

DOCKET NO. 395 (A & B) – Application of New Cingular }
Wireless PCS, LLC (AT&T) for a Certificate of Environmental }
Compatibility and Public Need for the construction, maintenance }
and management of two telecommunications facilities located off }
Haywardville Road (Devil's Hopyard North) }
and
Ed Williams Road (Devil's Hopyard South)
East Haddam, Connecticut

Connecticut
Siting
Council

May 10, 2010

AT&T Proposed Findings of Fact

Introduction

1. New Cingular Wireless PCS, LLC ("AT&T"), in accordance with the provisions of Connecticut General Statutes (CGS) §§ 16-50g through 16-50aa, applied to the Connecticut Siting Council ("Council") on November 25, 2009 for the construction, maintenance, and management of two wireless telecommunications facilities located on Haywardville Road and Rd Williams Road, East Haddam, Connecticut. (Transcript 1 - 3/4/10, 3:30 p.m. [Tr.1], p.4; AT&T Application [App.], p. 1, 3).
2. AT&T is a Delaware limited liability company with an office at 500 Enterprise Drive, Rocky Hill, Connecticut 06067. AT&T's member corporation is licensed by the Federal Communications Commission ("FCC") to construct and operate a personal wireless services system, which has been interpreted as a "cellular system", within the meaning of CGS Section 16-50i(a)(6). (AT&T App., p. 4).
3. The purposes of the proposed facilities are to provide wireless service to an existing coverage gap in eastern East Haddam in the greater vicinity of Devil's Hopyard State Park. (AT&T App., p. 2).
4. Due to the fact that the network coverage from the towers sites is interrelated; that the tower sites implicate the same environmental resources and both are located within the same Town, AT&T presented both Facilities as one project. For consistency and clarity, the proposed sites are identified as "Devil's Hopyard North" for the Haywardville Road site and "Devil's Hopyard South" for the Ed Williams Road site. (AT&T App., p.2).
4. Notice of the application was sent to all abutting property owners of the Devil's Hopyard North site and the Devil's Hopyard South site by certified mail on November 17, 2009. (AT&T App., Tab 8).
5. Certificates of service were received from all but one of the abutting property owners. After re-verification of the proper address, notice to the Nature Conservancy was resent on December 7, 2009. (AT&T Pre-Hearing Interrogatory Responses, Set I, A1).
6. Public notice of the application was published in the Hartford Courant on November 19 and November 20, 2009. (AT&T Post Hearing Interrogatory Responses).
7. AT&T installed a four-foot by six-foot sign at the entrance to the property on February 19, 2010. The sign presented information regarding the project and public hearing. (Transcript 1 - 3/4/10, 3:30 p.m. [Tr.1], p.15).
8. Pursuant to CGS § 16-50l(b), AT&T provided notice to all federal, state and local officials and agencies listed therein. (AT&T App., Tab 7).

9. Pursuant to CGS § 16-50m, the Council held a public hearing on March 4, 2010, beginning at 3:30 p.m. and continuing at 7:00 p.m. at the Grange Hall, 488 Town Street, East Haddam, Connecticut. (Tr. 1, p. 3; Transcript 2 – 03/4/10, 7:00 p.m. [Tr. 2], p. 3).
10. The Council and its staff conducted an inspection of the proposed sites on March 4, 2010, beginning at 2:00 p.m. The applicant flew a three-foot diameter balloon at each site to simulate the height of each of the proposed towers. (Tr. 1, p. 25). The balloon at the Devil's Hopyard North site was flown at its intended height of 180 feet above ground level ("AGL") from 7:30 a.m. to 5:00 p.m. The balloon at the Devil's Hopyard South site was raised at 7:30 a.m. to its intended height of 160' AGL and burst at approximately 10:00 a.m. The balloon at the Devil's Hopyard South site was replaced at 1:30 p.m. and was flown until 5:00 p.m. (Tr. 1, p. 25-26).

