STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:	:	
	:	
A PETITION OF CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS FOR A DECLARATORY RULING ON THE NEED TO OBTAIN A SITING COUNCIL CERTIFICATE FOR THE TO INSTALL A ROOF-TOP TELECOMMUNICATIONS FACILITY TOWER AT 58 ROBINSON BOULEVARD, ORANGE, CONNECTICUT	:	PETITION NO. ____
	:	JUNE 5, 2014

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 tower on the roof of an existing industrial building at 58 Robinson Boulevard in Orange, Connecticut (the "Property"). For the purposes of this Petition, Cellco has identified this facility as its "Milford South 4" cell site.

II. The Property and Surrounding Environs

The Property is a 7.4 acre parcel located on the east side of Robinson Boulevard in the Orange Industrial Park. The Property is zoned Light Industrial 2 (LI-2) and is improved with an approximately 82,000 square foot industrial building, access driveways and paved parking areas.

The Property is immediately adjacent to other industrial buildings and uses to the south and west in the Orange Industrial Park (a/k/a Marsh Hill Industrial Park) and residential uses to the north and east, in the Town of West Haven. Portions of the Property are located within 2500 feet of West Haven and Milford, Connecticut. Included in Attachment 1 is a Site Vicinity Map showing the location of the Property, an Aerial Photograph showing the Property and immediately adjacent parcels, and a copy of the U.S.G.S. Topographic Map showing the Milford South 4 cell site location. As depicted on the Site Vicinity Map, the Property is proximate to industrial, commercial and densely developed residential land uses, the Conn. Rail, New Haven rail line and Interstate 95.

III. Factual Background and Need for the Milford South 4 Facility

Cellco is licensed to provide wireless telecommunications services in the 750 MHz, 850 MHz, 1900 MHz and 2100 MHz frequency ranges throughout the State of Connecticut. Pursuant to its FCC Licenses, Cellco has developed and continues to develop a network of cell sites to serve its customer's growing demand for enhanced wireless services.

Cellco currently maintains and operates three (3) wireless facilities, all located within approximately 3.5 miles of the Property. These existing wireless facilities include Cellco's West Haven SW facility, an existing tower at 668 Jones Road in West Haven; Milford South II facility, a tower site located at 185 Research Parkway in Milford; and Orange 4 facility, a tower site located at 100 Red Cedar Road in Orange. The locations of these existing facilities is included on the Vicinity Map in Attachment 1. Maps showing Cellco's existing wireless coverage in the area, and the coverage footprint of the proposed Milford South 4 cell site are included in Attachment 2. As shown on the "Existing" coverage maps, Cellco's facilities in the area appear to provide reliable wireless service (coverage) to significant portions of southeast Orange,

northeast Milford and southwest West Haven between the existing West Haven SW, Orange 4 and Milford South II cell sites. Due to the nature of development in this part of the State, as described above and depicted on the Site Vicinity Map and Aerial Photograph, and an exponential increase in demand for enhanced wireless data services throughout Connecticut, these coverage maps only tell a part of the story.

As Cellco has described in several recent filings, due to technological limits of the available radio equipment and the limited licensed radio spectrum within which Cellco must operate, each of its existing cells has a limited capacity to handle so many calls and data transmissions. Cellco's RF and System Performance engineers have identified a need for significant capacity relief to its network in the area around the proposed Milford South 4 facility. System performance data shows that Cellco's alpha sector antennas at the Orange 4 cell site and all antenna sectors at the Milford South II cell site are currently operating at their respective capacity limits, rendering service from these sites less reliable. Voice calls in these areas are more likely to experience disruption, in the form of dropped calls and/or ineffective attempts to initiate a call. Data transmissions (i.e. downloading e-mail; internet access; GPS location devices) in these areas are more likely to be slower or unsuccessful altogether. System performance data also shows that the gamma sector antennas at Cellco's West Haven SW cell site (the sector directed toward the Milford South 4 facility) will reach their capacity limit within the next two years. These existing and near future capacity problems have a significant impact on Cellco's ability to provide reliable wireless service to its customer, local business and industrial uses, commuters and emergency service providers in portions of Orange, Milford and West Haven.

IV. Proposed Milford South 4 Telecommunications Facility

Cellco's proposed Milford South 4 cell site would consist of a 35-foot tall stub-tower on the northerly portion of the roof of the existing 82,000 square foot industrial building. Cellco would install twelve (12) antennas and six (6) remote radio heads (RRHs) on T-Arms at the top of the tower. Equipment associated with the antennas and a natural gas-fueled back-up generator would be located in a 12' x 24' shelter located on the ground to the north of the existing industrial building. The antennas would extend to an overall height of 65.9 feet above ground level. Project plans for the proposed facility are included in Attachment 3.

V. Discussion

A. The Proposed Facility 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 proposed wireless facility at the Property will not involve a significant alteration in the physical and environmental characteristics of the Property or the surrounding area. Cellco's 12' x 24' shelter will be placed on an existing paved surface, immediately north of the existing industrial building. A portion of the shelter will encroach, a short distance, into an existing lawn area adjacent to the building. (*See* Project Plans – Sheet C-

2). The roof-mounted tower would be located in the northerly portion of the roof and attached to a steel tower support frame. The roof and the building structure have been analyzed and it has been determined that the building roof is structurally capable of supporting the proposed stub-tower and related improvements. (*See* Attachment 4).

a. Wetland Investigation and Flood Hazard Designation

According to the attached Wetlands Impact Evaluation, the development of the Milford South 4 cell site will have no direct impact on any federal or state designated wetlands or watercourses located on or near the Property. Further, no temporary wetland or watercourse impacts are anticipated provided appropriate soil erosion and sediment controls are designed, installed and maintained during facility construction activity at the Property.

A vast majority of the Property, including the portion where Cellco's equipment shelter would be located, is outside of any designated flood zone or flood hazard area. The Oyster River and its associated flood zones do not encumber any of the developed portions of the Property. Attachment 5 includes a Wetland Impact Evaluation prepared by Dean Gustafson at All-Points Technology ("APT") and a Flood Insurance Rate Map depicting flood zones in the area proximate to the Property.

b. Access and Utilities

Vehicular access to the equipment shelter would extend from Robinson Boulevard along the existing paved access driveway and parking area. Utility service including natural gas service to the back-up generator, would extend from existing service on the Property.

2. Visual Effects

As discussed in numerous other Council filings, visual impact of a tower, even a roof-mounted tower, is often the most significant and, in many cases, the only discernible

environmental effect associated with such facilities. To assess these conditions, Cellco asked APT to assess the overall visual impact of the proposed 35-foot tall roof-top stub-tower, described in this Petition. A copy of APT's Visibility Analysis is included in Attachment 6 (the "APT Report").

The APT Report concludes that the visual impacts of the proposed 35-foot tall roof-top stub-tower will be minimal and limited to locations within about ¼ mile of the Property. Due to the tower's low height, combined with the buffer and mature trees in the area, visibility in residential areas to the east and south of the Property has been minimized. (*See* Photosimulation Nos. 7, 8 and 9). The Property is not located within 250 feet of any building containing a commercial day care facility or school.

3. Compliance with Radio Frequency Emissions Standards

Radio frequency ("RF") emissions from the proposed Milford South 4 facility will not exceed the Maximum Permissible Exposure ("MPE") standards adopted by the Federal Communications Commission ("FCC"). Included in Attachment 7 is a Calculated Radio Frequency Emission report for the proposed facility. These calculations confirm that the proposed facility will operate well within the MPE standards established by the FCC.

4. FAA Summary Report

Included in Attachment 8 of this Petition is a Federal Airways & Airspace Summary Report verifying that a 35-foot roof-mounted stub-tower at the Property would not constitute an obstruction or hazard to air navigation and the structure does not require registration or filing with the FAA.

In sum, the effect of the proposed facility at the Property on the environment would be minimal and limited, rather than significant. This stands in contrast to typical proposals for new,

taller towers that frequently must be located on the ground and, in many cases, on properties with no development at all. Thus, the proposed 35-foot tall, roof-mounted stub-tower would not present a substantial adverse environmental effect for which the General Assembly intended to require a Certificate under C.G.S. § 16-50k(a).

B. Notice

Pursuant to R.C.S.A. Section 16-50j-40(a), notice of Cellco's intent to file this Petition was sent to all abutting property owners. A copy of the sample notice letter and a list of abutting landowners are included in Attachment 9. Notice of Cellco's intent to file the Petition was also sent to Group Seven Associates, the owner of the Property, Orange First Selectman James Zeoli, West Haven Mayor Edward M. O'Brien and Milford Mayor Benjamin G. Blake. A copy of the government official's and Property owner's notice letters are included in Attachment 10.

C. A Conclusion That the Proposed Facility Modifications Will Not Have a Substantial Adverse Environmental Effect Would Be Consistent With Siting Council Precedent

The Council has recently determined, under similar circumstances, that the installation of a shorter roof-mounted tower would have no substantial adverse environmental effect, does not require a Certificate and, most importantly, is preferable to the construction of a new, ground-mounted tower in a particular area. (*See* Petition No. 1096 – AT&T's proposed installation of a 45-foot tall roof-mounted tower in East Haven, CT).

VI. 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 35-foot tall stub-tower on the roof of an 82,000 square foot industrial building at the Property 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

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

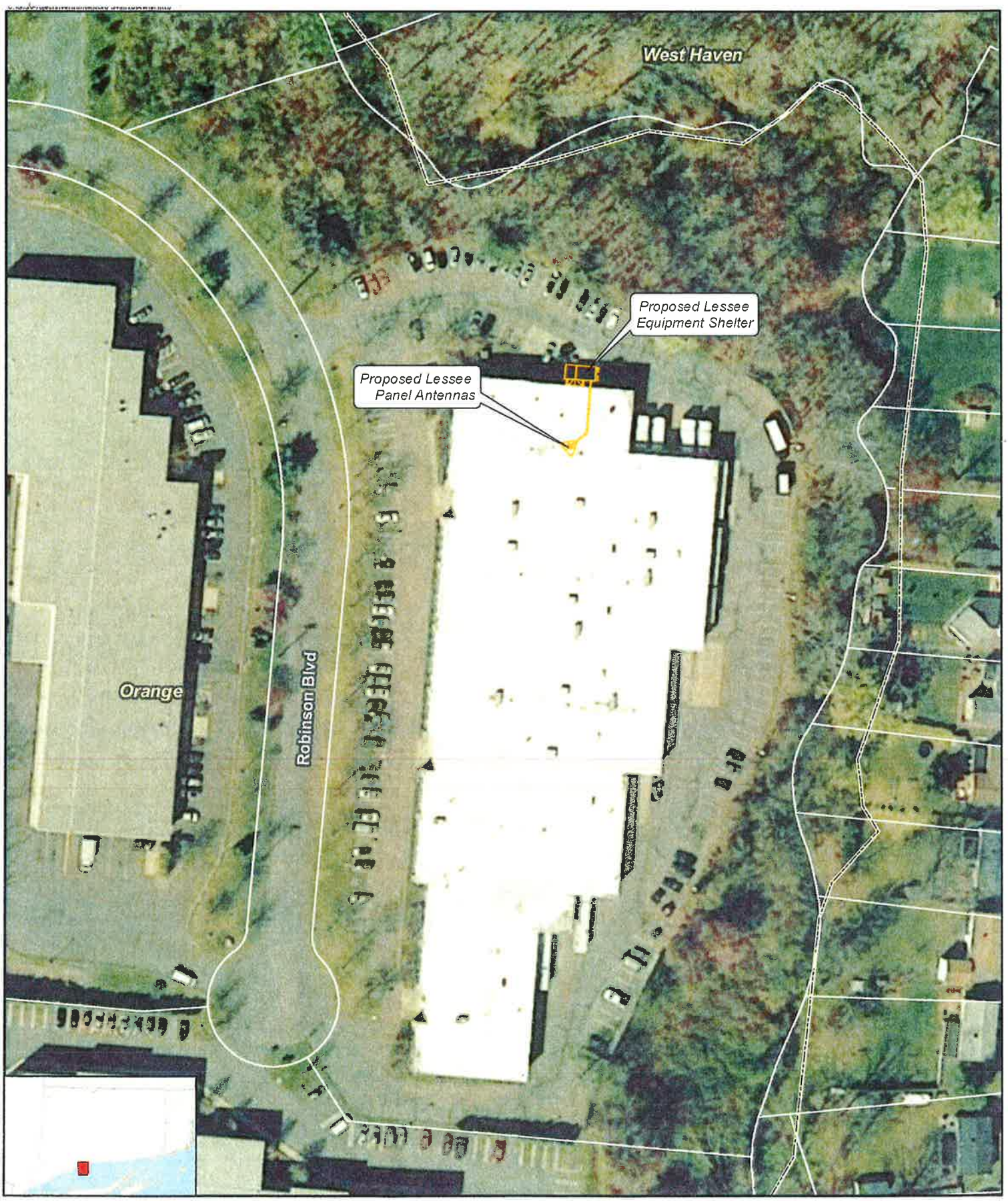
1,000 500 0 1,000

Base Map Source: 2012 Aerial Photograph (CTECO)

Site Vicinity

verizonwireless

Proposed Wireless Telecommunications Facility
Milford South 4
58 Robinson Boulevard
Orange, Connecticut



Legend

Proposed Facility Layout

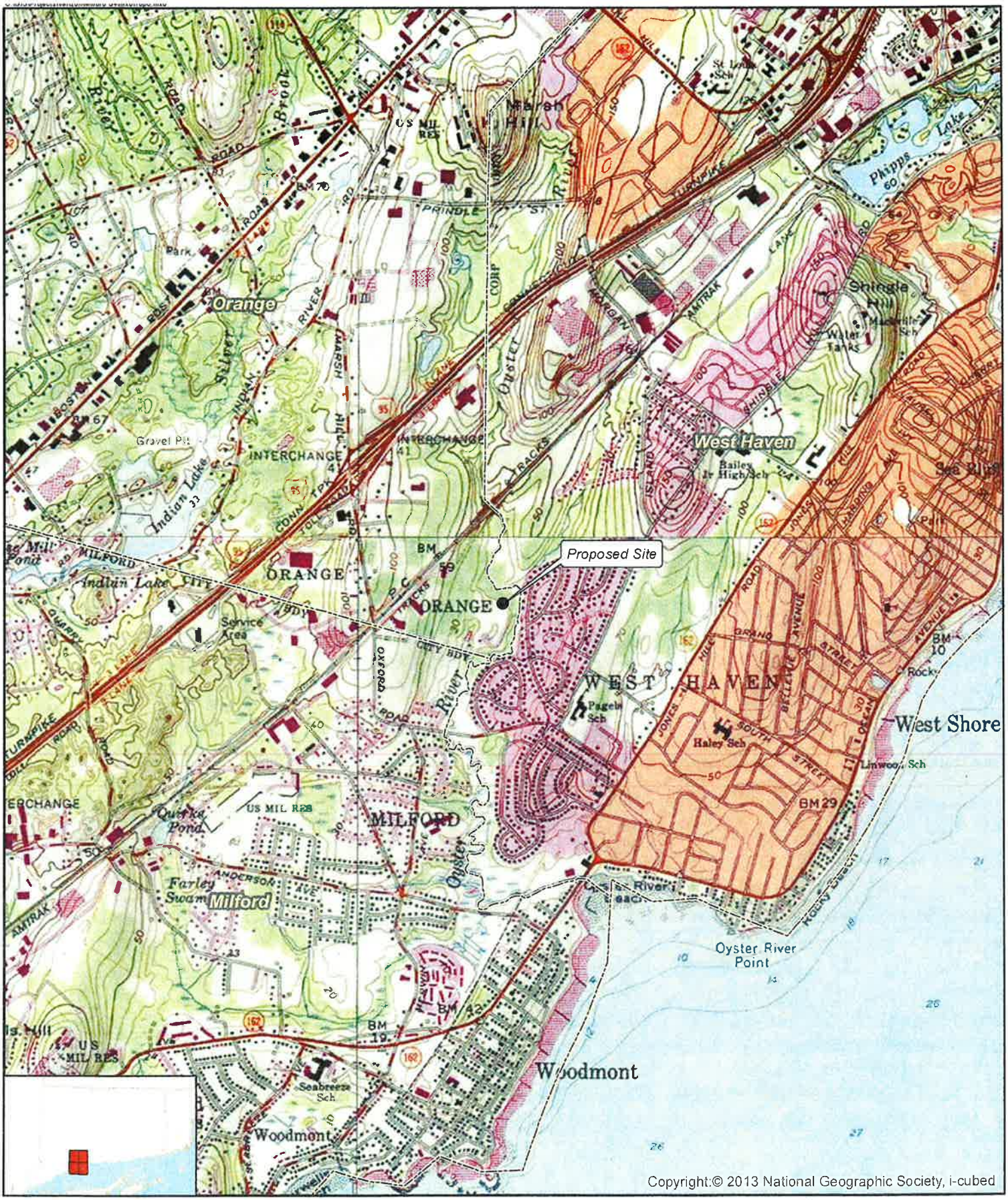
Parcel Boundary

Aerial Photograph

verizon wireless

Proposed Wireless Telecommunications Facility
Milford South 4
58 Robinson Boulevard
Orange, Connecticut

Base Map Source: 2012 Aerial Photograph (CTECO)



