DOCKET NO. 412 – SBA Towers III and New Cingular Wireless PCS, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and management of a telecommunications facility located at Wewaka Brook Road, Bridgewater, Connecticut.	}	Connecticut Siting Council

January 5, 2012

Findings of Fact

Introduction

1. SBA Towers III (SBA) and New Cingular Wireless PCS, LLC (AT&T) (collectively, the Applicant), in accordance with provisions of Connecticut General Statutes (CGS) § 16-50g through 16-50aa, applied to the Connecticut Siting Council (Council) on November 19, 2010 for the construction, maintenance, and operation of a telecommunications facility, which would include a 170-foot tall monopole tower, at Wewaka Brook Road in the Town of Bridgewater, Connecticut. (Applicant 1, pp. 1, 3)

2. SBA is a Delaware limited liability company and a subsidiary of SBA Communications Corporation, a publicly traded company that owns and operates wireless infrastructure facilities nationwide. Its offices are at One Research Drive, Suite 200C, Westborough, Massachusetts. (Applicant 1, p. 3)

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. (Applicant 1, p. 4)

4. The parties in this proceeding are the Applicant and the Town of Bridgewater. (Transcript, April 5, 2011, 3:33 p.m. [Tr. 1], pp. 4, 5)

5. The purpose of the proposed facility would be to provide wireless communication coverage in the eastern portion of Bridgewater. (Applicant 1, p. 1)

6. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public hearing on April 5, 2011, beginning at 3:30 p.m. and continuing at 7:05 p.m. at the Burnham Elementary School Auditorium, 80 Main Street South, Bridgewater, Connecticut. (Tr. 1, p. 3 ff.)

7. The Council and its staff conducted an inspection of the proposed site on April 5, 2011, beginning at 2:30 p.m. On the day of the field inspection, the applicant attempted to fly a red balloon at the site between 12:00 p.m. and 7:00 p.m. Weather conditions were not conducive for the balloon flight due to the wind. Three balloons were lost. (Tr. 1, p. 15)

8. Pursuant to CGS § 16-50l (b), public notice of the application was published in the Housatonic Times on October 8 and 15, 2010 and The News-Times on November 16, 2010. (Applicant 1, p. 5; Applicant 2)

9. Pursuant to CGS § 16-50*l*(b), AT&T sent notices of its intent to file an application with the Council to each person appearing of record as owner of property abutting the property on which the proposed facility is located. (Applicant 1, p. 5)

10. AT&T received return receipts from all of the abutting property owners to whom it sent notice. (Applicant 3, response 3)

11. Pursuant to CGS § 16-50*l* (b), AT&T provided notice to all federal, state, regional, and local officials and agencies listed therein. (Applicant 1, p. 5)

12. On March 22, 2011, AT&T posted a sign on Wewaka Brook Road informing the passing public of the time, date, and place of the hearing on this application and the proposed facility height. (Tr. 1, p. 15-16)

13. On April 26, 2011, the Council requested consent to extend the deadline for decision for a maximum of 180 days until November 14, 2011. (Council Extension Request Letter dated April 26, 2011)

14. On May 20, 2011, the Applicant granted consent to extend the deadline for decision until November 14, 2011. (Applicant Extension Letter dated May 20, 2011)

15. On July 21, 2011, the Council provided notice of a continued evidentiary hearing to be held on September 13, 2011, in Hearing Room One, Ten Franklin Square, New Britain, Connecticut. (Council Hearing Memo dated July 21, 2011)

16. On September 9, 2011, the Town of Bridgewater requested a continuance of the hearing scheduled for September 13, 2011 due to the unavailability of some of the Town's witnesses on that hearing date and the Town's intent to supplement its land use commission's report regarding wetlands impacts. (Town Request for Continuance dated September 9, 2011)

17. On September 9, 2011, the Applicant indicated that it did not object to the continuance. (Applicant Response to Continuance Request dated September 9, 2011)

18. On September 12, 2011, the Council cancelled the evidentiary hearing to be held on September 13, 2011. (Council Hearing Cancellation Memo dated September 12, 2011)

19. On September 15, 2011, the Council provided notice of a continued evidentiary hearing to be held on November 1, 2011, in Hearing Room One, Ten Franklin Square, New Britain, Connecticut. (Council Hearing Memo dated September 15, 2011)

20. On October 20, 2011, the Council denied the proposed facility without prejudice on the basis that the statutory deadline for a decision could not be met. (Minutes of October 20, 2011 Council Meeting)

21. On October 20, 2011, the Council voted to reconsider the application under C.G.S. § 4-181a(a). (Minutes of October 20, 2011 Council Meeting)

22. On November 1, 2011, the Council held a continued public hearing in New Britain. (Transcript 3 – November 1, 2011 at 1:00 p.m. [Tr. 3], p. 2)

State Agency Comments

23. Pursuant to CGS § 16-50*l*, the Council solicited comments on AT&T's application from the following state departments and agencies: Department of Agriculture, Department of Environmental Protection (DEP), Department of Public Health, Council on Environmental Quality, Department of Public Utility Control, Office of Policy and Management, Department of Economic and Community Development, the Department of Transportation, and the Department of Emergency Management and Homeland Security. The Council's letters requesting comments were sent on February 14, 2011. (CSC Hearing Package dated February 14, 2011)

24. On March 8, 2011, DOT responded to the Council's solicitation, but had no comments. No responses were received from any of the other state agencies solicited. (DOT Comments dated March 8, 2011; Record)

Municipal Consultation

25. AT&T filed a technical report with the Town of Bridgewater (Town) on July 16, 2010. (Applicant 1, p. 22)

26. A public information session was held in the Town on September 6, 2010 and included representatives of the Town Board of Selectman and the public. (Applicant 1, p. 22)

