

PETITION NO. 1101 - New Cingular Wireless PCS, LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required to install a stealth rooftop telecommunications tower on the roof of the existing building located at 79 Park Avenue, Danbury, Connecticut.	} } }	Connecticut Siting Council
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October 2, 2014

Findings of Fact

Introduction

1. On May 1, 2014, New Cingular Wireless PCS, LLC (AT&T), pursuant to § 16-50j-38 and 16-50j-39 of the Regulations of Connecticut State Agencies (RCSA), petitioned the Connecticut Siting Council (Council) for a declaratory ruling that no amended Certificate of Environmental Compatibility and Public Need (Certificate) is required pursuant to § 16-50k of the Connecticut General Statutes (CGS), for the installation of a stealth tower on the rooftop of an existing apartment building located at 79 Park Avenue in Danbury, Connecticut. (AT&T 1, pp. 1-2)
2. AT&T is licensed by the Federal Communications Commission (FCC) to provide wireless services within the Danbury area. (AT&T 1, p. 2)
3. AT&T is the party in this proceeding. (Transcript, August 19, 2014, 4:00 p.m. [Tr. 1], p. 4)
4. The purpose of the proposed facility would be to provide reliable wireless services along portions of Park Avenue, Lake Avenue, secondary and tertiary streets within the vicinity and the railroad in this area of Danbury. (AT&T 1, p. 4)
5. Pursuant to RCSA § 16-50j-40(a), AT&T sent notice of its intent to file a petition with the Council to all abutting property owners on April 28, 2014. (AT&T 1, p. 5)
6. The apartment building at 79 Park Avenue is in a condominium form of ownership. Unit owners who are residents of the building were notified of AT&T's proposed facility. The lease for AT&T's proposed facility was approved by the directors of the condominium association on March 28, 2014. (AT&T 2, A1; Exhibit 1 – Corporate Resolution of Summit Park West Condominium Association, Inc.)
7. Pursuant to RCSA § 16-50j-40(a), on April 28, 2014 AT&T sent notice of its intent to file a petition with the Council to municipal officials and government agencies as listed in CGS § 16-50e. (AT&T 1, p. 5)
8. Council member Robert Hannon and Council staff members Melanie Bachman and David Martin conducted a field review of AT&T's proposed project on June 10, 2014. The field review was attended by Paul Rotello, a member of the Danbury City Council who represents the area in which this property is located. (Petition 1101 Staff Report; Transcript, August 19, 2014, 6:30 p.m. [Tr. 2], pp. 59 ff.)

9. Subsequent to the field review, Danbury City Councilman Paul Rotello submitted a letter requesting that the Council hold a public hearing on this petition before making its decision. The Council also received a number of letters from nearby residents and a petition with 555 signatures opposed to AT&T's proposal. (Record)
10. At a meeting held on June 26, 2014, the Council voted to hold a public hearing on AT&T's petition. (Council Meeting Minutes, Meeting of June 26, 2014)
11. The Council published notice of its public hearing in the Danbury News-Times on July 15, 2014. (Tr. 2, p. 51)
12. AT&T posted a sign at the 79 Park Avenue property on August 1, 2014. The sign gave the date of the Council's scheduled public hearing and contact information for the Council. (AT&T 5, Attachment 2 – Affidavit of Eric Dahl)
13. Pursuant to provisions of Connecticut General Statutes § 16-50m and Section 16-50j-21 of the Regulations of Connecticut State Agencies, the Council, after giving due notice thereof, held a public hearing on August 19, 2014, with a public field review beginning at 3:00 p.m., an evidentiary hearing beginning at 4:00 p.m., and a session for public comments beginning at 6:30 p.m. in the Council Chambers of the Danbury City Hall, 155 Deer Hill Avenue in Danbury, Connecticut. (Tr. 1, p. 1 ff.)
14. At the evening session of the public hearing, set aside for comments from members of the public, two Danbury City Councilmen and three citizens spoke.
 - The City Councilmen expressed concerns about the compatibility of the proposed facility with the surrounding neighborhood, its proximity to the nearby school, the potential of noise from the generator, and the possibility that the diesel tank to hold the generator's fuel could experience a rupture that would spill diesel into the nearby Still River.
 - The three citizens expressed concerns over the potential health effects of the radiofrequency emissions from the facility, its proximity to the nearby school, and possible reductions to the value of nearby properties.
(Tr. 2, pp. 59 ff.)

