

DOCKET NO. 442 – New Cingular Wireless PCS, LLC } Connecticut
application for a Certificate of Environmental Compatibility }
and Public Need for the construction, maintenance, and } Siting
operation of a telecommunications facility located at 284 New }
Canaan Avenue, Norwalk, Connecticut. } Council

May 8, 2014

DRAFT Findings of Fact
(changes since January 15, 2014 version are highlighter in Yellow)

Introduction

1. New Cingular Wireless PCS, LLC (AT&T), in accordance with provisions of Connecticut General Statutes (C.G.S.) § 16-50g, et seq., applied to the Connecticut Siting Council (Council) on September 23, 2013 for the construction, maintenance, and operation of a wireless telecommunications facility consisting of two 140-foot towers at 284 New Canaan Avenue, Norwalk, Connecticut (refer to Figure 1). (AT&T 1, pp. 1-3)
2. During a meeting held on October 17, 2013, the Council approved a schedule for this application and deemed the application complete. (Connecticut Siting Council Meeting Minutes, October 17, 2013)
3. AT&T is a Delaware limited liability company with an office at 500 Enterprise Drive, Rocky Hill, Connecticut. The company's member corporation is licensed by the Federal Communications Commission (FCC) to construct and operate a personal wireless services system. The company does not conduct any other business in the State of Connecticut other than the provision of wireless services under FCC rules and regulations. (AT&T 1, p. 4)
4. The party in this proceeding is AT&T. Cellco Partnership d/b/a Verizon Wireless (Cellco) is an intervenor. (Record)
5. The purpose of the proposed facility is to provide reliable wireless telecommunications services for AT&T and Cellco in the Route 15 (Merritt Parkway) area of Norwalk and Route 123 (Norwalk Road) area in New Canaan. (AT&T 1, p. 1, Tab 1; Cellco 2, response 1)
6. Pursuant to C.G.S. § 16-50l (b), public notice of the application filing to the Council was published in the New Canaan Advertiser on August 22 and 29, 2013 and in The Hour on August 23 and 30, 2013. (AT&T 2; AT&T 3)
7. Pursuant to C.G.S. § 16-50l(b), notice of the application filing was provided to all abutting property owners by certified mail. Mail return receipts were not received for four abutters. Notice was sent by first class mail to these abutters on October 3, 2013. (AT&T 4, response 1)
8. Pursuant to C.G.S. § 16-50l (b), AT&T provided notice to all federal, state and local officials and agencies listed therein, including representatives from the Town of New Canaan which is located within 2,500 feet. (AT&T 1, p. 5)
9. Pursuant to C.G.S. § 16-50j-21, AT&T installed a four-foot by six-foot sign near the entrance driveway to the site property on December 3, 2013. The sign included the Applicant's name, type of facility proposed, the date and location of the Council's public hearing, and contact information for the Applicant and the Council. (AT&T 6)

10. Pursuant to C.G.S. § 16-50m, the Council, after giving due notice thereof, held a public hearing on December 19, 2013, beginning at 3:00 p.m. and continuing at 7:00 p.m. at the Norwalk City Hall, 125 East Avenue, Norwalk, Connecticut. (Council's Hearing Notice dated October 18, 2013)
11. The Council and its staff conducted an inspection of the proposed site on December 19, 2013, beginning at 2:00 p.m. During the field inspection, AT&T flew two four-foot diameter balloons at the site to simulate the height of the two towers. The weather was windy at times so a few balloons were lost and replaced, and the balloon strings were angled for most of the time. (Transcript 1, December 19, 2013- 3:00 p.m. [Tr. 1], p. 12)
12. During a meeting held on January 23, 2014, the Council, on its own motion, reopened the evidentiary record for this docket to obtain more information from the State Historic Preservation Office (SHPO). (Connecticut Siting Council, Meeting Minutes, January 23, 2014)
13. On February 10, 2014, Chairman Robert Stein and Acting Executive Director/Staff Attorney Melanie Bachman met with Daniel Forrest, Director of Acts & Historic Preservation and Todd Levine, Environmental Analyst of the SHPO. Matters discussed during the meeting included:
 - a. compliance with Section 106 of the National Historic Preservation Act (Section 106 Process);
 - b. the Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission;
 - c. Council state agency comment solicitation pursuant to C.G.S. §16-50j(h);
 - d. consistency of SHPO and Council conditions of no adverse effect and approval regarding decommissioning of facilities;
 - e. an updated SHPO review for Docket No. 442; and
 - f. the two-year validity of SHPO's determination letters pursuant to the Section 106 Process.(Record – Council Memo to Parties and Intervenors dated February 11, 2014)
14. On February 12, 2014, AT&T submitted a letter to the SHPO seeking to ascertain if a 130-foot monopole tower with external antennas on low-profile platforms that are painted brown would be consistent with Condition No. 1 of the No Adverse Effect letter issued by SHPO on April 7, 2010. (Record – Correspondence from Attorney Christopher Fisher to Mr. Daniel Forrest dated February 12, 2014)
15. On March 20, 2014, the SHPO and AT&T met to discuss the project. After the meeting, SHPO issued a letter to AT&T dated March 27, 2014 stating that SHPO prefers two 140-foot monopoles with internal mounted antennas rather than a single monopole with any exterior antenna configuration. SHPO's position is that any exterior mounted antennas would have a greater visual mass and would be more destructive to the historic character of the Merritt Parkway. (AT&T Administrative Notice Item No. 1)
16. A public hearing for the reopened proceeding was held on April 15, 2014 at 10 Franklin Square in New Britain, beginning at 1:05 p.m. (Transcript 3 – 1:05 p.m. [Tr. 3], p. 145)

State Agency Comment to Council

17. Pursuant to C.G.S. § 16-50j (h), on October 18, 2013 and December 23, 2013, 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; Council on Environmental Quality; Public Utilities Regulatory Authority (PURA); Office of Policy and Management; Department of Economic and Community Development; Department of Agriculture;

Department of Transportation (DOT); and Department of Emergency Services and Public Protection. (Record)

