



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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November 9, 2018

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

RE: **DOCKET NO. 484** - Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility at one of three locations at 72 Ragged Hill Road, Pomfret, Connecticut.

Dear Attorney Baldwin:

By its Decision and Order dated November 8, 2018, the Connecticut Siting Council (Council) granted a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a telecommunications facility located at proposed Site C, 72 Ragged Hill Road, Pomfret, Connecticut.

Enclosed are the Council's Certificate, Findings of Fact, Opinion, and Decision and Order.

Sincerely,

Robert Stein  
Chairman

RS/RDM/lm

Enclosures (4)

c: Parties and Intervenors  
State Documents Librarian (via email)



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**CERTIFICATE  
OF  
ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED  
DOCKET NO. 484**

Pursuant to General Statutes § 16-50k, as amended, the Connecticut Siting Council hereby issues a Certificate of Environmental Compatibility and Public Need to Cellco Partnership d/b/a Verizon Wireless for the construction, maintenance, and operation of a telecommunications facility located at proposed Site C, 72 Ragged Hill Road, Pomfret, Connecticut. This Certificate is issued in accordance with and subject to the terms and conditions set forth in the Decision and Order of the Council on November 8, 2018.

By order of the Council,

A handwritten signature in blue ink, appearing to read "Robert Stein", written over a horizontal line.

Robert Stein, Chairman

November 8, 2018



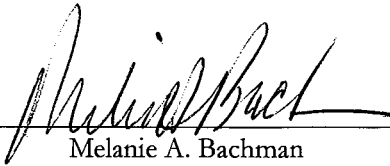
STATE OF CONNECTICUT )

: ss. New Britain, Connecticut November 9, 2018

COUNTY OF HARTFORD )

I hereby certify that the foregoing is a true and correct copy of the Findings of Fact, Opinion, and Decision and Order issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:



Melanie A. Bachman  
Executive Director  
Connecticut Siting Council

I certify that a copy of the Findings of Fact, Opinion, and Decision and Order in Docket No. 484 has been forwarded by Certified First Class Return Receipt Requested mail, on November 9, 2018, to all parties and intervenors of record as listed on the attached service list, dated July 10, 2018.

ATTEST:



Lisa A. Mathews  
Office Assistant  
Connecticut Siting Council

**LIST OF PARTIES AND INTERVENORS**  
**SERVICE LIST**

<b>Status Granted</b>	<b>Document Service</b>	<b>Status Holder (name, address &amp; phone number)</b>	<b>Representative (name, address &amp; phone number)</b>
<b>Applicant</b>	<input checked="" type="checkbox"/> E-mail	Cellco Partnership d/b/a Verizon Wireless	Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 <a href="mailto:kbaldwin@rc.com">kbaldwin@rc.com</a>  Andrew Candiello Cellco Partnership d/b/a Verizon Wireless Real Estate & Regulatory 20 Alexander Drive Wallingford, CT 06492 <a href="mailto:andrew.candiello@verizonwireless.com">andrew.candiello@verizonwireless.com</a>

**DOCKET NO. 484** - Cellco Partnership d/b/a Verizon Wireless }  
application for a Certificate of Environmental Compatibility and }  
Public Need for the construction, maintenance, and operation of a }  
telecommunications facility at one of three locations at 72 Ragged }  
Hill Road, Pomfret, Connecticut. }

Connecticut

Siting

Council

November 8, 2018

## **Findings of Fact**

### **Introduction**

1. Cellco Partnership d/b/a Verizon Wireless (Cellco), in accordance with provisions of Connecticut General Statutes (C.G.S.) § 16-50g, et seq, applied to the Connecticut Siting Council (Council) on July 9, 2018 for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a telecommunications facility at one of three locations at 72 Ragged Hill Road, Pomfret, Connecticut (refer to Figures 1 & 2). (Cellco 1, pp. 1-2)
2. Cellco is a Delaware Partnership with an administrative office located in Wallingford, Connecticut. Cellco is licensed by the Federal Communications Commission (FCC) to provide personal wireless communication service to Windham County, Connecticut, the county in which Pomfret is located. (Cellco 1, pp. 2, 27, Tab 5)
3. The party in this proceeding is Cellco. (Transcript 1, September 18, 2018, 3:00 p.m. [Tr. 1], p. 5)
4. The purpose of the proposed facility is to provide reliable wireless service to existing service deficient areas in the northwest Pomfret, northeast Eastford and southwest Woodstock region. (Cellco 1, p. i; Cellco 3, response 17)
5. Pursuant to C.G.S. § 16-50/ (b), the applicant provided public notice of the filing of the application that was published in *The Norwich Bulletin* on July 5, and July 6, 2018. (Cellco 2)
6. Pursuant to C.G.S. § 16-50/ (b), notice of the application was provided to all abutting property owners by certified mail. Notice was unclaimed by two abutters for property at 66 Swedetown Road in Pomfret and on Quarry Road in Woodstock. Cellco resent notice to these abutters by first class mail. (Cellco 1, Tab 4; Cellco 3, response 1)
7. On July 9, 2018, Cellco provided notice to all federal, state and local officials and agencies listed in C.G.S. § 16-50/ (b), including the Towns of Woodstock and Eastford, located within 2,500 feet of the site property. (Cellco 1, Tab 2; Cellco 3, response 3)

### **Procedural Matters**

8. On July 11, 2018, the Council sent letters to the Towns of Pomfret, Eastford and Woodstock as notification that the application was received and is being processed, in accordance with C.G.S. § 16-50gg. (Record)
9. During a regular Council meeting on August 2, 2018, the application was deemed complete pursuant to Regulations of Connecticut State Agencies (R.C.S.A.) § 16-50/-1a and the public hearing schedule was approved by the Council. (Record)
10. Pursuant to C.G.S. § 16-50m, the Council published legal notice of the date and time of the public hearing in *The Norwich Bulletin* on August 6, 2018. (Record)

11. Pursuant to C.G.S. § 16-50m, on August 3, 2018, the Council sent letters to the Towns of Pomfret, Eastford and Woodstock to provide notification of the scheduled public hearing and to invite the municipalities to participate. (Record)
12. On August 15, 2018, the Council held a pre-hearing teleconference on hearing procedural matters for interested persons to discuss the requirements for pre-filed testimony, exhibit lists, administrative notice lists, expected witness lists, filing of pre-hearing interrogatories and the logistics of the public inspection of the proposed sites. (Council Pre-hearing Conference Memorandum, dated August 15, 2018)
13. In compliance with R.C.S.A. § 16-50j-21, on September 4, 2018, the Applicant installed three four-foot by six-foot signs at three locations on the subject property, visible from a public road, that presented information regarding the proposed project and the Council's public hearing. (Cellco 4)
14. The Council and its staff conducted an inspection of the proposed sites on September 18, 2018, beginning at 1:30 p.m. During the field inspection, the applicant flew a 4.5-foot diameter balloon at each of the proposed sites to simulate the height of the proposed towers (Site A - blue balloon, Site B - purple balloon, Site C - red balloon). Weather conditions during the balloon fly included rain with heavy overcast and light to moderate winds. The balloons were aloft from approximately 8:00 a.m. to 6:00 p.m. for the convenience of the public. (Council's Hearing Notice dated August 3, 2018; Council Hearing Procedures Memorandum dated August 15, 2018; Tr. 1, pp. 11-12)
15. Pursuant to C.G.S. § 16-50m, the Council, after giving due notice thereof, held a public hearing on September 18, 2018, beginning with the evidentiary session at 3:00 p.m. and continuing with the public comment session at 6:30 p.m. at the Abington Congregational Church, Fellowship Hall, 542 Hampton Road, Pomfret, Connecticut. (Council's Hearing Notice dated August 3, 2018; Tr. 1, p. 1; Transcript 2 – 6:30 p.m. [Tr. 2], p. 1)

#### **State Agency Comment**

16. Pursuant to C.G.S. § 16-50j (g), on August 3, 2018, the following State agencies were solicited by the Council to submit written comments regarding the proposed facility: Department of Energy and Environmental Protection (DEEP); Department of Public Health (DPH); Council on Environmental Quality (CEQ); Public Utilities Regulatory Authority (PURA); Office of Policy and Management (OPM); Department of Economic and Community Development (DECD); Department of Agriculture (DOAg); Department of Transportation (DOT); Connecticut Airport Authority (CAA); Department of Emergency Services and Public Protection (DESPP); and State Historic Preservation Office (SHPO). (Record)
17. The Council received a response from the DOT's Bureau of Engineering and Construction on August 7, 2018 indicating that DOT had no comments. (DOT Comments received August 7, 2018)
18. The Council received a response from the CAA on August 21, 2018 requesting that the Applicant coordinate the project with two nearby private airports. (CAA Comments received August 21, 2018)
19. The following agencies did not respond with comment on the application: DEEP, CEQ, PURA, OPM, DECD, DOAg, DPH, DESPP, and SHPO. (Record)

### **Municipal Consultation**

20. On May 18, 2017, Cellco commenced the 90-day pre-application municipal consultation process by submitting a technical report for the proposed telecommunications facility to local officials in the Towns of Pomfret, Eastford and Woodstock. The Pomfret First Selectman, Craig Baldwin requested that Cellco host a Public Information Meeting (PIM) regarding the project. (Cellco 1, pp. 23-24)
21. The PIM was held on August 23, 2017 at the Pomfret Senior Center, and was attended by approximately thirty-five residents. Cellco sent all abutters a notification of the PIM and published a notice in a local newspaper. At the time of the PIM, only one site on the property was proposed, referred to as Site 1A. Based on public comment received at the PIM, Cellco and the landowner discussed alternative locations on the parcel and developed two additional sites that were subsequently included in the Application, referred to as Site B and Site C. (Cellco 1, pp. 22-24, Tab 17)
22. By letter to the Council dated September 25, 2018, the Pomfret First Selectman Maureen Nicholson expressed opposition to the proposed tower, stating that it would not fit in with the rural character of the Town and that wireless service in Town is adequate. (Town of Pomfret comment letter, dated September 25, 2018)
23. Cellco did not receive any comments from officials in the Towns of Eastford or Woodstock. (Tr. 1, p. 24)
24. The proposed facility would be designed to accommodate Town or local emergency response antennas. However, to date, no emergency responders have expressed an interest in co-locating emergency services antennas at the proposed facility. (Cellco 1, p. 14; Tr. 1, pp. 20-21)

### **Public Need for Service**

25. In 1996, the United States Congress recognized a nationwide need for high quality wireless telecommunications services, including cellular telephone service. Through the Federal Telecommunications Act of 1996, Congress seeks to promote competition, encourage technical innovations, and foster lower prices for telecommunications services. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996)
26. In issuing cellular licenses, the Federal government has preempted the determination of public need for cellular service by the states, and has established design standards to ensure technical integrity and nationwide compatibility among all systems. Cellco is licensed by the Federal Communications Commission (FCC) to provide personal wireless communication service to Connecticut. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996; Cellco 1, p. 6, Tab 5)
27. Section 253 of the Telecommunications Act of 1996 prohibits any state or local statute or regulation, or other state or local legal requirement from prohibiting or having the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996)
28. Section 704 of the Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services and from prohibiting or having the effect of prohibiting the provision of personal wireless services. This section also requires state or local governments to act on applications within a reasonable period of time and to make any denial of an application in writing supported by substantial evidence in a written record. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996)

29. Section 704 of the Telecommunications Act of 1996 also prohibits any state or local entity from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions, which include effects on human health and wildlife, to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996)
30. In February 2009, as part of the American Recovery and Reinvestment Act, Congress directed the FCC to develop a National Broadband Plan to ensure every American has “access to broadband capability.” Congress also required that this plan include a detailed strategy for achieving affordability and maximizing use of broadband to advance “consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, employee training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes.” (Council Administrative Notice Item No. 20 – The National Broadband Plan)
31. Section 706 of the Telecommunications Act of 1996 requires each state commission with regulatory jurisdiction over telecommunications services to encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans, including elementary and secondary schools, by utilizing regulating methods that promote competition in the local telecommunications market and remove barriers to infrastructure investment. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996)
32. In December 2009, President Barack Obama recognized cell phone towers as critical infrastructure vital to the United States. The Department of Homeland Security, in collaboration with other federal stakeholders, state, local, and tribal governments, and private sector partners, has developed the National Infrastructure Protection Plan (NIPP) to establish a framework for securing our resources and maintaining their resilience from all hazards during an event or emergency. (Council Administrative Notice Item No. 11 – Presidential Proclamation 8460, Critical Infrastructure Protection)
33. In February 2012, Congress adopted the Middle Class Tax Relief and Job Creation Act to advance wireless broadband service for both public safety and commercial users. The Act established the First Responder Network Authority to oversee the construction and operation of a nationwide public safety wireless broadband network. Section 6409 of the Act contributes to the twin goals of commercial and public safety wireless broadband deployment through several measures that promote rapid deployment of the network facilities needed for the provision of broadband wireless services. (Council Administrative Notice Item No. 8 – Middle Class Tax Relief and Job Creation Act of 2012)
34. In June 2012, President Barack Obama issued an Executive Order to accelerate broadband infrastructure deployment declaring that broadband access is a crucial resource essential to the nation's global competitiveness, driving job creation, promoting innovation, expanding markets for American businesses and affording public safety agencies the opportunity for greater levels of effectiveness and interoperability. (Council Administrative Notice Item No. 22 – FCC Wireless Infrastructure Report and Order; Council Administrative Notice Item No. 12 – Presidential Executive Order 13616, Accelerating Broadband Infrastructure Development)