Legend

- Site Facility Location
- Municipal Boundary

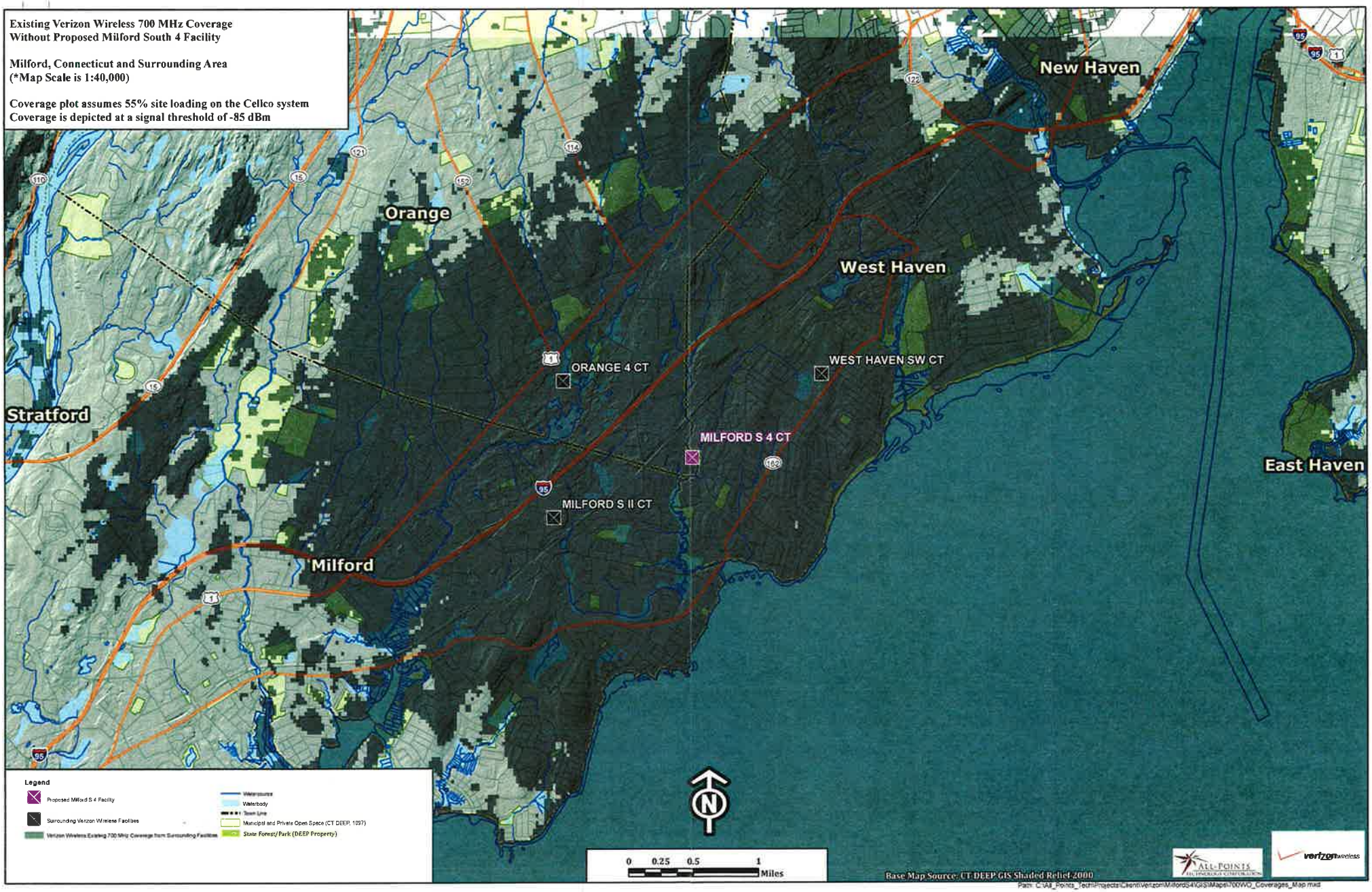
USGS Topographic Map

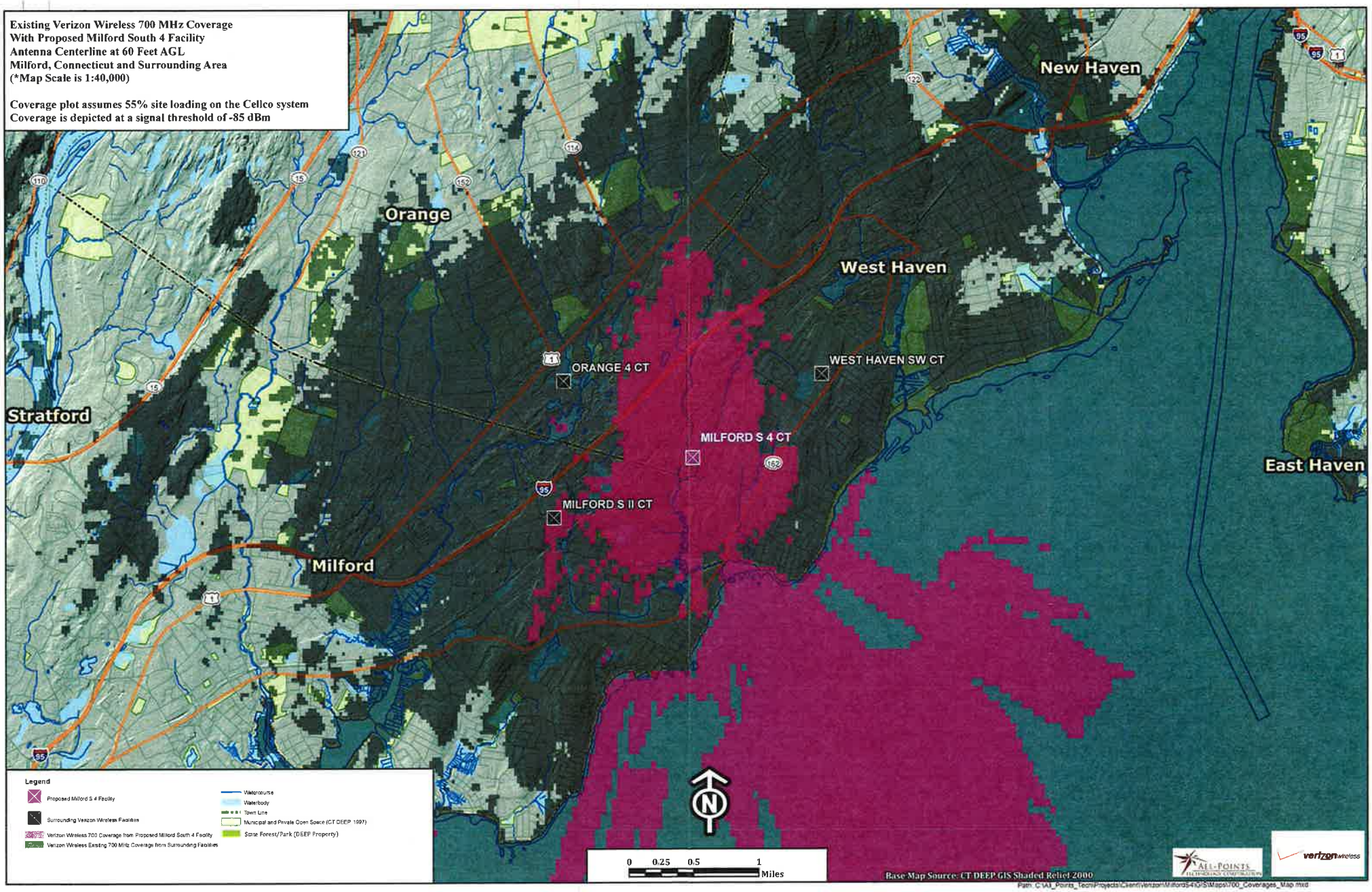
verizonwireless

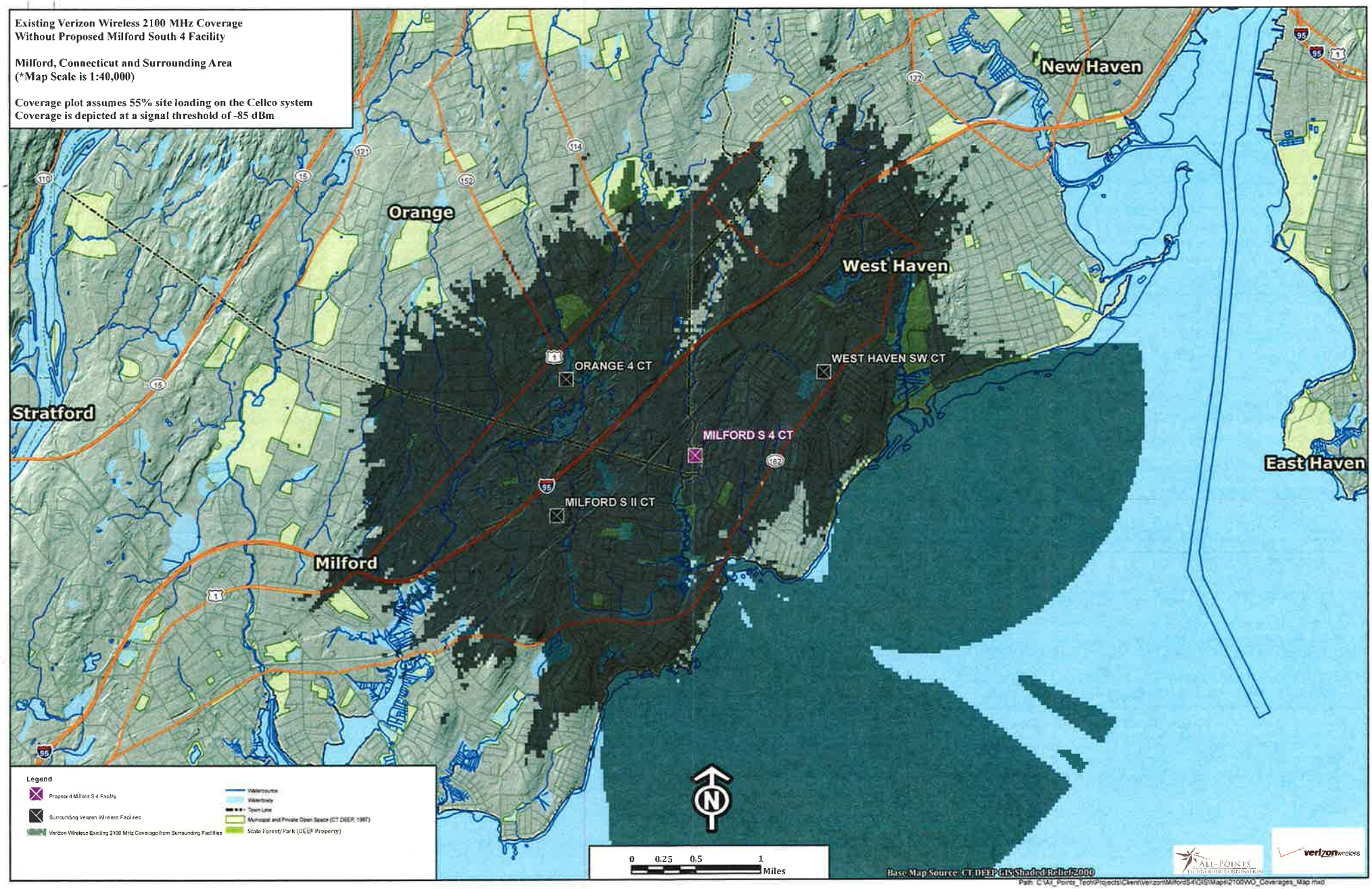
Proposed Wireless
Telecommunications Facility
Milford South 4
58 Robinson Boulevard
Orange, Connecticut

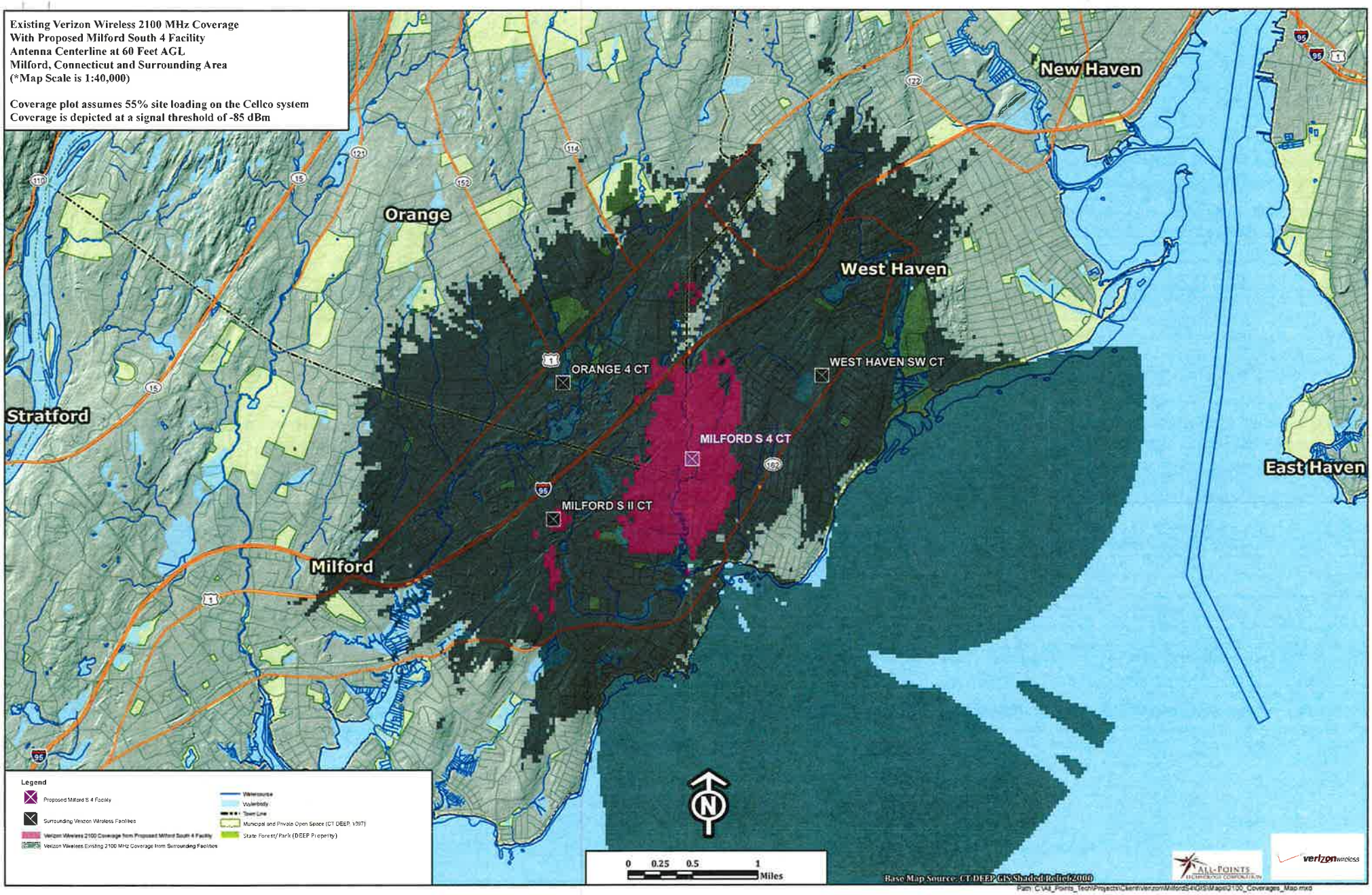
Base Map Source: USGS 7.5 Minute Topographic Quadrangle Maps, Ansonia, Milford, New Haven (1984), and Woodmont (1971), CT
Site located on Woodmont Quadrangle

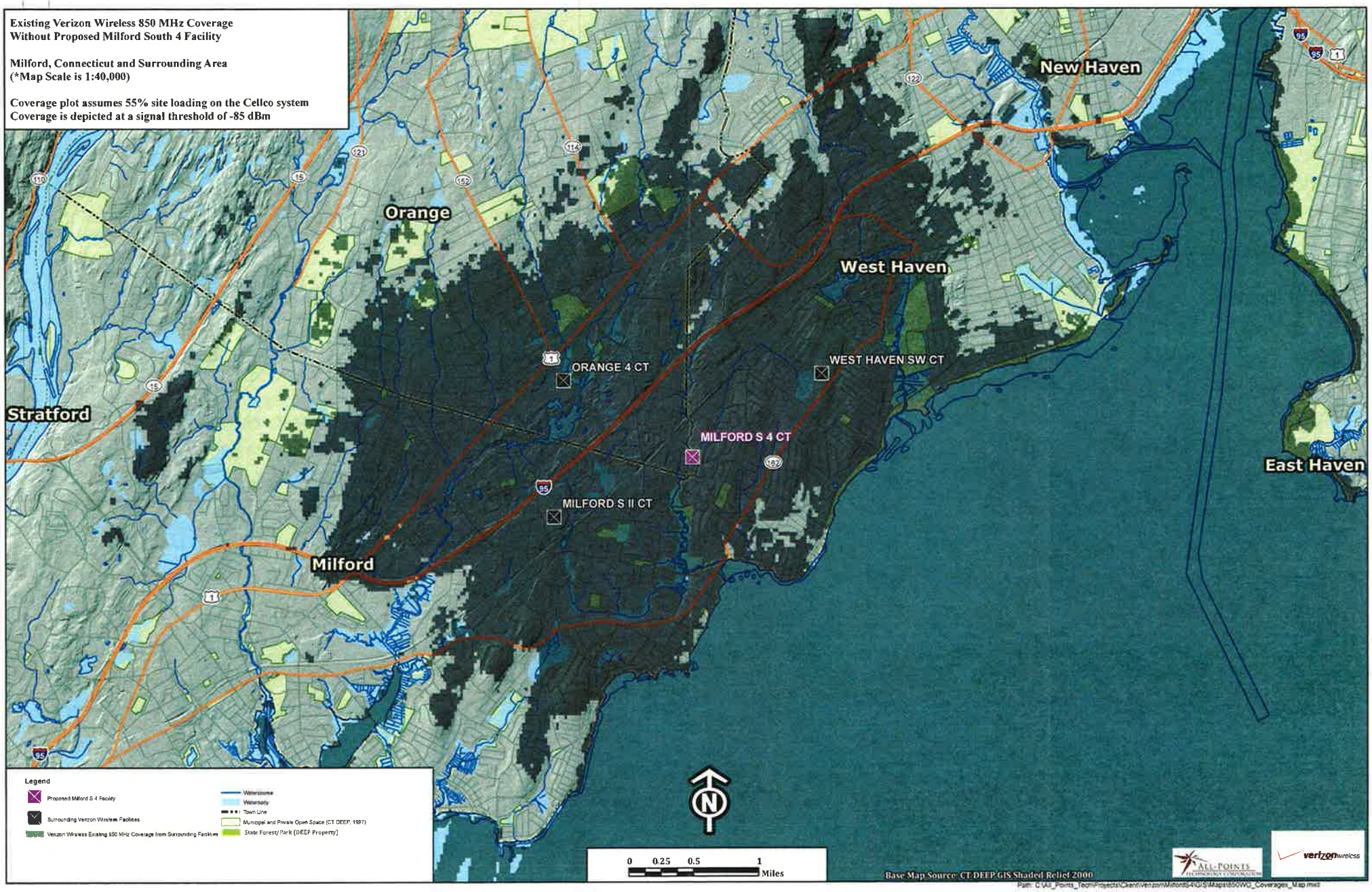
ATTACHMENT 2

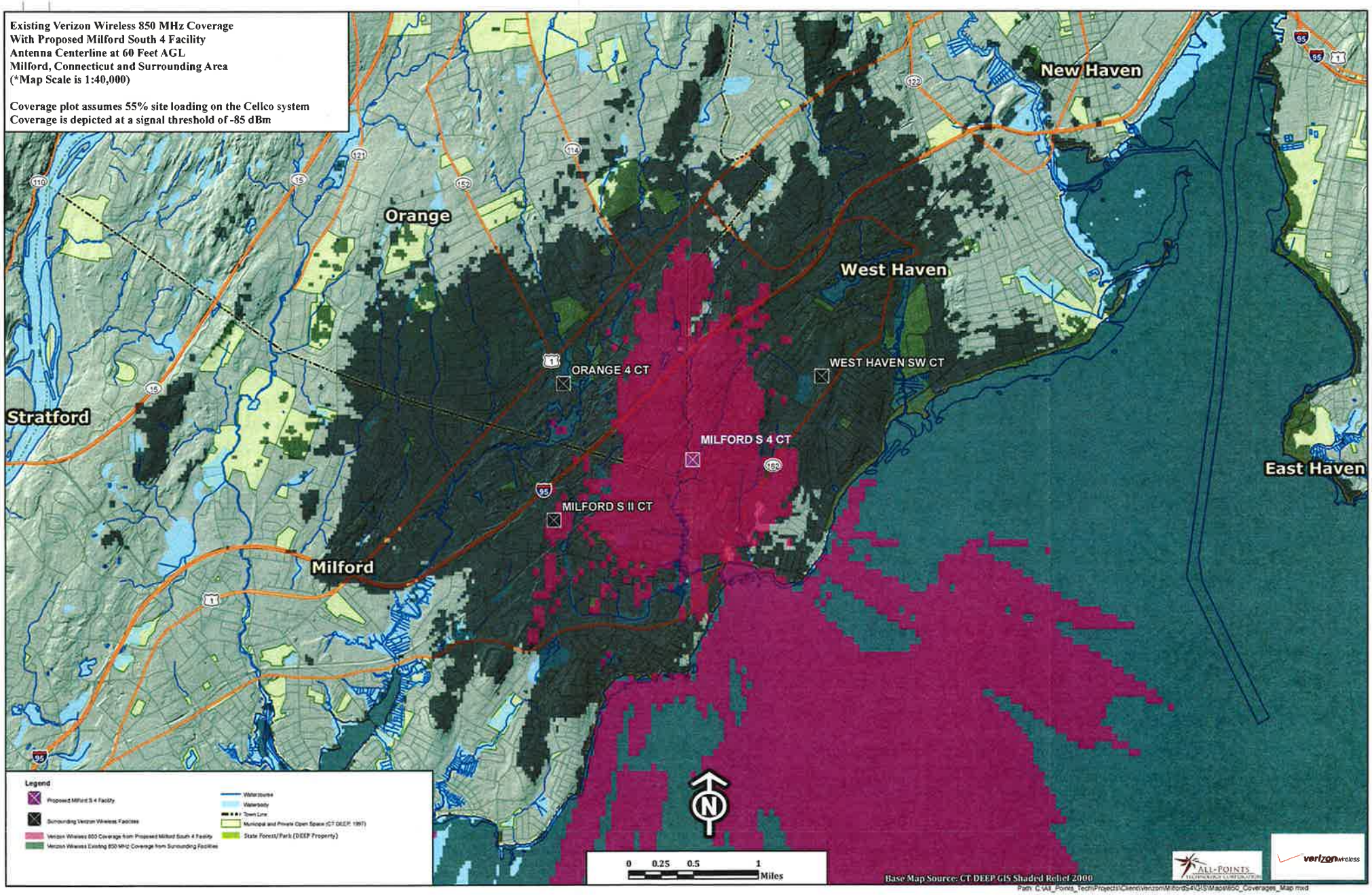

Existing Verizon Wireless 700 MHz Coverage
Without Proposed Milford South 4 Facility
Milford, Connecticut and Surrounding Area
(*Map Scale is 1:40,000)
Coverage plot assumes 55% site loading on the Cellco system
Coverage is depicted at a signal threshold of -85 dBm
New Haven
Orange
West Haven
ORANGE 4 CT
WEST HAVEN SW CT
Stratford
MILFORD S 4 CT
East Haven
MILFORD S II CT
Milford
Legend
Proposed Milford S 4 Facility
Surrounding Verizon Wireless Facilities
Verizon Wireless Existing 700 MHz Coverage from Surrounding Facilities
Waterbody
Town Line
Municipal and Private Open Space (CT DEEP, 1997)
State Forest/ Park (DEEP Property)
0 0.25 0.5 1
Miles
Base Map Source: CT DEEP GIS Shaded Relief 2000
verizonwireless

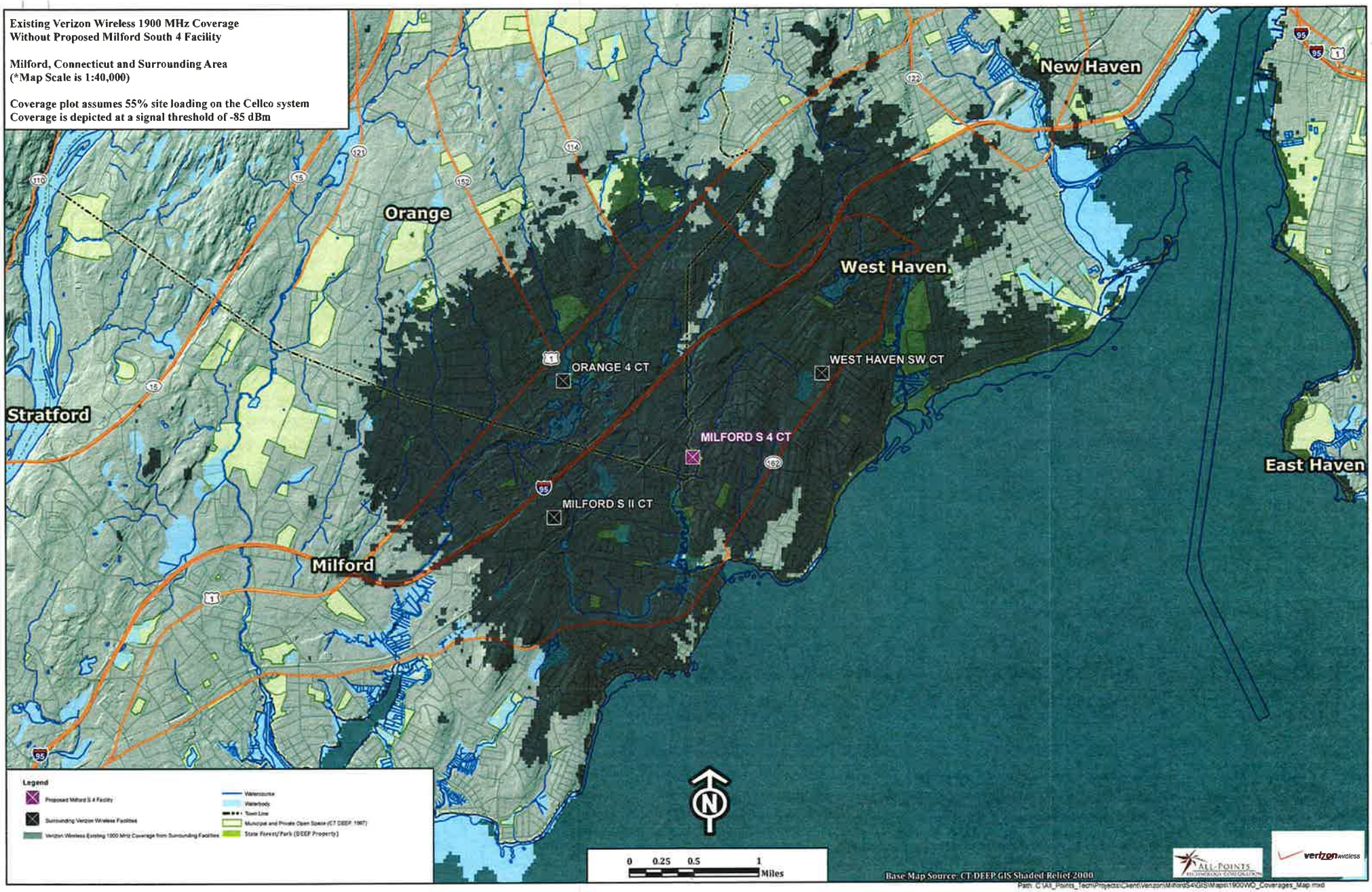

Existing Verizon Wireless 700 MHz Coverage
With Proposed Milford South 4 Facility
Antenna Centerline at 60 Feet AGL
Milford, Connecticut and Surrounding Area
(*Map Scale is 1:40,000)
Coverage plot assumes 55% site loading on the Cellco system
Coverage is depicted at a signal threshold of -85 dBm
New Haven
Orange
West Haven
ORANGE 4 CT
WEST HAVEN SW CT
Stratford
MILFORD S 4 CT
East Haven
MILFORD S II CT
Milford
Legend
Proposed Milford S 4 Facility
Surrounding Verizon Wireless Facilities
Verizon Wireless 700 Coverage from Proposed Milford South 4 Facility
Verizon Wireless Existing 700 MHz Coverage from Surrounding Facilities
Watercourse
Waterbody
Town Line
Municipal and Private Open Space (CT DEEP 1997)
State Forest/Park (DEEP Property)
0 0.25 0.5 1
Miles
Base Map Source: CT DEEP GIS Shaded Relief 2000
verizon wireless