Municipal Consultation

11. In the fall of 2008, after initial site search efforts, AT&T met with Town officials to discuss AT&T's coverage requirements and proposed sites and to receive input from the Town. (AT&T App., p.9).
12. A representative of the Eightmile River Wild and Scenic Coordinating Committee attended these initial meetings. (AT&T App., p.9).
13. During these initial meetings, several resources of importance were identified including Devil's Hopyard State Park and the Millington Green Historic District. (AT&T App., p.9).
14. Subsequent to these initial meetings, AT&T continued its search for sites in a specific effort to proposed tower facilities with limited or no impacts on the resources of importance while at the same time meeting the coverage requirements. (AT&T App., p.9).
15. In compliance with Section 16-50f of the Connecticut General Statutes, on May 11, 2009, AT&T submitted two technical reports, one for the Devil's Hopyard North site and one for the Devil's Hopyard South site, to Mark B. Walter, the First Selectman of the Town of East Haddam. (AT&T App., p.9, Tab 5; AT&T Bulk Filing).
16. The technical report for the Devil's Hopyard North site included two alternative sites: an approximately 23 acre parcel on Hopyard Road owned by Edward Hotyckey and an approximately 102 acre parcel on Haywardville Road owned by the East Haddam Fish & Game Club. (AT&T App. p. 9; AT&T Bulk Filing, Technical Report).
17. The technical report for the Devil's Hopyard South site included one candidate: an approximately 32 acre parcel located at 17 Jones Road owned by the Bochain Family Trust. (AT&T App. p. 9, AT&T Bulk Filing, Technical Report).
18. At the request of the Planning & Zoning Commission, on June 13, 2009, AT&T conducted noticed balloon floats at each of the proposed tower sites. The balloons were flown between 8 am and 12 p.m. (AT&T App., Tab 5).
19. AT&T representatives appeared before the East Haddam Planning and Zoning Commission at a duly noticed information session on June 23, 2009 to discuss the details of the sites presented in the two Technical Reports. (AT&T App., p. 10, Tab 5).
20. As a result of the municipal consultation, the Town of East Haddam, in conjunction with the Eightmile River Watershed Committee and other local representatives, indicated no objection to the

- proposed East Haddam Fish & Game Club site, one of the proposed candidates for Devil's Hopyard North. (AT&T App. p. 10, Tab 5).
21. Town of East Haddam, the Eightmile River Watershed Committee and other local representatives did object to the other two candidates proposed - the Hotyckey property and the Bochain Family Trust property, concluding that these two tower sites would have significant environmental impacts to Devil's Hopyard State Park due to visibility at the park entrance in the case of Hotyckey property candidate and visibility along a trail and from a documented scenic view from the State Park in the case of the Bochain Family Trust candidate. (AT&T App., p. 10, Tab 5).
 22. The Town of East Haddam proposed an alternative location for the Devil's Hopyard South proposed site. (AT&T App., p.10, Tab 5).
 23. Upon investigation of the Town of East Haddam's suggested alternative, AT&T determined that a tower facility at this suggested alternative would provide adequate coverage to the area intended to be served by a Devil's Hopyard South facility and that the property owner, Andrew Tarpill, was willing to host a facility. (AT&T App., p. 11, Tab 5).
 24. AT&T developed plans for a facility at the Tarpill property, shared the plans with the Town of East Haddam officials and incorporated the Town recommended site into its Application as the proposed Devil's Hopyard South Facility. (AT&T App., p. 11, Tab 5).
 25. In a letter dated February 3, 2010, the Town of East Haddam Land Use Administrator, James Ventres, confirmed that the Town's had no objection to the Devil's Hopyard North site at the East Haddam Fish & Game Club and Devil's Hopyard South site at the Andrew Tarpill location. (East Haddam Planning and Zoning Commission Comments, February 3, 2010).
 26. The Eight Mile River Watershed Committee acknowledges AT&T's efforts in addressing their concerns in the site selection. (Tr. 1, p. 16).
 27. AT&T has offered lease-free space to the Town to install emergency communications antennas on the proposed tower facility. (AT&T Pre-Hearing Interrogatory Responses, A6; Tr. 1, p.18).

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. 7; AT&T App., p. 6; Tr. 1, p. 5).
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 FCC to provide wireless service to Middlesex County. (Council Administrative Notice Item No. 7; AT&T App., p. 6).
30. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 7; Tr. 1, p.6; Tr. 2, p. 6).

31. The Telecommunications Act of 1996, a Federal law passed by the United States Congress, prohibits any state or local entity 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. 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. 7; Tr. 1, p. 5-6; Tr. 2, p. 6).
32. In an effort to ensure the benefits of wireless technologies to all Americans, Congress enacted the Wireless Communications and Public Safety Act of 1999. The purpose of this legislation was to promote public safety through the deployment of a seamless, nationwide emergency communications infrastructure that includes wireless communications services. (Council Administrative Notice Item No. 7; AT&T App., p. 7-8).
33. As an outgrowth of the 911 Act, the Federal Communications Commission has mandated that wireless carriers provide enhanced 911 services (E911) as part of their communications networks. (AT&T App., p. 7-8).
34. The site will provide enhanced 911 services to the proposed service area. (AT&T App., p. 7-8).
35. The proposed facility would be an integral component of AT&T's wireless network in Middlesex County. (AT&T App., p. 1, 6). Presently, AT&T has gaps in coverage in eastern East Haddam in and around Devil's Hopyard State Park. One gap in coverage exists in the area of the intersection of Hopyard Road, Haywardville Road/Millington Road and other roads and areas in this vicinity north of Devil's Hopyard State Park. Another gap in coverage exists in the area of Hopyard Road, Mitchell Road, Jones Hill Road, Ed Williams Road and other roads and areas in the vicinity south of Devil's Hopyard State Park. (AT&T App., p. 6).

