STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

PETITION NO. 1118

ORIGINAL

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 1 SELLECK STREET, NORWALK, CONNECTICUT	:	PETITION NO. ____ SEPTEMBER 24, 2014

RECEIVED
SEP 24 2014
CONNECTICUT
SITING COUNCIL

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 twenty-five (25) foot tall stub-tower on the roof of a five-story office building at 1 Selleck Street in Norwalk, Connecticut (the "Property"). For the purposes of this Petition, Cellco has identified this facility as its "East Norwalk 4" cell site.

II. The Property and Surrounding Environs

The Property is a 1.84 acre parcel located on the west side of Selleck Street and owned by Sandoval Shore Point Development LLC. The Property is zoned Neighborhood Business (NB) and is improved with a five-story office building and associated paved parking areas. The

Property is immediately adjacent to an elevated portion of Interstate 95 ("I-95") to the north, the Norwalk River to the west, commercial land uses to the south and residential land uses to the east. Included in Attachment 1 is a Site Vicinity Map showing the location of the Property, an Aerial Photograph showing the improvements on the Property and the immediately adjacent parcels, and a copy of the U.S.G.S. Topographic Map showing the East Norwalk 4 cell site location.

III. Factual Background and Need for the East Norwalk 4 Facility

Cellco is licensed to provide wireless telecommunications services in the 700 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 demand for enhanced wireless data services.

Cellco currently maintains and operates six (6) wireless facilities within approximately 2.5 miles of the Property. Each of these existing facilities would interact, in some respect, with the proposed East Norwalk 4 facility. Cellco's existing wireless facilities in the area include Cellco's Saugatuck cell site, an existing roof-top facility at 21 Charles Street in Westport; East Norwalk cell site, a water tank facility located at 1 Filbert Street in Norwalk; East Norwalk 2 cell site, a roof-top facility at 24 Belden Avenue in Norwalk; Norwalk West cell site, a roof-top facility at 4 Elmcrest Terrace in Norwalk; Norwalk 2 cell site, a water tank facility at Price Avenue and Fairview Street in Norwalk; and East Norwalk South cell site, a roof-top facility at 25 Van Zant Street in Norwalk. The locations of each of these existing cell sites is included on the Site Vicinity Map (Attachment 1) and on Cellco's Coverage Maps showing existing wireless service in the area. (*See* Attachment 2). As shown on the "Existing Verizon Wireless" coverage maps, Cellco's facilities in the area appear to provide reliable wireless service (coverage) to

significant portions of southern Norwalk. Due to the nature of development in the southern Norwalk area, as described above and depicted on the Site Vicinity Map and Aerial Photograph, the presence of significant commuter and commercial transportation corridors, and an exponential increase in demand for enhanced wireless data services throughout Fairfield County and the State of Connecticut, these coverage maps only tell a part of the story.

As Cellco has described in several recent filings, due to technological limitations of its radio equipment and the limited licensed radio spectrum within which it must operate, each of Cellco's existing cell sites has a limited capacity to handle so many calls and/or data transmissions. Cellco's RF and System Performance engineers, who monitor cell site operations throughout the network have identified a need for significant capacity relief in the area around the proposed East Norwalk 4 facility location. For example, Cellco's system performance data shows that the Gamma sector antennas at its Saugatuck cell site, Beta and Gamma sector antennas at its East Norwalk cell site, Beta sector antennas at its Norwalk 2 cell site, and Alpha and Gamma sector antennas at its East Norwalk South cell site are all currently operating at or near their respective capacity limits, rendering service from these sites less reliable. System performance data also shows that the Beta sector antennas at Cellco's East Norwalk 2 cell site and Beta sector antennas at Cellco's Norwalk West cell site (the sector directed toward the East Norwalk 4 facility) will reach their capacity limit within the next two (2) years. These capacity problems result in significant degradation of signal strength and limit Cellco's ability to provide its customers with reliable wireless service. 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. These capacity problems have a

significant impact on its customers, local businesses and industrial uses in the area, commuters and emergency service providers in significant portions of southern Norwalk.

IV. Proposed East Norwalk 4 Telecommunications Facility

Cellco's proposed East Norwalk 4 cell site would consist of a 25-foot tall stub-tower on the northeasterly portion of the roof of the existing five-story office building. Cellco would install twelve (12) antennas and six (6) remote radio heads (RRHs) on a square antenna platform 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 also located on the roof to the west of the proposed tower. The façade of the shelter will be designed to match the color and texture of the existing building. Project plans for the proposed East Norwalk 4 facility improvement 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 roof-top wireless facility at the Property will not involve a significant alteration in the physical and environmental characteristics of the

Property or the surrounding area. All improvements associated with the East Norwalk 4 facility will be located on the roof of the existing five-story office building. (*See* Project Plans – Sheet C-2). The stub tower and equipment shelter would be located on the roof, attached to steel support frames to distribute weight of each structure (load) to the existing building's support structure. The roof of the building has been analyzed and it has been determined that the building roof is structurally capable of supporting the proposed stub-tower and equipment shelter. (*See* Attachment 4).

a. Coastal Consistency Review

The Property and all existing improvements on the Property lie within the limits of the Coastal Boundary as defined by Conn. Gen. Stat. Section 22a-94(b). To ensure consistency with the State's coastal/environmental policies, All Points Technology ("APT") Corporation has prepared a Coastal Consistency Review (the "CCR") for the proposed wireless facility. The CCR concludes that the development of a wireless facility, with all components on the roof of the building, is consistent with all applicable policies of the Coastal Area Management Act and will not adversely impact coastal resources in the area. (*See* Attachment 5).

No federal or State-regulated tidal or inland wetlands or watercourses were identified on the Property.

- Coastal resources that exist on or adjacent to the Property will not be impacted by the proposed development as all improvements will be on the roof of the five-story office building.
- The Property lies within an area identified as potential habitat for endangered, threatened or special concern species. However, the entirety of the Property is developed and all Cellco improvements will be on the roof of the existing five-

story building. No impact to any such species is anticipated.

- The wireless facility improvements will not generate additional stormwater run-off; are outside any flood areas, and will not impact, in any way, existing coastal resources.

b. Access and Utilities

Vehicular access to the East Norwalk 4 cell site would extend from Selleck Street along the existing paved access driveway to the building. 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 stub-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 25-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").

3. Compliance with Radio Frequency Emissions Standards

Radio frequency ("RF") emissions from the proposed East Norwalk 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 25-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 25-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 Sandoval Shore Point Development LLC, the owner of the Property, and Norwalk's Mayor Harry W. Rilling. A copy of Mayor Rilling's and the 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; and Petition No. 1107 – Cellco's proposed

installation of a 35-foot tall roof-mounted tower in Orange, 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 25-foot tall stub-tower on the roof of a five-story commercial office 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.

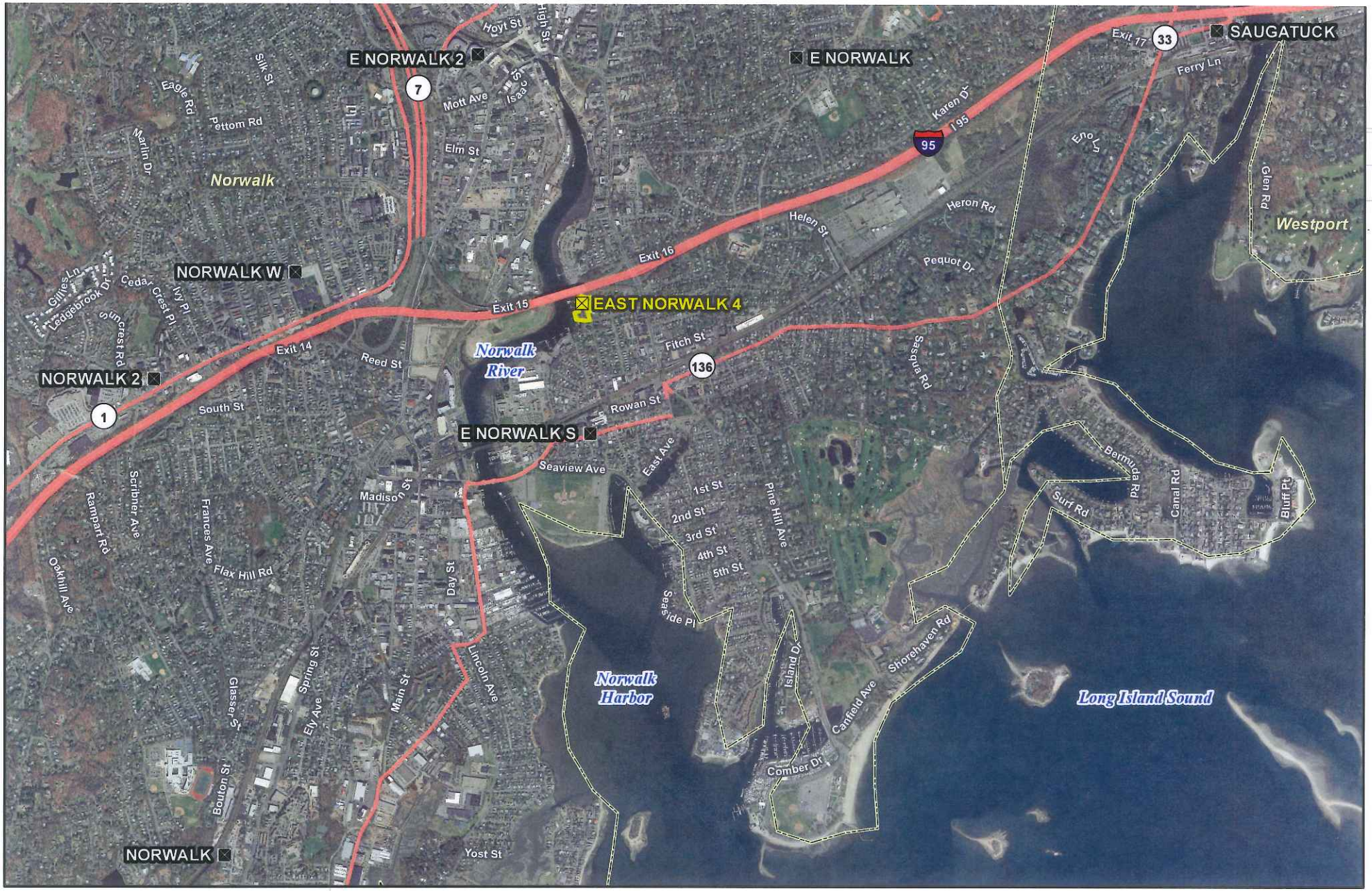
Respectfully submitted,

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

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

Base Map Source: 2012 Aerial Photograph (CTECO)

N W E S

2,000 1,000 0 2,000

Site Vicinity

verizonwireless

Proposed Wireless
Telecommunications Facility
East Norwalk 4
1 Selleck Street
Norwalk, Connecticut

Legend

- Proposed Facility Layout
- Approximate Subject Parcel Boundary
- Approximate Parcel Boundary (CTDEEP)

N
W E
S

50 25 0 50 Feet

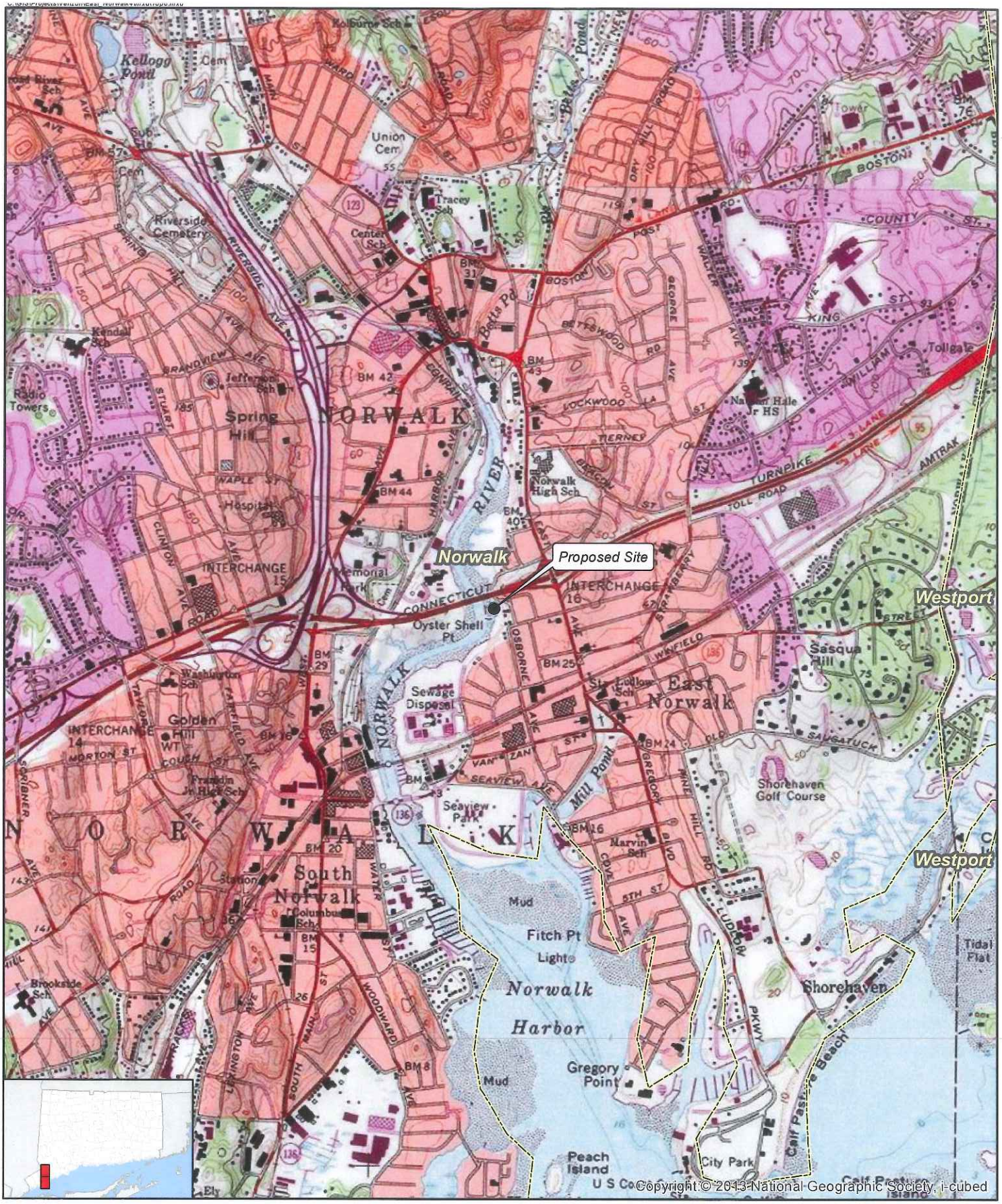
Base Map Source: 2012 Aerial Photograph (CTECO)
Map Date: June 2014

Aerial Photograph

verizonwireless

Proposed Wireless Telecommunications Facility
East Norwalk 4
1 Selleck Street
Norwalk, Connecticut

ALL-POINTS



Legend

- Site Facility Location
- Municipal Boundary

Base Map Source: USGS 7.5 Minute Topographic Quadrangle Maps, Norwalk South (1984) and Norwalk North (1971), CT
Site located on Norwalk South Quadrangle
Map Date: June 2014

1,000 500 0 1,000 Feet

USGS Topographic Map

verizonwireless

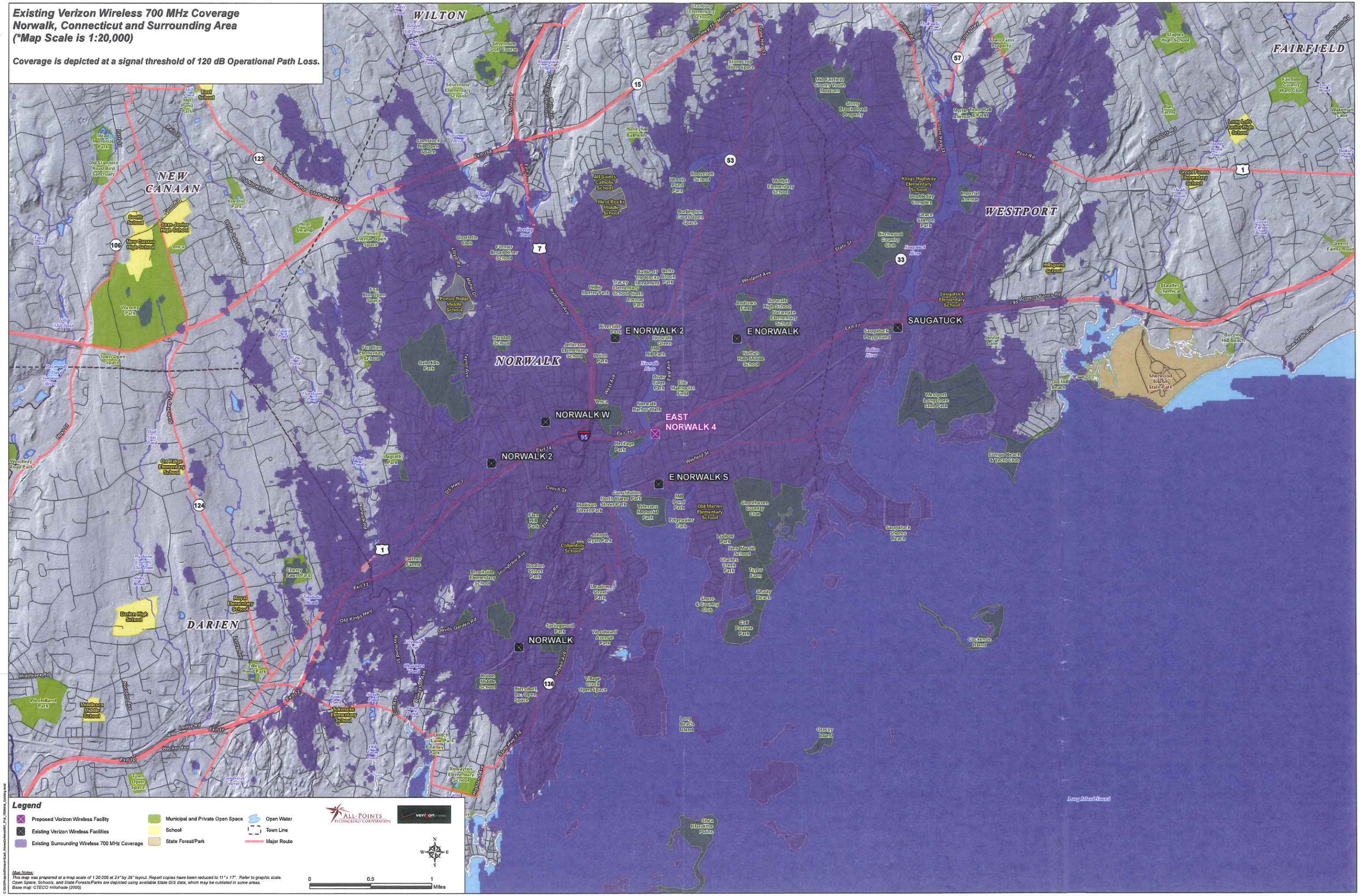
Proposed Wireless Telecommunications Facility
East Norwalk 4
1 Selleck Street
Norwalk, Connecticut