35. Pursuant to Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, also referred to as the Spectrum Act, a state or local government may not deny and shall approve any request for collocation, removal or replacement of equipment on an existing wireless tower provided that this does not constitute a substantial change in the physical dimensions of the tower. The Federal Communications Commission defines a substantial change in the physical dimensions of a tower as follows:
- a) An increase in the existing height of the tower by more than 10 percent or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater. Changes in height should be measured from the dimensions of the tower, inclusive of originally approved appurtenances and any modifications that were approved prior to the passage of the Spectrum Act.
  - b) Adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater.
  - c) Installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four, or more than one new equipment shelter.
  - d) A change that entails any excavation or deployment outside the current site.
  - e) A change that would defeat the concealment elements of the tower.
  - f) A change that does not comply with conditions associated with the siting approval of the construction or modification of the tower, provided however that this limitation does not apply to any modification that is non-compliant only in a manner that would exceed the thresholds identified in (a) – (d).
- (Council Administrative Notice Item No. 8 – Middle Class Tax Relief and Job Creation Act of 2012; Council Administrative Notice Item No. 22 – FCC Wireless Infrastructure Report and Order)
36. According to state policy, if the Council finds that a request for shared use of a facility by a municipality or other person, firm, corporation or public agency is technically, legally, environmentally and economically feasible, and the Council finds that the request for shared use of a facility meets public safety concerns, the Council shall issue an order approving such shared use to avoid the unnecessary proliferation of towers in the state. (C.G.S. §16-50aa)
37. On August 3, 2018, the Council sent correspondence to other telecommunications carriers requesting that carriers notify the Council by September 11, 2018 if they are interested in locating on the proposed facility in the foreseeable future. No carriers responded to the Council's solicitation. (Record)

#### **Existing and Proposed Wireless Services**

38. Cellco's proposed tower facility, referred to by Cellco as the Pomfret Center site, would provide wireless services generally to the northwest Pomfret, northeast Eastford and southwest Woodstock areas (target service area). Cellco's wireless service objectives could be met by construction of a 150-foot tower at Sites A or B, or, due to a higher ground elevation, a 130-foot tower at Site C. (Cellco 1, pp. 6-7, Tab 1; Cellco 3, Attachment 1)
39. Cellco would initially deploy Long Term Evolution (LTE) voice and data service equipment utilizing the 700 MHz and 2100 MHz frequency bands on the proposed tower. Cellco designs its LTE network using a -95 dB Reverse Link Operational Path Loss standard for reliable in-vehicle service and -85 Reverse Link Operational Path Loss standard for reliable in-building service. (Cellco 3, response 11; Tr. 1, p. 24)

- 40. Propagation modeling indicates Cellco's existing 700 MHz service in the target service area is deficient, including large land areas and roadways. Deficient service on major roads includes 1.5 miles of Route 44, 1.8 miles of Route 244, and 2.1 miles of Route 198. Additionally, there is minimal 2100 MHz service in most of the surrounding area. (Cellco 1, p. 7; Cellco 3, response 14)
- 41. Although the site is designed to improve Cellco's coverage footprint, the proposed facility would also provide capacity relief to adjacent facilities. However, none of these adjacent facilities are currently at risk of exhausting capacity. (Cellco 3, response 13)
- 42. The table below indicates the projected 700 MHz coverage from each of the proposed sites:

	700 MHz Projected Service		
	Site A (150 feet)	Site B (150 feet)	Site C (130 feet)
Land Area (sq. mi.)	20	16	21
Route 44 (mi.)	1.7	1.0	2.4
Route 244 (mi)	3.6	3.0	3.0
Route 198 (mi)	3.4	2.4	2.2

Refer to Figures 3 to 6 for 700 MHz coverage models. (Cellco 1, pp. 8-9; Cellco 3, response 17)

- 43. All three facilities would improve coverage to Route 198, a north-south roadway west of the sites that that follows the narrow Still River valley. The topography of the area would cause some areas along the roadway to receive less than standard service. Cellco would optimize the site and adjacent sites to maximize service to these areas. (Tr. 1, pp. 28-30)
- 44. Of the three sites, Site C would provide the most in-vehicle service to the surrounding area due to its higher ground elevation. For example, Site C would project more to the southeast, offering more service to Route 97, Mashamoquet Brook State Park, and the Airline State Park Greenway Trail than Sites A or B. (Cellco 3, Attachment 1, Cellco 1 1d, p. 4-18; Tr. 1, pp. 31-32, 53-54)
- 45. Service from Site A and Site B are essentially the same with the exception of the Route 97 area where Site A offers more service. (Cellco 3, Attachment 1; Tr. 1, pp. 31-33, 53-54)
- 46. Although 2100 MHz service from the sites appears limited, it would facilitate the deployment of carrier aggregation technology which expands customer bandwidth, thus enhancing Cellco's voice and data services. The customer can simultaneously receive signals from multiple frequencies, in this case, the 700 MHz and 2100 MHz frequencies, thus expanding the amount of transmitted data. Refer to Figures 7 and 8 for 2100 MHz coverage models. (Tr. 1, pp. 25-27)
- 47. The coverage models indicate that wireless service from the proposed site would overlap with wireless service from adjacent sites. Some of the projected service from the proposed site would be handled by these adjacent sites. Once the proposed site is activated, the site and adjacent existing sites would be optimized to maintain operational network performance. (Cellco 3, response 17)

48. Cellco's proposed facility would interact with adjacent existing tower facilities identified in the following table:

Cellco Site Designation	Site Address	Distance/direction from Proposed Sites	Antenna Height (agl)
Pomfret East	398 Pomfret Street, Pomfret	4.3 miles east	157 feet
Brooklyn West	118 Grant Hill Road, Brooklyn	7.9 miles south	117 feet
Ashford Relo	353 Pumpkin Hill Road, Ashford	5.9 miles southwest	240 & 248 feet
Ashford North	174 Ashford Center Road, Ashford	6.1 miles southwest	120 feet
Eastford-	35 Old Route 44, Eastford	2.8 miles southwest	190 feet
Westford	264 Janoski Road, Ashford	8.7 miles northwest	180 feet
Union West	1050 Buckley Highway, Union	8.7 miles northwest	150 feet
Woodstock NW	40 Sherman Road, Ashford	5.8 miles northwest	137 feet
Coatney Hill	at 215 Coatney Hill Road, Woodstock	4.0 miles north	167 feet
Woodstock Relo	87 West Quassett Road, Woodstock	2.9 miles northwest	149 feet

These existing Cellco facilities surrounding the proposed site cannot provide adequate service to the target service area. (Cellco 1, pp. 10-11, 13; Cellco 3, response 19)

#### Site Selection

49. Cellco established a search ring for its Pomfret Center facility in January 2009. Cellco identified the subject property as suitable for tower development and began the application process. Cellco then put the proposed site on hold in May 2010. Cellco reactivated the proposed site in December 2016. (Cellco 1, Tab 8)
50. There are no other existing towers or other sufficiently tall structures available within Cellco's search area. (Cellco 1, p. 13, Tab 8)
51. After determining there were no suitable structures within the search area, Cellco searched for properties suitable for tower development. The large size of the 72 Ragged Hill Road site property - 627 acres - allowed Cellco to investigate numerous locations for a tower site. Of the locations investigated, three were ultimately selected as suitable sites and were submitted in the application to the Council. (Cellco 1, pp. 13-14; Cellco Tab 8)
52. Cellco investigated 14 different sites, including 8 sites on the subject parcel. Of these, three sites on the subject parcel were selected for potential tower development. The 11 rejected sites and the reasons for their rejection are as follows:
- a) 63 Firetower Road, Pomfret – existing lattice tower would require replacement. Also site would not be able to connect to Cellco's Woodstock North facility.
  - b) 187 Firetower Road, Pomfret – site would not be able to connect to Cellco's Woodstock NW facility.
  - c) Swedetown Road, Pomfret – This parcel is located northwest of the site property. Site was rejected Cellco RF engineers because it is located too far to the north of Route 244.

- d) Angle Road, Pomfret – This parcel is located east of the site property and contains wetland areas that limit site development. Site was rejected by Cellco RF engineers because it would not be able to connect to Cellco's Eastford facility.
- e) 665 Brayman Hollow Road, Pomfret – Available site on property is adjacent to developed residential areas and thus would have greater visual impact than the proposed sites.
- f) 326 Taft Pond Road, Pomfret – site would not be able to connect to Cellco's Woodstock North facility.
- g) 72 Ragged Hill Road, Pomfret (5 sites) – five other sites on the parcel were examined and rejected due to wetland crossings and/or deficient coverage.  
(Cellco 1, Tab 8)

53. While it is technically possible to utilize small cells or a distributed antenna system to provide the required wireless service to be provided by the proposed tower, it would be difficult to penetrate some of the dense residential areas to the west and northwest as it would require the installation of nodes and antennas on private residential lots and/or apartment complexes. Thus, the proposed macro-cell tower site would be the most efficient and cost effective means of enhancing wireless service in the area. (Cellco 1, pp. 12-13; Cellco 3, response 16)

#### Site Property Description

54. The site property consists of a 627-acre parcel owned by Raynham, Inc. that is currently used for residential and agricultural purposes. Most of the property is forested and logging roads extend through the property. (Cellco 1, p. i, Tab 1)
55. The property has road frontage along Swedetown Road and Ragged Hill Road to the west, Brayman Hollow Road to the south, and a section of Quarry Road to the north. (Cellco 1, Tab 1, Tab 8)
56. The property and surrounding area is zoned Rural Residential. (Cellco 1, Bulk File b –Town Zoning Map)
57. The Property is surrounded by residential and agricultural uses and other undeveloped wooded land. (Cellco 1, Tab 1, Tab 9)
58. All three proposed sites (A, B & C) are located in the western portion of the parcel, near the intersection with Ragged Hill Road and Swedetown Road (refer to Figure 9). (Cellco 1, Tab 1)
59. All three proposed sites would be accessed from an existing logging road that extends east into the parcel from Swedetown Road. The logging road access on Swedetown Road is approximately 600 feet north of the Ragged Hill Road intersection. (Cellco 1, Tab 1)
60. The existing logging road would be improved as necessary, by adding gravel and base material to create a stable surface. (Cellco 1, p. 7, Tab 1; Tr. 1, p. 13)
61. Utilities to all three sites would be installed underground from a new utility pole to be installed at the logging road entrance on Swedetown Road. The exact placement of the wood pole would be coordinated with the local utility company. (Cellco 1, Tab 1)

**Facility Description – Proposed Site A**

62. Proposed Site A is located in a wooded area approximately 260 feet east of Swedetown Road, which is also the distance to the nearest property line. (Cellco 1 p. 7, Tab 1; Cellco 2, response 31)
63. The nearest off-site residence is 420 feet southwest of the proposed site. (Cellco 1, Tab 1)
64. Two residences are within 1,000 feet of the proposed site. (Cellco 1, Tab 1)
65. The proposed tower consists of a 150-foot monopole, approximately 50 inches wide at the base tapering to 24 inches wide at the top. It would be capable of supporting multiple wireless carriers and a 20-foot extension. (Cellco 1, p. 20, Tab 1)
66. The tower site is located at an elevation of approximately 820 feet above mean sea level (amsl). (Cellco 1, Tab 1)
67. Cellco would install six panel antennas and six remote radio heads on an antenna platform at a centerline height of 150 feet above ground level (agl). (Cellco 1, p. 7, Tab 1)
68. A 50-foot by 50-foot fenced equipment compound within a 100-foot by 100-foot lease area would be established at the base of the tower, enclosed by an eight-foot tall chain link fence. (Cellco 1, Tab 1)
69. Cellco would install equipment cabinets and an emergency generator on a 16-foot by 10-foot concrete pad, covered by a metal canopy. (Cellco 1, p. 7, Tab 1)
70. Vehicle access to the compound would follow the existing logging road for 140 feet, then follow a new 12-foot wide, 120-foot long gravel drive extending southeasterly to the compound. (Cellco 1, p. 7, Tab 1)

