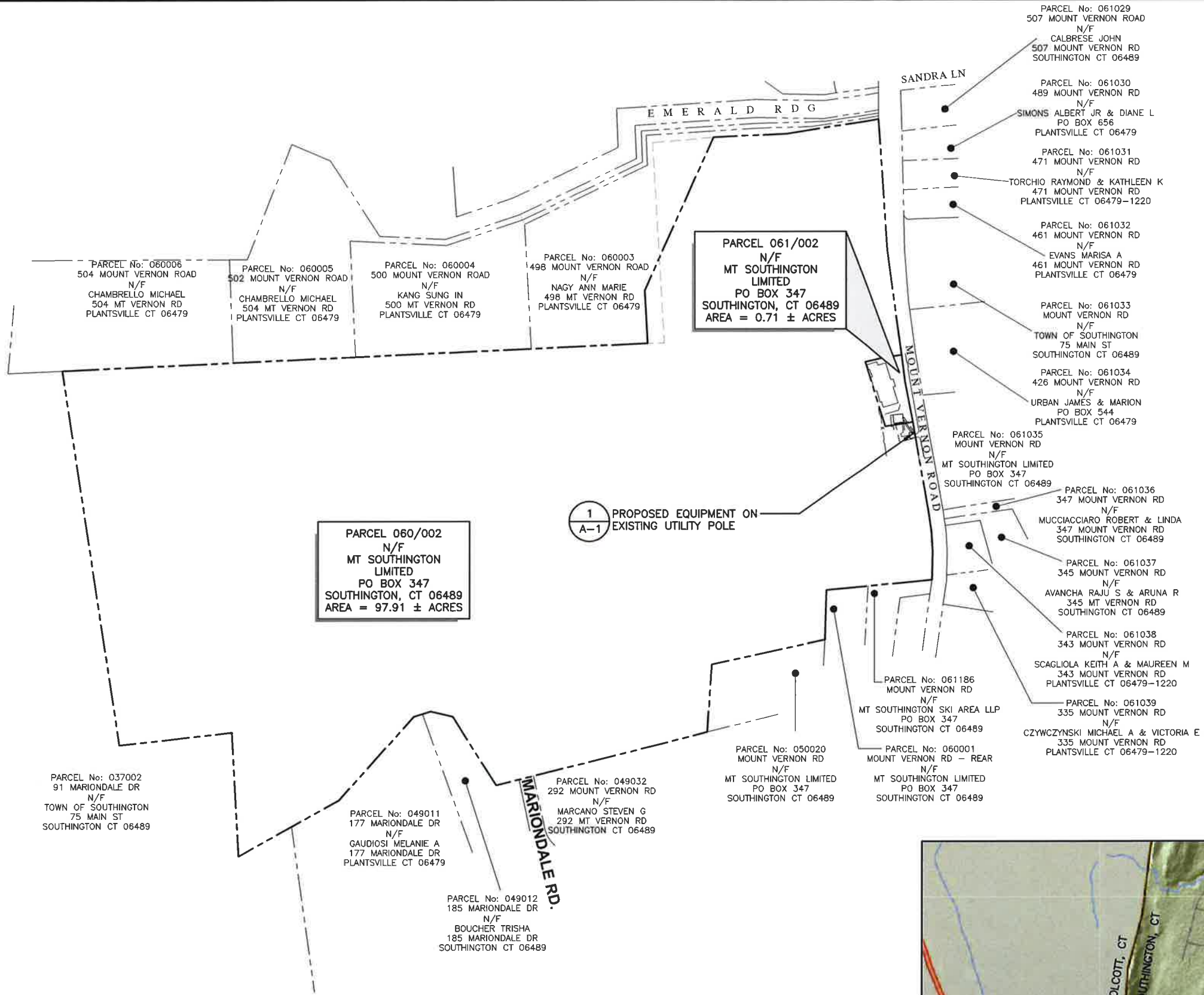
SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
1	08/21/17	REVISED PER COMMENTS	SLY
0	08/14/17	ISSUED FOR REVIEW	SLY

SITE NAME:
MOUNT SOUTHINGTON SC CT

SITE ADDRESS:
396 AND 412 MOUNT VERNON ROAD
SOUTHINGTON, CT 06479

SHEET TITLE
TITLE SHEET

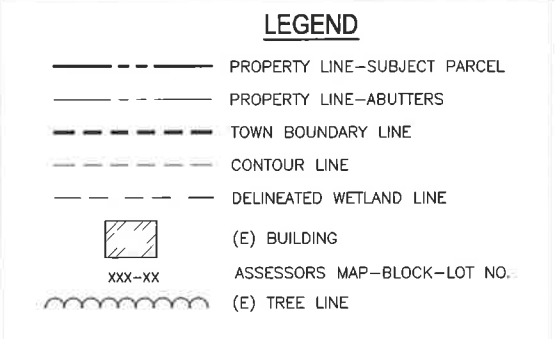
SHEET NUMBER
T-1



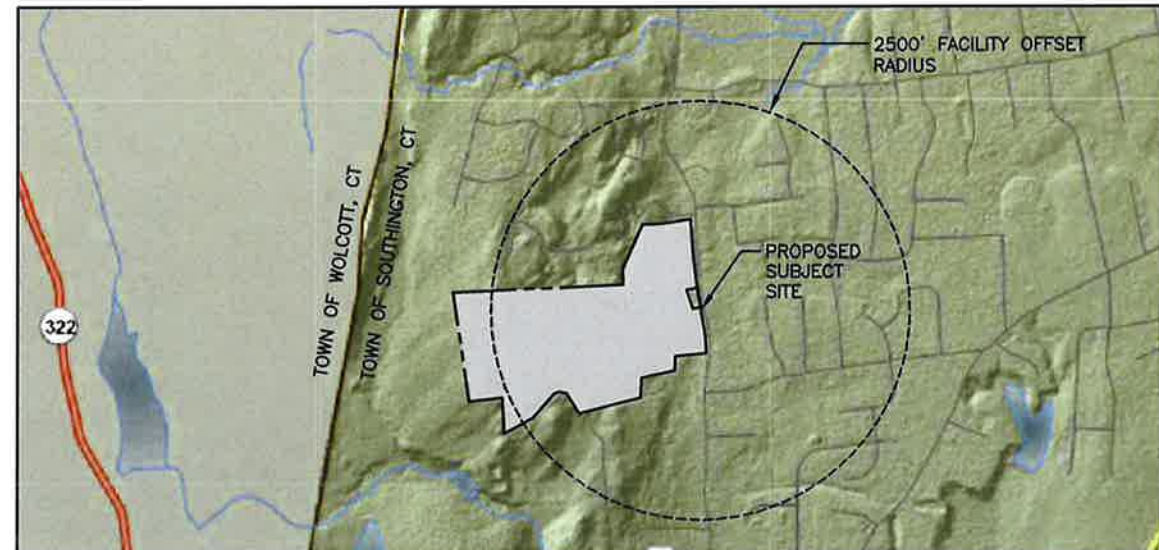
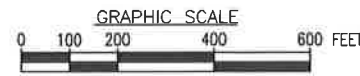
SOURCE:
TOWN OF SOUTHINGTON, CT ASSESSORS MAP AND GIS MAPS.