18. The DOT responded with a no comment letter. No other agencies responded to the Council's solicitation. (Record)

Municipal Consultation

19. On September 4, 20013 AT&T met with the City of Norwalk Planning Commission regarding a telecommunications facility at the site. On October 23, 2003, The City sent a letter to AT&T requesting further information. (AT&T 1, Tab 7)
20. AT&T placed the project on hold in 2004 due to a potential merger and the reallocation of funds for existing network upgrades. (AT&T 5)
21. AT&T reactivated the project in 2010 and the NEPA review process resumed. (AT&T 5)
22. A technical report for the proposed site was submitted to the City on July 29, 2011. (AT&T 1, Tab 7)
23. At the request of Norwalk Mayor Richard Moccia, AT&T met with the Norwalk Director of Planning, Michael Greene and Senior Planner, Dorothy Wilson on August 11, 2011 to review the project. (AT&T 1, p. 22)
24. AT&T submitted a technical report to the Town of New Canaan on July 15, 2011 as the Town is within 2,500 feet of the project site. (AT&T 1, p. 21)
25. AT&T met with the New Canaan Town Administrator on August 9, 2011. AT&T attended a Town Council meeting on September 21, 2011 and answered questions regarding the proposal. (AT&T 1, Tab 7)
26. After the technical filing, the Town of New Canaan conducted a non-scientific poll of residences regarding the need for wireless coverage. A majority of respondents indicated a need for infrastructure to provide service. (AT&T 1, p. 22, Tab 7; Tr. 1, pp. 55-57)
27. During the period from 2010 to 2013, AT&T negotiated and completed the lease approval process with the State Office of Policy and Management, State Property Review Board, Office of the Attorney General, State Military Department, and the Department of Public Works. (AT&T 5)

Public Need for Service

28. 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)
29. 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. AT&T is licensed by the Federal Communications Commission (FCC) to provide personal wireless communication service throughout the State. (Council Administrative Notice Item No. 4; AT&T 1, p. 9)

30. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 4)
31. The Telecommunications Act of 1996 prohibits any state or local entity from regulating telecommunications towers on the basis of the environmental effects, which include human health effects, of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. This Act also blocks the Council from prohibiting or acting with the effect of prohibiting the provision of personal wireless service. (Council Administrative Notice Item No. 4)
32. Pursuant to the tower sharing policy of the State of Connecticut under C.G.S. §16-50aa, 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. (Conn. Gen. Stat. §16-50aa)

Public Safety

33. 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. Approximately 70 percent of 9-1-1 calls are made with a wireless device. (Council Administrative Notice Item No. 6; AT&T 1, p. 8)
34. Pursuant to the Warning, Alert and Response Network Act of 2006, the FCC has established a Personal Localized Alerting Network (PLAN) that requires wireless communication providers to issue text message alerts from federal bodies including the President of the United States. PLAN would allow the public to receive e-mails and text messages on mobile devices based on geographic location. The proposed facility would also enable the public to receive e-mails and text messages. (Council Administrative Notice Item No. 6)
35. Following the enactment of the 911 Act, the FCC mandated wireless carriers to provide enhanced 911 services (E911) to allow public safety dispatchers to determine a wireless caller's geographical location within several hundred feet. The proposed facility would become a component of AT&T's E911 network in this part of the state. (Council Administrative Notice Item No. 6; AT&T 1, p. 10)
36. 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 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)
37. In 2009, Connecticut became the first state in the nation to establish a statewide emergency notification system. The CT Alert ENS system utilizes the state Enhanced 911 services database to allow the Connecticut Department of Homeland Security and Connecticut State Police to provide targeted alerts to the public and local emergency response personnel alike during life-threatening emergencies. (AT&T 1, p. 11)

38. AT&T's proposed towers would be designed in accordance with the specifications of the American National Standards Institute EIA/TIA-222-G "Structural Standards for Steel Antenna Towers and Antenna Support Structures" and the 2003 International Building Code with 2005 Connecticut Amendment. (AT&T 1, Tab 3)
39. The proposed equipment compound would be enclosed by an eight-foot high chain link fence. (AT&T 1, p.13)
40. The tower setback radius would extend onto a separate State of Connecticut property, located 138 feet to the east. (AT&T 1, Tab 3)

Existing and Proposed Wireless Coverage – AT&T

41. AT&T's proposes to install 850 MHz (cellular), 1900 MHz (PCS), and 700 MHz (LTE) wireless services at the proposed site. (AT&T 1, Tab 1)
42. AT&T designs its system utilizing a signal level threshold of -82 dBm for in-vehicle coverage and -74 dBm for in-building coverage. (AT&T 2, Tab 1)
43. AT&T's existing signal strength in the proposed service area ranges from less than -100 dBm to -82 dBm. (AT&T 2, response 8)
44. AT&T has identified an in-building coverage gap of 1.6 square miles and an in-vehicle coverage gap of 0.4 square miles in the Route 15 area of Norwalk and New Canaan (refer to figure 2). (AT&T 1, Tab 1)
45. Approximately 3.8 miles of roadway experience deficient coverage, including the Merritt Parkway, Route 123 and secondary roads serving residential areas. (AT&T 1, Tab 1)
46. Adjacent AT&T sites include facilities at 135 Main Street, New Canaan; 671 South Avenue, New Canaan; Will Russ Court, New Canaan; 6 Shirley Street, Norwalk; 177 West Rock Road, Norwalk; and 479 Main Street, Norwalk. These sites cannot adequately serve the area (refer to Figure 2 & 3). (AT&T 1, Tab 1)
47. The proposed site would provide adequate coverage and additional capacity to the proposed service area (refer to Figure 3). Minor in-building coverage gaps would remain in the Douglas Drive and Styles Lane area south of the site and in the Cedar Lane area north of the site. Different AT&T search rings have been established for the larger coverage gaps east and west of the proposed site. (AT&T 1, Tab 1)

Existing and Proposed Wireless Coverage – Cellco

48. Cellco seeks to provide LTE and AWS wireless services from the proposed site. (Cellco 2, response 1)
49. Cellco designs its system utilizing a signal level threshold of -85 dBm for in-vehicle coverage and -75 dBm for in-building coverage. (Cellco 2, response 2)
50. Cellco's existing signal levels within the proposed service area range from -86 dBm to less than -100 dBm. (Cellco 2, response 1)

51. Cellco experiences LTE service coverage gaps generally occur north of the proposed site (refer to Figure 3). AWS service in all areas surrounding the proposed site. (Cellco 2, response 7)
52. The proposed site would provide Cellco with adequate coverage to the proposed service area with 12.5 square miles of LTE coverage and 6.1 square miles of AWS coverage (refer to Figure 4 for LTE coverage). (Cellco 2, response 1)