State Agency Comment

15. Pursuant to C.G.S. § 16-50j (g), on July 11, 2014 and August 21, 2014, the Council solicited written comments regarding the proposed facility from the following State agencies: Department of Energy and Environmental Protection (CT 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); Department of Emergency Management and Public Protection (DESPP); Connecticut Airport Authority; and the State Historic Preservation Office. (Record)
16. DOT responded to the Council's solicitation with no comments. (DOT Letter dated August 5, 2014)
17. No other state agency responded to the Council's solicitation of comments. (Record)

Public Need for Service

18. 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)
19. 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. (Council Administrative Notice Item No. 4 - Telecommunications Act of 1996)
20. The Telecommunications Act of 1996 prohibits local and state bodies from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 4 - Telecommunications Act of 1996)
21. 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 - Telecommunications Act of 1996)
22. 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 - Barack Obama Presidential Proclamation 8460, Critical Infrastructure Protection)
23. Pursuant to the Middle Class Tax Relief and Job Creation Act of 2012, 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. The mounting of the proposed antenna on the tower would increase the existing height of the tower by more than 10% or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits if necessary to avoid interference with existing antennas; or
 - b. The mounting of the proposed antenna would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed four, or more than one new equipment shelter; or
 - c. The mounting of the proposed antenna would involve 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, except that the mounting of the proposed antenna may exceed the size limits if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable; or

- d. The mounting of the proposed antenna would involve excavation outside the current tower site, defined as the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site.

(Council Administrative Notice Item No. 8 - Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, §6409 Wireless Facilities Deployment [2012] and FEDERAL COMMUNICATIONS COMMISSION, Public Notice – Wireless Telecommunications Bureau Offers Guidance on Interpretation of Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, DA 12-2407, January 25, 2013)

24. 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

25. 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. 4)

Existing and Proposed Wireless Coverage

26. AT&T proposed facility would provide wireless services in the 700 MHz and 1900 MHz frequency bands. (AT&T 1, Attachment E)
27. The proposed facility would provide coverage along portions of Park Avenue, portions of Lake Avenue, as well as secondary and tertiary streets in the general vicinity. (AT&T 1, p. 4)

Site Search

28. In addition to the property on which the proposed facility would be located, AT&T investigated several other properties within the vicinity of 79 Park Avenue. The properties AT&T investigated were:
 - a) Village Square Condominiums: This is a condominium complex adjacent to Summit Park West (the apartment building at 79 Park Avenue). No structure within this complex would provide the height needed by AT&T.
 - b) Putnam Tower, 25 Beaver Street: This is a 100-foot apartment building. This location did not work from an RF perspective because it is too close to an AT&T telecommunications facility at nearby location.
 - c) Danbury Mill, 55 Oil Mill Road: There is a 55-foot smokestack at this site, but AT&T could not achieve its coverage objective from this location.

- d) 71 and 93 Lake Avenue: Both of these locations are commercial properties. AT&T explored erecting a new, 50-foot tower at either one of these locations. But the service from either location would not be as reliable as the service possible from the 79 Park Avenue building. (Tr. 1, pp. 14-15)
29. AT&T also analyzed a city-owned water tank located off of Tarrywile Lake Road as a potential site for its facility. However, RF analysis indicated that this site could not provide the coverage AT&T is seeking to achieve. (AT&T 2, A6)