SITE SPECIFIC NOTES:

- SITE SURVEY HAS NOT BEEN CONDUCTED BY HUDSON DESIGN GROUP, LLC FOR THIS PROJECT. ALL SETBACKS SHOWN ON THIS PLAN ARE TAKEN FROM CORNERS OF PROPOSED LEASE AREA TO PROPERTY LINES AND ARE APPROXIMATE.
- PROPERTY LINE INFORMATION IS COMPILED FROM ASSESSORS PLAN AND RECORD DOCUMENTS AND IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD BOUNDARY SURVEY, AND IS SUBJECT TO CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE. A FULL BOUNDARY SURVEY WAS NOT PERFORMED.



PLOT PLAN
22x34 SCALE: 1"=200'-0"
11x17 SCALE: 1"=400'-0"



MUNICIPALITY NOTIFICATION LIMIT MAP

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.



Hudson Design Group LLC

1400 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090 TEL: (978) 557-5553
N. ANDOVER, MA 01845 FAX: (978) 336-5586

CHECKED BY: DJR

APPROVED BY: DPH

SUBMITTALS

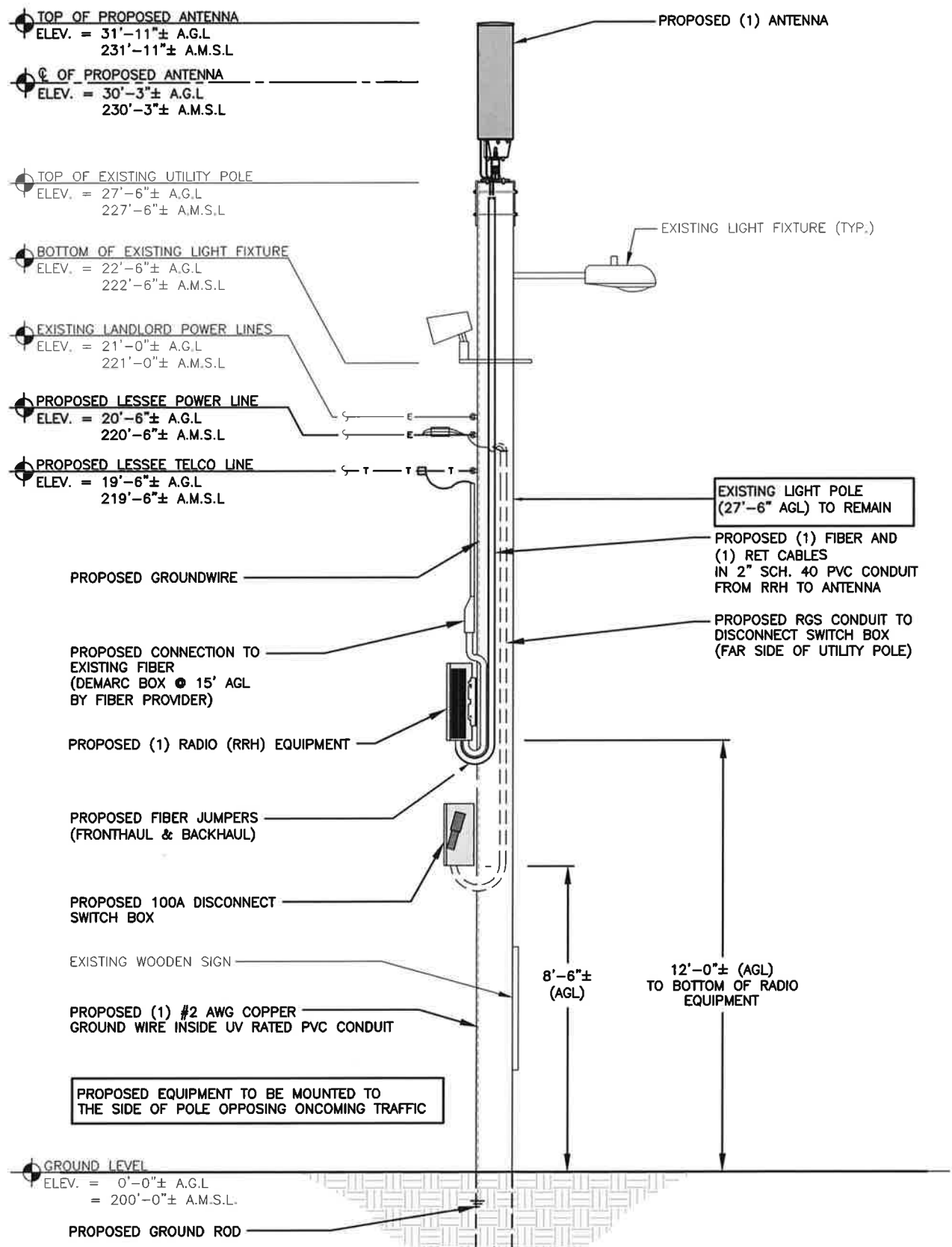
REV.	DATE	DESCRIPTION	BY
1	08/21/17	REVISED PER COMMENTS	SLY
0	08/14/17	ISSUED FOR REVIEW	SLY