**Facility Description – Proposed Site B**

71. Proposed Site B is located in a wooded area approximately 570 feet due east of Swedetown Road. The nearest property line is 530 feet to the west. (Cellco 1, p. 8, Tab 1, Tab 9)
72. The nearest off-site residence is 850 feet southwest of the proposed site. (Cellco 1, Tab 1)
73. One residence is within 1,000 feet of the proposed site. (Cellco 1, Tab 1)
74. The proposed tower consists of a 150-foot monopole, approximately 50 inches wide at the base tapering to 24 inches wide at the top. It would be capable of supporting multiple wireless carriers and a 20-foot extension. (Cellco 1, pp. 7, 20, Tab 1)
75. The tower site is located at an elevation of approximately 816 feet amsl. (Cellco 1, Tab 1)
76. Cellco would install six panel antennas and six remote radio heads on an antenna platform at a centerline height of 150 feet agl. (Cellco 1, p. 7, Tab 1)
77. A 50-foot by 50-foot fenced equipment compound within a 125-foot by 80-foot lease area would be established at the base of the tower, enclosed by an eight-foot tall chain link fence. (Cellco 1, Tab 1)
78. Cellco would install equipment cabinets and an emergency generator on a 16-foot by 10-foot concrete pad, covered by a metal canopy. (Cellco 1, p. 7, Tab 1)

79. Vehicle access to the compound would follow the existing logging road for approximately 625 feet to a new 12-foot wide, 50-foot long gravel drive extending east to the compound. (Cellco 1, p. 8, Tab 1)

**Facility Description – Proposed Site C**

80. Proposed Site C is located in a wooded area approximately 1,300 feet due east of Ragged Hill Road. The nearest property line is approximately 1,000 feet to the southwest. (Cellco 1, p. 9, Tab 1, Tab 9)

81. The nearest off-site residence is 1,500 feet southwest of the proposed site. (Cellco 1, Tab 1)

82. No residences are within 1,000 feet of the proposed site. (Cellco 1, Tab 1)

83. The proposed tower consists of a 130-foot monopole, approximately 50 inches wide at the base tapering to 24 inches wide at the top. It would be capable of supporting multiple wireless carriers and a 20-foot extension. (Cellco 1, pp. 7, 20, Tab 1)

84. The tower site is located at an elevation of approximately 833 feet amsl. (Cellco 1, Tab 1)

85. Cellco would install six panel antennas and six remote radio heads on an antenna platform at a centerline height of 130 feet agl. (Cellco 1, p. 7, Tab 1)

86. A 50-foot by 50-foot fenced equipment compound within a 100-foot by 100-foot lease area would be established at the base of the tower, enclosed by an eight-foot tall chain link fence. (Cellco 1, Tab 1)

87. Cellco would install equipment cabinets and an emergency generator on a 16-foot by 10-foot concrete pad, covered by a metal canopy. (Cellco 1, p. 7, Tab 1)

88. Vehicle access to the compound would follow the existing logging road for approximately 2,000 feet to a new 12-foot wide, 20-foot long gravel drive extending east to the compound. (Cellco 1, p. 8, Tab 1)

89. Cellco examined the possibility of using an alternative access route to Site C that would take a more direct, eastward approach from Ragged Hill Road than the current proposed access, but ultimately rejected this potential access route due to an extensive wetland crossing that would be required. Additionally, the landowner did not want this area of the property encumbered by a long-term lease that could be detrimental to any potential future subdivision plans. (Tr. 1, pp. 58-60)

**Project Cost**

90. Cellco would recover the costs of the construction and operation of the site through the customer price of its services on a national level. (Cellco 3, response 2)

91. The estimated cost of each proposed facility is:

	<b>Site A</b>	<b>Site B</b>	<b>Site C</b>
Radio equipment	150,000	150,000	150,000
Tower	60,000	60,000	60,000
Generator	60,000	60,000	60,000
Site Prep & Construction	250,000	300,000	480,000
<b>TOTAL</b>	<b>\$520,000</b>	<b>\$570,000</b>	<b>\$750,000</b>

(Cellco 1, p. 26)

92. The significant additional cost to develop a facility at Site C is largely due to the long access drive that must be developed, including a crossing through a wetland that would require mitigation measures as well as a specialized design. The extension of the utility run by almost 2,000 feet also adds significant cost to the project. (Tr. 1, pp. 70-71)

### **Public Safety**

93. The Wireless Communications and Public Safety Act of 1999 (911 Act) was enacted by Congress to promote and enhance public safety by making 9-1-1 the universal emergency assistance number, by furthering deployment of wireless 9-1-1 capabilities, and by encouraging construction and operation of seamless ubiquitous and reliable networks for wireless services. (Council Administrative Notice Item No. 6 - Wireless Communications and Public Safety Act of 1999)
94. The proposed facilities would be in compliance with the requirements of the 911 Act and would provide Enhanced 911 services. (Cellco 1, p. 5)
95. Wireless carriers have voluntarily begun supporting text-to-911 services nationwide in areas where municipal Public Safety Answering Points (PSAP) support text-to-911 technology. Text-to-911 will extend emergency services to those who are deaf, hard of hearing, have a speech disability, or are in situations where a voice call to 911 may be dangerous or impossible. However, even after a carrier upgrades its network, a user's ability to text to 911 is limited by the ability of the local 911 call center to accept a text message. The FCC does not have the authority to regulate 911 call centers; therefore, it cannot require them to accept text messages. (Council Administrative Notice Item No. 21 – FCC Text-to-911: Quick Facts & FAQs)
96. Cellco's facilities would be capable of supporting text-to-911 service as soon as the PSAP is capable of receiving text-to-911. However, no PSAPs in the vicinity of the proposed tower sites are able to accept text-to-911 service at this time. (Cellco 3, response 23)
97. Pursuant to the Warning, Alert and Response Network Act of 2006, "Wireless Emergency Alerts" (WEA) is a public safety system that allows customers who own certain wireless phone models and other enabled mobile devices to receive geographically-targeted, text-like messages alerting them of imminent threats to safety in their area. WEA complements the existing Emergency Alert System that is implemented by the FCC and FEMA at the federal level through broadcasters and other media service providers, including wireless carriers. Cellco's facilities would comply with the intent of the WARN Act. (Council Administrative Notice No. 5 – FCC WARN Act; Cellco 3, response 24)
98. Pursuant to C.G.S. §16-50p(a)(3)(G), the towers would be constructed in accordance with the current governing standard in the State of Connecticut. (Cellco 3, response 4)
99. The tower radius for each site would remain within the boundaries of the subject property. (Cellco 1, Tab 1)
100. None of the proposed towers would constitute an obstruction or hazard to air navigation and would not require any obstruction marking or lighting. The CAA requested that Cellco coordinate the project with two nearby private airports. Cellco has contacted the owners of each airport to notify them about the proposed project. Project plans were also sent to each airport owner. (Cellco 1, pp. 24-25; Tr. 1, pp. 21-24)

101. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of Cellco's proposed antennas at any of the three sites is less than 30 percent of the standard for the General Public/Uncontrolled Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed tower (21.8 percent for Sites A and B, 29.0 percent for Site C). This calculation was based on methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) that assumes all antennas in a sector would be pointed at the base of the tower and all channels would be operating simultaneously, which creates the highest possible power density levels. Under normal operation, the antennas would be oriented outward, directing radio frequency emissions away from the tower, thus resulting in significantly lower power density levels in areas around the tower. (Cellco 1, Tab 15; Council Administrative Notice Item No. 2 – FCC OET Bulletin No. 65)

#### Emergency Backup Power

102. In response to two significant storm events in 2011, Governor Malloy formed a Two Storm Panel (Panel) that was charged with an objective review and evaluation of Connecticut's approach to the prevention, planning and mitigation of impacts associated with emergencies and natural disasters that can reasonably be anticipated to impact the state. (Final Report of the Two Storm Panel, Council Administrative Notice Item No. 46)
103. In response to the findings and recommendations of the Panel, and in accordance with C.G.S. §16-50//, the Council, in consultation and coordination with the Department of Energy and Environmental Protection, the Department of Emergency Services and Public Protection and the Public Utilities Regulatory Authority (PURA), studied the feasibility of requiring backup power for telecommunications towers and antennas as the reliability of such telecommunications service is considered to be in the public interest and necessary for the public health and safety. The study was completed on January 24, 2013. (Council Administrative Notice Item No. 26 – Council Docket No. 432)
104. The Council reached the following conclusions in the study:
- a) "Sharing a backup source is feasible for Commercial Mobile Radio Service providers, within certain limits. Going forward, the Council will explore this option in applications for new tower facilities;" and
  - b) "The Council will continue to urge reassessment and implementation of new technologies to improve network operations overall, including improvements in backup power."
- (Council Administrative Notice Item No. 26 – Council Docket No. 432)
105. Cellco proposes to install a 30-kilowatt diesel-fueled generator for its own use. It could run for approximately 130 hours under normal cell tower loading conditions. A battery unit would also be installed that can provide up to 8 hours of emergency power in the event the diesel-fueled generator does not start or runs out of fuel. (Cellco 5)
106. If another carrier seeks to locate on the tower in the future, Cellco would be amenable for that carrier to upgrade the existing single entity emergency generator to a shared generator. (Cellco 3, response 27)
107. The emergency power generator would have a double-walled fuel tank with remote alarm to protect against fuel leakage. Also, the generator has a secondary containment basin to collect any oil or coolant leaks. (Cellco 3, response 28)
108. The generator would be remotely tested and monitored on a bi-weekly basis to ensure proper operation. (Cellco 3, response 26)



109. According to R.C.S.A. §22a-69-1.8, noise created as a result of, or relating to, an emergency, such as an emergency backup generator, is exempt from the State Noise Control Regulations. Even though the emergency generator is exempt from noise control regulations, the generator would meet noise control regulatory criteria during operation. (R.C.S.A. §22a-69-1.8; Cellco 3, response 31)
110. Pursuant to R.C.S.A. §22a-174-3b, the generator would be managed to comply with DEEP's "permit by rule" criteria. Therefore, the generator would be exempt from general air permit requirements. (R.C.S.A. §22a-174-3b; Cellco 1, p. 25)

### **Environmental Considerations**

111. No historic properties on or eligible for listing on the State or National Register of Historic Places are within a half-mile of the proposed sites. If a tower on the site parcel is approved, Cellco would send information regarding the project to the SHPO. (Cellco 1, p. 18)
112. The site parcel is within the Last Green Valley National Heritage Corridor, a 35-town area located in northeast Connecticut and south-central Massachusetts, established by Congress in 1994 to recognize the region as a unique national resource. The designation is intended to encourage preservation and promotion of the region's cultural, historical and natural heritage. The proposed sites would not be visible or have any direct effect on any identified heritage area resource. (Council Administrative Notice Item No. 64; Tr. 1, pp. 40-41)
113. Development of any of the three proposed sites would require the removal of three to six trees with a diameter of six inches or greater at breast height. Some overhanging tree branches may need to be trimmed to upgrade the existing logging road to the sites. (Cellco 1, Tab 1; Tr. 1, p. 14)
114. Connecticut is within the range of the northern long-eared bat (NLEB), a federally-listed threatened species and state-listed endangered species. There are no known NLEB hibernacula or known maternity roost trees near the project area and thus the proposed facility is not likely to adversely impact the NLEB. The United States Fish and Wildlife Service (USFWS) did not respond to the Cellco NLEB submittal, and in accordance with USFWS rules, the project site is thus deemed in compliance and no further action is necessary. (Cellco 1, p. 17, Tab 10)
115. According to DEEP's Natural Diversity Database, development of the proposed sites would not negatively impact any state-listed species. (Cellco 1, Tab 10)
116. The site parcel is located approximately 4.3 miles from the Pomfret Important Bird Area (IBA), a Connecticut Audubon Society designated area with known bird concentrations. Development of the proposed sites would have no effect on the IBA. (Cellco 1, Tab 10)
117. The design of the proposed facility would comply with USFWS guidelines for minimizing the potential impact of telecommunications towers to bird species. The guidelines recommend that towers be less than 199 feet tall, avoid the use of aviation lighting, and avoid guy-wires as tower supports, among others. (Cellco 1, Tab 10)
118. The Inland Wetlands and Watercourses Act (IWWA), C.G.S. §22a-36, *et seq.*, contains a specific legislative finding that the inland wetlands and watercourses of the state are an indispensable and irreplaceable but fragile natural resource with which the citizens of the state have been endowed, and the preservation and protection of the wetlands and watercourses from random, unnecessary, undesirable and unregulated uses, disturbance or destruction is in the public interest and is essential to the health, welfare and safety of the citizens of the state. (C.G.S. §22a-36, *et seq.*)