27. The Town Inland Wetland Commission conducted a site visit on October 5, 2010. (Applicant 1, p. 22)

28. Subsequent to the public information session held in the Town, AT&T conducted a balloon float at the site to gather additional visual data in conjunction with a request from the State Historic Preservation Office. (Applicant 1, p. 22)

29. Consultation with the Town resulted in the following alternative sites: the Town Garage; a property across the street from the Town Fire Department; and a property at 50 Stuart Road. None of these sites would meet AT&T's coverage requirements. (Applicant 1, p. 22)

30. By letter, the Town First Selectman William T. Stuart noted that if the Council approves the tower (which is not the Town's preference), that the tower be erected in a manner that greatly minimizes its visual intrusiveness and negative impact on property values. The tower should be as low as possible and use technology that would narrow its profile or camouflage the appearance. (Town 2)

31. By letter dated September 29, 2011, Bridgewater Wetland Enforcement Officer Russell Dirienzo expressed concerns about the project. Mr. Dirienzo believes that the access drive has inadequate turning radius, the project would cause disturbance to wetlands, and other alternatives exist. Specifically, Mr. Dirienzo proposes an alternate access to the site intended to minimize wetland impacts. (Town 4)

Public Need for Service

32. 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. 8 - Telecommunications Act of 1996)

33. 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 personal wireless communication service throughout the State of Connecticut. (Council Administrative Notice Item No. 8 - Telecommunications Act of 1996; AT&T 1, p. 6)

34. The Act prohibits local and state bodies from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 8 - Telecommunications Act of 1996)

35. The Act prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. 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. 8 - Telecommunications Act of 1996)

36. Congress enacted the Wireless Communications and Public Safety Act of 1999 (the 911 Act) to promote public safety through the deployment of a seamless, nationwide emergency communications infrastructure that includes wireless communications services. (Council Administrative Notice Item No. 9 - Wireless Communications and Public Safety Act of 1999; Applicant 1, p. 7-8)

37. AT&T would provide Enhanced 911 services from its proposed site in compliance with the 911 Act. (Applicant 1, p. 7-8; Applicant 3, response 5)

Existing and Proposed Wireless Coverage

38. AT&T's proposed facility would provide 880 MHz (cellular) and 1900 MHz (PCS) service. (Applicant 1, Attachment 5)

39. AT&T designs its system for -82 dBm in-vehicle coverage and -74 dBm in-building coverage. AT&T used in-vehicle coverage in its analysis of this site. (Applicant 3, response 7; Tr. 3, p. 11)

40. The tower is mostly to provide coverage, although it would also improve capacity. (Tr. 3, p. 23)

41. AT&T's existing signal strength in the area that would be covered from the proposed facility ranges from -80 dBm to -105 dBm due to terrain fluctuations. (Applicant 3, response 7)

42. The table below indicates the distances AT&T would cover at its different licensed frequencies along the major routes in the area of its proposed facility at various heights.

Street Name	Coverage at Proposed Tower Height of 170 feet	Coverage at 160 feet	Coverage at 150 feet
North Mountain Road	0.063 miles	0.032 miles	0.031 miles
Obtuse Rocks Road	0.053 miles	0.023 miles	0.021 miles
State Route 133 / Southville Road	2.584 miles	1.427 miles	1.372 miles
Whisconier Road	0.276 miles	0.101 miles	0.065 miles

(Applicant 3, response 10)

43. The table below indicates the total areas AT&T would cover at its different licensed frequencies from the proposed facility at various heights.

Signal Strength	Coverage Area at Proposed Tower Height of 170 feet	Coverage Area at 160 feet	Coverage Area at 150 feet
≤ -74 dBm*	12.76 square miles	7.043 square miles	6.245 square miles
≤ -82 dBm**	23.50 square miles	12.58 square miles	11.53 square miles

*This is the signal strength AT&T considers generally sufficient to provide service within building structures, otherwise known as "in-building coverage."

**This is the signal strength AT&T considers generally sufficient to provide service within vehicles, otherwise known as "in-vehicle coverage."

(Applicant 3, response 11)

44. AT&T's proposed facility would interact with the adjacent facilities identified in the following table.

Site Location	Distance and Direction from Proposed Site
Second Hill Road	3.2 miles to north-northwest
24 Dinglebrook Lane	3.0 miles to south-southeast
100 Old Town Park Road	4.1 miles to northwest
761 Federal Road	3.5 miles to southwest
33 ½ Carmen Hill Road	3.9 miles to west-southwest
316 Perkins Road	2.7 miles to east

(AT&T 3, response 15)

45. The minimum height at which AT&T could achieve its coverage objectives is the proposed height of 170 feet AGL with an antenna centerline height of 167 feet AGL. At lower heights, coverage along Route 133 would be compromised. (Applicant 1, Attachment 3; Applicant 3, response 13; Tr. 1, pp. 19, 37-38)

Site Selection

46. AT&T initiated a search ring for this area in 2007. (Tr. 1, p. 16)

47. The center of AT&T's search ring was located between Wewaka Brook Road and Skyline Ridge Road. Its radius was approximately 0.75 miles. (Applicant 3, response 1; Tr. 1, p. 16)

48. There are 8 communications towers within a radius of approximately four miles of the proposed site. None of these towers were found to be adequate for AT&T's coverage purposes. The towers are listed in the table below.