Site Selection

53. AT&T began its search for a site to serve its coverage needs in the Merritt Parkway – Route 123 area in 1999. (AT&T 5)
54. AT&T identified an existing water tank on Flower Lane in Norwalk as a suitable telecommunications site. Upon consultation with the City, the water tank site was abandoned due to public opposition and zoning regulations prohibiting such use. (AT&T 5)
55. Two other sites were investigated but rejected as follows:
 - a) Norwalk Transfer Station, 394 Main Street, New Canaan, - site did not meet coverage objectives, and;
 - b) 217 New Canaan Avenue, Norwalk – landlocked property along Merritt Parkway has no access.(AT&T 1, Tab 2)
56. In 2000, AT&T identified the state-owned National Guard Armory as a suitable alternative and began a leasing effort that extended into 2003. A lease was secured and the proposed site was reviewed through the National Environmental Policy Act (NEPA). (AT&T 5)
57. Providing coverage via a distributed antenna system (DAS), repeater, or microcell is not practical given the limited service area for each of these systems. These systems are employed for limited, targeted areas such as within buildings, highway underpasses or in urban environments. Although a DAS was approved by the Council in 2007 to provide coverage to the Merritt Parkway, the DAS was never constructed or proposed for use by AT&T. (AT&T 1, p. 11; Council Administrative Notice Item No. 26)

Facility Description

58. The proposed facility would be located on an 11.5-acre parcel developed as the Connecticut National Guard Armory at 284 New Canaan Avenue in Norwalk. The property consists of several buildings along the south side of the property and a parking lot, wetlands, and woodland on the north side of the property. (AT&T 1, p. 13, Tab 3)
59. The proposed facility would be located at the northerly edge of the parking lot, adjacent to a wooded area (refer to Figure 6). (AT&T 1, Tab 3)
60. The property is zoned residential. (AT&T 1, Tab 3)
61. Land use within a quarter-mile of the site consists of residential, a natural gas pipeline, a religious institution, the Merritt Parkway and an associated commuter parking lot. (AT&T 1, Tab 3)
62. There are 35 residences within 1,000 feet of the tower site. (AT&T 1, Tab 3)

63. The nearest residence to the tower site is approximately 454 feet to the west at 178 Pocconock Trail, New Canaan. (AT&T 1, Tab 3)
64. The nearest property line to the proposed site is approximately 138 feet to the east (State of Connecticut). (AT&T 1, Tab 3)
65. There are no schools or licensed day-care facilities within 250 feet of the proposed site. The nearest school is Silvermine Elementary located 1.2 miles northeast of the site. The nearest licensed daycare facility is located 1,330 feet south of the site. (AT&T 4, response 4)
66. The AT&T facility would consist of two, 140-foot monopoles approximately 60 feet apart. The monopoles are designed to conceal panel antennas behind a RF transparent shroud, giving the monopole a sleek appearance (refer to Figure 6). (AT&T 1, Tab 3)
67. Each monopole would be designed to accommodate panel antennas at five tower levels (at 137, 127, 117, 107, and 97 feet above ground level). Each monopole level has the capability of accommodating three panel antennas. (AT&T 1, Tab 3)
68. AT&T would install three panel antennas each at the 137-foot and 127-foot levels of the west monopole. AT&T would also utilize the 117-foot level for tower-mounted amplifiers, leaving two additional tower levels for future co-location (at 107 and 97 feet). If the site were designed as a traditional monopole with platform antennas, AT&T would require an antenna height of 127 feet above ground level. (AT&T 1, Tab 3; AT&T 4, response 12; Tr. 3, pp. 150-153)
69. Cellco proposes to install three panel antennas each at the 117-foot and 107-foot levels of the east monopole. Depending on the diameter of the monopole, Cellco may need the 97-foot level of the monopole to accommodate other equipment. The 137 and 127-foot levels of the tower would be available for another carrier. (Cellco 2, response ; Cellco 3, response 1)
70. The preliminary diameter of the monopoles measures 52 inches at the base and 48 inches at the top. This diameter would be able to accommodate AT&T's antennas and tower mounted amplifiers. (AT&T 1, Tab 3; Tr. 3, pp. 150-153)
71. Cellco requires a minimum tower diameter of 42 inches at the antenna mounting level for their antennas. A tower diameter of 47 inches would allow Cellco to fit their antennas and remote radio units (RRU) at the same tower level. An additional tower level (total of three) would be required to fit their cable distribution box on the tower. A tower diameter of 56 inches would allow Cellco to fit their antennas, RRUs and cable distribution box on one tower level, thus requiring only two tower levels rather than three. (Cellco 2, response 4; Tr. 1, pp. 15-16, 75-78; Cellco 3, response 1)
72. If the site were restricted to a diameter less than 47-inches so that Cellco could not install the RRU's, Cellco would still locate at the facility. Although the site would operate at a reduced performance level, it would still provide necessary coverage to the area. (Tr. 3, pp. 199-203)
73. The monopole configuration necessitates greater antenna height and hinders future technological upgrades and opportunities for co-location. (AT&T 4, response 11)
74. No local entities expressed interest in locating at the site. The top, flat surface of the monopole would be able to accommodate whip antennas. (Tr. 1, pp. 22, 41)
75. The site would include a 50-foot by 80-foot compound. AT&T and Cellco would install equipment shelters within the compound. (AT&T 1, Tab 3)

76. Utility service to the compound would be installed overhead from New Canaan Avenue using five new wood poles along the edge of the property parking lot driveway. The utility line would transition to underground approximately 100 feet from the compound. (Tr. 1, pp. 20-21)
77. Site construction is anticipated to take six weeks. Once completed, radio frequency testing and integration would take another two weeks. AT&T's estimated construction cost of the facility (without Cellco's equipment) is:
- | | |
|----------------------------------|-------------------|
| a. Radio equipment and antennas | \$250,000. |
| b. Site development/installation | 125,000. |
| c. Two towers/foundations | 180,000. |
| d. <u>Utilities</u> | <u>80,000.</u> |
| <u>Total estimated cost</u> | <u>\$635,000.</u> |
- (AT&T 1, pp. 22-23)

Backup Power

78. 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. In its review, the Panel found the following:
- "Wireless telecommunications service providers were not prepared to serve residential and business customers during a power outage. Certain companies had limited backup generator capacity;" and
 - "The failure of a large portion of Connecticut's telecommunications system during the two storms is a life safety issue."
(Council Administrative Notice Item No. 40)
79. The Panel made the following recommendations:
- "State regulatory bodies should review telecommunications services currently in place to verify that the vendors have sufficient generator and backhaul capacity to meet the emergency needs of consumers and businesses;" and
 - The Connecticut Siting Council should require continuity of service plans for any cellular tower to be erected. In addition, where possible, the Siting Council should issue clear and uniform standards for issues including, but not limited to, generators, battery backups, backhaul capacity, and response times for existing cellular towers."
(Council Administrative Notice Item No. 40)
80. In response to the findings and recommendations of the Panel, Public Act 12-148, An Act Enhancing Emergency Preparedness and Response, codified at C.G.S. §16-50II, required 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), to study 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. 22)