SITE NAME:
MOUNT SOUTHWINGTON SC CT

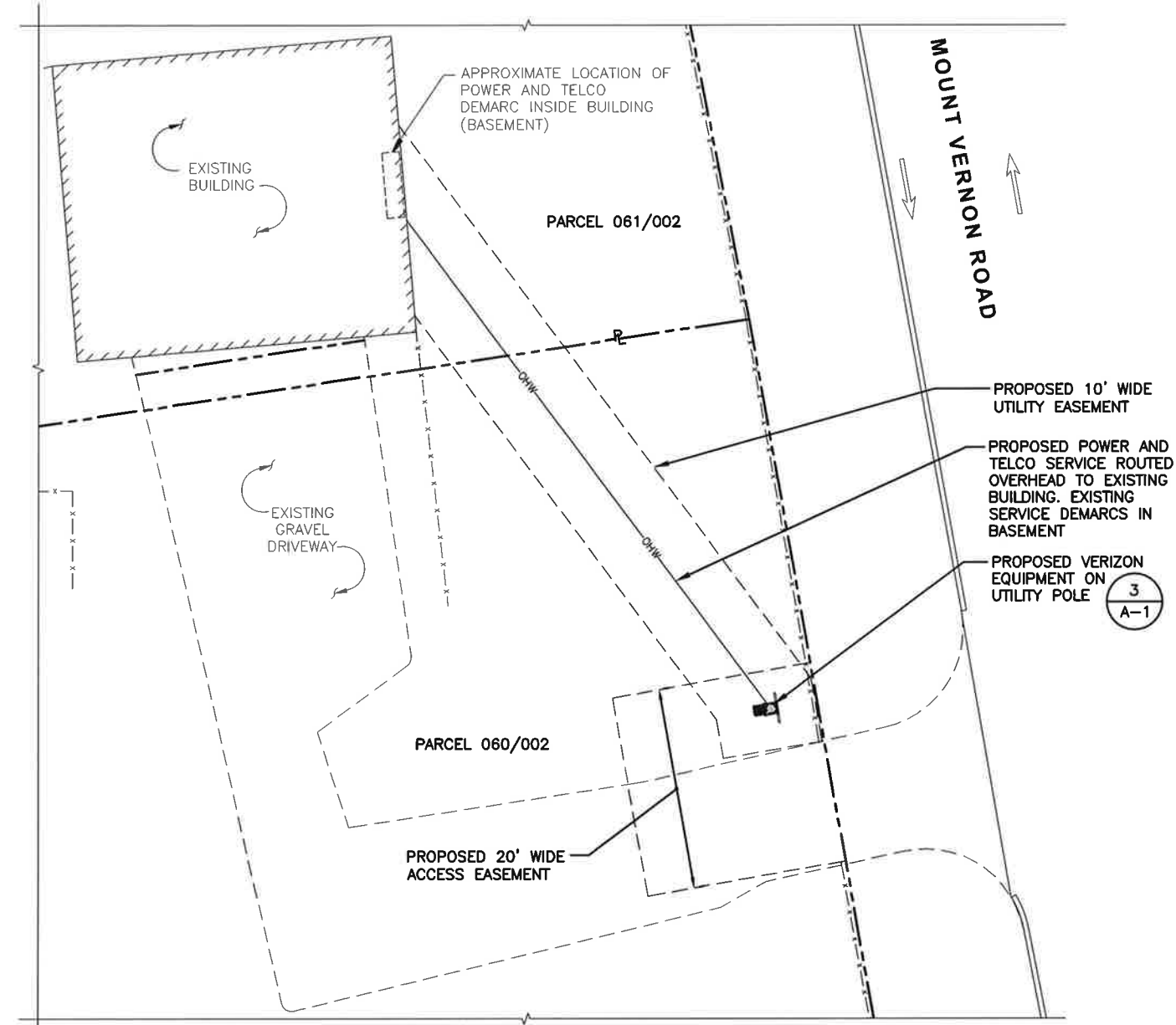
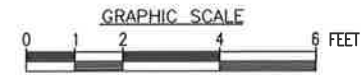
SITE ADDRESS:
396 AND 412 MOUNT VERNON ROAD
SOUTHINGTON, CT 06479

SHEET TITLE
ABUTTERS PLAN

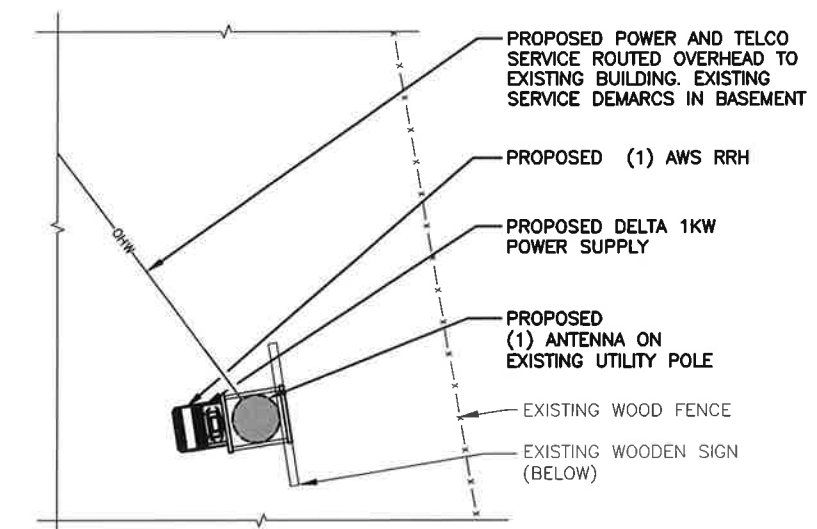
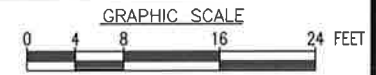
SHEET NUMBER
C-1



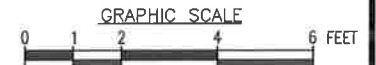
UTILITY POLE ELEVATION 1 A-1
22x34 SCALE: 1/2"=1'-0"
11x17 SCALE: 1/4"=1'-0"



PARTIAL SITE PLAN 2 A-1
22x34 SCALE: 1/8"=1'-0"
11x17 SCALE: 1/16"=1'-0"



EQUIPMENT DETAIL PLAN 3 A-1
22x34 SCALE: 1/2"=1'-0"
11x17 SCALE: 1/4"=1'-0"



PREPARED FOR: CELCO PARTNERSHIP D.B.A.



1400 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090 TEL: (978) 557-5553
N. ANDOVER, MA 01845 FAX: (978) 336-5586

CHECKED BY: DJR

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
1	08/21/17	REVISED PER COMMENTS	SLY
0	08/14/17	ISSUED FOR REVIEW	SLY

SITE NAME:

MOUNT SOUTHTON SC CT

SITE ADDRESS:
396 AND 412 MOUNT VERNON ROAD
SOUTHTON, CT 06479

SHEET TITLE

ELEVATION AND EQUIPMENT PLAN

SHEET NUMBER

A-1

ATTACHMENT 3

Product Specifications

COMMSCOPE®



NH360QM-DG-2XR

Multiband Quasi Omni Metro Cell Antenna, 698-896 and 1695-2200 MHz, internal RETs with manual override, internal diplexer and active GPS L1 band antenna

Electrical Specifications

Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2200
Gain, dBi	6.1	7.1	9.7	9.9	9.9
Beamwidth, Horizontal, degrees	360	360	360	360	360
Beamwidth, Vertical, degrees	28.6	25.4	11.2	10.6	10.1
Beam Tilt, degrees	0-20	0-20	0-14	0-14	0-14
USLS (First Lobe), dB	16	15	14	13	13
Isolation, dB	25	25	25	25	25
VSWR Return Loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	125	125	125	125	125
Polarization	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2200
Gain by all Beam Tilts, average, dBi	5.4	6.3	9.3	9.4	9.4
Gain by all Beam Tilts Tolerance, dB	±1	±0.7	±0.5	±0.7	±0.7
	0° 5.1	0° 6.3	0° 9.2	0° 9.3	0° 9.4
Gain by Beam Tilt, average, dBi	10° 5.4	10° 6.3	7° 9.3	7° 9.5	7° 9.6
	20° 5.6	20° 6.0	14° 9.2	14° 9.1	14° 9.1
Beamwidth, Vertical Tolerance, degrees	±3.7	±3.2	±0.9	±1.1	±1.1
USLS, beampeak to 20° above beampeak, dB			13	13	13

