

July 9, 2014

Via Federal Express

Mark Sciota
Deputy Town Manager and Town Attorney
Town of Southington
75 Main Street
Southington, CT 06489

Re: **Submission of Technical Information Concerning a Proposal to Construct a
Wireless Telecommunications Facility on Town Property
at 99 East Street, Southington, Connecticut**

Dear Mr. Brumback:

This firm represents Cellco Partnership d/b/a Verizon Wireless (“Cellco”), in its proposal to construct a new wireless telecommunications facility on an approximately 27 acre parcel at 99 East Street in Southington. For the purposes of this filing, the proposed telecommunications facility is known as Cellco’s “Southington – East Street” cell site. This technical report is submitted pursuant to Connecticut General Statutes (“Conn. Gen. Stat.”) § 16-50~~l~~(e), which establishes local input requirements for the siting of a wireless telecommunications facility under the jurisdiction of the Connecticut Siting Council (the “Council”). This statutory provision requires the submission of technical information to the municipality where the proposed facility would be located and any municipality within 2,500 feet of the proposed facility.

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

Sandy M. Carter, Regulatory Manager
Verizon Wireless
99 East River Drive
East Hartford, CT 06108

12943947-v1

Robinson + Cole

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A copy of all such correspondence or communications should also be sent to Cellco's attorneys:

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

Cellco intends to submit an application to the Council for a Certificate of Environmental Compatibility and Public Need ("Certificate") for the construction, maintenance and operation of a wireless telecommunications facility at 99 East Street in Southington (the "Town" or "Southington"). The Southington – East Street cell site is designed to provide wireless service in the southerly portion of Town and will replace a portion of the wireless service currently provided by Cellco's Meriden Mountain cell site.¹ The Southington – East Street facility would interact with Cellco's existing Milldale, Southington 2 and Berlin 3 cell sites.

The Southington – East Street cell site would provide enhanced wireless service (coverage) along portions of Routes 120 and 364, local streets and the surrounding residential and commercial areas and provide capacity relief to Cellco's network in southern portions of Town. Cellco's Milldale site, in particular, is currently operating at or near its existing capacity limits. Plots showing coverage from Cellco's existing cell sites in the area alone and together with the proposed Southington – East Street cell site are included in Attachment 1.

Cell Site Information

The proposed Southington – East Street facility would be located in the westerly portion of an approximately 27 acre parcel at 99 East Street in Southington (the "Property"). The Property is owned by the Town of Southington and is currently used as the Town's composting facility. The Property is surrounded by agriculture uses and undeveloped woodlands to the north and east; and residential areas to the south and west. A CL&P electric transmission line runs along the westerly boundary of the Property adjacent to residences along Strawberry Lane.

Cellco proposes to construct a wireless telecommunications facility in the westerly portion of the Property. The facility will consist of an 90-foot monopole tower and a 12' x 30' shelter located within a 50-foot by 50-foot fenced compound and leased area. Cellco will install

¹ If the Southington – East Street cell site is approved Cellco will remove its antennas from the existing Meriden Mountain cell site.

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up to fifteen (15) panel-type antennas at the centerline height of 80-feet above ground level (“AGL”). The top of Cellco’s antennas would extend to an overall height of approximately 83 feet AGL. The 90-foot antenna mounting level on the tower has been reserved for the Town. Equipment associated with the Cellco’s antennas and a propane-fueled backup generator would be located inside the shelter. A 1,000 gallon propane tank will be located in the southeast corner of the facility compound. Access to the Southington – East Street facility would extend from East Street over an existing gravel driveway associated with the Town’s composting facility a distance of approximately 600 feet. A short 12-foot wide gravel driveway extension will extend an additional 160 feet to the facility compound. Project plans for the Southington – East Street facility are included in Attachment 2.

Connecticut Siting Council Jurisdiction

Municipal jurisdiction over the siting of the proposed telecommunications facility described in this report is pre-empted by provisions of the Public Utilities Environmental Standards Act (“PUESA”), Conn. Gen. Stat. § 16-50g *et seq.* The PUESA gives exclusive jurisdiction over the location, type and modification of telecommunications towers, to the Council (Conn. Gen. Stat. § 16-50x(a); 16-50i(a)(6)). Accordingly, the telecommunications facility described in this report is exempt from Southington’s land use regulations.

Upon receipt of an application, the Council will assign a docket number and, following a completeness review, set a hearing date. At that time, the Town may choose to become an intervenor or party in the proceeding. Other procedures followed by the Council include serving the applicant and other participants with interrogatories, holding a pre-hearing conference, and conducting a public hearing. The public hearing would be held at a location in the Town. Following the public hearing, the Council will issue findings of fact, an opinion and a decision and order. Prior to construction, the Council will also require the Applicant to submit a development and management plan (“D&M Plan”) which is, in essence, a final site development plan showing the details of the facility including any conditions imposed by the Council. These procedures are also outside the scope of the Town’s jurisdiction and are governed by the Connecticut General Statutes, the Regulations of Connecticut State Agencies, and the Council’s Rules of Practice. If the Council approves the cell site described in this report, Cellco will submit to the Town’s Building Official an application for approval of a local building permit. Under Section 16-50x of the General Statutes, which provides for the exclusive jurisdiction of the Council, the building official must honor the Council’s decision.

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Municipal Consultation Process

Pursuant to Section 16-50~~l~~ of the General Statutes, Town officials are entitled to receive technical information regarding the proposed telecommunications facility at least ninety (90) days prior to the filing of an application with the Council. This technical report is provided to the Town in accordance with these provisions and includes information on the need for wireless service in the area; the location of existing wireless facilities in and around Southington; details of the proposed facility; the location of alternative sites considered and rejected; the location of schools and commercial day care facilities in the area and the aesthetic impacts of the facility on those schools and day care facilities, if any, a description of the site selection process, and a discussion of potential environmental effects associated with the proposed facility.

Not later than sixty (60) days after the initial consultation meeting, the municipality may, in cooperation with the prospective applicant, hold a public information hearing on the facility proposal. If such a hearing is held, the applicant must notify all abutting landowners and publish notice in a newspaper of general circulation in the municipality at least fifteen (15) days prior to the hearing.

Not later than thirty (30) days after the initial consultation meeting, the municipality may present the prospective applicant with alternative sites, including additional municipal parcels, for its consideration. If not previously considered, these alternatives will be evaluated and discussed in its application to the Council.

Pursuant to Section 16-50~~l~~(e) of the General Statutes, Cellco must provide a summary of the Town's comments and recommendations, if any, to the Council not more than fifteen (15) days of the filing of an application.

Need

In 1988, Cellco received Council approval to install antennas on an existing tower off West Peak Road (Meriden Mountain) in Meriden, Connecticut. This site is identified as Cellco's "Meriden cell site" (see Attachment 1). The antennas are mounted at the 100-foot level on the tower, constructed at a ground elevation of approximately 1620 feet above mean sea level ("AMSL"). In the early days of network development, the placement of antennas at higher ground elevations, like Meriden Mountain, were more common, and provided, as you would expect, a fairly large coverage footprint for the provision of reliable voice services. Since that time, Cellco's network and wireless technologies have evolved to a point where a facility like the Meriden Mountain cell site is more of a hindrance to the provision of reliable wireless voice and

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data service in the area. The wireless signal from Meriden Mountain is difficult to control, tends to “over-shoot” nearby areas where service may be needed and interferes with the signal from other cell sites in the area.

The primary purpose for the Southington – East Street cell site described above is to provide reliable wireless voice and data services to the northerly portion of the area currently served by Cellco’s Meriden cell site including portions of Routes 120 and 364, local roads in the area, residential and recreation land uses and commercial areas along Route 322.² Further, the proposed Southington – East Street facility will also provide capacity relief to Cellco’s Milldale cell site which is operating at or near its current capacity limits.

Environmental Effects

In our experience, the primary impact of a wireless facility such as the proposed Southington – East Street facility is visual. The visual impact of the proposed facility will vary from place to place around the Property, depending upon factors such as vegetation, topography, distance from the tower, and the location of buildings in the sight-line of the tower site. The Southington – East Street facility will be located in the westerly portion of an approximately 27 acre Town-owned parcel, used for leaf composting.

To more fully assess the visual impact of the Southington – East Street facility, Cellco’s consultant, All-Points Technology Corporation (“APT”) has prepared a Preliminary Visibility Analysis. This analysis indicates that a majority of the year-round visibility of the tower would be limited to the area immediately surrounding the proposed facility location and along select portions of nearby roadways. (See Attachment 3). A more detailed visual report is being prepared and will be included in Cellco’s application to the Council.

Pursuant to the provisions of Conn. Gen. Stat. § 16-50p(a)(3)(G), new telecommunications facilities must be located at least 250 feet from schools (defined in C.G.S. §10-154a) and commercial day care facilities (defined in C.G.S. §19a-77(a)(1)) unless the location selected is acceptable to the Town’s chief elected official or the Council finds that the facility will not have a substantial adverse effect on the aesthetics or scenic quality of the neighborhood where the school or commercial day care use is located. The proposed Southington – East Street tower is not located within 250 feet of any building containing a school or commercial day care facility.

² The southerly portion of the area currently served by the Meriden Mountain cell site will be served by another new facility planned to the south of Interstate 691.

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Based on field surveys, Cellco has determined that the construction of the Southington – East Street facility will have no direct impacts on inland wetlands or watercourses, within or near the tower compound. All improvements associated with this facility are proposed to be more than 100 feet from the nearest wetland areas located to the east of the proposed tower compound. Cellco anticipates that all other physical environmental effects associated with the proposed facility would be minimal.

Power Density

The Federal Communications Commission (“FCC”) has adopted a standard (the “Standard”) for exposure of radio frequency (“RF”) emissions from telecommunications facilities like the Southington – East Street facility. To ensure compliance with the Standard, Cellco has performed “far-field” calculations for each of Cellco’s operating frequencies at the proposed facility according to the methodology described in FCC Office of Science and Technology Bulletin No. 65 (“OST Bulletin 65”). These calculations are conservative approximations of RF emissions from the facility and demonstrates that the proposed Southington – East Street facility will operate well within the FCC’s RF safety limits. (*See Attachment 4.*) Actual RF emissions levels from this facility will be far less than even these conservative calculations.

Scenic Natural Historic or Recreational Impacts

To further assess the environmental impacts of the proposed facility, Cellco is working with its consultant team to prepare a National Environmental Policy Act (“NEPA”) Environmental Screening Checklist (the “NEPA Checklist”) and other related environmental reviews to determine if the facility will have any significant adverse environmental effects. The NEPA Checklist will include information from the Environmental and Geographic Information Center of the Connecticut Department of Energy and Environmental Protection (“DEEP”), the U.S. Fish and Wildlife Service (“USFWS”) and the State Historic Preservation Officer (“SHPO”). Copies of the DEEP, USFWS and the SHPO determinations will also be submitted as a part of the Council Application.

Site Search Process

Cellco conducted a search for suitable cell site locations in southerly portions of Town and identified the Property as a site that would satisfy its wireless service objectives in the area. In addition to the proposed location, Cellco identified and investigated six (6) alternative facility locations in the area. With the exception of the Property, each of the alternative sites considered

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were rejected by the landowner who was unwilling to enter into a lease for a cell site, rejected by Cellco's RF engineers or eliminated due to some concerns for significant environmental effects. A complete list of other potential cell sites investigated is included in Attachment 5.

Tower Sharing

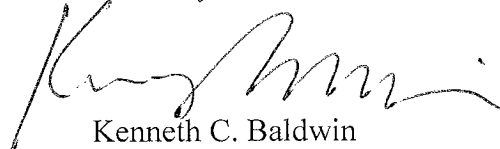
As stated above, Cellco intends to build a tower that is capable of supporting its antennas and those of additional wireless telecommunications providers, including the Town emergency service providers, if a need exists. The provision to share the tower is consistent with the intent of the General Assembly when it adopted Conn. Gen. Stat. § 16-50aa and with Council policy. The availability of space on the proposed tower may reduce, if not eliminate, the need for additional towers in Southington for the foreseeable future.

Conclusion

This technical report is submitted in accordance with Conn. Gen. Stat. § 16-50i which requires Cellco to supply the Town with information regarding its proposed Southington – East Street facility. This report includes information regarding the site selection process, public need, and the potential environmental impacts of the facility. Cellco submits that its proposed Southington – East Street facility would not have any significant adverse environmental effects. Moreover, Cellco submits that the public need for high quality wireless service, and a competitive framework for providing such service has been determined by the FCC to be in the public interest and that such public need far outweighs any perceived environmental effects of the proposed facility.

Please contact me if you have any additional questions regarding the proposed facility.