81. The Council's study included consideration of the following matters:
- Federal, state and local jurisdictional issues of such backup power requirements, including, but not limited to, siting issues;
 - Similar laws or initiatives in other states;
 - The technical and legal feasibility of such backup power requirements;
 - The environmental issues concerning such backup power; and
 - Any other issue concerning backup power that PURA deems relevant to such study.
(Council Administrative Notice Item No. 22)
82. The Council reached the following conclusions in the study:
- "Sharing a backup source is feasible for CMRS providers, within certain limits. Going forward, the Council will explore this option in applications for new tower facilities;" and
 - "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. 22)
83. For backup power, AT&T would utilize a 50 kW diesel generator located adjacent to its shelter. The typical run time of the generator before it requires refueling is 48 hours assuming full load. Cellco would install a diesel generator within its shelter that can run for 4 days before refueling, assuming normal operating conditions. A battery would also be installed to provide power between the time power is lost and the diesel generator can start. (AT&T 4, response 2; Cellco 2, response 9, Tr. 1, pp. 94-95)
84. The lease agreement between the Connecticut National Guard (Licensor) and the applicant (Licensee) contains an Emergency Generator Rider that grants Licensee the right to install a 50-kilowatt supplemental generator to provide emergency additional electrical capacity to the equipment during the license term. Licensee's right to install the generator is subject to the Licensor's approval. Licensor has the right to require a reasonably acceptable enclosure to hide or disguise the existence of the generator and to minimize any adverse effect that the installation of the generator may have on the appearance of the premises. Licensor also has the right to approve, in its reasonable discretion, work plans for improvements or alterations with respect to any generator. (AT&T 9)
85. According to the Regulations of Connecticut State Agencies (RCSA) §22a-69-1.8, noise created as a result of, or relating to, an emergency, such as an emergency backup generator, are exempt from the State Noise Control Regulations. (R.C.S.A. §22a-69-1.8)

Historic Resource Concerns

86. The proposed site is adjacent to the Merritt Parkway, designated as a National Scenic Byway and listed on the National Register of Historic Places. As part of the FCC mandated NEPA review, site plans were submitted to the SHPO for comment. On December 30, 2003, SHPO found the then proposed 150-foot monopole at the site would have an adverse visual effect on the Merritt Parkway. (AT&T 1, pp.15-16, AT&T 4, response 13; Correspondence from Attorney Christopher Fisher to Executive Director Melanie Bachman, dated January 27, 2014)
87. The SHPO's main concern was concealing antennas from view. A tower with flush-mounted external antennas was discussed during the consultation process, but was ultimately rejected by SHPO. (Tr. 1, pp. 17, 18, 82-83)

88. Based on SHPO's comments, AT&T redesigned the facility to consist of the two-monopole design. SHPO reviewed the project site in the field, including viewing a balloon float, and reviewed similar two monopole designs that were constructed elsewhere. The SHPO issued a no adverse effect letter for the proposed design on **April 7, 2010**. (AT&T 1, Tab 6; Tr. 1, pp. 17-18)
89. **The Merritt Parkway Conservancy did not comment on the proposal, although there was correspondence between the Merritt Parkway Conservancy and SHPO as part of the SHPO consultation. (Tr. 1, p.69)**
90. Any changes in the tower design, except for an increase in facility height of less than 20 percent, would have to go undergo additional review by SHPO. (Tr. 1, pp. 21-27; Council Administrative Notice No. 8)
91. **The SHPO did not comment on the diameter of the proposed towers in their March 27, 2014 correspondence. AT&T and SHPO did discuss a 48-inch top tower diameter at the March 20, 2014 meeting. AT&T believes an increase of the monopole diameter by several inches, perhaps up to 56 inches, would not trigger an additional review by SHPO as the antennas are still concealed within the pole. Once the final diameters of the monopoles are selected, AT&T would notify SHPO. (Tr. 3, pp. 163-166, 179-181)**

Environmental Considerations

92. A review of the DEEP Natural Diversity Database indicates there are no records of state or federal endangered, threatened, or species of special concern in the project area. (AT&T 10)
93. No trees would be removed to develop the site. A few trees would be trimmed at the edge of the woodland adjacent to the site. Any trees identified as sick or diseased along the woodland edge would be removed. (Tr. 1, p. 14)
94. The northeast corner of the proposed compound fence would be approximately 52 feet from the edge of the nearest wetland. This wetland is a forested swamp that encompasses the north and west portions of the Armory property. A significant portion of the wetland edge was disturbed by previous site activities. (AT&T 1, Tab 3, Tab 4)
95. The limit of construction, delineated by silt fencing, would be approximately 45 feet from the forested wetland. Temporary construction activities would occur within the City of Norwalk's 50-foot wetland buffer. **The City Conservation Commission and the Planning and Zoning Commission received copies of the application with site plans. No comments were received from the City in regards to wetlands.** (AT&T 1, Tab 3, Tab 7; Tr. 1, pp. 37-38)
96. **AT&T would examine the possibility of shifting the compound slightly west to comply with the City's 50-foot wetland setback provision. (Tr. 1, pp. 44-45)**
97. Erosion and sedimentation controls consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*, as amended, and other best management practices would be established and maintained during construction. (AT&T 1, Tab 3)
98. The proposed site is not located **within a FEMA** designated 100-year or 500-year flood zone. (AT&T 1, Tab 4; AT&T 4, response 14)

99. Aircraft hazard obstruction marking or lighting of the tower would not be required. (AT&T 1, Tab 4)
100. The nearest Important Bird Area, a National Audubon Society designation that recognizes unique habitats that stand out from the surrounding landscape and typically support vulnerable or special concern species, is approximately six miles southwest of the proposed site in Stamford. (AT&T 4, response 5)
101. The design of the proposed tower would comply with recommended guidelines of the United States Fish and Wildlife Service for minimizing the potential for telecommunications towers to impact 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. (AT&T 4, response 5)
102. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of the proposed AT&T and Cellco antennas is calculated to be 20.1% of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed facility. 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 would be pointed at the base of the facility 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 facility, thus resulting in significantly lower power density levels in areas around the base of the facility. (AT&T 1, Tab 4; Cellco 2, response 11)

Visibility

103. The proposed facility would be visible year-round above the tree canopy from approximately 7.6 acres within a two-mile radius of the proposed site (refer to Figure 8). Most of this visibility is from spot areas within a quarter-mile of the site. The tree canopy in the study area is estimated to be 65 feet in height. (AT&T 1, Tab 5)
104. Visibility of the proposed facility from specific locations within a two-mile radius of the site is as follows:

Specific Location	Photo location on Map*	Approx. Portion of Facility Visible	Approx. Distance (miles)/ Direction from Tower
Merritt Parkway south of Exit 38	1+	west tower visible 90 feet east tower not visible	0.25/south
New Canaan Way, adjacent to #7	2+	west tower visible 50 feet east tower visible 25 feet	0.3/southeast
New Canaan Avenue, adjacent to #275	3	west tower visible 40 feet east tower not visible	0.2/southeast
New Canaan Avenue, commuter lot across from host property	4	west tower visible 90 feet east tower visible 65 feet	0.17/south

New Canaan Avenue, at host property access drive	5+	west tower visible 130 feet east tower visible 75 feet	0.18/south
Carter Street, adjacent to #46	6+	west tower tip trough trees east tower not visible	0.17/southwest
Carter Street, natural gas ROW	7	west tower visible 25 feet east tower not visible	0.15/southwest
Route 123 at Old Norwalk Road	8	not visible	0.4/southwest
Old Pocconock Trail at Old Norwalk Road	9	not visible	0.1 northwest
Pocconock Trail, adjacent to #178	10	not visible	0.2/northwest
Klim Lane	11	not visible	0.16/north
Fullmar Lane, adjacent to #19	12	visible through trees	0.2/east
Merritt Parkway Interchange 38 northbound ramp	13	not visible	0.18/southeast

Map is attached as Figure 9.

+ Photosimulation of facility from this location attached after Figure 8.

105. Approximately four residences within two miles of the site would have year-round views of the facility: two on Carter Street, 0.1 mile west of the site and two on New Canaan Way, 0.3 miles south of the site. (AT&T 1, Tab 5; AT&T 4, response 15)
106. Approximately 23 residences within two miles of the site would have leaf-off views of the tower through the trees. All of these residences are within a half-mile of the site, including five residences that abut the site to the north and west. (AT&T 1, Tab 5, Tr. 1, pp. 57-58)
107. The tower would not be visible from any known hiking trails maintained by the DEEP or the Connecticut Forest and Parks Association. (AT&T 1, Tab 5; Council Administrative Notice 54)
108. The proposed west tower would be visible for approximately 300 feet from the northbound side of the Merritt Parkway in the area of Interchange 38. The views would not be in front of the viewer but rather off to the side. The east tower would be visible through the trees during leaf-off conditions. (AT&T 1, Tab 5; AT&T 4, response 16)
109. In their consideration of this project, SHPO required that the tower be painted to match adjacent materials. AT&T intends to paint the towers brown. Although AT&T would be willing to paint the monopoles to resemble brick chimneys to match the existing building on the site, AT&T would first consult with the SHPO to ensure this treatment is acceptable. (AT&T Administrative Notice Item No. 1; AT&T 1, Tab 5; Tr. 3, pp. 153-155)



Figure 1: Site Location at National Guard Armory, 284 New Canaan Avenue, Norwalk.
(AT&T 1, Tab 3)

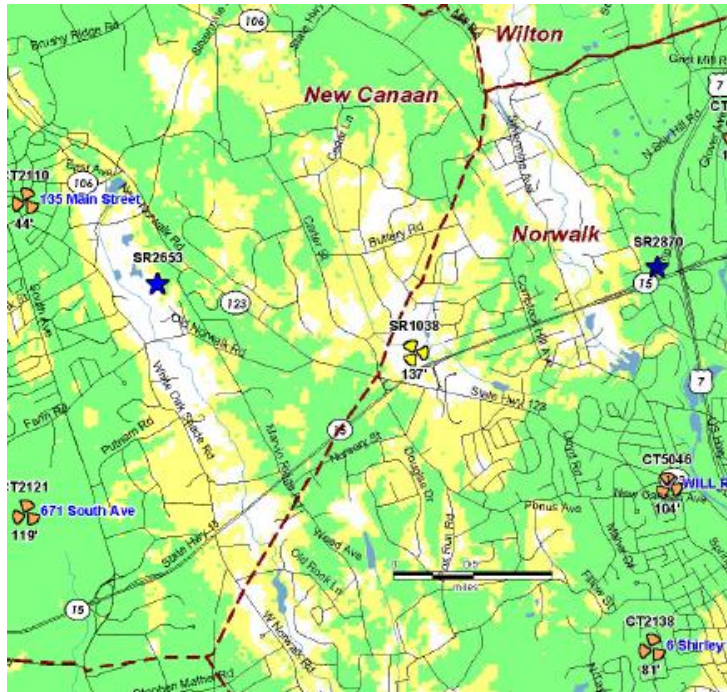


Figure 2: AT&T - Existing coverage (850 MHz). SR 1038 is proposed site location. SR2635 and SR2870 are active search rings to serve remaining gaps. (AT&T 1, Tab 1)