AT&T - Existing and Proposed Wireless Coverage

22. AT&T's operating frequencies in this part of the state include the 850 MHz (cellular) band, specifically 880-894 MHz, and the 1900 MHz (PCS) band. (AT&T Pre-Hearing Interrogatory Responses, Set I, A7; Pre-Filed Testimony of John Blevins, A4).
23. AT&T designs and operates at the following signal level thresholds: in-vehicle service is -82 dBm and in-building service is -74 dBm. (AT&T Pre-Hearing Interrogatory Responses, Set I, A8).
24. AT&T currently has gaps in coverage in eastern East Haddam in and around Devil's Hopyard State Park. One gap in coverage exists in the area of the intersection of Hopyard Road, Haywardville Road (Route 434)/Millington Road and other roads and areas in this vicinity north of Devil's Hopyard State Park. Another gap in coverage exists in the area of Hopyard Road, Mitchell Road, Jones Hill Road, Ed Williams Road and other roads and areas in the vicinity south of Devil's Hopyard State Park. Signal levels in these two areas range between -82 dBm and -105 dBm. (AT&T App., p.6, Tab 1; Pre-Filed Testimony of John Blevins, A7; AT&T Pre-Hearing Interrogatory Responses, Set I, A10).
25. The minimum height at which AT&T could achieve its coverage objectives from the proposed Devil's Hopyard North facility is 170 feet AGL. The minimum height at which AT&T could achieve its coverage objectives from the proposed Devil's Hopyard South facility is 160 feet AGL. (AT&T Pre-Hearing Interrogatory Responses, Set I, A17; Tr. 1, p. 35).

26. For the Devil's Hopyard North Facility, installing antennas at a lower height, results in less than reliable service along Salem Road to the east and along Route 434 to the west of the Facility. (Tr. 1, p.20, 21).
27. Coverage strength lower than -82 dBm is considered inadequate for reliable in-car service. (AT&T Pre-Hearing Interrogatory Responses, Set I, A14).
28. The proposed Facilities would provide approximately 4.8 miles of coverage along Route 434 and approximately 1.8 miles of coverage along Haywardville/Millington Road. (AT&T Pre-Hearing Interrogatory Responses, Set I, A15).
29. At -82 dBm, the total area covered by the Devil's Hopyard North site will be 7.3 square miles and from the Hopyard South Site, the area covered would be 5.0 square miles. Combine, the two proposed facilities will cover approximately 12.3 square miles. (AT&T Pre-Hearing Interrogatory Responses, Set I, A12).
30. From the proposed facility, AT&T's antennas would hand off signals to adjacent sites located at 160 Witch Meadow Road, Salem, CT (Site 2195); 126 Parker Road, East Haddam, CT (Site 2053); East Haddam Road, Salem, CT (Site 2234) and 135 Honey Hill Road, East Haddam, CT (Site 5540). (AT&T App., Tab 1; AT&T Pre-Hearing Interrogatory Responses, Set I, A16).
31. The overall dropped calls rate in the area is 2%. (Tr. 2, p.44).

Site Selection

32. AT&T began its investigation of the area with benchmark data on a gap in its wireless coverage in eastern East Haddam. In 2008, AT&T established a "site search areas" in the general geographical locations where the installation of a wireless facilities would address the identified coverage need problem while still allowing for orderly integration of a sites into AT&T's network, based on the engineering criteria of hand-off, frequency reuse and interference. (AT&T App., p. 8).
33. Due to the proximity of Devil's Hopyard State Park to AT&T's coverage gap, AT&T generated two search areas, one each to the north and south of the park. (AT&T App., Tab 2).
34. In this area of East Haddam, there are no communications towers to service AT&T's gap in coverage, including a tower approved in Docket 198. (AT&T App., p. 9, Tab 1).
35. The search in each search area included identification of potential structures that could be used for telecommunications purposes and the examination of area properties to identify potential telecommunications sites. (AT&T App., p.9, Tab 2).
36. AT&T's search included investigation of sites suggested as a result of the municipal consultation process with the Town of East Haddam. (AT&T App., p. 10, 11, 12; Tab 3).
37. After determining there were no viable structures within the search areas, AT&T investigated a total of ten (10) potential sites/areas in and near the Devil's Hopyard North and Devil's Hopyard South search areas. (AT&T App., Tab 2). Properties that were investigated, with the reasons for their unsuitability, include:

Devil's Hopyard North

- a. Hotyckey: Hopyard Road: This property was considered a back-up candidate site by AT&T. Town of East Haddam officials and other interested parties raised concerns regarding potential visual impacts and proximity to Devil's Hopyard State Park which AT&T recognized and accordingly did not apply for this as an alternate site.
- b. Town of East Haddam: Early Road: The Town of East Haddam officials felt that a facility at this property would be too visible.
- c. DRA, LLC: #428 Hopyard Road: The owner of this property did not respond to AT&T's request and much of the land is impacted by wetlands.

Devil's Hopyard South

- d. Bochain: #17 Jones Hill Road: This property was an original candidate site. The owner's residence is located on the adjoining 7-acre lot (23 Jones Hill Road). Consultation with Town of East Haddam officials and other local/interested parties voiced serious concerns regarding potential visual impacts and proximity to Devil's Hopyard State Park. In particular, views of test balloons floated at the property from the Devil's Hopyard scenic overlook were a prime concern.
- e. Kashanski: # 22 Dolbia Hill Road: The owner of this property is not interested in leasing space for a facility.
- f. Hunt: #121 Hopyard Road: This site was rejected for Radio Frequency engineering criteria.
- g. Veronica: # 50 Mitchell Road: The owner of this property is not interested in leasing space for a facility.
- h. Hand: George Babcock Road: This site was rejected for Radio Frequency engineering criteria.
- i. DEP: # 100 Mitchell Road: Restricted use/conserved land.
- j. Golet: #81 Haywardville Road: This site was rejected for Radio Frequency engineering criteria and access is impacted by wetlands.

(AT&T App., Tab 2).

38. Repeaters, microcell transmitters, distributed antenna systems and other types of transmitting technologies would not be practicable or feasible means of providing to providing service within the target area for this site, which contains a significant wide area coverage gap. There are no equally effective and feasible technological alternatives to the construction of the proposed tower. (AT&T App., p 8).

Facility Description
Devil's Hopyard North

39. The proposed facility would be located in the southern portion of a 101.72 acre parcel owned by the East Haddam Fish & Game Club located on the western side of Haywardville Road in East Haddam. The property consists of wooded land. (AT&T App.1, Tab3 and Tab 3C - Visual Analysis Report).
40. The East Haddam Fish & Game Club property is locally in the R-2 zoning district, a residential zoning district. Section 22 of the East Haddam Zoning Code addresses the placement and operation of wireless telecommunications facilities and in general requires a Special Exception. (AT&T App., p. 21,; AT&T bulk Filing Section 3, East Haddam Zoning Regulations).

41. Land uses in the vicinity surrounding the proposed facility consists primarily of large parcels, many of which are owned by the East Haddam Fish & Game Club with other nearby parcels residential in nature. (AT&T Bulk Filing, Section 3; AT&T App., p. 24).
42. AT&T's proposed facility would consist of a new self-supporting 180 foot monopole tower, erected within a 75 foot by 75 foot compound in a 100 foot by 100 foot lease area; and the compound would be enclosed by an 8 foot tall chain link fence. The area within the tower compound would accommodate AT&T's equipment and provide for future shared use of the facility by other carriers. (AT&T App., p. 13; Tab 3).
43. The monopole will be painted brown below the tree line to accommodate a request by the East Haddam Fish & Game Club. (AT&T App., Tab 3; Tr. 1, p.22, 40).
44. The proposed facility would be located at 41° 29' 28.1" north latitude and 72° 21' 16.9" west longitude. Its ground elevation would be 416 feet above average mean sea level ("AMSL"). (AT&T App., Tab 3).
45. The proposed tower would be designed in accordance with American National Standards Institute TIA/EIA-222-F "Structural Standards for Steel Antenna Towers and Antenna Support Structures" and the 2003 International Building Code with 2005 Connecticut Amendment. The foundation design would be based on soil conditions at the site. The details of the tower and foundation design will be provided as part of the final D&M plan. (AT&T App., Tab 3).
46. AT&T will install up to 12 panel antennas at the 177' centerline height on the tower together with an associated 12' x 20' radio equipment shelter at the tower base within the equipment compound. (AT&T App., Tab 3).
47. In the event of a power failure, AT&T's proposed emergency backup power plans for the proposed Facility relies on battery backup and a permanent diesel generator with a self-contained fuel tank. AT&T would have a battery backup required to prevent the Facilities from experiencing a "re-boot" condition during the generator start-up delay period that typically lasts ten minutes. The generator's fuel tanks will consist of a bladder within a steel containment chamber and is designed to contain fuel in the unlikely event of a fuel spill. (AT&T App. p. 15; Post Hearing Interrogatory Responses, A7; Tr. 1, p.17).
48. The proposed facility would be unmanned, requiring monthly maintenance visits approximately one hour long. AT&T's equipment would be monitored 24 hours a day, seven days a week from a remote location. (AT&T App., p. 19; Tr. 2, p.46).
49. Development of the proposed facility would require approximately 454 cubic yards of cut and 202 cubic yards of fill. (AT&T Pre-Hearing Interrogatory Responses, Set I, A3).
50. Vehicle access to the compound would extend westerly from Haywardville Road along a new 12-foot wide gravel access drive approximately 616 feet to the proposed compound. (AT&T App., p. 13; Tab 3).
51. The design standards for the access road will incorporate the standards of the Department of Environmental Protection's Stormwater Design Manual and the Department of Transportation Drainage Manual Standards. (AT&T Post Hearing Interrogatory Responses, A3; Tr. 1, p.31).