Tower Location	Height, Type of Tower	Tower Owner	Approx. Distance and Direction from Proposed Tower
39 Carmen Hill Road, Brookfield	80 feet, self-supporting lattice	Charter Communications	3.9 miles to W
39 Carmen Hill Road, Brookfield	500 feet, guyed lattice	Aurora of Danbury	4.0 miles to W
761 Federal Road, Brookfield	91 feet, power mount	CL&P	3.5 miles to SW
586 Danbury Road, New Milford	99 feet, flagpole	VoiceStream	3.4 miles to W
W. Flagg Swamp Road, Southbury	180 feet, self-supporting lattice	DPS	3.7 miles to E
24 Dinglebrook Lane, Newtown	150 feet, monopole	Cingular/AT&T	3.1 miles to S
Second Hill Road, Bridgewater	100 feet, monopole	State of Connecticut	3.3 miles to N
Main Street South, Bridgewater	65 feet, telephone pole	Town of Bridgewater Fire Department	1.7 miles to N

(Applicant 1, Attachment 1)

49. The Applicant investigated 17 sites as potential locations for its proposed facility. Information about these sites presented in the table below.

Location	**Assessor Parcel Number**	**Determination of Suitability**
50 Stuart Road East	14-31	SBA was unable to reach a lease agreement with the property owner.
66 Northrop Street	14-4	The property owner did not respond to SBA's inquiries to lease.
149 Northrop Street	10-3	The property owner did not respond to SBA's inquiries to lease.
129 & 0 Stuart Road East	14-44	The property owners were not interested.
0 Stuart Road East	14-55	This parcel was rejected due to a land trust restriction.
58 Hambrock Lane	18-15	The property owner was not interested, and the site would not meet AT&T's coverage objectives.
50 Stuart Road East	14-31	SBA was unable to reach a lease agreement with the property owner.
Wewaka Brook Road	15-1	This site would not meet to AT&T's coverage objectives due to the low elevation.
Northrop Street Benson Road Christian Road Hut Hill Road	10-41 14-9 14-18 18-9	The property owner was not interested, and these sites would not meet coverage objectives.
370 Northrop Street	7-9	The property owner did not respond to SBA's inquiries to lease.
293 Wewaka Brook Road	10-23	The property owner did not respond to SBA's inquiries to lease.
Northrop Street	7-1-1	The property owner did not respond to SBA's inquiries to lease.
000 Hut Hill Road	22-1	This site would not meet AT&T's coverage objectives.
324 Hut Hill Road	Not available	This site would not meet AT&T's coverage objectives.

(Applicant 1, Attachment 2)

50. No combination of existing site co-locations would meet AT&T's coverage objectives. (Tr. 1, p. 21)

51. Repeaters, microcell transmitters, distributed antenna systems and other types of transmitting technologies are not a practicable or feasible means of providing service within the coverage objective area, and there are no equally effective and feasible technological alternatives to the construction of the proposed tower. (Applicant 1, p. 8)

52. Prior to the April 5, 2011 hearing for this proceeding, AT&T filed a technical report with the Town for another proposed tower at 111 Second Hill Road, Bridgewater. An application for the 111 Second Hill Road tower has not yet been submitted to the Council. No date for submission by AT&T is planned, and would not occur until late 2012 at the earliest. (Tr. 1, p. 44; Council Records; Applicant 6, response 1)

53. AT&T has analyzed the 111 Second Hill Road coverage up to a tower height of 190 feet and determined that it has no impact on the analysis (i.e. the height) of the proposed facility at Wewaka Brook Road. (Applicant 4, response 39)

54. AT&T also analyzed the coverage of the existing tower at Dinglebrook Lane, Danbury and found that re-configuration of this site (e.g. increased power, different antennas, increased height) would not reduce the height needed at the proposed facility at Wewaka Brook Road. (Applicant 4, response 42)

Facility Description

55. AT&T's proposed site is located on a 51.2-acre parcel, west of Wewaka Brook Road. The property is owned by the Mary Allen. Currently the parcel is largely undeveloped and used for agricultural purposes. (See Figures 1 and 2) (Applicant 1 p. 3)

56. The subject property is within a Residential R-4 Zoning District, which does not allow for wireless telecommunications facilities. (Applicant 1b; Tr. 1, p. 17)

57. Surrounding land uses are agricultural and residential in nature. (Applicant 3, response 2)

58. AT&T would locate its proposed facility in the northwestern portion of the subject property. It would lease a 100-foot by 100-foot parcel, within which it would develop a 45-foot by 80-foot compound that would include a 170-foot tall monopole tower. The compound would be gravel and enclosed by an eight-foot high chain link fence. AT&T would house its ground equipment in a 12-foot by 20-foot shelter. (See Figure 3) (Applicant 1, pp. 3, 11, and Attachment 3)

59. The proposed tower would be designed in accordance with the American National Standards Institute TIA/EIA-222-G "Structural Standards for Steel Antenna Towers and Antenna Support Structures" and the 2003 International Building Code with the 2005 Connecticut Amendment. It would have a diameter of approximately four and one-half feet at its base and approximately two feet at its top. (Applicant 1, Attachment 3 – Facilities and Equipment Specification)

60. At its proposed height of 170 feet, SBA's tower could accommodate three additional wireless carriers. (Applicant 1, Attachment 3 – Tower Elevation Drawing)

61. No other carriers have expressed an interest in co-locating at the proposed facility. (Tr. 1, p. 25)

62. The proposed tower would be located at 41º 30' 31.43" north latitude and 73º 21' 15.8" west longitude. Its ground elevation would be 582 feet above mean sea level (amsl). (Applicant 1, Attachment 3 – Site Evaluation Report)

63. AT&T would deploy up to 12 panel antennas on a low-profile platform at a centerline height of 167 feet AGL. (Tr. 1, p. 9)