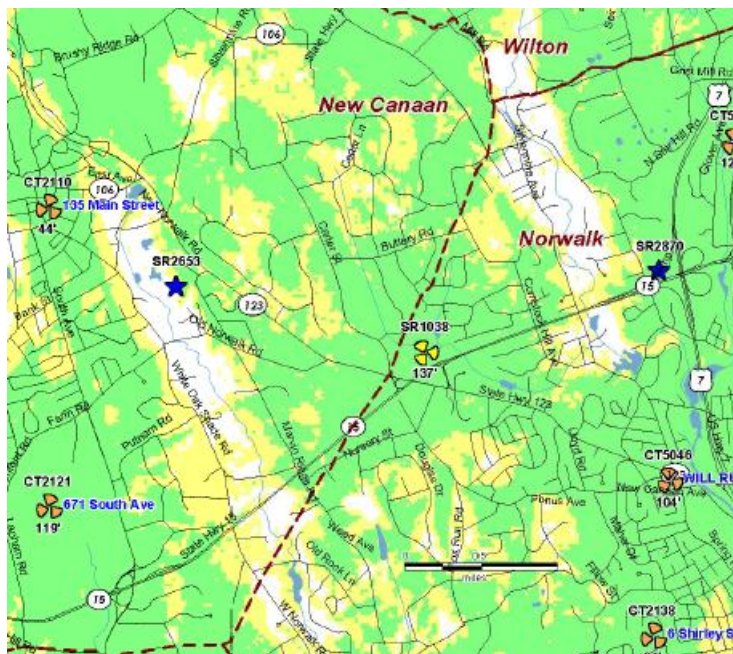
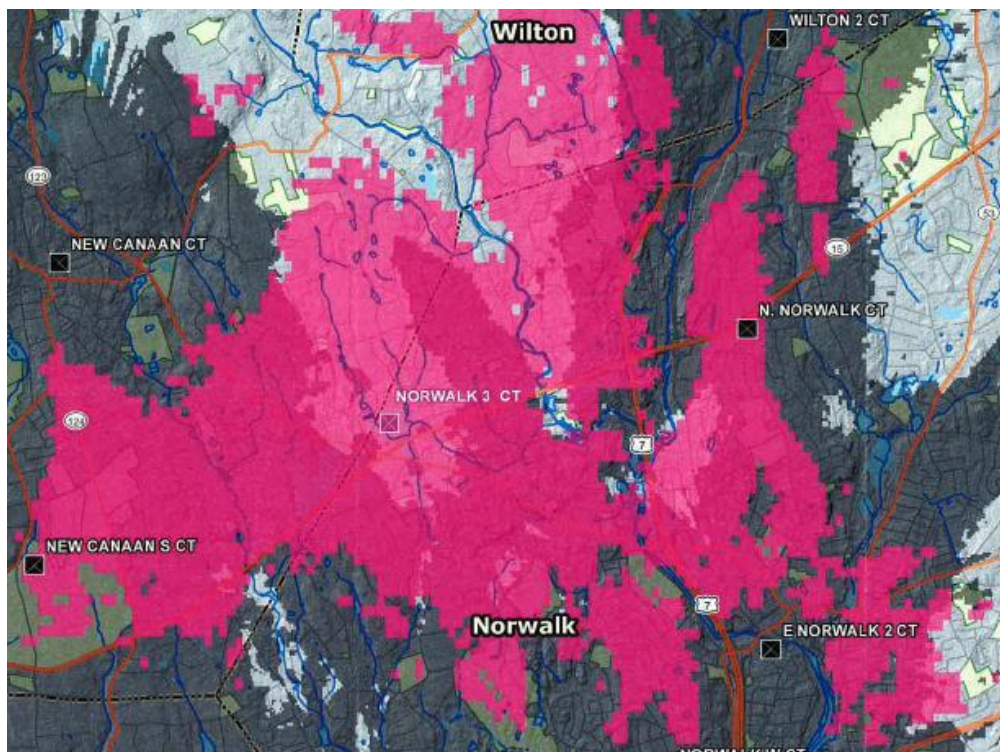
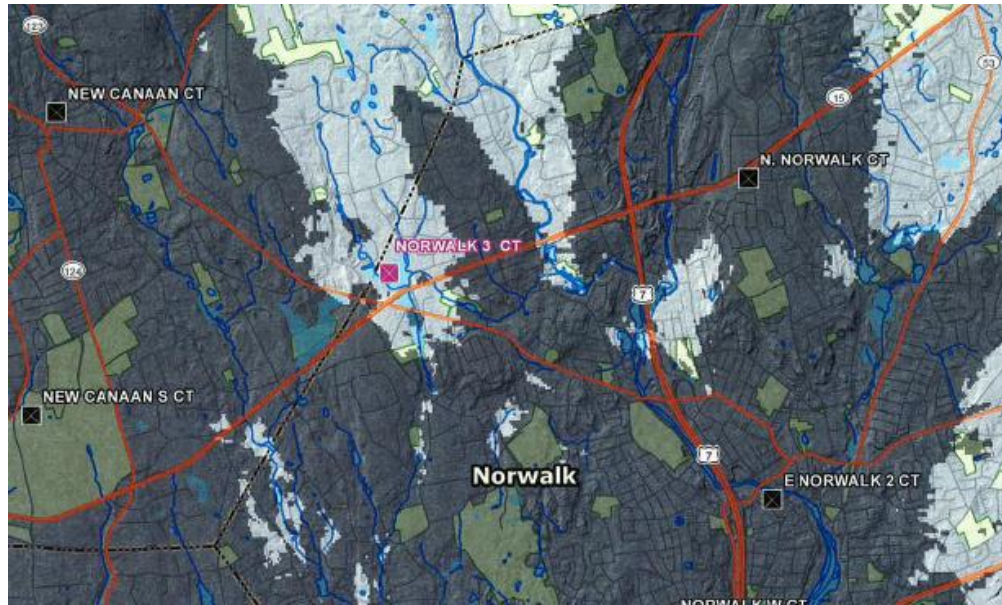


Figure 3: AT&T - Existing and proposed coverage (850 MHz). SR 1038 is proposed site location. SR2635 and SR2870 are active search rings to serve remaining gaps. (AT&T 1, Tab 1)



Legend





-  Proposed Norwalk 3 Facility
-  Surrounding Verizon Wireless Facilities
-  Verizon Wireless LTE Coverage from Proposed Norwalk 3 Facility
-  Verizon Wireless Existing LTE Coverage from Surrounding Facilities

Figure 4 & 5: Cellco - Existing and proposed 700 MHz coverage. (Cellco 2, Tab 3)