Facility Description

30. The property at 79 Park Avenue is approximately 1.4 acres, on which there is a four-story residential apartment building and associated parking areas. (AT&T 1, p. 2; Attachment B – Sheet Z-4)
31. The 79 Park Avenue is located in a RMF-4 zoning district, which is a multi-family residential district. (AT&T 1, Attachment B, Sheet T-1)
32. The area surrounding the 79 Park Avenue property is characterized by multi-family and high density single family residential development with several commercial areas within two miles of the property. (AT&T 1, p. 2)
33. On the apartment building at 79 Park Avenue, AT&T would add an extension measuring approximately 10 feet by 13 feet by 14 feet high to the top of an existing stairwell enclosure toward the front of the building. The top of the enclosure extension would be 52.7 feet above grade level (agl). AT&T would mount 12 panel antennas inside the enclosure extension at a centerline height of approximately 47.5 feet agl. (AT&T 1, p. 2; Attachment B – Sheet Z-6)
34. The existing building has the structural capacity to support the proposed stealth extension of the stair tower, although some reinforcing would be required. (AT&T 2, Exhibit 2 – Structural Evaluation)
35. The proposed extension would be designed and painted to match the existing stairwell structure. (AT&T 1, p. 2)
36. The proposed stairwell extension could be further camouflaged with architectural detailing and fenestration to make it more visually integrated with the overall structure. (Tr. 1, p. 19)
37. The ground equipment for AT&T's facility would be located in a room in the basement of the apartment building. (AT&T 1, p. 2)
38. The location of AT&T's proposed antennas would be approximately 202 feet from the nearest portion of the property on which the Park Avenue elementary school is located. The nearest portion of the school building is approximately 305 feet from the proposed location of AT&T's antennas. (AT&T 5, Attachment 1 – Calculated Radio Frequency Emissions)
39. The 79 Park Avenue property is not located within a 100-year or 500-year flood plain. (Tr. 1, pp. 18-19)

Backup Power

40. 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. Two of the Panel's findings are as follows:
 - a. "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
 - b. "The failure of a large portion of Connecticut's telecommunications system during the two storms is a life safety issue."(Final Report of the Two Storm Panel, Council Administrative Notice Item No. 39)
41. The Panel made the following recommendations:
 - a. "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
 - b. 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, response times for existing cellular towers."(Final Report of the Two Storm Panel, Council Administrative Notice Item No. 39)
42. 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. §16-50ll, 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 Docket No. 432, Council Administrative Notice Item No. 23)
43. The Council's study included consideration of the following matters:
 - a. Federal, state and local jurisdictional issues of such backup power requirements, including, but not limited to, siting issues;
 - b. Similar laws or initiatives in other states;
 - c. The technical and legal feasibility of such backup power requirements;
 - d. The environmental issues concerning such backup power; and
 - e. Any other issue concerning backup power that PURA deems relevant to such study.(Council Docket No. 432, Council Administrative Notice Item No. 23)
44. The Council reached the following conclusions in the study:
 - a. "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
 - b. "The Council will continue to urge reassessment and implementation of new technologies to improve network operations overall, including improvements in backup power."(Council Docket No. 432, Council Administrative Notice Item No. 23)

45. 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, are exempt from the State Noise Control Regulations. (R.C.S.A. §22a-69-1.8)
46. For emergency backup power, AT&T would install a diesel generator on a four-foot by 10-foot concrete pad near the apartment building's garbage dumpster. (AT&T 1, p. 2)
47. AT&T's backup generator could run for three to four days before needing to be refueled. (AT&T 2, A4)
48. The generator pad would be enclosed by an eight-foot tall wood stockade fence. (AT&T 1, Attachment B, Sheet Z-7)
49. AT&T's generator would be located within a manufacturer's noise and weatherproof enclosure. To further reduce the possibility of creating a noise-related nuisance, AT&T could install additional noise baffling inside the enclosure or inside the fence around the enclosure. (Tr. 1, pp. 16-17)
50. The generator is designed with a double steel walled tank and a bladder to provide protection against fuel spills. (AT&T 2, A5)
51. AT&T could install bollards around the generator enclosure to protect it from vehicles. (Tr. 1, pp. 20-21)