119. The IWWA grants regulatory agencies with the authority to regulate upland review areas in its discretion if it finds such regulations necessary to protect wetlands or watercourses from activity that will likely affect those areas. (C.G.S. §22a-42a)
120. The IWWA forbids regulatory agencies from issuing a permit for a regulated activity unless it finds on the basis of the record that a feasible and prudent alternative does not exist. (C.G.S. §22a-41)
121. There would be no direct wetland impacts through the development of the tower compound at all three sites. The Site A compound would be located  $\pm 160$  feet from the nearest wetland, the Site B compound would be located  $\pm 140$  feet from the nearest wetland, and the Site C compound would be located  $\pm 90$  feet from the nearest wetland (refer to Figure 10). (Cellco 1, Tab 11)
122. Development of the access roads to Sites A and Site B would have no direct wetland impacts. The access road to Site C passes through a wetland for 60 linear feet and extends along a wetland edge for an additional 135 feet. (Cellco 1, Tab 10, Tab 11; Tr. 1, p. 16)
123. Upgrading the logging road through the wetland area for access to Site C would include the installation of a French Mattress at the west end of the crossing. It consists of a sub-base of coarse stone and gravel material wrapped in a geotextile fabric to allow for hydraulic connection between the wetland areas on either side of the existing logging road. A culvert at the east end of the crossing would be maintained. (Cellco 1, Tab 10)
124. Improving the logging road for access to Site C would result in 1,500 square feet of permanent wetland impacts. Three vernal pools are located adjacent to the existing logging road and a fourth pool is located 175 feet south of the logging road. No disruption to the hydrology of the vernal pools is anticipated from the proposed improvements to the logging road. (Cellco 1, Tab 1, Tab 11; Tr. 1, pp. 15-18)
125. Spotted salamander and wood frog were confirmed in the three vernal pools adjacent to the existing logging road. Improvements to the logging road to Site C would occur within the VPE of three vernal pools. (Cellco 1, Tab 1, Tab 11)
126. Development of the compound at any of the three sites would not be within the vernal pool envelope (VPE) of any of the pools. (Cellco 1, Tab 11)
127. The total area of Critical Terrestrial Habitat (CTH) associated with the four identified vernal pools is  $\pm 58$  acres, which consists largely of undeveloped land. The combined vernal pool CTH is less than 1 percent developed under existing conditions. Development of the sites would increase the developed portion of the combined CTH area by 0.24 percent for Site A, 0.45 percent for Site B, and 1.07 percent for Site C. (Cellco 1, Tab 1, Tab 11)
128. Cellco would implement vernal pool Best Management Practices (BMPs) to reduce impacts to the vernal pool and vernal pool obligate species. The BMPs consist of several components including: installation of appropriate erosion controls; periodic inspection and maintenance of isolation structures; herpetofauna sweeps; contractor education and reporting. (Cellco 1, Tab 1, Tab 11)
129. The project would be constructed in compliance with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control*. (Cellco 1, Tab 10)

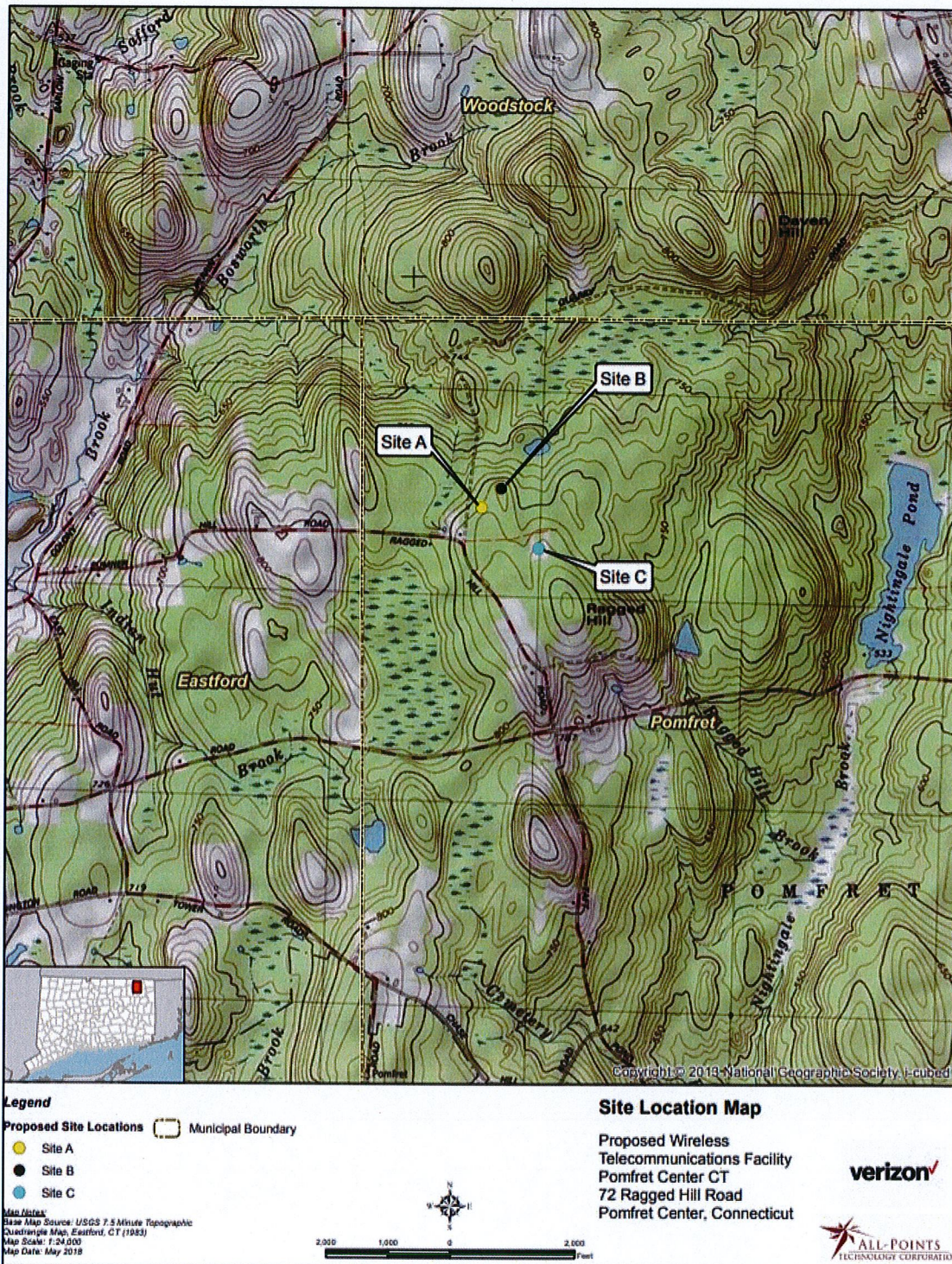
130. None of the three proposed sites are in areas mapped by the U.S. Department of Agriculture Natural Resource Conservation District as containing prime farmland soils. (Cellco 1, pp. 18-19)
131. Portions of the Site property are enrolled in the Public Act 490 Program as Tillable D farmland, forest land and swamp land. The exact boundaries of each tax designation are not known. The Public Act 490 designation does not restrict the development of a telecommunications facility on the property. (Cellco 3, response 8)
132. The site is located in the Federal Emergency Management Agency Zone X, an area of minimal risk for flooding. (Cellco 1, p. 21)
133. The proposed site is not within a DEEP designated Aquifer Protection Area or a public supply watershed. (Cellco 3, response 30)
134. Operation of the proposed facility would not cause any significant noise, air, or water impacts or present a hazard to human health. (Cellco 1, p. 19)
135. Stormwater along the west end of the access drive to all three proposed sites would be controlled by a subsurface stone drain located along the edge of the access drive. The drain would connect to a series of concrete galleries that would have a gravel base to allow for controlled infiltration. (Cellco 1, Tab 1)
136. Noise from normal operation of the facility would comply with state noise control regulations at the property boundaries. (Cellco 1, Tab 1)
137. Construction noise is exempt from the State of Connecticut Noise Control Regulations §22a-69-1.8(g), which includes, but is not limited to, “physical activity at a site necessary or incidental to the erection, placement, demolition, assembling, altering, blasting, cleaning, repairing, installing, or equipping of buildings or other structures, public or private highways, roads, premises, parks, utility lines, or other property.” (R.C.S.A. §22a-69-1.8(g))
138. Cellco does not anticipate the need for blasting to develop the proposed sites. (Tr. 1, pp. 19-20)
139. Site preparation and engineering would commence following Council approval of a Development and Management Plan (D&M Plan) and are expected to be completed within four weeks. Installation of the equipment is expected to take another four weeks. After the equipment installation, cell site integration and system testing is expected to require about two additional weeks. (Cellco 1, pp. 26-27)

#### Visibility

140. The proposed sites are located within a relatively undeveloped area with rolling terrain. Based on a visibility field reconnaissance study, the top portions of all three towers would be visible from a section of Hopkins Road, approximately 1.4 to 1.6 miles northwest of the sites. Visibility modeling also shows potential year-round visibility of all three towers from a small portion of one residential property on the south side of the Ragged Hill Road-Swedetown Road intersection (approx. 1,050 feet from Site A). (Cellco 1, Tab 9; Cellco 3, Attachment 3)