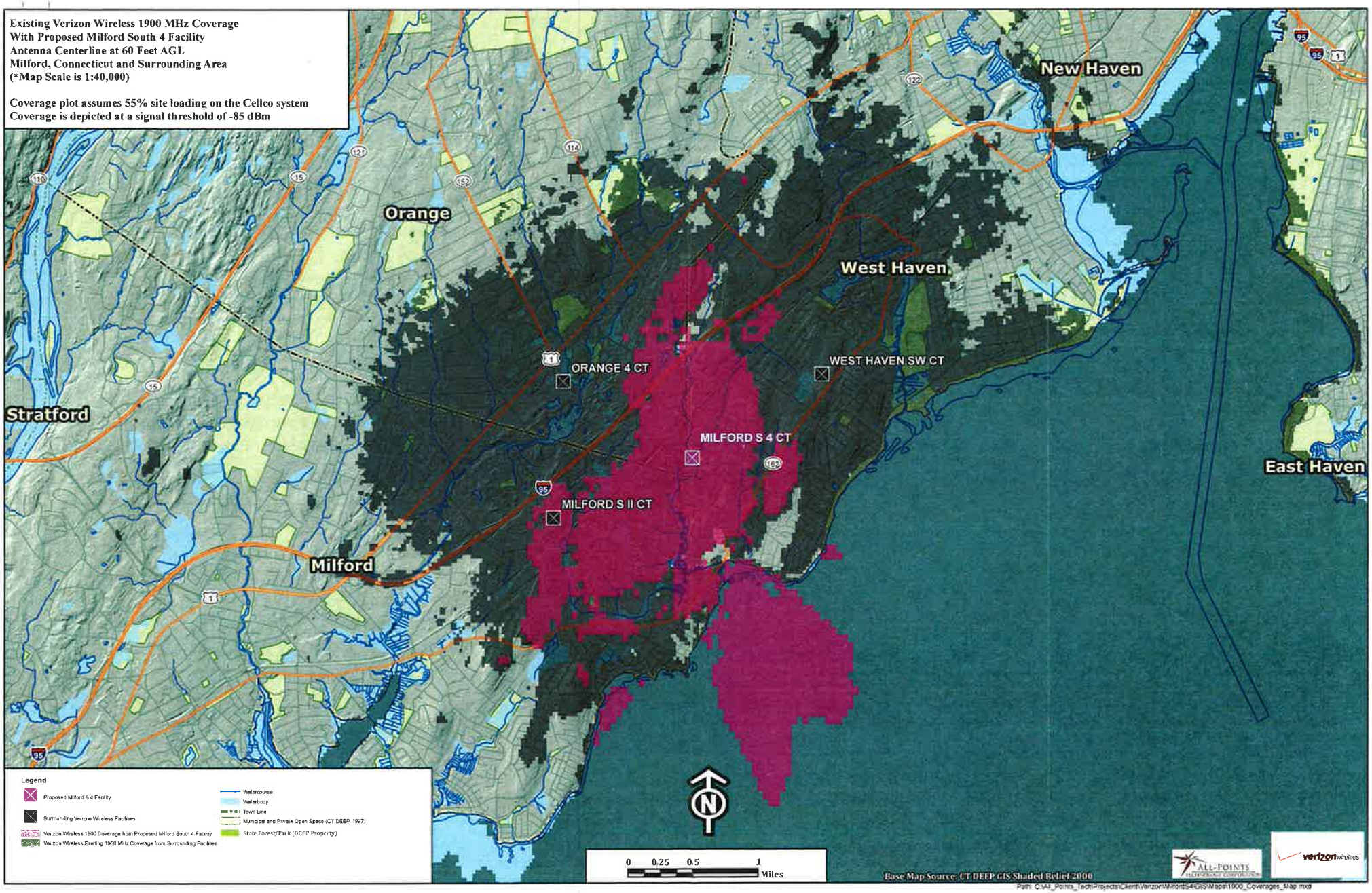

Existing Verizon Wireless 2100 MHz Coverage
Without Proposed Milford South 4 Facility
Milford, Connecticut and Surrounding Area
(*Map Scale is 1:40,000)
Coverage plot assumes 55% site loading on the Cellco system
Coverage is depicted at a signal threshold of -85 dBm
New Haven
Orange
West Haven
ORANGE 4 CT
WEST HAVEN SW CT
Stratford
MILFORD S 4 CT
East Haven
MILFORD S II CT
Milford
Legend
Proposed Milford S 4 Facility
Surrounding Verizon Wireless Facilities
Verizon Wireless Existing 2100 MHz Coverage from Surrounding Facilities
Waterbody
Town Line
Municipal and Private Open Space (CT DEEP, 1997)
State Forest/ Park (DEEP Property)
0 0.25 0.5 1
Miles
Base Map Source: CT DEEP GIS Shaded Relief 2000
verizonwireless


Existing Verizon Wireless 2100 MHz Coverage
With Proposed Milford South 4 Facility
Antenna Centerline at 60 Feet AGL
Milford, Connecticut and Surrounding Area
(*Map Scale is 1:40,000)
Coverage plot assumes 55% site loading on the Cellco system
Coverage is depicted at a signal threshold of -85 dBm
New Haven
Orange
West Haven
ORANGE 4 CT
WEST HAVEN SW CT
Stratford
MILFORD S 4 CT
East Haven
MILFORD S II CT
Milford
Legend
Proposed Milford S 4 Facility
Surrounding Verizon Wireless Facilities
Verizon Wireless 2100 Coverage from Proposed Milford South 4 Facility
Verizon Wireless Existing 2100 MHz Coverage from Surrounding Facilities
Watercourse
Waterbody
Town Line
Municipal and Private Open Space (CT DEEP, 1997)
State Forest/ Park (DEEP Property)
N
0 0.25 0.5 1
Miles
Base Map Source: CT DEEP GIS Shaded Relief 2000
verizonwireless


Existing Verizon Wireless 850 MHz Coverage
Without Proposed Milford South 4 Facility
Milford, Connecticut and Surrounding Area
(*Map Scale is 1:40,000)
Coverage plot assumes 55% site loading on the Cellco system
Coverage is depicted at a signal threshold of -85 dBm
New Haven
Orange
West Haven
ORANGE 4 CT
WEST HAVEN SW CT
Stratford
MILFORD S 4 CT
East Haven
MILFORD S II CT
Milford
Legend
Proposed Milford S 4 Facility
Surrounding Verizon Wireless Facilities
Verizon Wireless Existing 850 MHz Coverage from Surrounding Facilities
Watercourse
Waterbody
Town Line
Municipal and Private Open Space (CT DEEP, 1997)
State Forest/ Park (DEEP Property)
0 0.25 0.5 1
Miles
Base Map Source: CT DEEP GIS Shaded Relief 2000
verizonwireless


Existing Verizon Wireless 850 MHz Coverage
With Proposed Milford South 4 Facility
Antenna Centerline at 60 Feet AGL
Milford, Connecticut and Surrounding Area
(*Map Scale is 1:40,000)
Coverage plot assumes 55% site loading on the Cellco system
Coverage is depicted at a signal threshold of -85 dBm
New Haven
Orange
West Haven
ORANGE 4 CT
WEST HAVEN SW CT
Stratford
MILFORD S 4 CT
East Haven
MILFORD S II CT
Milford
Legend
Proposed Milford S 4 Facility
Surrounding Verizon Wireless Facilities
Verizon Wireless 850 Coverage from Proposed Milford South 4 Facility
Verizon Wireless Existing 850 MHz Coverage from Surrounding Facilities
Waterbody
Town Line
Municipal and Private Open Space (CT DEEP, 1997)
State Forest/Park (DEEP Property)
N
0 0.25 0.5 1
Miles
Base Map Source: CT DEEP GIS Shaded Relief 2000
ALL-POINTS
verizon wireless


Existing Verizon Wireless 1900 MHz Coverage
Without Proposed Milford South 4 Facility
Milford, Connecticut and Surrounding Area
(*Map Scale is 1:40,000)
Coverage plot assumes 55% site loading on the Cellco system
Coverage is depicted at a signal threshold of -85 dBm
New Haven
Orange
West Haven
ORANGE 4 CT
WEST HAVEN SW CT
Stratford
MILFORD S 4 CT
East Haven
MILFORD S II CT
Milford
Legend
Proposed Milford S 4 Facility
Surrounding Verizon Wireless Facilities
Verizon Wireless Existing 1900 MHz Coverage from Surrounding Facilities
Watercourse
Waterbody
Town Line
Municipal and Private Open Space (CT DEEP 1997)
State Forest/Park (DEEP Property)
0 0.25 0.5 1
Miles
Base Map Source: CT DEEP GIS Shaded Relief 2000
verizon wireless


Existing Verizon Wireless 1900 MHz Coverage
With Proposed Milford South 4 Facility
Antenna Centerline at 60 Feet AGL
Milford, Connecticut and Surrounding Area
(*Map Scale is 1:40,000)
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Coverage is depicted at a signal threshold of -85 dBm
New Haven
Orange
West Haven
ORANGE 4 CT
WEST HAVEN SW CT
Stratford
MILFORD S 4 CT
East Haven
MILFORD S II CT
Milford
Legend
Proposed Milford S 4 Facility
Surrounding Verizon Wireless Facilities
Verizon Wireless 1900 Coverage from Proposed Milford South 4 Facility
Verizon Wireless Existing 1900 MHz Coverage from Surrounding Facilities
Watercourse
Waterbody
Town Line
Municipal and Private Open Space (CT DEEP, 1997)
State Forest/Park (DEEP Property)
N
0 0.25 0.5 1
Miles
Base Map Source: CT DEEP GIS Shaded Relief 2000
verizonwireless

ATTACHMENT 3

Cellco Partnership

d.b.a. verizon wireless

WIRELESS COMMUNICATIONS FACILITY

MILFORD SOUTH 4
58 ROBINSON BLVD
ORANGE, CT 06477

SITE DIRECTIONS

FROM: 99 EAST RIVER DRIVE, EAST HARTFORD, CONNECTICUT **TO:** 58 ROBINSON BLVD, ORANGE, CONNECTICUT

1.	Head Southwest on E RIVER DR toward PITKIN ST	0.9 mi.
2.	Continue onto E RIVER DR EXTENSION	0.3 mi.
3.	Turn RIGHT onto the US-5 S/CT-15 S ramp to NEW HAVEN/I-91 S	0.2 mi.
4.	Merge onto US-5 S	0.8 mi.
5.	Take EXIT 86 to merge onto I-91 S toward NEW HAVEN/NYC	36.6 mi.
6.	Keep LEFT at the fork, follow signs for I-95 S/NYC and merge onto I-95 S	5.7 mi.
7.	Take EXIT 41 for MARSH HILL ROAD toward ORANGE	0.3 mi.
8.	Turn LEFT onto MARSH HILL ROAD	0.7 mi.
9.	Turn LEFT onto ROBINSON BLVD, and the destination will be on the LEFT	0.3 mi.

GENERAL NOTES

1. PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY CELLCO PARTNERSHIP.

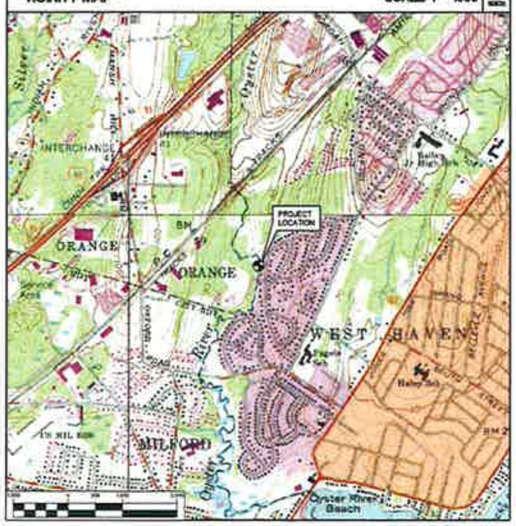
SITE INFORMATION

THE SCOPE OF WORK SHALL INCLUDE:

1. THE INSTALLATION OF A PROPOSED 12'x24' CELLCO PARTNERSHIP EQUIPMENT SHELTER WITH SHELTER HOUSED NATURAL GAS FUELED EMERGENCY POWER GENERATOR AT GRADE.
2. A TOTAL OF UP TO TWELVE (12) DIRECTIONAL PANEL ANTENNAS ARE PROPOSED TO BE MOUNTED AT A CENTERLINE ELEVATION OF 62.6'± AGL ON A 35'± PROPOSED STUB TOWER ATOP EXISTING BUILDING ROOF.
3. POWER AND TELCO UTILITIES SHALL BE ROUTED FROM DEMARCS LOCATED WITHIN THE EXISTING BUILDING TO THE PROPOSED 12'x24' CELLCO PARTNERSHIP EQUIPMENT SHELTER.
4. FINAL DESIGN FOR TOWER AND ANTENNA MOUNTS SHALL BE INCLUDED IN THE D&M PLANS.
5. THE PROPOSED WIRELESS FACILITY INSTALLATION WILL BE DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2009 CONNECTICUT SUPPLEMENT.
6. THERE WILL NOT BE ANY LIGHTING UNLESS REQUIRED BY THE FCC OR THE FAA.
7. THERE WILL NOT BE ANY SIGNS OR ADVERTISING ON THE ANTENNAS OR EQUIPMENT.

VICINITY MAP

SCALE: 1" = 1000'



PROJECT SUMMARY

SITE NAME:	MILFORD SOUTH 4
SITE ADDRESS:	58 ROBINSON BLVD ORANGE, CT 06477
PROPERTY OWNER:	GROUP SEVEN ASSOCIATES 929 KINGS HIGHWAY EAST ORANGE, CT 06430
LESSEE/TENANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
CONTACT PERSON:	SANDY CARTER CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
TOWER COORDINATES:	LATITUDE 41°-14'-49.991" LONGITUDE 72°-59'-29.069" GROUND ELEVATION: 19.3'± A.M.S.L. COORDINATES AND GROUND ELEVATION BASED ON FAA 1-A SURVEY CERTIFICATION AS PREPARED FOR VERIZON WIRELESS, BY MARTINEZ COUCH AND ASSOCIATES L.L.C., DATED APRIL 7, 2014.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	2
C-1	SITE/SITE SURVEY PLAN	2
C-2	PARTIAL ROOF PLAN, ELEVATION AND ANTENNA MOUNTING CONFIGURATION	1

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
2	08/03/14	HAM	CFC	REVISED CSC TECH REPORT
1	06/16/14	DMD	CFC	ISSUED FOR CSC TECH REPORT
0	04/24/14	HAM	DMD	ISSUED FOR CSC TECH REPORT - CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

Cellco Partnership d.b.a. verizon wireless

CENTEK engineering
Centered on Solutions
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

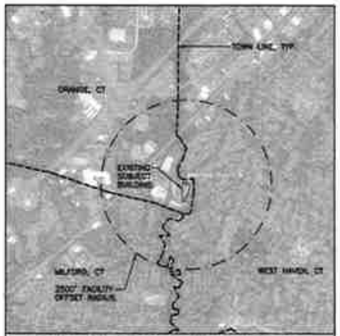
Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY
MILFORD SOUTH 4
58 ROBINSON BLVD
ORANGE, CT 06477

DATE:	04/23/14
SCALE:	AS NOTED
JOB NO.	13158.000

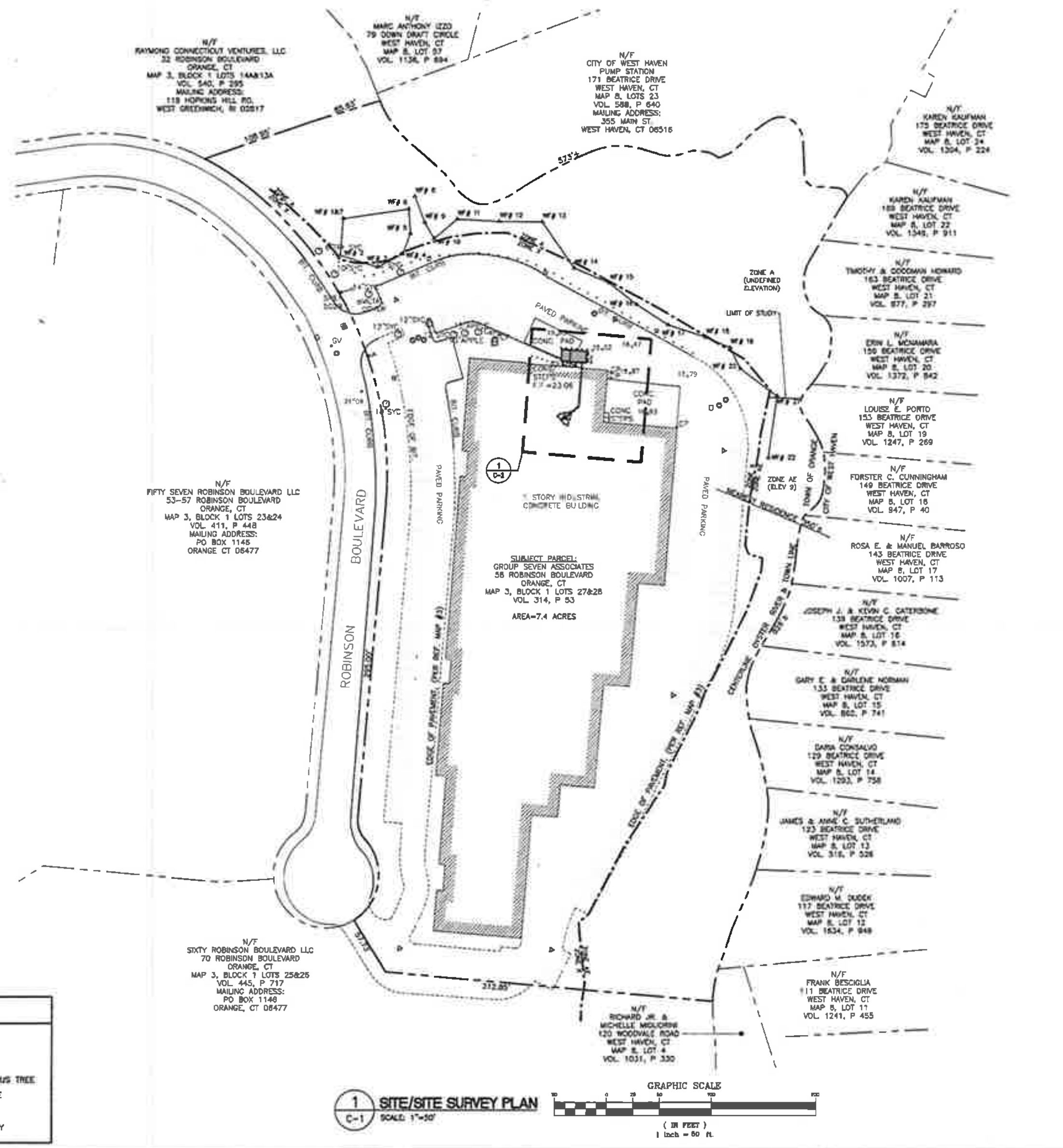
TITLE SHEET

T-1

Sheet No. 1 of 3



MUNICIPALITY NOTIFICATION LIMIT MAP



1 / C-1 **SITE/SITE SURVEY PLAN**
SCALE: 1"=50'

SYMBOLS LEGEND

	PROPERTY LINE
	EXISTING ROAD
	UTILITY POLE
	EXISTING DECIDUOUS TREE
	EXISTING TREE LINE
18.87	SPOT ELEVATION
	WETLAND BOUNDARY

SURVEY NOTES

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300B-1 THRU 20-300B-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES - "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPT. 26, 1996. THE TOPOGRAPHIC SURVEY PORTION OF THIS PLAN CONFORMS TO A TOPOGRAPHIC ACCURACY OF CLASS T-2 AND IS INTENDED TO BE USED TO DEPICT A PROPOSED TELECOMMUNICATION SITE.

THE PROPERTY/BOUNDARY LINES DEPICTED HEREON ARE COMPILED FROM OTHER MAPS, DEEDS AND LIMITED FIELD SURVEY. THESE LINES ARE NOT TO BE CONSTRUED AS A BOUNDARY OPINION AND ARE SUBJECT TO CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE. PROPERTY MAY BE SUBJECT TO ENCUMBRANCES, EASEMENTS, RIGHTS OF WAY AS A TITLE SEARCH REPORT MAY DISCLOSE. PLANIMETRIC FEATURES SUCH AS ROADWAY AND PARKING AREA ARE COMPILED FROM OTHER MAPS AND LIMITED FIELD SURVEY. NOT ALL IMPROVEMENTS SHOWN.

COORDINATES REFER TO NAD 83.
ELEVATIONS DATUM IS NGVD 1929

PARCEL OWNER OF RECORD: GROUP SEVEN ASSOCIATES
929 KINGS HIGHWAY EAST
FAIRFIELD, CT 06430

PARCELS KNOWN AS 58 ROBINSON BLVD
PARCEL AREA= 7.4 ACRES

PARCEL IS IN THE LI-2 ZONING DISTRICT.

MAP 3, LOT NO. 1, ORANGE ASSESSORS MAP.

A PORTION OF PARCEL IS WITHIN FLOOD ZONE AE -1% ANNUAL CHANCE FLOOD (100 YEAR FLOOD) BASED ON THE FLOOD INSURANCE RATE MAP, NEW HAVEN COUNTY, CONNECTICUT, ALL JURISDICTIONS, PANEL 551 OF 635, COMMUNITY MAP NUMBER 09009C0551J.

ZONE AE (ELEVATION 9) IS BASED UPON NAVD 88 PER FIRM MAP NOTES.
THE EXISTING GROUND ELEVATION AT THE PROPOSED EQUIPMENT SHELTER LOCATION IS ± 19.33.

MAP REFERENCE

1) PREPARED FOR K.R. ROBINSON, ORANGE & MILFORD, CONN., SCALE: 1"=100', DATE: OCT. 14, 1986, BY: BERNARD E. GODFREY.

2) SUBDIVISION "OYSTER RIVER BUSINESS PARK, ORANGE, CONN., SCALE: 1"=40', DATE: APRIL 7, 1987, BY: BERNARD E. GODFREY.

3) AS-BUILT, LOTS 5, 6, & 7 UPS BUILDING 58 ROBINSON BLVD, SCALE: 1"=40', DATE: APRIL 2, 1988, REVISED THRU: DEC. 1, 1987, BY: BERNARD E. GODFREY.

TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND SEAL

A. RAFAEL MARTINEZ LLS #18833 DATE

REV	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	04/23/14	MMR	DMD	ISSUED FOR CSC TECH REPORT - CLIENT REVIEW
1	05/14/14	DMD	CFC	ISSUED FOR CSC TECH REPORT
2	05/30/14	MMR	CFC	REVISED CSC TECH REPORT

PROFESSIONAL ENGINEER SEAL

Cellco Partnership d.b.a. verizon wireless

CENTEK engineering
Centered on Solutions
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY

MILFORD SOUTH 4

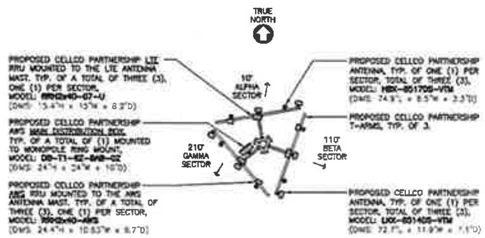
58 ROBINSON BLVD
ORANGE, CT 06477

DATE: 04/23/14
SCALE: AS NOTED
JOB NO. 13156.000

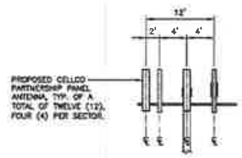
SITE/SITE SURVEY PLAN

C-1

Sheet No. 2 of 3



PLAN VIEW



TYPICAL SECTOR ELEVATION

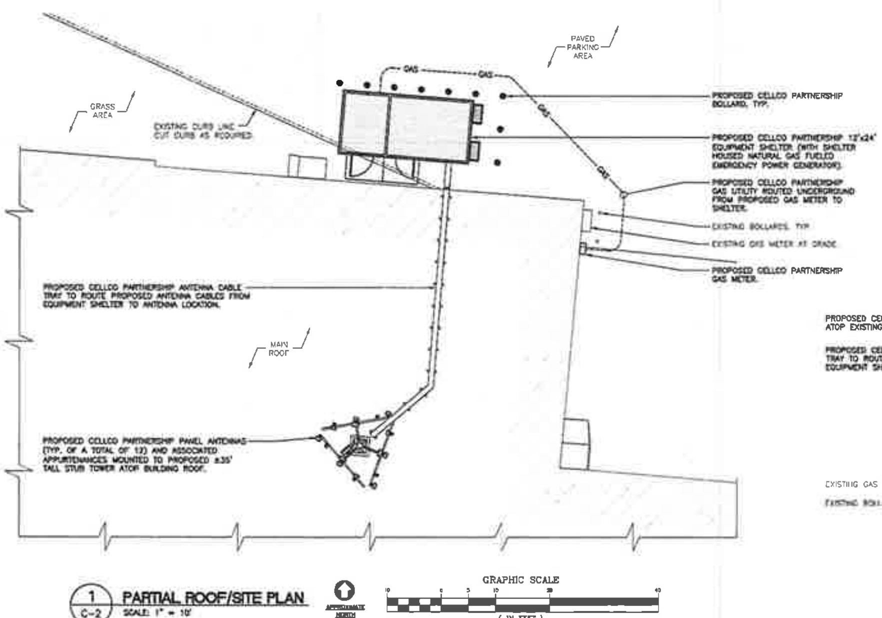
3 / C-2 **ANTENNA MOUNTING CONFIGURATION**
SCALE: 1/8" = 1'

EROSION CONTROL NOTE:

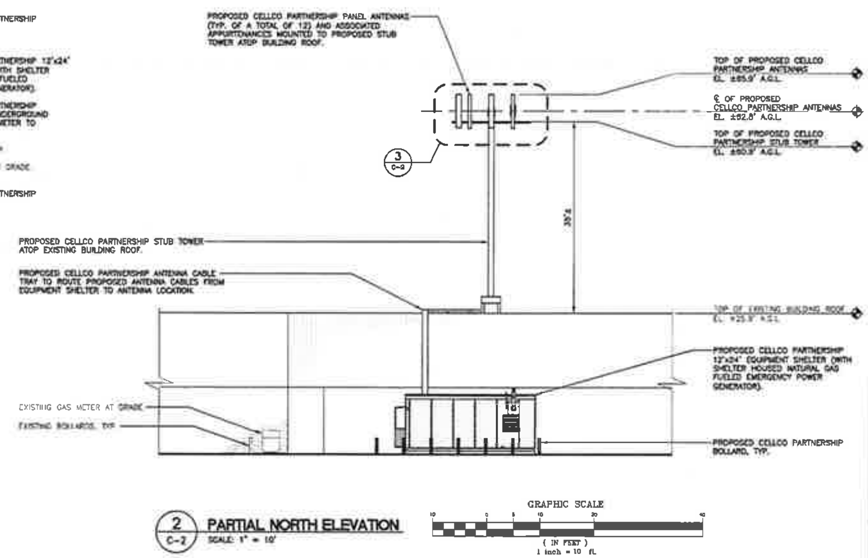
1. EROSION CONTROLS WILL BE INSTALLED AS NECESSARY, INCLUDING PROTECTION OF NEARBY CATCH BASINS WITH SiltSack® OR SIMILAR DEVICE. SUCH DETAILS WILL BE INCLUDED AT THE D&M PHASE OF THE PROJECT.

TOWER STRUCTURAL NOTES:

1. LOCATION OF PROPOSED CELLCO PARTNERSHIP ANTENNAS ARE SUBJECT TO STRUCTURAL REVIEW OF HOST BUILDING CONSIDERING EXISTING AND PROPOSED LOADINGS.
2. TOWER STRUCTURE TO COMPLY WITH LOADING AND DESIGN REQUIREMENTS PRESCRIBED BY THE 2003 INTERNATIONAL BUILDING CODE PORTION OF THE 2005 CONNECTICUT STATE BUILDING CODE AS MODIFIED BY THE 2009 CONNECTICUT SUPPLEMENT.
3. ALL ANTENNAS AND COAX TO BE INSTALLED IN ACCORDANCE WITH STRUCTURAL ANALYSIS AND FINAL AT&T RF DATA SHEET.



1 / C-2 **PARTIAL ROOF/SITE PLAN**
SCALE: 1" = 10'



2 / C-2 **PARTIAL NORTH ELEVATION**
SCALE: 1" = 10'

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	04/24/14	MAH	DMD	ISSUED FOR CSC TECH REPORT - CLIENT REVIEW
1	05/14/14	DMD	CFC	ISSUED FOR CSC TECH REPORT

PROFESSIONAL ENGINEER SEAL

Cellco Partnership d.b.a. verizon wireless

CENTEK engineering
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(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
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www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless

WIRELESS COMMUNICATIONS FACILITY

MILFORD SOUTH 4

58 ROBINSON BLVD
ORANGE, CT 06477

DATE: 04/23/14
SCALE: AS NOTED
JOB NO. 13150.000

PARTIAL ROOF PLAN ELEVATION AND ANTENNA MOUNTING CONFIG.

C-2

Sheet No. 2 of 2

ATTACHMENT 4

CENTEK engineering

Centered on Solutions℠

May 7, 2014

Mr. Brian Ragozzine
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

Re: Structural Feasibility Letter
Verizon Wireless Site - Milford South 4
58 Robinson Blvd.
Orange, Connecticut

CENTEK Project No. 13156.000

Dear Mr.Ragozzine,

This letter is to confirm the structural feasibility of installing a stub tower on the roof of the referenced property for Verizon's proposed wireless communications facility. No structural documentation of the existing building was available. A site visit by Centek personnel was conducted on 08/16/2013 for the purpose of verifying the existing structural systems. Preliminary structural calculations and field data obtained were utilized in our assessment.

The host building is a 1-story steel framed structure currently utilized as UPS storage facility. The framing consists of long span steel joists, wide flange girders and wide flange columns. The proposed 35-ft tall stub tower is to be mounted to a steel dunnage frame located directly above an interior steel building column.

The stub tower base reactions were calculated to be as follows:

Shear	6 kips
Axial	5 kips
Moment	191 ft-kips

The above reactions will be transferred to the host building through a rooftop dunnage frame and supplemental support steel to be located within the existing roof structure. The tower base reactions will be transferred to the host building components as axial forces. A preliminary check of the affected host building components, considering the aforementioned tower reactions applicable snow & dead loads on the roof, found them to be of sufficient capacity. Minor local reinforcements are anticipated to assure proper load transfer. Structural details and related design calculations for any local reinforcements will be provided with the D&M submittal to the Connecticut Siting Council.

The host building components are in sound condition and accessible for any requisite reinforcements. Final engineered documents for the proposed installation will comply with the requirements of the 2005 Connecticut State Building Code with most current supplements. We conclude that the Verizon proposal can be implemented without adversely affecting the host building at the subject facility.

Respectfully Submitted,

Carlo F. Centore, PE
Principal ~ Structural Engineer

ATTACHMENT 5

ALL-POINTS TECHNOLOGY CORPORATION

WETLAND INVESTIGATION

June 2, 2014

Verizon Wireless
99 East River Drive
East Hartford, CT 06108

APT Project No.: CT1412090

Attn: Alexandria Carter

Re: Proposed Milford South 4 Facility
58 Robinson Boulevard
Orange, Connecticut

Dear Ms. Carter,

All-Points Technology Corporation, P.C. ("APT") understands that a wireless telecommunications facility ("Facility") is proposed by Verizon Wireless at 58 Robinson Boulevard in Orange, Connecticut ("Subject Property"). At your request, Dean Gustafson, a Connecticut registered Professional Soil Scientist with APT conducted an inspection of the Subject Property on April 28, 2014 to determine the presence or absence of wetlands and watercourses within approximately 200 feet of proposed development activities ("Study Area"). The delineation methodology followed was consistent with both the Connecticut Inland Wetlands and Watercourses Act (IWWA) and the *Corps of Engineers Wetland Delineation Manual* (1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, Version 2.0 (January 2012). The results of this wetland investigation are provided below.

Site and Project Description:

The Subject Property consists of an approximately 7.4-acre developed industrial parcel. The area proposed for the wireless communications Facility is located on the roof of an industrial building with an equipment shelter to be located in a paved area along the north side of the building. Access to the Facility is proposed along the existing paved drive. The Study Area is dominated by the existing industrial development and a forested area associated with the Oyster River. The surrounding land use generally consists of industrial and residential development.

One wetland area was delineated within the Study Area consisting of a small detention basin and forested floodplain wetlands bordering the Oyster River. Please refer to the enclosed Wetland Delineation Map for the approximate location of the identified wetland resource area. Wetlands were marked with pink and blue plastic flagging tape numbered with the following sequence: WF 1 to 7 (loop) and WF 8 to 22. General weather conditions encountered during the April inspection included mid 50° F temperatures with sunny skies.

Soil Description:

Soil types encountered throughout the Study Area were generally consistent with digitally available soil survey information obtained from the Natural Resources Conservation Service ("NRCS")[1]. Wetland soils were field identified to consist of Saco silt loam, an alluvial soil associated with the Oyster River floodplain. The non-wetland soils were examined along the wetland boundary and more distant upland areas during the delineation, including the proposed Facility location. They are dominated by Agawam fine sandy loam, Udorthents and Urban land. Detailed descriptions of wetland and upland soil types are provided below.

Wetland Soils:

The **Saco** series consists of very deep, very poorly drained soils formed in silty alluvial deposits derived mostly from granite, gneiss, schist, shale and sandstone. They are nearly level soils on floodplains along rivers and streams subject to frequent flooding. The thickness and number of horizons below the A horizon is variable and corresponds to the thickness and variability of the alluvial deposits.

Upland Soils:

The **Agawam** series consists of very deep, well drained soils formed in a loamy mantle over sandy, water deposited materials. They are level to steep soils on outwash plains and high stream terraces. Most areas are on slopes that are less than 15 percent. Steeper slopes are on terrace escarpments and steep sides of gullies in dissected outwash plains.

Udorthents is a miscellaneous land type used to denote moderately well to excessively drained earthen material which has been so disturbed by cutting, filling, or grading that the original soil profile can no longer be discerned.

Urban land is a miscellaneous land type consisting mostly of buildings, paved roads and parking lots. Typically included with this unit are small, intermingled areas disturbed by cutting, filling, or grading such that the original soil profile can no longer be discerned.

Wetlands Discussion:

Wetland 1 Classification Summary:

Wetland 1[2] (WF 1 to 7 [loop] & 8 to 22)	**System** Palustrine	**Subsystem**	**Class** Forested	**Subclass** Broad-leaved Deciduous	**Water Regime** Seasonally Flooded	**Special Modifier**
Watercourse Type (Oyster River)	Perennial ☒	Intermittent ☐	Tidal ☐	**Special Aquatic Habitat** (None)	Vernal Pool ☐	Other ☐

[1] NRCS Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/, accessed on April 23, 2014.

[2] Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Jamestown, ND: Northern Prairie Wildlife Research Center Online. http://www.npwrc.usgs.gov/resource/wetlands/classwet/index.htm - contents.

Photo 1: Detention basin.

Photo 2: Oyster River and bordering floodplain.

Wetland 1 Description:

Wetland 1 is predominately a forested floodplain system associated with the Oyster River, located along the north and east sides of the Subject Property. The Oyster River generally flows north to south, with a relatively broad bordering forested floodplain in the northern portion of the Subject Property. As the river flows along the east property boundary, the stream is channelized as development from the east (residential rear yards) and west (Subject Property's industrial development) constrain the wetland system resulting in minimal bordering floodplain wetlands and some of the stream banks being armored. A detention basin (wetland flags 1 to 7) that treats stormwater from Robinson Boulevard and the northwest portion of the Subject Property is located adjacent to the Oyster River wetland system in the northwest corner of the property. Stormwater generated by the existing Subject Property development also discharges to the Oyster River along the east side of the development in a couple of locations.

Wetland 1 Dominant Vegetation:

Dominant Wetland Species Common Name (Latin Name)	**Dominant Adjacent Upland Species** Common Name (Latin Name)
Tulip Poplar (Liriodendron tulipifera)	American Beech (Fagus grandifolia)
Red Maple (Acer rubrum)	Tulip Poplar (Liriodendron tulipifera)
Yellow Birch (Betula alleghaniensis)	Red Maple (Acer rubrum)
Ironwood (Carpinus caroliniana)	Sycamore (Platanus occidentalis)
Multiflora Rose* (Rosa multiflora)	Multiflora Rose* (Rosa multiflora)
Northern Arrow-wood (Viburnum recognitum)	Asiatic Bittersweet* (Celastrus orbiculatus)
Winged Euonymus* (Euonymus alata)	Winged Euonymus* (Euonymus alata)
Silky Dogwood (Cornus amomum)	Skunk Cabbage (Symplocarpus foetidus)
Asiatic Bittersweet* (Celastrus orbiculatus)	
Highbush Blueberry (Vaccinium corymbosum)	
Winterberry (Ilex verticillata)	
Trout Lily (Erythronium americanum)	
Skunk Cabbage (Symplocarpus foetidus)	

* denotes Connecticut Invasive Plants Council invasive species

Summary:

Based on a review of the Site/Site Survey Plan prepared by Centek Engineering (Sheet No. C-1, latest revision date 05/14/14), no direct impact to wetlands or watercourses are associated with the proposed Verizon Wireless development. The proposed equipment shelter is located 65± feet southwest of Wetland 1 (northeast equipment shelter corner to wetland flag WF 16). However, no temporary impacts to this nearby wetland are anticipated provided sedimentation and erosion controls (particularly protection of nearby catch basins in the adjoining paved parking area) are designed, installed and maintained during construction activities in accordance with the *2002 Connecticut Guidelines For Soil Erosion and Sediment Control*. Long term secondary impacts to wetland/watercourse resources possibly associated with the operation of this Facility are minimized by the fact the proposed Facility is located on an existing industrial development with high level of human activity, the Facility will not encroach closer to the wetland system than the existing development footprint, it is unmanned, it will not create additional impervious surfaces, and it creates minimal traffic. Therefore, it is APT's opinion that the proposed Verizon Wireless development will not result in a likely adverse impact to wetland or watercourse resources.

In addition, as no direct impact to federal wetlands would result from Verizon Wireless' proposed development activities, a Finding of No Significant Impact ("FONSI") is issued since **no significant change in surface features** (e.g., wetland fill, deforestation or water diversion) would result in accordance with National Environmental Policy Act ("NEPA") Categorical Exclusion checklist item 7.

If you have any questions regarding the above-referenced information, please feel free to contact me by telephone at (860) 663-1697 ext. 201 or via email at dgustafson@allpointstech.com.

Sincerely,

All-Points Technology Corporation, P.C.

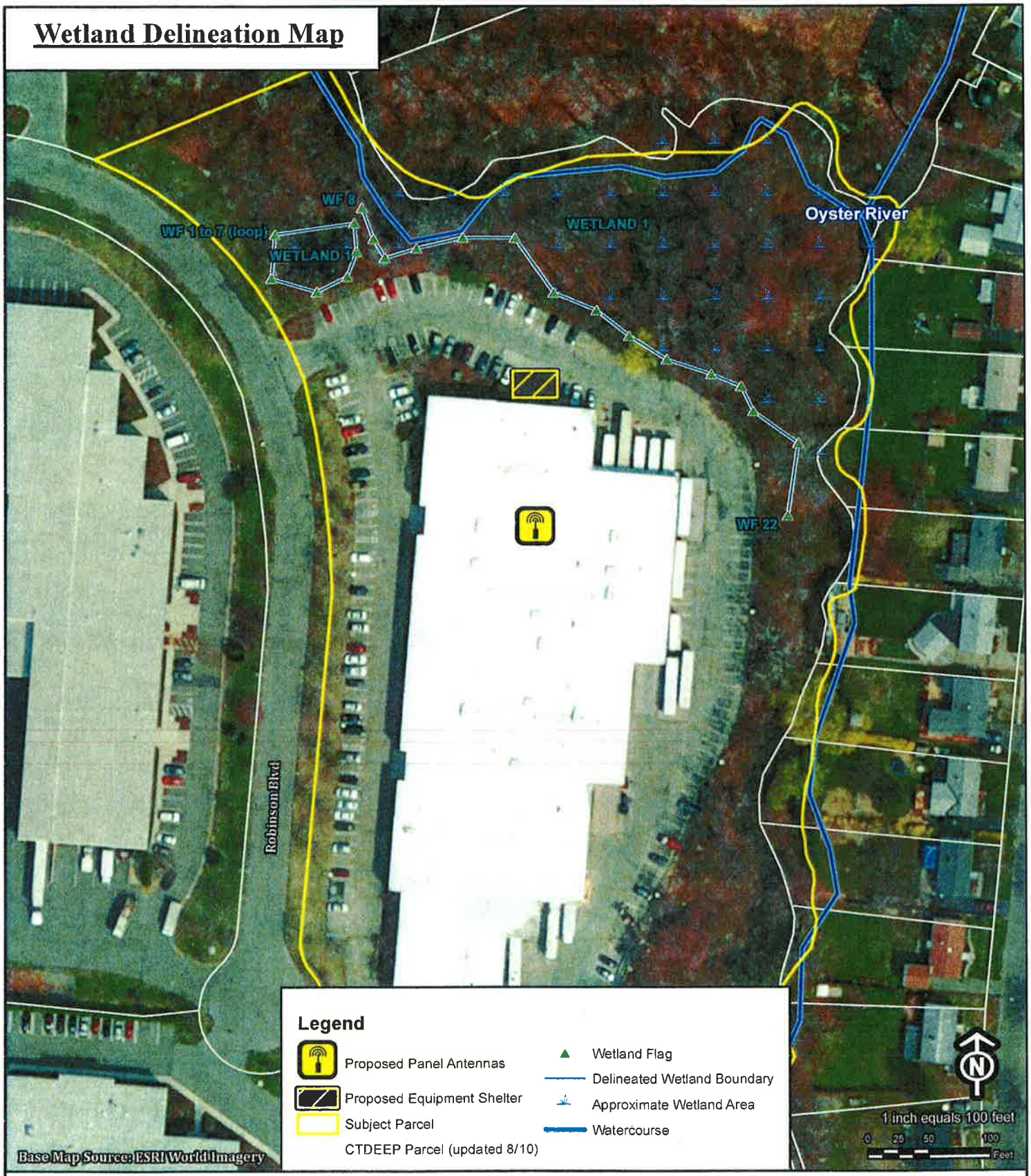
Dean Gustafson

Professional Soil Scientist

Enclosure

Wetland Delineation Map

Wetland Delineation Map



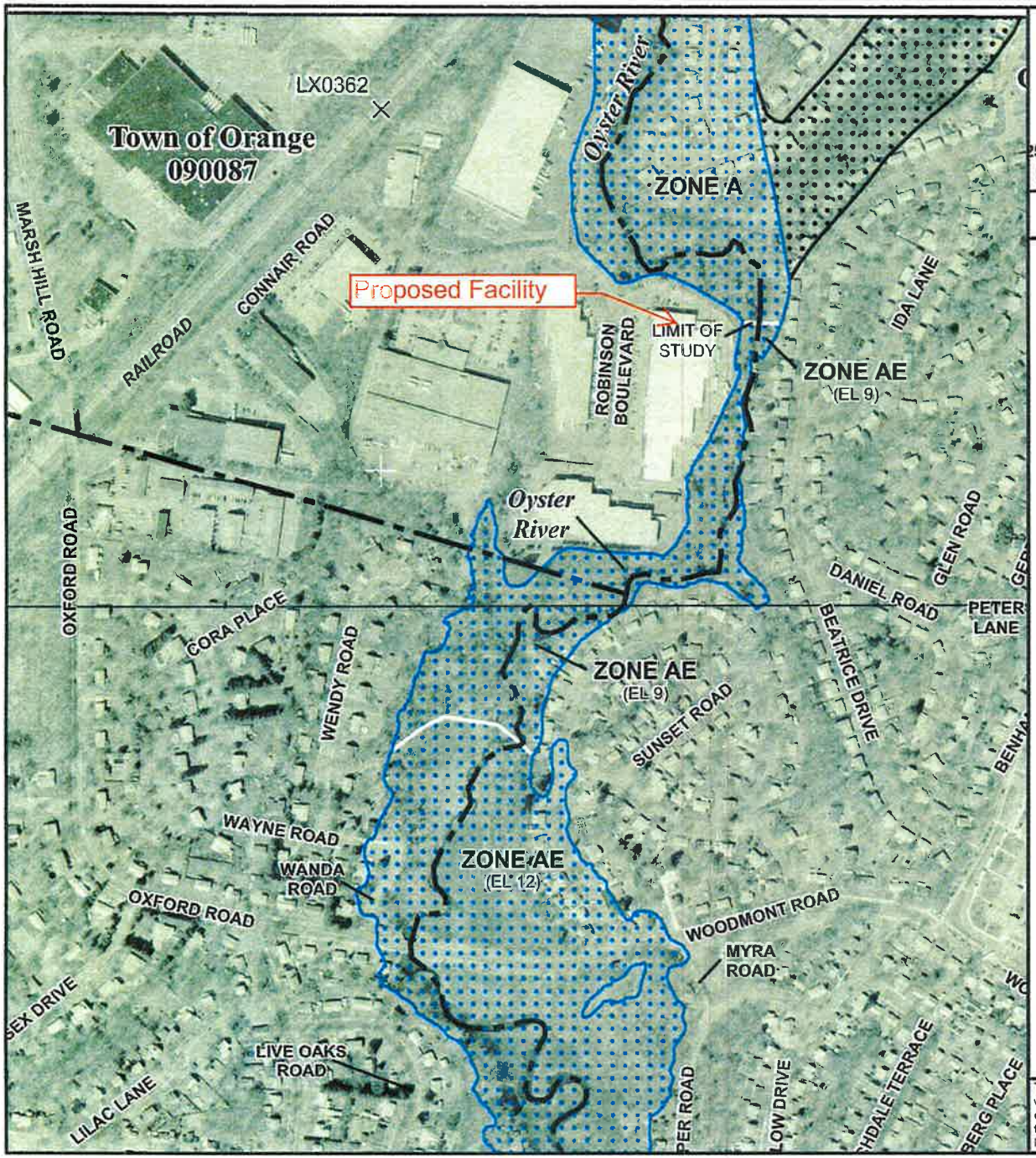
Proposed Verizon Milford South 4 Facility
58 Robison Blvd
Orange, Connecticut

verizonwireless

ALL-POINTS TECHNOLOGY CORPORATION

Saturday, May 31, 2014

Path: C:\All_Points_Tech\Projects\Client\Verizon\MilfordS4\GIS\Maps\CT_Wetlands_Delineation_Map.mxd



MAP SCALE 1" = 500'