Environmental Considerations

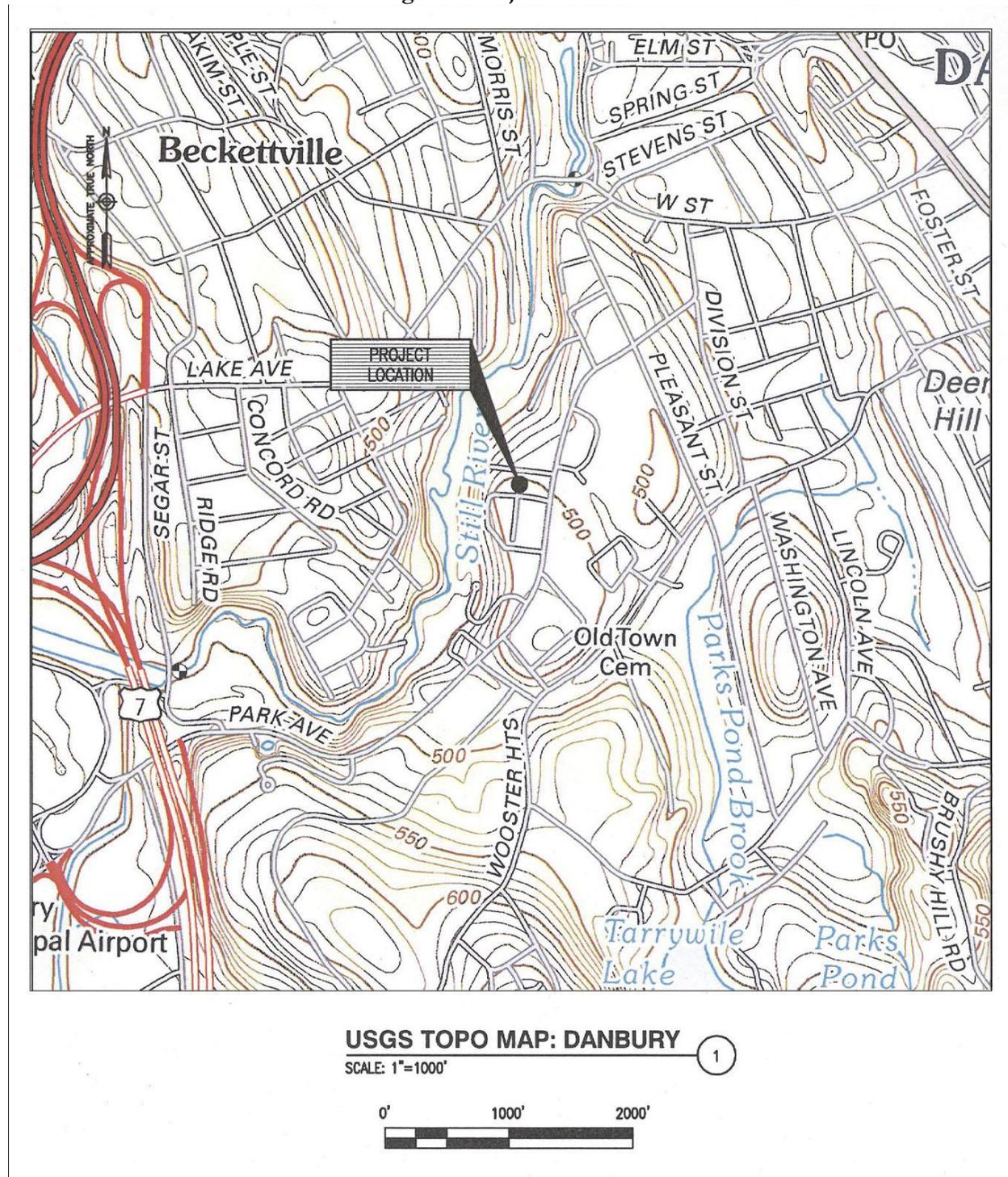
52. There are no known existing populations of federal or state endangered, threatened or special concern species that occur at the proposed site, based on a review of the Connecticut Department of Environmental Protection Natural Diversity Database. (Council Administrative Notice Item No. 53 - State of Connecticut Department of Energy and Environmental Protection, *Natural Diversity Database Map for the City of Danbury*)
53. The Still River is located approximately 600 feet to the west of the rear of the apartment building at 79 Park Avenue. (AT&T 1, Attachment B, Sheet Z-3)
54. No trees would be removed to install AT&T's rooftop facility. (AT&T 1, Attachment B – Sheet Z-4, Note 14)
55. At ground level of the apartment building nearest to the proposed stairwell extension, the cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T's proposed antennas, calculated for a height of six feet above ground level, would be 35.34% of the standard for the General Public/Uncontrolled Maximum Permissible Exposure, as adopted by the FCC. 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 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. (AT&T 1, Attachment C)