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

General Specifications

Operating Frequency Band	1695 – 2200 MHz 698 – 896 MHz
Antenna Type	Omni
Band	Multiband
Internal GPS frequency band	1575.42 MHz
Internal GPS VSWR	2.0
Performance Note	Outdoor usage

Mechanical Specifications

RF Connector Quantity, total	2
RF Connector Quantity, low band	2
RF Connector Quantity, high band	2
RF Connector Interface	7-16 DIN Female
Color	Light gray

Product Specifications



NH360QM-DG-2XR

GPS Connector Interface	4.1-9.5 DIN Female
GPS Connector Quantity	1
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Aluminum Low loss circuit board
Radome Material	ASA, UV stabilized
Reflector Material	Aluminum
RF Connector Location	Bottom
RF Connector Quantity, diplexed low and high bands	2
Wind Loading, maximum	225.0 N @ 150 km/h 50.6 lbf @ 150 km/h
Wind Speed, maximum	200 km/h 124 mph

Dimensions

Length	982.0 mm 38.7 in
Outer Diameter	305.0 mm 12.0 in
Net Weight, without mounting kit	15.3 kg 33.7 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10-30 Vdc
Internal RET	High band (1) Low band (1)
Power Consumption, idle state, maximum	2.0 W
Power Consumption, normal conditions, maximum	13.0 W
Protocol	3GPP/AISG 2.0 (Multi-RET)
RET Interface	8-pin DIN Male
RET Interface, quantity	1 male

Packed Dimensions

Length	1251.0 mm 49.3 in
Width	427.0 mm 16.8 in
Depth	407.0 mm 16.0 in
Shipping Weight	20.6 kg 45.4 lb

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system



* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

ALCATEL-LUCENT B66A RRH4X45

The Alcatel-Lucent B66a Remote Radio Head 4x45 is the newest addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering. Its operational range covers beyond that of B4 (AWS) and B10 (AWS+).

Supporting 2Tx/4Tx MIMO and 2-way/4-way Rx diversity, the Alcatel-Lucent B66a RRH4x45 allows operators to have a compact radio solution to deploy LTE in the 2100 band (3GPP band 4, 10, and 66), providing them with the means to achieve high capacity, high quality, high reliability, large instantaneous bandwidth, and high coverage with minimum site requirements.

The Alcatel-Lucent B66a RRH4x45 product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x90W or 4x45W RF output power. It also supports 4-way Rx diversity at the 70 MHz instantaneous bandwidth.



The Alcatel-Lucent B66a RRH4x45 is a compact (near zero-footprint) solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

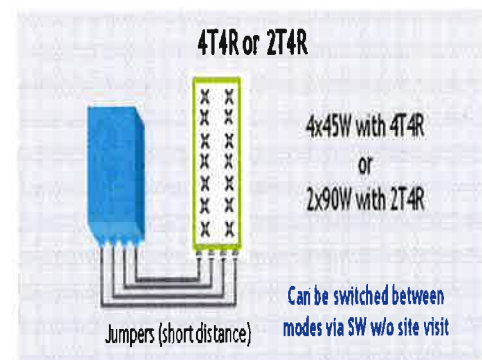
Its compactness and slim design makes the Alcatel-Lucent B66a RRH4x45 easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 2110 - 2180 MHz band/DL, 1710-1780MHz/UL (3GPP band 4, 10, and 66a)
- LTE 2Tx or 4Tx MIMO (SW selectable)
- Configuration: 2T2R/2T4R/4T4R
- Output power: Up to 2x90W or 4x45W (SW configurable)
- 70MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports

BENEFITS

- Compact to reduce additional footprint when adding LTE in AWS 1-3 band
- Selection of MIMO configuration (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through 4Tx MIMO
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall



TECHNICAL SPECIFICATIONS

Features & Performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R selectable by SW)
Frequency band	AWS 1-3, B4/B66a DL: 2110-2180 MHz / UL: 1710-1780 MHz
Instantaneous bandwidth - #carriers	70 MHz – 4 LTE MIMO carriers (in 70 MHz occupied bandwidth)
LTE carrier bandwidth	5, 10, 15, 20 MHz
RF output power	2x90W or 4x45W (selectable by SW)
Noise figure – RX Diversity scheme	2 dB typical (<2.5 dB max) – 2 or 4 way Rx diversity
Receiver Sensivity (FRC A1-3)	-104.5 dBm maximum
Sizes (HxWxD) in mm (in.)	655x299x182 (25.8x11.8x7.2) (with solar shield) 640x290x160 (25.2x11.4x6.3) (without solar shield)
Volume in Liters	35.5 (with solar shield) 29.7 (without solar shield)
Weight in kg (lb) (w/o mounting HW)	25.8kg (56.8lb) (with solar shield)
DC voltage range	Nominal: -48V, -40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption
DC power consumption	750W typical @100% RF load (in 2Tx or 4Tx mode); Add 58W for 2A*29V for AISG
Environmental conditions	-40°C (-40°F) / +55°C (+131°F) UL50E Type 4 Enclosure
Wind load (@150km/h or 93mph)	250N (56lb) Frontal/150N (34lb) Lateral
Antenna ports	4 ports 4.3-10 female (50 ohms) VSWR < 1.5
CPRI ports	2 CPRI ports (HW ready for Rate 7, 9.8 Gbps) SFP: SMDF (HW supports also SMSF and MMDF)
AISG interfaces	1 AISG 2.0 output (RS485) Integrated Smart Bias Tees (x2)
Misc. Interfaces	4 external alarms (1 connector) 1 DC connector (2 pins)
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-487 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27 / FCC Part 15 / GR-3178-CORE

www.alcatel-lucent.com Alcatel, Lucent, Alcatel-Lucent and the Alcatel-Lucent logo are trademarks of Alcatel-Lucent. All other trademarks are the property of their respective owners. The information presented is subject to change without notice. Alcatel-Lucent assumes no responsibility for inaccuracies contained herein.
Copyright © 2016 Alcatel-Lucent. All Rights Reserved

ATTACHMENT 4

Visual Assessments & Photo-Simulations

MOUNT SOUTHWINGTON SC CT
396 AND 412 MOUNT VERNON ROAD
SOUTHWINGTON, CT 06479



Prepared in August 2017 by:
All-Points Technology Corporation, P.C.
3 Saddlebrook Drive
Killingworth, CT 06419

Prepared for Verizon Wireless



VISUAL ASSESSMENT & PHOTO-SIMULATIONS

At the request of Cellco partnership LLC d/b/a Verizon Wireless, All-Points Technology Corporation, P.C. ("APT") completed this visual assessment and prepared computer-generated photo-simulations depicting the proposed installation of a small cell wireless telecommunications facility ("Facility") at 396 and 412 Mount Vernon Road Southington, Connecticut (the "Host Property").