250 0 500 1000 FEET

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0551J

FIRM

FLOOD INSURANCE RATE MAP

NEW HAVEN COUNTY, CONNECTICUT (ALL JURISDICTIONS)

PANEL 551 OF 635

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MILFORD, CITY OF	090082	0551	J
ORANGE, TOWN OF	090087	0551	J
WEST HAVEN, CITY OF	090092	0551	J
WOODMONT, BOROUGH OF	090168	0551	J

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
09009C0551J

MAP REVISED
JULY 8, 2013

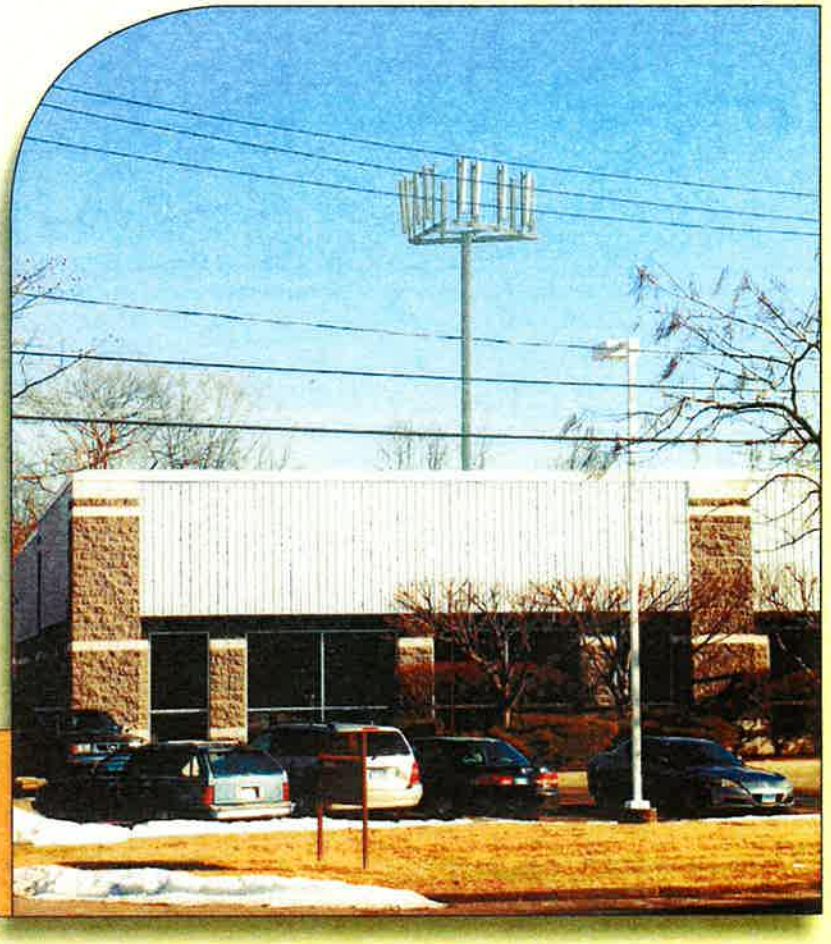
Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

ATTACHMENT 6

Visibility Analysis

MILFORD SOUTH 4
58 ROBINSON BLVD
ORANGE, CT



Prepared in May 2014 by:
All-Points Technology Corporation, P.C.
3 Saddlebrook Drive
Killingworth, CT 06141

Prepared for Verizon Wireless

ALL-POINTS
TECHNOLOGY CORPORATION

Project Introduction

Cellco Partnership (d/b/a "Verizon Wireless") proposes to construct and operate a wireless telecommunications facility ("Facility") at 58 Robinson Boulevard in the Town of Orange, New Haven County, Connecticut (identified herein as the "Host Property"). All-Points Technology Corporation, P.C. ("APT") prepared this Visibility Analysis to evaluate views associated with the proposed Facility with a one mile radius of the proposed site location ("Study Area").

Site Description and Setting

The 7.4± acre Host Property is located at the east end of Robinson Boulevard, within a commercial/industrial complex south of Interstate 95 and the MetroNorth rail line. The Milford Assessor's Office identifies the Host Property as Map 3, Block 1, Lots 27 and 28. The Host Property is developed with a large industrial concrete building and parking areas. Residential development occurs to the north, south and east.

The proposed Facility would be located on the 25.9-foot tall, flat-roofed building and would include a 36.9-foot tall monopole that would extend to an overall height of 62.8 feet above ground level ("AGL"). A 12-foot by 24-foot equipment shelter would be located north of the building.

The Study Area consists of a mix of commercial/industrial development and the transportation corridor (to the west) and residential homes to the south, north and east. In addition to the Town of Orange, the Study Area also includes parts of the neighboring municipalities of West Haven and Milford.

METHODOLOGY

APT used the combination of a predictive computer model and in-field analysis to evaluate the visibility associated with the proposed Facility on both a quantitative and qualitative basis. The predictive model provides a measurable assessment of potential visibility throughout the entire Study Area including private properties and other areas inaccessible for direct observations. The in-field analyses included a reconnaissance of the Study Area to record existing conditions and provide photographic documentation from publicly accessible areas. A description of the procedures used in the analysis is provided below.

Preliminary Computer Modeling

Two computer modeling tools are used to calculate those areas from which at least the top of the proposed Facility is estimated to be visible: IDRISI image analysis program (developed by Clark Labs, Clark University) and ArcGIS®, developed by Environmental Systems Research Institute, Inc. Project- and Study Area-specific data were incorporated into the computer model, including the Facility's location, height, and ground elevation, as well as the surrounding topography, vegetation and existing structures,

all of which can block direct lines of sight. Information used in the model included LiDAR[1]-based digital elevation data and customized land use data layers developed specifically for this analysis. The LiDAR-based Digital Elevation Model ("DEM") represents topographic information for the state of Connecticut that was derived through the spatial interpolation of airborne LiDAR-based data collected in the year 2000 and has a horizontal resolution of ten (10) feet. In addition, multiple land use data layers were created from National Agricultural Imagery Program (USDA) aerial photography (1-foot resolution, flown in 2012) using IDRISI image processing tools. The IDRISI 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. This information is manually cross-checked with the recent USGS topographic land characteristics to quality assure the imaging analysis.

The Study Area includes a total of approximately 2,010 acres. The tree canopy within the Study Area consists mainly of mixed deciduous hardwood species, and occupies approximately 525 acres (representing approximately 26% of the Study Area). Topography within the Study Area ranges in ground elevations from approximately 10 feet AMSL to 160 feet AMSL and is generally characterized as level to gently rolling terrain.

Once the data layers were entered, image processing tools were applied and overlaid onto USGS topographic base maps and aerial photographs to achieve an estimate of locations where the Facility might be visible. First, only the topography data layer (DEM) was incorporated to evaluate potential visibility with no intervening vegetative screening. The initial omission of the forest and structure cover data layers results in an excessive over-prediction, but provides an opportunity to identify and evaluate those areas with potentially direct sight lines toward the Facility. Eliminating the tree canopy and structures altogether as performed in the preliminary analysis exaggerates areas of visibility because it assumes unobstructed sight lines everywhere but in those locations where intervening topography rises above the height of the proposed Facility. However, using this technique not only allows for an initial identification of direct sight lines, but also to gain some insight regarding seasonal views when the leaves are not on the trees.

Purposely low average tree canopy and structure heights of 45 and 15 feet, respectively, were subsequently incorporated and added to the DEM for a second iteration of the viewshed map. The model was 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, vegetation and structures data. The results of the preliminary analysis provide a representation of those areas where portions of the Facility may potentially be visible to the human eye without the aid of magnification, based on a viewer eye-height of 5 feet above the ground and the combination of intervening topography, the tree canopy (year-round) and tree trunks (seasonally, when the leaves are off the deciduous trees), buildings and other infrastructure. The computer model then outputs shaded areas of predicted visibility that identify locations from within the Study Area where the proposed Facility may potentially be visible. The Facility however may not necessarily be visible from all locations within those shaded areas. It is important to note that the computer model cannot account for mass density, the height, diameter and branching variability of individual trees, or the degradation of views that occur with distance. In addition, each point – or pixel -

[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.

represents about one square meter in area, and thus cannot predict visibility from all viewpoints through all possible obstacles. Although large portions of the predicted viewshed may theoretically offer visibility of the Facility, because of these unavoidable limitations the quality of those views may not be sufficient for the human eye to recognize the tower or discriminate it from other surrounding objects. Visibility also varies seasonally with increased, albeit obstructed, views occurring during "leaf-off" conditions. Beyond the density of woodlands found within the given Study Area, each individual tree has its own unique trunk, pole timber and branching pattern characteristics that provide varying degrees of screening in leafless conditions which cannot be adequately modeled. Thus, modeling for seasonal variations of visibility generally over-predicts the viewshed in "leaf-off" conditions, even when incorporating conservative constraints into the model (i.e., assuming trees are simply vertical poles with no distinct branching pattern). The preliminary viewshed maps are then used in the field to assist in the visibility evaluation.

Additional data was reviewed and incorporated into the visibility analysis, including protected private and public open space, parks, recreational facilities, hiking trails, schools, and historic districts. No trail systems or scenic roads are located within the Study Area.

In-Field Activities

To supplement the results of the computer modeling efforts, APT conducted field reconnaissance of the Study Area on January 9 and April 24, 2014 to photo-document lines of sight towards the Host Property building. Because of the proposed Facility's short height above the existing building, and the resultant small area of predicted visibility, a balloon float was not necessary for obtaining representative photographs to simulate.

During the in-field activities, several trees and buildings were randomly surveyed using a Suunto Tandem clinometer to ascertain their heights. The average canopy height was developed based on these measurements and comparative observations, in this case approximately 60 feet AGL. The average building height was assigned a conservative value of 20 feet AGL.

At each photo location, the geographic coordinates of the camera's position were logged using global positioning system ("GPS") equipment. Photographs were taken with a Nikon D-3000 digital camera body and Nikon 18 to 135 mm zoom lens, with the lens set to 50 mm. A 50 mm focal length best approximates the relation of sizes between objects similar to what the human eye might perceive.

> *"The lens that most closely approximates the view of the unaided human eye is known as the normal focal-length lens. For the 35 mm camera format, which gives a 24x36 mm image, the normal focal length is about 50 mm."*[2]

Information obtained during the field reconnaissance was incorporated into the mapping data layers, including general observations of the building and its surroundings, the photo locations, and areas that experienced recent land use changes. The revised average tree canopy height (60 feet AGL) and structures (20 feet AGL) data were merged with the DEM and added to the base ground elevations in the model. Once the additional data was integrated into the model, APT re-calculated the visibility of the proposed Facility from within the Study Area to produce the final visibility map.

[2] Warren, Bruce. Photography, West Publishing Company, Eagan, MN, c. 1993, (page 70).

Photographic simulations were generated to portray scaled renderings of the proposed Facility from four representative locations where the proposed Facility would be visible either on a year-round or seasonal basis. Using field data, site plan information and 3-dimension (3D) modeling software, spatially referenced models of the site area and Facility were generated and merged. The geographic coordinates obtained in the field for the photograph locations were incorporated into the model to produce virtual camera positions within the spatial 3D model by linking the project photography with the 3D computer model using existing structures (such as telephone/electric distribution poles, light poles and buildings/homes) so their global position can be verified. The information recorded by the photographer was used to set up a virtual camera within the 3D computer model replicating the exact position of the camera when in the field. Photo simulations were then created using a combination of renderings generated in the 3D model and photo rendering software programs. As a final step, the accuracy and scale of the simulation is tested against photographs of existing telecommunication facilities with recorded camera position, focal lengths, photographic locations, and site locations.

Photo-documentation of existing conditions and photo-simulations of the proposed Facility are presented in the attachment at the end of this report. For presentation purposes in this report, the photographs were taken with a 50 mm focal length and produced in an approximate 7-inch by 10.5-inch format. The simulations provide a representation of the Facility under similar settings as those encountered during the field reconnaissance. Views of the Facility can change substantially throughout the season and are dependent on environmental conditions, including (but not necessarily limited to) weather, light conditions, seasons, time of day, and the viewer location.

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, the distance from where the photo was taken relative to the proposed Facility and the general characteristics of that view. The photo locations are depicted on the visibility analysis maps provided as attachments to this report.

View	Location	Orientation	Distance To Site	View Characteristics
1	Adjacent to Host Property	East	±320 Feet	Year-round
2	Robinson Boulevard	Southeast	±0.19 Mile	Year-round
3	Woodvale Road	North	±0.19 Mile	Seasonal
4	Beatrice Drive	West	±0.11 Mile	Seasonal

Visibility Analysis Results

Results of this analysis are graphically displayed on the viewshed maps provided in the attachment at the end of this report. The maps include a photolog that depicts the photo locations.

In general, views of the proposed Facility would be limited to locations within less than 0.25 mile of the Host Property. The Facility's low height combined with the buffer of mature trees surrounding three sides of the Host Property effectively minimize significant views from residential areas to the north, east and south. Views are a bit more open immediately to the west, where commercial/industrial development occurs.

Other than from locations on and immediately surrounding the Host Property, the proposed Facility would not be substantially visible on a year-round basis (predicted over a total of approximately 21) acres. Being located within a commercial/industrial park setting, numerous potential visual receptors are other business tenants (see photographs 1 and 2 for example). When the leaves are off the trees, seasonal views through or around intervening trees and structures are anticipated to occur over an additional 34± acres, extending slightly into nearby residential neighborhoods (see photos 4 and 5).

Proximity to Schools And Commercial Child Day Care Centers

No schools or commercial child day care centers are located within 250 feet of the Host Property. The nearest school is Woodhouse Academy, located at 4 Oxford Road in Milford, approximately 0.3 mile to the southwest. The nearest commercial child day care center is Bright Horizons, located at 230 West Campus Drive in Orange, approximately 0.57 mile to the northwest. No views of the Facility are anticipated from either of these locations.

LIMITATIONS

Private property and otherwise inaccessible locations on the viewshed maps depicting the proposed Facility as potentially visible assume a viewer eye-height of 5 feet above the ground with intervening topography, an average tree canopy height of 60 feet and average structure height of 20 feet. This analysis may not necessarily account for all visible locations, as it is based on the combination of computer modeling, incorporating 2012 aerial photographs, and in-field observations from publicly-accessible locations. No access to private properties was provided to APT personnel. This analysis does not claim to depict the only areas, or all locations, where visibility may occur; it is intended to provide a representation of those areas where the Facility is likely to be seen.

The simulations provide a representation of the Facility under similar settings as those encountered during the field reconnaissance. 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. Weather conditions on the days of the reconnaissance included mostly sunny skies and, combined with the leaf-off conditions, the photo-simulations presented in this report provide an accurate portrayal of the Facility during comparable conditions.

ATTACHMENTS

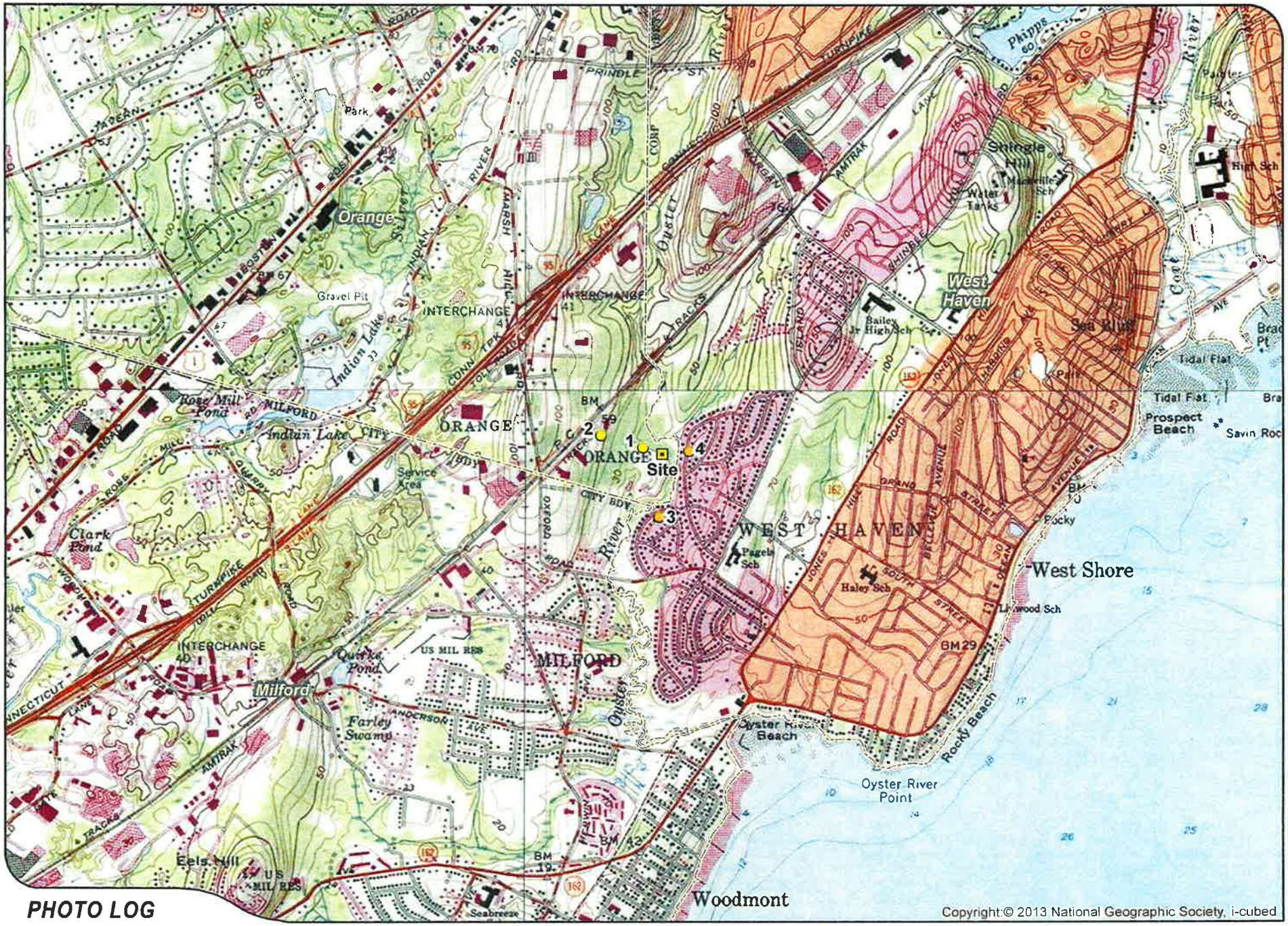


PHOTO LOG

Legend

Site · Seasonal Visibility · Year-Round Visibility · Municipal Boundary

1,000 500 0 1,000 Feet

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	ADJACENT TO HOST PROPERTY	EAST	+/- 320 FEET	YEAR ROUND

ALL-POINTS TECHNOLOGY CORPORATION

verizon wireless

SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	**ADJACENT TO HOST PROPERTY**	**EAST**	**+/- 320 FEET**	**YEAR ROUND**

ALL-POINTS TECHNOLOGY CORPORATION

verizonwireless

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	ROBINSON BOULEVARD	SOUTHEAST	+/- 0.19 MILE	YEAR ROUND

ALL-POINTS TECHNOLOGY CORPORATION

verizon

SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	**ROBINSON BOULEVARD**	**SOUTHEAST**	**+/- 0.19 MILE**	**YEAR ROUND**

ALL-POINTS TECHNOLOGY CORPORATION

verizon wireless

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	WOODVALE ROAD	NORTH	+/- 0.19 MILE	SEASONAL

ALL-POINTS TECHNOLOGY CORPORATION

verizon wireless

SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	**WOODVALE ROAD**	**NORTH**	**+/- 0.19 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

verizon wireless

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	BEATRICE DRIVE	WEST	+/- 0.11 MILE	SEASONAL

ALL-POINTS TECHNOLOGY CORPORATION

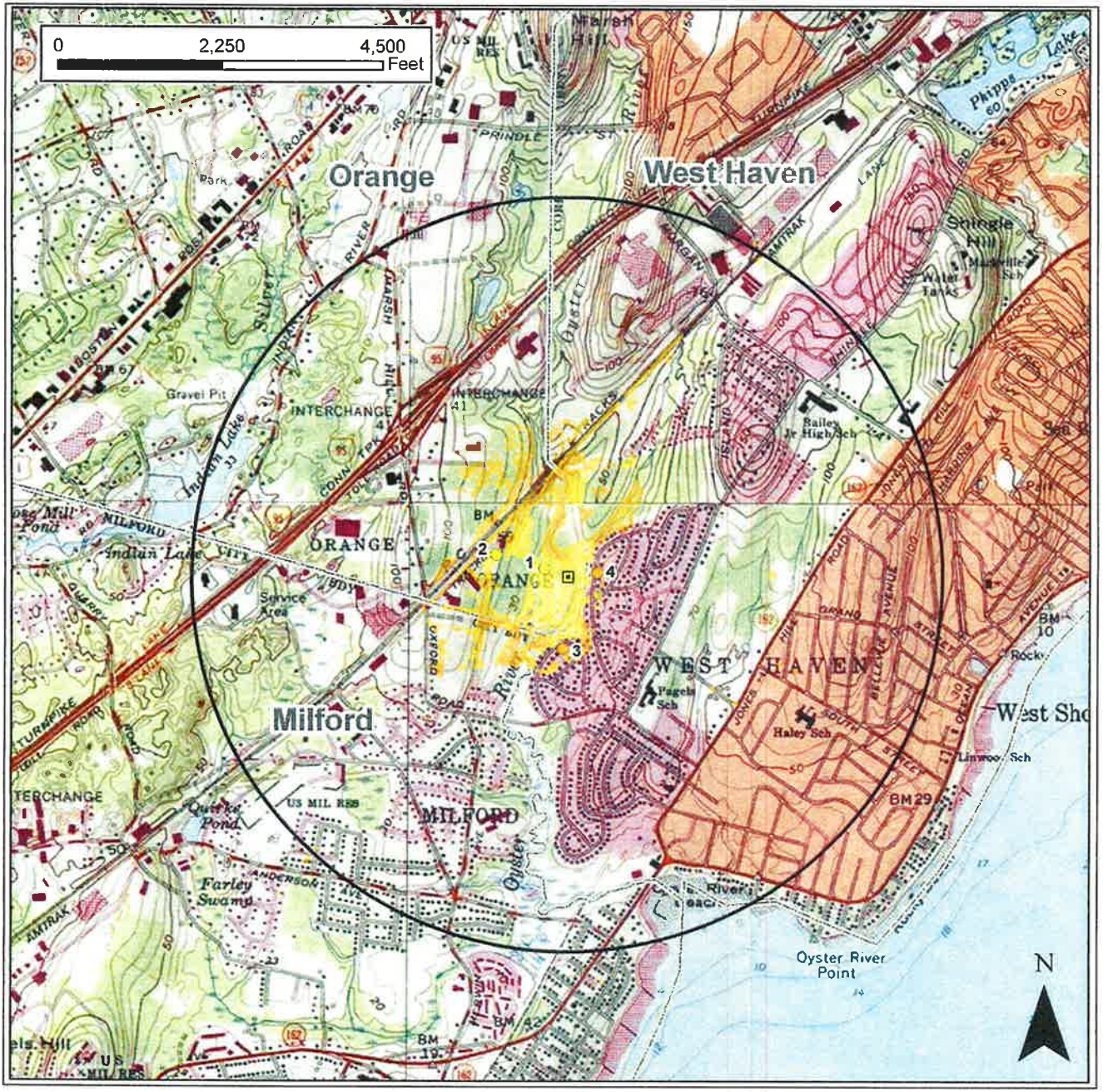
verizon wireless

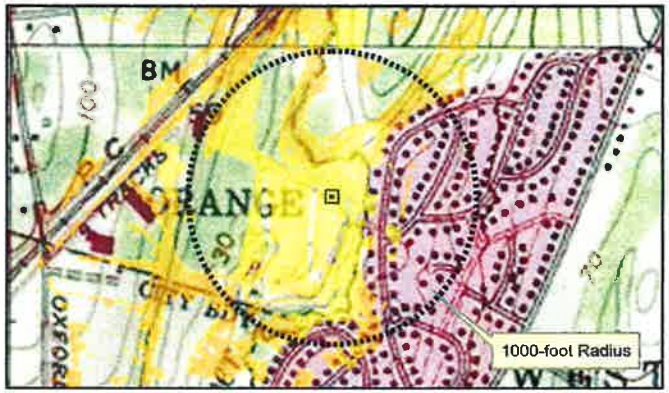
SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	**BEATRICE DRIVE**	**WEST**	**+/- 0.11 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

verizon wireless





Viewshed Map – Topo Base

Proposed Wireless Telecommunications Facility
CT1412090 – Milford South 4
58 Robinson Boulevard, Orange, CT

Proposed facility height is 66± feet AGL.
Existing tree canopy height estimated at 60± feet and structures at 20± feet.
Study area encompasses a one-mile radius and includes 2,010 acres of land.