56. At the penthouse apartments of the apartment building, the cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T's proposed antennas, calculated for a height of six feet above the level of the apartment building's rooftop, would be less than 10% of the standard for the General Public/Uncontrolled Maximum Permissible Exposure, as adopted by the FCC. This calculation was based on methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) (AT&T 3 – Supplemental Submission received June 20, 2014, Attachment C: Rooftop Radio Frequency Exposure Report)
57. On the grounds of the Park Avenue School, the highest worst-case maximum power density from the radio frequency emissions from the operation of AT&T's proposed antennas, calculated for a height of six feet above ground level, would be 6.60% of the standard for the General Public/Uncontrolled Maximum Permissible Exposure, as adopted by the FCC. This calculation was based on methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997). (AT&T 5 – Second Supplemental Submission dated August 12, 2014, Supplemental RF Emissions Report)
58. In order to confirm that the operations of its antennas would not exceed FCC limits, AT&T would be willing to take actual field measurements of radio frequency levels at the locations modeled should the proposed facility be approved and brought into operations. (Tr. 1, p. 38)
59. The Telecommunications Act of 1996, which is administered by the Federal Communications Commission, prohibits the Council from considering the health effects of radio frequency emissions on human health and wildlife to the extent the emissions from towers are within the federal acceptable safe limits standard, which standard is also followed by the Connecticut Department of Public Health. (Tr. 2, p. 50)

Visibility

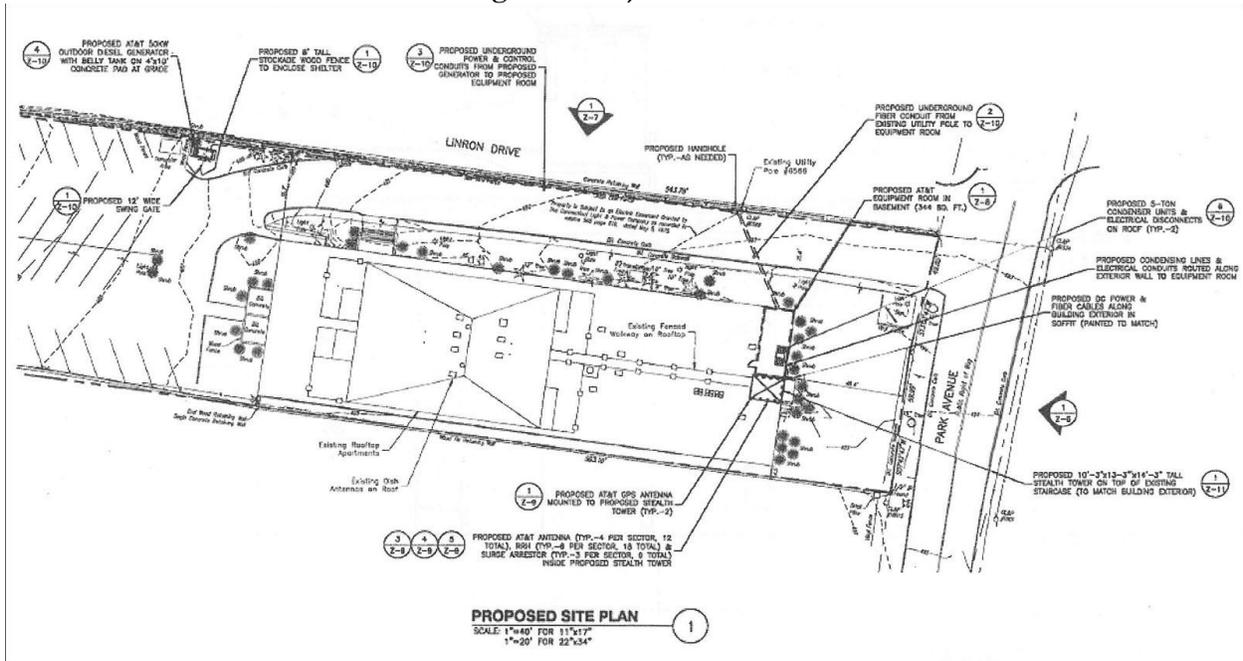
60. The stealth tower would not materially change the overall character of existing views of the building or create a visual impact on the surrounding area. (AT&T 1, p. 4)
61. The stealth tower be visible from portions of Park Avenue. (AT&T 1, Attachment D)
62. The stealth tower would not be visible from the driveway of the Village Square multi-family to the south of 79 Park Avenue. (AT&T 1, Attachment D)