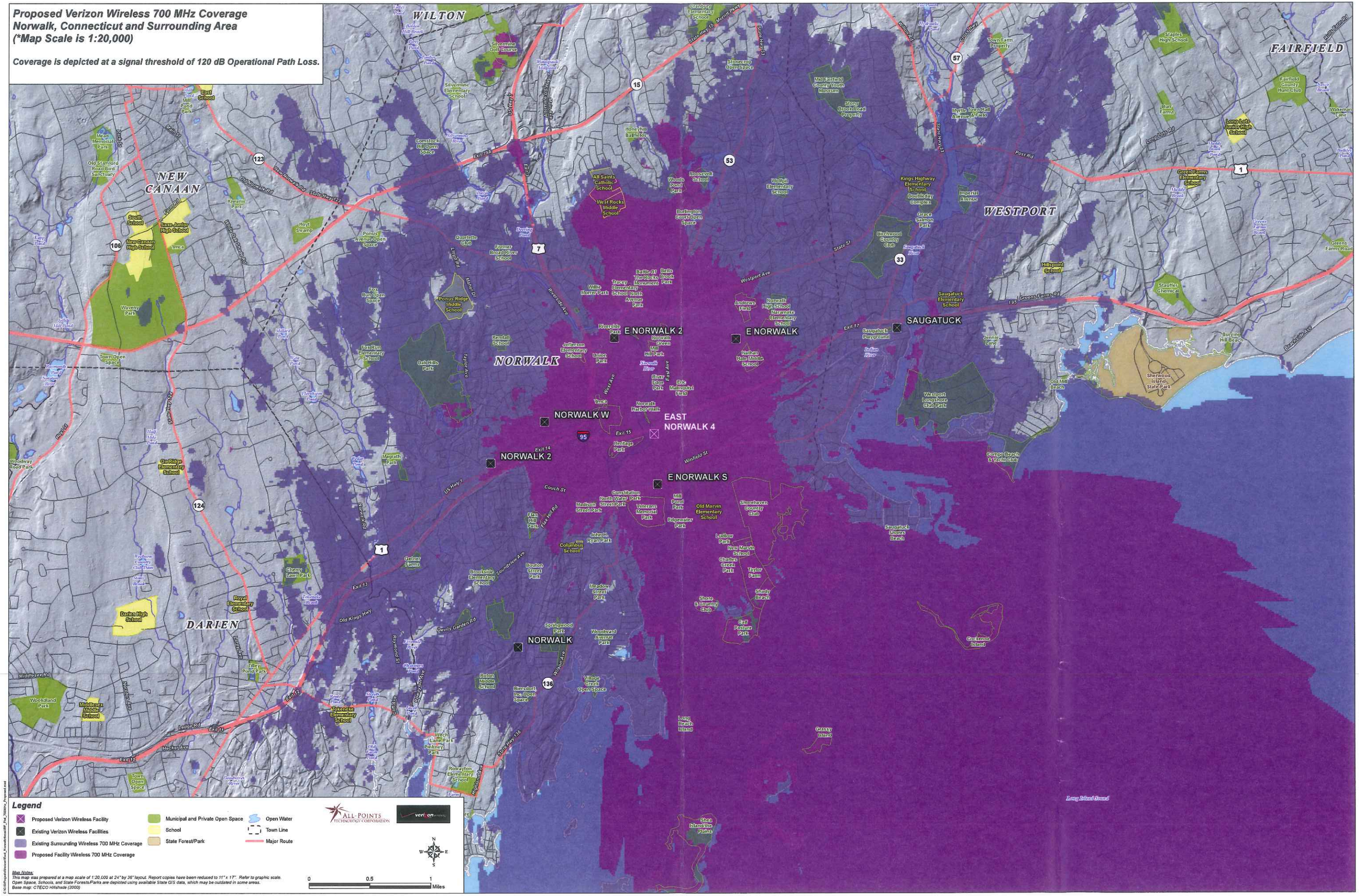
ALL-POINTS

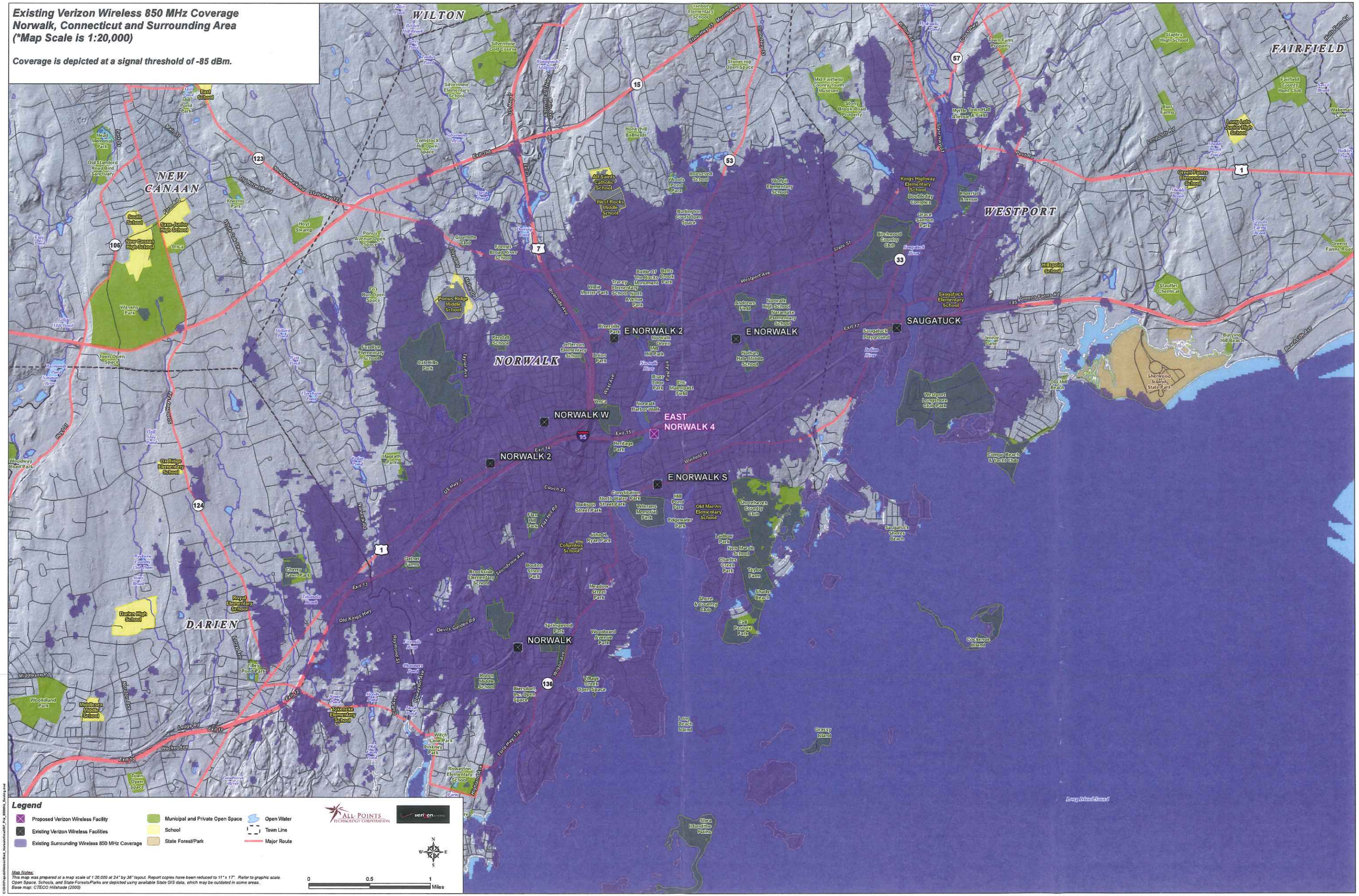
ATTACHMENT 2

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

Coverage is depicted at a signal threshold of 120 dB Operational Path Loss.

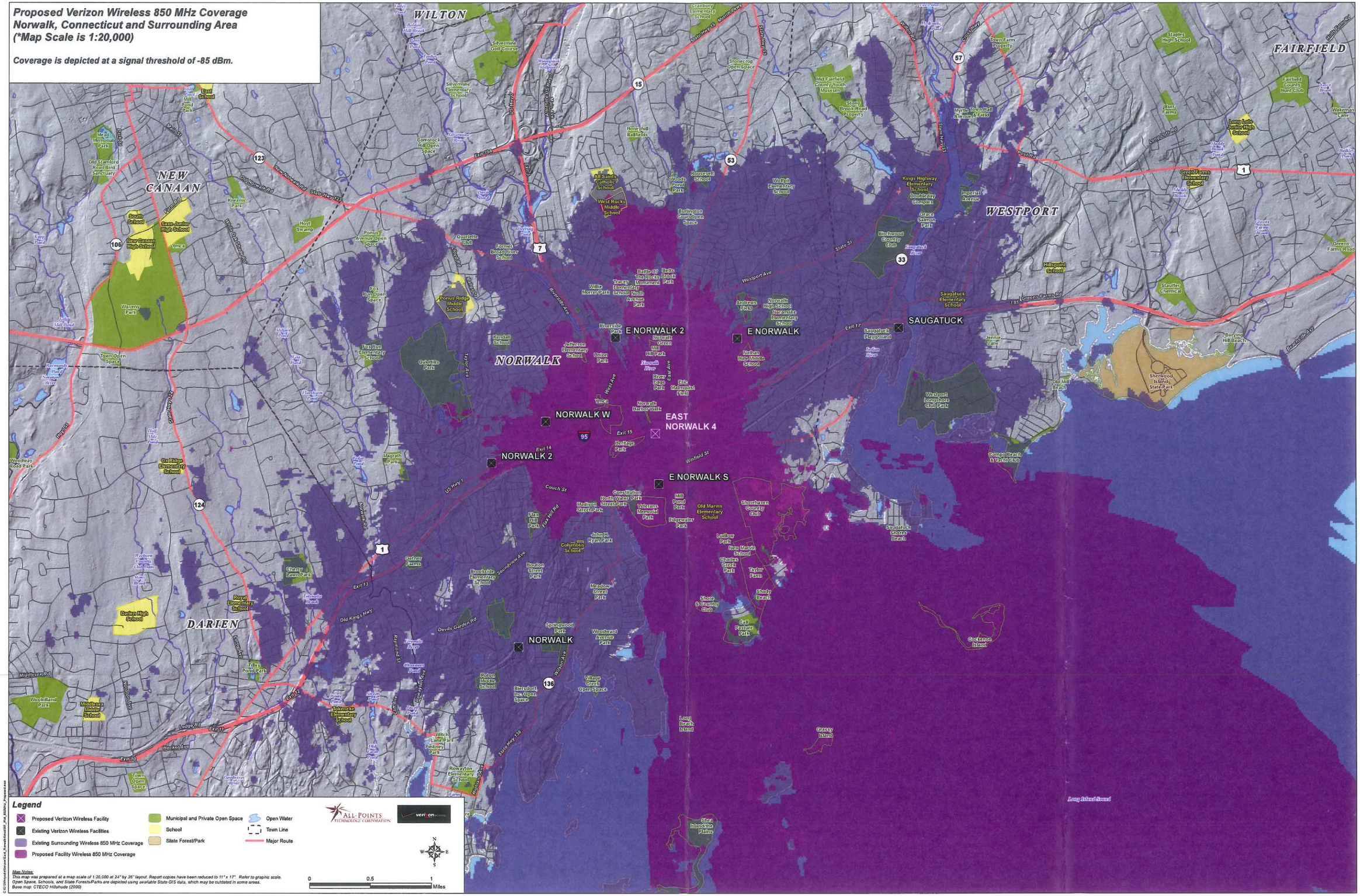



Proposed Verizon Wireless 700 MHz Coverage
Norwalk, Connecticut and Surrounding Area
(*Map Scale is 1:20,000)
Coverage is depicted at a signal threshold of 120 dB Operational Path Loss.
WILTON
FAIRFIELD
NEW CANAAN
WESTPORT
NORWALK
DARIEN
SAUGATUCK
E NORWALK 2
E NORWALK
NORWALK W
EAST NORWALK 4
NORWALK 2
E NORWALK S
NORWALK
Legend
Proposed Verizon Wireless Facility
Existing Verizon Wireless Facilities
Existing Surrounding Wireless 700 MHz Coverage
Proposed Facility Wireless 700 MHz Coverage
Municipal and Private Open Space
School
State Forest/Park
Open Water
Town Line
Major Route
ALL-POINTS TECHNOLOGY CORPORATION
verizon
Map Notes:
This map was prepared at a map scale of 1:20,000 at 24" by 36" layout. Report copies have been reduced to 11" x 17". Refer to graphic scale.
Open Space, Schools, and State Forests/Parks are depicted using available State GIS data, which may be outdated in some areas.
Base map: CTECO Hillshade (2000)
0
0.5
1
Miles


Existing Verizon Wireless 850 MHz Coverage
Norwalk, Connecticut and Surrounding Area
(*Map Scale is 1:20,000)
Coverage is depicted at a signal threshold of -85 dBm.
WILTON
FAIRFIELD
NEW CANAAN
WESTPORT
NORWALK
DARIEN
SAUGATUCK
E NORWALK 2
E NORWALK
NORWALK W
EAST NORWALK 4
NORWALK 2
E NORWALK S
NORWALK
Legend
Proposed Verizon Wireless Facility
Existing Verizon Wireless Facilities
Existing Surrounding Wireless 850 MHz Coverage
Municipal and Private Open Space
School
State Forest/Park
Open Water
Town Line
Major Route
ALL-POINTS TECHNOLOGY CORPORATION
verizon
Map Notes:
This map was prepared at a map scale of 1:20,000 at 24" by 36" layout. Report copies have been reduced to 11" x 17". Refer to graphic scale.
Open Space, Schools, and State Forests/Parks are depicted using available State GIS data, which may be outdated in some areas.
Base map: CTECO Hillshade (2000)
0
0.5
1
Miles

Proposed Verizon Wireless 850 MHz Coverage
Norwalk, Connecticut and Surrounding Area
(*Map Scale is 1:20,000)

Coverage is depicted at a signal threshold of -85 dBm.



Legend

- Proposed Verizon Wireless Facility
- Existing Verizon Wireless Facilities
- Existing Surrounding Wireless 850 MHz Coverage
- Proposed Facility Wireless 850 MHz Coverage
- Municipal and Private Open Space
- School
- State Forest/Park
- Open Water
- Town Line
- Major Route

ALL-POINTS TECHNOLOGY CORPORATION

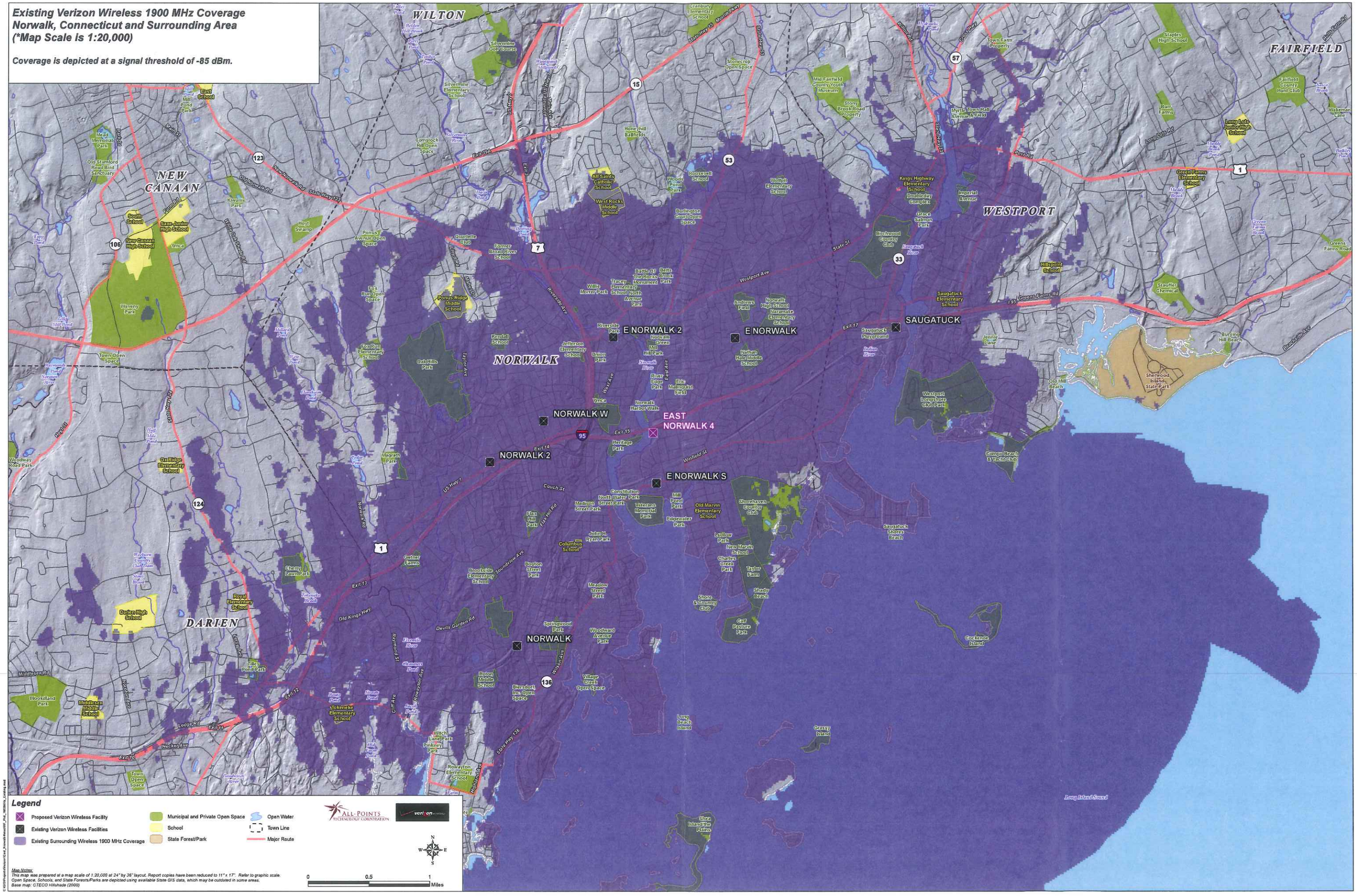
verizon wireless

N
W E
S

0 0.5 1 Miles

Map Notes:
This map was prepared at a map scale of 1:20,000 at 24" by 36" layout. Report copies have been reduced to 11" x 17". Refer to graphic scale.
Open Space, Schools, and State Forests/Parks are depicted using available State GIS data, which may be outdated in some areas.
Base map: CTECO Hillshade (2006)

©2010 Verizon Wireless


Existing Verizon Wireless 1900 MHz Coverage
Norwalk, Connecticut and Surrounding Area
(*Map Scale is 1:20,000)
Coverage is depicted at a signal threshold of -85 dBm.
WILTON
FAIRFIELD
NEW CANAAN
WESTPORT
NORWALK
DARIEN
SAUGATUCK
E NORWALK 2
E NORWALK
NORWALK W
EAST NORWALK 4
NORWALK 2
E NORWALK S
NORWALK
Legend
Proposed Verizon Wireless Facility
Existing Verizon Wireless Facilities
Existing Surrounding Wireless 1900 MHz Coverage
Municipal and Private Open Space
School
State Forest/Park
Open Water
Town Line
Major Route
ALL-POINTS TECHNOLOGY CORPORATION
verizon
Map Notes:
This map was prepared at a map scale of 1:20,000 at 24" by 36" layout. Report copies have been reduced to 11" x 17". Refer to graphic scale.
Open Space, Schools, and State Forests/Parks are depicted using available State GIS data, which may be outdated in some areas.
Base map: CTECO Hillshade (2000)
0
0.5
1
Miles

Proposed Verizon Wireless 1900 MHz Coverage
Norwalk, Connecticut and Surrounding Area
(*Map Scale is 1:20,000)

Coverage is depicted at a signal threshold of -85 dBm.

WILTON
NEW CANAAN
DARIEN
NORWALK
E NORWALK 2
E NORWALK
NORWALK W
EAST NORWALK 4
NORWALK 2
E NORWALK S
WESTPORT
SAUGATUK
FAIRFIELD

Legend

- Proposed Verizon Wireless Facility
- Existing Verizon Wireless Facilities
- Existing Surrounding Wireless 1900 MHz Coverage
- Proposed Facility Wireless 1900 MHz Coverage
- Municipal and Private Open Space
- School
- State Forest/Park
- Open Water
- Town Line
- Major Route

ALL-POINTS TECHNOLOGY CORPORATION

verizon wireless

N W E S

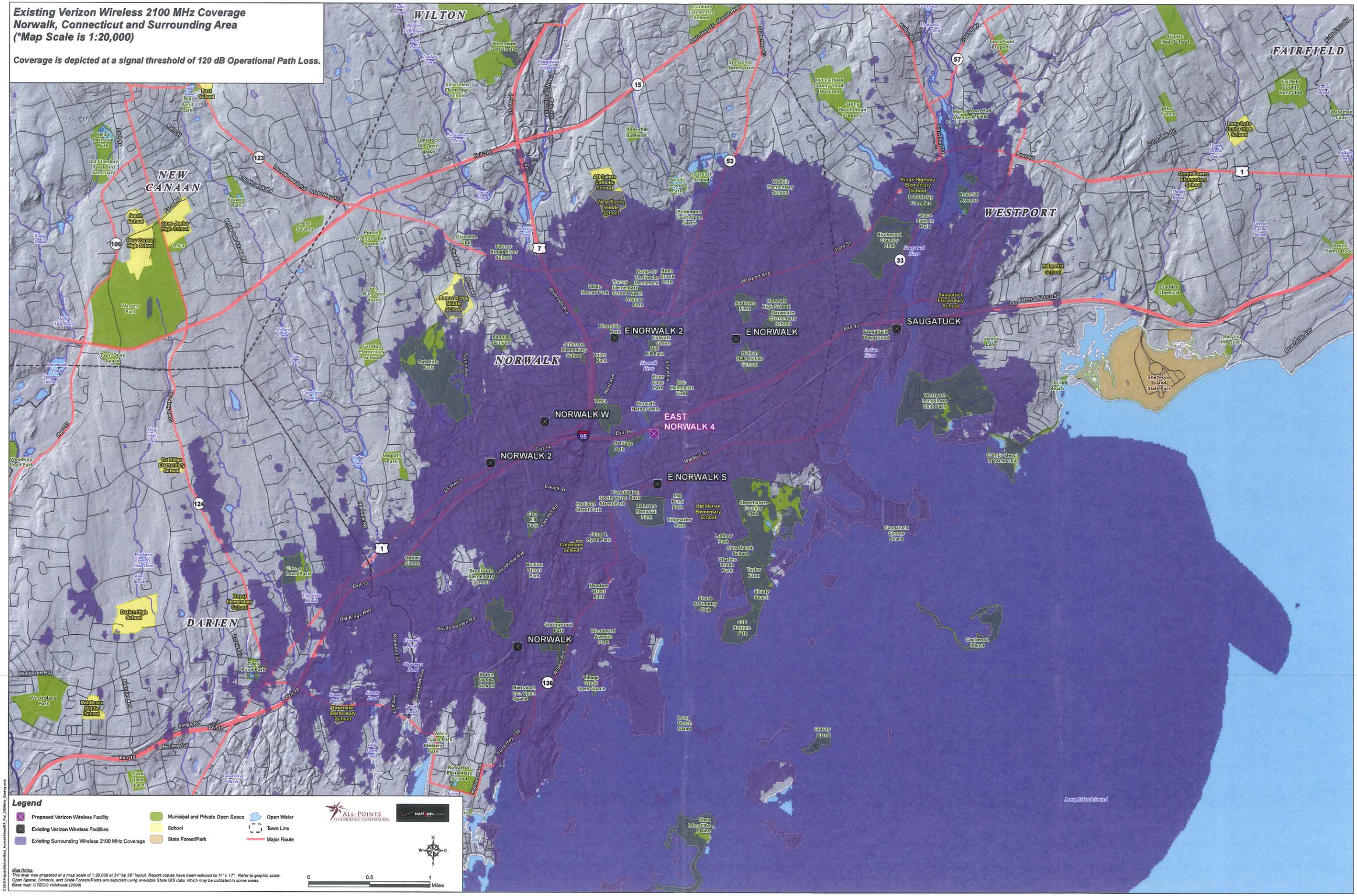
0 0.5 1 Miles

Map Notes:
This map was prepared at a map scale of 1:20,000 at 24" by 36" layout. Report copies have been reduced to 11" x 17". Refer to graphic scale. Open Space, Schools, and State Forests/Parks are depicted using available State GIS data, which may be outdated in some areas. Base map: CTECO Hillshade (2009)