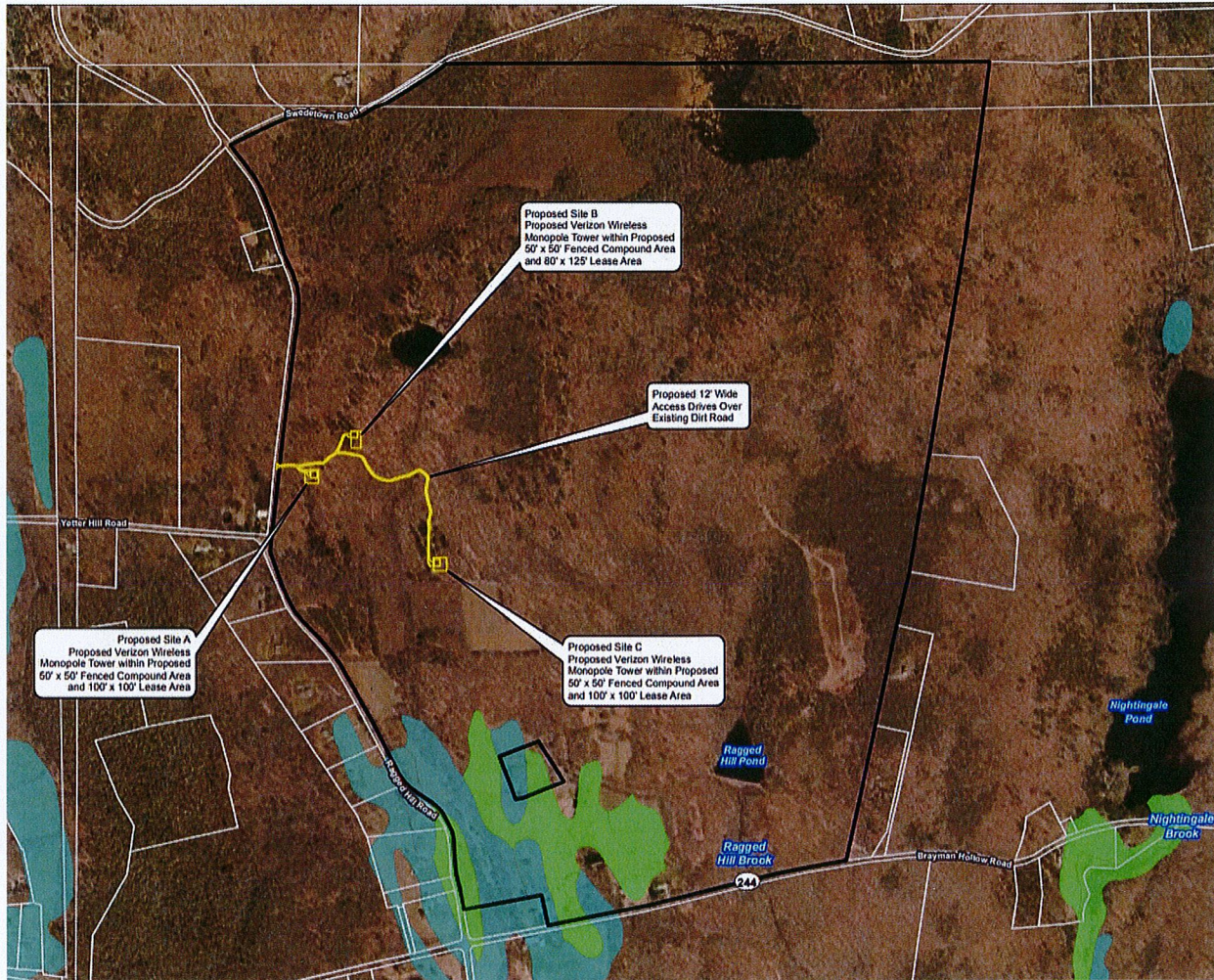
141. Generally, due to the forested nature of the site and surrounding area, seasonal views of Sites A and B would be limited to areas within 0.25 mile of the site. Both sites would also be seasonally visible from a section of Quarry Road, approximately 0.8 mile north of the sites. Site C is not expected to be seasonally visible from off-site locations (refer to Figures 11 A, B, C). (Cellco 1, Tab 9; Cellco 3, Attachment 3)
142. Portions of the Site A tower and compound would be visible through the trees from Swedetown Road west of the site and possibly from a residence near the corner of Swedetown Road and Ragged Hill Road (approx. 420 feet southwest). (Cellco 1, Tab 9; Cellco 3, Attachment 3; Tr. 1, pp. 36-38)
143. Site B would be less visible from Swedetown Road than Site A with visibility limited to portions of the tower. The tower would not be visible from the residence at the corner of Swedetown Road and Ragged Hill Road (approx. 850 feet southwest). (Cellco 1, Tab 9; Cellco 3, Attachment 3; Tr. 1, pp. 36-38)
144. Site A could be painted a brown or similar color to blend in during leaf-off conditions with the surrounding wooded landscape. (Tr. 1, pp. 39-40)
145. There are no "blue-blazed" hiking trails maintained by the Connecticut Forest and Park Association within one-mile of the site. (Council Administrative Notice Item No. 69; Applicant 1, Tab 9)
146. Pursuant to C.G.S. § 16-50p(a)(3)(F), no public schools or commercial child day care facilities are located within two miles of the site. (Cellco 1, Tab 9)
147. Connecticut State Route 244, a state designated scenic road, is located approximately 0.54 miles south of the Site C, the nearest site to this resource. None of the three sites would be visible from the designated scenic portion of Route 244. (Cellco 1, Tab 9, Bulk File 1d, p. 3-6)
148. Landscaping is not proposed at any of the three sites. (Cellco 1, Tab 1)

Figure 1 – Site Location








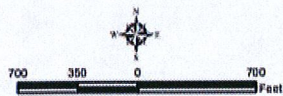
(Celco 1, p. ii)

**Figure 2 - Site Property, Tower Locations and Surrounding Terrain**

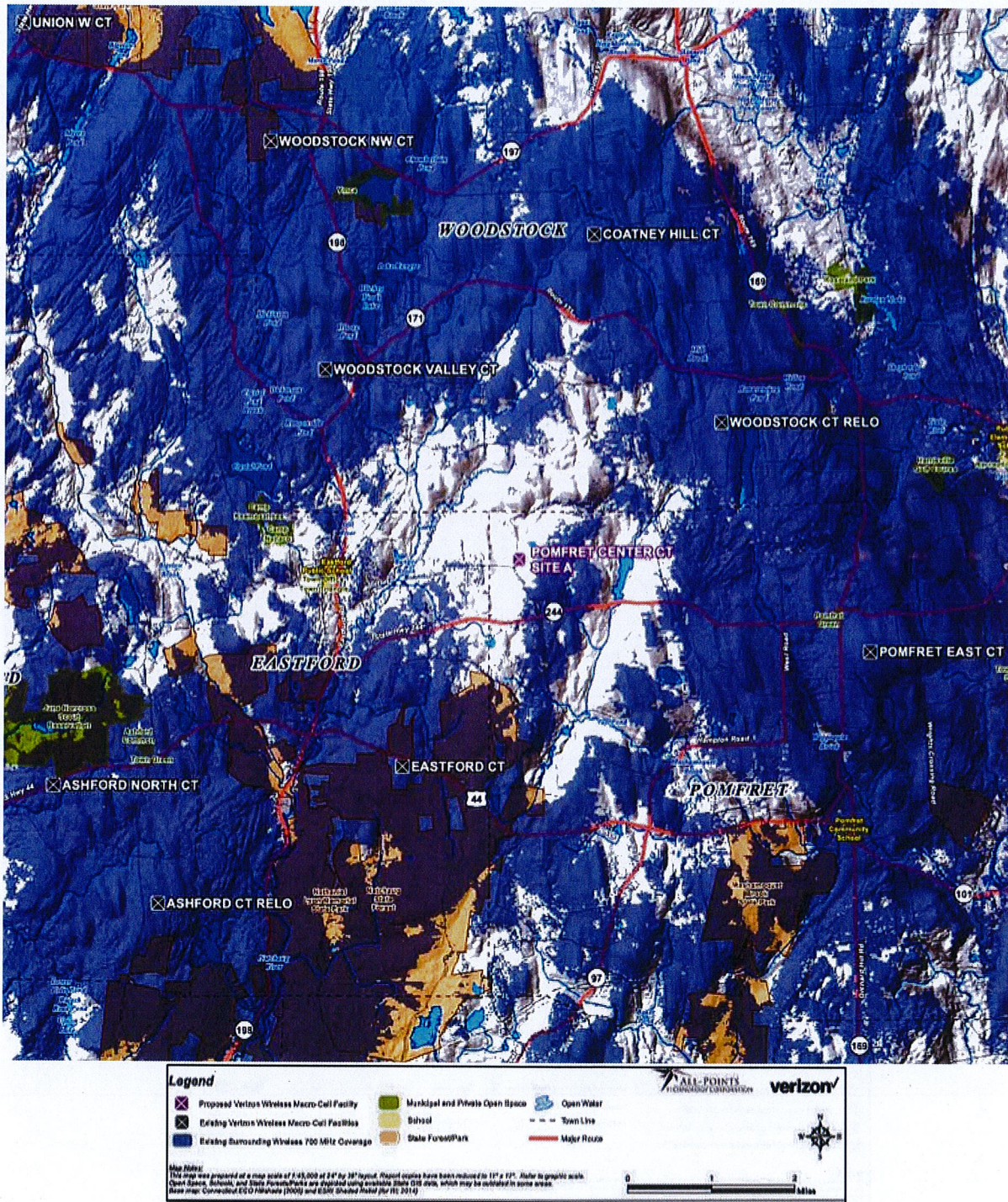


**Legend**

-  Proposed Verizon Wireless Facility Layout (Sites A, B, and C)
-  Approximate Subject Property
-  Approximate Parcel Boundary (CTDEEP)
-  Prime Farmland Soils
-  Statewide Important Farmland Soils

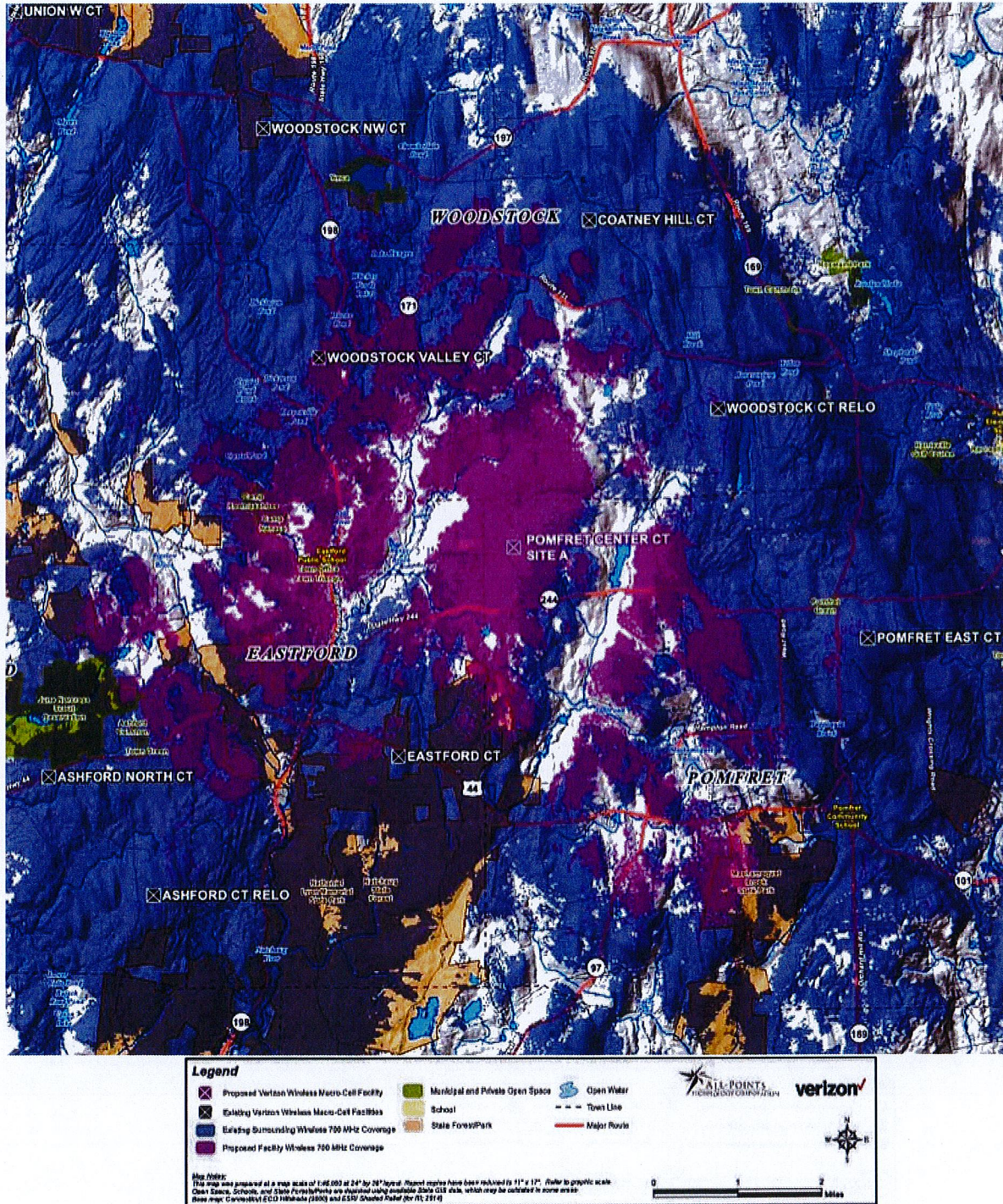


**Figure 3 - Existing LTE 700 MHz Service**



(Cellco 3, Attachment 1)