Map compiled 5/21/2014

Map information field verified by APT on 1/9/2014 and 4/28/2014.

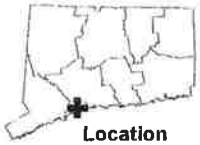
Only those resources located within the extent of the map are depicted. For a complete list of data sources consulted for this analysis, please refer to the Documentation Page.

Legend

- Proposed Tower

Photo Locations

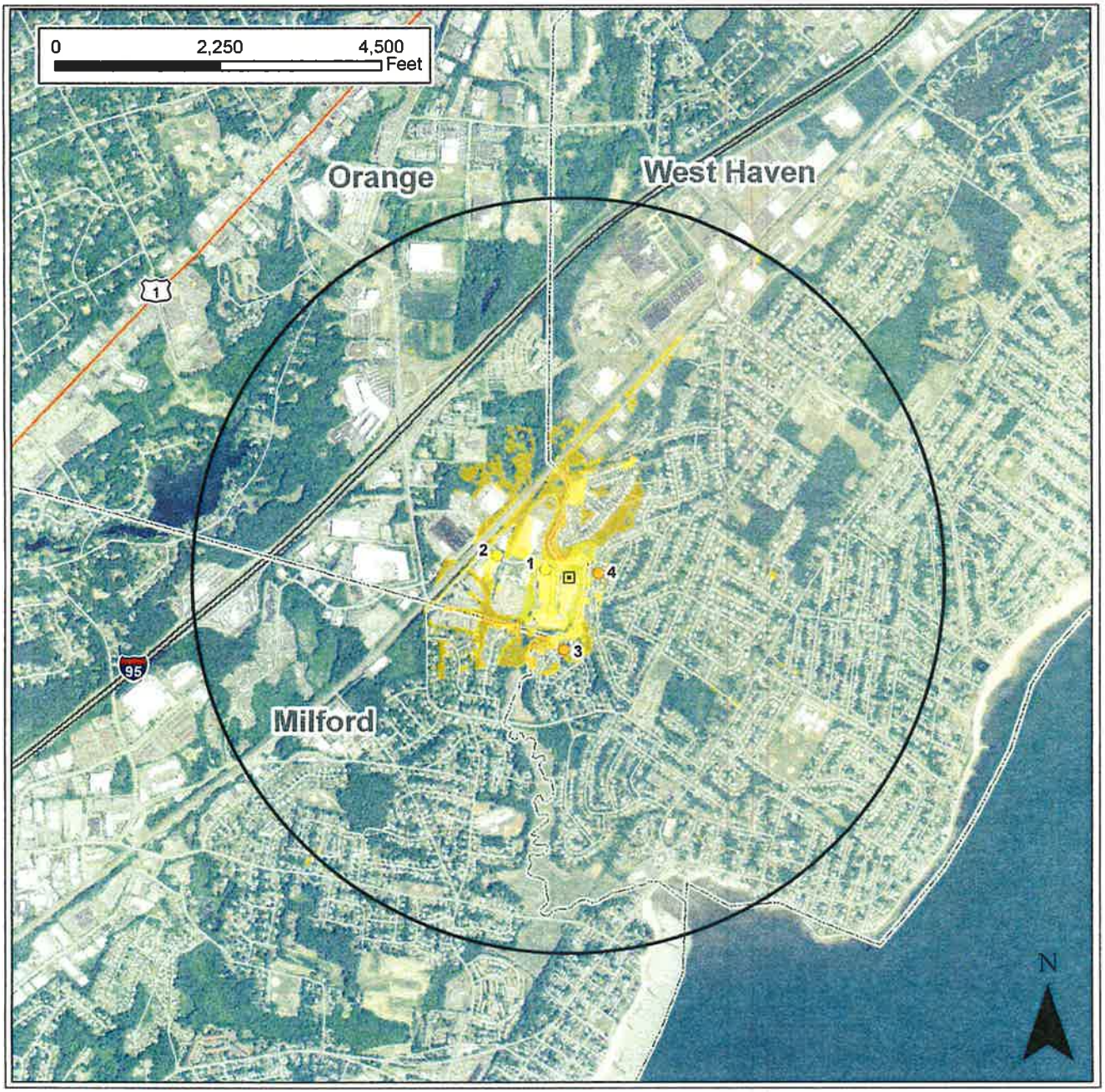
- Seasonal Views
- Year-round Views
- Predicted Seasonal Visibility (34 Acres)
- Predicted Year-Round Visibility (21 Acres)
- Towns
- 1-Mile Study Area

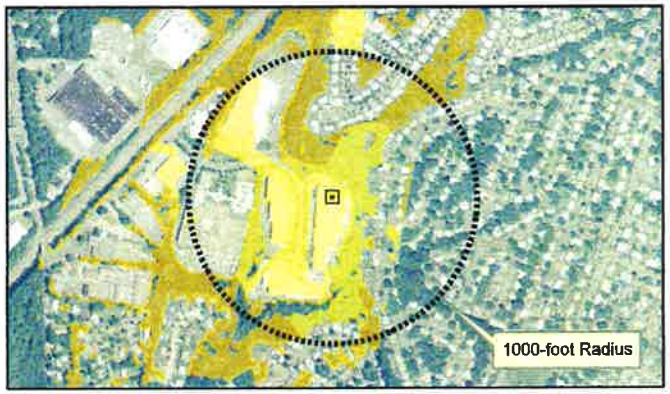


Location

verizonwireless

ALL-POINTS TECHNOLOGY CORPORATION





Viewshed Map – Aerial Base

Proposed Wireless Telecommunications Facility
CT1412090 – Milford South 4
58 Robinson Boulevard, Orange, CT

Proposed facility height is 66± feet AGL.
Existing tree canopy height estimated at 60± feet and structures at 20± feet.
Study area encompasses a one-mile radius and includes 2,010 acres of land.

Map compiled 5/21/2014

Map information field verified by APT on 1/9/2014 and 4/28/2014.

Only those resources located within the extent of the map are depicted. For a complete list of data sources consulted for this analysis, please refer to the Documentation Page.

Legend

- Proposed Tower

Photo Locations

- Seasonal Views
- Year-round Views
- Predicted Seasonal Visibility (34 Acres)
- Predicted Year-Round Visibility (21 Acres)
- Towns
- 1-Mile Study Area

Location

verizonwireless

All-Points Technology Corporation

DOCUMENTATION

SOURCES CONSULTED FOR VISBILITY ANALYSIS MAPS
58 Robinson Boulevard
Orange, Connecticut

Physical Geography / Background Data

Center for Land Use Education and Research, University of Connecticut (http://clear.uconn.edu)
- *Land Use / Land Cover (2006)
- *Coniferous and Deciduous Forest (2006)
- *LiDAR data – topography (2000)

United States Geological Survey
- *USGS topographic quadrangle maps – Woodmont, New Haven, Ansonia, and Milford (1984)

National Resource Conservation Service
- *NAIP aerial photography (2012)

Heritage Consultants
- ^State Scenic Highways (based on Department of Transportation data, updated monthly)
- ^Municipal Scenic Roads (by website, phone and/or email/fax - current)

Cultural Resources

Heritage Consultants
- ^National Register
- ^ Local Survey Data

Dedicated Open Space & Recreation Areas

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 Forest & Parks Association
- ^Connecticut Walk Book West – The Guide to the Blue-Blazed Hiking Trails of Western Connecticut, 19th Edition, 2006.

Other

- ^ConnDOT Scenic Strips (based on Department of Transportation data)

*Available to the public in GIS-compatible format (some require fees).
^ Data not available to general public in GIS format. Reviewed independently and, where applicable, GIS data later prepared specifically for this Study Area.

LIMITATIONS

The visibility analysis map(s) presented in this report depict areas where the proposed Facility may potentially be visible to the human eye without the aid of magnification based on a viewer eye-height of 5 feet above the ground and intervening topography, an assumed tree canopy height of 60 feet, and average structure height of 20 feet. This analysis may not necessarily account for all visible locations, as it is based on the combination of computer modeling, incorporating 2012 aerial photographs, and in-field observations from publicly-accessible locations. No access to private properties beyond the host Property was provided to APT personnel. This analysis does not claim to depict the only areas, or all locations, where visibility may occur; it is intended to provide a representation of those areas where the Facility is likely to be seen.

The photo-simulations in this report are provided for visual representation only. Actual visibility depends on various environmental conditions, including (but not necessarily limited to) weather, season, time of day, and viewer location.

ATTACHMENT 7

C Squared Systems, LLC
65 Dartmouth Drive
Auburn, NH 03032
(603) 644-2800
support@csquaredsystems.com

Calculated Radio Frequency Emissions

Milford South 4 CT

58 Robinson Blvd, Orange, CT 06477

April 24, 2014

Table of Contents

List of Tables

List of Figures

C2Systems

1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed installation of Verizon Wireless antennas on a monopole tower to be located on the rooftop of the building located at 58 Robinson Blvd in Orange, CT. The coordinates of the proposed tower are 41° 14' 50.02" N, 72° 59' 29.03" W.

Verizon Wireless is proposing the following:

1) Install a 35' monopole tower on the existing building rooftop;
2) Install three 750 MHz antennas for their LTE network (one per sector);
3) Install three 850 MHz antennas for their Cellular network (one per sector);
4) Install three 1900 MHz antennas for their PCS network (one per sector);
5) Install three 2100 MHz antennas for their LTE network (one per sector).

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

The FCC general population/uncontrolled limits set the maximum exposure to which most people may be subjected. General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm^2). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment B of this report.

Higher exposure limits are permitted under the occupational/controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure, and they must be able to exercise control over their exposure. General population/uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals. Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population/uncontrolled exposure and for occupational/controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

3. RF Exposure Prediction Methods

The emission field calculation results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{Power Density} = \left(\frac{1.6^2 \times EIRP}{4\pi \times R^2} \right) \times OffBeamLoss$$

Where:

EIRP = Effective Isotropic Radiated Power

R = Radial Distance = $\sqrt{(H^2 + V^2)}$

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Ground reflection factor of 1.6

Off Beam Loss is determined by the selected antenna patterns

These calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. As a result, the predicted signal levels reported below are much higher than the actual signal levels will be from the final site configuration.

4. Calculation Results

Table 1 below outlines the power density information for the site. Due to the directional nature of the antennas in use by Verizon, the majority of the RF power is focused out towards the horizon. As a result, there will be less RF power directed below the antennas relative to the horizon, and consequently lower power density levels around the base of the building. Please refer to Attachment C for the vertical patterns of Verizon's antennas. The calculated results shown in Table 1 include a nominal 10 dB off-beam pattern loss to account for the lower relative gain below the antennas.

Carrier	Antenna Height (Feet)	Operating Frequency (MHz)	Number of Trans.	ERP Per Transmitter (Watts)	Power Density (mw/cm^2)	Limit	%MPE
Verizon	60	751	1	1833	0.0183	0.5007	3.66%
Verizon	60	869	9	526	0.0473	0.5793	8.16%
Verizon	60	1900	7	715	0.0500	1.0000	5.00%
Verizon	60	2120	1	3829	0.0382	1.0000	3.82%
						Total	**20.64%**

Table 1: Carrier Information[1] [2]

[1] The nominal 10 dB off-beam loss factor for Verizon was derived from the specific antennas for this site and their associated antenna patterns, which are presented in Attachment C. Antenna models for Verizon are based on the New Build Antenna Recommendation, dated November 8, 2013.

[2] Please note that %MPE values listed are rounded to two decimal points. The total %MPE listed is a summation of each unrounded contribution. Therefore, summing each rounded value may not reflect the total value listed in the table.

5. Conclusion

The above analysis verifies that emissions from the final site configuration will be below the maximum power density levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. The highest expected percent of Maximum Permissible Exposure at the base of the building is **20.64% of the FCC Uncontrolled/General Population limit.**

As noted in the introduction, obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are more conservative (higher) than the actual signal levels will be from the final site configuration.

6. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.

Daniel L. Goulet
C Squared Systems, LLC

April 24, 2014
Date

Attachment A: References

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

ANSI C95.1-1982, American National Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300 kHz to 100 GHz IEEE-SA Standards Board

IEEE Std C95.3-1991 (Reaff 1997), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave IEEE-SA Standards Board

Attachment B: FCC Limits for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure[3]

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $|E|^2$, $|H|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

(B) Limits for General Population/Uncontrolled Exposure[4]

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $|E|^2$, $|H|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz * Plane-wave equivalent power density

Table 2: FCC Limits for Maximum Permissible Exposure (MPE)

[3] Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

[4] General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

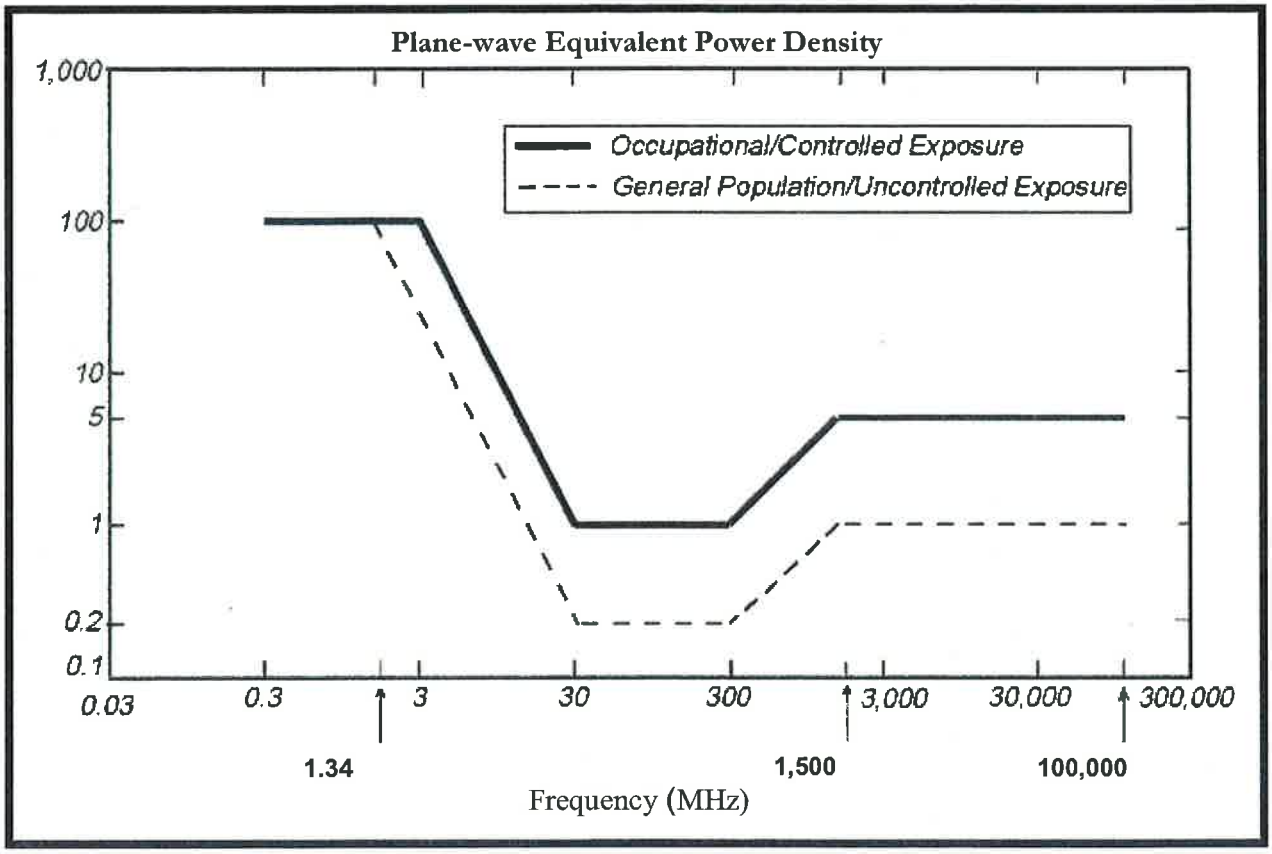
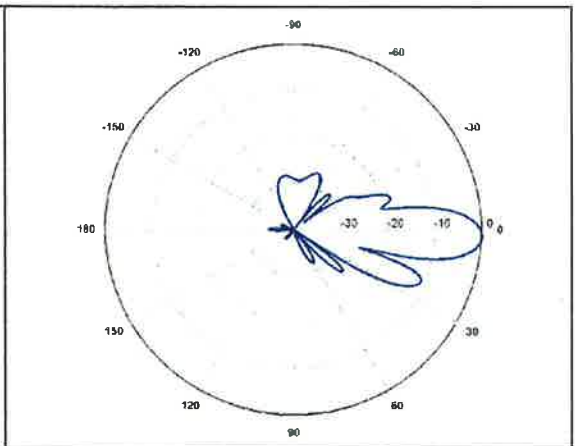


Figure 1: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

Attachment C: Verizon Wireless' Antenna Model Data Sheets and Electrical Patterns

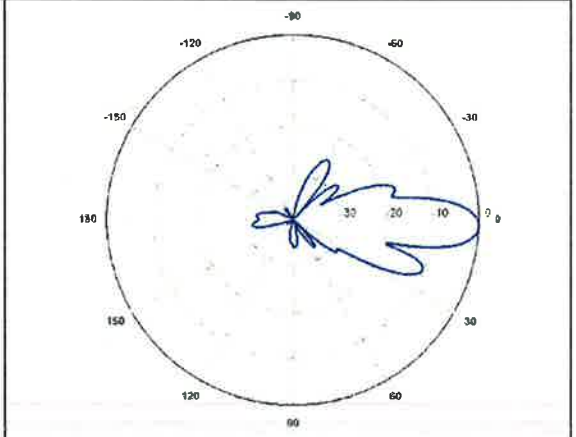
750 MHz

Manufacturer:	Commscope
Model #:	LNX-6514DS-VTM_2
Frequency Band:	698-806 MHz
Gain:	13.6 dBd
Vertical Beamwidth:	12.5°
Horizontal Beamwidth:	65°
Polarization:	±45°
Size L x W x D:	72.7" x 11.9" x 7.1"



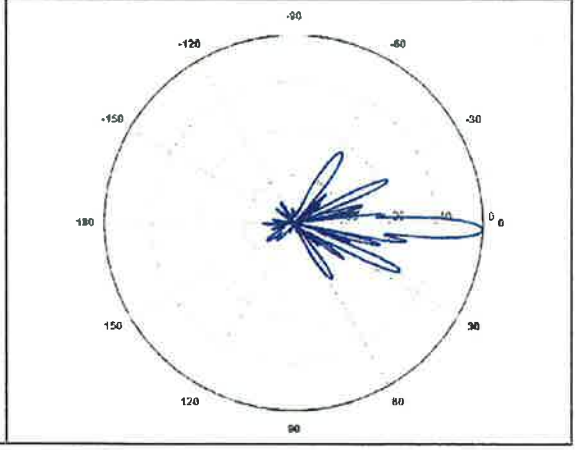
850 MHz

Manufacturer:	Commscope
Model #:	LNX-6514DS-VTM_2
Frequency Band:	806-896 MHz
Gain:	14.2 dBd
Vertical Beamwidth:	11.2°
Horizontal Beamwidth:	65°
Polarization:	±45°
Size L x W x D:	72.7" x 11.9" x 7.1"



1900 MHz

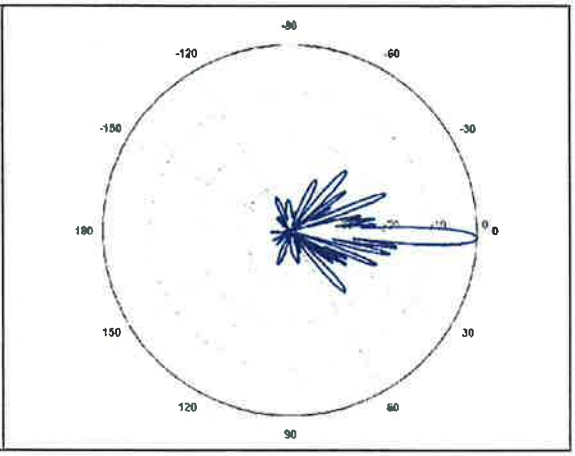
Manufacturer:	Commscope
Model #:	HBX-6517DS-VTM_2
Frequency Band:	1850-1990 MHz
Gain:	16.5 dBd
Vertical Beamwidth:	4.7°
Horizontal Beamwidth:	66°
Polarization:	±45°
Size L x W x D:	74.9" x 6.5" x 3.3"



C2Systems

2100 MHz

Manufacturer:	Commscope
Model #:	HBX-6517DS-VTM_2
Frequency Band:	1920-2180 MHz
Gain:	16.8 dBd
Vertical Beamwidth:	4.4°
Horizontal Beamwidth:	64°
Polarization:	±45°
Size L x W x D:	74.9" x 6.5" x 3.3"