C:\GIS\Projects\Verizon\Final_Norwalk\Norwalk1F_Fnl_1900MHz_Proposed.mxd

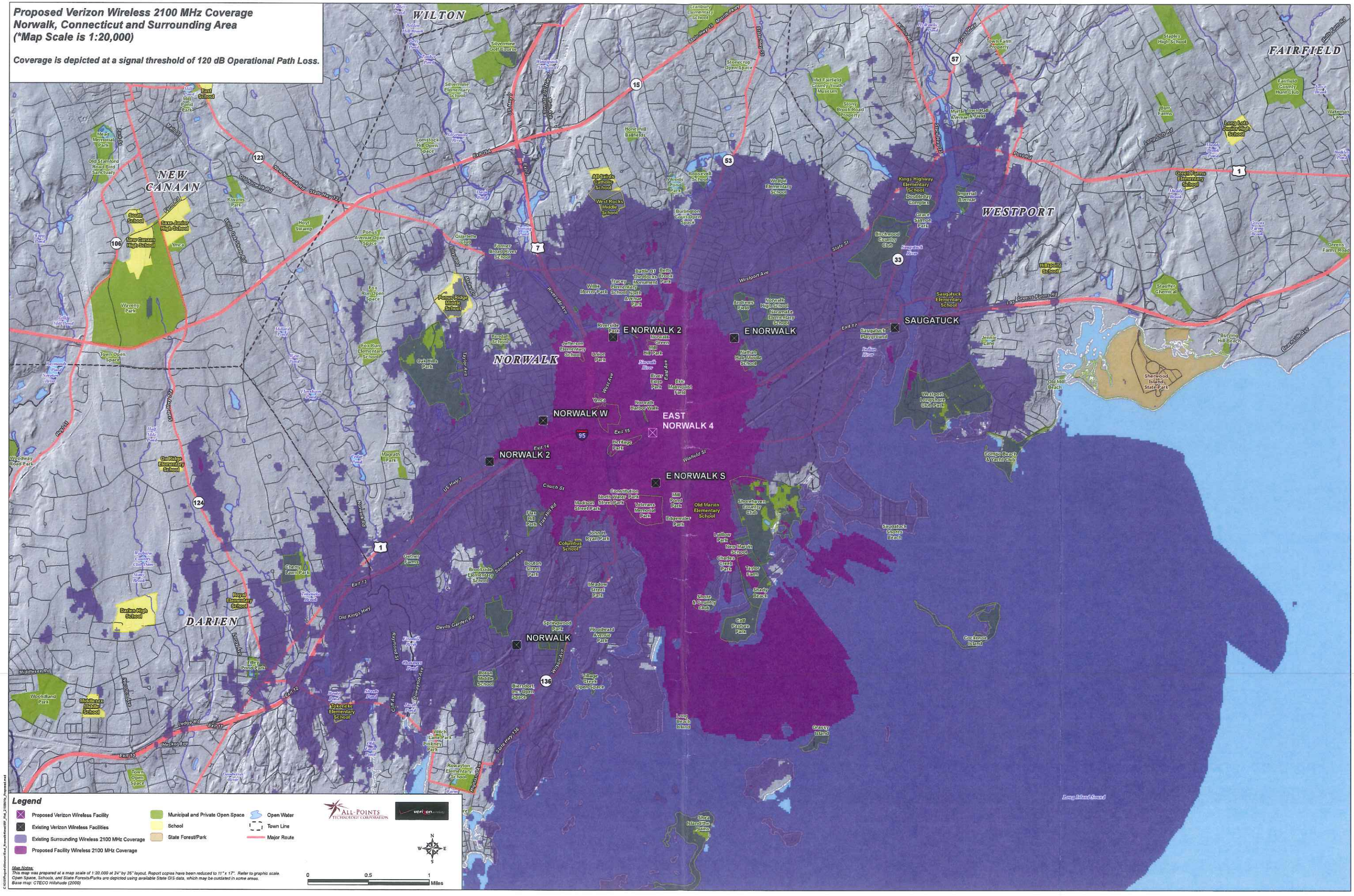
Existing Verizon Wireless 2100 MHz Coverage
Norwalk, Connecticut and Surrounding Area
(*Map Scale is 1:20,000)

Coverage is depicted at a signal threshold of 120 dB Operational Path Loss.



Proposed Verizon Wireless 2100 MHz Coverage
Norwalk, Connecticut and Surrounding Area
(*Map Scale is 1:20,000)

Coverage is depicted at a signal threshold of 120 dB Operational Path Loss.



ATTACHMENT 3

Cellco Partnership

d.b.a. verizon wireless

WIRELESS COMMUNICATIONS FACILITY

EAST NORWALK 4
1 SELLECK STREET
NORWALK, CT 06855

SITE DIRECTIONS

FROM: 99 EAST RIVER DRIVE, EAST HARTFORD, CONNECTICUT **TO:** 1 SELLECK STREET, NORWALK, 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	17.7 mi.
6.	Take EXIT 17 for CT-15 S/W CROSS PKWY	0.4 mi.
7.	Merge onto CT-15 S	29.8 mi.
8.	Take EXIT 52 for CT-108 S/CT-8 S toward BRIDGEPORT	0.6 mi.
9.	Follow signs for CT-8 S/BRIDGEPORT and merge onto CT-8 S	5.2 mi.
10.	Keep RIGHT at the fork, follow signs for I-95 S/NYC and merge onto I-95 S	12.7 mi.
11.	Take EXIT 16 toward EAST NORWALK	0.1 mi.
12.	Turn LEFT onto EAST AVE	0.1 mi.
13.	Turn RIGHT onto ST JOHN ST	0.1 mi.
14.	Take the 2nd RIGHT onto SELLECK ST, and the destination will be on the LEFT	243 ft.

GENERAL NOTES

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

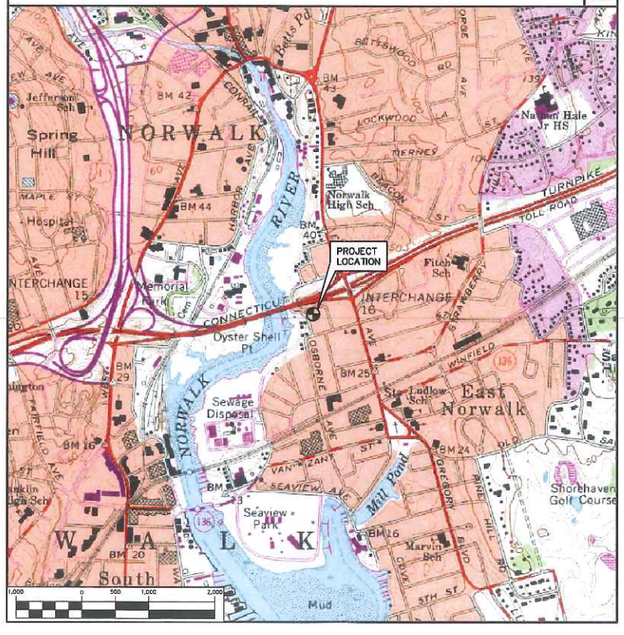
SITE INFORMATION

THE GENERAL 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 ON STEEL DUNNAGE ATOP EXISTING BUILDING ROOF.
2. A TOTAL OF UP TO TWELVE (12) DIRECTIONAL PANEL ANTENNAS ARE PROPOSED TO BE MOUNTED AT A CENTERLINE ELEVATION OF 90'± AGL ON A 25'± 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:	EAST NORWALK 4
SITE ADDRESS:	1 SELLECK STREET NORWALK, CT 06855
PROPERTY OWNER:	SANDOVAL SHORE POINTE DEVELOPMENT LLC 1 SELLECK STREET NORWALK, CT 06855
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°-06'-25.822" LONGITUDE 73°-24'-32.908" GROUND ELEVATION: 9.2'± A.M.S.L. COORDINATES AND GROUND ELEVATION BASED ON FAA 2-C SURVEY CERTIFICATION AS PREPARED FOR VERIZON WIRELESS, BY MARTINEZ COUCH AND ASSOCIATES L.L.C., DATED MARCH 18, 2014.

SHEET INDEX

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

PROFESSIONAL ENGINEER SEAL

REV.	DATE	DRAWN BY	CH'D BY	DESCRIPTION
0	04/28/14	MAR	DNO	ISSUED FOR CT SITING COUNCIL – CLIENT REVIEW

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

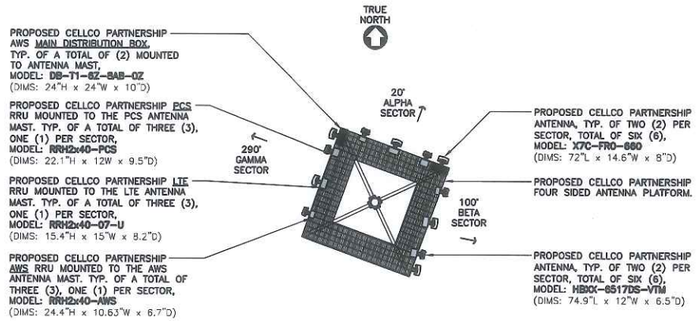
Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY
EAST NORWALK 4
1 SELLECK STREET
NORWALK, CT 06855

DATE: 04/28/14
SCALE: AS NOTED
JOB NO. 13248.000

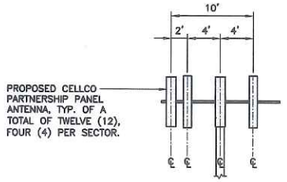
TITLE SHEET

T-1

Sheet No. 1 of 3



PLAN VIEW



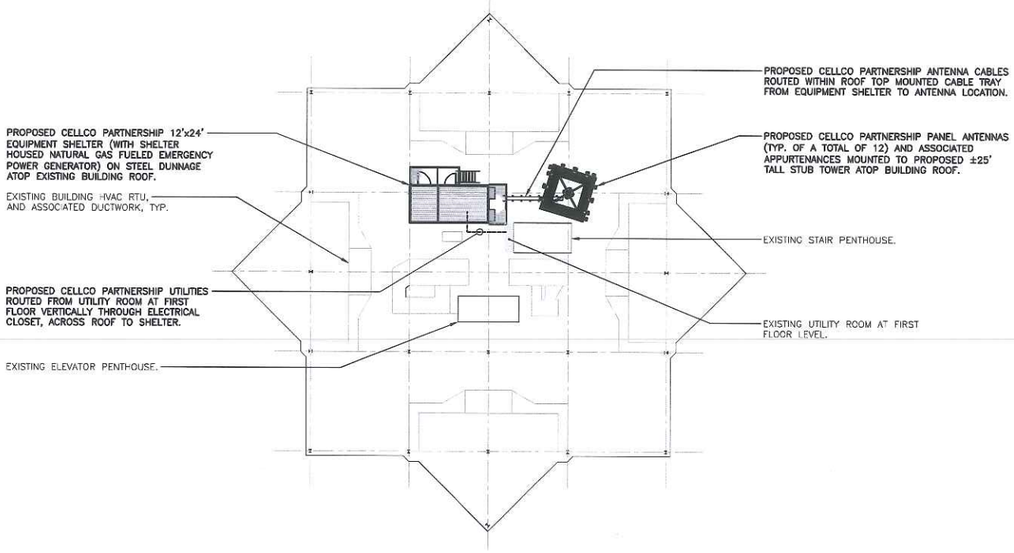
TYPICAL SECTOR ELEVATION

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.

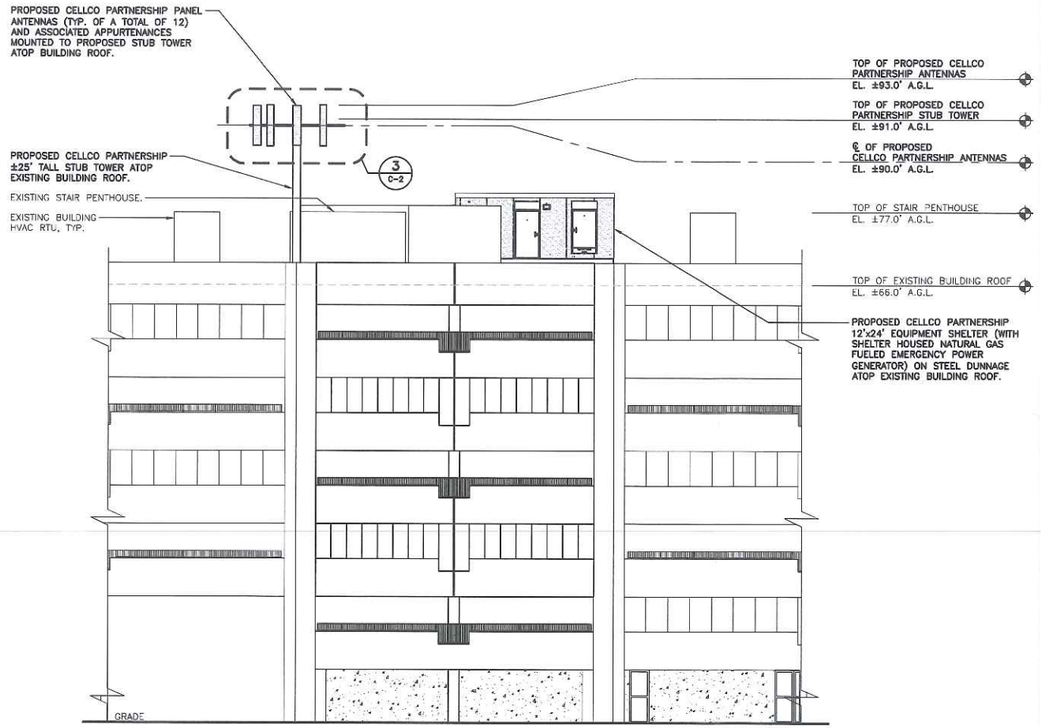
2 C-2



1 C-2 **ROOF PLAN**
SCALE: 1" = 20'

APPROXIMATE NORTH

GRAPHIC SCALE
20 0 10 20 40 60
(IN FEET)
1 inch = 20 ft.



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

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	04/28/14	HAR	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

EAST NORWALK 4

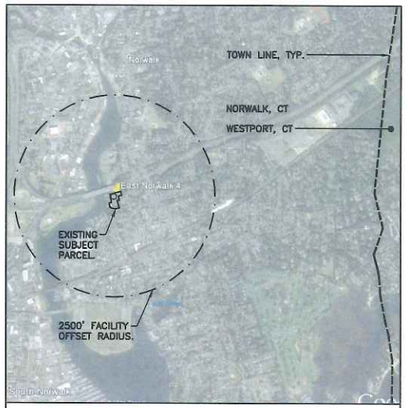
1 SELLECK STREET
NORWALK, CT 06855

DATE: 04/28/14
SCALE: AS NOTED
JOB NO. 13246.000

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 LIMITED TOPOGRAPHIC SURVEY PORTION OF THIS PLAN CONFORMS TO A VERTICAL 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 PARKING AREAS, PAVED DRIVE ARE COMPILED FROM OTHER MAPS AND LIMITED FIELD SURVEY.

COORDINATES REFER TO NAD 83.

VERTICAL DATUM IS BASED ON NGVD 29.

PARCEL OWNER OF RECORD: SANDOVAL SHORE POINTE DEVELOPMENT LLC

PARCEL AREA = 1.84± ACRES.

PARCEL IS IN NB ZONING DISTRICT.

PARCEL ID: MAP 3 BLOCK 7 LOT 37 NORWALK ASSESSOR'S OFFICE.

PORTION OF SUBJECT PARCEL IS IN FLOOD ZONE AE (EL.11) AS SHOWN ON THE FLOOD INSURANCE RATE MAP, FAIRFIELD COUNTY, CONNECTICUT PANEL 531 OF 626, MAP NUMBER 09001C0531G, MAP REVISED JULY 8, 2013, BY FEDERAL EMERGENCY MANAGEMENT AGENCY.

REFERENCE IS MADE TO THE FOLLOWING MAPS:

1. AS-BUILT PREPARED FOR SHORE POINTS ASSOCIATES LIMITED PARTNERSHIP, NORWALK CONNECTICUT. SCALE 1"=20' DATED DECEMBER 31, 1985. REVISED THROUGH SEPTEMBER 5, 1986. PREPARED BY HALL & McCHESNEY INC.

2. MAP OF PROPERTY PREPARED FOR SHORE POINTS ASSOCIATES LIMITED PARTNERSHIP, NORWALK, CONNECTICUT. SCALE 1"=10'. DATED OCTOBER 3, 1988. PREPARED BY GREGORY SURVEYORS.

3. MAP SHOWING EXCHANGE OF PARCELS BETWEEN HARRY PARKS AND SHORE POINTS ASSOCIATES LIMITED PARTNERSHIPS & S. P. ASSOCIATES II, NORWALK CONNECTICUT. SCALE 1"=20' DATED OCTOBER 31, 1984. PREPARED BY GREGORY SURVEYORS.

4. SANITARY SEWER EASEMENT TO BE ACQUIRED BY THE CITY OF NORWALK BETWEEN SOUTH SMITH STREET AND MERRILLS LANE, NORWALK CONNECTICUT. SCALE 1"=40' DATED SEPTEMBER 27, 1974. PREPARED BY LEONARD SURVEYORS.

5. RIGHT OF WAY MAP TOWN OF NORWALK CONNECTICUT TURNPIKE FROM THE DARIEN-NORWALK TOWN LINE TO THE NORWALK-WESTPORT TOWN LINE, SCALE 1"=80', DATED MARCH 7, 1980, BY CONNECTICUT DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS.

NOT ALL IMPROVEMENTS SHOWN.

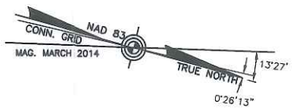
TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON

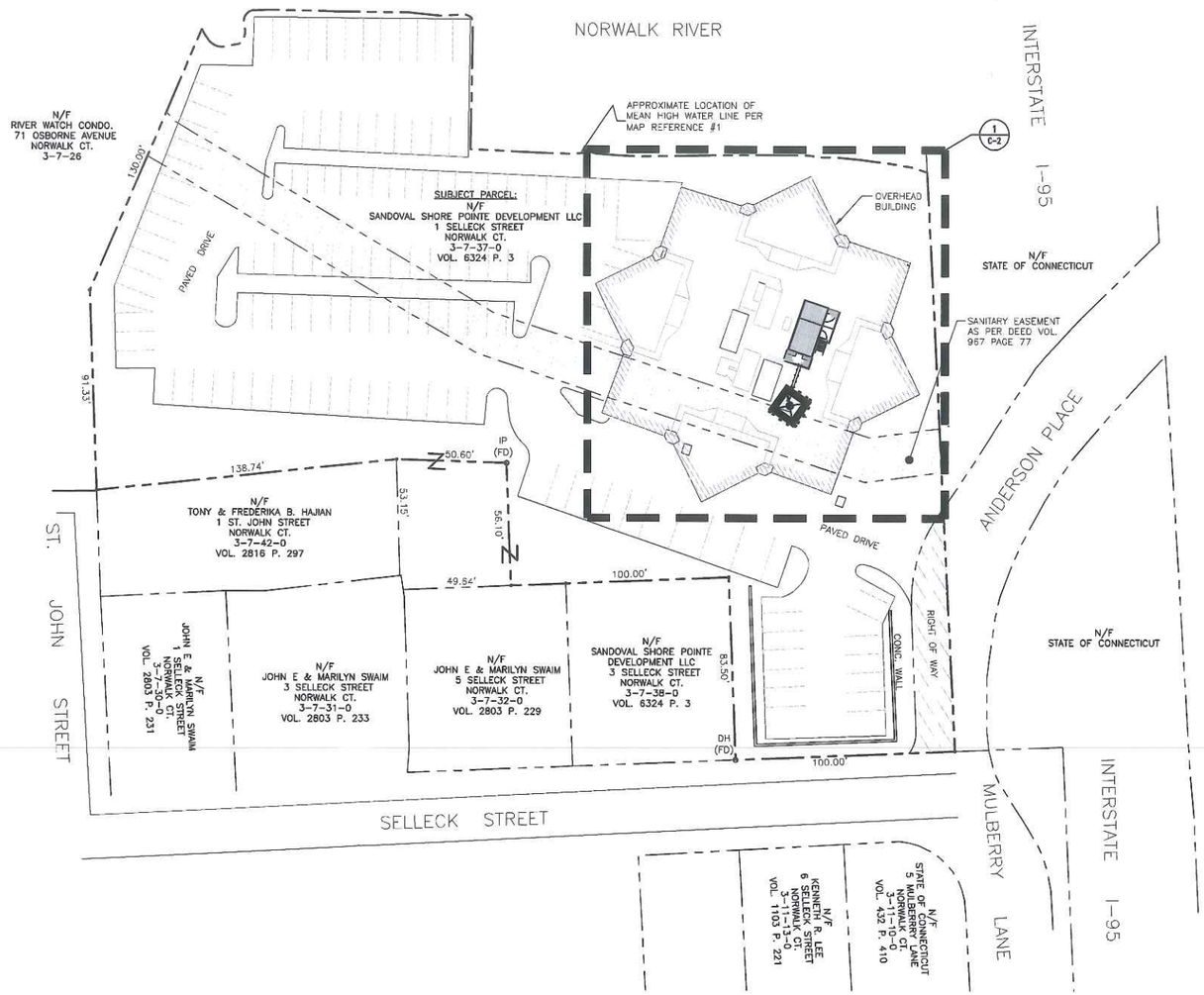
THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND SEAL

A. RAFAEL MARTINEZ LLS #18833 DATE

SYMBOLS LEGEND

- PROPERTY LINE
- EXISTING ROAD
- IRON PIN OR DRILL HOLE
- CONCRETE COLUMN
- CONCRETE COLUMN
- CL "CB"





1 / C-1 **SITE/SITE SURVEY PLAN**
SCALE: 1"=30'

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	04/29/14	HMR	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
EAST NORWALK 4
1 SELLECK STREET
NORWALK, CT 06855

DATE: 04/28/14
SCALE: AS NOTED
JOB NO. 13248.000

SITE/SITE SURVEY PLAN

C-1
Sheet No. 2 of 3

ATTACHMENT 4

CENTEK engineering

Centered on Solutions℠

June 16, 2014

Mr. Mark Gauger
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

Re: Structural Feasibility Letter
Verizon Wireless Site East Norwalk 4
1 Selleck Street
Norwalk, CT 06855

CENTEK Project No. 13248.000

Dear Mr. Gauger,

This letter is to confirm the structural feasibility of constructing the proposed wireless communications facility at the referenced property. The existing building drawings prepared by Rudolph L. Melk dated December 12, 1984 were available for use. A preliminary structural analysis was prepared for use in making a final recommendation.