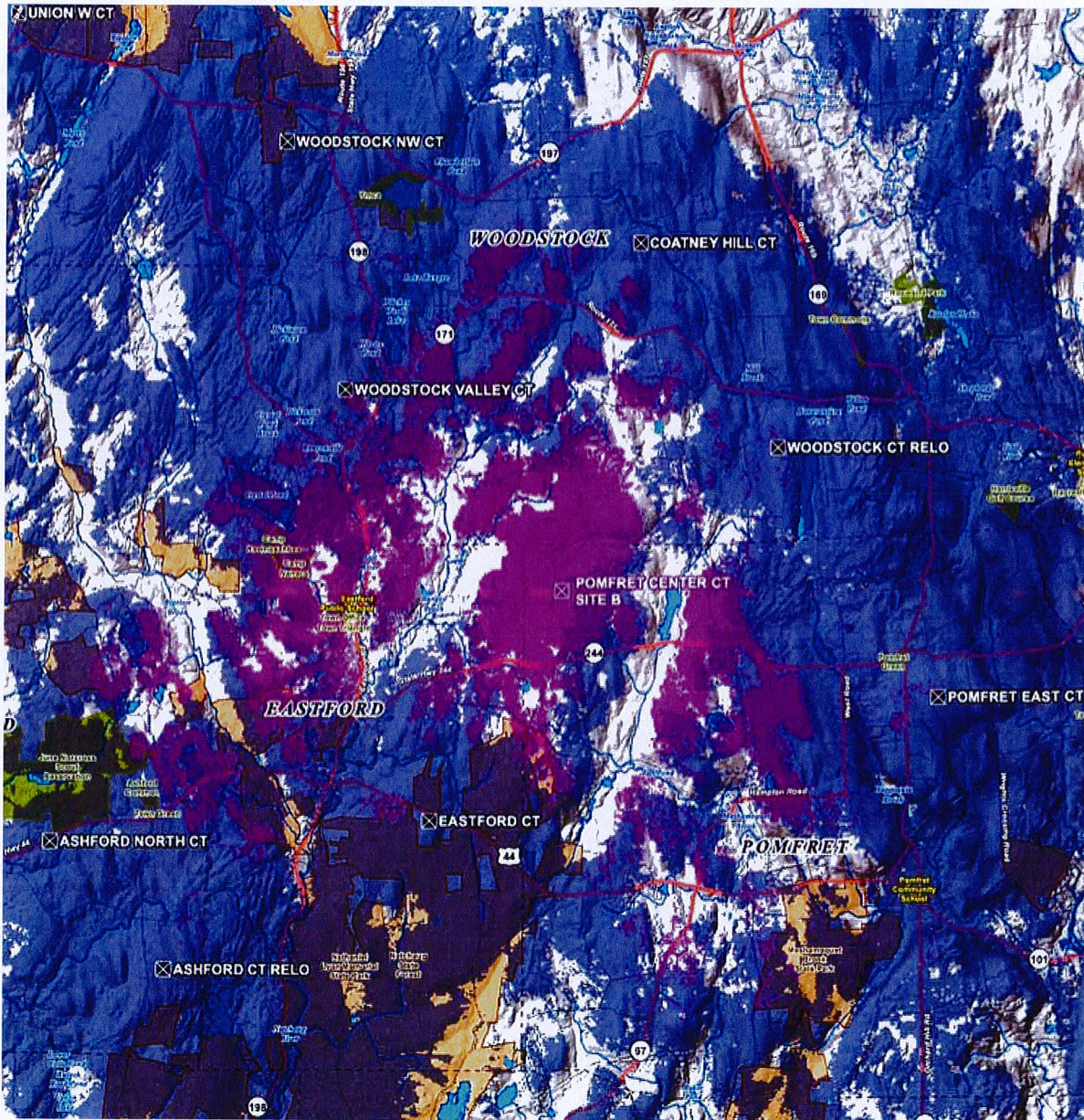
**Figure 4 - Proposed LTE 700 MHz Service- Site A**



(Cellco 3, Attachment 1)



**Figure 5 - Proposed LTE 700 MHz Service- Site B**



**Legend**

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

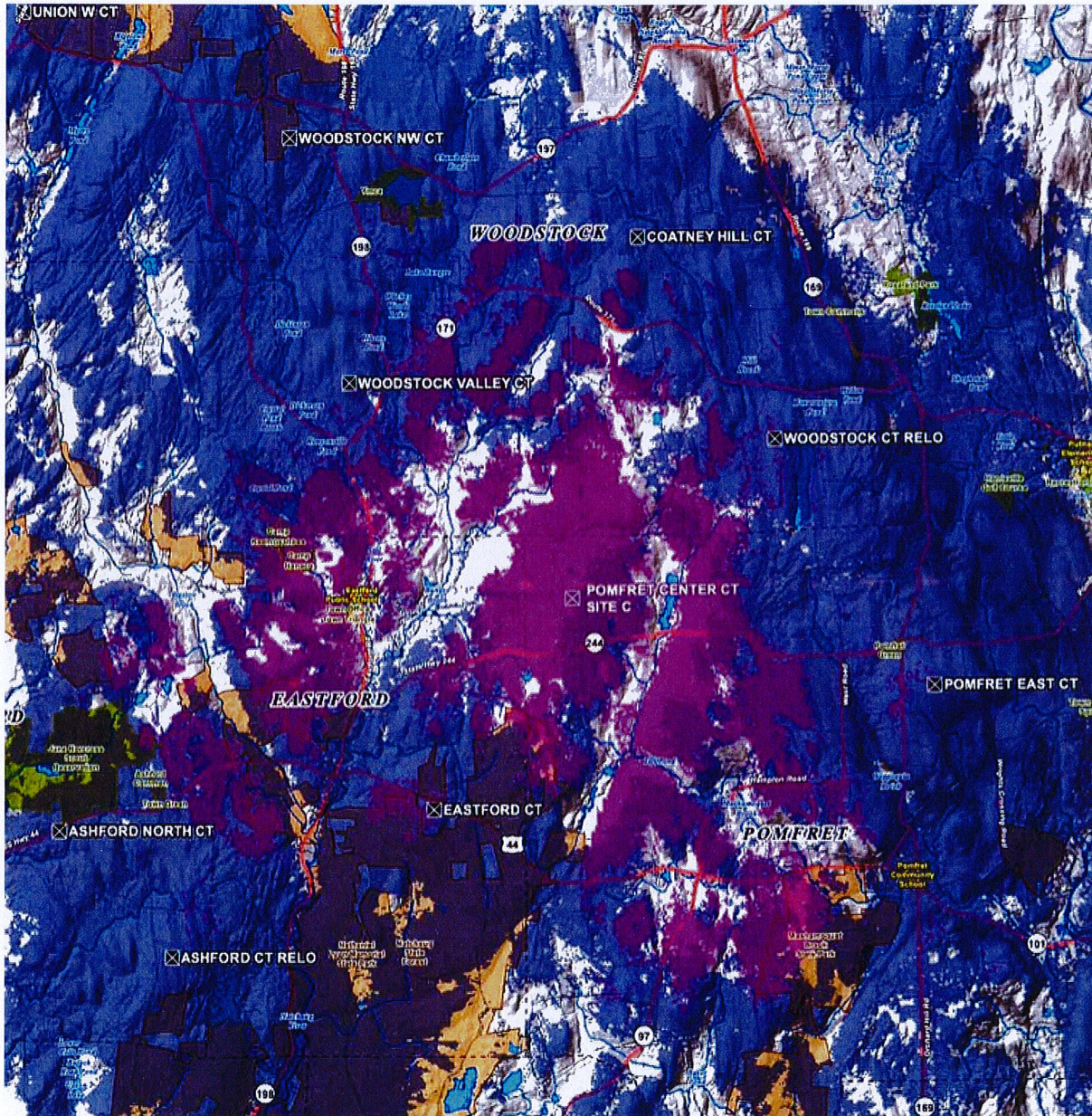
**All-Points**  
 UNLIMITED COVERAGE

**verizon**

Map Notes:  
 This map was prepared at a map scale of 1:45,000 at 30" by 30" layout. Report copies have been reduced to 11" x 17". Refer to graphic scale.  
 Open Space, Schools, and State Forest/Parks are highlighted using available State GIS data, which may be outdated in some areas.  
 Base map: Connecticut GEO Information (2007) and ESRI Street Relief (v. 11, 2014)

0 1 2 Miles

Figure 6 - Proposed LTE 700 MHz Service - Site C



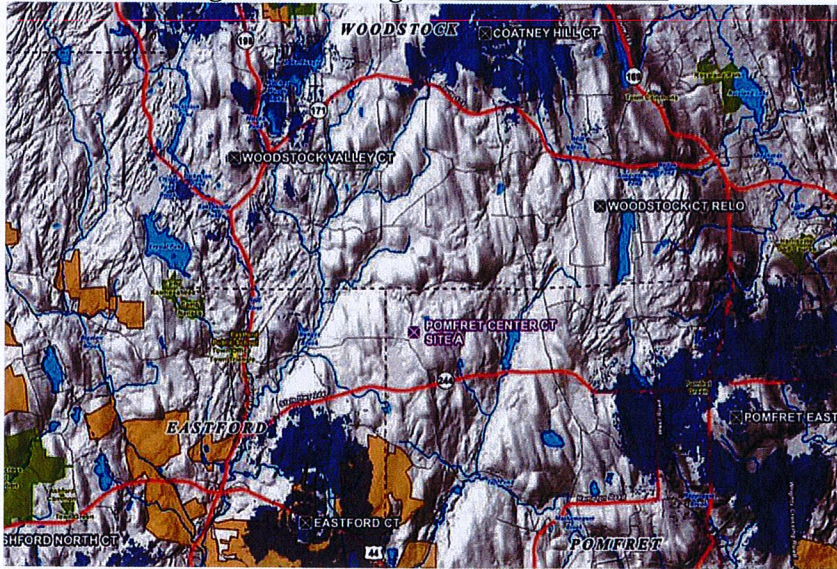
**Legend**


**Notes:**  
 This map was prepared at a map scale of 1:48,266 at 24" by 36" layout. Report curves have been rounded to 1/2" or 1". Refer to graphic scale.  
 Open Space, School, and State Forest/Park are digitized using variable size 1/16 inch, which may be outdated in some areas.  
 Base map: Connecticut GEO Information (2000) and USGS Stream Data (for 21, 2014)

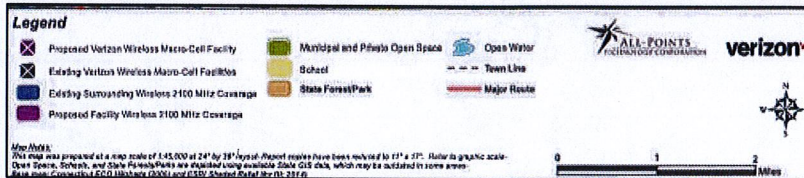
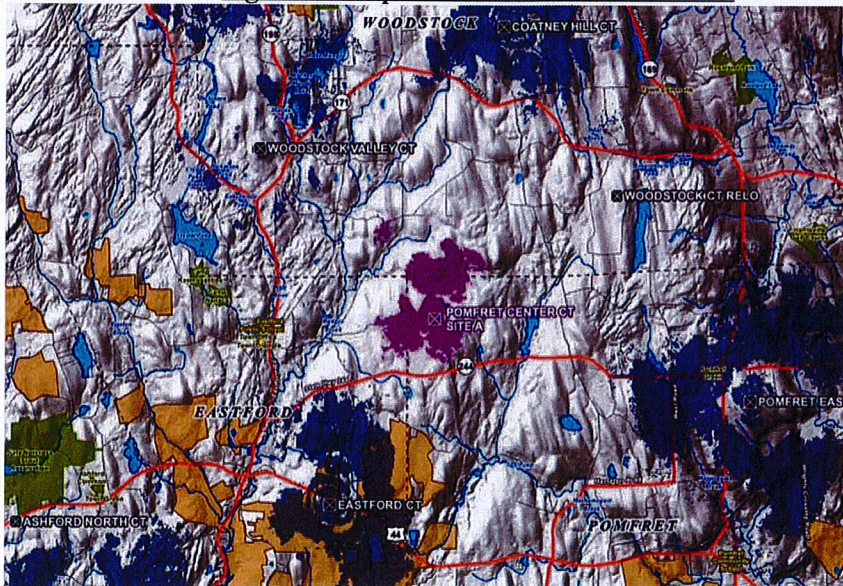
ALL-POINTS THE VERMONT COMMERCIAL **verizon**