Sincerely,



Kenneth C. Baldwin

Enclosures

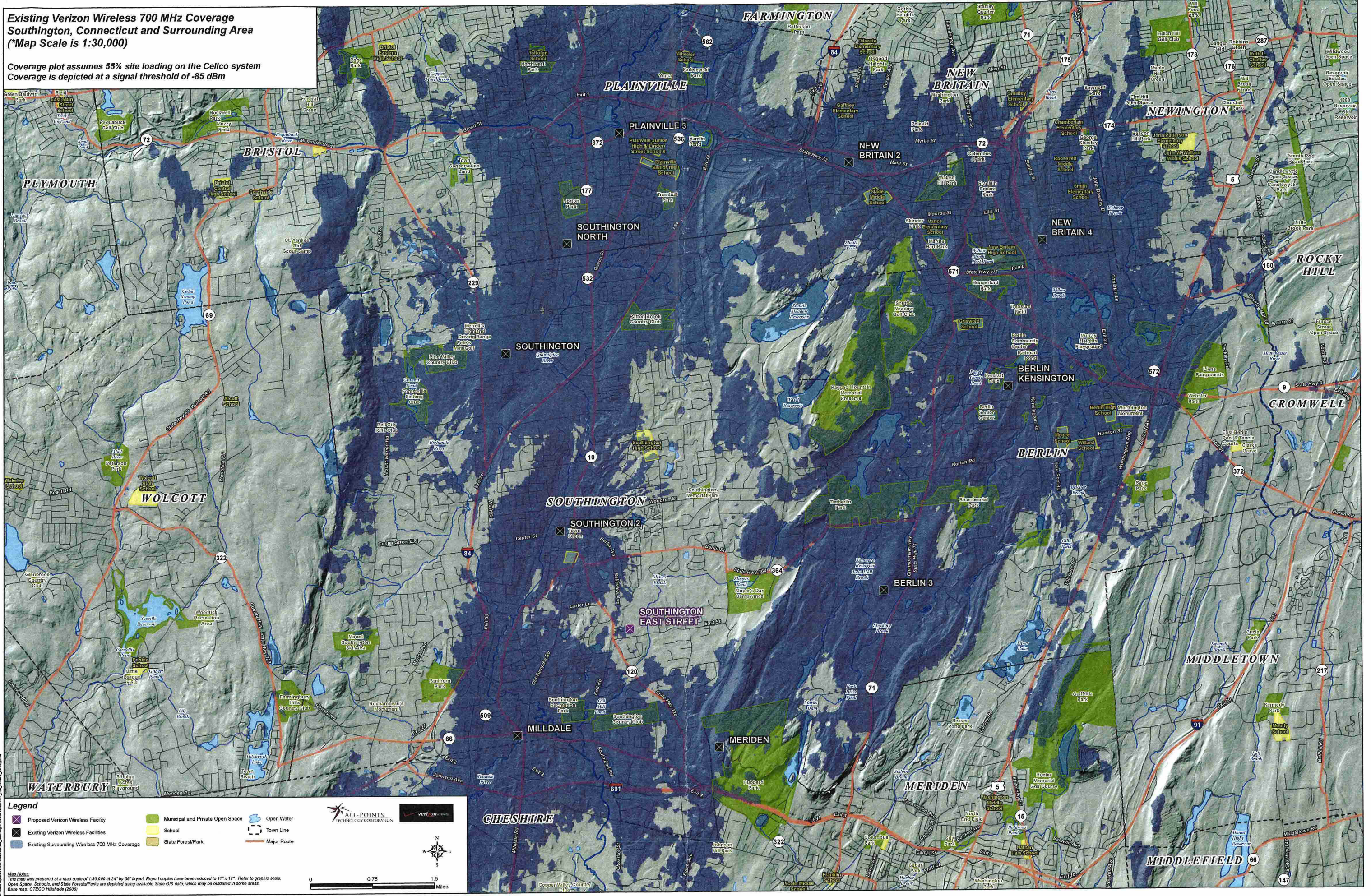
Copy to:

Sandy M. Carter

ATTACHMENT 1

**Existing Verizon Wireless 700 MHz Coverage
Southington, Connecticut and Surrounding Area
(*Map Scale is 1:30,000)**

Coverage plot assumes 55% site loading on the Cellco system
Coverage is depicted at a signal threshold of -85 dBm



Legend

- Proposed Verizon Wireless Facility
- Municipal and Private Open Space
- Open Water
- Existing Verizon Wireless Facilities
- School
- Town Line
- Existing Surrounding Wireless 700 MHz Coverage
- State Forest/Park
- Major Route

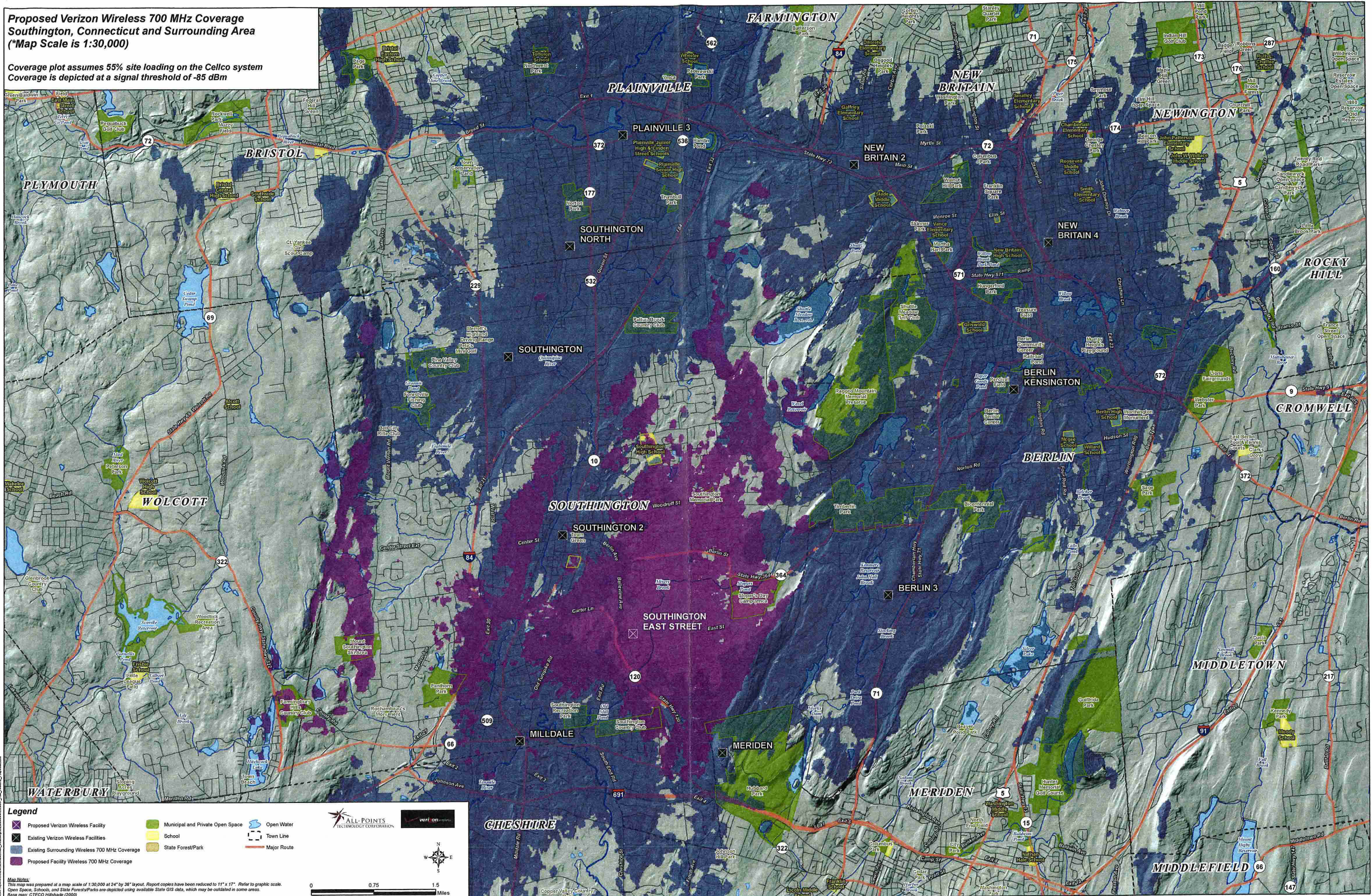
Map Notes:
This map was prepared at a map scale of 1:30,000 at 24" x 36" layout. Report copies have been reduced to 11" x 17". Refer to graphic scale.
Open Space, Schools, and State Forests/Parks are depicted using available State GIS data, which may be outdated in some areas.
Base map: ©TECO Hillshade (2009)

Scale: 0 0.75 1.5 Miles

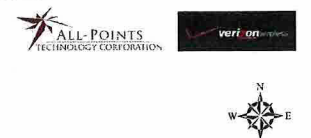
Logos: ALL-POINTS TECHNOLOGY CORPORATION, verizon

**Proposed Verizon Wireless 700 MHz Coverage
Southington, Connecticut and Surrounding Area
(*Map Scale is 1:30,000)**

Coverage plot assumes 55% site loading on the Celco system
Coverage is depicted at a signal threshold of -85 dBm



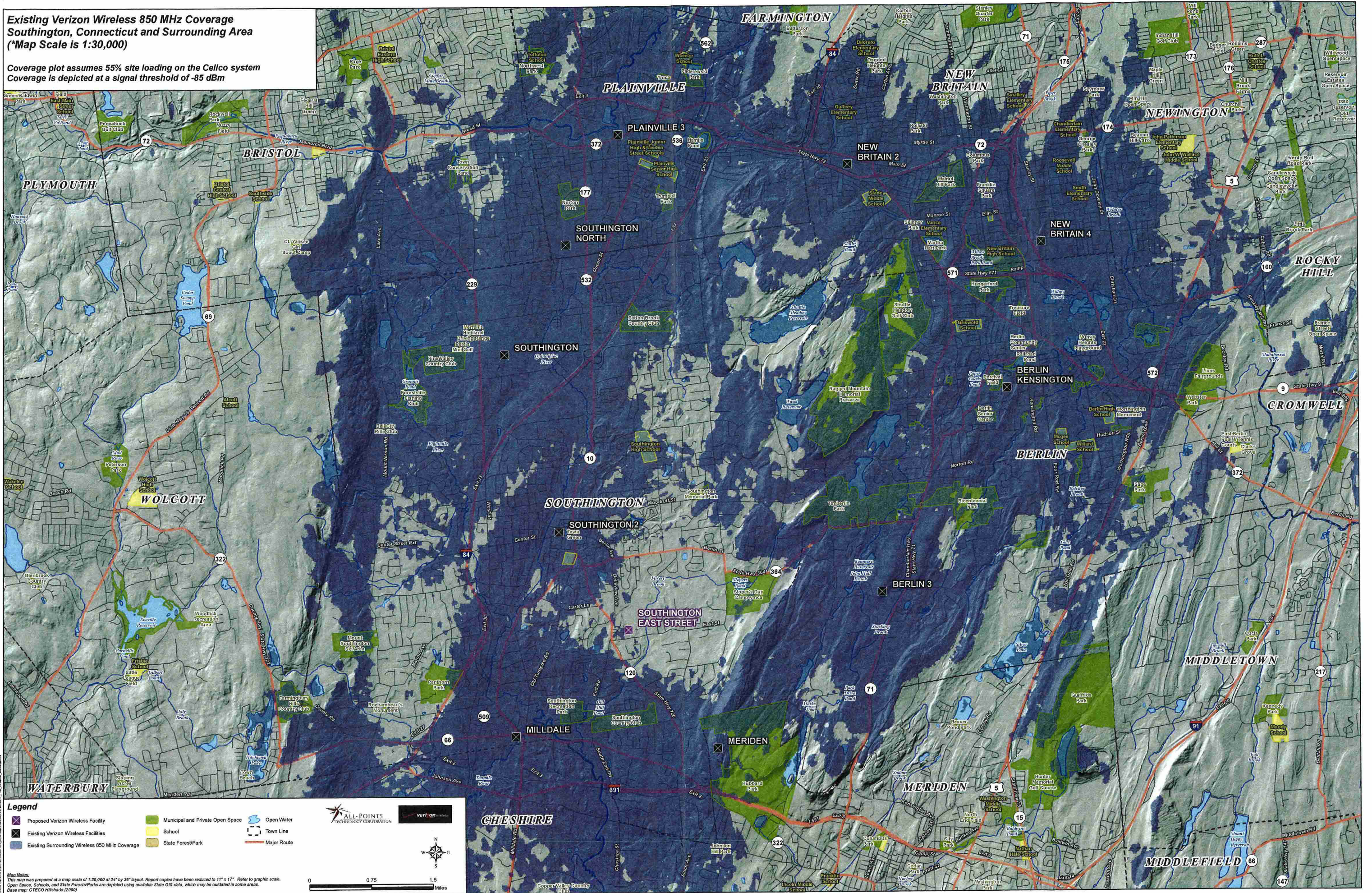
- Legend**
- Proposed Verizon Wireless Facility
 - Existing Verizon Wireless Facilities
 - Existing Surrounding Wireless 700 MHz Coverage
 - Proposed Facility Wireless 700 MHz Coverage
 - Municipal and Private Open Space
 - School
 - State Forest/Park
 - Open Water
 - Town Line
 - Major Route