The host building is a 5-story steel framed structure currently utilized as office space. The typical floor construction consists of a reinforced concrete slab system supported on steel beams and steel columns. Of particular concern were the two interior columns to be utilized for support of the proposed equipment shelter and dunnage frame.

The weight of the Verizon radio equipment, shelter and steel dunnage frame along with applicable wind, snow and occupant loadings will be transferred to the structural bearing of the host building through the two aforementioned columns and the concrete shear wall core. The column capacities were verified utilizing the existing building dead and live loads in conjunction with the worst-case maximum dunnage reaction of 30 kips per column.

Centek Engineering, Inc. will prepare sealed design documents for the proposed unmanned wireless communications facility located on the roof of the 5-story (± 66 ft.) host building. The final design will comply with the requirements of the 2005 Connecticut State Building Code with most current supplements. Should modifications to the existing structure be warranted to accommodate the proposed installation, it is our opinion that they could be implemented without adverse effect to the existing facility operations. In conclusion, our preliminary analysis finds that the proposed Verizon Wireless facility will not adversely affect the structural integrity of the host building.

Respectfully Submitted,

Carlo F. Centore, PE
Principal ~ Structural Engineer

STATE OF CONNECTICUT
CARLO F. CENTORE
No. 15694
LICENSED
PROFESSIONAL ENGINEER

63-2 North Branford Road, Branford, CT 06405 203.488.0580 Fax 203.488.8587 www.CentekEng.com

ATTACHMENT 5

ALL-POINTS
TECHNOLOGY CORPORATION

COASTAL CONSISTENCY REVIEW

June 11, 2014

Verizon Wireless
99 East River Drive
East Hartford, CT 06108

APT Project No.: CT1412330

Re: Proposed East Norwalk 4 Facility
One Selleck Street
Norwalk, Connecticut

On behalf of Cellco Partnership (d/b/a Verizon Wireless), All-Points Technology Corporation, P.C. ("APT") performed an evaluation to demonstrate that the proposed Verizon Wireless project meets the requirements of the Connecticut Coastal Management Act ("CCMA")[1] and is adequately protective of the interests of these regulations and the State's coastal resources and policies. This analysis was performed because the proposed project is located within the coastal boundary as defined in CGS section 22a-94(b); please refer to the enclosed Coastal Boundary Map in the Figures Attachment. The initial step in assuring consistency with the State's coastal policies for any use or activity subject to the CCMA is to determine the coastal resources on or near a project site which may be affected. The next step is to review the coastal use policies to determine if there are potential conflicts regarding the proposed use or activity under consideration.

Project Information

APT understands that Verizon Wireless proposes to construct a 25-foot stub-tower on the northeasterly portion of the roof of an existing five-story office building located at One Selleck Street in Norwalk, Connecticut ("Subject Property" or "Site"). The Subject Property is a 1.84 acre parcel located on the west side of Selleck Street and along the east bank of the Norwalk River. The parcel is zoned as a Neighborhood Business and is improved with the five-story office building and paved parking areas. Equipment associated with the antennas and a natural gas-fueled back-up generator would be located in a 12' x 24' shelter also located on the roof to the west of the proposed tower, collectively referenced herein as the "Facility". The façade of the shelter will be designed to match the color and texture of the existing building. The top of Cellco's antennas would extend to an overall height of 93 feet above ground level. The Property is immediately adjacent to an elevated portion of Interstate 95 to the north, the Norwalk River to the west, commercial uses to the south and residential uses to the east.

[1] CGS Section 22a-90 through 22a-112

Coastal Resources

An APT Wetland Scientist inspected the Subject Property to field-verify on Site and adjacent coastal resources. Prior to the field inspection, the Connecticut Department of Energy and Environmental Protection ("DEEP") Coastal Resources Map[2] for Norwalk was reviewed. The following Coastal Resources are located on or adjacent to the Subject Property:

Coastal Resources	On Site	Adjacent to Property	Off Site but Potentially Affected by Project	Not Applicable
General Resources*	☒	☐	☐	☐
Beaches & Dunes	☐	☐	☐	☒
Bluffs & Escarpments	☐	☐	☐	☒
Coastal Hazard Area	☒	☐	☐	☐
Coastal Waters & Estuarine Embayments	☒	☐	☐	☐
Developed Shorefront	☒	☐	☐	☐
Freshwater Wetlands and Watercourses	☐	☐	☐	☒
Intertidal Flats	☐	☒	☐	☐
Islands	☐	☐	☐	☒
Rocky Shorefront	☐	☐	☐	☒
Shellfish Concentration Areas	☐	☐	☐	☒
Shorelands	☐	☐	☐	☒
Tidal Wetlands	☐	☒	☐	☐

* applicable to all proposed activities

No federal or state-regulated tidal or inland wetlands or watercourses were identified (or delineated) on the Subject Property. The DEEP Coastal Resource Map identifies the following coastal resources on or adjacent to the Subject Property: Coastal Flood Hazard Area, Developed Shorefront, Estuarine Embayments and Tidal Wetlands. The Coastal Flood Hazard Area is associated with the Norwalk River's 100-year flood plain (Zone AE with a Base Flood Elevation of 10 feet) as shown on the FEMA Flood Insurance Rate Map, Fairfield County, Connecticut, Panel 531 of 626, Map Number 09001C0531G, revised July 8, 2013, which is included in the Figures Attachment. Field observations of Developed Shorefront consisted of armored banks of the Norwalk River and a marina. The Estuarine Embayments resource is associated with the Norwalk River, a tidally influenced river, and its connection to Norwalk Harbor, located approximately one mile south of the Subject Property. Small disconnected areas of Intertidal Flats and Tidal Wetlands (common reed {*Phragmites australis*} dominated) were observed adjacent to the Subject Property. Please refer to the enclosed Coastal Boundary and Coastal Resources Maps in the Figures Attachment. Representative photographs of the Subject Property and coastal resources are enclosed.

According to the most current DEEP Natural Diversity Data Base ("NDDB") State and Federal Listed Species and Natural Communities Map for Norwalk, the Subject Property lies within an area identified as potential habitat for Endangered, Threatened or Special Concern Species. Considering the Subject Property is entirely developed and Verizon Wireless' proposed development would be located on the roof of the existing office building, no impact to Endangered, Threatened or Special Concern Species is anticipated. However, a review request has been submitted to the agency for confirmation; correspondence from DEEP will be forwarded upon receipt.

The proposed project will not generate any additional stormwater beyond current conditions, as the Facility will be installed on the roof of the existing office building.

[2] Connecticut Department of Environmental Protection (now known as Department of Energy & Environmental Protection), Coastal Area Management Program. *Coastal Resources, Norwalk South Quadrangle*. 1979.

Applicable Coastal Use and Activity Policies

Section 22a-92 of the Coastal Management Act identifies all statutory activities applicable to the proposed activity. One of these activities applies to the proposed Verizon Wireless project:

- ☒ **General Development**[3] [CGS Sections 22a-92(a)(1), 22a-92(a)(2), 22a-92(a)(9)]
- ☐ Water-Dependent Uses [CGS Sections 22a-92(a)(3), 22a-92(b)(1)(A)]
- ☐ Ports and Harbors [CGS Section 22a-92(b)(1)(C)]
- ☐ Coastal Structures and Filling [CGS Section 22a-92(b)(1)(D)]
- ☐ Dredging and Navigation [CGS Sections 22a-92(c)(1)(C), 22a-92(c)(1)(D)]
- ☐ Boating [CGS Section 22a-92(b)(1)(G)]
- ☐ Fisheries [CGS Section 22a-92(c)(1)(I)]
- ☐ Coastal Recreation and Access [CGS Sections 22a-92(a)(6), 22a-92(c)(1)(J), 22a-92(c)(1)(K)]
- ☐ Sewer and Water Lines [CGS Section 22a-92(b)(1)(B)]
- ☐ Fuel, Chemicals and Hazardous Materials [CGS Sections 22a-92(b)(1)(C), 22a-92(b)(1)(E), 22a-92(c)(1)(A)]
- ☐ Transportation [CGS Sections 22a-92(b)(10)(F), 22a-92(c)(1)(F), 22a-92(c)(1)(G), 22a-92(c)(1)(H)]
- ☐ Solid Waste [CGS Section 22a-92(a)(2)]
- ☐ Dams, Dikes and Reservoirs [CGS Section 22a-92(a)(2)]
- ☐ Cultural Resources [CGS Section 22a-92(b)(J)]
- ☐ Open Space and Agricultural Lands [CGS Section 22a-92(a)(2)]

Consistency with Applicable Statutory Coastal Use and Activity Policies

A primary policy of the CCMA is to insure that the proposed development proceeds in a responsible manner to allow for economic growth without significantly disrupting coastal resources. The CCMA identifies eight potential adverse impacts to coastal resources. The proposed Verizon Wireless project will not result in adverse impacts to coastal resources or associated policies. This section provides an explanation of how the proposed activity is consistent with the applicable statutory coastal resource policies and describes any mitigation necessary to offset adverse impacts.

Potential Resource Impacts	Applicable	Not Applicable
1. Characteristics & Functions of Resources - CGS Section 22a-93(15)(H)	☒	☐
2. Coastal Flooding - CGS Section 22a-93(15)(E)	☒	☐
3. Coastal Waters Circulation Patterns - CGS Section 22a-93(15)(B)	☐	☒
4. Drainage Patterns - CGS Section 22a-93(15)(D)	☐	☒
5. Patterns of Shoreline Erosion and Accretion - CGS Section 22a-93(15)(C)	☐	☒
6. Visual Quality - CGS Section 22a-93(15)(F)	☒	☐
7. Water Quality - CGS Section 22a-93(15)(A)	☐	☒
8. Wildlife, Finfish, Shellfish Habitat - CGS Section 22a-93(15)(G)	☐	☒

1) *Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments by significantly altering their natural characteristics or function.*

The proposed project will not alter the natural characteristics of any coastal resource area. The proposed Facility would be located on the roof of the existing office building. No ground disturbance is associated with the proposed installation.

[3] applicable to all proposed activities

2) *Increasing the hazard of coastal flooding by significantly altering shoreline configurations or bathymetry, particularly within high velocity flood zones.*

The proposed project will not alter shoreline configurations or bathymetry and will not increase coastal flooding. Although the Subject Property is identified within the 100-year flood hazard zone (Coastal Flood Hazard Area), the proposed Facility would be located on the roof of the five-story office building and does not require any ground disturbance or development. Therefore, the project would not increase coastal flooding.

3) *Degrading existing circulation patterns of coastal waters by impacting tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours.*

Being located on the roof of the office building, the proposed project is located outside of tidally influenced coastal water areas and as such will not impact current drainage or circulation patterns to tidally influenced areas.

4) *Degrading natural or existing drainage patterns by significantly altering groundwater flow and recharge and volume of runoff.*

Existing drainage patterns, groundwater flow and recharge and stormwater runoff will not be altered by the proposed Facility due to its location on the office building roof. Additional impervious surfaces will not be created.

5) *Degrading natural erosion patterns by significantly altering littoral transport of sediments in terms of deposition or source reduction.*

The proposed project would not affect littoral transport of sediments (i.e., patterns of sand deposition) since the Facility location is not on a shoreline.

6) *Degrading visual quality by significantly altering the natural features of vistas and viewpoints.*

The APT Visual Report concludes that the visual impacts of the proposed 25-foot tall roof-top stub-tower will be minimal and limited to locations within about 0.5 mile of the Property. Views of coastal resources will not be obstructed by the proposed Facility from scenic overlooks or public parks. Oyster Shell Park is located across the Norwalk River just west of the Subject Property. Principal views of coastal resources from this park consist of the Norwalk River and Developed Shorefront, which would not be obstructed by the proposed Facility. Views of the Facility from Oyster Shell Park would be mitigated by the tree line on the horizon such that the proposed Facility would not rise substantially above this backdrop. 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.

7) *Degrading water quality of coastal waters by introducing significant amounts of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity.*

The proposed project will not affect water quality within the Norwalk River or associated coastal resources. Since the proposed Facility is located on the roof of the office building, no additional impervious surfaces are created and as a result no additional stormwater runoff will be generated by the proposed project. Since no ground disturbance is associated with the proposed installation, no sedimentation will be generated by the proposed development.

8) *Degrading or destroying essential wildlife, finfish or shellfish habitat by significantly altering the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significantly altering the natural components of the habitat.*

The proposed facility will not degrade or destroy essential coastal wildlife, finfish or shellfish habitat. The proposed facility would be located on the roof of the existing office building.

Impact to Future Water-Dependent Development Activities and Opportunities

"Adverse impacts on future water-dependent development opportunities" and "adverse impacts on future water-dependent development activities" include but are not limited to (A) locating a non-water-dependent use at a site that (i) is physically suited for a water-dependent use for which there is a reasonable demand or (ii) has been identified for a water-dependent use in the plan of development of the municipality or the zoning regulations; (B) replacement of a water dependent use with a non-water-dependent use; and (C) siting of a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters.[4]

Potential Impacts on Water Dependent Uses	Applicable	Not Applicable
Locating a non-water-dependent use on a site suited to or planned for a water-dependent use - CGS Section 22a-93(17)	☐	☒
Replacing an existing water-dependent use with a non-water-dependent use - CGS Section 22a-93(17)	☐	☒
Siting a non-water-dependent use which reduces or eliminates public access to marine or tidal waters - CGS Section 22a-93(17)	☐	☒

The Subject Property has direct access to the Norwalk River, a marine and tidal water, and is therefore physically suited for a water-dependent use. The exiting marina currently provides a water-dependent use on the property. Verizon Wireless' proposed development on the roof of the existing office building will not reduce, eliminate or in any way hinder public access to the Norwalk River or the marina or future water-dependent development activities or opportunities.

Conclusion

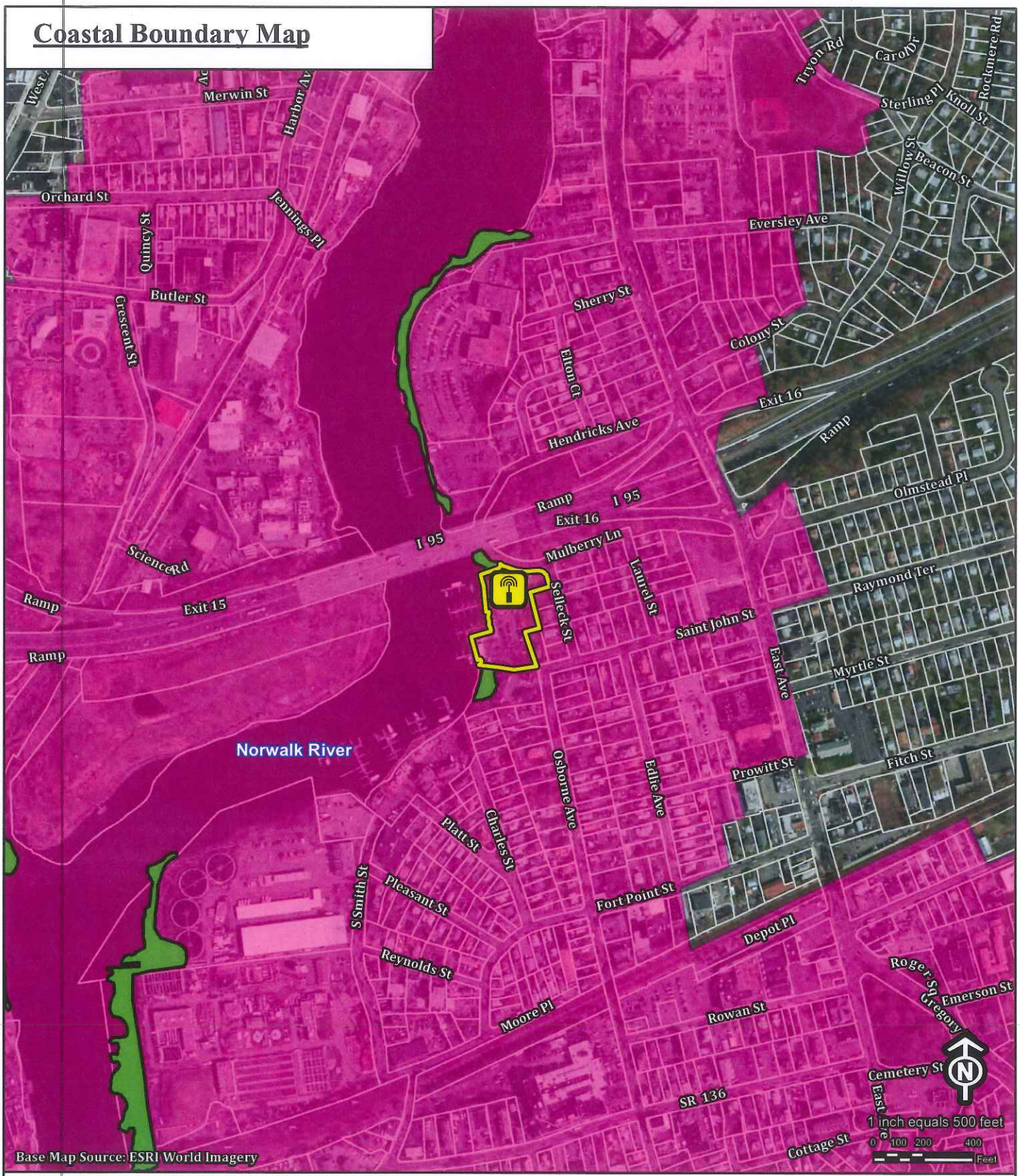
The activity proposed by Verizon Wireless is found to be consistent with all applicable policies in Section 22a-92 of the Connecticut Coastal Management Act and will not adversely impact coastal resources.