0 1 2 miles

**Figure 7 – Existing LTE 2100 MHz Service**



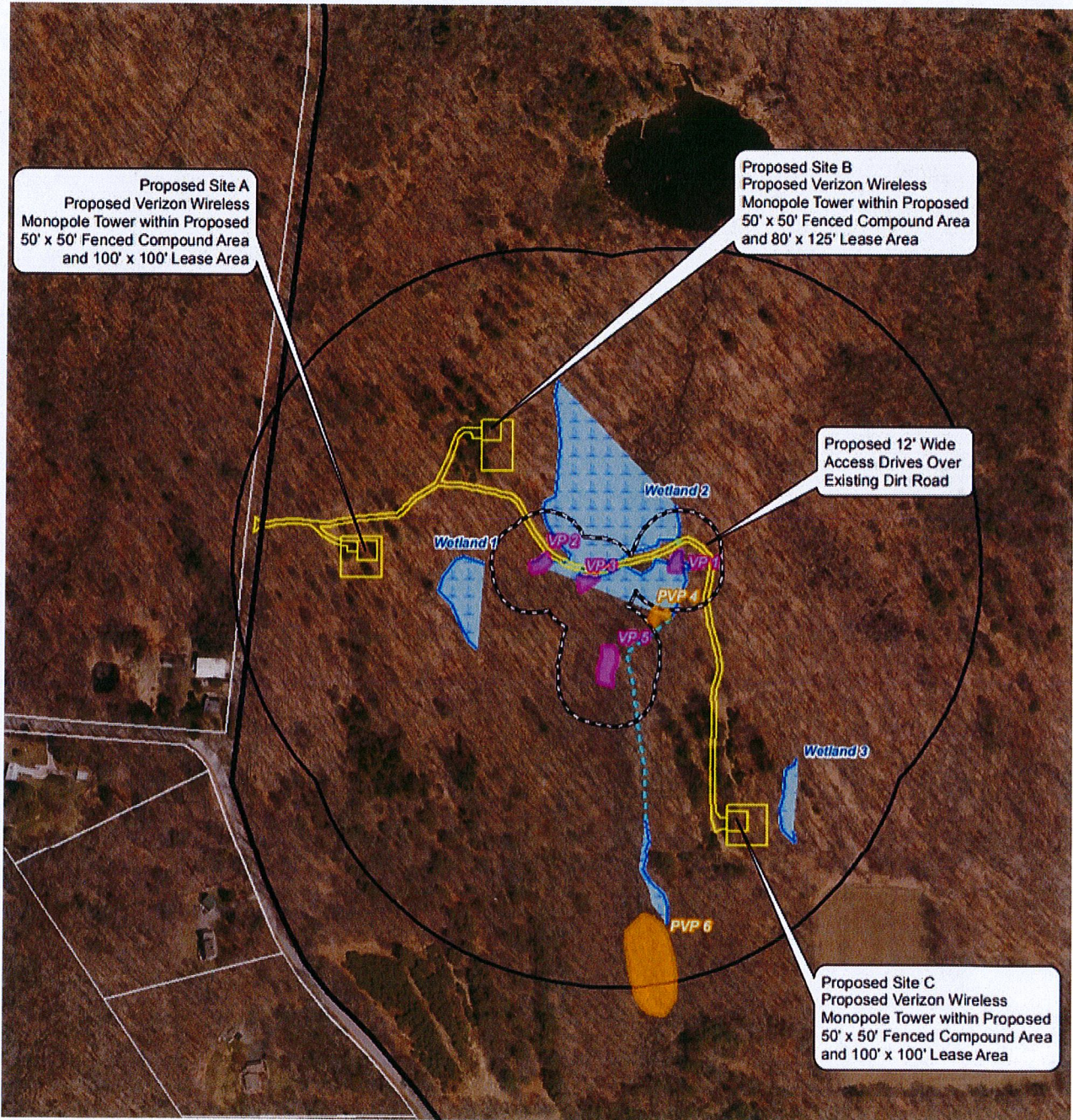
**Figure 8 – Proposed LTE 2100 MHz Service \***



\*The proposed 2100 MHz service from all three sites is similar



**Figure 10 – Site Locations and Wetland Resources**



**Legend**

Proposed Verizon Wireless Facility Layout (Sites A, B, and C)	Approximate Wetland Area
Potential Vernal Pool	Existing Culvert
Verified Vernal Pool	Subject Property
100' Vernal Pool Envelope	Approximate Parcel Boundary (CTDEEP)
100'-750' Critical Terrestrial Habitat	
Delineated Wetland Boundary	
Field Identified Approximate Wetland Boundary	

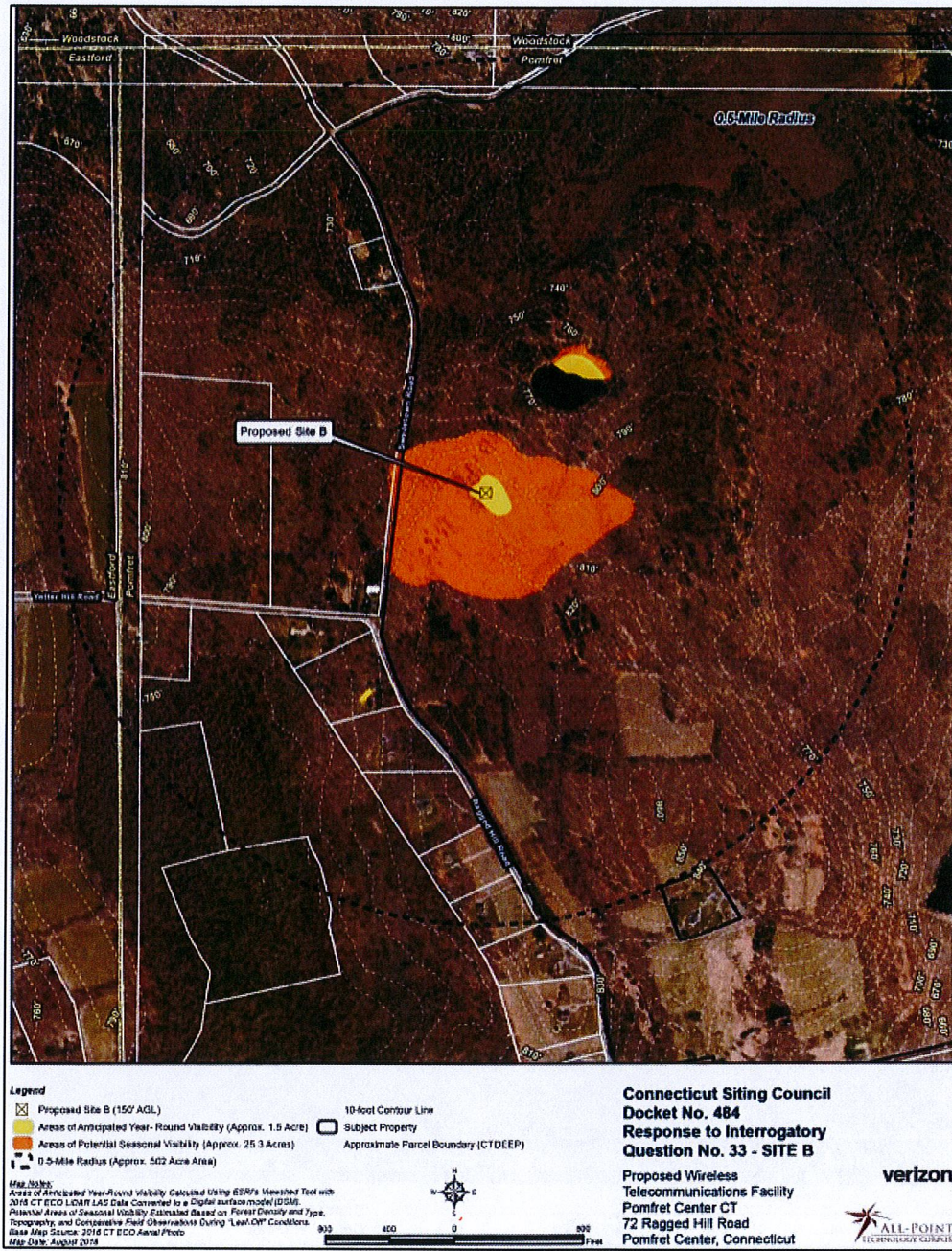
**Map Notes:**  
 Base Map Source: 2016 Aerial Photograph (CTECO)  
 Map Scale: 1 inch = 350 feet  
 Map Date: May 2018

350 175 0 350 Feet

**Figures 11 A, B, C – Visibility Analysis**  
*Site A*



Site B



(Cellco 3, Attachment 3)

Site C





<p><b>DOCKET NO. 484</b> - Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility at one of three locations at 72 Ragged Hill Road, Pomfret, Connecticut.</p>	<p>} Connecticut          } Siting          } Council</p>
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November 8, 2018

**Opinion**

On July 9, 2018, Cellco Partnership d/b/a Verizon Wireless (Cellco) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of wireless telecommunications facility at one of three locations at 72 Ragged Hill Road in Pomfret, Connecticut. The purpose of the proposed facility is to provide reliable wireless service to service deficient areas in the northwest Pomfret, northeast Eastford and southwest Woodstock region.

The United States Congress recognized a nationwide need for high quality wireless services through the adoption of the Federal Telecommunications Act of 1996 and directed the Federal Communications Commission (FCC) to establish a market structure for system development and develop technical standards for network operations. The FCC preempts state or local regulation on matters that are exclusively within the jurisdiction and authority of the FCC, including, but not limited to, network operations and radio frequency emissions. Preservation of state or local authority extends only to placement, construction and modifications of telecommunications facilities based on matters not directly regulated by the FCC, such as environmental impacts. The Council’s statutory charge is to balance the need for development of proposed wireless telecommunications facilities with the need to protect the environment.

Cellco is currently located on six existing telecommunications facilities within a six-mile radius of the proposed sites and these existing facilities cannot provide adequate coverage to the target service area. Cellco customers experience unreliable 700 MHz LTE service to large land areas and roadways within the area surrounding the proposed sites. Deficient service on major roads includes 1.5 miles of Route 44, 1.8 miles of Route 244, and 2.1 miles of Route 198, and the land areas abutting these roads. Additionally, service is deficient in Mashamoquet Brook State Park in Pomfret, potentially posing a safety hazard to park users who may need to access Cellco’s network during an emergency.

Cellco established a search ring for its “Pomfret Center” facility in January 2009 and determined there were no existing structures available within the search area to locate on. Cellco then searched for suitable properties to develop a tower. Cellco investigated a total of 14 different tower sites, 11 of which were deemed not suitable due to proximity to exiting residences, environmental constraints or inferior wireless coverage.

Cellco identified the subject property as suitable for a new tower facility and developed the proposed Site A facility. Cellco put the proposed project on hold in May 2010, reactivating it in December 2016. Based on consultation with the Town in 2017 and a subsequent public information hearing in Pomfret, Cellco identified two additional tower locations on the site property for consideration. Besides Site B and Site C, other locations on the property were examined but ultimately rejected due to environmental issues or deficient wireless coverage.

Although the Town did not participate as a party to the proceeding, the Pomfret First Selectman Maureen Nicholson submitted correspondence to the Council expressing opposition to all three proposed sites, stating that a new tower would not fit in with the rural character of the Town and that wireless service in Town is adequate.

To resolve the identified coverage deficiencies, Cellco proposes a new monopole facility at one of three locations on a 627-acre parcel owned Raynham, Inc. The three site locations are referred to as Site A, Site B and Site C. Site A and Site B would both consist of a 150-foot monopole facility. Site C, due to a higher ground elevation, would consist of a 130-foot monopole facility. Cellco would install six panel antennas and six remote radio heads on an antenna platform at the top of the proposed towers.

An analysis of Cellco's coverage models and related information indicates Site C offers better service than Site A or Site B to the area as a whole, with an estimated coverage footprint of 21 square miles, compared to 20 square miles for Site A, and 16 square miles for Site B. It also provides more service to the southeast, offering reliable service to a section of Route 97, and to portions of Mashamoquet Brook State Park and the Airline State Park Greenway Trail. Sites A and B would not be able to provide reliable service to most of these areas.

Cellco would also deploy 2100 MHz service at the site and although the service footprint appears limited, it is used by Cellco to deploy carrier aggregation technology which expands customer bandwidth that enhances Cellco's voice and data services.

Although the site is designed to improve Cellco's coverage footprint, the proposed facility would also provide capacity relief to adjacent facilities. However, none of these adjacent facilities are currently at risk of exhausting capacity.

All three of the proposed sites would consist of a monopole tower and a 50-foot by 50-foot fenced equipment compound within a 100-foot by 100-foot lease area at the base of the tower, enclosed by an eight-foot tall chain link fence. Minimal grading would be required to develop the sites. All three proposed sites would be accessed by following an existing logging road that extends from Swedetown Road into the interior of the parcel. The existing logging road would be upgraded as necessary to create a stable road surface.

Proposed Site A is located in a wooded area approximately 260 feet east of Swedetown Road with the nearest off-site residence approximately 420 feet southwest of the proposed 150-foot tower. Two residences are within 1,000 feet of the proposed site. Vehicle access to the compound would follow the existing logging road for 140 feet, then follow a new 12-foot wide, 120-foot long gravel drive extending southeasterly to the compound. No wetlands would be affected by site construction.