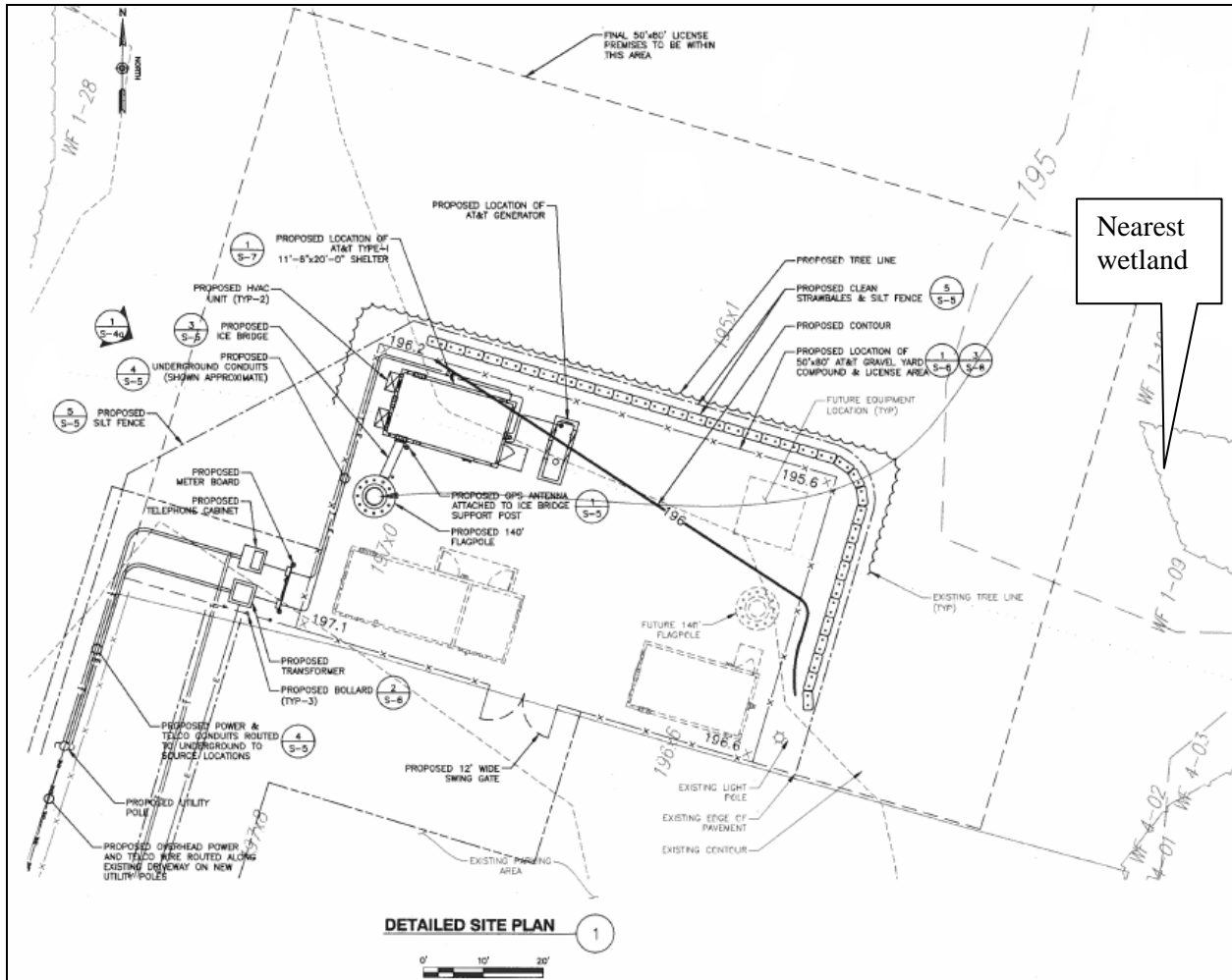


Figure 6: Proposed site plan. (AT&T 1, Tab 3)

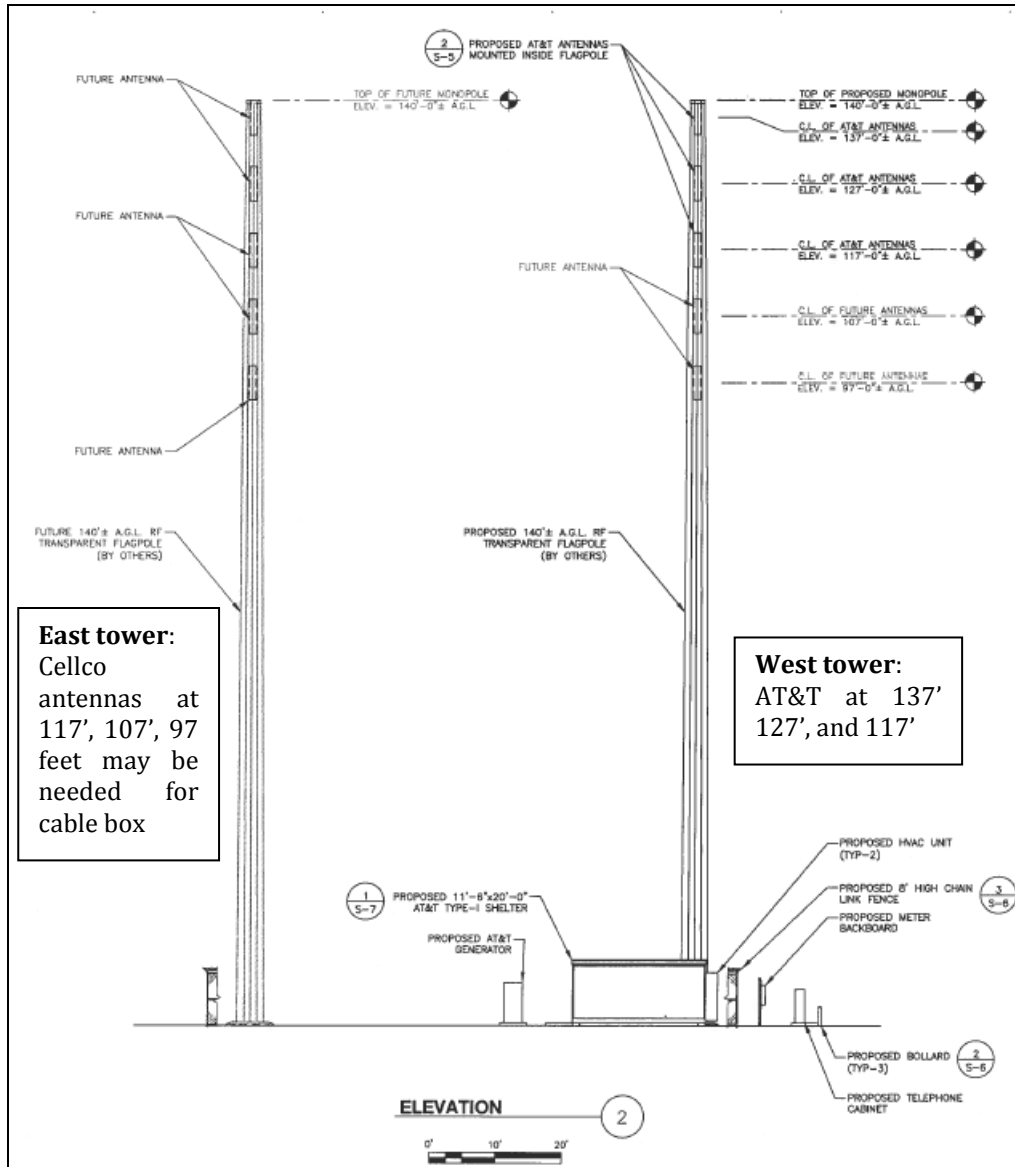
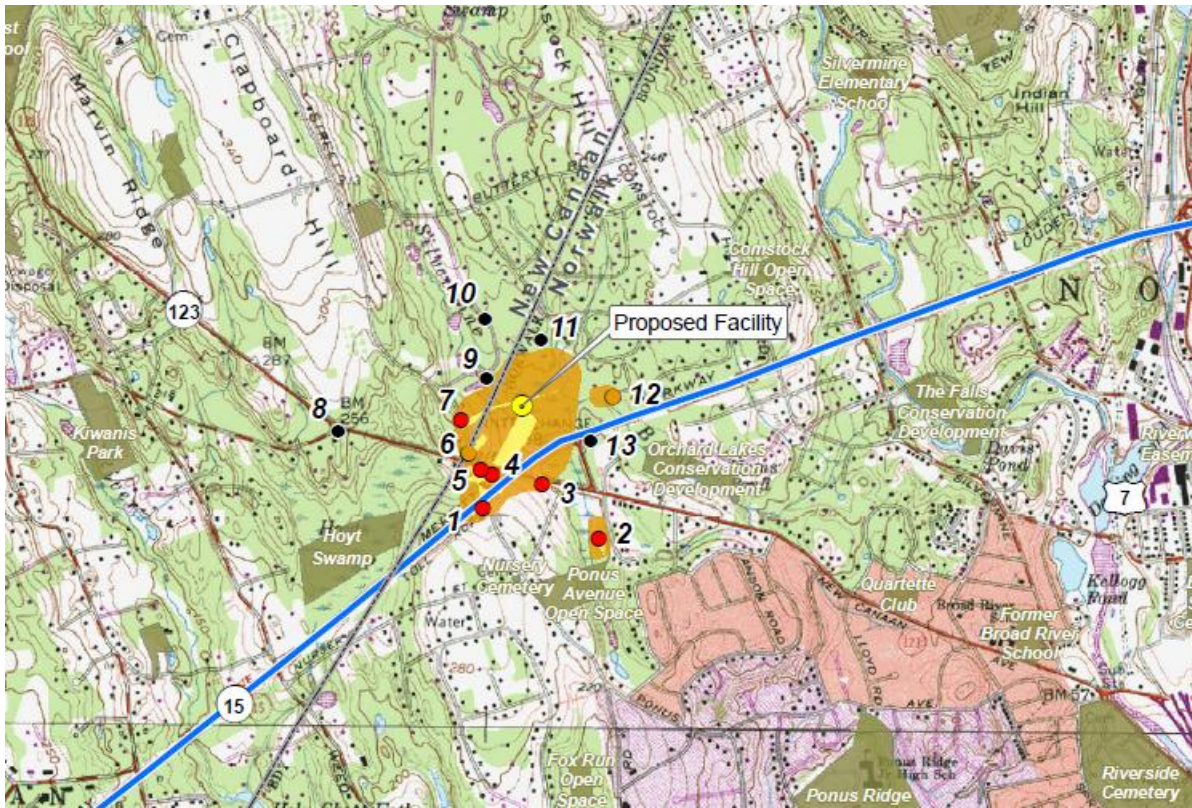