[4] CGS Section 22a-93(17)

Figures

- Coastal Boundary Map
- Coastal Resources Map
- FEMA Flood Insurance Rate Map, Map Number 09001C0531G

Coastal Boundary Map



Legend

- Proposed Facility Location
- Subject Parcel
- Coastal Boundary
- CTDEEP Parcel (updated 8/10)
- Tidal Wetland 1990s

Proposed Verizon East Norwalk 4 Facility
1 Selleck Street
East Norwalk, CT

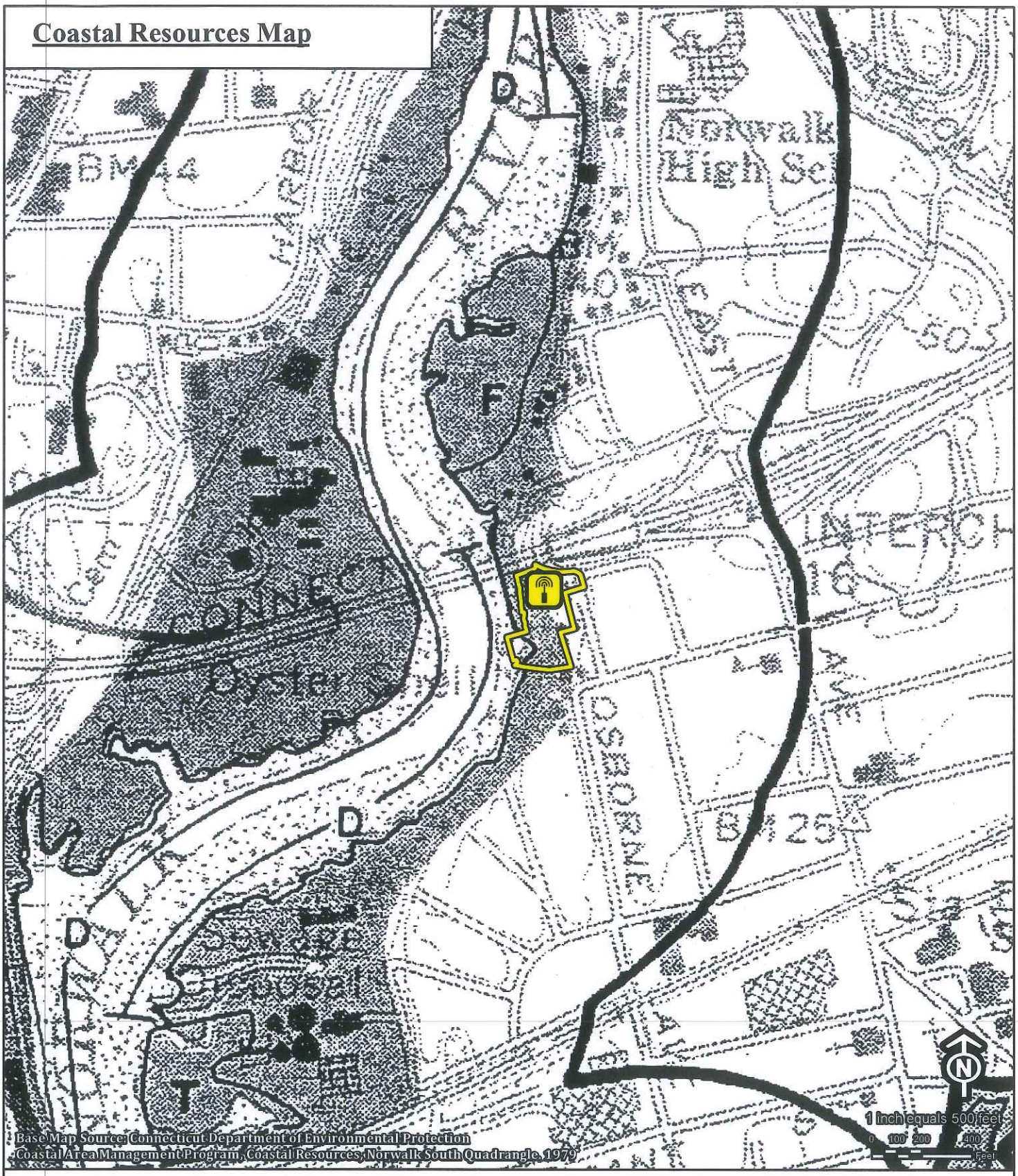
Monday, June 09, 2014

verizonwireless

ALL-POINTS TECHNOLOGY CORPORATION

Path: C:\All_Points_Tech\Projects\Client\Verizon\EastNorwalk4\GIS\Maps\CAM1_Map.mxd

Coastal Resources Map



Base Map Source: Connecticut Department of Environmental Protection
Coastal Area Management Program, Coastal Resources, Norwalk South Quadrangle, 1979

Legend

Proposed Facility Location

Subject Parcel

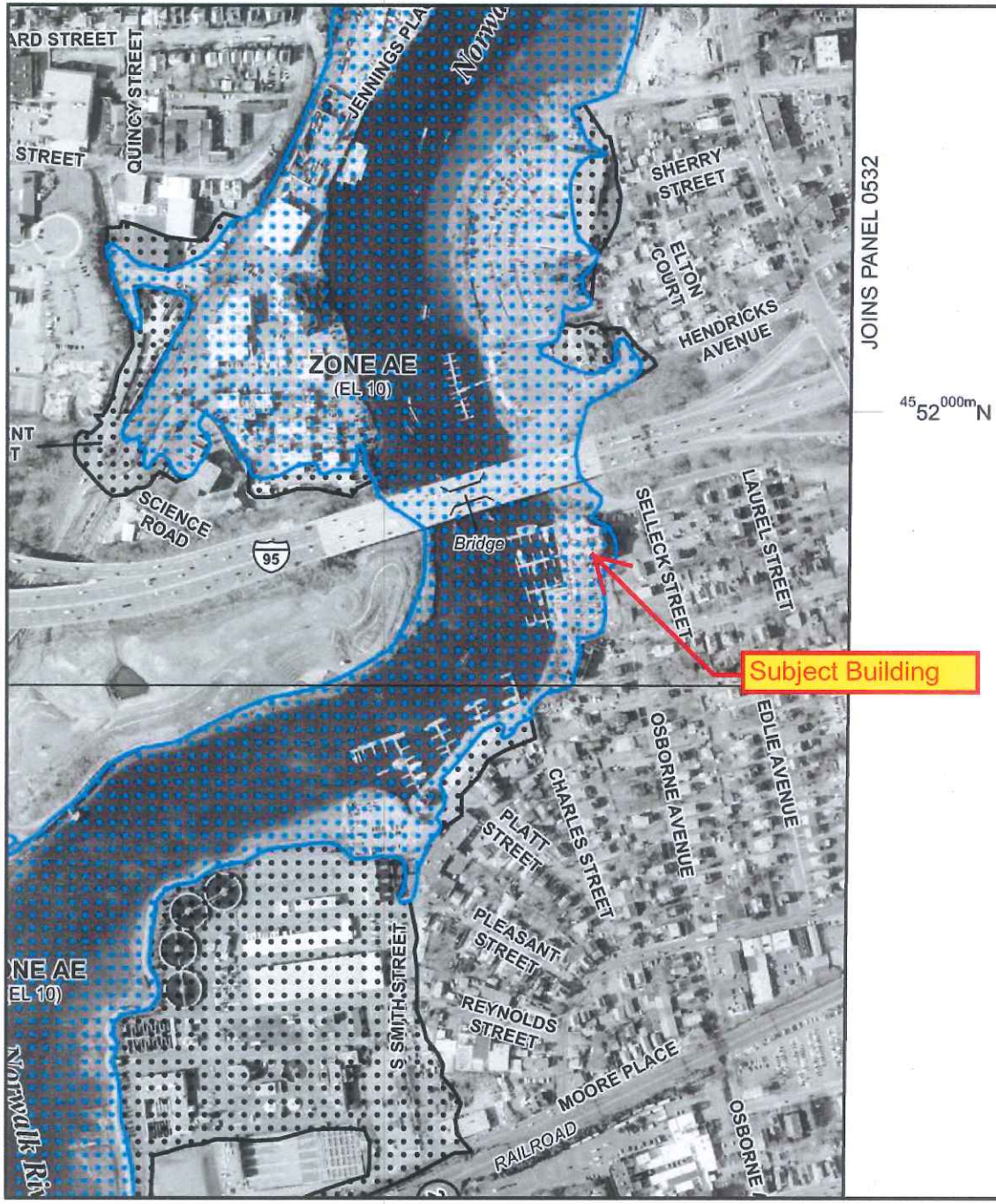
Proposed Verizon East Norwalk 4 Facility
1 Selleck Street
East Norwalk, CT

Monday, June 09, 2014

verizonwireless

ALL-POINTS TECHNOLOGY CORPORATION

Path: C:\All_Points_Tech\Projects\Client\Verizon\EastNorwalk4\GIS\Maps\CAM2_Map.mxd



MAP SCALE 1" = 500'

250 0 500 1000 FEET

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0531G

FIRM

FLOOD INSURANCE RATE MAP

FAIRFIELD COUNTY, CONNECTICUT (ALL JURISDICTIONS)

PANEL 531 OF 626

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
NORWALK, CITY OF	090012	0531	G

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
09001C0531G

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

Photodocumentation

Photo 1: View of office building from Norwalk River, looking northeast, along with marina and Developed Shorefront coastal resource.

Photo 2: View of Norwalk River from marina with Oyster Shell Park across river in left side of photo, looking northwest. Interstate 95 crossing over river in background of photo.

Photo 3: View of Intertidal Flats and Tidal Wetlands (common reed area) coastal resources adjacent to north end of property, looking north at I-95 bridge supports.

Photo 4: View of Intertidal Flats and Tidal Wetlands (common reed area) coastal resources adjacent to south end of property, looking southeast at adjacent property.

ATTACHMENT 6

ALL-POINTS
TECHNOLOGY CORPORATION

VISIBILITY ANALYSIS

EAST NORWALK 4

1 SELLECK STREET

NORWALK, CT 06855

Prepared for:

Verizon Wireless
99 East River Drive
East Hartford CT 06108

Prepared by:

All-Points Technology Corporation, P.C.
3 Saddlebrook Drive
Killingworth, CT 06419

JUNE 2014

Project Introduction

Cellco Partnership (d/b/a "Verizon Wireless") proposes to construct and operate a wireless telecommunications facility ("Facility") at One Selleck Street in the City of Norwalk, Fairfield 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 Host Property is located south of Interstate 95 and east of the Norwalk River within a mixed commercial/residential area of southern Norwalk. The Host Property is developed with a large, multi-story commercial building and parking areas.

The proposed Facility would be located atop the 66-foot tall, flat-roofed building and would include a 27-foot tall monopole that would extend to an overall height of 93 feet above ground level ("AGL"). A 12-foot by 24-foot equipment shelter would be located west of the monopole on the roof of the building. Verizon wireless would affix a total of 12 antennas at a center-line height of 90 feet AGL.

The Study Area consists of a mix of commercial, residential and industrial development, the I-95, MetroNorth Railroad, Norwalk Harbor and recreation areas.

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.

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

[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.

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 655 acres (representing approximately 33% of the Study Area). Topography within the Study Area ranges in ground elevations from sea level to 200 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 30 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 - 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.

To supplement the results of the computer modeling efforts, APT conducted a field reconnaissance of the Study Area on March 21, 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 50 feet AGL. The average building height was assigned a conservative value of 25 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 Canon EOS 6D digital camera body and Canon EF 24 to 105 millimeter ("mm") zoom lens, with lens set to 50 mm[2]. 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."*[3]

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 (50 feet AGL) and structures (25 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.

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

[2] A 105 mm lens setting was also used for two locations across the Norwalk River, at distances beyond 0.25 mile so that details of the Facility could be seen in the simulations.

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

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.

Note that the two near-range simulations were taken with a 50 mm focal length and a 105 mm lens setting was used for two locations across the Norwalk River at distances beyond 0.25 mile. In all cases, the lens setting was selected so that details of the Facility could be seen in the simulations. Photo-documentation of the two distant views is also presented at the 50 mm lens setting to provide an understanding of the perspectives from these locations; at these distances the proposed installation would not be readily discernable from other existing infrastructure on the building.

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 photo-simulations were 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, and the distance from where the photo was taken relative to the proposed Facility. All of the photo locations presented herein would provide views of the proposed Facility on a year-round basis. The photo locations are depicted on the visibility analysis maps provided as attachments to this report.

View	Location	Orientation	Distance To Site
1	Mulberry Lane	Southwest	±0.06 Mile
2	Osborne Avenue	North	±0.05 Mile
3	Oyster Shell Park*	East	±0.34 Mile
4	Maritime Aquarian Parking Lot*	Northeast	±0.51 Mile

*50 mm and 105 mm lens settings used at these locations

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 approximately 0.50 mile of the Host Property building. On a purely quantitative level, year-round views may extend over approximately 75 acres. Seasonally, when the leaves are off the deciduous trees, views could encompass an area of 80 additional acres.

Photos 1 and 2 were taken from areas immediately abutting the Host Property to demonstrate the proposed installation. The vast majority of locations where the Facility would be visible beyond the immediate vicinity become partially obstructed with intervening buildings, trees and existing urban infrastructure. Locations to the west would have the advantage of a tree line on the horizon such that the proposed Facility would not rise substantially above this backdrop (see photographs 3 and 4).

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 Jefferson Elementary School, located at 75 Van Buren Avenue, approximately 0.3 mile to the northwest. No views of the Facility are anticipated from this location. The nearest commercial child day care center is Room to Grow-Norwalk, located at 208 East Avenue, approximately 0.21 mile to the southeast. Limited views of the Facility may be attainable from some locations at this property.

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 50 feet and average structure height of 25 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

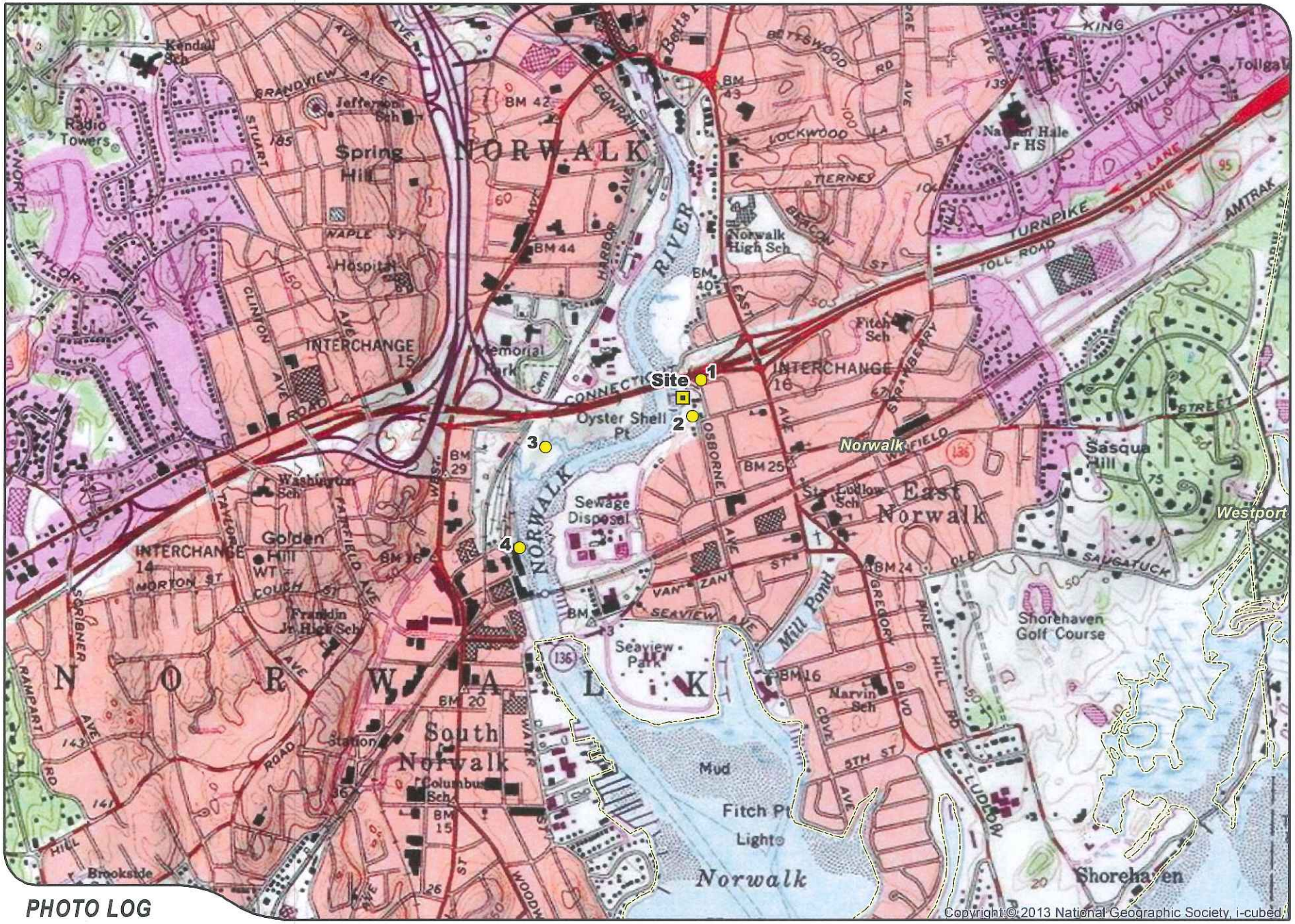


PHOTO LOG

Legend

Site | Year-Round Visibility | Municipal Boundary

1,000 500 0 1,000 Feet

ALL-POINTS TECHNOLOGY CORPORATION

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
1	**MULBERRY LANE**	**SOUTHWEST**	**+/- 0.06 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

verizon wireless

SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
1	**MULBERRY LANE**	**SOUTHWEST**	**+/- 0.06 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

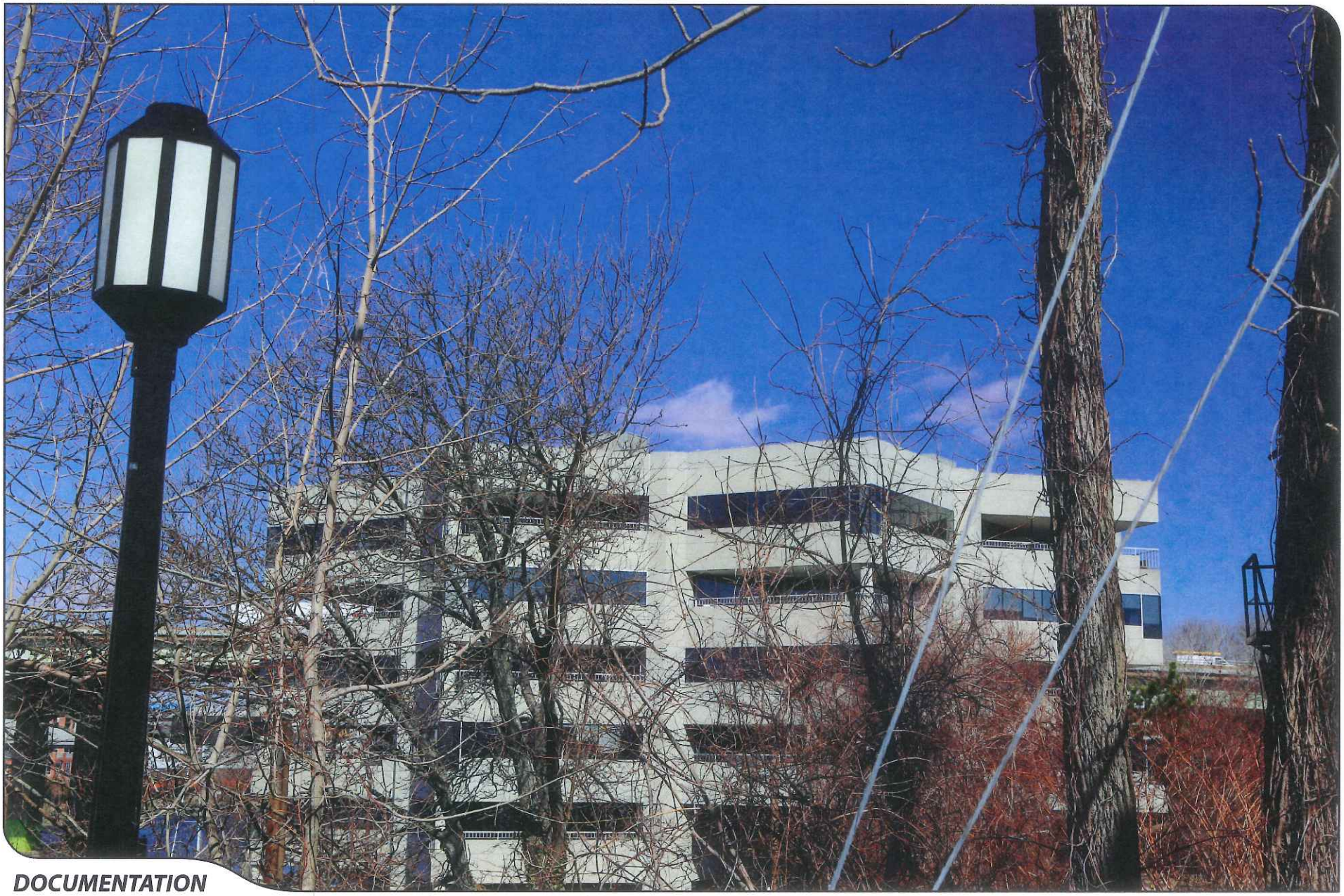
verizonwireless

SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
1	**MULBERRY LANE**	**SOUTHWEST**	**+/- 0.06 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

verizon wireless

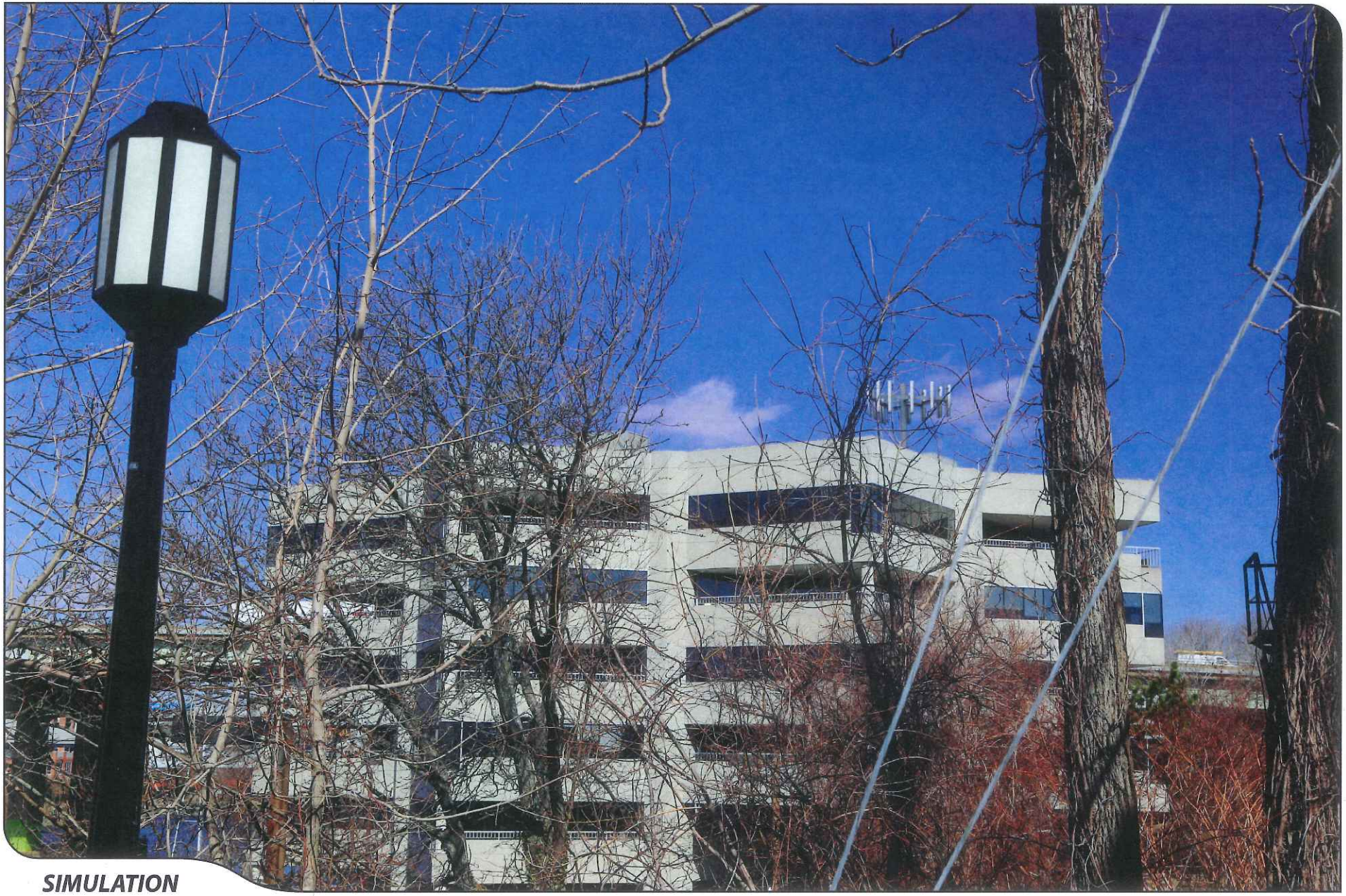


DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
2	OSBORNE AVENUE	NORTH	+/- 0.05 MILE