64. AT&T could use T-arm mounts without compromising coverage. (Tr. 1, p. 20)

65. To utilize flush-mounted antennas would require twenty feet of additional height and three levels of antennas: 187 feet, 177 feet, and 167 feet. (Tr. 1, p. 20)

66. For backup power, AT&T would primarily rely on a diesel generator. In addition, AT&T would also have a battery backup to prevent the facility from experiencing a "re-boot" condition during the generator start-up delay period. The generator fuel tank would be a 210-gallon steel containment chamber lined with a bladder to contain fuel in the event of a fuel spill. (Applicant 3, response 17)

67. The generator would consume approximately 1.7 gallons of diesel fuel per hour. At a 50 percent load and a useable capacity of 200 gallons, the generator could run for roughly 118 hours or 4.9 days. (Tr. 3, pp. 24-25; Applicant 3, response 17)

68. Approximately 1,430 cubic yards of cut and approximately 350 cubic yards of fill would be required to develop the proposed tower site and access drive. (Applicant 3, response 16)

69. Vehicular access to the proposed facility would extend from Wewaka Brook Road westerly along an existing access drive and over a bridge to be replaced. Access then continues over a new gravel access drive for a total distance of 2,495 feet to the proposed compound. (Applicant 1, p. 11)

70. There may be encroachment beyond the final access road so that long construction trailers can reach the site. These would be temporary in nature and would not involve tree clearing. (Tr. 3, p. 40)

71. Utility service for the proposed facility would be extended underground from pole number 1242 on Wewaka Brook Road and generally follow the access drive to the site. (Applicant 1, p. 11)

72. All stormwater drainage design would comply with the Connecticut Department of Transportation Hydraulic Manual. (Tr. 3, p. 33)

73. Should ledge be encountered upon completion of a geotechnical investigation, mechanical means would be the preferred method of removal. However, if blasting is required, an appropriate protocol would be following in accordance with State law. (Applicant 3, response 20)

74. The setback radius of the proposed tower would remain within the boundaries of the subject property. (Applicant 1, Attachment 3)

75. There are no residences located within 1,000 feet of the proposed site. (Applicant 1, Attachment 5)

76. The nearest residence is 1,140 feet to the southwest of the proposed facility. The address is 0 Stuart Road. (Applicant 1, Attachment 3; Tr. 1, p. 18)

77. The estimated cost of construction of the proposed facility, not including radio equipment is:

Tower and foundation costs	$100,000
Site development costs	200,000
Utility installation costs	90,000
Facility installation	95,000
Total Estimated Cost	485,000

(Applicant 1, p. 23)

Environmental Considerations

78. The proposed backup generator would meet all applicable noise standards. (Tr. 1, p. 29)

79. The State Historic Preservation Office determined that the proposed facility would have no adverse effect on historic or cultural resources. (Applicant 1, Attachment 6)

80. SBA's proposed facility would comply with the recommendations of the U.S. Fish and Wildlife Service for minimizing the potential for telecommunications towers to impact bird species. (Applicant 3, response 22)

81. SBA's proposed facility is not located near an Important Bird Area (IBA) as designated by the National Audubon Society. (Applicant 3, response 21)

82. There are no known extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur on the property where the proposed facility would be located. (Applicant 1, p. 12)

83. No wildlife species observed at the site were state or federally listed endangered, threatened, or special-concern species. (Tr. 1, p. 33)

84. 102 trees with diameters of six inches or more at breast height would be removed in the construction of the proposed facility. (Applicant 1, p. 14)

85. The Applicant would replace the existing bridge over Wewaka Brook, a perennial stream, to provide safe access to the proposed facility for emergency vehicles, site technicians and heavy construction equipment. The existing bridge will not accommodate design load and dimensional requirements for this type of traffic. (Applicant 1, p. 15)

86. The bridge replacement project would have three phases. First, culverts would be placed to fill in the narrowest portion of Wewaka Brook and provide temporary passage. Next, the existing bridge would be demolished and a new bridge put in its place. At this point, the culverts initially placed would be removed. (Applicant 1, pp. 15-16)

87. Approximately 400 square feet of the perennial stream would be temporarily impacted. Once the replacement bridge is completed, the banks of the Wewaka Brook would be properly restored with native stream materials and native plantings. (Applicant 1, p. 15)

88. There are six wetlands in the vicinity of the proposed site. (Applicant 1, Attachment 6, pp. 2-7)

89. Wetland 1 is an isolated depressional palustrine forested wetland located approximately 178 feet northwest of the closest construction area. A wildlife survey found spotted salamander egg masses and numerous wood frog tadpoles. Both species are considered obligate vernal pool species. Thus, this wetland is considered to contain both the physical and biological characteristics of a vernal pool. No direct or indirect impacts to Wetland 1 is expected. (Applicant 1, Attachment 6, p. 2)

90. Wetland 2 is a depressional palustrine forested and scrub/shrub wetland located approximately 100 feet southwest of the closest construction area. A wildlife survey also found spotted salamander egg masses and numerous wood frog tadpoles within this wetland. Both species are considered obligate vernal pool species. This wetland is considered a cryptic type of vernal pool habitat. No direct or indirect impacts to Wetland 2 is expected. (Applicant 1, Attachment 6, pp. 2-3)

91. Wetland 3 is a narrow headwater palustrine forested wetland that would be directly impacted by the proposed access drive due to the culvert and road fill material. Approximately 819 square feet of Wetland 3 would be permanently impacted. (Applicant 1, Attachment 6, pp. 3-4)