52. Utility service to the proposed facility, including electric and telephone services, would be extended underground from an existing offsite utility pole to the proposed facility, and would not follow the new access drive to the site. (AT&T App., p. 13; Tab 3).
53. Youghiogheny Communications Northeast, LLC d/b/a Pocket Wireless has expressed interest in the tower. (Tr. 1, p. 27).
54. The tower setback radius would not extend or encroach onto any adjacent properties in the event of Tower failure, but rather would be completely contained within the host property. (AT&T App. Tab 3; Tr. 1, p.29).
55. Exposed ledge was not visible on the property in the vicinity of the proposed facility at the time of AT&T's field investigation. The presence of ledge will be confirmed upon completion of a geotechnical investigation. If ledge is encountered, chipping is preferred to blasting. (AT&T Pre-Hearing Interrogatories, Set I, A4).
56. The nearest off-site residence identified is owned by Gregory R. Grinsfelder and is 770' southeast of the proposed tower. (AT&T App, Tab 3).
57. The total estimated cost of construction for the proposed facility is \$317,000,. In particular, this estimate includes:

a. Tower and foundation (including installation)	\$100,000
b. Site development	\$56,000
c. Utility installation	\$68,000
d. Facility Installation	\$93,000

(AT&T App., p. 26).

58. The estimated cost of AT&T's antennas and related radio equipment would be approximately \$250,000.00. (AT&T Pre-Hearing Interrogatory Responses, Set I, A5).

Environmental Review

59. The parcel on which the facility will be located and the nearby areas are within the Eightmile River watershed but not within 100' of the Eightmile River or tributaries thereto. The site otherwise exhibits no specifically listed scenic, natural or recreational characteristics. (AT&T App., Tab 3).
60. The proposed facility would have no adverse effect on historic, architectural or archeological resources listed in or eligible for the National Register of Historic Places. (AT&T App., Tab 3). On April 15, 2009, the Connecticut State Historic Preservation Office ("SHPO") issued a letter indicating that a facility will constitute no adverse effect upon the historic ambiance of the Millington Green Historic District and WPA Bridges No, 1603, 1604 and 1605. (AT&T App., p.18, Tab 6).
61. The site is not within any designated area indicating the presence of federally threatened or endangered species or State endangered, threatened or special concern species. (AT&T App., Tab 3 10).
62. Federal, State and local databases indicate that the site is not located within a wetlands mapped on the National Wetland's Inventory and not within a 100-year of 500-year flood zone. (AT&T App., p.20).

63. There are no target ranges on the property. Therefore, the area of the proposed Facility and access drive will not contain significant amounts of spent ammunition. (Tr.1, p.23).
64. Wetlands were delineated in proximity to the Devil's Hopyard North Facility as follows: 62' from the nearest edge of the compound to the south; 26' from the nearest edge of the road grading to the north; and 6' from the nearest edge of road grading near an existing culvert. (AT&T App., p. 25, Tab 3B).
65. Erosion and sedimentation controls and other best management practices would be established and maintained for the duration of site construction, including diversion swales along the access drive, level spreader, hay bales and silt fencing during construction and seeding thereafter. (AT&T App., p.25-26, Tab 3A; AT&T Post Hearing Interrogatory Responses, A2).
66. Development of the proposed facility would require the removal of 24 trees with a diameter at breast height of 6 inches or larger within the area of the proposed access road and compound. (AT&T App., Tab 3).
67. Pursuant to the FCC TOWAIR program, registration with the FAA is not required for the Devil's Hopyard North facility. Accordingly, no marking or lighting will be required. (AT&T App., p.20, Tab 3A).
68. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of the proposed AT&T antennas is calculated to be 4.3% of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed tower. 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 base. (AT&T App., p.19, Tab 3A; Tr. 2, p.13).