ALL-POINTS TECHNOLOGY CORPORATION

verizonwireless

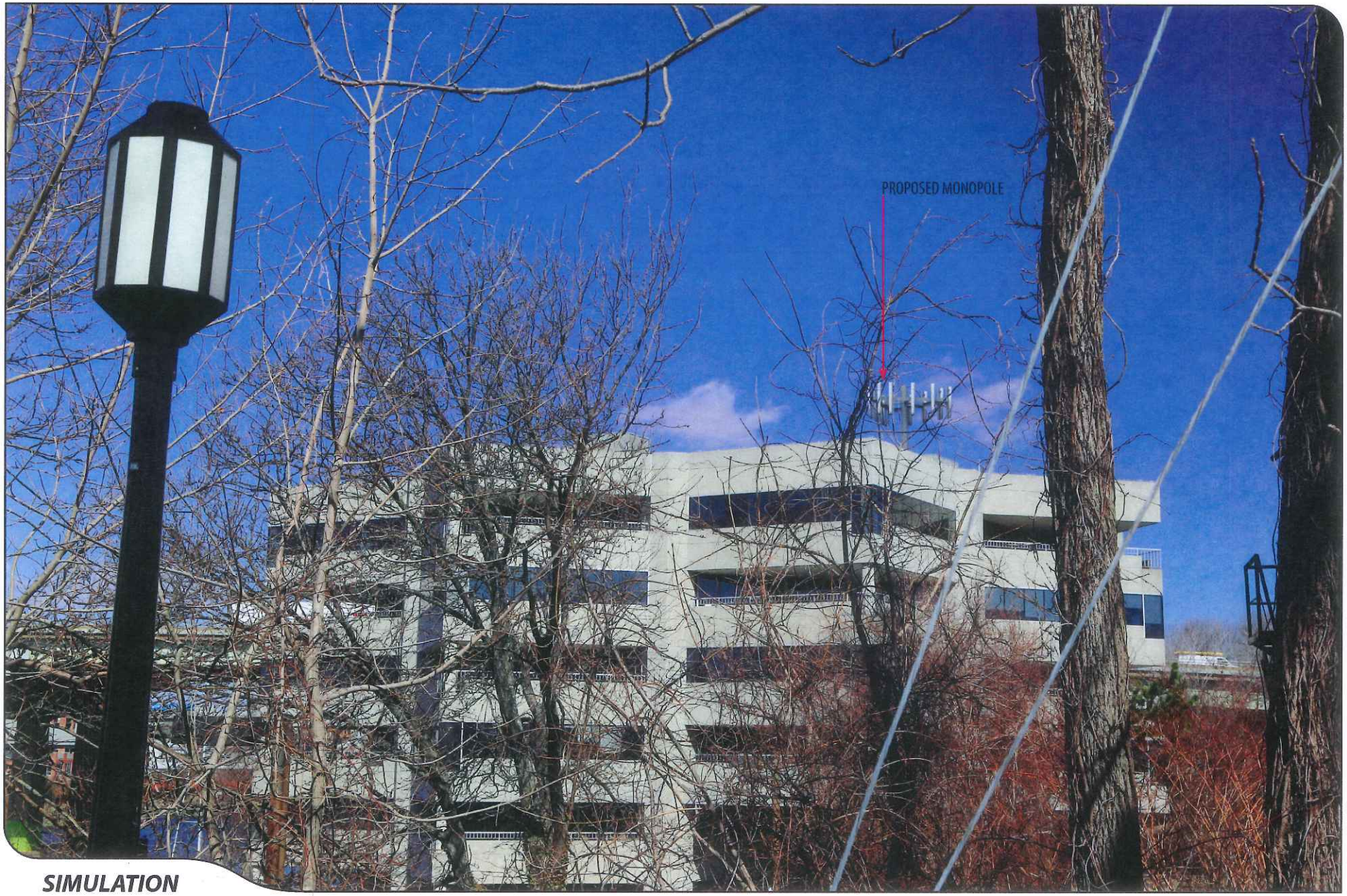


SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
2	**OSBORNE AVENUE**	**NORTH**	**+/- 0.05 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

verizonwireless



SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
2	**OSBORNE AVENUE**	**NORTH**	**+/- 0.05 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

verizonwireless

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
3	**OYSTER SHELL PARK (105mm Focal Length)**	**EAST**	**+/- 0.34 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

verizon wireless

SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
3	**OYSTER SHELL PARK (105mm Focal Length)**	**EAST**	**+/- 0.34 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

verizonwireless

SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
3	**OYSTER SHELL PARK (105mm Focal Length)**	**EAST**	**+/- 0.34 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

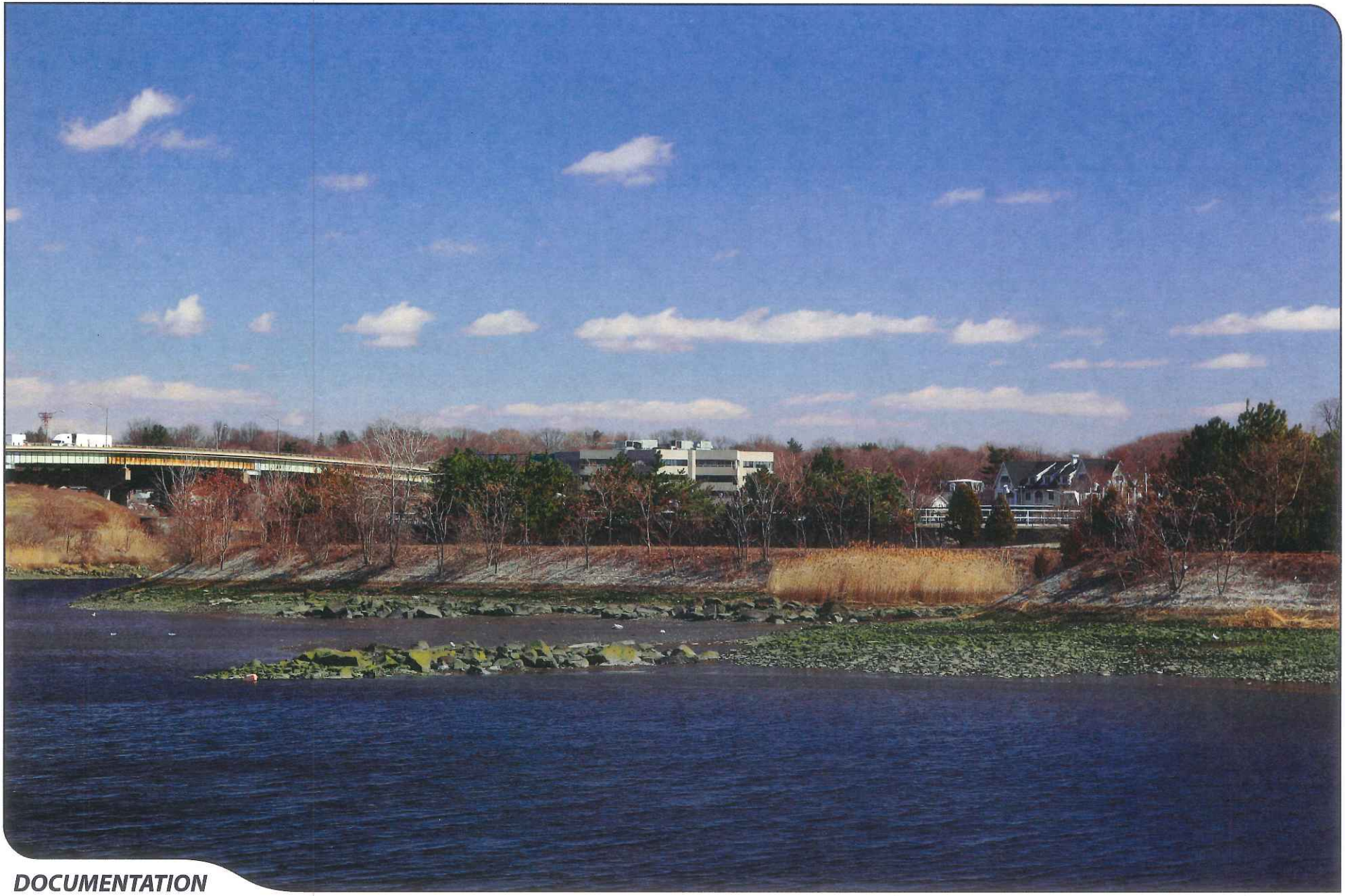
verizon wireless

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
3A	**OYSTER SHELL PARK (50mm Focal Length)**	**EAST**	**+/- 0.34 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

verizonwireless

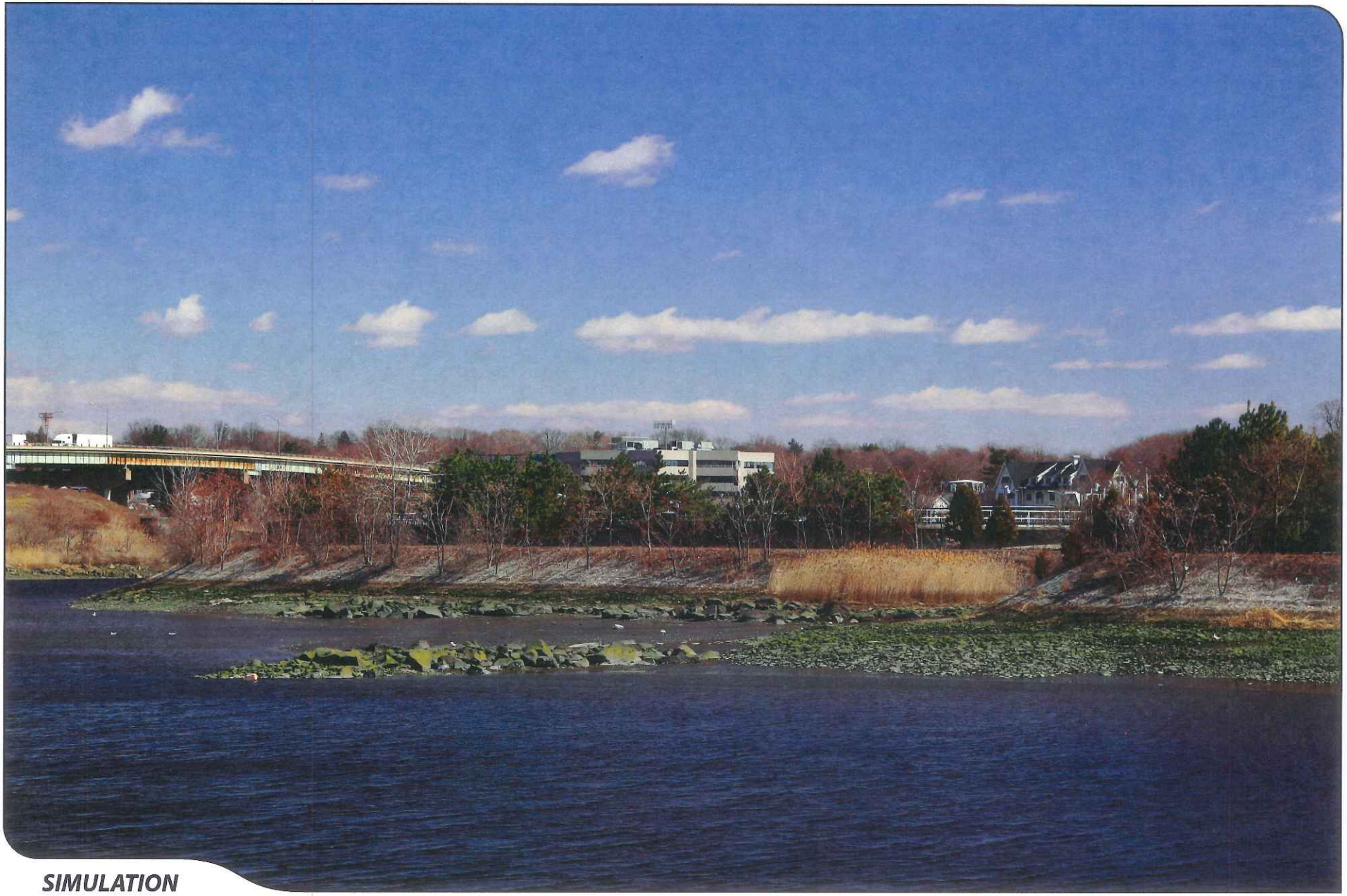


DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
4	**MARITIME AQUARIUM PARKING LOT (105mm Focal Length)**	**NORTHEAST**	**+/- 0.51 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

verizonwireless

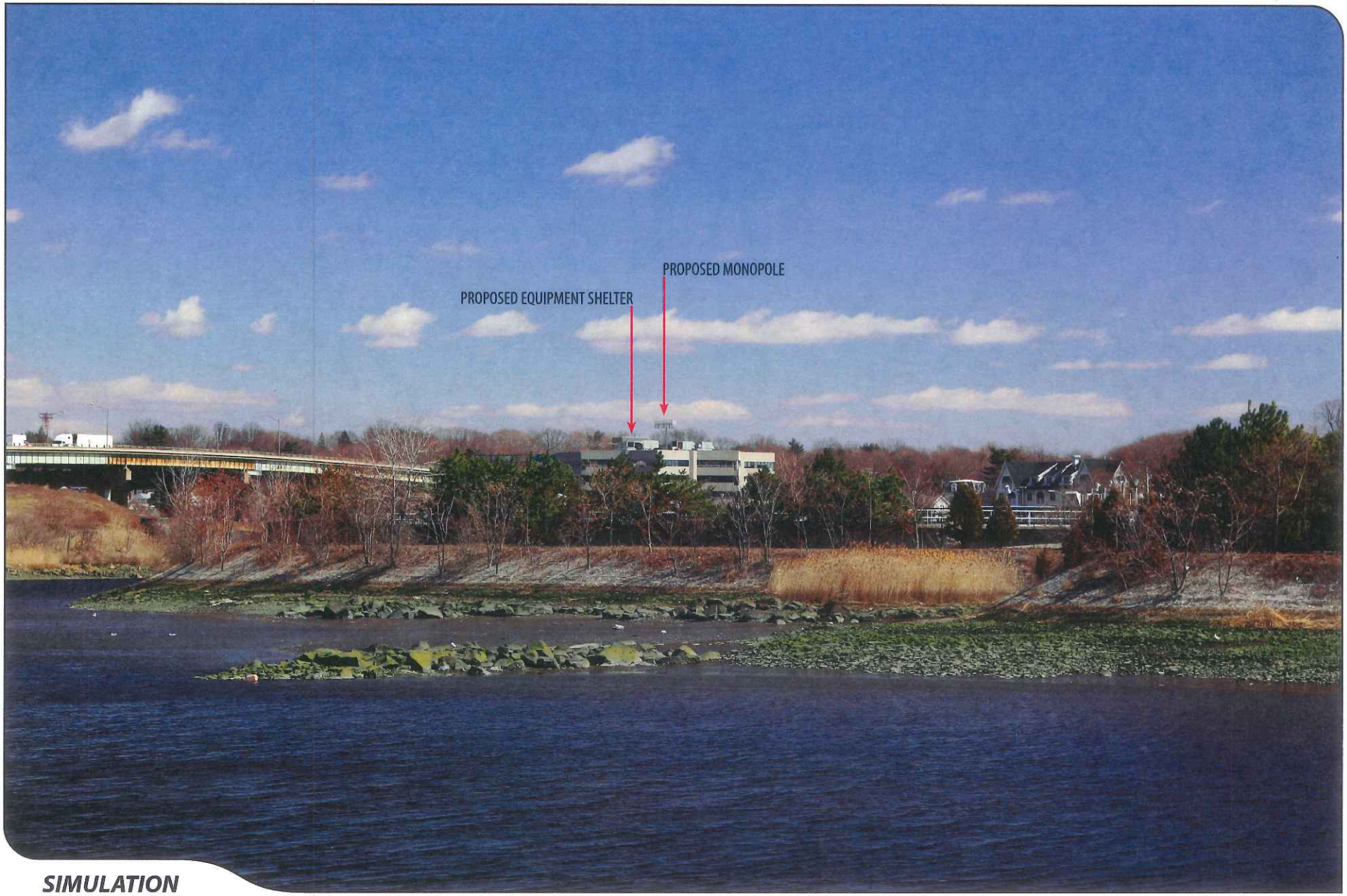


SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
4	**MARITIME AQUARIUM PARKING LOT (105mm Focal Length)**	**NORTHEAST**	**+/- 0.51 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

verizonwireless

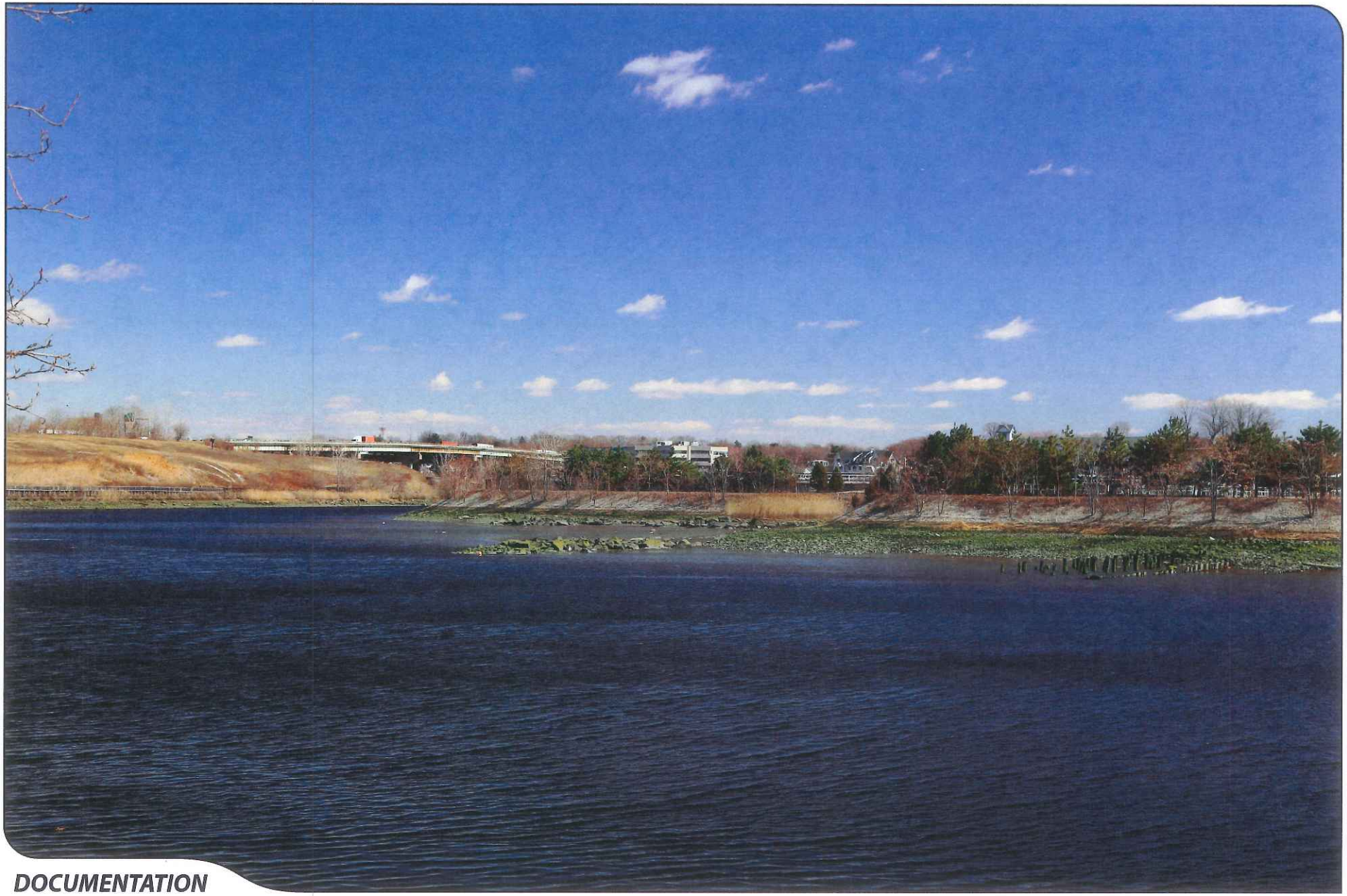


SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
4	**MARITIME AQUARIUM PARKING LOT** (105mm Focal Length)	**NORTHEAST**	**+/- 0.51 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