92. Wetland 4 is a palustrine wetland with forested, scrub/shrub, wet meadow and agricultural disturbed habitats. The proposed access drive deviates off the existing trail to avoid direct impacts. Approximately 63 square feet of permanent wetland impacts and 150 square feet of temporary wetland impacts are expected. (Applicant 1, Attachment 6, pp. 4-5)

93. Wetland 5 is a riparian corridor that consists of the delineated banks of Wewaka Brook. The first-phase culvert crossing of Wewaka Brook would temporarily impact 400 square feet of stream resource. These impacts are not likely to have a permanent adverse impact, considering the mitigating protective design. (Applicant 1, Attachment 6, pp. 6-7)

94. Wetland 6 is a small man-made pond adjacent to the north driveway entrance from Wewaka Brook Road. No direct or indirect impact to Wetland 6 would result from the proposed development. (Applicant 1, Attachment 6, p. 7)

95. The Applicant's environmental consultant, VHB, Inc., recommends the following protective measure for inland wetland resources.

    a) An extensive erosion and sedimentation control plan should be developed in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control to properly protect these vernal pools and the wildlife with them, particularly amphibians. Silt fencing will act as an exclusion to amphibians from active construction areas and avoid amphibian mortality associated with construction equipment traffic.

    b) A thorough cover search of the construction area should be performed by a properly qualified professional for amphibians prior to and following the installation of silt fencing to remove amphibians from the work zone prior to the initiation of construction activities.

    c) A properly qualified professional independent of the site contractor should monitor the installation and maintenance of erosion and sedimentation controls throughout the construction project and perform periodic sweeps for amphibians to ensure that nearby wetlands are protected and amphibians are not trapped within the construction zone of the project.

    d) Construction of the wireless telecommunications facility should be seasonally restricted from occurring between March 1 and May 15 to avoid construction activities and potential disturbance during the peak amphibian migration and breeding period. Access drive construction activities located more than 750 feet from the vernal pools need not be seasonally restricted from this period, excepting in-stream work associated with the bridge replacement previously described.

    e) Any ruts or artificial depressions that could hold water created unintentionally by site clearing/construction activities should be properly filled in and permanently stabilized with vegetation to avoid the creation of decoy pools that could intercept amphibians moving towards the vernal pools.

    f) The usage of herbicides and pesticides at the proposed wireless telecommunications facility and along the proposed access drive should be restricted.

    (Applicant 1, Attachment 6, pp. 11-12)

96. No wetlands and watercourses are expected to be adversely impacted provided that the protective measures and mitigation described by VHB, Inc. are performed. (Applicant 1, Attachment 6, p. 12)

97. The proposed tower site is not located within the 100-year or 500-year flood areas. (Applicant 1, p. 18)

98. The Federal Aviation Administration (FAA) would not require the proposed tower to have lighting or marking. (Applicant 1, Attachment 5)

99. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T's proposed antennas is 4.56% 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. (Applicant 1, p. 14)

Alternate Access

100. The Town recommended an alternate access road to eliminate two proposed crossings of Wetland 4 and improve the turning radius. (Town 4)

101. The alternate access suggested by the Town would enter the subject property via the same bridge along the existing access drive, but would turn to the north and then run closely parallel to the northern property boundary to reach the site. The total length of the alternate access would be approximately 2,290 feet. (Applicant 9)

102. The alternate access would result in 5,800 square feet of wetland impact on Wetland 4 and 1,300 square feet of impact on Wetland 3. This is over 6,000 square feet of additional permanent wetland impact area versus the proposed access. (Applicant 9; Tr. 3, pp. 15, 62)

103. The number of trees to be cleared for the alternate access would be at least comparable to the proposed access, possibly greater. The total has not been confirmed via a field survey. (Tr. 3, p. 32)

104. It is not known if the underlying property owner would agree to the alternate access. The property owner was not consulted. (Tr. 1 p. 23)

Visibility

105. The proposed tower would be visible on a year-round basis from approximately 62 acres within a two-mile radius of the proposed site. (See Figure 10) (Applicant 1, Attachment 7 – Visual Analysis Map)

106. The proposed tower would be visible seasonally from an additional approximately 61 acres within a two-mile radius of the proposed site. (Applicant 1, Attachment 7 – Visual Analysis Map)

107. The proposed tower would be visible year-round from approximately 17 residential properties and on a seasonal basis from approximately 19 residential properties. The streets on which these properties are located are listed in the following table.

Road	# Residences with Year-round Visibility	# Residences with Seasonal Visibility	Total # Residences with Visibility
Hut Hill Road	2	-	2
Northrop Road	8	5	13
Route 133	1	1	2
Skyline Ridge Road	2	6	8
Stuart Road	2	3	5
Wewaka Brook Road	2	4	6

(Applicant 1, Attachment 7 – Visual Analysis Report)

108. The visibility of the proposed tower from different vantage points in the surrounding vicinity is summarized in the following table. (See Figure 10)