Visibility

69. The visual impact of the proposed facility is not substantial. Areas of visibility are expected for short distances primarily along Haywardville and Hopyard Roads. (AT&T App., p.16).
70. No views of the tower were documented from Millington Green or Devil's Hopyard State Park. (AT&T App., p.17; Tab 3C).
71. The year round visual impact to the surrounding community within a 2 mile radius is limited to approximately 0.1%, or 10 acres, of the total study area; and topography and vegetation will serve to screen or otherwise limit visibility of the tower from large portion of the viewshed. A small portion of the study area, approximately 0.3 % of the area or 21 acres, would have seasonal views of the tower. (AT&T App., Tab 3C).
72. Approximately 3198 acres or 39.7% of the study area is screened by topography and 4,824 acres or 59.9% of the study area is screened by vegetation. (AT&T App., Tab 3C).
73. The proposed monopole will be visible year round from 9 residences on Salem Road and seasonal visibility of the tower is expected from 3 residences on Hopyard Road and 11 residences on Haywardville Road. (AT&T, App. Tab 3C).

74. The proposed monopole will not be visible from any visual receptors within the study area. (AT&T App., Tab 3C).
75. Shortening the access drive would result in increased localized visibility along Haywardville Road. (AT&T Post Hearing Interrogatory Responses, A20).
76. Visibility of the proposed tower from specific locations within a 2 mile radius of the site is summarized in the following table:

Specific Location and Area Receptors	Visible	Approximate Portion of Tower Visible	Approx. Distance and Direction to Tower*
1. Picnic Area in Devil's Hopyard State Park	No	None	4,750 feet -Northwest
2. Pay phone in Devil's Hopyard State Park	No	None	4,500 feet - Northwest
3. Hopyard Road	No	None	3,750 feet - Northwest
4. Hopyard Road near residence	Yes	Upper 90 feet - Year Round	2,350 feet - West
5. Intersection of Hopyard Road and Haywardville Road	No	None	2,100 feet - Southwest
6. Millington Green	No	None	1,950 feet - North
7. Tater Hill Road	No	None	3,850 feet - Northeast
8. Tater Hill Road	No	None	8,100 feet - North
9. Hopyard Road and Jones Hill Road	No	None	9,850 feet - Northwest
10. Intersection of Jones Hill Road and Ed Williams Road	No	None	9,400 feet - Northwest
11. Salem Farms Camp Ground	No	None	11,150 feet - Southwest
12. Intersection of Early Road and Haywardville Road	No	None	3,650 feet - Northwest
13. Southwest Viewpoint in Devil's Hopyard State Park	No	None	8,150 feet - Southwest
14. Southeast Viewpoint in Devil's Hopyard State Park	No	None	8,500 feet - Southeast
15. North Viewpoint in Devil's Hopyard State Park	No	None	4,250 feet - North
16. Orange Trail in Devil's Hopyard State Park	No	None	6,050 feet - Northwest
17. Youth Camp Area 2 in Devil's Hopyard State Park	No	None	7,650 feet - Northwest
18. Orange Trail in Devil's Hopyard State Park	No	None	6,400 feet - Northwest
19. Blue Trail in Devil's Hopyard State Park	No	None	6,150 feet - Northwest
20. Bridge on Red Trail in Devil's Hopyard State Park	No	None	4,750 feet - Northwest
21. Bridge on Red Trail in Devil's Hopyard State Park	No	None	5,950 feet - Northwest
22. Bridge on Green Trail in Devil's Hopyard State Park	No	None	4,000 feet - Northwest

23. Intersection of Daniel Peck Road and Wickham Road	No	None	5,550 feet - Southeast
24. Intersection of Early Road, Geoffrey Road and Ackley Cemetery Road	No	None	6,500 feet - South
25. Salem Road	Yes	Upper 70 feet - Year Round	9,600 feet - Southwest
26. 22 Haywardville Road	Yes	Partial Upper 25 feet - Seasonal	650 feet - Southwest
27. Haywardville Road	Yes	Upper 30 feet - Seasonal	900 feet - North
28. Hopyard Road	Yes	Upper 80 feet - Seasonal	2,950 feet - West

* 528 feet = 0.1 mile.
(AT&T App., Tab 3A).