Project Setting

The Host Property is located on the western side of Mount Vernon Road, south of Emerald Ridge Road and north of Frost Street. The Host Property is currently occupied by the Ski Mount Southington ski area ("Ski Area") and includes several buildings and machinery used to support site operations. A large paved parking area associated with the Ski Area is located to the immediate east of the proposed Facility, across Mount Vernon Road. The surrounding land use is a mix of residential properties to the north, south and east with large expanses of undeveloped woodlands with reservoirs to the west. *See Figure 1 – Site Location Map.*

The proposed Facility would include one (1) panel antenna with associated appurtenances and cabling mounted to and on top of an existing utility pole located next to the main entrance of the Ski Area. The utility pole currently houses two safety light fixtures and a wooden sign. The height of the proposed antennas would be ± 32.0 feet above ground level ("AGL") and approximately 4.5 feet above the top of the existing utility pole. Associated equipment would be mounted on the western side of the utility pole, opposite Mount Vernon Road. Utilities would be routed overhead from the utility pole to existing services within the basement of a building located approximately 66 feet to the northwest. The proposed Facility components and their locations are illustrated in *Figure 2 – Proposed Equipment Location and Elevation Plan.*




Methodology

On July 26, 2017, APT personnel conducted field reconnaissance and photo-documented existing conditions. At each photo location, the geographic coordinates of the camera's position were logged using global positioning system ("GPS") technology. Photographs were taken with a Canon EOS 6D digital camera body and Canon EF 24 to 105 millimeter ("mm") zoom lens using a focal length of 50 mm for consistency.

Three-dimensional computer models were developed for the building and proposed Facility components from AutoCAD information. Photographic simulations were then generated to portray scaled renderings of the proposed installation. Using field data, site plan information and image editing software, the proposed Facility was scaled to the correct location and height, relative to the existing structure and surrounding area.



Legend

-  Site
-  Subject Property (Entire Extent of Subject Property Not Depicted)
-  Approximate Parcel Boundary (CTDEEP GIS)



Map Notes:
 Base Map Source: CT ECO 2016 Imagery
 Map Scale: 1 inch = 300 feet
 Map Date: August 2017

Figure 1 - Site Location Map

Proposed Wireless
 Telecommunications Facility
 Mount Southington SC CT
 396 and 412 Mount Vernon Road
 Southington, Connecticut



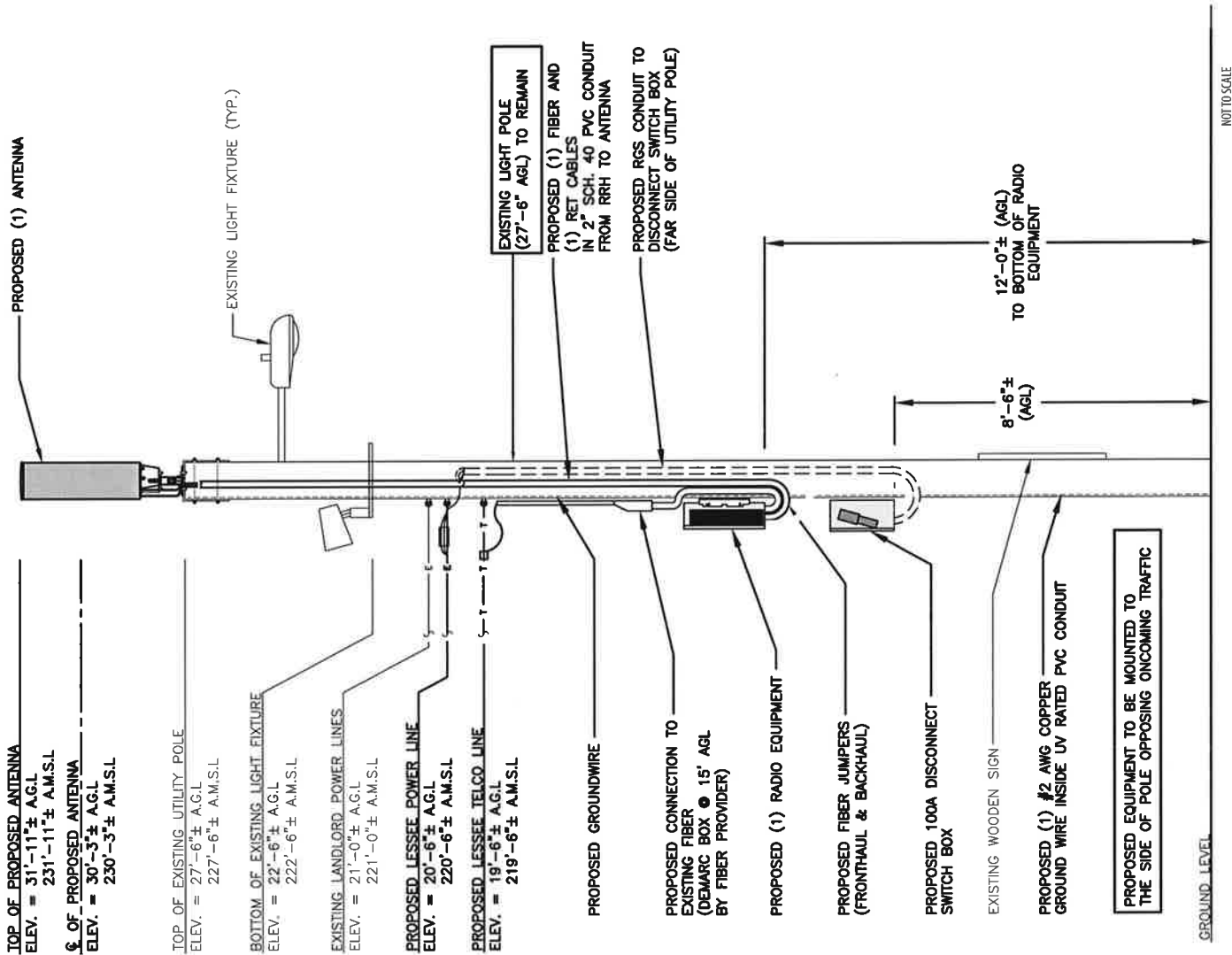


FIGURE 2 - PROPOSED EQUIPMENT LOCATION AND ELEVATION PLAN

Details extracted from technical drawings provided by Hudson Design Group, LLC dated 8-14-17.

Photograph Locations

Four (4) photo-locations were simulated and present generally unobstructed view lines towards at least a portion of the proposed installation(s). The table below summarizes characteristics of the photographs and simulations presented in the attachment to this report including a description of each location, view orientation, and the distance from where the photo was taken relative to the proposed Facility. A photo-log map depicting the photo locations and corresponding photo-simulations are provided in the attachment to this report.