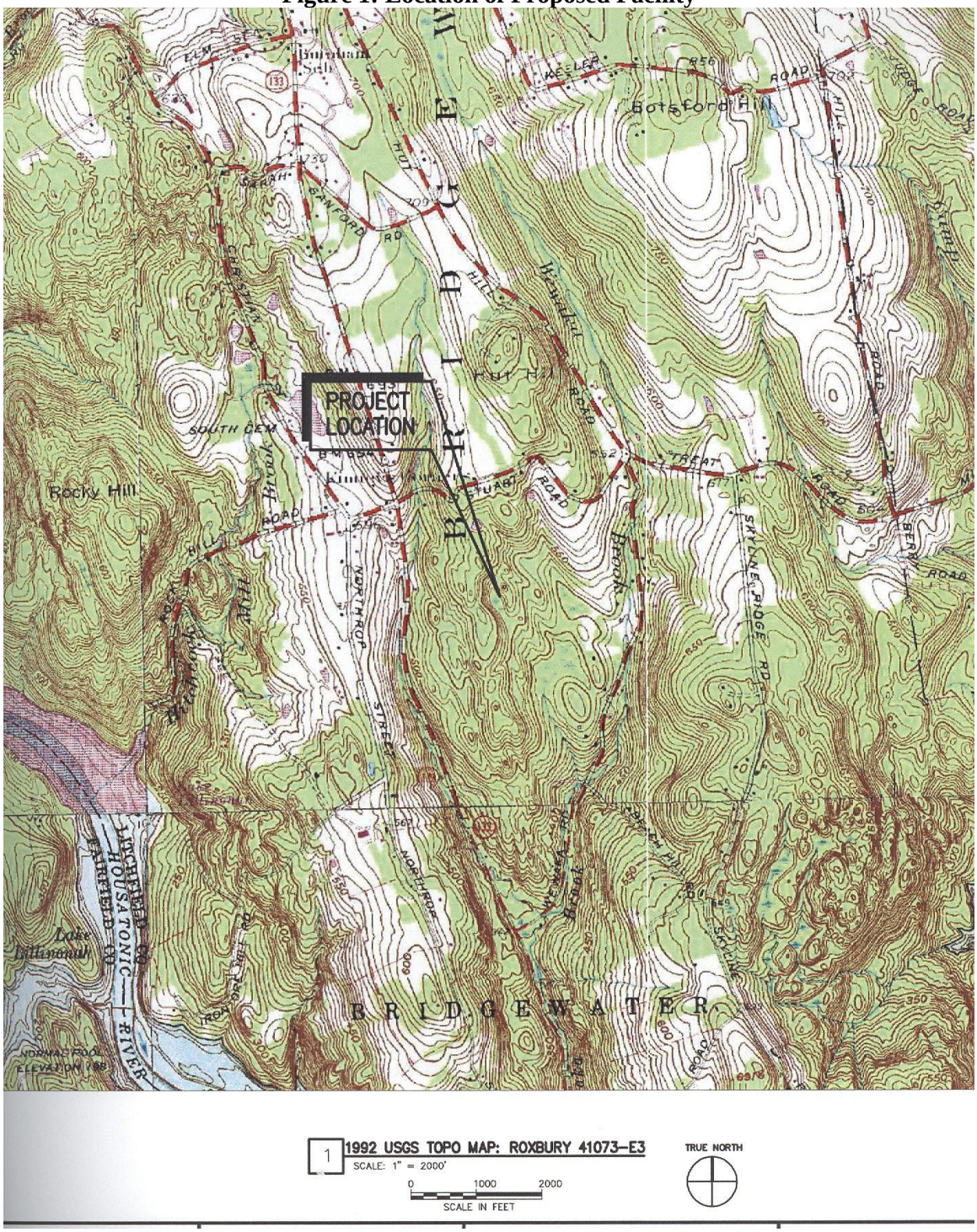
Location	Visibility	Approx. Portion of (170') Tower Visible (ft.)	Approx. Distance and Direction to Tower Site
1 – Skyline Ridge Road	Year round	41'	0.81 miles northwest
2 – Skyline Ridge Road near #66	Year round	60'	0.70 miles southwest
3 – Skyline Ridge Road near #66	Year round	61'	0.71 miles southwest
4 – Northrop Street near #211	Year round	60'	0.82 miles northeast
5 – Northrop Street	Year round	44'	0.78 miles northeast
6 – Northrop Street near #160	Year round	33'	0.59 miles northeast
7 – Northrop Street near #147	Year round	25'	0.50 miles southeast
8 – Northrop Street near #119	Year round	26'	0.47 miles northeast
9 – Northrop Street near #70	Year round	12'	0.45 miles southeast
10 – Stuart Road near #	Year round	48'	0.35 miles southwest
11 – Route 133	Year round	20'	0.58 miles southeast
12 – Stuart Road near #50	Year round	19'	0.33 miles southeast
13 – Hut Hill Road north of Sarah Sanford Road	Not visible	None	1.29 miles southeast
14 – Stuart Road	Not visible	None	0.42 miles southwest
15 – Route 133 at Stuart Road	Not visible	None	0.41 miles southeast
16 – Wewaka Brook Road east of Route 133	Not visible	None	0.94 miles north
17 – Wewaka Brook Road at host property	Not visible	None	0.39 miles west
18 – Wewaka Brook Road at Stuart Road	Not visible	None	0.54 miles southwest

(Applicant 1, Attachment 7 – Visual Analysis Report)

109. There are no state or locally designated scenic roads within a two-mile radius of the proposed site. (Applicant 1, Attachment 7 – Visual Analysis Map; Tr. 1, p. 17)

110. There are no hiking trails within a two-mile radius of the proposed site. (Applicant 1, Attachment 7 – Visual Analysis Map; Tr. 1, p. 17)