Facility Description
Devil's Hopyard South

77. The proposed facility would be located in the southern portion of a 64.32 acre parcel owned by Andrew J. Tarpill on the south side of Ed Williams Road in East Haddam. The property consists of wooded land. (AT&T App., Tab 4 and Tab 4C).
78. The Tarpill property is locally classified in the R-4 zoning district, a residential zoning district. Section 22 of the East Haddam Zoning Code addresses the placement and operation of wireless telecommunications facilities and in general requires a Special Exception. (AT&T App., p. 21.; AT&T Bulk Filing, Section 3, East Haddam Zoning Regulations).
79. Land uses in the vicinity surrounding the proposed facility consists primarily of large parcels residential in nature. The Lefebvre property adjacent to the Tarpill property is in the process of being purchased by the Town for open space conservation. (AT&T App., p. 24-25).
80. AT&T's proposed facility would consist of a new self-supporting 160 foot monopole tower, erected within a 75 foot by 75 foot compound in a 100 foot by 100 foot lease area; and the compound would be enclosed by an 8 foot tall chain link fence. The area within the tower compound would accommodate AT&T's equipment and provide for future shared use of the facility by other carriers. (AT&T App., p. 14; Tab 4).
81. The proposed facility would be located at 41° 28' 17.7" north latitude and 72° 19' 23.9" west longitude. Its ground elevation would be 476 feet above average mean sea level ("AMSL"). AT&T App., Tab 4).
82. The proposed tower would be designed in accordance with American National Standards Institute TIA/EIA-222-F "Structural Standards for Steel Antenna Towers and Antenna Support Structures" and the 2003 International Building Code with 2005 Connecticut Amendment. The foundation design would be based on soil conditions at the site. The details of the tower and foundation design will be provided as part of the final D&M plan. (AT&T App., Tab 4).
83. AT&T will install up to 12 panel antennas at the 157' centerline height on the tower together with an associated 12' x 20' radio equipment shelter at the tower base within the equipment compound. (AT&T App., Tab 4).

84. In the event of a power failure, AT&T's proposed emergency backup power plans for the proposed Facility relies on battery backup and a permanent diesel generator. AT&T would have a battery backup required to prevent the Facilities from experiencing a "re-boot" condition during the generator start-up delay period that typically lasts ten minutes. The generator's fuel tanks will consist of a bladder within a steel containment chamber and is designed to contain fuel in the unlikely event of a fuel spill. (AT&T App. p. 15).
85. The proposed facility would be unmanned, requiring monthly maintenance visits approximately one hour long. AT&T's equipment would be monitored 24 hours a day, seven days a week from a remote location. (AT&T App., p. 19; Tr. 2, p.46).
86. Development of the proposed facility would require approximately 875 cubic yards of cut and no fill is required. (AT&T Pre-Hearing Interrogatory Responses, Set I, A3).
87. Access to the compound would extend southerly from Ed Williams Road along new 12' wide gravel; access drive approximately 1,498 feet to the proposed equipment compound. (AT&T App., p. 14, Tab 4).
88. A large portion of the existing unimproved woods road is located on an adjacent parcel and is not benefited by an easement for the host property. (AT&T Post Hearing Interrogatory Responses, A12).
89. The existing woods road straddles the eastern property line and an alternative access drive for that portion of the drive is proposed. The alternative access would widen the existing road as needed on the host parcel for access and utilities. (AT&T Post Hearing Interrogatory Responses, A12, Ex. B).
90. Utility service to the proposed facility, including electric and telephone services, would be extended underground from an existing offsite utility pole to the proposed facility, and would follow the access drive to the site. (AT&T App., p. 14, Tab 4; AT&T Post Hearing Interrogatory Responses, A12, Ex. B).
91. Youghioghney Communications Northeast, LLC d/b/a Pocket Wireless has expressed interest in the tower. (Tr. 1, p. 27).
92. The tower setback radius would not extend or encroach onto any adjacent properties in the event of Tower failure, but rather would be completely contained within the host property. (AT&T App. Tab 4; Tr. 1, p. 29).
93. Exposed ledge was not visible on the property in the vicinity of the proposed facility at the time of AT&T's field investigation. The presence of ledge will be confirmed upon completion of a geotechnical investigation. If ledge is encountered, chipping is preferred to blasting. (AT&T Pre-Hearing Interrogatories, Set I, A4).
94. The nearest off-site residence identified is located at 6 Ed Williams Road and is 800' northwest of the proposed tower. (AT&T App, Tab 4).
95. The total estimated cost of construction for the proposed facility is \$387,000,. In particular, this estimate includes:
- | | |
|--|-----------|
| a. Tower and foundation (including installation) | \$100,000 |
| b. Site development | \$82,000 |
| c. Utility installation | \$112,000 |

d. Facility Installation \$93,000
(AT&T App., p. 26).