Map Notes:
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Base map: CTECO Hillshade (2009)

**Existing Verizon Wireless 850 MHz Coverage
 Southington, Connecticut and Surrounding Area
 (*Map Scale is 1:30,000)**

Coverage plot assumes 55% site loading on the Cellco system
 Coverage is depicted at a signal threshold of -85 dBm



Legend

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

ALL-POINTS TECHNOLOGY CORPORATION

verizon

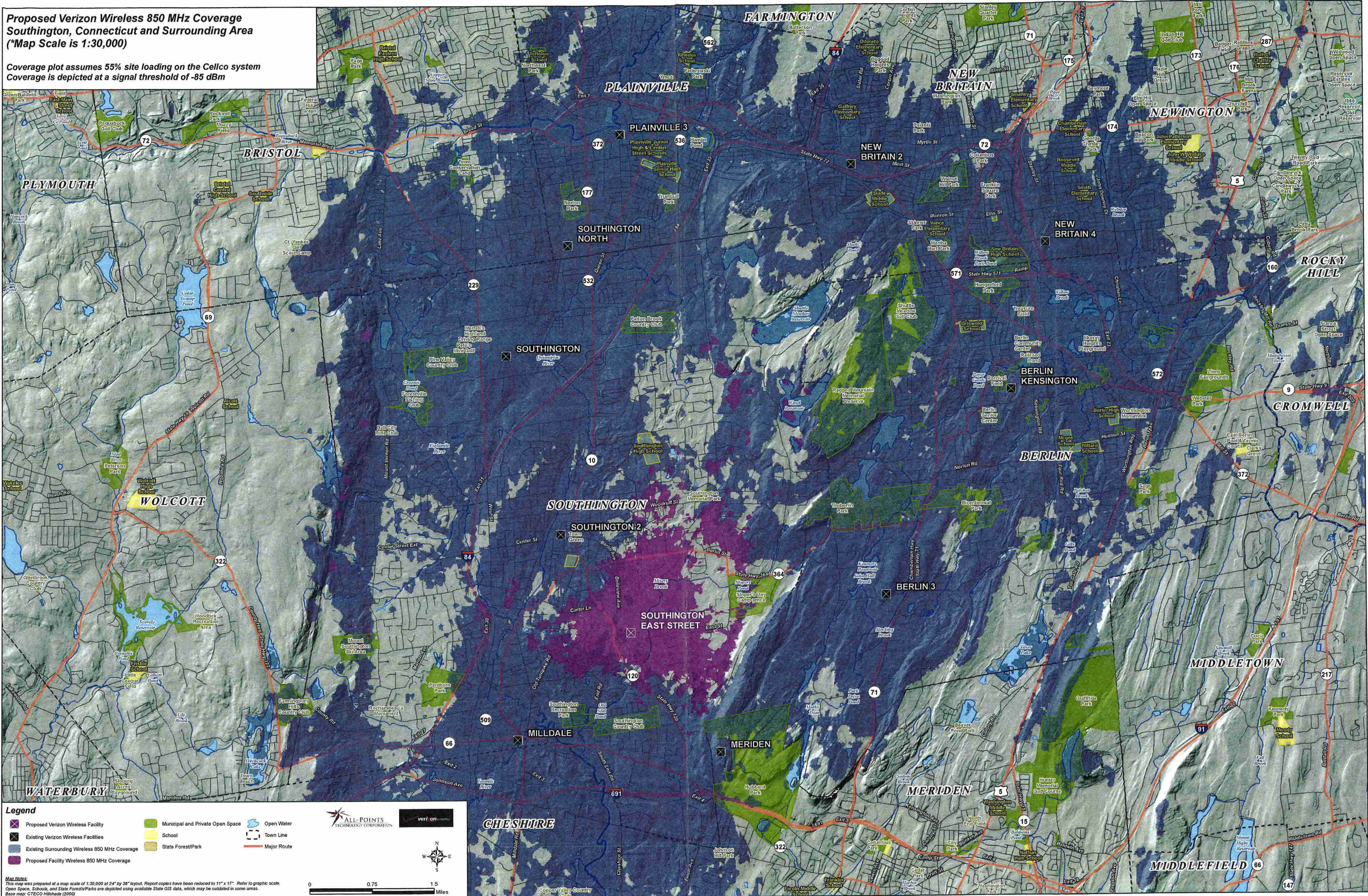
Middlefield

Map Notes:
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 Base map: CTECO Hillshade (2000)

0 0.75 1.5 Miles

**Proposed Verizon Wireless 850 MHz Coverage
Southington, Connecticut and Surrounding Area
(*Map Scale is 1:30,000)**

Coverage plot assumes 55% site loading on the Cellco system
Coverage is depicted at a signal threshold of -85 dBm



Legend

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

Map Notes:
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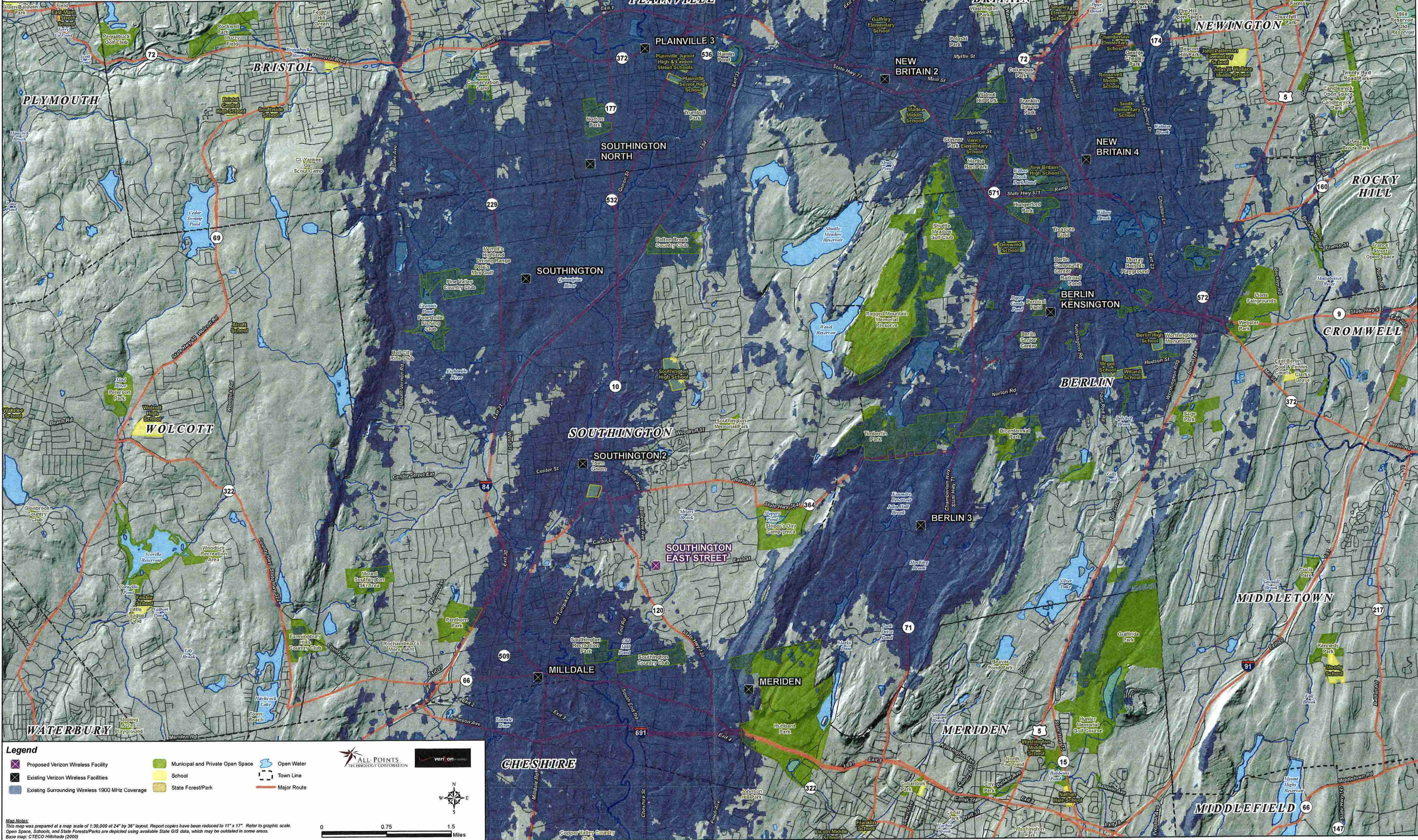
ALL-POINTS TECHNOLOGY CORPORATION

verizon

0 0.75 1.5 Miles

Existing Verizon Wireless 1900 MHz Coverage
Southington, Connecticut and Surrounding Area
 (*Map Scale is 1:30,000)

Coverage plot assumes 55% site loading on the Celco system
 Coverage is depicted at a signal threshold of -85 dBm



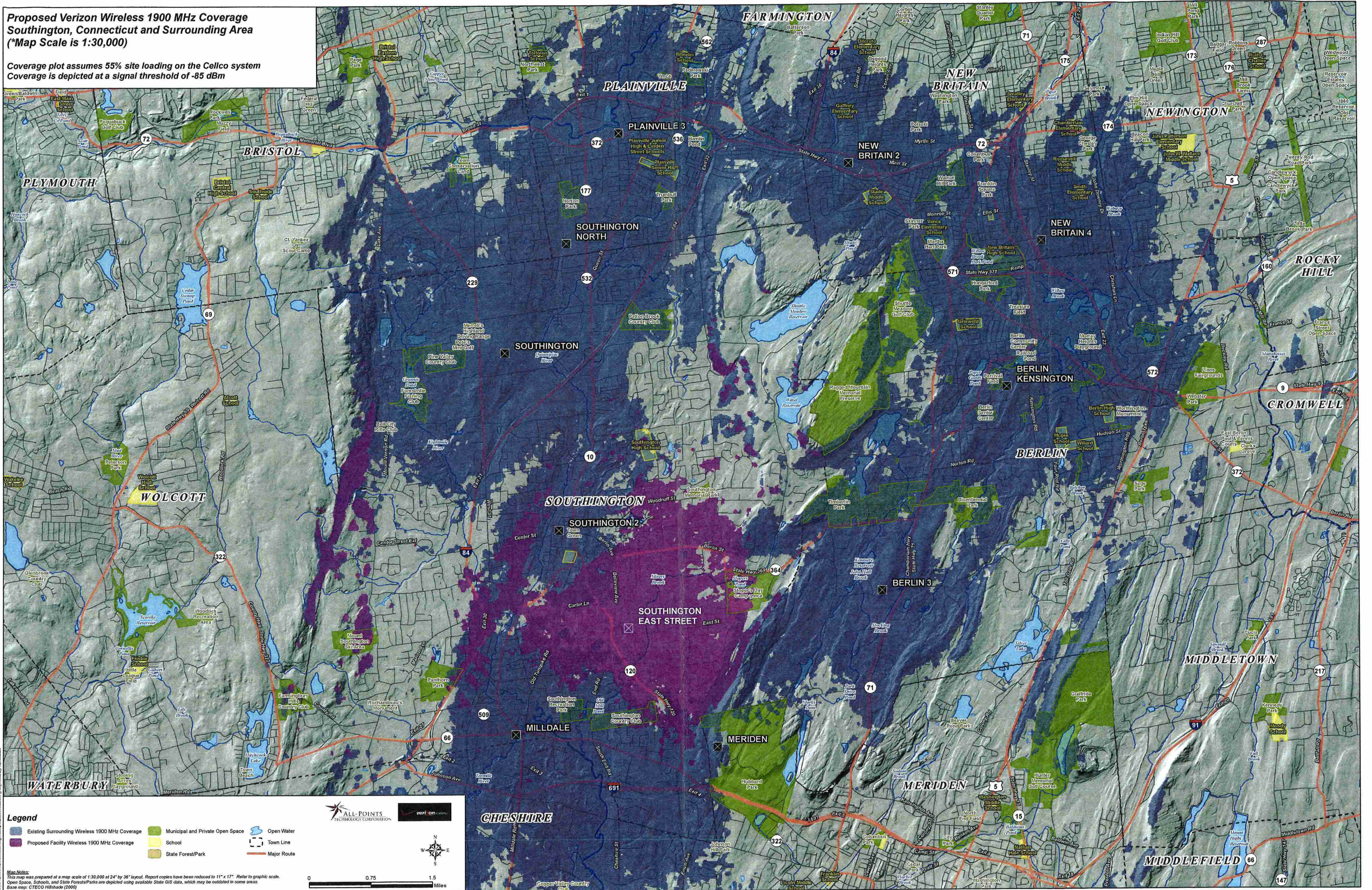
Legend

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

Map Notes
 This map was prepared at a map scale of 1:30,000 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)