Figure 1: Location of Proposed Facility

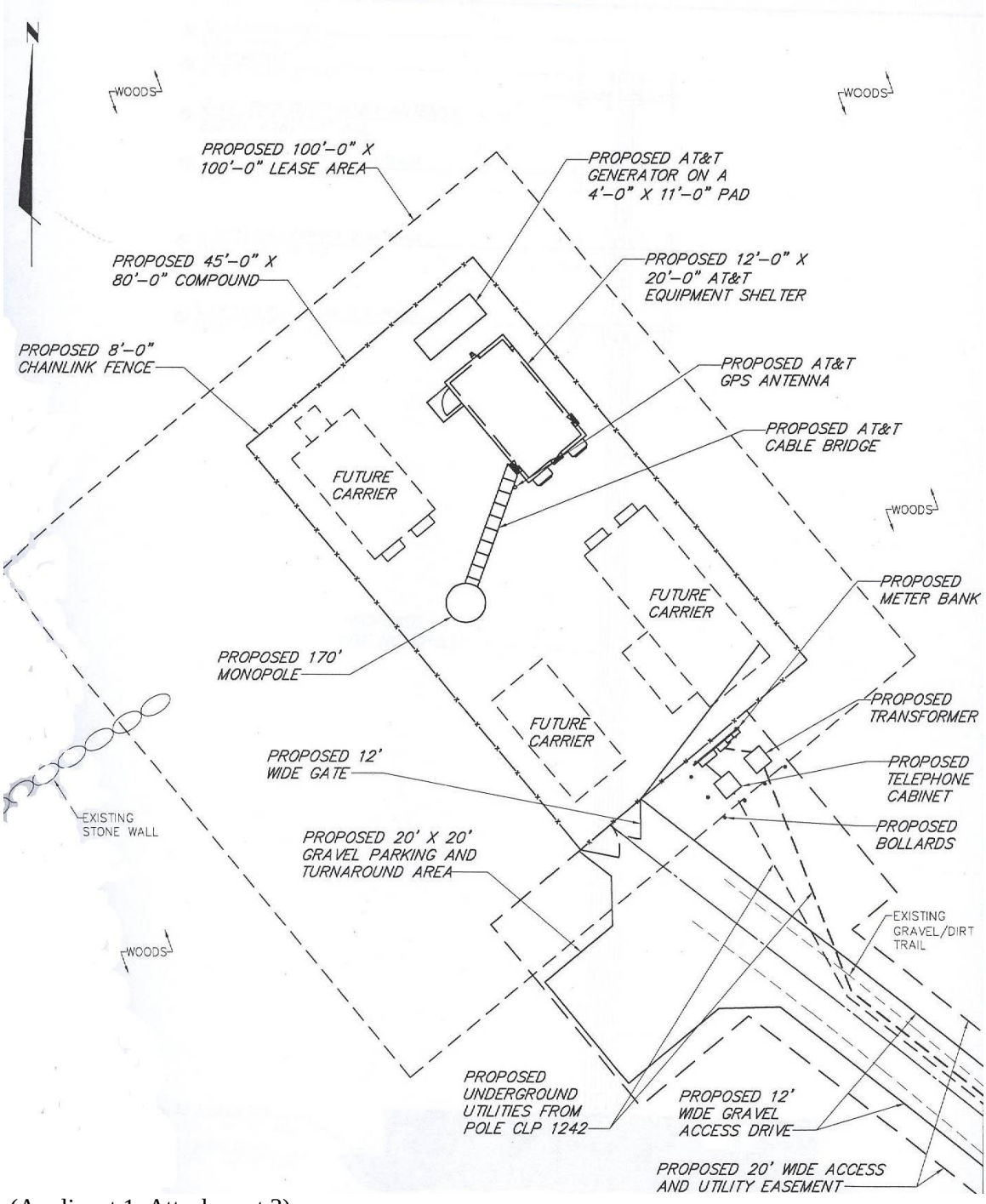


(Applicant 1, Attachment 3)

Figure 2: Aerial Photograph of Vicinity of Proposed Facility

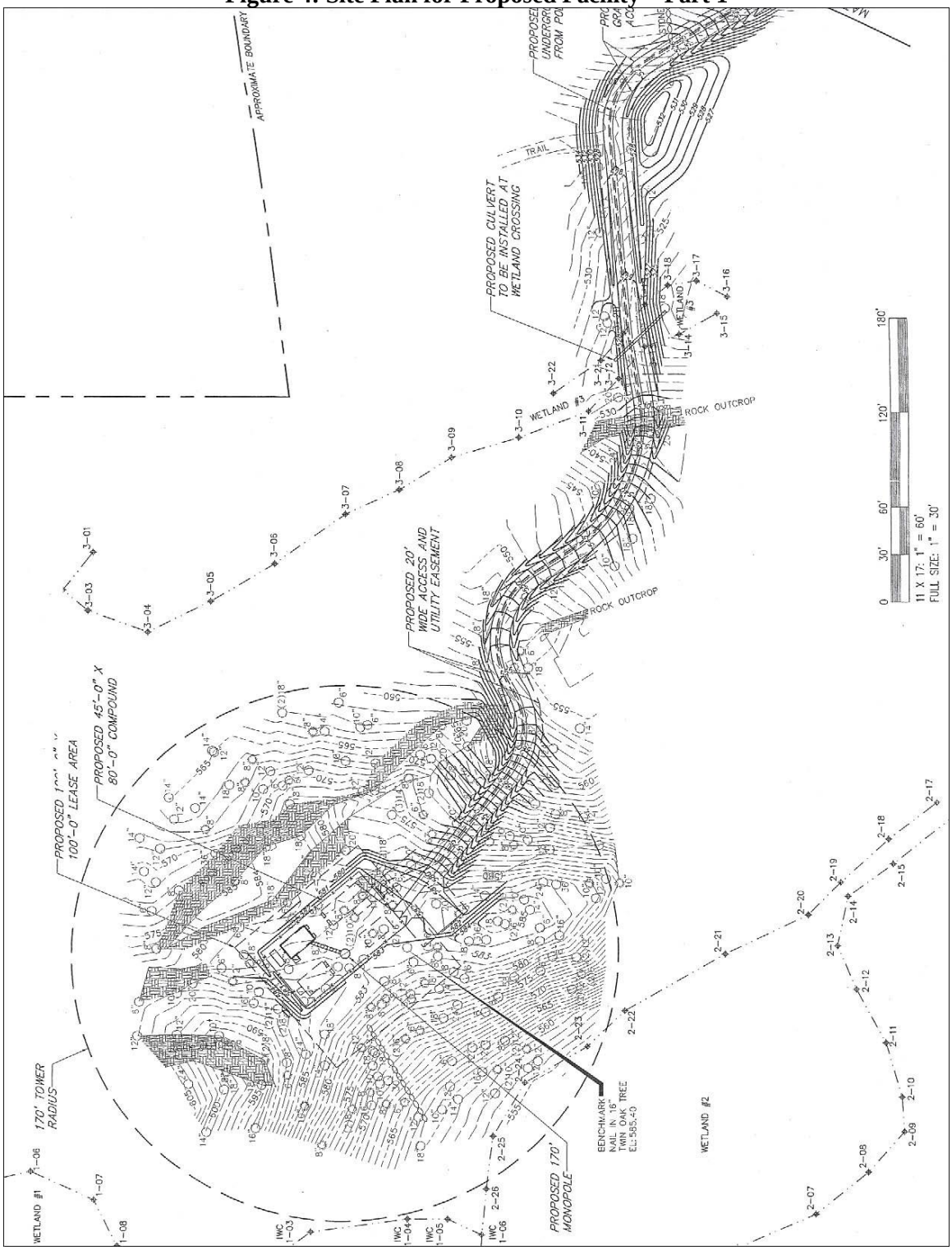
(Applicant 1, Attachment 3)