96. The estimated cost of AT&T's antennas and related radio equipment would be approximately \$250,000.00. (AT&T Pre-Hearing Interrogatory Responses, Set I, A5).

Environmental Review

97. The parcel on which the facility will be located and the nearby areas are within the Eightmile River watershed but not within 100' of the Eightmile River or tributaries thereto. The site otherwise exhibits no specifically listed scenic, natural or recreational characteristics. (AT&T App. Tab 4).

98. By letter dated October 5, 2009, the Connecticut DEP confirmed that there are no extant populations of Federal or State threatened or endangered species or State endangered, threatened or special concern species that occur in the vicinity of the site. (AT&T App., p.18, Tab 6).

99. Federal, State and local databases indicate that the site is not located within a wetlands mapped on the National Wetland's Inventory and not within a 100-year or 500-year flood zone. (AT&T App., p.20).

100. Wetlands were delineated in proximity to the Devil's Hopyard South facility as follows: 122' from the nearest edge of the compound and 60' from the nearest road edge (AT&T App., p. 25, Tab 4B).

101. Potential vernal pools are located approximately 150 feet from the roadway edge and no significant impacts from the proposed Facility are anticipated. (AT&T Post Hearing Interrogatory Responses, A8, Ex. B).

102. The alternative access along the existing woods road is located further from the wetlands and potential vernal pools than the originally proposed access drive. (AT&T Post Hearing Interrogatory Responses, A12).

103. Erosion and sedimentation controls and other best management practices would be established and maintained for the duration of site construction. (AT&T App., p.25-26).

104. Development of the proposed facility would require the removal of 64 trees with a diameter at breast height of 6 inches or larger within the area of the proposed access road and compound. (AT&T App., Tab 4).

105. Pursuant to the FCC TOWAIR program, registration with the FAA is not required for the Devil's Hopyard South facility. Accordingly, no marking or lighting will be required. (AT&T App., p.20, Tab 4A).

106. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of the proposed AT&T antennas is calculated to be 5.4% of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed tower. 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 base. (AT&T App., p.19, Tab 4A; Tr.2, p.13).

Visibility

107. The visual impact of the proposed facility is not substantial. Areas of visibility are expected to be extremely limited to portions of private lands in close proximity to the facility. (AT&T App., p.17).
108. The facility is not expected to be visible from publicly accessible locations included all identified sensitive visual receptors including historic properties and Devil's Hopyard State Park. (AT&T App., p.17; Tab 4C).
109. The year round visual impact to the surrounding community within a 2 mile radius is limited to approximately 0.05%, or 3.95 acres, of the total study area; and topography and vegetation will serve to screen or otherwise limit visibility of the tower from large portion of the viewshed. A very small portion of the study area, approximately 0.02 % of the area or 1.39 acres, would have seasonal views of the tower. (AT&T App., Tab 4C).
110. The remainder of the two mile radius study area is screened by topography, 3,856 acres or 47.88% and vegetation, 4,191.66 acres or 52.05%. (AT&T App., Tab 4C).
111. The proposed monopole will be visible year round from three locations: two patches of visibility just to the south of Ed William Road and a patch of visibility just to the west of West Street.. (AT&T, App., Tab 4C).
112. A shorter access drive will result in greater visual impacts on abutting residential properties. (AT&T Post Hearing Interrogatory Responses, A27).
113. Visibility of the proposed tower from specific locations within a 2 mile radius of the site is summarized in the following table:

Specific Location and Area Receptors	Visible	Approximate Portion of Tower Visible	Approx. Distance and Direction to Tower*
1. West Street	Yes	Upper 20 feet - Seasonal	3,410 feet - West
2. Foxtown Road	Yes	Upper 20 feet - Seasonal	2,130 feet - Southeast
3. Foxtown Cemetery	No	None	8,105 feet - South
4. Salem Farm Camping	No	None	10,335 feet - South
5. North Plain Cemetery	No	None	10,045 feet - Northeast
6. Woodbridge Farm	No	None	7,415 feet - Northwest
7. Millington Green	No	None	10,310 feet - Southeast
8. Devil's Hopyard State Park South Viewpoint	No	None	3,480 feet - South
9. Devil's Hopyard State Park North Viewpoint	No	None	6,880 feet - North
10. Devil's Hopyard State Park Yellow Trail	No	None	4,920 feet - East

* 528 feet = 0.1 mile.
(AT&T App., Tab 4C).