verizonwireless

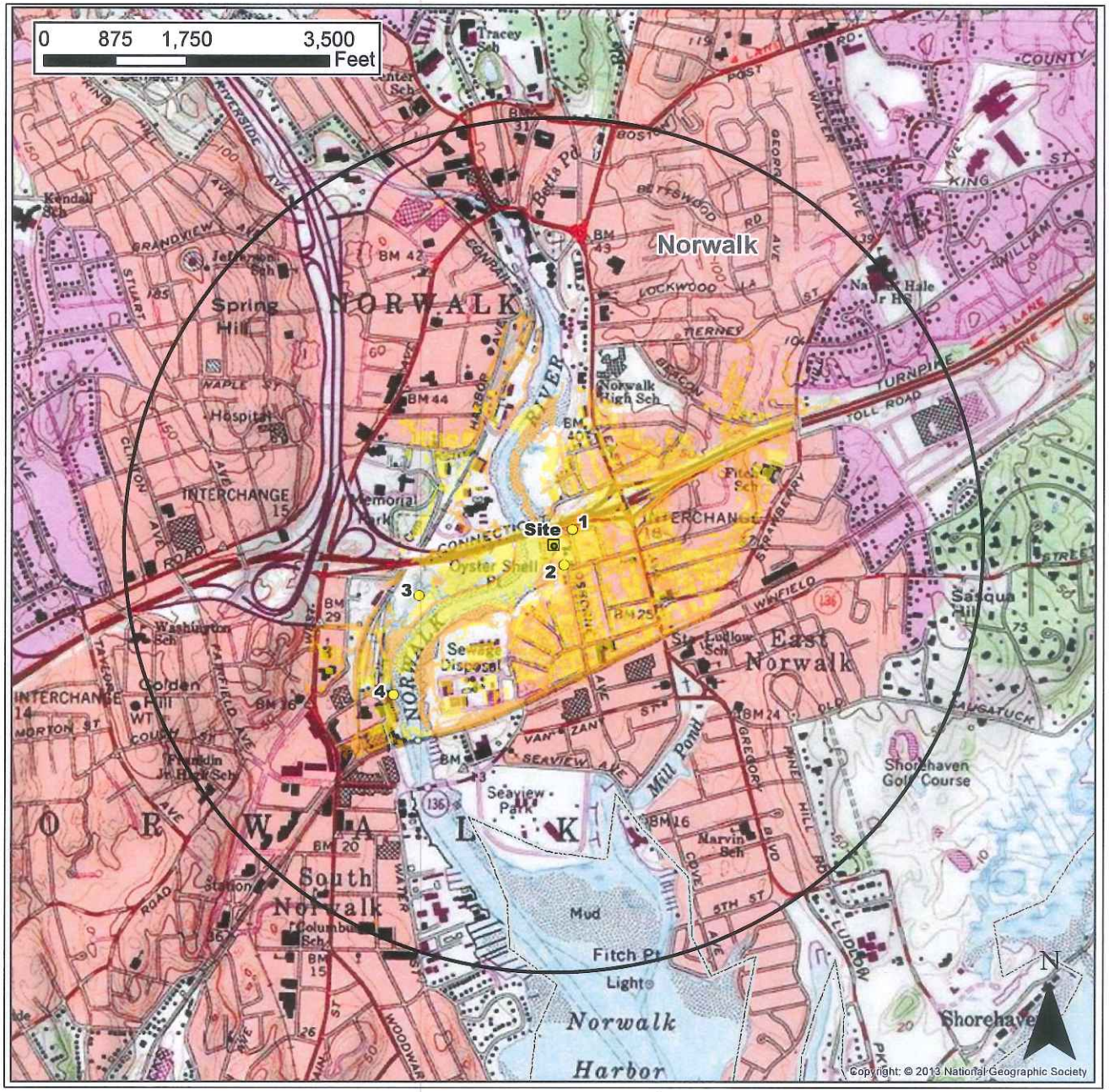


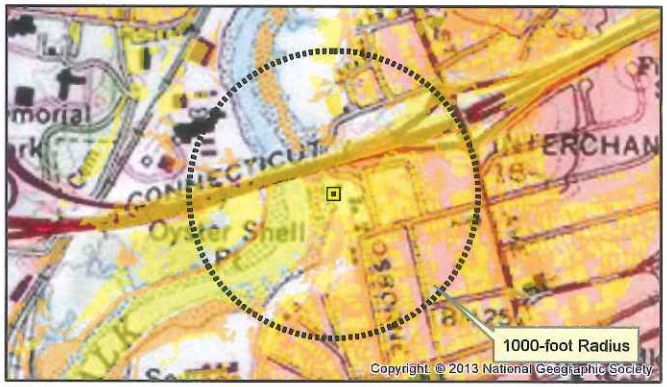
DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE
4A	**MARITIME AQUARIUM PARKING LOT (50mm Focal Length)**	**NORTHEAST**	**+/- 0.51 MILE**

ALL-POINTS TECHNOLOGY CORPORATION

verizonwireless





Viewshed Map – Topo Base

Proposed Wireless Telecommunications Facility
East Norwalk 4 – CT1412330
1 Selleck Street, Norwalk, CT

Proposed facility height is 93 feet AGL.
Existing tree canopy height estimated as 50 feet and buildings as 25 feet.
Study area encompasses a one-mile radius and includes 2,010 acres of land.

Map compiled 6/2/2014

Map information field verified by APT on 3/21/2014.

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

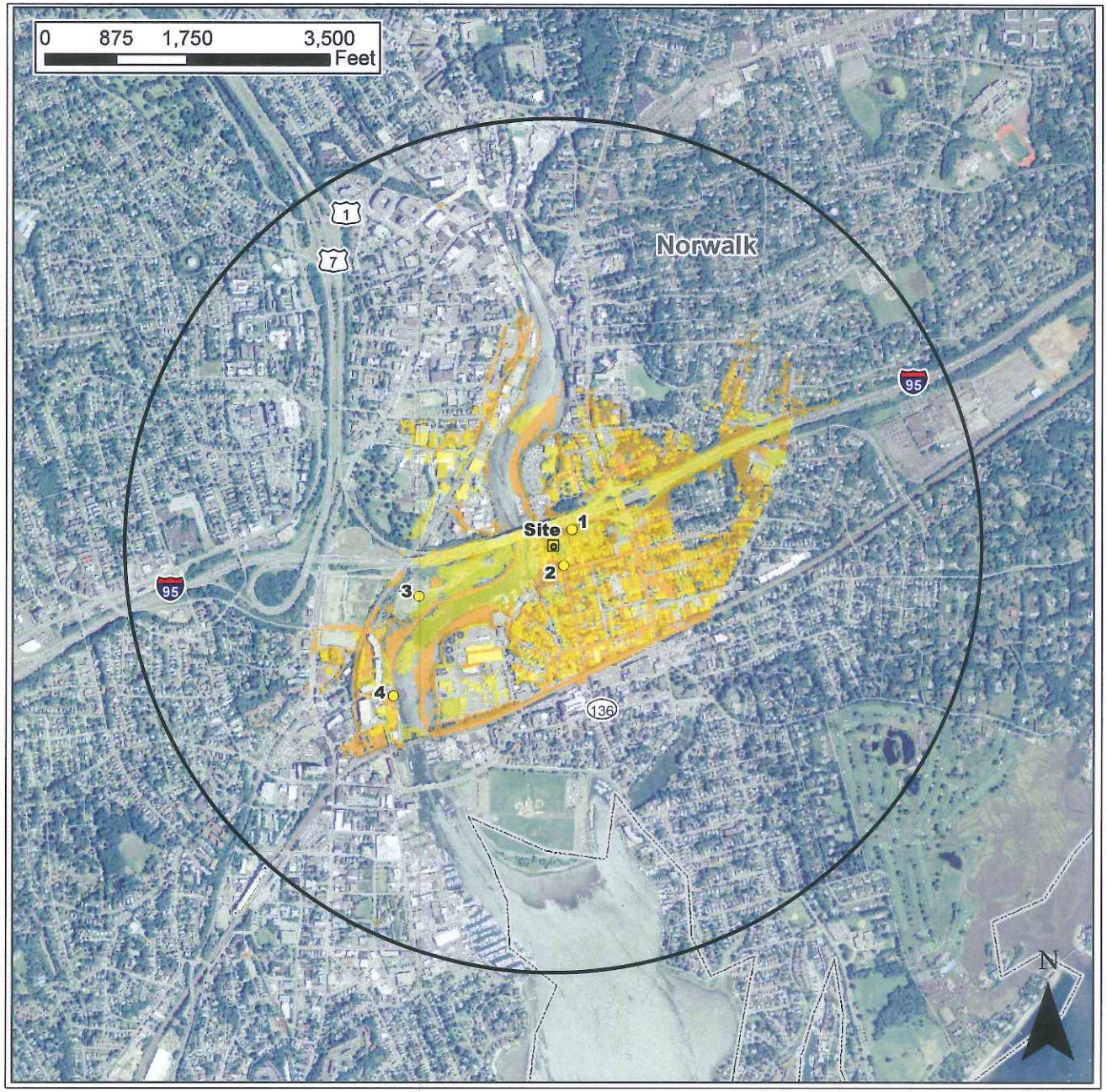
Photo Locations

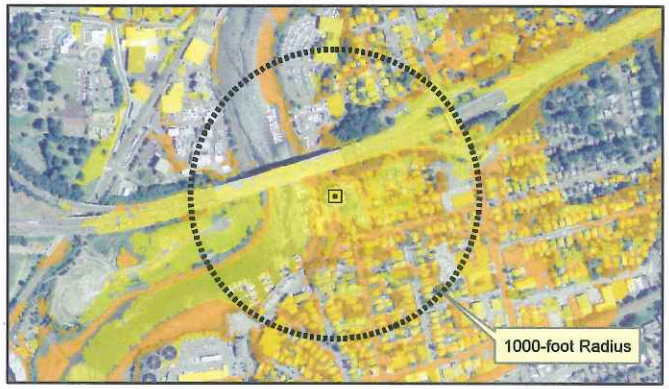
- Year-round Views
- Predicted Seasonal Visibility (80 Acres)
- Predicted Year-Round Visibility (75 Acres)
- Towns
- 1-Mile Study Area

Location

verizonwireless

ALL-POINTS TECHNOLOGY CORPORATION





Viewshed Map – Aerial Base

Proposed Wireless Telecommunications Facility
East Norwalk 4 – CT1412330
1 Selleck Street, Norwalk, CT

Proposed facility height is 93 feet AGL.
Existing tree canopy height estimated as 50 feet and buildings as 25 feet.
Study area encompasses a one-mile radius and includes 2,010 acres of land.

Map compiled 6/2/2014

Map information field verified by APT on 3/21/2014.

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

- Year-round Views
- Predicted Seasonal Visibility (80 Acres)
- Predicted Year-Round Visibility (75 Acres)
- Towns
- 1-Mile Study Area

Location

verizonwireless

ALL-POINTS TECHNOLOGY CORPORATION

DOCUMENTATION

SOURCES CONSULTED FOR VISBILITY ANALYSIS MAPS
One Selleck Street
East Norwalk, 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 50 feet, and average structure height of 25 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

East Norwalk 4 CT

1 Selleck Street, Norwalk, CT 06855

April 18, 2014

Table of Contents

1. Introduction 1
2. FCC Guidelines for Evaluating RF Radiation Exposure Limits 1
3. RF Exposure Prediction Methods 2
4. Calculation Results 3
6. Statement of Certification 4
Attachment A: References 5
Attachment B: FCC Limits for Maximum Permissible Exposure (MPE) 6
Attachment C: Verizon Wireless' Antenna Model Data Sheets and Electrical Patterns 8

List of Tables

Table 1: Carrier Information 3
Table 2: FCC Limits for Maximum Permissible Exposure (MPE) 6

List of Figures

Figure 1: Graph of FCC Limits for Maximum Permissible Exposure (MPE) 7

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 1 Selleck Street in Norwalk, CT. The coordinates of the proposed tower are 41° 06' 25.75" N, 73° 24' 32.63" W.

Verizon Wireless is proposing the following:

1) Install a 25' 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 LTE 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 each carrier, 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	90	751	1	1919	0.0085	0.5007	1.70%
Verizon	90	869	9	491	0.0196	0.5793	3.39%
Verizon	90	1900	1	5360	0.0238	1.0000	2.38%
Verizon	90	2120	1	5613	0.0249	1.0000	2.49%
						Total	**9.96%**

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 February 18, 2014.

[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 **9.96% 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 18, 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.

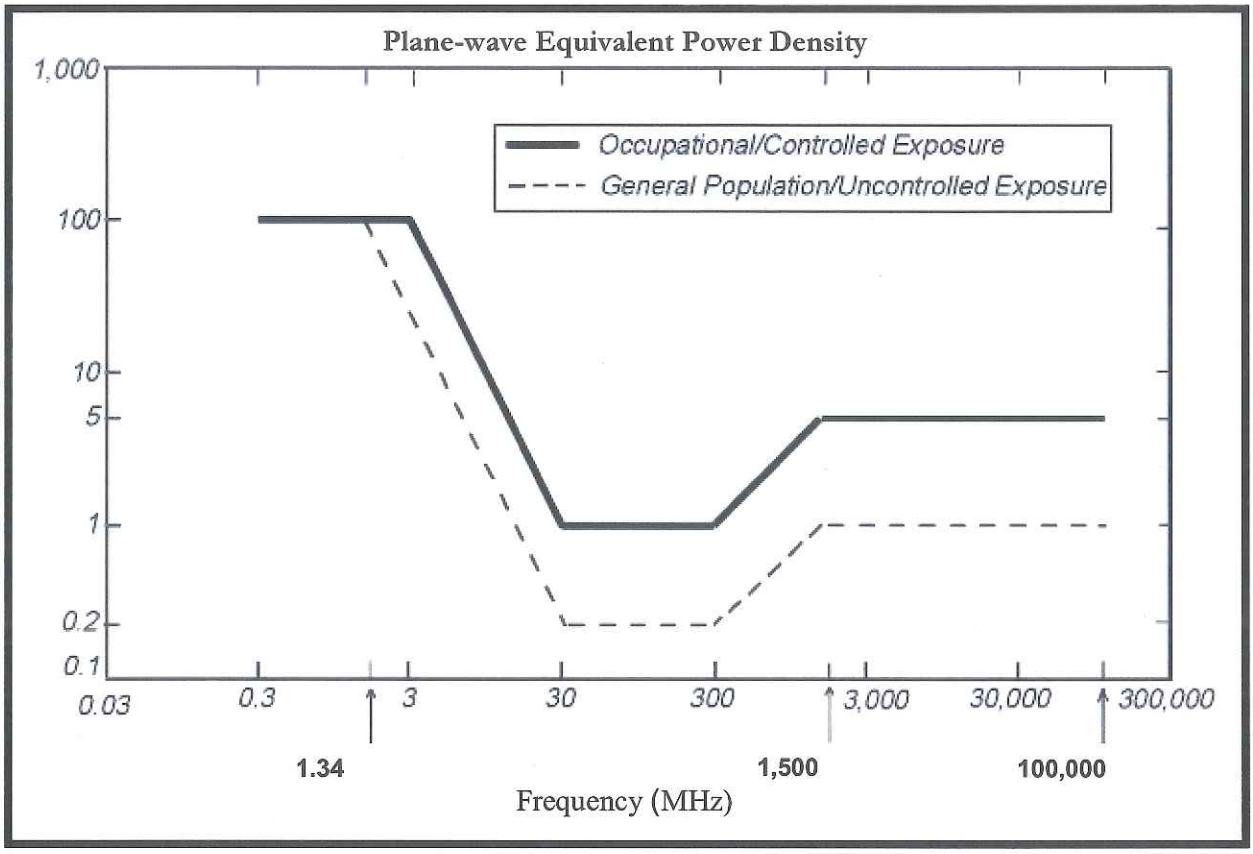
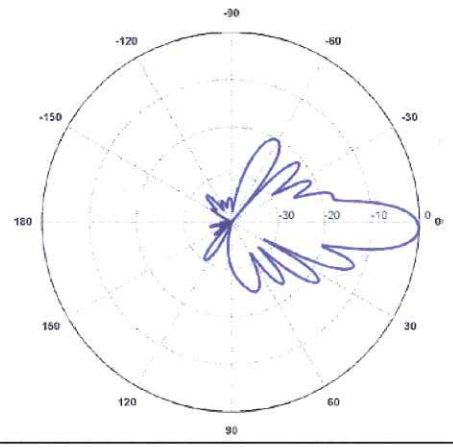


Figure 1: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

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

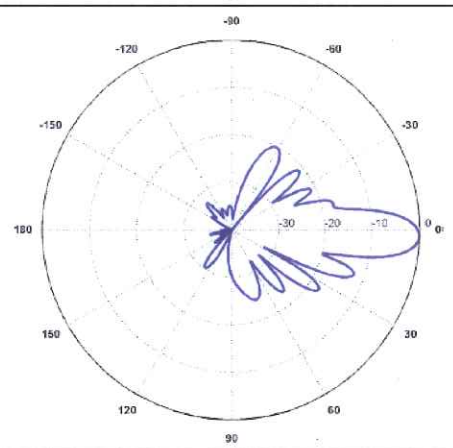
750 MHz

Manufacturer:	CSS
Model #:	X7C-FRO-660-V_2
Frequency Band:	698-824 MHz
Gain:	13.8 dBd
Vertical Beamwidth:	12.0°
Horizontal Beamwidth:	62°
Polarization:	±45°
Size L x W x D:	72.0" x 14.6" x 8.0"



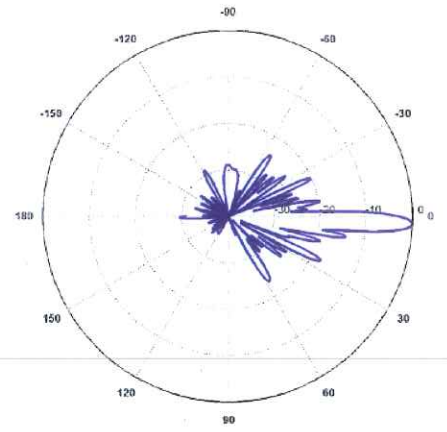
850 MHz

Manufacturer:	CSS
Model #:	X7C-FRO-660-V_2
Frequency Band:	824-896 MHz
Gain:	13.9 dBd
Vertical Beamwidth:	10.5°
Horizontal Beamwidth:	58°
Polarization:	±45°
Size L x W x D:	72.0" x 14.6" x 8.0"

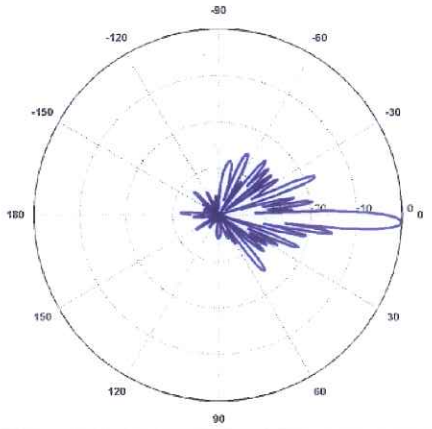


1900 MHz

Manufacturer:	Commscope
Model #:	HBXX-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 12.0" x 6.5"



2100 MHz	
Manufacturer:	Commscope
Model #:	HBXX-6517DS-VTM_2
Frequency Band:	1920-2180 MHz
Gain:	16.7 dBd
Vertical Beamwidth:	4.4°
Horizontal Beamwidth:	65°
Polarization:	±45°
Size L x W x D:	74.9" x 12.0" x 6.5"