ATTACHMENT 8

```
**************************************************
                    *            Federal Airways & Airspace
*
                    * Summary Report: Alteration Of Existing Structure
*
                    *                 Antenna Structure
*

**************************************************

                    Airspace User: Jaime Laredo

                    File: MILFORD_SOUTH_4_CT

                    Location:  Woodmont, CT
                    Distance:  1.6 Statute Miles
                    Direction: 182° (true bearing)

                    Latitude:  41°-14'-49.99"         Longitude: 72°-
59'-29.09"

                    SITE ELEVATION AMSL.....19.3 ft.
                    STRUCTURE HEIGHT.........66 ft.
                    OVERALL HEIGHT AMSL.....85 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
HVN
       FAR 77.9:    NNR FAR 77.9 IFR Straight-In Notice Criteria for
BDR
       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.

       If the proposed construction is an alteration to an existing
structure,
       notice requirements may be superceded by the item exemptions
listed below.

       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 FAA Co-Location policy does not apply unless the existing structure has
been previously studied by the FAA and has a valid ASN with a DNH ruling. To
take advantage of co-locating an antenna systems on an 'existing' structure
it is recommended that 'only' notice on the existing structure be filed with
the FAA. Once the DNH is received rerun Airspace and enter the ASN is the
space provided.

Notice Criteria found in Title 14 CFR 77.9 applies to the alteration of
existing structures.

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: HVN: TWEED-NEW HAVEN

Type: A RD: 28551.66 RE: 6.3
FAR 77.17(a)(1): DNE
FAR 77.17(a)(2): DNE - Height No Greater Than 200 feet AGL.
VFR Horizontal Surface: DNE
VFR Conical Surface: DNE
VFR Approach Slope: DNE
VFR Transitional Slope: DNE

VFR TRAFFIC PATTERN AIRSPACE FOR: BDR: IGOR I SIKORSKY MEMORIAL
Type: A RD: 46038.8 RE: 6.5
FAR 77.17(a)(1): DNE
FAR 77.17(a)(2): DNE - Greater Than 5.99 NM.
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 1000 ft AMSL

PRIVATE LANDING FACILITIES

FACIL IDENT	TYP	NAME	BEARING To FACIL	RANGE IN NM	DELTA ARP ELEVATION	FAA IFR
CT46	HEL	MILFORD-ALEXANDER	247.18	1.98	+65	
No Impact to Private Landing Facility Structure is beyond notice limit by 7031 feet.						
1CT2	HEL	YALE NEW HAVEN HOSPITAL	36.48	4.23	-134	
No Impact to Private Landing Facility Structure 5 ft below heliport.						

AIR NAVIGATION ELECTRONIC FACILITIES

FAC IDNT	TYPE	ST AT	FREQ	VECTOR	DIST (ft)	DELTA ELEVA	ST	LOCATION	GRND ANGLE	APCH BEAR
HVN	VOR/DME	R	109.8	79.31	29727	+79	CT	NEW HAVEN	.15	

HVN	ATCT	ON	A/G	76.99	30066	-6	CT	TWEED-NEW HAVEN	-.01
HVN	LOCALIZER	I	109.1	71.21	30311	+67	CT	RWY 02 TWEED-NEW	.13 16
BDR	VOR/DME	R	108.8	229.22	48324	+76	CT	BRIDGEPORT	.09
JWE	NDB	I	36	326.00	59419	-486	CT	CLERA	-.47
MAD	VOR/DME	R	110.4	73.46	85759	-135	CT	MADISON	-.09
CCC	VOR/DME	R	117.2	155.42	127316	+0	NY	CALVERTON	0.00
OKX	RADAR WXL	Y		165.85	143446	-136	NY	BRENTWOOD	-.05
QVH	RADAR ARSR	Y	1326.9	148.11	158318	-266	NY	RIVERHEAD	-.1
CMK	VOR/DME	I	116.6	274.42	162624	-609	NY	CARMEL	-.21
ISP	RADAR	ON	2735.	190.11	163132	-97	NY	LONG ISLAND MacAR	-.03
FOK	TACAN	R	NA	146.5	179155	+35	NY	SUFFOLK CO	.01
DPK	VOR/DME	I	117.7	207.33	186991	-38	NY	DEER PARK	-.01
HFD	VOR/DME	R	114.9	40.16	188189	-764	CT	HARTFORD	-.23
HPN	RADAR	ON	2735.	252.08	209243	-425	NY	WESTCHESTER COUNT	-.12

FCC AM PROOF-OF-PERFORMANCE

NOT REQUIRED: Structure is not near a FCC licensed AM radio station Proof-of-Performance is not required. Please review AM Station Report for details.

Nearest AM Station: WAVZ @ 5859 meters.

Airspace® Summary Version 14.3.352

04-28-2014
11:18:26

ATTACHMENT 9

SAMPLE ABUTTER'S NOTICE

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

June 3, 2014

Via Certified Mail, Return Receipt Requested

«Name_and_Address»

Re: **Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling to Establish a New Wireless Telecommunications Facility at 58 Robinson Boulevard, Orange, Connecticut**

Dear «Salutation»:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). On or about June 5, 2014, Cellco intends to file a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to install a new wireless telecommunications facility at 58 Robinson Boulevard in Orange, Connecticut (the "Property"). The proposed facility will consist of a 35-foot tall stub-tower installed on the roof of the approximately 82,000 square foot industrial building at the Property. Cellco will install twelve (12) antennas and remote radio heads (RRHs) at the top of the tower. Equipment associated with the antennas and RRHs will be located inside a 12' x 24' shelter located on the ground to the north of the existing industrial building. Plans showing the proposed facility improvements are attached for your review. This notice is being sent to you because you are listed as an owner of land that abuts the Property.

If you have any questions regarding the Petition, the Council's process for reviewing the proposed facility 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.

Sincerely,

Kenneth C. Baldwin

Attachment
Copy to:
Sandy M. Carter

Cellco Partnership

d.b.a. **verizon** wireless

WIRELESS COMMUNICATIONS FACILITY

MILFORD SOUTH 4
58 ROBINSON BLVD
ORANGE, CT 06477

SITE DIRECTIONS

FROM: 99 EAST RIVER DRIVE, EAST HARTFORD, CONNECTICUT **TO:** 58 ROBINSON BLVD, ORANGE, CONNECTICUT

1.	Head Southeast on E RIVER DR toward PITKIN ST	0.9 mi.
2.	Continue onto E RIVER DR EXTENSION	0.3 mi.
3.	Turn RIGHT onto the US-5 S/CT-15 S ramp to NEW HAVEN/I-91 S	0.2 mi.
4.	Merge onto US-5 S	0.0 mi.
5.	Take EXIT 03 to merge onto I-91 S toward NEW HAVEN/NYC	36.6 mi.
6.	Keep LEFT at the fork, follow signs for I-95 S/NYC and merge onto I-95 S	5.7 mi.
7.	Take EXIT 41 for MARSH HILL ROAD toward ORANGE	0.5 mi.
8.	Turn LEFT onto MARSH HILL ROAD	0.7 mi.
9.	Turn LEFT onto ROBINSON BLVD, and the destination will be on the LEFT	0.3 mi.

GENERAL NOTES

1. PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY CELLCO PARTNERSHIP.

SITE INFORMATION

THE SCOPE OF WORK SHALL INCLUDE:

1. THE INSTALLATION OF A PROPOSED 12'x24' CELLCO PARTNERSHIP EQUIPMENT SHELTER WITH SHELTER HOUSED NATURAL GAS FUELED EMERGENCY POWER GENERATOR AT GRADE.
2. A TOTAL OF UP TO TWELVE (12) DIRECTIONAL PANEL ANTENNAS ARE PROPOSED TO BE MOUNTED AT A CENTERLINE ELEVATION OF 63.0'± AGL ON A 35'± PROPOSED STUD TOWER ATOP EXISTING BUILDING ROOF.
3. POWER AND TELCO UTILITIES SHALL BE ROUTED FROM DEMARCS LOCATED WITHIN THE EXISTING BUILDING TO THE PROPOSED 12'x24' CELLCO PARTNERSHIP EQUIPMENT SHELTER.
4. FINAL DESIGN FOR TOWER AND ANTENNA MOUNTS SHALL BE INCLUDED IN THE D&M PLANS.
5. THE PROPOSED WIRELESS FACILITY INSTALLATION WILL BE DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2009 CONNECTICUT SUPPLEMENT.
6. THERE WILL NOT BE ANY LIGHTING UNLESS REQUIRED BY THE FCC OR THE FAA.
7. THERE WILL NOT BE ANY SIGNS OR ADVERTISING ON THE ANTENNAS OR EQUIPMENT.

VICINITY MAP

SCALE: 1" = 1000'

PROJECT SUMMARY

SITE NAME:	MILFORD SOUTH 4
SITE ADDRESS:	58 ROBINSON BLVD ORANGE, CT 06477
PROPERTY OWNER:	GROUP SEVEN ASSOCIATES 929 KINGS HIGHWAY EAST ORANGE, CT 06430
LESSEE/TENANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
CONTACT PERSON:	SANDY CARTER CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
TOWER COORDINATES:	LATITUDE 41°-14'-49.051" LONGITUDE 72°-57'-29.080" GROUND ELEVATION: 19.3'± A.M.S.L. COORDINATES AND GROUND ELEVATION BASED ON FAA 1-A SURVEY CERTIFICATION AS PREPARED FOR VERIZON WIRELESS, BY MARTINEZ COUCH AND ASSOCIATES L.L.C., DATED APRIL 7, 2014.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	0
C-1	SITE/SITE SURVEY PLAN	0
C-2	PARTIAL ROOF PLAN, ELEVATION AND ANTENNA MOUNTING CONFIGURATION	0

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	04/24/14	MJH	DJD	ISSUED FOR CT SITING COUNCIL - CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

Cellco Partnership d.b.a. Verizon wireless

CENTEK engineering
Centered on Solutions™
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

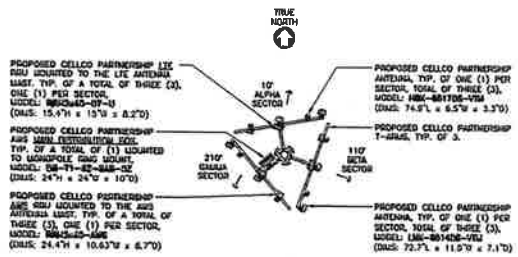
Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY
MILFORD SOUTH 4
58 ROBINSON BLVD
ORANGE, CT 06477

DATE: 04/23/14
SCALE: AS NOTED
JOB NO. 13150.000

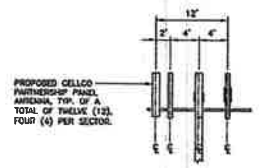
TITLE SHEET

T-1

Sheet No. 1 of 3



PLAN VIEW

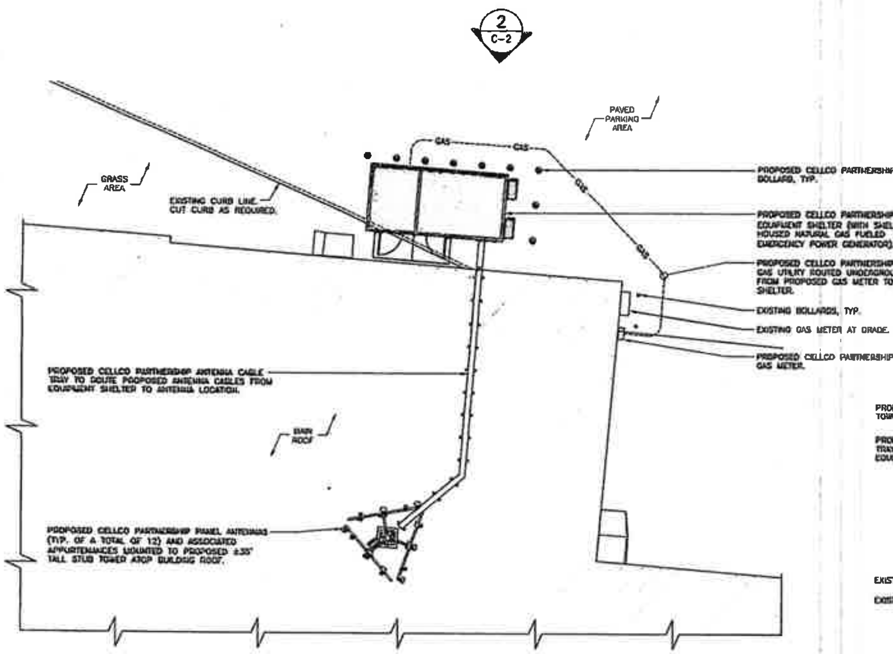


TYPICAL SECTOR ELEVATION

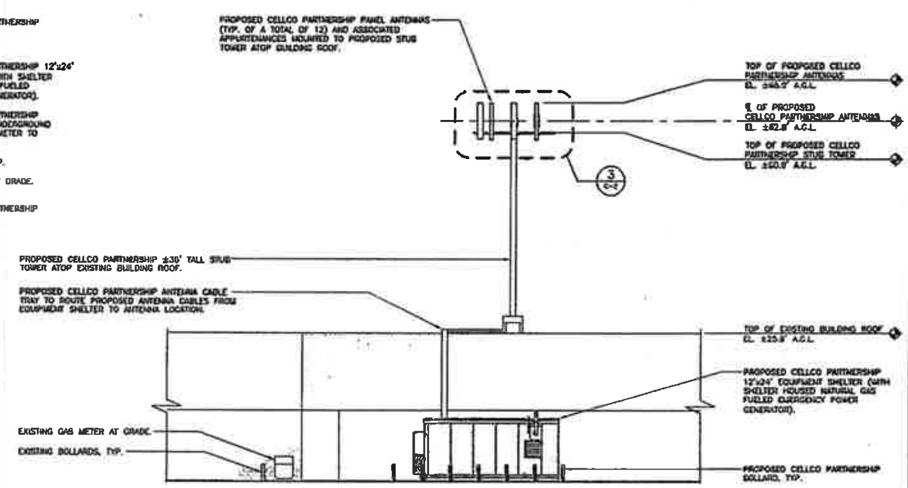
3 / C-2 **ANTENNA MOUNTING CONFIGURATION**
SCALE: 1/8" = 1'

TOWER STRUCTURAL NOTES

1. LOCATION OF PROPOSED CELLCO PARTNERSHIP ANTENNAS ARE SUBJECT TO STRUCTURAL REVIEW OF HOST BUILDING CONSIDERING EXISTING AND PROPOSED LOADINGS.
2. TOWER STRUCTURE TO COMPLY WITH LOADING AND DESIGN REQUIREMENTS PRESCRIBED BY THE 2003 INTERNATIONAL BUILDING CODE PORTION OF THE 2005 CONNECTICUT STATE BUILDING CODE AS MODIFIED BY THE 2009 CONNECTICUT SUPPLEMENT.
3. ALL ANTENNAS AND COAX TO BE INSTALLED IN ACCORDANCE WITH STRUCTURAL ANALYSIS AND FINAL AT&T RF DATA SHEET.



1 / C-2 **PARTIAL ROOF/SITE PLAN**
SCALE: 1" = 10'



2 / C-2 **PARTIAL NORTH ELEVATION**
SCALE: 1" = 10'

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	03/21/14	HAH	DMD	ISSUED FOR CT SITING COUNCIL - CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

Cellco Partnership d.b.a. Verizon wireless

CENTEK engineering
Centered on Solutions™
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY

MILFORD SOUTH 4

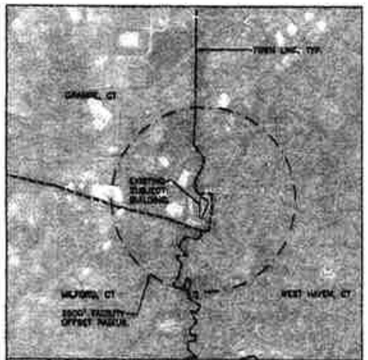
88 ROBINSON BLVD
ORANGE, CT 06477

DATE:	03/23/14
SCALE:	AS NOTED
JOB NO.	13108.000

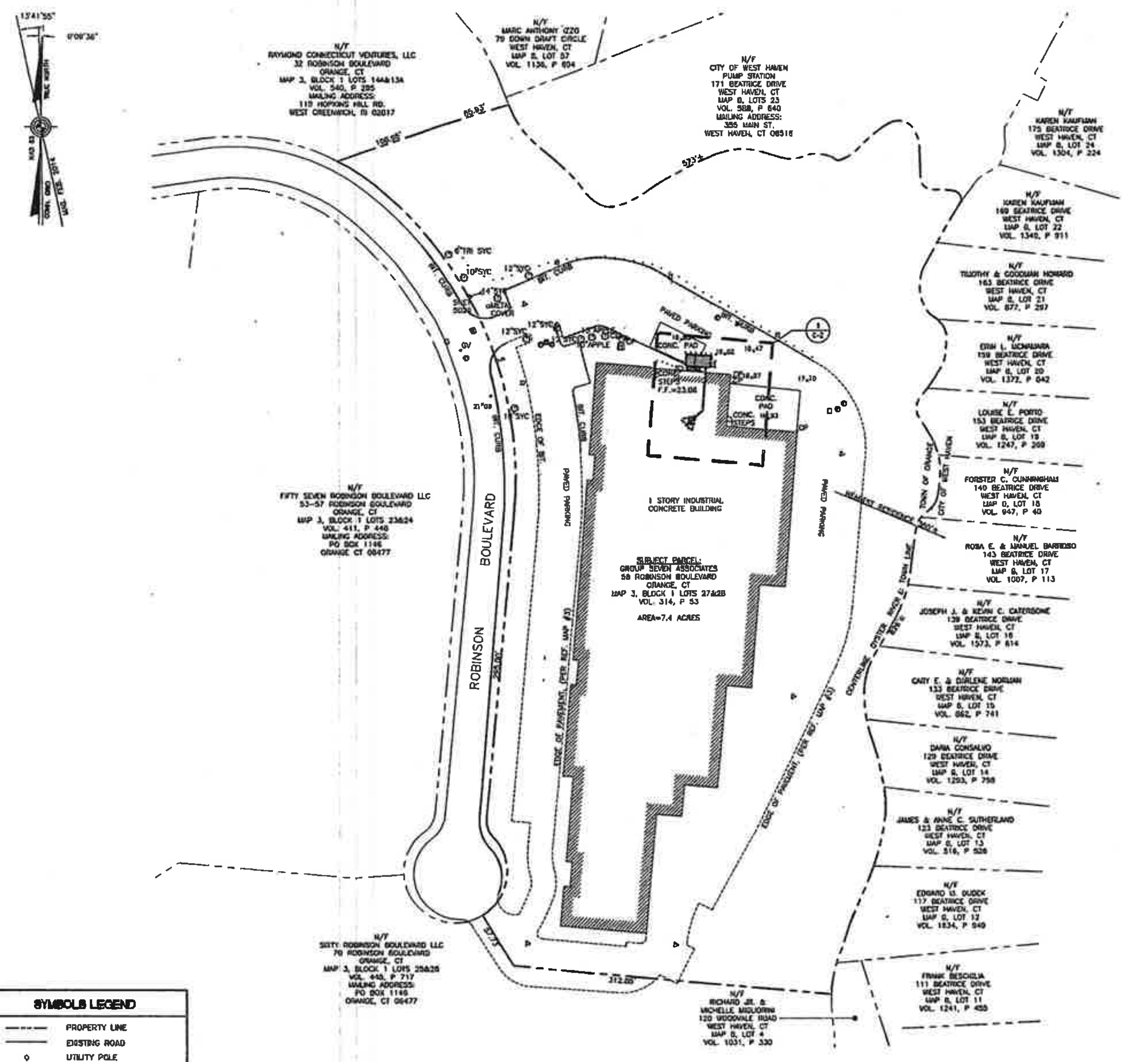
PARTIAL ROOF PLAN ELEVATION AND ANTENNA MOUNTING CONFIG.

C-2

Sheet No. 2 of 3



MUNICIPALITY NOTIFICATION LIMIT MAP



SYMBOLS LEGEND

— — —	PROPERTY LINE
———	EXISTING ROAD
○	UTILITY POLE
⊙	EXISTING DECIDUOUS TREE
· · · ·	EXISTING TREE LINE
18.87	SPOT ELEVATION

1 SITE/SITE SURVEY PLAN
C-1 SCALE: 1"=50'

GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

SURVEY NOTES

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300B-1 THRU 20-300B-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES – "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPT. 26, 1996. THE TOPOGRAPHIC SURVEY PORTION OF THIS PLAN CONFORMS TO A TOPOGRAPHIC ACCURACY OF CLASS T-2 AND IS INTENDED TO BE USED TO DEPICT A PROPOSED TELECOMMUNICATION SITE.

THE PROPERTY/BOUNDARY LINES DEPICTED HEREON ARE COMPILED FROM OTHER MAPS, DEEDS AND LIMITED FIELD SURVEY. THESE LINES ARE NOT TO BE CONSTRUED AS A BOUNDARY OPINION AND ARE SUBJECT TO CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE. PROPERTY MAY BE SUBJECT TO ENCUMBRANCES, EASEMENTS, RIGHTS OF WAY AS A TITLE SEARCH REPORT MAY DISCLOSE. PLANIMETRIC FEATURES SUCH AS ROADWAY AND PARKING AREA ARE COMPILED FROM OTHER MAPS AND LIMITED FIELD SURVEY. NOT ALL IMPROVEMENTS SHOWN.

COORDINATES REFER TO NAD 83.
ELEVATIONS DATUM IS NGVD 1929

PARCEL OWNER OF RECORD: GROUP SEVEN ASSOCIATES
620 KINGS HIGHWAY EAST
FAIRFIELD, CT 06430

PARCELS KNOWN AS 58 ROBINSON BLVD
PARCEL AREA= 7.4 ACRES

PARCEL IS IN THE LI-2 ZONING DISTRICT.

MAP 3, LOT NO. 1, ORANGE ASSESSORS MAP.

PARCEL IS NOT IN A FLOOD ZONE BASED ON THE FLOOD INSURANCE RATE MAP, NEW HAVEN COUNTY, CONNECTICUT, ALL JURISDICTIONS, PANEL 551 OF 635, COMMUNITY MAP NUMBER 09009C0551J, MAP REVISED JULY 8, 2013.

MAP REFERENCE

1) PREPARED FOR K.R. ROBINSON, ORANGE & MILFORD, CONN., SCALE: 1"=100', DATE: OCT. 14, 1965, BY: BERNARD E. GODFREY.

2) SUBDIVISION "OYSTER RIVER BUSINESS PARK, ORANGE, CONN., SCALE: 1"=40', DATE: APRIL 7, 1967, BY: BERNARD E. GODFREY.

3) AS-BUILT, LOTS 5, 6, & 7 UPS BUILDING 58 ROBINSON BLVD, SCALE: 1"=40', DATE: APRIL 2, 1968, REVISED THRU: DEC. 1, 1967, BY: BERNARD E. GODFREY.

TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND SEAL

A. RAFAEL MARTINEZ LLS #16933 DATE

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	04/21/14	NMR	DMD	ISSUED FOR CT SITING COUNCIL – CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

Cellco Partnership d.b.a. Verizon Wireless

CENTEK engineering
Centered on Solutions

Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY

MILFORD SOUTH 4

58 ROBINSON BLVD
ORANGE, CT 06477

DATE:	04/23/14
SCALE:	AS NOTED
JOB NO.	13108.000

SITE/SITE SURVEY PLAN

C-1

Sheet No. 8 of 3

ADJACENT PROPERTY OWNERS

SITE NAME: MILFORD SOUTH 4

OWNER NAME: GROUP SEVEN ASSOCIATES

OWNER ADDRESS: 58 ROBINSON BOULEVARD, ORANGE, CONNECTICUT

ASSESSOR'S REFERENCE: MAP: 3 BLOCK: 1 LOT: 27/28

THE FOLLOWING INFORMATION WAS COLLECTED FROM THE TAX ASSESSOR'S RECORDS AND LAND RECORDS OF ORANGE TOWN HALL AND WEST HAVEN TOWN HALL. THE INFORMATION IS CURRENT AS OF MAY 2, 2014.

THE PARCEL IS ZONED LIGHT INDUSTRIAL 2 (LI-2).

	M/B/L	Property Address	Property Owner