Figure 1: Project Location



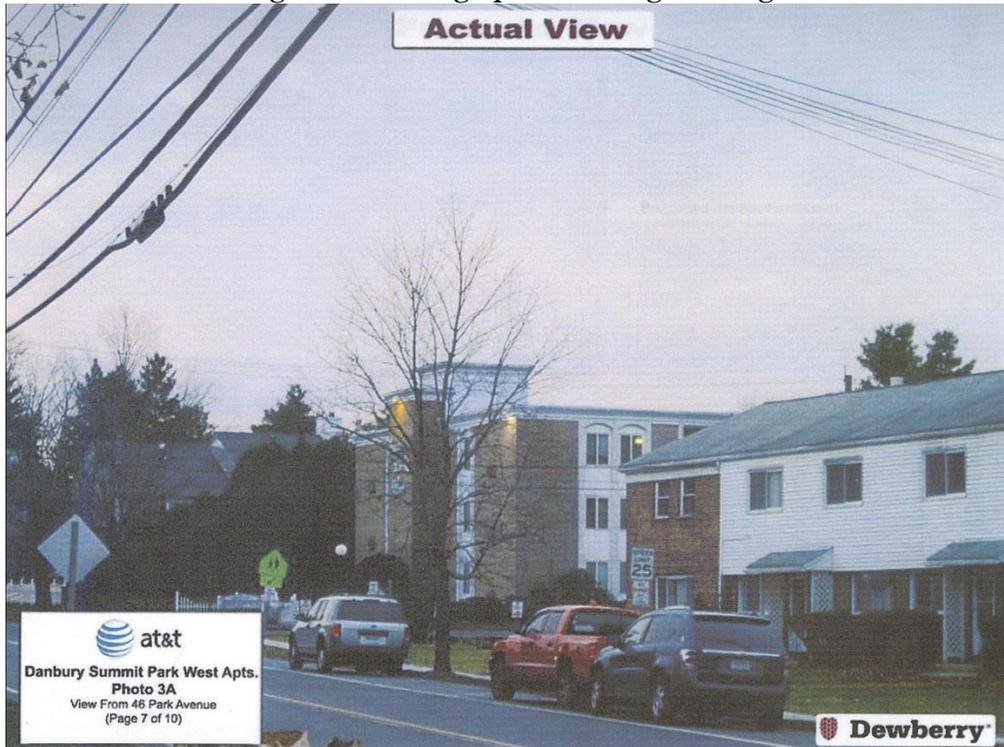
(AT&T 1, Attachment A)

Figure 2: Project Site Plan



(AT&T 1, Attachment B, Sheet Z-5)

Figure 3A: Photograph of existing building



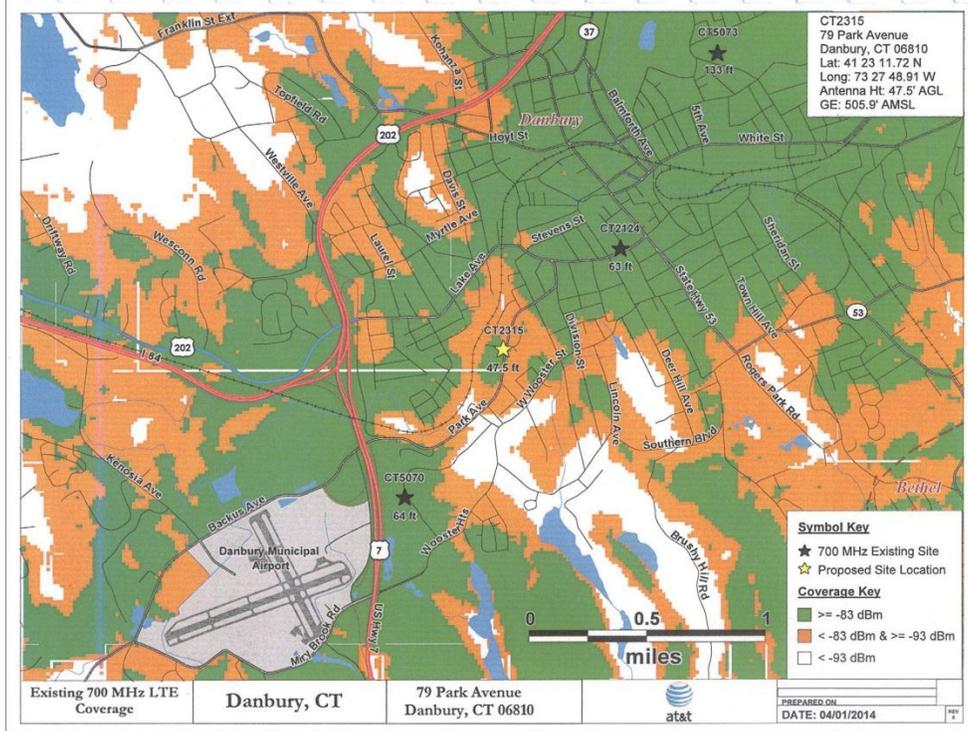
(AT&T 1, Attachment D)