View	Location	Orientation	Distance to Site
1	Mount Vernon Road	North	±160 Feet
2	Parking Area Adjacent to Host Property	West	±121 Feet
3	Mount Vernon Road	Southwest	±125 Feet
4	Host Property	Northeast	±98 Feet

Conclusions

The visibility of the proposed Facility would be limited primarily to nearby locations adjacent to along Mount Vernon Road. Located among the substantial utility and Ski Area infrastructure in the immediate area, the Facility would not be highly conspicuous.

Based on the results of this assessment, it is our opinion that the proposed installation of the Verizon Wireless small cell Facility will not have an adverse visual impact on existing views or the character of the community.

Limitations

The photo-simulations provide a representation of the Facility under similar settings as those encountered during the reconnaissance. They are however static in nature and do not necessarily characterize the prevailing views from all locations within a given area. For example, moving a few feet in either direction from a specific photo location may significantly alter the view, including obscuring the Facility altogether. Views of the Facility can change throughout the seasons and the time of day, and are dependent on weather and other atmospheric conditions (e.g., haze, fog, clouds); the location, angle and intensity of the sun; and the specific viewer location.

Attachments

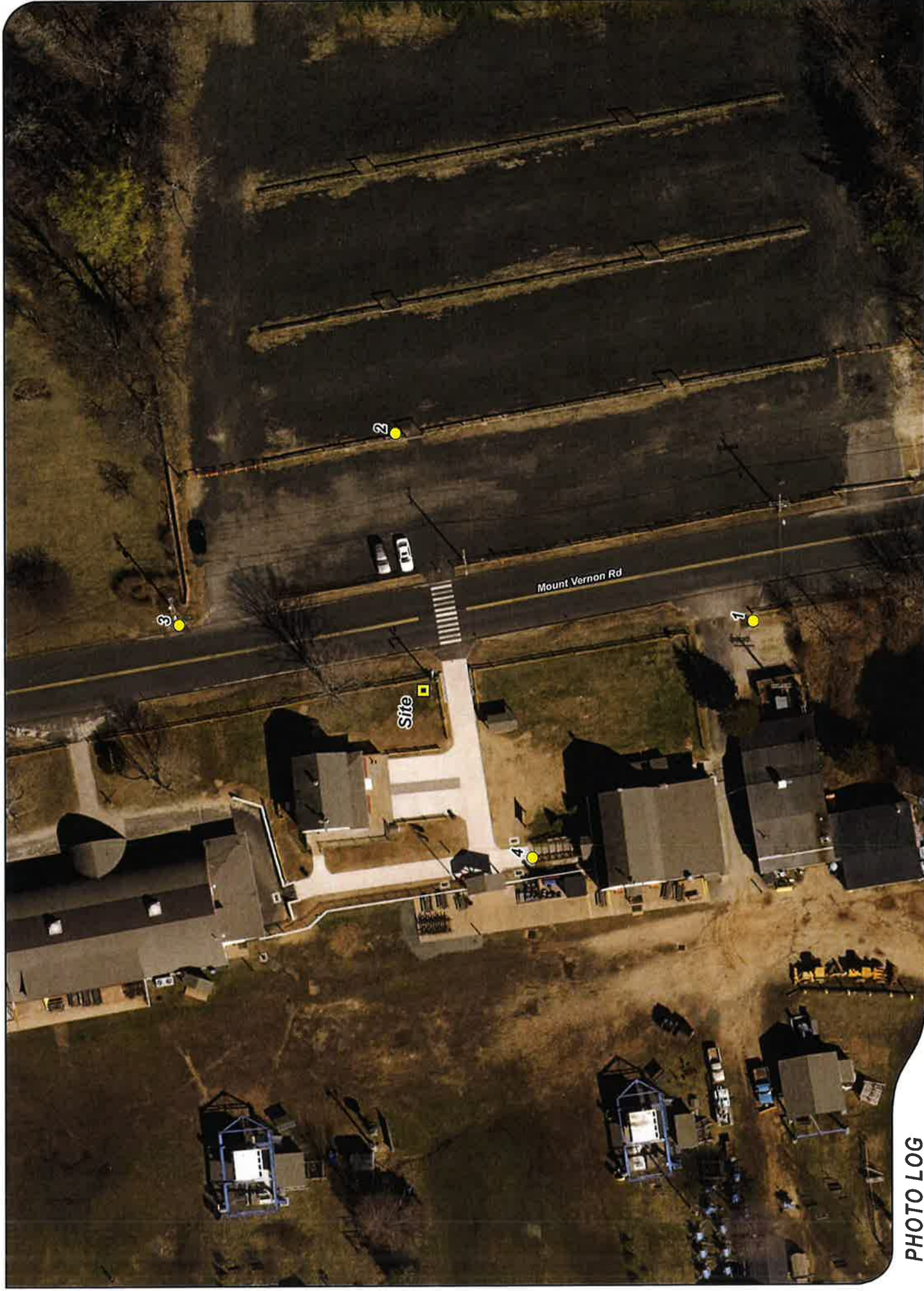




PHOTO LOG

Legend

-  Site
-  Year-Round Visibility





EXISTING

PHOTO

1

LOCATION

MOUNT VERNON ROAD

ORIENTATION

NORTH

DISTANCE TO SITE

+/- 160 FEET



ALL-POINTS
TECHNOLOGY CORPORATION

verizon



PROPOSED

PHOTO

1

LOCATION

MOUNT VERNON ROAD

ORIENTATION

NORTH

DISTANCE TO SITE

+/- 160 FEET



ALL-POINTS
TECHNOLOGY CORPORATION





PHOTOGRAPHED ON 7/26/2017

EXISTING

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
2	PARKING AREA ADJACENT TO HOST PROPERTY	WEST	+/- 121 FEET





PROPOSED

PHOTO

2

LOCATION

PARKING AREA ADJACENT TO HOST PROPERTY

ORIENTATION

WEST

DISTANCE TO SITE

+/- 121 FEET



ALL-POINTS
TECHNOLOGY CORPORATION





EXISTING

PHOTO

3

LOCATION

MOUNT VERNON ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 125 FEET



ALL-POINTS
TECHNOLOGY CORPORATION





PROPOSED

PHOTO

3

LOCATION

MOUNT VERNON ROAD

ORIENTATION

SOUTHWEST

DISTANCE TO SITE

+/- 125 FEET



ALL-POINTS
TECHNOLOGY CORPORATION

verizon



EXISTING

PHOTO

4

LOCATION

HOST PROPERTY

ORIENTATION

NORTHEAST

DISTANCE TO SITE

+/- 98 FEET





PROPOSED

PHOTO

4

LOCATION

HOST PROPERTY

ORIENTATION

NORTHEAST

DISTANCE TO SITE

+/- 98 FEET



ATTACHMENT 5

General Power Density

Site Name: MT Southington SC 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	na						0.00%
VZW Cellular	869	na						0.00%
VZW PCS	1970	na						0.00%
VZW AWS	2145	1	1072	1072	30	0.4283	1.0	42.83%
Total Percentage of Maximum Permissible Exposure								42.83%

*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.