**Proposed Verizon Wireless 1900 MHz Coverage
Southington, Connecticut and Surrounding Area
(*Map Scale is 1:30,000)**

Coverage plot assumes 55% site loading on the Cellco system
Coverage is depicted at a signal threshold of -85 dBm



Legend

- 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

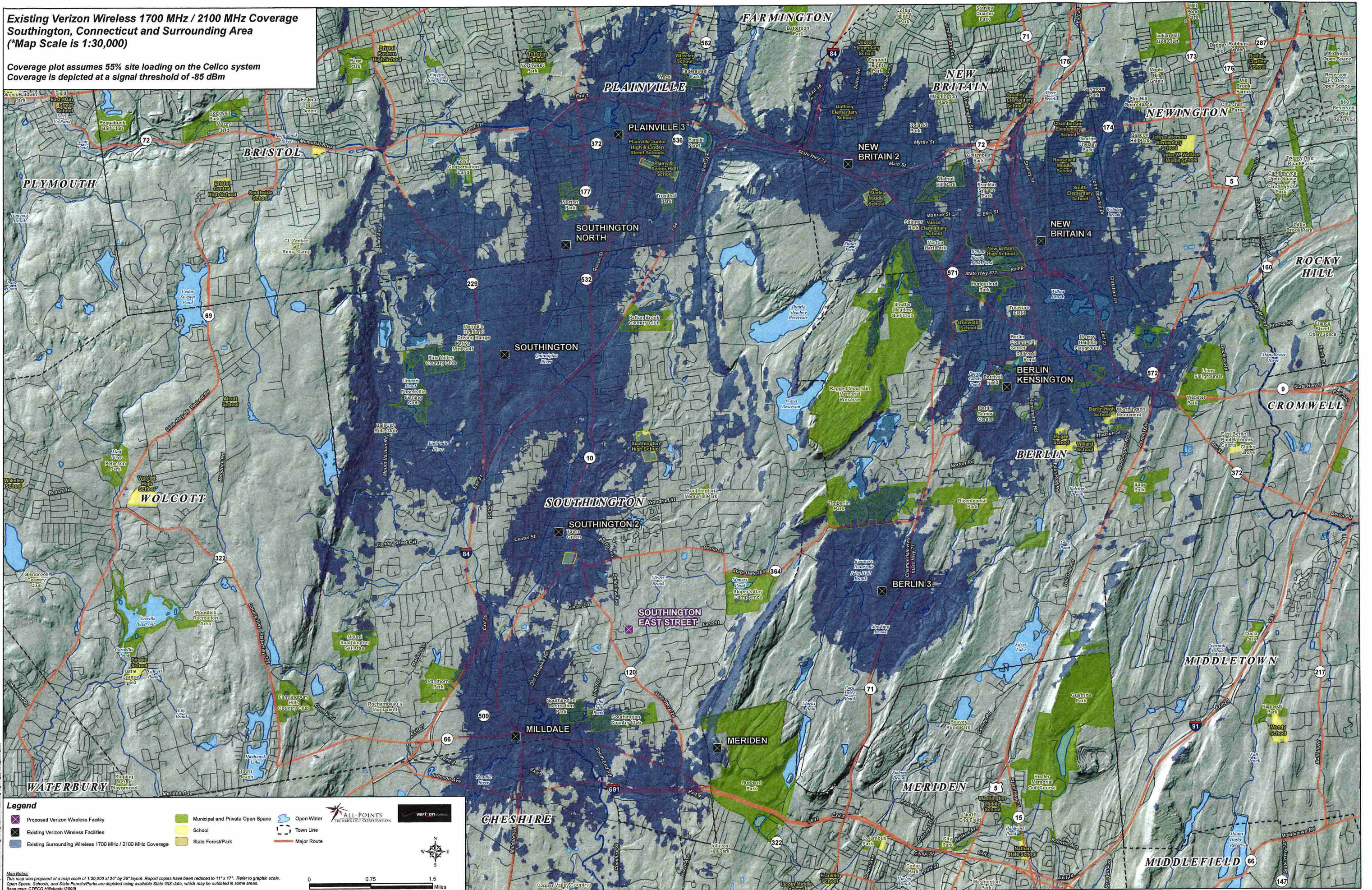
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Base map: CTECO Hillshade (2009)

Scale: 0 0.75 1.5 Miles

Logos: ALL-POINTS TECHNOLOGY CORPORATION, verizon

**Existing Verizon Wireless 1700 MHz / 2100 MHz Coverage
 Southington, Connecticut and Surrounding Area
 (*Map Scale is 1:30,000)**

Coverage plot assumes 55% site loading on the Cellco system
 Coverage is depicted at a signal threshold of -85 dBm



- Legend**
- Proposed Verizon Wireless Facility
 - Existing Verizon Wireless Facilities
 - Existing Surrounding Wireless 1700 MHz / 2100 MHz Coverage
 - Municipal and Private Open Space
 - School
 - State Forest/Park
 - Open Water
 - Town Line
 - Major Route

ALL POINTS TECHNOLOGY CORPORATION

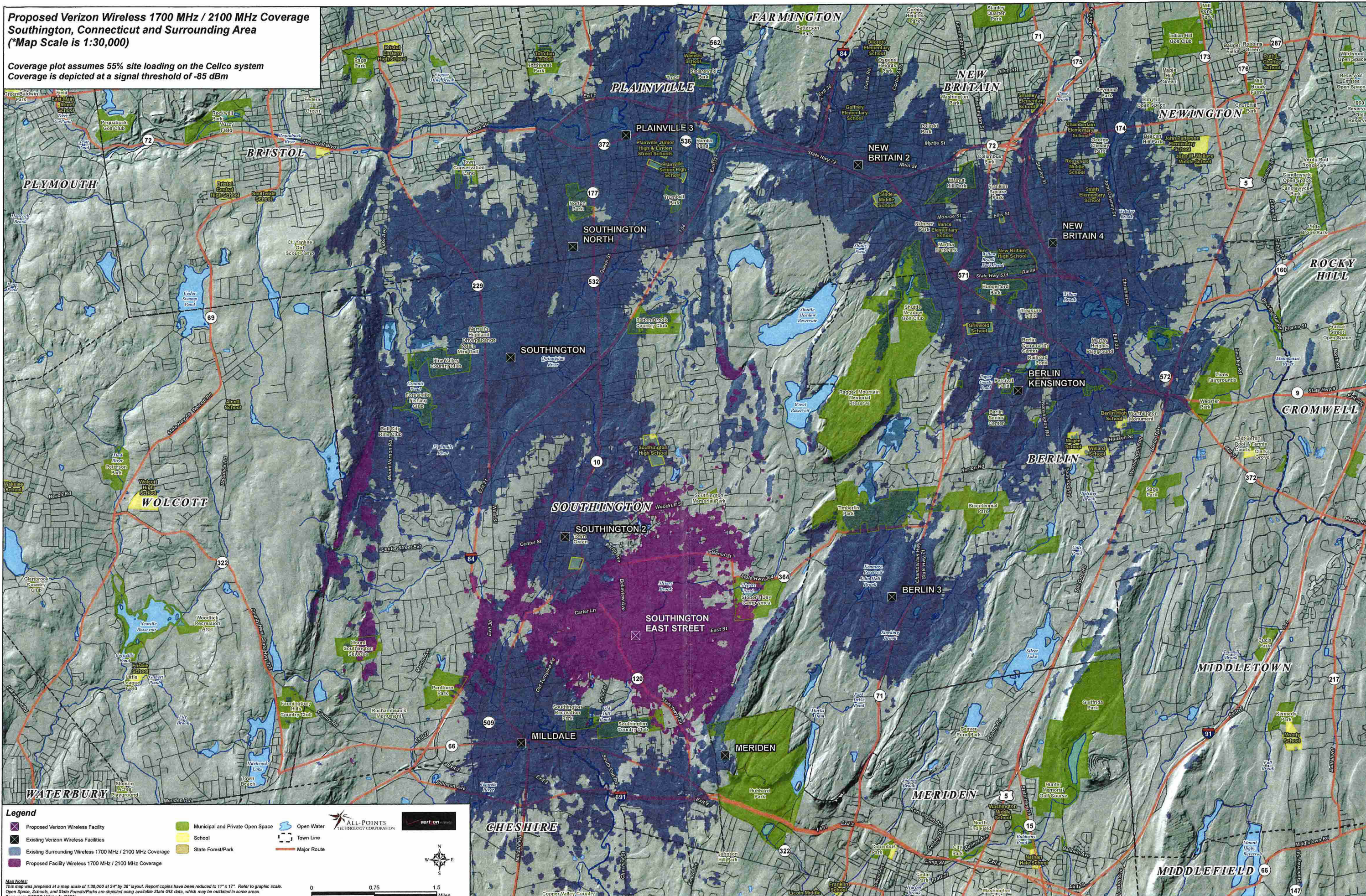
verizon

Map Notes:
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 Base map: ©TECO Hillshade (2009)

0 0.75 1.5 Miles

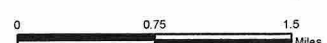
**Proposed Verizon Wireless 1700 MHz / 2100 MHz Coverage
 Southington, Connecticut and Surrounding Area
 (*Map Scale is 1:30,000)**

Coverage plot assumes 55% site loading on the Cellco system
 Coverage is depicted at a signal threshold of -85 dBm



- Legend**
- Proposed Verizon Wireless Facility
 - Existing Verizon Wireless Facilities
 - Existing Surrounding Wireless 1700 MHz / 2100 MHz Coverage
 - Proposed Facility Wireless 1700 MHz / 2100 MHz Coverage
 - Municipal and Private Open Space
 - School
 - State Forest/Park
 - Open Water
 - Town Line
 - Major Route

Map Notes:
 This map was prepared at a map scale of 1:30,000 at 24" by 36" layout. Report copies have been reduced to 11" x 17". Refer to graphic scale.
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 Base map: CTECO Hillshade (2000)



ATTACHMENT 2

Cellco Partnership

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

WIRELESS COMMUNICATIONS FACILITY

MERIDEN RELO.

99 EAST STREET

SOUTHINGTON, CT 06489

SITE DIRECTIONS

FROM:	TO:
99 EAST RIVER DRIVE EAST HARTFORD, CONNECTICUT	99 EAST STREET SOUTHINGTON, CONNECTICUT

- Head EAST on E RIVER DR toward DARLIN ST 0.3 mi.
- Turn LEFT to stay on E RIVER DR 400 ft.
- Take the 1st LEFT onto CONNECTICUT BLVD 0.2 mi.
- Turn LEFT to merge onto I-84 443 ft.
- Merge onto I-84 15.8 mi.
- Take EXIT 32 for CT-10/QUEEN ST 0.3 mi.
- Turn RIGHT onto CT-10 S/QUEEN ST 2.6 mi.
- Turn LEFT onto CT-120 S 1.2 mi.
- Turn LEFT onto EAST ST, and the destination will be on the left 0.2 mi.

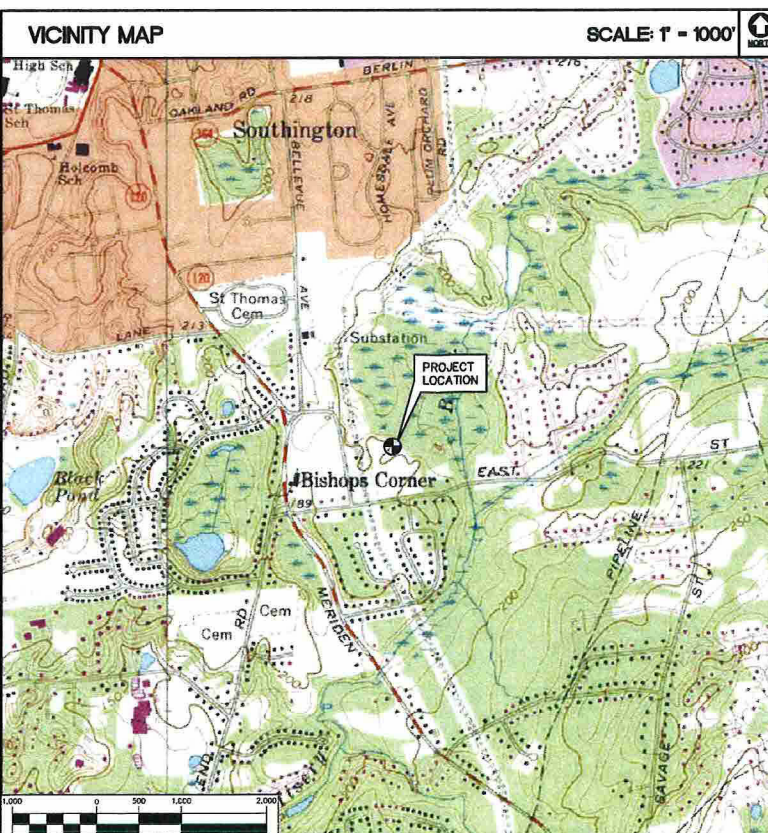
GENERAL NOTES

- PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY CELCO PARTNERSHIP.