Proposed Site B is located in a wooded area approximately 570 feet due east of Swedetown Road with the nearest off-site residence approximately 850 feet southwest of the proposed 150-foot tower. One residence is within 1,000 feet of the proposed site. Vehicle access to the compound would follow the existing logging road for 625 feet, then follow a new 12-foot wide, 50-foot long gravel drive extending east to the compound. No wetlands would be affected by site construction.

Proposed Site C is located in a wooded area approximately 1,300 feet due east of Ragged Hill Road with the nearest off-site residence is approximately 1,500 feet southwest of the proposed site. No residences are within 1,000 feet of the proposed site. Vehicle access to the compound would follow the existing logging road for approximately 2,000 feet to a new 12-foot wide, 20-foot long gravel drive extending east to the compound.

The existing logging road that would be used to access Site C passes through a wetland for 60 linear feet and extends along a wetland edge for an additional 135 feet. Several vernal pools are located along the edge of this existing logging road. Improving the logging road to create a stable access drive to Site C would result in 1,500 square feet of permanent wetland impacts, consisting of the addition of gravel and the installation of a French Mattress wetland crossing that would allow for unimpeded water flow through the access road bed. No disruption to the hydrology of the adjacent vernal pools is anticipated from the proposed improvements to the logging road. Cellco would implement vernal pool Best Management Practices (BMPs) to reduce potential impacts to the vernal pools and vernal pool obligate species. The BMPs consist of several components including the installation of appropriate erosion controls, periodic inspection and maintenance of isolation structures, herpetofauna sweeps, contractor education, and reporting.

An underground utility line would be installed along the access road to the respective tower sites from a proposed utility pole on Ragged Hill Road. Cellco proposes to install a 30-kilowatt diesel-fueled emergency generator within the compound for its own use. It could run for approximately 130 hours under normal loading conditions. A battery unit would also be installed in the event Cellco's generator does not start or ceases to function.

The proposed facilities will have no effect on historic properties. No records of any species listed on the Department of Energy and Environmental Protection's Natural Diversity Database occur at the subject parcel. The proposed facilities are not located near an Important Bird Area, as designated by the National Audubon Society. The design of the proposed facilities would comply with United States Fish and Wildlife Service guidelines for minimizing the potential impact of telecommunications towers to bird species. Minimal tree removal would occur to develop the sites.

The subject property is located within the Last Green Valley National Heritage Corridor but no identified heritage resources would be impacted by the proposed facilities. A State-designated scenic road, Route 244, is located approximately 0.54 miles south of Site C, the nearest proposed tower site to this resource. None of the three sites would be visible from Route 244.

The proposed sites are located within a relatively undeveloped area with rolling terrain. Based on a visibility field reconnaissance study, the top portions of all three towers would be visible from a section of Hopkins Road, approximately 1.4 to 1.6 miles northwest of the sites and from a small section of a residential property on Ragged Hill Road, approximately 1,050 feet from Site A. Leaf-off views of Sites A and B would be mostly limited to areas within a quarter-mile of each site but also include a section of Quarry Road, approximately 0.8 mile north of the sites, and portions of Swedetown Road to the east of the sites. Site C is not expected to be seasonally visible from off-site locations.

After considering the record in this matter, the Council finds that Site C would best meet Cellco's coverage objectives by providing the largest wireless service footprint as well as providing service to portions of Mashamoquet Brook State Park, the Airline State Park Greenway Trail, and Route 97 - areas that the other two proposed sites cannot reach. Site C is also isolated from a nearby residential area and is the farthest site from any adjacent residence, thereby limiting any potential year-round or leaf-off views of the facility. Although the proposed access road to Site C passes through a wetland,

Cellco has submitted information and site plans that demonstrate it could adequately mitigate any impact to this wetland and adjacent vernal pools. The proposed project would be constructed in compliance with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control*.

To promote tower sharing, the tower would be designed to support the co-location of additional telecommunication carriers as well as municipal emergency service antennas, if needed. No other wireless carriers or emergency response entities have expressed interest in co-locating of the facility at this time. The tower and foundation would be designed to support an extension of up to 20 feet if the need arises for a taller tower to meet future wireless objectives by another carrier.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the radio frequency power density level of Cellco's antennas would be 29.0 percent of the FCC's General Public/Uncontrolled Maximum Permissible Exposure, as measured at the base of the Site C tower. This is conservatively based on all antennas of a given sector pointing down to the ground and emitting maximum power. This percentage is well below federal standards established for the frequencies used by wireless companies. If federal standards change, the Council will require that the tower be brought into compliance with such standards. The Council will require that the power densities be recalculated in the event other carriers add antennas to the tower. The Telecommunications Act of 1996 prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. Regarding potential harm to wildlife from radio emission; this, like the matter of potential hazard to human health, is a matter of federal jurisdiction. The Council's role is to ensure that the tower meets federal permissible exposure limits.

Based on the record in this proceeding, the Council finds that the effects associated with the construction, operation, and maintenance of the telecommunications facility at proposed Site C, including effects on the natural environment, ecological balance, public health and safety, scenic, historic, and recreational values, agriculture, forests and parks, air and water purity, and fish, aquaculture and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with policies of the State concerning such effects, and are not sufficient reason to deny this application. Therefore, the Council will issue a Certificate to Cellco Partnership d/b/a Verizon Wireless for the construction, maintenance, and operation of a 130-foot monopole telecommunications facility at proposed Site C located at 72 Ragged Hill Road in Pomfret, Connecticut.

**DOCKET NO. 484** - Cellco Partnership d/b/a Verizon Wireless }  
application for a Certificate of Environmental Compatibility and }  
Public Need for the construction, maintenance, and operation of a }  
telecommunications facility at one of three locations at 72 Ragged }  
Hill Road, Pomfret, Connecticut. }

Connecticut

Siting

Council

November 8, 2018

### Decision and Order

Pursuant to Connecticut General Statutes §16-50p, and the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, maintenance, and operation of a telecommunications facility, including effects on the natural environment, ecological balance, public health and safety, scenic, historic, and recreational values, agriculture, forests and parks, air and water purity, and fish, aquaculture and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes §16-50k, be issued to Cellco Partnership d/b/a Verizon Wireless, hereinafter referred to as the Certificate Holder, for a telecommunications facility at Site C, located at 72 Ragged Hill Road, Pomfret, Connecticut. The Council denies certification of Site A and Site B located at 72 Ragged Hill Road, Pomfret, Connecticut.

Unless otherwise approved by the Council, the facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The tower shall be constructed as a monopole at a height of 130 feet above ground level to provide the proposed wireless services, sufficient to accommodate the antennas of Cellco Partnership and other entities, both public and private. The height of the tower may be extended after the date of this Decision and Order pursuant to regulations of the Federal Communications Commission.
2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for the Site C location in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Pomfret for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
  - a) final site plan(s) for development of the facility that employ the governing standard in the State of Connecticut for tower design in accordance with the currently adopted International Building Code and include specifications for the tower, tower foundation, antennas and equipment compound including, but not limited to, fencing, radio equipment, access road, utility installation and emergency backup generator;
  - b) construction plans for site clearing, grading, landscaping, water drainage and stormwater control, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended;
  - c) provisions for vernal pool best management practices; and
  - d) proposed construction schedule, including construction work hours and days.

3. Prior to the commencement of operation, the Certificate Holder shall provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.
4. Upon the establishment of any new federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
5. The Certificate Holder shall provide the Council with a copy of necessary permits from any other state or federal agency with concurrent jurisdiction prior to the commencement of construction.
6. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
7. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed with at least one fully operational wireless telecommunications carrier providing wireless service within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The Certificate Holder shall provide written notice to the Executive Director of any schedule changes as soon as is practicable.
8. Any request for extension of the time period referred to in Condition 7 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of Pomfret.
9. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council within 90 days from the one year period of cessation of service. The Certificate Holder may submit a written request to the Council for an extension of the 90 day period not later than 60 days prior to the expiration of the 90 day period.
10. Any nonfunctioning antenna, and associated antenna mounting equipment, on this facility shall be removed within 60 days of the date the antenna ceased to function.
11. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction, and the commencement of site operation.
12. The Certificate Holder shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v.

13. This Certificate may be transferred in accordance with Conn. Gen. Stat. §16-50k(b), provided both the Certificate Holder/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. In addition, both the Certificate Holder/transferor and the transferee shall provide the Council a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility.
14. The Certificate Holder shall maintain the facility and associated equipment, including but not limited to, the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line and landscaping in a reasonable physical and operational condition that is consistent with this Decision and Order and a Development and Management Plan to be approved by the Council.
15. If the Certificate Holder is a wholly-owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the Certificate Holder within 30 days of the sale and/or transfer.
16. This Certificate may be surrendered by the Certificate Holder upon written notification and acknowledgment by the Council.

We hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed in the Service List, dated July 10, 2018, and notice of issuance published in *The Norwich Bulletin*.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

**VIA ELECTRONIC MAIL**

November 9, 2018

TO: Classified/Legal Supervisor  
**484181109**  
The Norwich Bulletin  
10 Railroad Place  
Norwich, CT 06360  
classifieds@norwichbulletin.com

LM

FROM: Lisa A. Mathews, Office Assistant

RE: **DOCKET NO. 484** - Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility at one of three locations at 72 Ragged Hill Road, Pomfret, Connecticut.

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Please publish the attached legal notice for one day on the first day possible from receipt of this notice.

Please send an affidavit of publication and invoice to my attention.

Thank you.

LM

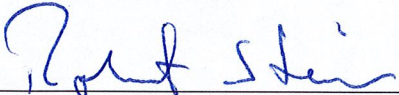
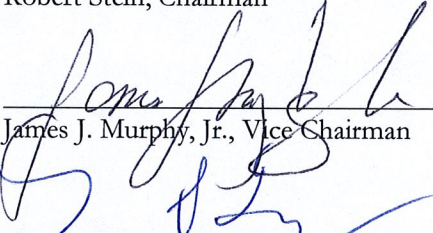
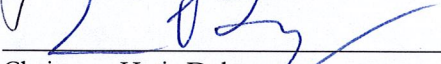
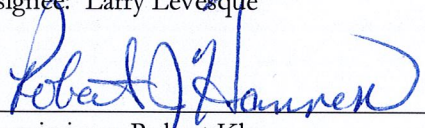
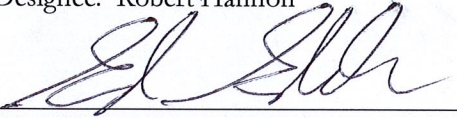
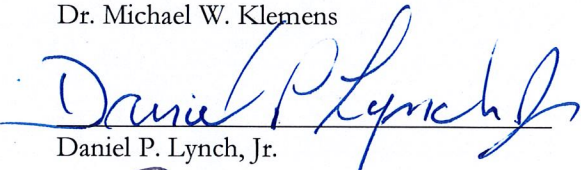
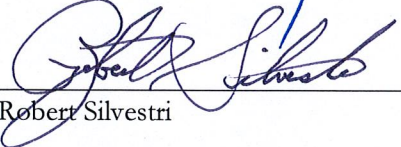


## NOTICE

Pursuant to General Statutes § 16-50p (a), the Connecticut Siting Council (Council) announces that, on November 8, 2018, the Council issued Findings of Fact, an Opinion, and a Decision and Order approving an application from Cellco Partnership d/b/a Verizon Wireless for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at proposed Site C, 72 Ragged Hill Road, Pomfret, Connecticut. This application record is available for public inspection in the Council's office, Ten Franklin Square, New Britain, Connecticut.

**CERTIFICATION**

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in **DOCKET NO. 484** – Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility at one of three locations at 72 Ragged Hill Road, Pomfret, Connecticut, and voted as follows to approve proposed Site C, and deny certification of proposed Site A and Site B:

<u>Council Members</u>	<u>Vote Cast</u>
 _____ Robert Stein, Chairman	Yes
 _____ James J. Murphy, Jr., Vice Chairman	Yes
 _____ Chairman Katie Dykes Designee: Larry Levesque	Yes
 _____ Commissioner Robert Klee Designee: Robert Hannon	Yes
 _____ Edward Edelson	Yes
_____ Michael Harder	Absent
_____ Dr. Michael W. Klemens	Absent
 _____ Daniel P. Lynch, Jr.	Yes
 _____ Robert Silvestri	Abstain

Dated at New Britain, Connecticut, November 8, 2018.