Figure 3B: Photosimulation of stealth tower extension



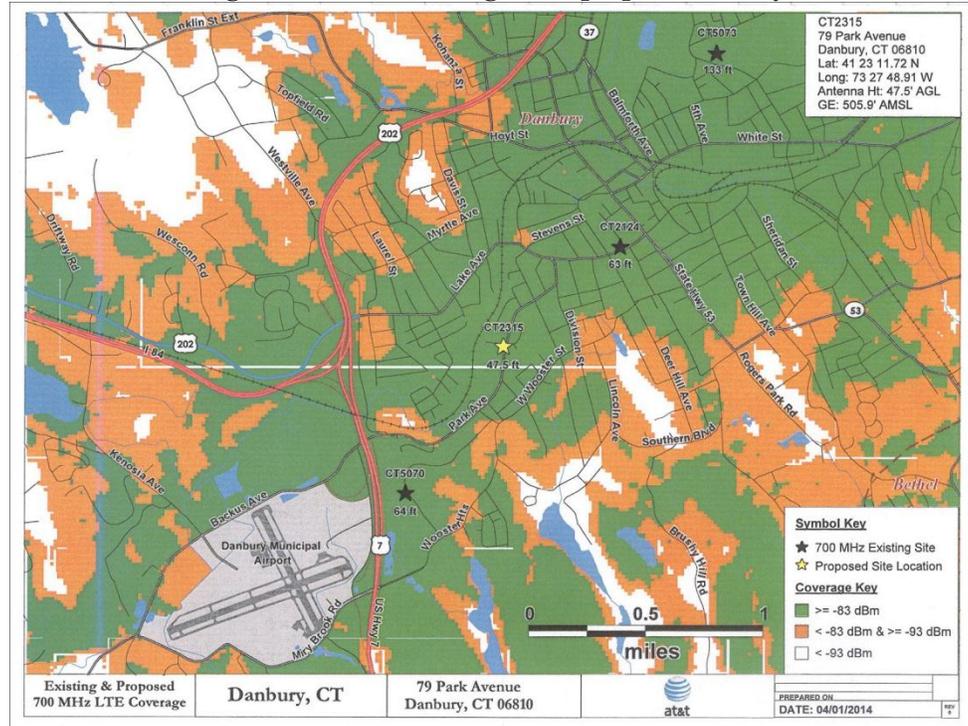
(AT&T 1, Attachment D)