SITE INFORMATION

THE SCOPE OF WORK SHALL INCLUDE:

- THE CONSTRUCTION OF A 50'x50' FENCED WIRELESS COMMUNICATIONS COMPOUND.
- A TOTAL OF UP TO TWELVE (12) DIRECTIONAL PANEL ANTENNAS ARE PROPOSED TO BE MOUNTED AT A CENTERLINE ELEVATION OF 80'-0"± AGL ON A 90'-0"± PROPOSED STEEL MONOPOLE TOWER.
- POWER AND TELCO UTILITIES SHALL BE ROUTED UNDERGROUND FROM EXISTING RESPECTIVE DEMARCS TO THE PROPOSED UTILITY BACKBOARD LOCATED ADJACENT TO THE PROPOSED FENCED COMPOUND. FINAL DEMARC LOCATION AND UTILITY ROUTING TO PROPOSED BACKBOARD WILL BE VERIFIED/DETERMINED BY LOCAL UTILITY COMPANIES. UTILITIES WILL BE ROUTED UNDERGROUND FROM UTILITY BACKBOARD TO THE PROPOSED NOMINAL 12'x30' WIRELESS EQUIPMENT SHELTER LOCATED WITHIN FENCED COMPOUND AREA.
- FINAL DESIGN FOR TOWER AND ANTENNA MOUNTS SHALL BE INCLUDED IN THE D&M PLANS.
- THE PROPOSED WIRELESS FACILITY INSTALLATION WILL BE DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2009 CONNECTICUT SUPPLEMENT.
- THERE WILL NOT BE ANY LIGHTING UNLESS REQUIRED BY THE FCC OR THE FAA.
- THERE WILL NOT BE ANY SIGNS OR ADVERTISING ON THE ANTENNAS OR EQUIPMENT.





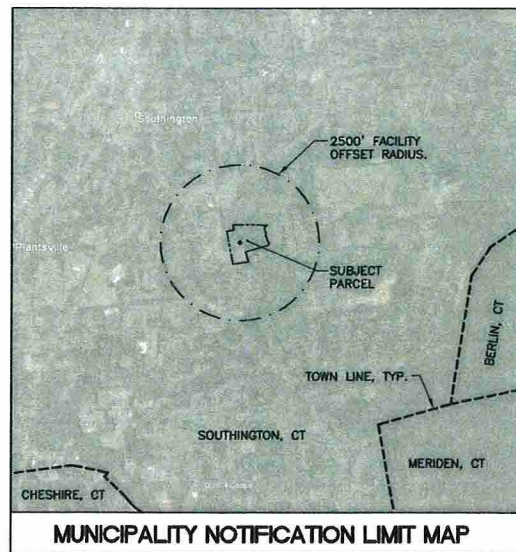
PROJECT SUMMARY

SITE NAME: MERIDEN RELO.
SITE ADDRESS: 99 EAST STREET
 SOUTHINGTON, CT 06489
PROPERTY OWNER: BRADLEY POND LLC
 328 DERBY AVENUE
 DERBY, CT 06418
LESSEE/TENANT: CELCO PARTNERSHIP
 d.b.a. VERIZON WIRELESS
 99 EAST RIVER DRIVE
 EAST HARTFORD, CT 06108
CONTACT PERSON: SANDY CARTER
 CELCO PARTNERSHIP
 d.b.a. VERIZON WIRELESS
 99 EAST RIVER DRIVE
 EAST HARTFORD, CT 06108
TOWER COORDINATES: LATITUDE 41°-34'-59.7"
 LONGITUDE 72°-51'-54.9"
 GROUND ELEVATION: 203'± A.M.S.L.
 PROVIDED BY VERIZON WIRELESS.

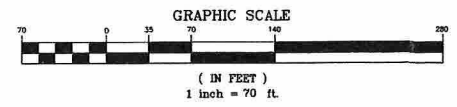
SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	1
C-1	SITE LOCATION PLAN	1
C-2	COMPOUND PLAN, ELEVATION AND ANTENNA MOUNTING CONFIGURATION	1

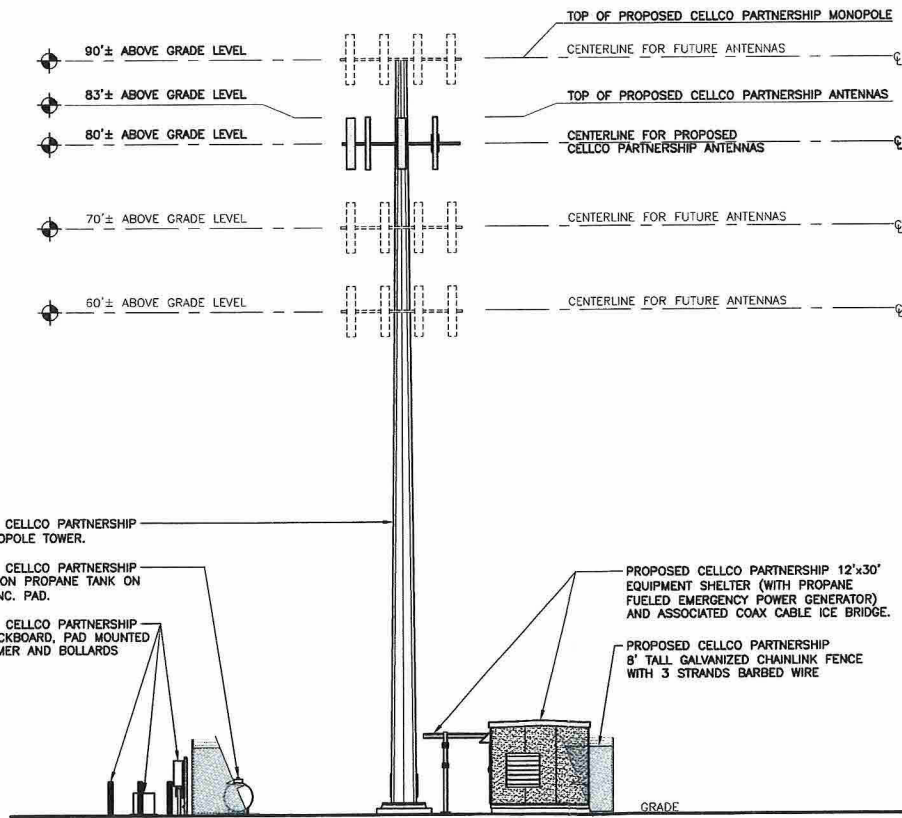
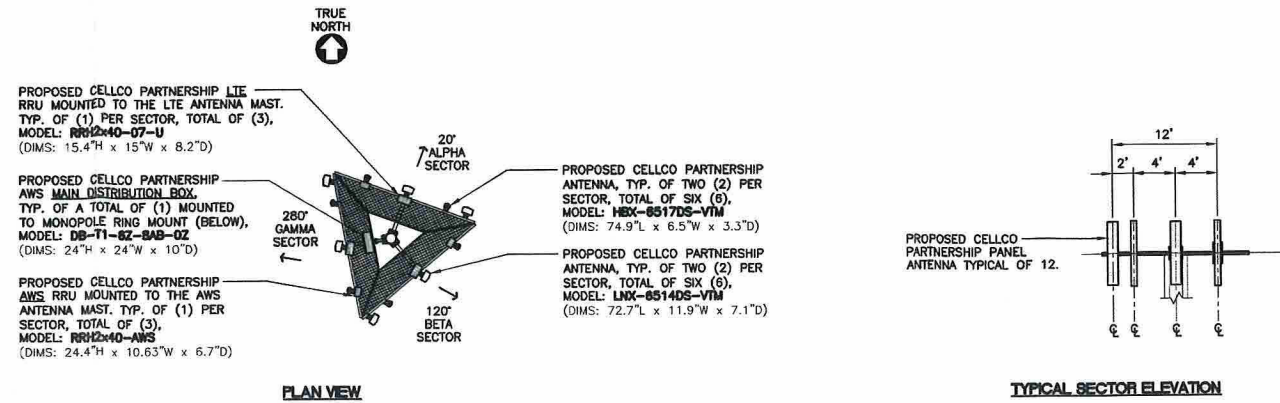
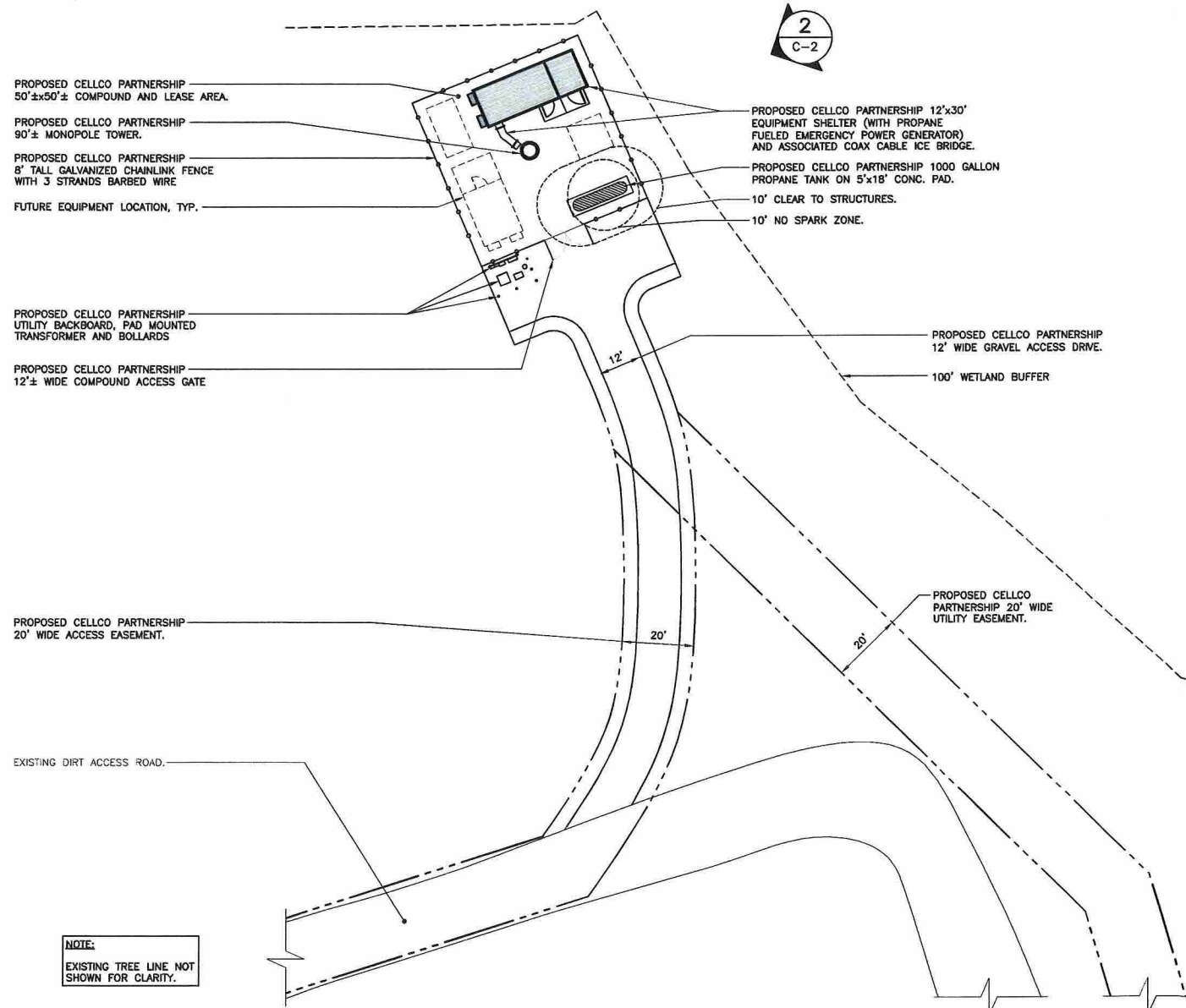
 d.b.a. Verizon Wireless		CT SPRING COUNCIL TECH REPORT ISSUED FOR CT SPRING COUNCIL - CLIENT REVIEW
PROFESSIONAL ENGINEER SEAL	1 05/27/14 0 05/07/14 REV. DATE	DMD DMD DRAWN BY CHK'D BY
 203 489-0580 203 489-0327 fax 652 North Branford Road Branford, CT 06405 www.centekeng.com		
Cellco Partnership d/b/a Verizon Wireless WIRELESS COMMUNICATIONS FACILITY MERIDEN RELO. 99 EAST STREET SOUTHINGTON, CT 06489		
DATE: 04/30/14 SCALE: AS NOTED JOB NO. 14035.000		
TITLE SHEET		
<h1>T-1</h1> Sheet No. 1 of 3		