ATTACHMENT 8

```
**************************************************
*            Federal Airways & Airspace          *
*         Summary Report: New Construction       *
*                  Antenna Structure             *
**************************************************

File: EAST_NORWALK_4

Location:  Norwalk, CT
Distance:  1.1 Statute Miles
Direction: 212° (true bearing)

Latitude:  41°-06'-25.82"
Longitude: 73°-24'-32.91"

SITE ELEVATION AMSL.....  9 ft.
STRUCTURE HEIGHT..... 93 ft.
OVERALL HEIGHT AMSL.....102 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 (No Expected TERPS® impact with BDR)
  FAR 77.9:    NNR (No Expected TERPS® impact HPN)
  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.

  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: BDR: IGOR I SIKORSKY MEMORIAL
Type: A   RD: 78493.71   RE: 5.7
  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

VFR TRAFFIC PATTERN AIRSPACE FOR: HPN: WESTCHESTER COUNTY
Type: A   RD: 81682.53   RE: 387.7
  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 1500 ft AMSL

PRIVATE LANDING FACILITIES

FACIL IDENT	TYP	NAME	BEARING To FACIL	RANGE IN NM	DELTA ARP ELEVATION	FAA IFR
5CT4	HEL	NORWALK HOSPITAL	292.58	.62	-54	
No Impact to Private Landing Facility Structure 0 ft below heliport.						
CT56	HEL	50 WASHINGTON STREET	229.58	.66	-41	
No Impact to Private Landing Facility Structure 0 ft below heliport.						
1CT0	HEL	NORDEN SYSTEMS	70.63	1.01	+42	
No Impact to Private Landing Facility Structure is beyond notice limit by 1137 feet.						
9CT1	HEL	THE TOWERS	338.45	2.4	-178	
No Impact to Private Landing Facility Structure 0 ft below heliport.						
CT91	HEL	USSC	343.12	2.82	-63	
No Impact to Private Landing Facility Structure 0 ft below heliport.						

AIR NAVIGATION ELECTRONIC FACILITIES

FAC IDNT	TYPE	ST AT	FREQ	VECTOR	DIST (ft)	DELTA ELEVA	ST	LOCATION	GRND APCH BEAR ANGLE
CMK	VOR/DME	I	116.6	323.11	78831	-592	NY	CARMEL	-.43
BDR	VOR/DME	R	108.8	75.95	80806	+93	CT	BRIDGEPORT	.07
HPN	RADAR	ON	2735.	261.45	85340	-408	NY	WESTCHESTER COUNT	-.27
No Impact. This structure does not require Notice based upon EMI. The studied location is within 20 NM of a Radar facility. The calculated Radar Line-Of-Sight (LOS) distance is: 40 NM. This location and height is within the Radar Line-Of-Sight.									
DPK	VOR/DME	I	117.7	165.8	118568	-21	NY	DEER PARK	-.01
ISP	RADAR	ON	2735.	141.77	139671	-80	NY	LONG ISLAND MacAR	-.03
HVN	VOR/DME	R	109.8	68.43	154913	+96	CT	NEW HAVEN	.04
LGA	VOR/DME	R	113.1	226.97	173207	+93	NY	LA GUARDIA	.03
OKX	RADAR WXL	Y		120.5	174396	-119	NY	BRENTWOOD	-.04
CCC	VOR/DME	R	117.2	111.21	180420	+17	NY	CALVERTON	.01

JFK	RADAR	ON	2755.	210.00	196953	+15	NY	JOHN F KENNEDY IN 0.00
JFK	VOR/DME	I	115.9	209.99	199742	+91	NY	KENNEDY .03
TEB	VOR/DME	R	108.4	242.21	203445	+99	NJ	TETERBORO .03
MAD	VOR/DME	R	110.4	68.87	211163	-118	CT	MADISON -.03
QVH	RADAR ARSR	Y	1326.9	112.91	215978	-249	NY	RIVERHEAD -.07
SWF	RADAR	Y	2765.	306.36	236957	-619	NY	STEWART INTERNATI -.15

Report and Order FCC 13-115
AM STUDY NOT REQUIRED: Structure is not near a FCC licensed AM station. Movement Method Proof as specified in 73.151(c) is not required. Please review 'AM Station Report' for details.

Nearest AM Station: WNLK @ 2339 meters.

Airspace® Summary Version 14.5.360

AIRSPACE® and TERPS® are registered ® trademarks of Federal Airways & Airspace®
Copyright © 1989 - 2014

06-04-2014
16:10:49

ATTACHMENT 9

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

September 24, 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 1 Selleck Street, Norwalk, Connecticut**

Dear «Salutation»:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") seeking approval to install a new wireless telecommunications facility at 1 Selleck Street in Norwalk, Connecticut (the "Property"). The proposed facility will consist of a 25-foot tall stub-tower installed on the roof of the five (5) story office building at the Property. Cellco will install twelve (12) antennas and nine (9) remote radio heads (RRHs) at the top of the tower on a low-profile antenna platform. Equipment associated with the facility and a natural gas-fueled back-up generator will be located inside a 12' x 24' shelter, also located on the roof of the 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

EAST NORWALK 4
1 SELLECK STREET
NORWALK, CT 06855

SITE DIRECTIONS

FROM: 99 EAST RIVER DRIVE, EAST HARTFORD, CONNECTICUT **TO:** 1 SELLECK STREET, NORWALK, 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	17.7 mi.
6.	Take EXIT 17 for CT-15 S/W CROSS PKWY	0.4 mi.
7.	Merge onto CT-15 S	29.8 mi.
8.	Take EXIT 52 for CT-108 S/CT-8 S toward BRIDGEPORT	0.6 mi.
9.	Follow signs for CT-8 S/BRIDGEPORT and merge onto CT-8 S	5.2 mi.
10.	Keep RIGHT at the fork, follow signs for I-95 S/NYC and merge onto I-95 S	12.7 mi.
11.	Take EXIT 16 toward EAST NORWALK	0.1 mi.
12.	Turn LEFT onto EAST AVE	0.1 mi.
13.	Turn RIGHT onto ST JOHN ST	0.1 mi.
14.	Take the 2nd RIGHT onto SELLECK ST, and the destination will be on the LEFT	243 ft.

GENERAL NOTES

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

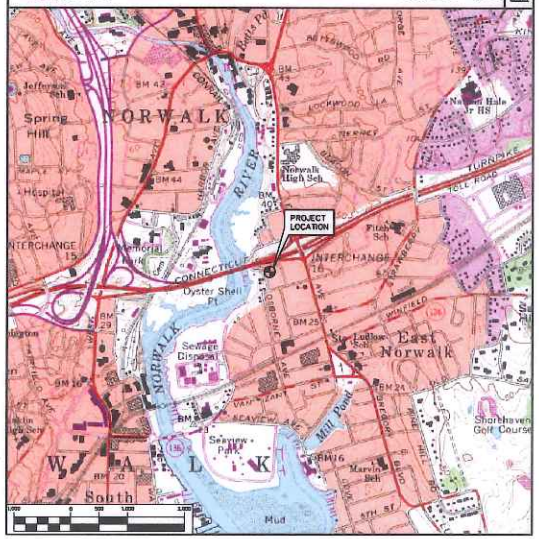
SITE INFORMATION

THE GENERAL 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 ON STEEL DUNNAGE ATOP EXISTING BUILDING ROOF.
2. A TOTAL OF UP TO TWELVE (12) DIRECTIONAL PANEL ANTENNAS ARE PROPOSED TO BE MOUNTED AT A CENTERLINE ELEVATION OF 90'± AGL ON A 25'± 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:	EAST NORWALK 4
SITE ADDRESS:	1 SELLECK STREET NORWALK, CT 06855
PROPERTY OWNER:	SANDOVAL SHORE POINTE DEVELOPMENT LLC 1 SELLECK STREET NORWALK, CT 06855
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°-08'-25.822" LONGITUDE 73°-24'-32.908" GROUND ELEVATION: 9.2'± A.M.S.L. COORDINATES AND GROUND ELEVATION BASED ON FAA 2-C SURVEY CERTIFICATION AS PREPARED FOR VERIZON WIRELESS, BY MARTINEZ COUCH AND ASSOCIATES L.L.C., DATED MARCH 18, 2014.

SHEET INDEX

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

REV.	DATE:	DRAWN BY	CHK'D BY	DESCRIPTION
0	04/28/14	HMR	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

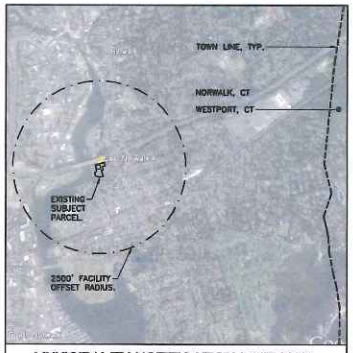
Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY
EAST NORWALK 4
1 SELLECK STREET
NORWALK, CT 06855

DATE: 04/28/14
SCALE: AS NOTED
JOB NO. 13248.000

TITLE SHEET

T-1

Sheet No. 1 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 LIMITED TOPOGRAPHIC SURVEY PORTION OF THIS PLAN CONFORMS TO A VERTICAL 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 PARKING AREAS, PAVED DRIVE ARE COMPILED FROM OTHER MAPS AND LIMITED FIELD SURVEY.

COORDINATES REFER TO NAD 83.

VERTICAL DATUM IS BASED ON NGVD 29.

PARCEL OWNER OF RECORD: SANDOVAL SHORE POINTE DEVELOPMENT LLC

PARCEL AREA = 1.84± ACRES.

PARCEL IS IN NB ZONING DISTRICT.

PARCEL ID: MAP 3 BLOCK 7 LOT 37 NORWALK ASSESSOR'S OFFICE.

PORTION OF SUBJECT PARCEL IS IN FLOOD ZONE AE (EL.11) AS SHOWN ON THE FLOOD INSURANCE RATE MAP, FAIRFIELD COUNTY, CONNECTICUT PANEL 531 OF 626, MAP NUMBER 09001C0531G, MAP REVISED JULY 8, 2013, BY FEDERAL EMERGENCY MANAGEMENT AGENCY.

REFERENCE IS MADE TO THE FOLLOWING MAPS:

1. AS-BUILT PREPARED FOR SHORE POINTS ASSOCIATES LIMITED PARTNERSHIP, NORWALK CONNECTICUT. SCALE 1"=20' DATED DECEMBER 31, 1985. REVISED THROUGH SEPTEMBER 5, 1986. PREPARED BY HALL & McCHESNEY INC.

2. MAP OF PROPERTY PREPARED FOR SHORE POINTS ASSOCIATES LIMITED PARTNERSHIP, NORWALK, CONNECTICUT. SCALE 1"=10'. DATED OCTOBER 3, 1988. PREPARED BY GREGORY SURVEYORS.

3. MAP SHOWING EXCHANGE OF PARCELS BETWEEN HARRY PARKS AND SHORE POINTS ASSOCIATES LIMITED PARTNERSHIPS & S. P. ASSOCIATES II, NORWALK CONNECTICUT. SCALE 1"=20' DATED OCTOBER 31, 1984. PREPARED BY GREGORY SURVEYORS.

4. SANITARY SEWER EASEMENT TO BE ACQUIRED BY THE CITY OF NORWALK BETWEEN SOUTH SMITH STREET AND MERRILLS LANE, NORWALK CONNECTICUT. SCALE 1"=40' DATED SEPTEMBER 27, 1974. PREPARED BY LEONARD SURVEYORS.

5. RIGHT OF WAY MAP TOWN OF NORWALK CONNECTICUT TURNPIKE FROM THE DARIEN-NORWALK TOWN LINE TO THE NORWALK-WESTPORT TOWN LINE. SCALE 1"=80', DATED MARCH 7, 1960, BY CONNECTICUT DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS.

NOT ALL IMPROVEMENTS SHOWN.

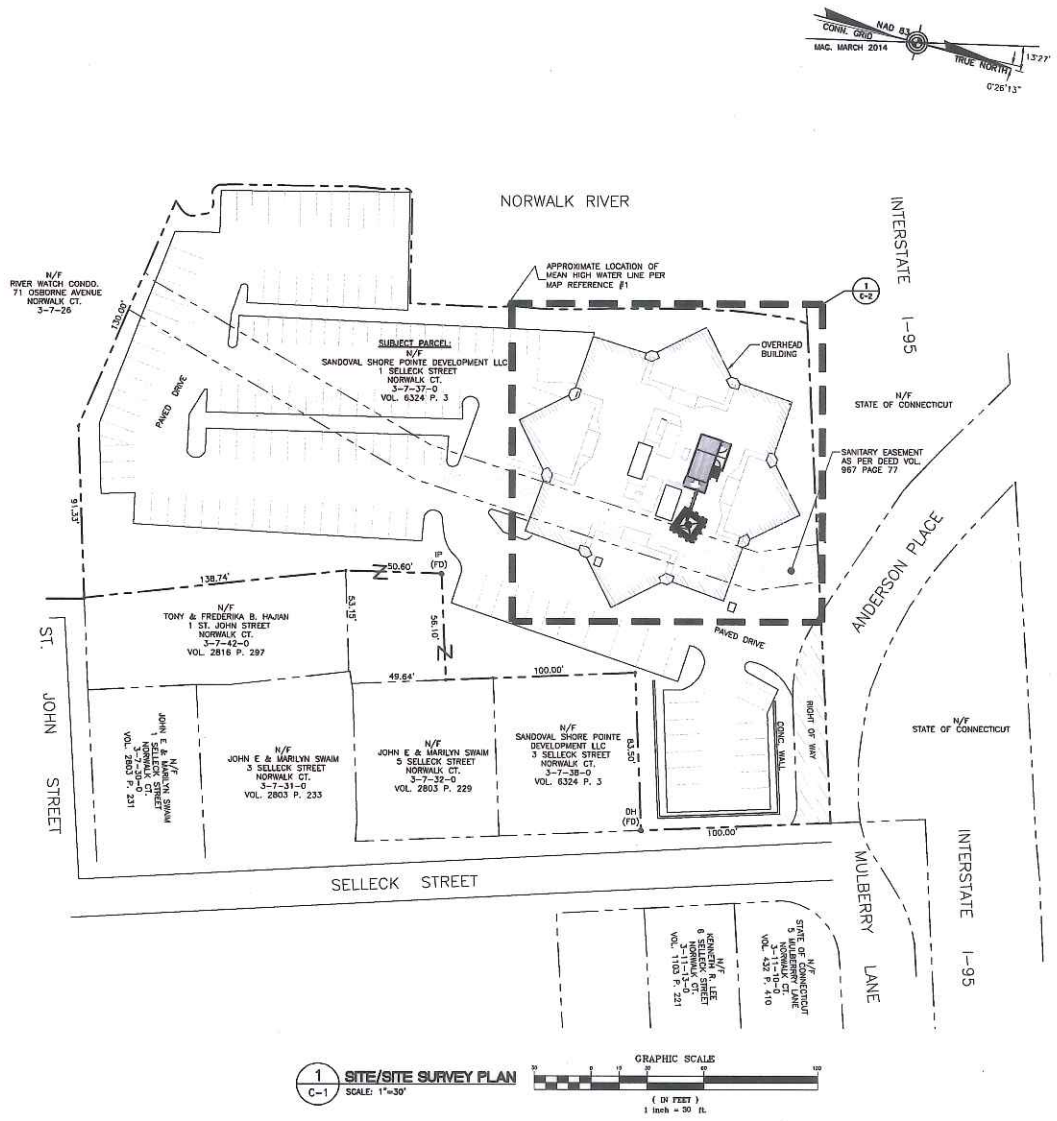
TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND SEAL

A. RAFAEL MARTINEZ LLS #18833 DATE

SYMBOLS LEGEND

- PROPERTY LINE
- EXISTING ROAD
- IRON PIN OR DRILL HOLE
- CONCRETE COLUMN
- CONCRETE COLUMN
- CL "CB"



1 / C-1 SITE/SITE SURVEY PLAN
SCALE: 1"=30'

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	04/28/14	HAB	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

EAST NORWALK 4

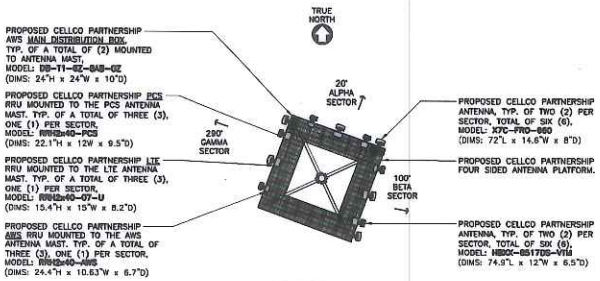
1 SELLECK STREET
NORWALK, CT 06855

DATE: 04/28/14
SCALE: AS NOTED
JOB NO. 13248.000

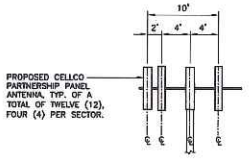
SITE/SITE SURVEY PLAN

C-1

Sheet No. 2 of 3



PLAN VIEW



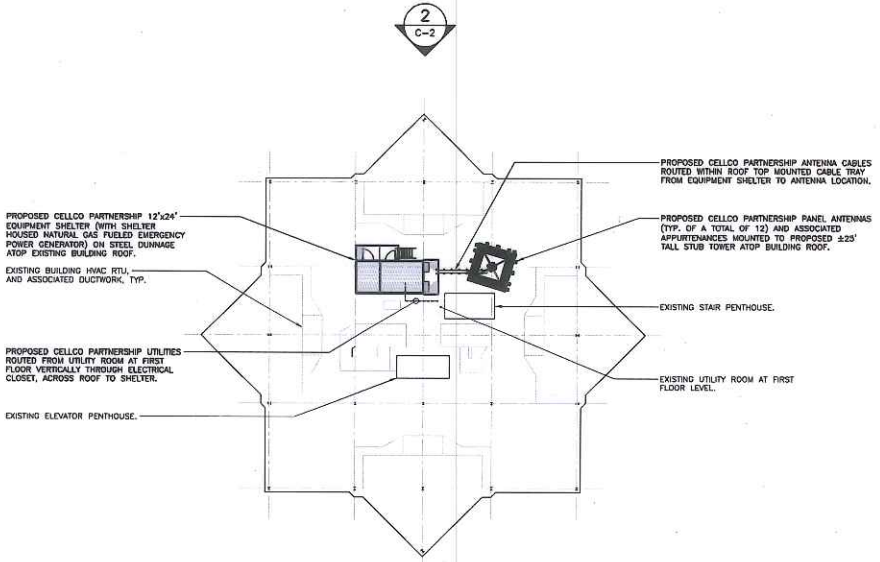
TYPICAL SECTOR ELEVATION

3 C-2 ANTENNA MOUNTING CONFIGURATION

SCALE: 1/8" = 1'

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.



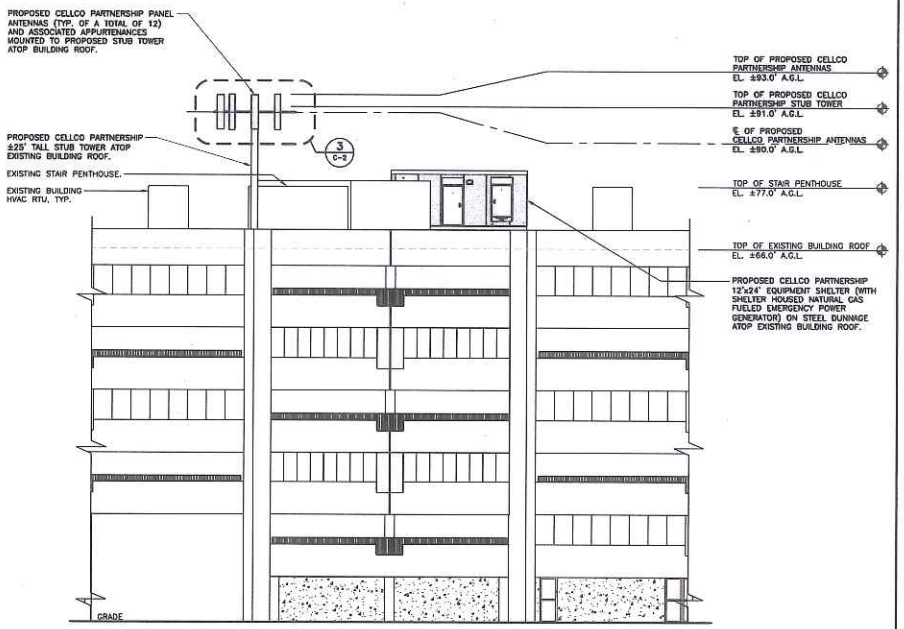
1 C-2 ROOF PLAN

SCALE: 1" = 20'

APPROXIMATE NORTH

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft



2 C-2 PARTIAL NORTH ELEVATION

SCALE: 1" = 10'

GRAPHIC SCALE

(IN FEET)
1 inch = 10 ft

REV.	DATE	BY	DESCRIPTION
0	04/29/14	HAB	DRAWN BY CHK'D BY DESCRIPTION
		DMD	ISSUED FOR CT SITING COUNCIL - CLEAR 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
EAST NORWALK 4
1 SELLECK STREET
NORWALK, CT 06855

DATE: 04/28/14
SCALE: AS NOTED
JOB NO. 13248.000

ROOF PLAN, ELEVATION AND ANTENNA MOUNTING CONFIG.

C-2

Sheet No. 2 of 3

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

ABUTTING PROPERTY OWNERS

1 SELLECK STREET
NORWALK, CONNECTICUT

	Parcel ID	Property Address	Owner and Mailing Address
1.	3/7/26	71 Osborne Avenue	River Watch Condominium 71 ABC Osborne Avenue Norwalk, CT 06855
2.	3/8/15	78 Osborne Avenue	Anastasios Petridis 78 Osborne Avenue Norwalk, CT 06855
3.	3/7/42	1 St. John Street	Tony and Fredericka B. Hajian 10 Raymond Lane Norwalk, CT 06855
4.	3/7/31	3 Selleck Street	John E. and Marilyn Swain 3 Charles Circle Sandy Hook, CT 06482
5.	3/7/32	5 Selleck Street	John E. and Marilyn Swain 3 Charles Circle Sandy Hook, CT 06482
6.	3/7/14	4 Selleck Street	George E. Matthews 95 Warren Street Stamford, CT 06902
7.	3/11/13	6 Selleck Street	Kenneth R. Lee 51 Laurel Road Westport, CT 06880
8.	Multiple parcels and 3/11/10	5 Mulberry Lane	State of Connecticut ROW P.O. Box 317546 Newington, CT 06131-7546
9.	3/7/38	3 Selleck Street	Sandoval Shore Pointe Development LLC 1 Selleck Street Norwalk, CT 06855
10.	2/19/21	7 Crescent Street	City of Norwalk (Old City Dump) P.O. Box 5125 Norwalk, CT 06856-5125

ATTACHMENT 10

Robinson+Cole

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

September 24, 2014

Sandoval Shore Point Development LLC
11 Green Lane
Greenwich, CT 06830

Re: **Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling to Establish a New Wireless Telecommunications Facility at 1 Selleck Street, Norwalk, Connecticut**

Dear Sir or Madam:

Today, Cellco Partnership d/b/a Verizon Wireless filed 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 1 Selleck Street in Norwalk, Connecticut (the "Property"). The new facility would consist of a 25-foot tall stub-tower on the roof of the existing five (5) story office building at the Property. Equipment associated with the facility will be located inside a 12' x 24' shelter also located on the roof. A copy of the full Petition is 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
Attachment

12958143-v1

Robinson+Cole

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

September 24, 2014

The Honorable Harry W. Rilling, Mayor
City of Norwalk
125 East Avenue
P.O. Box 5125
Norwalk, CT 06856

Re: **Cellco Partnership d/b/a Verizon Wireless – Petition for Declaratory Ruling to Establish a New Wireless Telecommunications Facility at 1 Selleck Street, Norwalk, Connecticut**

Dear Mayor Rilling:

Today, Cellco Partnership d/b/a Verizon Wireless filed 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 1 Selleck Street in Norwalk, Connecticut (the "Property"). The new facility would consist of a 25-foot tall stub-tower on the roof of the existing five (5) story office building at the Property. Equipment associated with the facility will be located inside a 12' x 24' shelter also located on the roof. A copy of the full Petition is 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
Attachment

12958103-v1