Figure 7: Proposed tower plan. (AT&T 1, Tab 3)



(no scale)

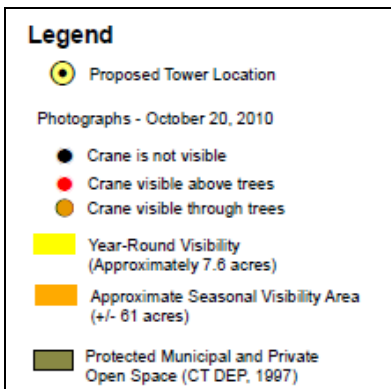


Figure 8: Projected visibility of the facility.
Photosimulations from map locations 1, 2, 5, 6 are attached.

(AT&T 1, Tab 5)



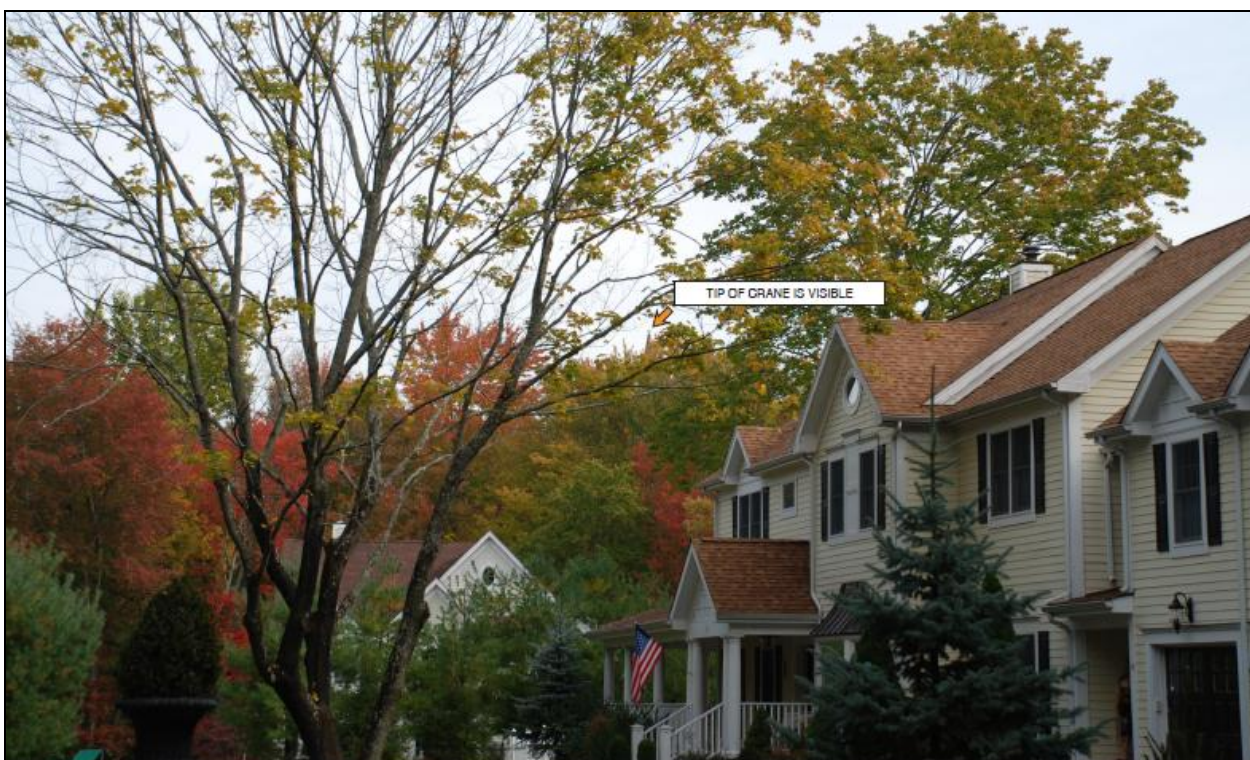
VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	NEW CANAAN AVENUE (ROUTE 123) ACROSS FROM EXISTING DRIVE TO HOST PROPERTY	NORTHEAST	0.18 MILE +/-	YEAR-ROUND



VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	ROUTE 15 (MERRITT PARKWAY) SOUTH OF INTERCHANGE 38 (potential future facility would not be visible from this location during "leaf-on" conditions)	NORTHEAST	0.25 MILE +/-	YEAR-ROUND



VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	ADJACENT TO #7 NEW CANAAN WAY	NORTHWEST	0.36 MILE +/-	YEAR-ROUND



VIEW	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
6	ADJACENT TO #46 CARTER STREET	NORTHEAST	0.17 MILE +/-	SEASONAL