1 SITE LOCATION PLAN
C-1 SCALE: 1"=70'



<p>Cellco Partnership d/b/a Verizon Wireless WIRELESS COMMUNICATIONS FACILITY MERIDEN RELO. 99 EAST STREET SOUTHINGTON, CT 06489</p>		<p>CENTEK engineering Centek on Solutions™ 7031 484-0200 2031 484-4887 Fax 432 North Branford Road Branford, CT 06405 www.CentekEng.com</p>	<p>PROFESSIONAL ENGINEER SEAL</p>
<p>Cellco Partnership d/b/a Verizon Wireless</p>		<p>DATE: 04/30/14 SCALE: AS NOTED JOB NO. 14035.000</p>	
<p>SITE LOCATION PLAN</p>		<p>1 05/27/14 HMR DMD CT SITING COUNCIL TECH REPORT - CLIENT REVIEW 0 05/07/14 HMR DMD ISSUED FOR CT SITING COUNCIL - CLIENT REVIEW REV. DATE DRAWN BY CHK'D BY DESCRIPTION</p>	
<p>C-1</p>		<p>Sheet No. 2 of 3</p>	



REV.	DATE	DRAWN BY	CHECK'D BY	DESCRIPTION
1	05/21/14	HMR	DMD	CT SITING COUNCIL TECH REPORT ISSUED FOR CT SITING COUNCIL - CLIENT REVIEW
0	05/01/14	HMR	DMD	ISSUED FOR CT SITING COUNCIL - CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

Cellco Partnership
d.b.a. Verizon Wireless

CENTEK engineering
Communications Division

2031 495-0380
1000 North Main Street
Branford, CT 06405
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless
WIRELESS COMMUNICATIONS FACILITY
MERIDEN RELO.
99 EAST STREET
SOUTHINGTON, CT 06489

DATE: 04/30/14
SCALE: AS NOTED
JOB NO. 14035.000

COMPOUND PLAN, ELEVATION AND ANTENNA MOUNTING CONFIG.

C-2
Sheet No. 3 of 3

ATTACHMENT 3



PRELIMINARY VISUAL ASSESSMENT

To: Ms. Alexandria Carter
Verizon Wireless

Date: June 6, 2104

Re: Proposed Wireless Telecommunications Facility From: Michael Libertine
99 East Street
Southington, Connecticut

Cellco Partnership (d/b/a “Verizon Wireless”) has identified a potential site candidate location for development of a new wireless telecommunications facility (“Facility”) at 99 East Street in Southington, Connecticut (the “host Property”). The proposed Facility would consist of a 90-foot tall monopole.

At the request of Verizon Wireless, All-Points Technology Corporation, P.C. (“APT”) prepared preliminary viewshed mapping to evaluate the potential visibility associated with the proposed Facility. To conduct this assessment, a predictive computer model was developed specifically for this project. The predictive model provides an initial estimate of potential visibility throughout a pre-defined Study Area, in this case a two-mile radius surrounding the proposed Facility location.

Two computer modeling tools were used to predict those areas where at least the top of the 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 site location, its ground elevation and Facility height, as well as the surrounding topography and existing vegetation, which are the primary features that can block direct lines of sight. For purposes of this preliminary evaluation, an average tree canopy height of 50 feet was incorporated.

Information used in the model included LiDAR¹-based digital elevation data and customized land use data layers developed specifically for this analysis. The LiDAR-based Digital Elevation Model represents topographic information for the state of Connecticut that was derived through the spatial interpolation of airborne LiDAR-based data collected in the year 2000 and has a horizontal resolution of ten (10) feet. In addition, multiple land use data layers were created from the Natural Resources Conservation Service (through the USDA) aerial photography (one-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

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.

is manually cross-checked with the recent USGS topographic land characteristics to quality assure the imaging analysis.

With these data inputs, the model is then queried to determine where the top of the Facility can be seen from any point(s) within the Study Area, given the intervening existing topography and vegetation. The results of the preliminary analysis are depicted on the attached map and are intended to provide a representation of those areas where portions of the Facility may potentially be visible to the human eye without the aid of magnification, based on a viewer eye-height of 5 feet above the ground and the combination of intervening topography and tree canopy (year-round) and tree trunks (seasonally, when the leaves are off the deciduous trees), using an assumed, average tree height of 50 feet. The shaded areas of predicted visibility shown on the map denote locations from within the Study Area which the proposed Facility may potentially be visible year-round (in yellow) above the tree canopy and/or seasonally, through the trees (during “leaf-off” conditions; depicted in orange). The Facility however may not necessarily be visible from all locations within those shaded areas. It is important to note that the computer model cannot account for mass density, the height, diameter and branching variability of the trees, or the degradation of views that occur with distance. In addition, each point – or pixel – represents about one square meter in area, and thus is not predicting visibility from all viewpoints through all possible obstacles. Although large portions of the predicted viewshed may theoretically offer visibility of the Facility, because of these unavoidable limitations the quality of those views may not be sufficient for the human eye to recognize the tower or discriminate it from other surrounding objects. Visibility also varies seasonally with increased, albeit obstructed, views occurring during “leaf-off” conditions. Beyond the density of woodlands found within the given Study Area, each individual tree has its own unique trunk, pole timber and branching pattern characteristics that provide varying degrees of screening in leafless conditions which cannot be adequately modeled. Thus, modeling for seasonal variations of visibility generally over-predicts the viewshed in “leaf-off” conditions, even when incorporating conservative constraints into the model (i.e., assuming each tree is simply a vertical pole of varying width, depending upon species, with no distinct branching pattern). Therefore, field verification remains a necessary component for cross-checking the model’s initial results.

The preliminary viewshed mapping results indicate that year-round visibility appears limited primarily to the host Property and surrounding open areas within less than 0.25 mile. Obstructed, seasonal views of portions of the Facility may extend out to areas within approximately 0.5 mile of the host Property during that time of year when the leaves are off the deciduous trees. There may also be opportunities to see the top of the Facility seasonally from areas on the western flank of Southington Mountain (Hanging Hills and West Peak State Park). The combination of the Facility’s relatively low height and the surrounding mature tree cover throughout the Study Area would assist in limiting views of the Facility to a modest footprint. On a purely quantitative basis, areas from where the proposed Facility is predicted to be visible above the tree canopy year-round constitute approximately 39 acres. When the leaves are off the trees, seasonal views through the intervening pole timber and branches are anticipated to occur potentially over an additional 210± acres of land.

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

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

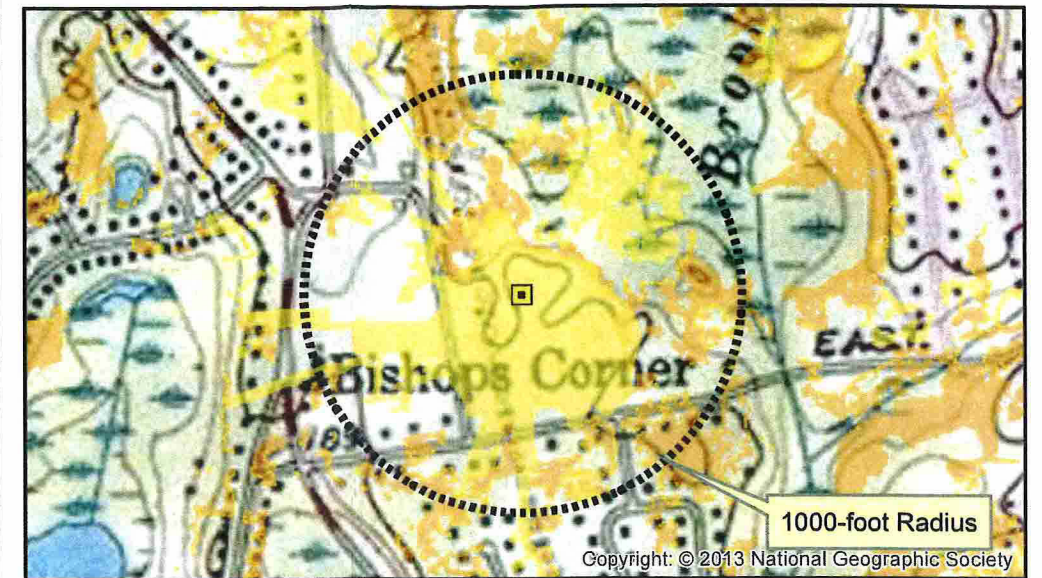
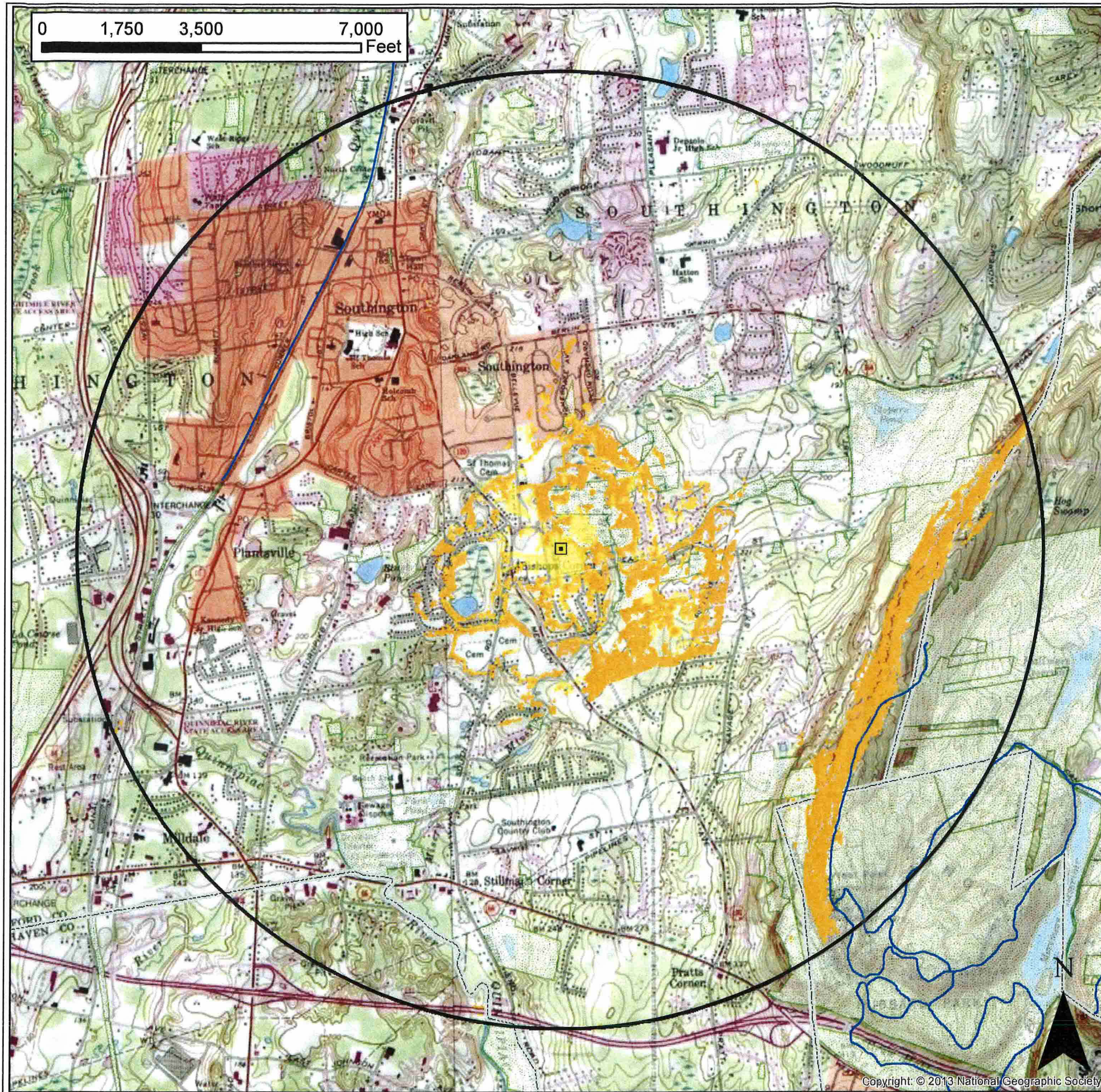
The map provides a basis for understanding the extent of visibility that may occur throughout the Study Area, but it does not address the characteristics of those potential views. Note that the results of the computer model have not been field verified. The modest average tree height value of 50 feet used in this preliminary analysis combined with the variability in tree heights and branching patterns as well as the model's sensitivity result in the initial model being over-predictive of the Facility's viewshed.

Our preliminary results are being field-verified with balloon and crane test information to supplement and fine tune the results of the preliminary computer modeling. Visual observations of these events are used to evaluate the results of the preliminary viewshed mapping and identify any discrepancies in the initial modeling. APT will also prepare photographic simulations from several vantage points to depict scaled renderings of the proposed Facility. This information will be included in an application to the Connecticut Siting Council for a Certificate of Environmental Compatibility and Public Need.