Figure 4A: Existing LTE coverage



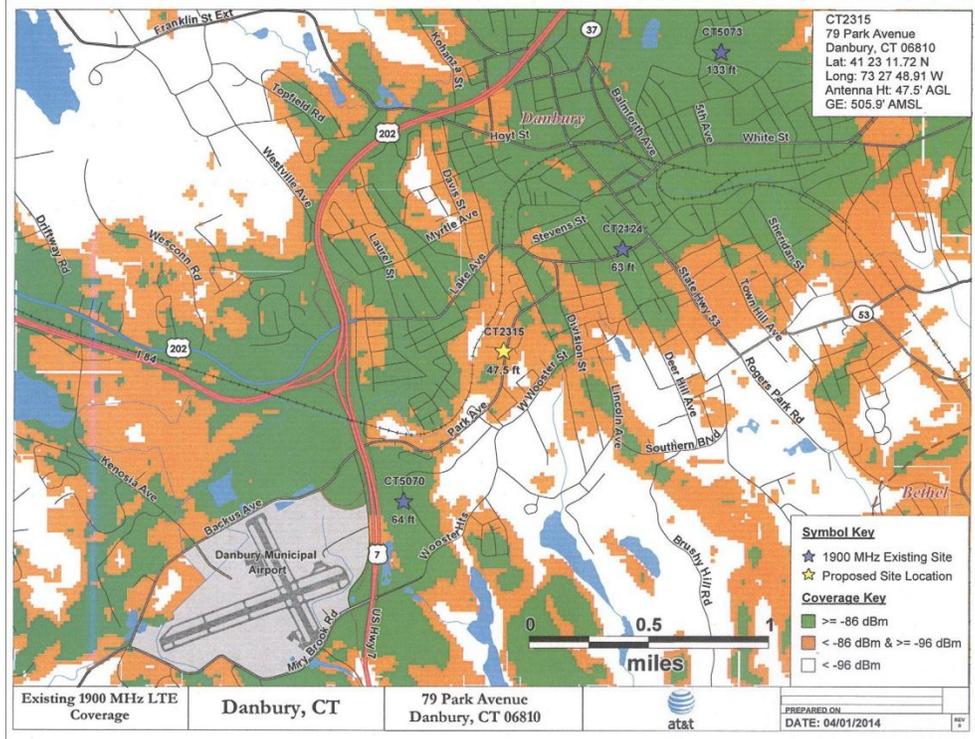
(AT&T 1, Attachment E)

Figure 4B: LTE coverage with proposed facility



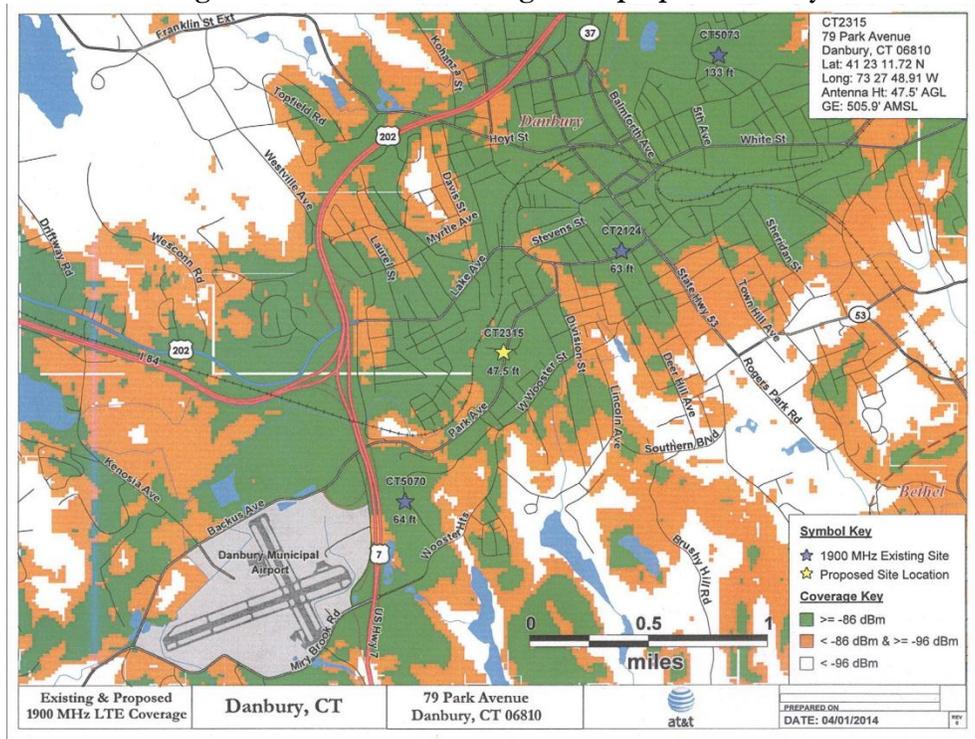
(AT&T 1, Attachment E)

Figure 5A: Existing 1900 MHz coverage



(AT&T 1, Attachment E)

Figure 5B: 1900 MHz coverage with proposed facility



(AT&T 1, Attachment E)