ATTACHMENT 6

* Federal Airways & Airspace
*
* Summary Report: Existing Structure
*
* Antenna Structure
*

Airspace User: Maria Montrose

File: MTSOUTHINGTONSC

Location: Waterbury, CT

Latitude: 41°-34'-56.7" Longitude: 72°-55'-28.6"

SITE ELEVATION AMSL.....200 ft.
STRUCTURE HEIGHT.....32 ft.
OVERALL HEIGHT AMSL.....232 ft.
SURVEY HEIGHT AMSL.....232 ft.

NOTICE CRITERIA

- FAR 77.9(a): NNR (DNE 200 ft AGL)
- FAR 77.9(b): NNR (DNE Notice Slope)
- FAR 77.9(c): NNR (Not a Traverse Way)
- FAR 77.9: NNR FAR 77.9 IFR Straight-In Notice Criteria for
- MMK FAR 77.9: NNR FAR 77.9 IFR Straight-In Notice Criteria for
- N41 FAR 77.9(d): NNR (Off Airport Construction)

NR = Notice Required
NNR = Notice Not Required
PNR = Possible Notice Required (depends upon actual IFR

procedure)
For new construction review Air Navigation Facilities at
bottom
of this report.

The location and analysis were based upon an existing structure. However, no existing aeronautical study number was identified. If the 'existing' structure penetrates an obstruction surface defined by CFR 77.17, 77.19, 77.21 or 77.23 (see below) it is strongly recommended the FAA be notified

of the 'existing' structure to determine obstruction marking or lighting requirements. It is not uncommon for the FAA to issue a Determination of No Hazard (DNH) for an existing structure and modify the airspace to accommodate the structure, should that be required. If the FAA issues a DNH enter the aeronautical study number (ASN) in the space provided on the Airspace Analysis Window Form and re-run Airspace.

The below analysis reflects the aeronautical conditions that exist as of the date stamped on this analysis.

Notice to the FAA is not required at the analyzed location and height for slope, height or Straight-In procedures. Please review the 'Air Navigation' section for notice requirements for offset IFR procedures and EMI.

OBSTRUCTION STANDARDS

FAR 77.17(a) (1): DNE 499 ft AGL
FAR 77.17(a) (2): DNE - Airport Surface
FAR 77.19(a): DNE - Horizontal Surface
FAR 77.19(b): DNE - Conical Surface
FAR 77.19(c): DNE - Primary Surface
FAR 77.19(d): DNE - Approach Surface
FAR 77.19(e): DNE - Transitional Surface

VFR TRAFFIC PATTERN AIRSPACE FOR: MMK: MERIDEN MARKHAM MUNI

Type: A RD: 36019.49 RE: 103
FAR 77.17(a) (1): DNE
FAR 77.17(a) (2): Does Not Apply.
VFR Horizontal Surface: DNE
VFR Conical Surface: DNE
VFR Approach Slope: DNE
VFR Transitional Slope: DNE

VFR TRAFFIC PATTERN AIRSPACE FOR: N41: WATERBURY

Type: A RD: 37544.11 RE: 852
FAR 77.17(a) (1): DNE
FAR 77.17(a) (2): Does Not Apply.
VFR Horizontal Surface: DNE
VFR Conical Surface: DNE
VFR Approach Slope: DNE
VFR Transitional Slope: DNE

TERPS DEPARTURE PROCEDURE (FAA Order 8260.3, Volume 4)

FAR 77.17(a) (3) Departure Surface Criteria (40:1)
 DNE Departure Surface

MINIMUM OBSTACLE CLEARANCE ALTITUDE (MOCA)
 FAR 77.17(a) (4) MOCA Altitude Enroute Criteria
 The Maximum Height Permitted is 1500 ft AMSL

PRIVATE LANDING FACILITIES									
ARP	FAA	FACIL			BEARING	RANGE	DELTA		
ELEVATION	IFR	IDENT	TYP	NAME	To FACIL	IN NM			
68		1CT3	HEL	ST MARY'S	251.07	5.39	-		
		No Impact to Private Landing Facility Structure 0 ft below heliport.							
174		CT03	HEL	BRISTOL HOSPITAL	354.76	5.66	-		
		No Impact to Private Landing Facility Structure 2 ft below heliport.							
21		CT60	HEL	ULTIMATE	15.13	5.77	-		
		No Impact to Private Landing Facility Structure 0 ft below heliport.							
+87		CT95	HEL	MERIDEN-WALLINGFORD HOSPITAL	119.61	5.96			
		No Impact to Private Landing Facility Structure is beyond notice limit by 31214 feet.							

AIR NAVIGATION ELECTRONIC FACILITIES										
GRND	APCH	FAC	ST		DIST	DELTA				
ANGLE	BEAR	IDNT	TYPE	AT	FREQ	VECTOR	(ft)	ELEVA	ST	LOCATION
-.22		JWE	NDB	I	36	215.17	89239	-339	CT	CLERA
-.34		HFD	VOR/DME	R	114.9	78.17	105344	-617	CT	HARTFORD
.01		MAD	VOR/DME	R	110.4	147.01	116784	+12	CT	MADISON
.11		HVN	VOR/DME	R	109.8	174.71	117139	+226	CT	NEW HAVEN
0.00		BDL	RADAR	ON		26.9	145622	-4	CT	BRADLEY INTL

.03 BDL VORTAC D 109.0 26.16 145675 +72 CT BRADLEY
.08 BDR VOR/DME R 108.8 199.58 163170 +223 CT BRIDGEPORT
-.3 PWL VOR/DME I 114.3 290.51 196873 -1018 NY PAWLING
-.13 CMK VOR/DME I 116.6 238.33 211108 -462 NY CARMEL

CFR Title 47, §1.30000-§1.30004

AM STUDY NOT REQUIRED: Structure is not near a FCC licensed AM station.

Movement Method Proof as specified in §73.151(c) is not required.

Please review 'AM Station Report' for details.

Nearest AM Station: WNTY @ 3466 meters.

Airspace® Summary Version 17.7.471

AIRSPACE® and TERPS® are registered ® trademarks of Federal Airways & Airspace®

Copyright © 1989 - 2017

07-28-2017

09:03:15

ATTACHMENT 7

August 22, 2017

Via Certificate of Mailing

Garry Brumback, Town Manager
Town of Southington
75 Main Street
Southington, CT 06489

Re: **Proposed Installation of a Wireless Telecommunications Facility at
396 and 412 Mount Vernon Road, Southington, Connecticut**

Dear Mr. Brumback:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Petition for Declaratory Ruling (“Petition”) with the Connecticut Siting Council (“Council”) seeking approval to install a new small cell wireless telecommunications facility at the Mount Southington Ski Area, 396 and 412 Mount Vernon Road in Southington (the “Property”). Cellco intends to install a single canister antenna, a remote radio head and associated electrical equipment on an existing wood pole on the Property. The top of the canister antenna would extend to a height of approximately 31’-11” above grade.