Attachment

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

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Preliminary Viewshed Map – Topo Base

Proposed Wireless Telecommunications Facility
CT1412300 – 99 East Street, Southington, CT

This Visibility Analysis map relies solely on computer modeling and interpretation of aerial photographs and topographic maps. The information presented herein has not been field verified.

NOTES

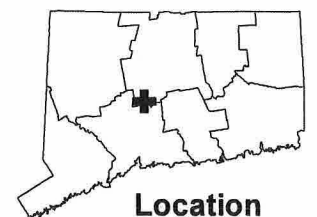
- Viewshed analysis conducted using Clark University's IDRISI.
- Areas of potential visibility are calculated based on facility location and height, Study Area topography, and Study Area vegetation.
- Proposed facility height is 90 feet AGL.
- Forest canopy height is 50 feet AGL
- Study area encompasses a two-mile radius and includes 8,042 acres of land.

DATA SOURCES

- Digital elevation model (DEM) derived from 10-foot contours obtained from official CT DEEP and CLEAR sources.
- Forest areas are generated with IDRISI (Clark University) image processing from 2012 NRCS/NAIP digital orthophotos with 1-foot pixel resolution.
- Municipal Open Space, State Recreation Areas, Trails, County Recreation Areas, and Town Boundary data obtained from CT DEEP and the towns.

Legend

- Proposed Tower
- Trails
- Predicted Seasonal Visibility (210 Acres)
- Predicted Year-Round Visibility (39 Acres)
- Towns
- 2-Mile Study Area
- Open Space



Location



ATTACHMENT 4

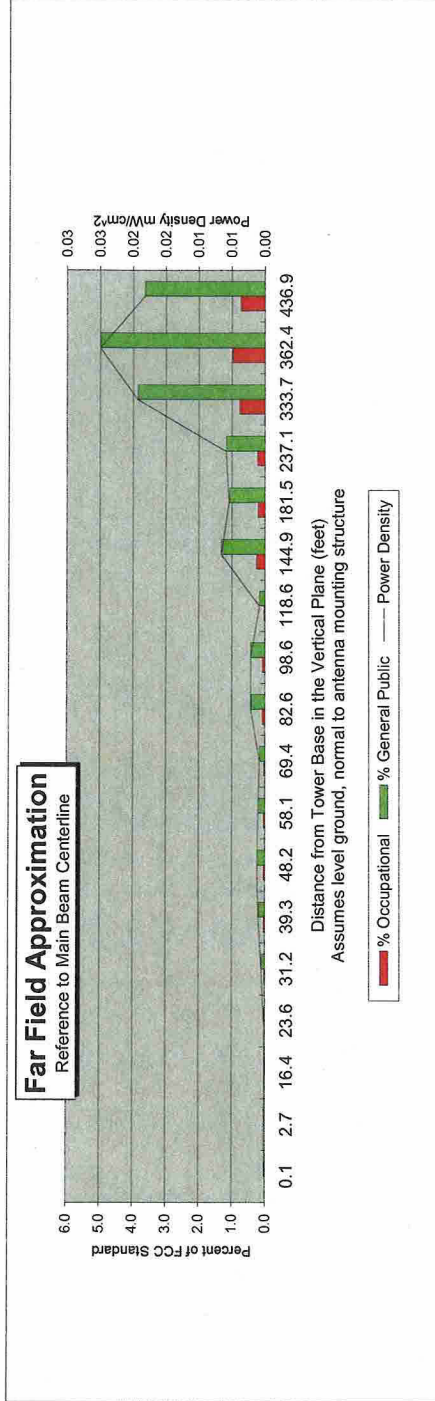
Far Field Approximation
with downtilt variation

**Estimated Radiated Emission
Single Emitter Far Field Model
Dipole / Wire/Yagi Antenna Types**



Location:	MERIDEN CT RELO
Site #:	
Date:	04/18/14
Name:	Jaime Laredo
File Name:	MERIDEN RELO, CT (LTE-700)

Operating Freq. (MHz)	751.0
Antenna Height (ft)	80.0
Antenna Gain (dBi)	13.6
Antenna Size (in.)	72.7
Downtilt (degrees)	8.0
Feedline Loss (dB)	0.0
Power @ J4 (w)	714.0



This approximation is only valid in the far field, which begins at: **65.7 Feet**

Enter Main Beam
Distance in feet below:

Calc Angle	90.0	88.0	80.0	78.0	73.0	68.0	63.0	58.0	53.0	48.0	43.0	38.0	33.0	28.0	23.0	18.0	13.0	12.0	10.0
Solve for r, dx to antenna	77.0	77.0	78.7	80.5	83.1	86.4	90.8	96.4	103.7	112.9	125.1	141.4	164.1	197.2	249.3	342.5	370.5	443.6	
Distance from Antenna Structure Base in Horizontal plane	0.1	2.7	16.4	23.6	31.2	39.3	48.2	58.1	69.4	82.6	98.6	118.6	144.9	181.5	237.1	333.7	362.4	436.9	#NUM!
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2	0
dB down from centerline (referenced to centerline)	36.76	34.35	38.52	35.34	29.54	26.8	25.59	25.63	25.99	21.21	20.29	23.24	13.03	12.3	9.92	2	0.2	0	0
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Power Density (mW/cm²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	#NUM!
Percent of Occupational Standard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.3	0.2	0.2	0.8	1.0	0.7
Percent of General Population Standard	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.2	1.1	1.2	3.9	5.0	3.6	#NUM!

Antenna Type LNX-6514DS-VTM
Max% 4.99%

Instructions:

- 1) Fill in Site Location, Site number, Date, Name of Person Responsible for Date, and enter File Name to be saved as.
- 2) References to J4 refer to a point where the transmission line exits the equipment shelter and proceeds to the antenna(s). There is typically a connector located here where power measurements are made.
- 3) Enter Antenna Height (in feet to bottom of antenna), Antenna Gain (expressed as dBi, add 2.17 to dBd to obtain dBi), Antenna Size (vertical size in inches), Downtilt (in Degrees, enter zero if none), Feedline loss from J4 to Antenna, and J4 P.
- 4) From manufacturer's plots, or data sheet, input Angle from mainbeam and dB below mainbeam centerline.
- 5) Enter Reflection coefficient (2.56 would be typical, 1 for free space)
- 6) Spreadsheet calculates actual power density, then relates as Occupational or General Population percentage of FCC Standard.
- 7) An odd distance may be entered in the rightmost column of the lower table.

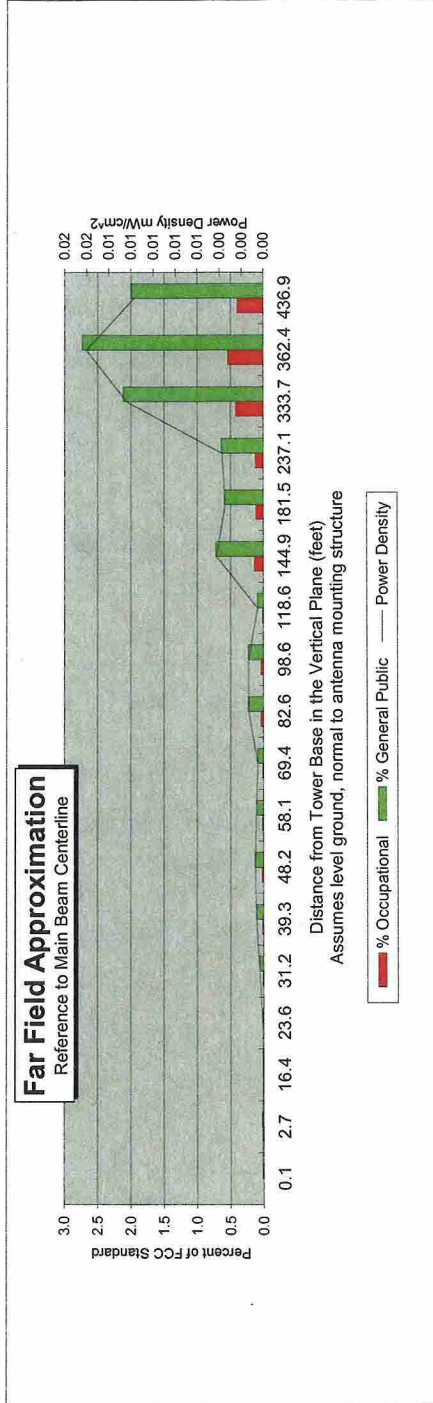
Far Field Approximation
with downtilt variation

**Estimated Radiated Emission
Single Emitter Far Field Model
Dipole / Wire/ Yagi Antenna Types**



Location:	MERIDEN CT RELO
Site #:	
Date:	04/18/14
Name:	Jaime Laredo
File Name:	MERIDEN RELO, CT (Cellular)

Operating Freq. (MHz)	878.5
Antenna Height (ft):	80.0
Antenna Gain (dBi):	14.2
Antenna Size (in.):	72.7
Downtilt (degrees):	8.0
Feedline Loss (dB):	0.0
Power @ J4 (w):	399.0



This approximation is only valid in the far field, which begins at: **65.7 Feet**

Enter Main Beam
Distance in feet below:

Calc Angle	90.0	88.0	80.0	78.0	73.0	68.0	63.0	58.0	53.0	48.0	43.0	38.0	33.0	28.0	23.0	18.0	13.0	12.0	10.0
Solve for r, dx to antenna	77.0	77.0	78.0	78.7	80.5	83.1	86.4	90.8	96.4	103.7	112.9	125.1	141.4	164.1	197.2	249.3	342.5	370.5	443.6
Distance from Antenna Structure Base in Horizontal plane	0.1	2.7	16.4	23.6	31.2	39.3	48.2	58.1	69.4	82.6	98.6	118.6	144.9	181.5	237.1	333.7	362.4	436.9	#NUM!
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2	0
dB down from centerline (referenced to centerline)	36.76	34.35	38.52	35.34	29.54	26.8	25.59	25.63	25.99	21.21	20.29	23.24	13.03	12.3	9.92	2	0.2	0	0
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Power Density (mW/cm²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01
Percent of Occupational Standard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.4	0.5	0.4
Percent of General Population Standard	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.7	0.6	0.6	2.1	2.7	2.0

Antenna Type LNX-6514DS-VTM
Max% 2.73%

Instructions:

- 1) Fill in Site Location, Site number, Date, Name of Person Responsible for Date, and enter File Name to be saved as.
- 2) References to J4 refer to a point where the transmission line exits the equipment shelter and proceeds to the antenna(s). There is typically a connector located here where power measurements are made.
- 3) Enter Antenna Height (in feet to bottom of antenna), Antenna Gain (expressed as dBi, add 2.17 to dBd to obtain dBi), Antenna Size (vertical size in inches), Downtilt (in Degrees, enter zero if none), Feedline loss from J4 to Antenna, and J4 P.
- 4) From manufacturer's plots, or data sheet, input Angle from mainbeam and dB below mainbeam centerline.
- 5) Enter Reflection coefficient (2.56 would be typical, 1 for free space)
- 6) Spreadsheet calculates actual power density, then relates as Occupational or General Population percentage of FCC Standard.
- 7) An odd distance may be entered in the rightmost column of the lower table.