1.	3/1/14A-13A	32 Robinson Boulevard	Raymond Connecticut Ventures LLC 119 Hopkins Hill Road West Greenwich, RI 02817
2.	3/1/24	53-57 Robinson Boulevard	Fifty Seven Robinson Boulevard P.O. Box 1146 Orange, CT 06477
3.	3/1/25 & 26	70 Robinson Boulevard	Sixty Robinson Boulevard LLC P.O. Box 1146 Orange, CT 06477
	M/L		
4.	8/57	79 Down Draft Circle	Maura Izzo 79 Down Draft Circle West Haven, CT 06516
5.	8/23	171 Beatrice Drive	City of West Haven Pump Station 355 Main Street West Haven, CT 06516
6.	8/22	169 Beatrice Drive	John S. Artz 169 Beatrice Drive West Haven, CT 06516

	M/B/L	Property Address	Property Owner
7.	8/21	163 Beatrice Drive	Timothy Howard and Donna Goodman 163 Beatrice Drive West Haven, CT 06516
8.	8/20	159 Beatrice Drive	Erin L. McNamara 159 Beatrice Drive West Haven, CT 06516
9.	8/19	153 Beatrice Drive	Louise Porto 153 Beatrice Drive West Haven, CT 06516
10.	8/18	149 Beatrice Drive	Forster C. Cunningham 149 Beatrice Drive West Haven, CT 06516
11.	8/17	143 Beatrice Drive	Rosa E. and Manuel Barroso 143 Beatrice Drive West Haven, CT 06516
12.	8/16	139 Beatrice Drive	Kevin C., Joseph J. and Sharon A. Caterbone 139 Beatrice Drive West Haven, CT 06516
13.	8/15	133 Beatrice Drive	Gary E. and Darlene Norman 133 Beatrice Drive West Haven, CT 06516
14.	8/14	129 Beatrice Drive	Daria Consalvo 129 Beatrice Drive West Haven, CT 06516
15.	8/13	123 Beatrice Drive	James and Anne C. Sutherland 123 Beatrice Drive West Haven, CT 06516
16.	8/12	117 Beatrice Drive	Edward M. Dudek 117 Beatrice Drive West Haven, CT 06516

CERTIFICATION OF SERVICE

I hereby certify that a copy of the foregoing letter was sent by certified mail, return receipt requested, to each of the parties on the attached list of abutting landowners.

6-3-14
Date

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

Attorneys for CELLCO PARTNERSHIP d/b/a
VERIZON WIRELESS

ATTACHMENT 10

ROBINSON & COLE LLP

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

June 3, 2014

James M. Zeoli
First Selectman
Town of Orange
617 Orange Center Road
Orange, CT 06477-2423

Re: **Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling to Establish a New Wireless Telecommunications Facility at 58 Robinson Boulevard, Orange, Connecticut**

Dear Mr. Zeoli:

On or about June 5, 2014, Cellco Partnership d/b/a Verizon Wireless intends to file a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking its approval for the installation of a new wireless telecommunications facility at 58 Robinson Boulevard in Orange, Connecticut (the "Property"). The new facility would consist of a 35-foot tall stub-tower installed on the roof of the existing approximately 82,000 square foot industrial building at the Property. Equipment associated with the facility will be located inside a 12' x 24' shelter located adjacent to and north of the industrial building. A copy of the Project Plans are attached for your review.

If you have any questions regarding the above-referenced Petition for Declaratory Ruling please feel free to contact me or the Siting Council directly. The Siting Council can be reached at 860-827-2935.

Very truly yours,

Kenneth C. Baldwin

KCB/kmd

12908397-v1

ROBINSON & COLE LLP

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

June 3, 2014

Edward M. O'Brien
Mayor
City of West Haven
355 Main Street
West Haven, CT 06516

Re: **Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling to Establish a New Wireless Telecommunications Facility at 58 Robinson Boulevard, Orange, Connecticut**

Dear Mr. O'Brien:

On or about June 5, 2014, Cellco Partnership d/b/a Verizon Wireless intends to file a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking its approval for the installation of a new wireless telecommunications facility at 58 Robinson Boulevard in Orange, Connecticut (the "Property"). The new facility would consist of a 35-foot tall stub-tower installed on the roof of the existing approximately 82,000 square foot industrial building at the Property. Equipment associated with the facility will be located inside a 12' x 24' shelter located adjacent to and north of the industrial building. A copy of the Project Plans are attached for your review.

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Very truly yours,

Kenneth C. Baldwin

KCB/kmd

12946762-v1

ROBINSON & COLE LLP

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

June 3, 2014

Benjamin G. Blake
Mayor
Town of Milford
110 River Street
Milford, CT 06460

Re: **Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling to Establish a New Wireless Telecommunications Facility at 58 Robinson Boulevard, Orange, Connecticut**

Dear Mr. Blake:

On or about June 5, 2014, Cellco Partnership d/b/a Verizon Wireless intends to file a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking its approval for the installation of a new wireless telecommunications facility at 58 Robinson Boulevard in Orange, Connecticut (the "Property"). The new facility would consist of a 35-foot tall stub-tower installed on the roof of the existing approximately 82,000 square foot industrial building at the Property. Equipment associated with the facility will be located inside a 12' x 24' shelter located adjacent to and north of the industrial building. A copy of the Project Plans are attached for your review.

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Very truly yours,

Kenneth C. Baldwin

KCB/kmd

12946748-v1

ROBINSON & COLE LLP

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

June 3, 2014

Group Seven Associates
929 Kings Highway East
Fairfield, CT 06825

Re: **Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling to Establish a New Wireless Telecommunications Facility at 58 Robinson Boulevard, Orange, Connecticut**

Dear Sir or Madam:

On or about June 5, 2014, Cellco Partnership d/b/a Verizon Wireless intends to file a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking its approval for the installation of a new wireless telecommunications facility at 58 Robinson Boulevard in Orange, Connecticut (the "Property"). The new facility would consist of a 35-foot tall stub-tower installed on the roof of the existing approximately 82,000 square foot industrial building at the Property. Equipment associated with the facility will be located inside a 12' x 24' shelter located adjacent to and north of the industrial building. A copy of the Project Plans are attached for your review.

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Very truly yours,

Kenneth C. Baldwin

KCB/kmd

Cellco Partnership

d.b.a. **verizon** wireless

WIRELESS COMMUNICATIONS FACILITY

MILFORD SOUTH 4
58 ROBINSON BLVD
ORANGE, CT 06477

SITE DIRECTIONS

FROM: 99 EAST RIVER DRIVE, EAST HARTFORD, CONNECTICUT **TO:** 58 ROBINSON BLVD, ORANGE, CONNECTICUT

1.	Head Southwest on E RIVER DR toward PITKIN ST	0.9 mi.
2.	Continue onto E RIVER DR EXTENSION	0.3 mi.
3.	Turn RIGHT onto the US-5 S/CT-15 S ramp to NEW HAVEN/I-91 S	0.2 mi.
4.	Merge onto US-5 S	0.8 mi.
5.	Take EXIT 85 to merge onto I-91 S toward NEW HAVEN/NYC	36.6 mi.
6.	Keep LEFT at the fork, follow signs for I-95 S/NYC and merge onto I-95 S	5.7 mi.
7.	Take EXIT 41 for MARSH HILL ROAD toward ORANGE	0.3 mi.
8.	Turn LEFT onto MARSH HILL ROAD	0.7 mi.
9.	Turn LEFT onto ROBINSON BLVD, and the destination will be on the LEFT	0.3 mi.

GENERAL NOTES

1. PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY CELLCO PARTNERSHIP.

SITE INFORMATION

THE SCOPE OF WORK SHALL INCLUDE:

1. THE INSTALLATION OF A PROPOSED 12'x24' CELLCO PARTNERSHIP EQUIPMENT SHELTER WITH SHELTER HOUSED NATURAL GAS FUELED EMERGENCY POWER GENERATOR AT GRADE.
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4. FINAL DESIGN FOR TOWER AND ANTENNA MOUNTS SHALL BE INCLUDED IN THE D&M PLANS.
5. THE PROPOSED WIRELESS FACILITY INSTALLATION WILL BE DESIGNED IN ACCORDANCE WITH THE 2005 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2005 CONNECTICUT SUPPLEMENT.
6. THERE WILL NOT BE ANY LIGHTING UNLESS REQUIRED BY THE FCC OR THE FAA.
7. THERE WILL NOT BE ANY SIGNS OR ADVERTISING ON THE ANTENNAS OR EQUIPMENT.

VICINITY MAP

SCALE: 1" = 1000'

PROJECT SUMMARY

SITE NAME:	MILFORD SOUTH 4
SITE ADDRESS:	58 ROBINSON BLVD ORANGE, CT 06477
PROPERTY OWNER:	GROUP SEVEN ASSOCIATES 920 KINGS HIGHWAY EAST ORANGE, CT 06430
LESSEE/TENANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
CONTACT PERSON:	SANDY CARTER CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
TOWER COORDINATES:	LATITUDE 41°-14'-40.001" LONGITUDE 72°-59'-29.080" GROUND ELEVATION: 10.3'± A.M.S.L. COORDINATES AND GROUND ELEVATION BASED ON FAA 1-A SURVEY CERTIFICATION AS PREPARED FOR VERIZON WIRELESS, BY MARTINEZ COUCH AND ASSOCIATES L.L.C., DATED APRIL 7, 2014.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	0
C-1	SITE/SITE SURVEY PLAN	0
C-2	PARTIAL ROOF PLAN, ELEVATION AND ANTENNA MOUNTING CONFIGURATION	0

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	04/23/14	MMT	DMD	ISSUED FOR CT SITING COUNCIL - CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

Cellco Partnership d.b.a. Verizon wireless

CENTEK engineering
Centered on Solutions™
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

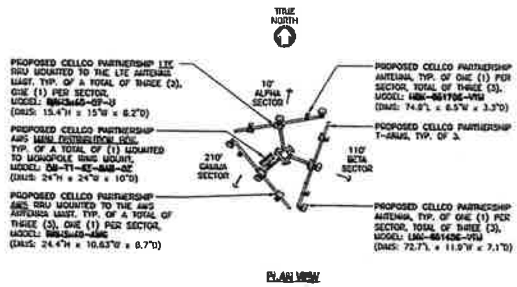
Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY
MILFORD SOUTH 4
58 ROBINSON BLVD
ORANGE, CT 06477

DATE: 04/23/14
SCALE: AS NOTED
JOB NO. 13156.008

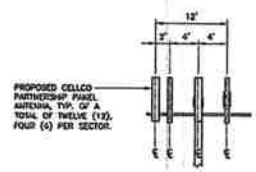
TITLE SHEET

T-1

Sheet No. 1 of 3



PLAN VIEW

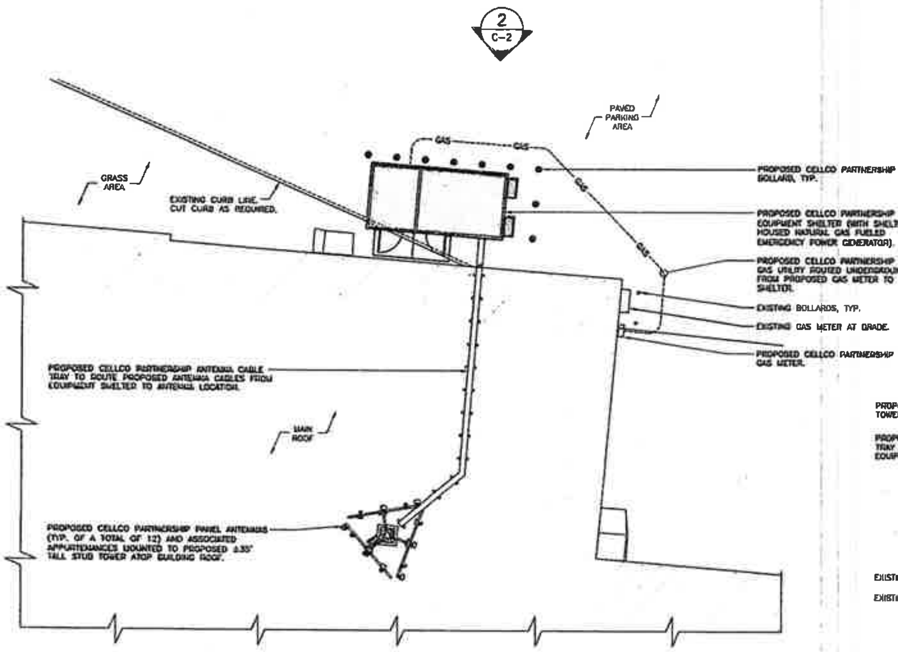


TYPICAL SECTOR ELEVATION

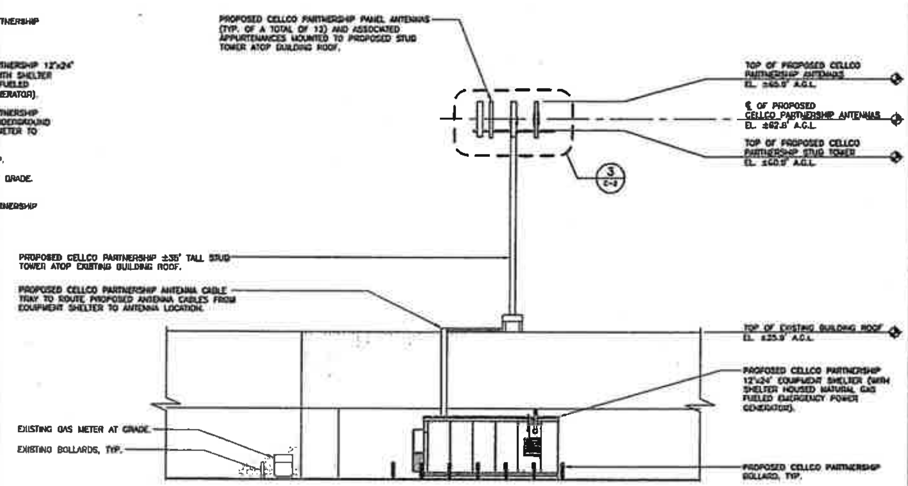
3 / C-2 ANTENNA MOUNTING CONFIGURATION
SCALE: 1/8" = 1'

TOWER STRUCTURAL NOTES:

1. LOCATION OF PROPOSED CELLCO PARTNERSHIP ANTENNAS ARE SUBJECT TO STRUCTURAL REVIEW OF HOST BUILDING CONSIDERING EXISTING AND PROPOSED LOADINGS.
2. TOWER STRUCTURE TO COMPLY WITH LOADING AND DESIGN REQUIREMENTS PRESCRIBED BY THE 2003 INTERNATIONAL BUILDING CODE PORTION OF THE 2005 CONNECTICUT STATE BUILDING CODE AS MODIFIED BY THE 2000 CONNECTICUT SUPPLEMENT.
3. ALL ANTENNAS AND COAX TO BE INSTALLED IN ACCORDANCE WITH STRUCTURAL ANALYSIS AND FINAL AT&T RF DATA SHEET.



1 / C-2 PARTIAL ROOF/SITE PLAN
SCALE: 1" = 10'



2 / C-2 PARTIAL NORTH ELEVATION
SCALE: 1" = 10'

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
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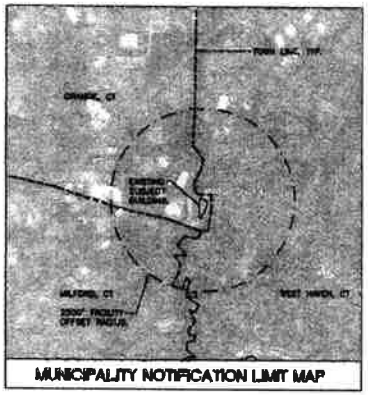
MILFORD SOUTH 4
58 ROBINSON BLVD
ORANGE, CT 06477

DATE:	04/23/14
SCALE:	AS NOTED
JOB NO.	13159.000

PARTIAL ROOF PLAN ELEVATION AND ANTENNA MOUNTING CONFIG.

C-2

Sheet No. 3 of 3



MUNICIPALITY NOTIFICATION LIMIT MAP

SURVEY NOTES

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES - "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPT. 26, 1996. THE TOPOGRAPHIC SURVEY PORTION OF THIS PLAN CONFORMS TO A TOPOGRAPHIC ACCURACY OF CLASS T-2 AND IS INTENDED TO BE USED TO DEPICT A PROPOSED TELECOMMUNICATION SITE.

THE PROPERTY/BOUNDARY LINES DEPICTED HEREON ARE COMPILED FROM OTHER MAPS, DEEDS AND LIMITED FIELD SURVEY. THESE LINES ARE NOT TO BE CONSTRUED AS A BOUNDARY OPINION AND ARE SUBJECT TO CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE. PROPERTY MAY BE SUBJECT TO ENCUMBRANCES, EASEMENTS, RIGHTS OF WAY AS A TITLE SEARCH REPORT MAY DISCLOSE. PLANIMETRIC FEATURES SUCH AS ROADWAY AND PARKING AREA ARE COMPILED FROM OTHER MAPS AND LIMITED FIELD SURVEY. NOT ALL IMPROVEMENTS SHOWN.

COORDINATES REFER TO NAD 83.
ELEVATIONS DATUM IS NGVD 1929

PARCEL OWNER OF RECORD: GROUP SEVEN ASSOCIATES
1150 KINGS HIGHWAY EAST
FAIRFIELD, CT 06430

PARCELS KNOWN AS 58 ROBINSON BLVD
PARCEL AREA= 7.4 ACRES

PARCEL IS IN THE LI-2 ZONING DISTRICT.

MAP 3, LOT NO. 1, ORANGE ASSESSORS MAP.

PARCEL IS NOT IN A FLOOD ZONE BASED ON THE FLOOD INSURANCE RATE MAP, NEW HAVEN COUNTY, CONNECTICUT, ALL JURISDICTIONS, PANEL 561 OF 635, COMMUNITY MAP NUMBER 0900900561J, MAP REVISED JULY 8, 2013.

MAP REFERENCE

1) PREPARED FOR K.R. ROBINSON, ORANGE & MILFORD, CONN., SCALE: 1"=100', DATE: OCT. 14, 1980, BY: BERNARD E. GODFREY.

2) SUBDIVISION "OYSTER RIVER BUSINESS PARK, ORANGE, CONN., SCALE: 1"=40', DATE: APRIL 7, 1987, BY: BERNARD E. GODFREY.

3) AS-BUILT, LOTS 5, 6, & 7 LIPS BUILDING 58 ROBINSON BLVD, SCALE: 1"=20', DATE: APRIL 2, 1988, REVISED THRU: DEC. 1, 1997, BY: BERNARD E. GODFREY.

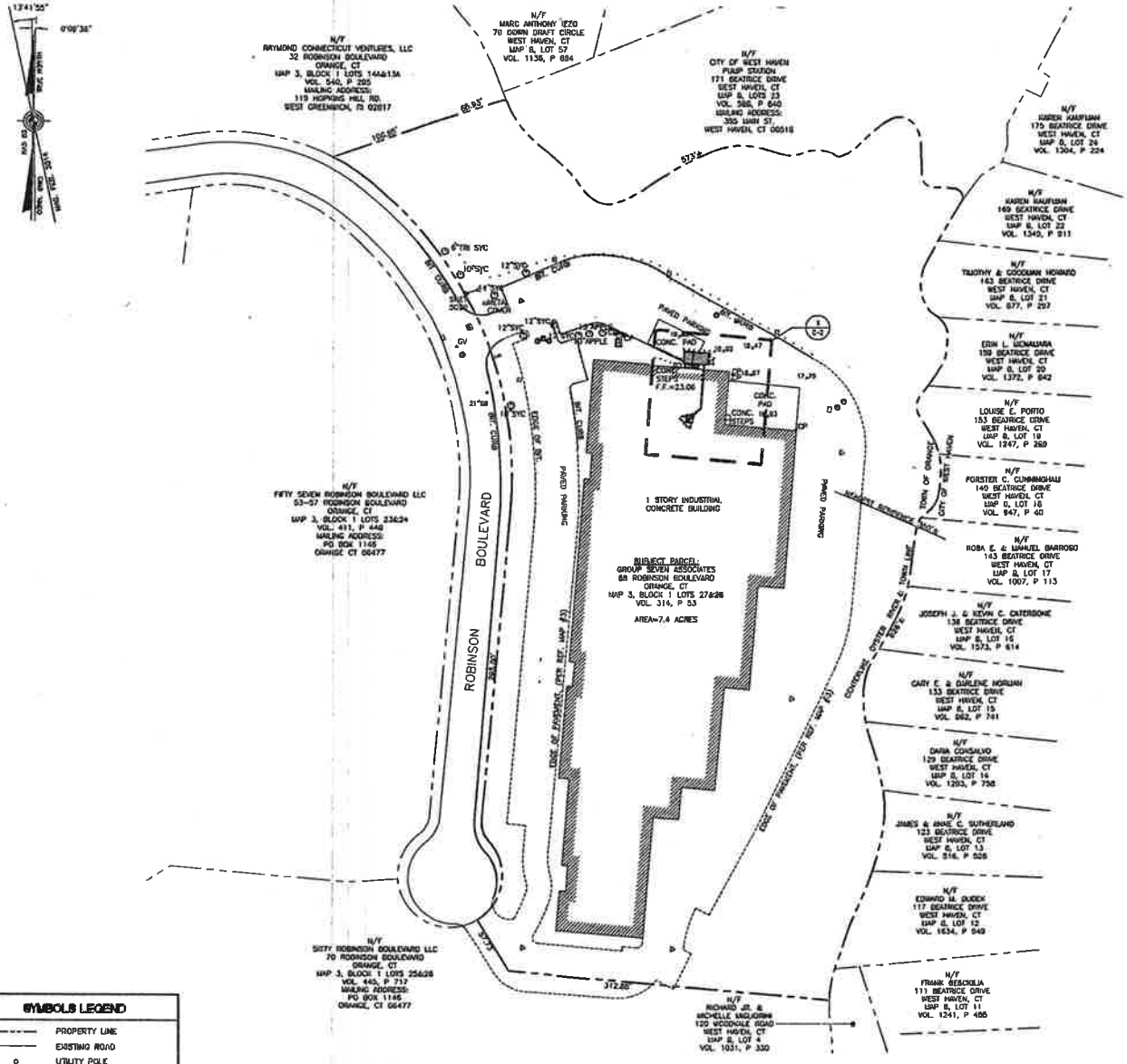
TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND SEAL

A. RAFAEL MARTINEZ LLS #18833 DATE

SYMBOLS LEGEND

- PROPERTY LINE
- EXISTING ROAD
- UTILITY POLE
- EXISTING DECIDUOUS TREE
- EXISTING TREE LINE
- 19.07 SPOT ELEVATION



1 SITE/SITE SURVEY PLAN
C-1 SCALE: 1"=50'

GRAPHIC SCALE
0 25 50 100
(IN FEET)
1 inch = 50 ft.

0	04/22/14	RAF	ISSUED FOR CT SITING COUNCIL - CLOSE KNOW
REV.	DATE	drawn BY	DESCRIPTION

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58 ROBINSON BLVD
ORANGE, CT 06477

DATE:	04/22/14
SCALE:	AS NOTED
JOB NO.	13188.000

SITE/SITE SURVEY PLAN

C-1

Sheet No. 2 of 3