A copy of the Petition is attached for your review. In accordance with Council requirements, abutting landowners were also sent notice of this filing and a copy of the Petition.

16901649-v1

Robinson + Cole

Garry Brumback, Town Manager
August 22, 2017
Page 2

Please contact me if you have any questions regarding this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read 'K. Baldwin', written over the printed name.

Kenneth C. Baldwin

Attachment

August 22, 2017

Via Certificate of Mailing

Robert Phillips
Director of Planning and Community Development
Town of Southington Municipal Center
196 North Main Street
Southington, CT 06489

Re: **Proposed Installation of a Wireless Telecommunications Facility at
396 and 412 Mount Vernon Road, Southington, Connecticut**

Dear Mr. Phillips:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Petition for Declaratory Ruling (“Petition”) with the Connecticut Siting Council (“Council”) seeking approval to install a new small cell wireless telecommunications facility at the Mount Southington Ski Area, 396 and 412 Mount Vernon Road in Southington (the “Property”). Cellco intends to install a single canister antenna, a remote radio head and associated electrical equipment on an existing wood pole on the Property. The top of the canister antenna would extend to a height of approximately 31’-11” above grade.

A copy of the Petition is attached for your review. In accordance with Council requirements, abutting landowners were also sent notice of this filing and a copy of the Petition.

16901651-v1

Robinson + Cole

Robert Phillips
August 22, 2017
Page 2

Please contact me if you have any questions regarding this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ken Baldwin', written in a cursive style.

Kenneth C. Baldwin

Attachment

August 22, 2017

Via Certificate of Mailing

Mount Southington Limited Partnership
P.O. Box 347
Southington, CT 06489

**Re: Proposed Installation of a Wireless Telecommunications Facility at
396 and 412 Mount Vernon Road, Southington, Connecticut**

Dear Sir or Madam:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Petition for Declaratory Ruling (“Petition”) with the Connecticut Siting Council (“Council”) seeking approval to install a new small cell wireless telecommunications facility at the Mount Southington Ski Area, 396 and 412 Mount Vernon Road in Southington (the “Property”). Cellco intends to install a single canister antenna, a remote radio head and associated electrical equipment on an existing wood pole on the Property. The top of the canister antenna would extend to a height of approximately 31’-11” above grade.

A copy of the Petition is attached for your review. In accordance with Council requirements, abutting landowners were also sent notice of this filing and a copy of the Petition.

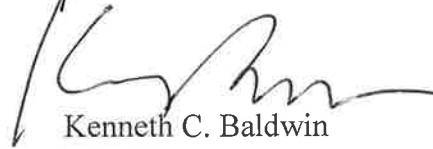
16901655-v1

Robinson + Cole

Mount Southington Limited Partnership
August 22, 2017
Page 2

Please contact me if you have any questions regarding this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read 'K. Baldwin', written over the printed name.

Kenneth C. Baldwin

Attachment

ATTACHMENT 8

KENNETH C. BALDWIN

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

Also admitted in Massachusetts

August 22, 2017

Via Certificate of Mailing

«Name_and_Address»

Re: Notice of Intent to File a Petition for Declaratory Ruling with the Connecticut Siting Council for the Installation of a Wireless Telecommunications Facility at 396 and 412 Mount Vernon Road, Southington, Connecticut

Dear «Salutation»:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”). Today, Cellco filed a Petition for Declaratory Ruling (“Petition”) with the Connecticut Siting Council (“Council”) seeking approval to install a new small cell wireless telecommunications facility at the Mount Southington Ski Area, 396 and 412 Mount Vernon Road in Southington (the “Property”). Cellco intends to install a single canister antenna, a remote radio head and associated electrical equipment on an existing wood pole on the Property. The top of the canister antenna would extend to a height of approximately 31’-11” above grade. A copy of the Petition is attached for your review.

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

August 22, 2017
Page 2

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Attachment

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

ABUTTING PROPERTY OWNERS

**1650 BOSTON POST ROAD
MILFORD, CONNECTICUT**

	Property Address	Owner's and Mailing Address
1.	Mount Vernon Road	Mt. Southington Ski Area LLP P.O. Box 347 Southington, CT 06489
2.	Mount Vernon Rear	Mt. Southington Ski Area LLP P.O. Box 347 Southington, CT 06489
3.	Mount Vernon Road	Mt. Southington Ski Area LLP P.O. Box 347 Southington, CT 06489
4.	292 Mount Vernon Road	Steven Marcano 292 Mount Vernon Road Southington, CT 06489
5.	186 Mariondale Drive	Robert J. and Ann O. Taylor 186 Mariondale Drive Plantsville, CT 06479
6.	185 Mariondale Drive	Trisha Boucher 185 Mariondale Drive Southington, CT 06489
7.	177 Mariondale Drive	Melanie Gaudiosi 177 Mariondale Drive Plantsville, CT 06479
8.	91 Mariondale Drive	Town of Southington 75 Main Street Southington, CT 06489
9.	504 Mount Vernon Road	Michael Chambrello 504 Mount Vernon Road Plantsville, CT 06479

	Property Address	Owner's and Mailing Address
10.	502 Mount Vernon Road	Michael Chambrello 504 Mount Vernon Road Plantsville, CT 06479
11.	500 Mount Vernon Road	Sung In Kang 500 Mount Vernon Road Plantsville, CT 06479
12.	498 Mount Vernon Road – Lot 1R	Ann Marie Nagy 498 Mount Vernon Road Plantsville, CT 06479
13.	507 Mount Vernon Road	John Calabrese 507 Mount Vernon Road Southington, CT 06489
14.	489 Mount Vernon Road	Diane L. and Albert Simons, Jr. P.O. Box 656 Plantsville, CT 06479
15.	471 Mount Vernon Road	Raymond and Kathleen Torchio 471 Mount Vernon Road Plantsville, CT 06479
16.	461 Mount Vernon Road	Marisa Evans 461 Mount Vernon Road Plantsville, CT 06479
17.	Mount Vernon Road	Town of Southington 75 Main Street Southington, CT 06489
18.	426 Mount Vernon Road	James and Marion Urban P.O. Box 544 Plantsville, CT 06479-0544
19.	Mount Vernon Road	Mt. Southington Limited Partnership P.O. Box 347 Southington, CT 06489
20.	347 Mount Vernon Road	Robert and Linda Mucciacciaro 347 Mount Vernon Road Southington, CT 06489

	Property Address	Owner's and Mailing Address
21.	345 Mount Vernon Road	Aruna R. and Raju Avancha 345 Mount Vernon Road Southington, CT 06489
22.	343 Mount Vernon Road	Keith A. and Maureen Scagliola 343 Mount Vernon Road Plantsville, CT 06479
23.	335 Mount Vernon Road	Michael A. and Victoria E. Czywcynski 335 Mount Vernon Road Plantsville, CT 06479