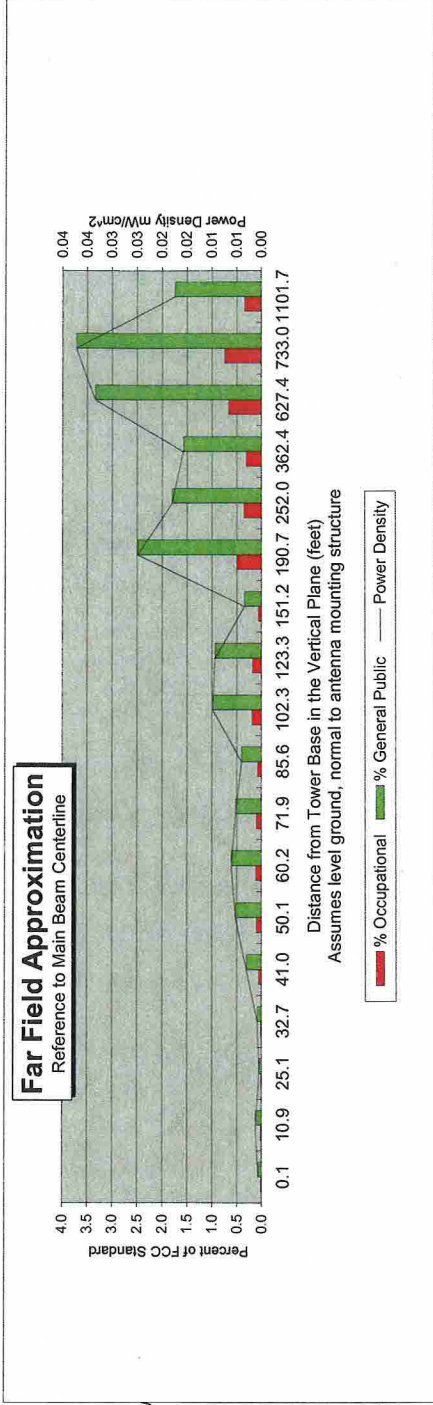
Far Field Approximation
with downtilt variation

**Estimated Radiated Emission
Single Emitter Far Field Model
Dipole / Wire/ Yagi Antenna Types**



Location:	MERIDEN CT RELO
Site #:	
Date:	04/18/14
Name:	Jaime Laredo
File Name:	MERIDEN RELO, CT (LTE-AW

Operating Freq. (MHz)	2120.0
Antenna Height (ft):	80.0
Antenna Gain (dBi):	17.1
Antenna Size (in.):	74.9
Downtilt (degrees):	2.0
Feedline Loss (dB):	0.0
Power @ J4 (w):	1897.0



This approximation is only valid in the far field, which begins at: **69.6 Feet**

Enter Main Beam
Distance in feet below:

Calc Angle	90.0	82.0	72.0	67.0	62.0	57.0	52.0	47.0	42.0	37.0	32.0	27.0	22.0	17.0	12.0	7.0	6.0	4.0
Solve for r, dx to antenna	77.0	77.8	81.0	83.7	87.2	91.8	97.7	105.3	115.1	128.0	145.4	169.7	205.6	263.5	370.5	632.1	737.0	1104.4
Distance from Antenna Structure Base in Horizontal plane	0.1	10.9	25.1	32.7	41.0	50.1	60.2	71.9	85.6	102.3	123.3	151.2	190.7	252.0	362.4	627.4	733.0	#NUM!
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2
dB down from centerline (referenced to centerline)	36.76	34.35	38.52	35.34	29.54	26.8	25.59	25.63	25.99	21.21	20.29	23.24	13.03	12.3	9.92	2	0.2	0
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Power Density (mW/cm²)	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.02	0.02	0.02	0.03	0.04	0.02
Percent of Occupational Standard	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.5	0.4	0.3	0.7	0.7	0.3
Percent of General Population Standard	0.1	0.1	0.0	0.1	0.3	0.5	0.6	0.5	0.4	1.0	0.9	0.3	2.5	1.8	1.6	3.3	3.7	1.7

Antenna Type HBXX-6517DS-VTM
Max% 3.72%

Instructions:

- 1) Fill in Site Location, Site number, Date, Name of Person Responsible for Date, and enter File Name to be saved as.
- 2) References to J4 refer to a point where the transmission line exits the equipment shelter and proceeds to the antenna(s). There is typically a connector located here where power measurements are made.
- 3) Enter Antenna Height (in feet to bottom of antenna), Antenna Gain (expressed as dBi, add 2.17 to dBi to obtain dBi), Antenna Size (vertical size in inches), Downtilt (in Degrees, enter zero if none), Feedline loss from J4 to Antenna, and J4 Pt
- 4) From manufacturer's plots, or data sheet, input Angle from mainbeam and dB below mainbeam centerline.
- 5) Enter Reflection coefficient (2.56 would be typical, 1 for free space)
- 6) Spreadsheet calculates actual power density, then relates as Occupational or General Population percentage of FCC Standard.
- 7) An odd distance may be entered in the rightmost column of the lower table.

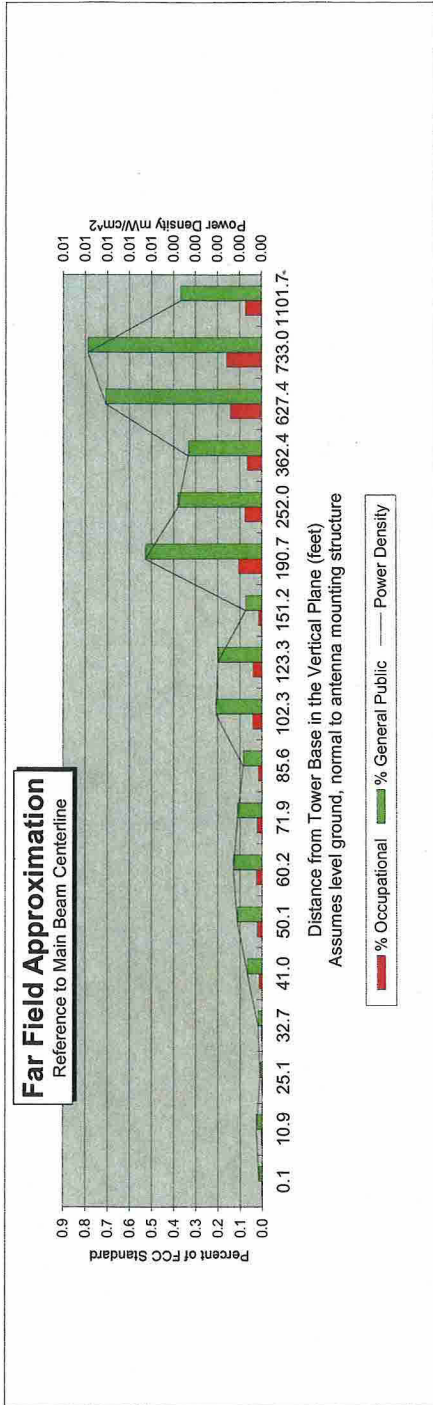
Far Field Approximation
with downtilt variation

**Estimated Radiated Emission
Single Emitter Far Field Model
Dipole / Wire/ Yagi Antenna Types**



Location:	MERIDEN CT RELO
Site #:	
Date:	04/18/14
Name:	Jaime Laredo
File Name:	MERIDEN RELO, CT (PCS) - F

Operating Freq. (MHz)	1973.8
Antenna Height (ft):	80.0
Antenna Gain (dBi):	16.4
Antenna Size (in.):	74.9
Downtilt (degrees):	2.0
Feedline Loss (dB):	0.0
Power @ J4 (w):	469.0



This approximation is only valid in the far field, which begins at: **69.6 Feet**

Enter Main Beam
Distance in feet below:

Calc Angle	90.0	82.0	72.0	67.0	62.0	57.0	52.0	47.0	42.0	37.0	32.0	27.0	22.0	17.0	12.0	7.0	6.0	4.0	
Solve for r, dx to antenna	77.0	77.8	81.0	83.7	87.2	91.8	97.7	105.3	115.1	128.0	145.4	169.7	205.6	263.5	370.5	632.1	737.0	1104.4	
Distance from Antenna Structure Base in Horizontal plane	0.1	10.9	25.1	32.7	41.0	50.1	60.2	71.9	85.6	102.3	123.3	151.2	190.7	252.0	362.4	627.4	733.0	#NUM!	
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2	0
dB down from centerline (referenced to centerline)	36.76	34.35	38.52	35.34	29.54	26.8	25.59	25.63	25.99	21.21	20.29	23.24	13.03	12.3	9.92	2	0.2	0	0
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Power Density (mW/cm²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#NUM!
Percent of Occupational Standard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#NUM!
Percent of General Population Standard	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	#NUM!

Antenna Type HBXX-6517DS-VTM
Max% 0.79%

Instructions:

- 1) Fill in Site Location, Site number, Date, Name of Person Responsible for Date, and enter File Name to be saved as.
- 2) References to J4 refer to a point where the transmission line exits the equipment shelter and proceeds to the antenna(s). There is typically a connector located here where power measurements are made.
- 3) Enter Antenna Height (in feet to bottom of antenna), Antenna Gain (expressed as dBi, add 2.17 to dBd to obtain dBi), Antenna Size (vertical size in inches), Downtilt (in Degrees, enter zero if none), Feedline loss from J4 to Antenna, and J4 Pt
- 4) From manufacturer's plots, or data sheet, input Angle from mainbeam and dB below mainbeam centerline.
- 5) Enter Reflection coefficient (2.56 would be typical, 1 for free space)
- 6) Spreadsheet calculates actual power density, then relates as Occupational or General Population percentage of FCC Standard.
- 7) An odd distance may be entered in the rightmost column of the lower table.

General Power Density

Site Name: MERIDEN RELO, CT
 Cumulative Power Density

Operator	Operating Frequency (MHz)	Number of Trans.	ERP Per Trans. (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure* (mW/cm ²)	Fraction of MPE (%)
VZW PCS	1970	11	469	5163	80	0.2901	1.0	29.01%
VZW Cellular	869	9	399	3595	80	0.2020	0.5793333333	34.87%
VZW AWS	2145	1	1897	1897	80	0.1066	1.0	10.66%
VZW 700	698	1	714	714	80	0.0401	0.4653333333	8.63%

Total Percentage of Maximum Permissible Exposure

83.17%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case maximum values used.

ATTACHMENT 5

Cellco Partnership d/b/a Verizon Wireless
Southington – East Street Facility
99 East Street
Southington, Connecticut

Site Search Summary

Section 16-50j-74(j) of the Regulations of Connecticut State Agencies requires the submission of a statement that describes “the narrowing process by which other possible sites were considered and eliminated.” In accordance with this requirement, descriptions of the general site search process, the identification of the applicable search area and the alternative locations considered for development of the proposed telecommunications facility in Southington are provided below.

Site Search Process

To initiate its site selection process in an area where wireless service is needed, Cellco first establishes a “site search ring” or “site search area”. In any search ring or search area, Cellco seeks to avoid the unnecessary proliferation of towers and to reduce the potential adverse environmental effects of the cell site, while at the same time maximizing the quality of service provided from a particular facility. These objectives are achieved by initially locating existing towers and other sufficiently tall structures within and near the site search area. If any are found, they are evaluated to determine whether they are capable of supporting Cellco’s telecommunications antennas and related equipment at a location and elevation that satisfies its technical requirements.

The list of available locations may be further reduced if, after preliminary negotiations, the property owners withdraw a site from further consideration. From among the remaining locations, the proposed sites are selected by eliminating those that have greater potential for significant adverse environmental effects and fewer benefits to the public (*i.e.*, those requiring taller towers, possibly with lights; those with substantial adverse environmental impacts, or in densely populated residential areas; and those with limited ability to share space with other public or private telecommunications service providers). It should be noted that in any given site search, the weight afforded to factors considered in the selection process will vary depending upon the availability and nature of sites within the search area.

Need

Within approximately two and one half miles of the proposed East Street cell site, Cellco maintains three (3) existing telecommunications facilities, identified as its Milldale, Southington 2 and Berlin 3 cell sites. Cellco’s Milldale facility consists of antennas at the 138-foot level on an existing 160-foot monopole tower at 1394 Meriden-Waterbury Road in Southington. Cellco’s Southington 2 facility consists of antennas at the 47.5-foot level on the roof of the building at 168 Center Street in Southington. Cellco’s Berlin 3 facility consists of antennas at the 95-foot level on an existing 125-foot monopole tower at 1684 Chamberlain Highway in Berlin. Today, these existing facilities provide wireless coverage in southern portions of Southington but cannot

serve the significant area of need described in this report. In addition, Cellco's existing Milldale facility is currently operating at or near its capacity limits, resulting in more significant reductions in reliable wireless service in the area. Cellco's East Street cell site will also provide capacity relief to the Milldale cell site.

Identification of the East Street Search Area

The purpose of the proposed Southington – East Street Facility is to provide coverage along portions of Routes 120 and 364, local roads in the area and residential and commercial areas in southerly portions of Southington. The facility will also provide network capacity relief to Cellco's existing Milldale cell site which is currently operating at or near its capacity limit. (See attached Coverage Maps behind Attachment 1).

Sites Investigated

Cellco investigated a total of seven (7) sites in southern Southington. A listing of the sites investigated is provided below.

1. **99 East Street, Southington, CT:** Cellco has entered into a lease agreement with the Town of Southington, the property owner, for an East Street tower site.
2. **Village Gate Drive, Southington, CT:** This is a parcel owned by the Southington Water Department and is developed with a water tank and a small lattice radio tower. The Water Department was not interested in leasing space to Cellco.
3. **CT-DOT Garage, Tanya Court, Southington, CT:** This is a DOT Garage parcel in an existing residential area. The DOT was not interested in leasing space to Cellco for a tower site.
4. **77 Faye Lane:** Cellco investigated and considered a residential parcel at this address. This site was rejected by Cellco's RF engineers.
5. **630 Savage Street – Mountain Grove Club:** Cellco investigated and considered a residential parcel at this address. This site was rejected by Cellco's RF engineers.
6. **150 Savage Street – Southington Country Club:** Cellco was unable to find a suitable location on the Country Club parcel of a tower site and compound.
7. **Savage Street:** Cellco investigated the use of an 18 acre parcel off Steeplechase Drive. The owner was not interested in leasing space to Cellco for a tower site.