Figure 3: Compound Plan for Proposed Facility



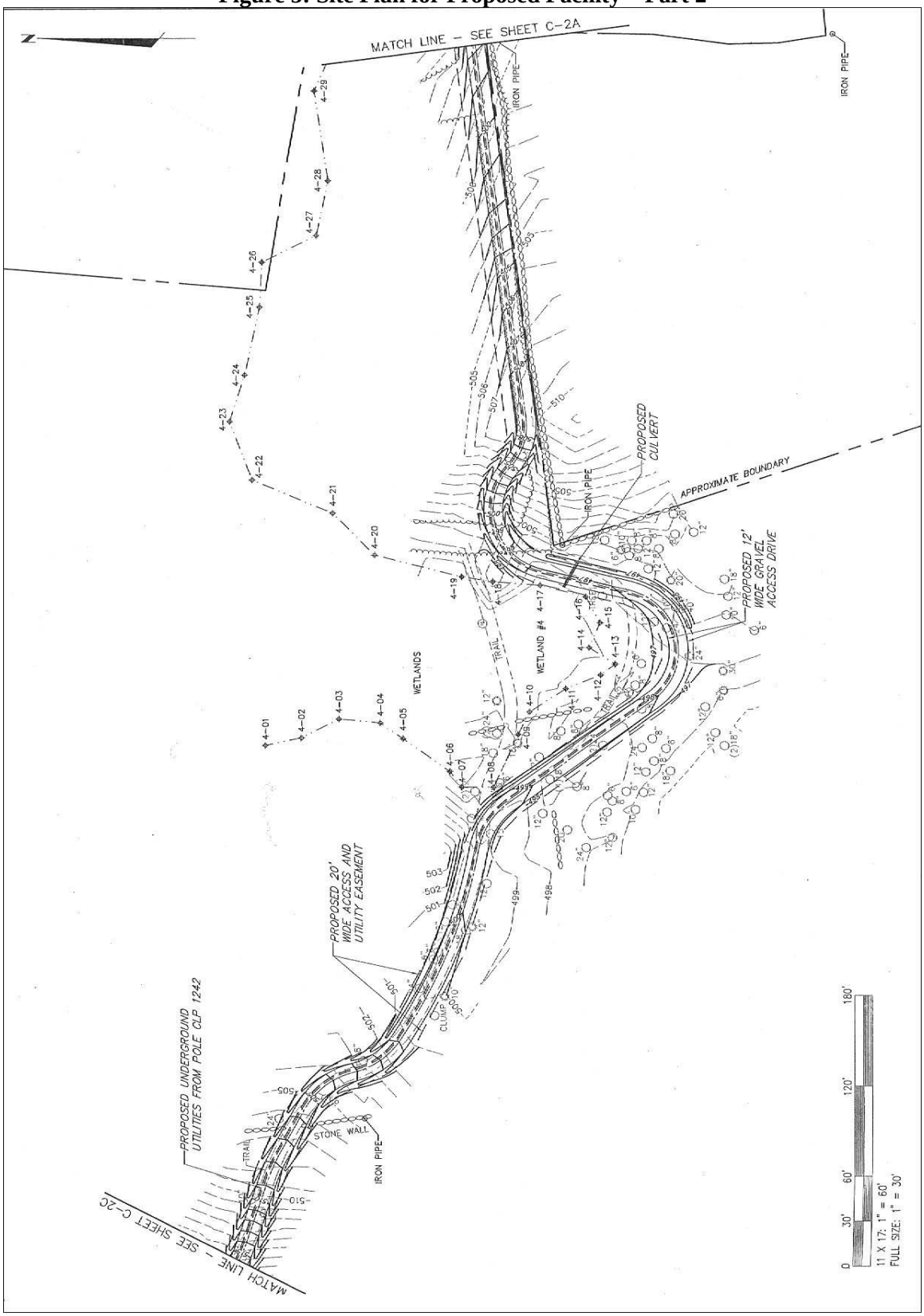
(Applicant 1, Attachment 3)

Figure 4: Site Plan for Proposed Facility – Part 1



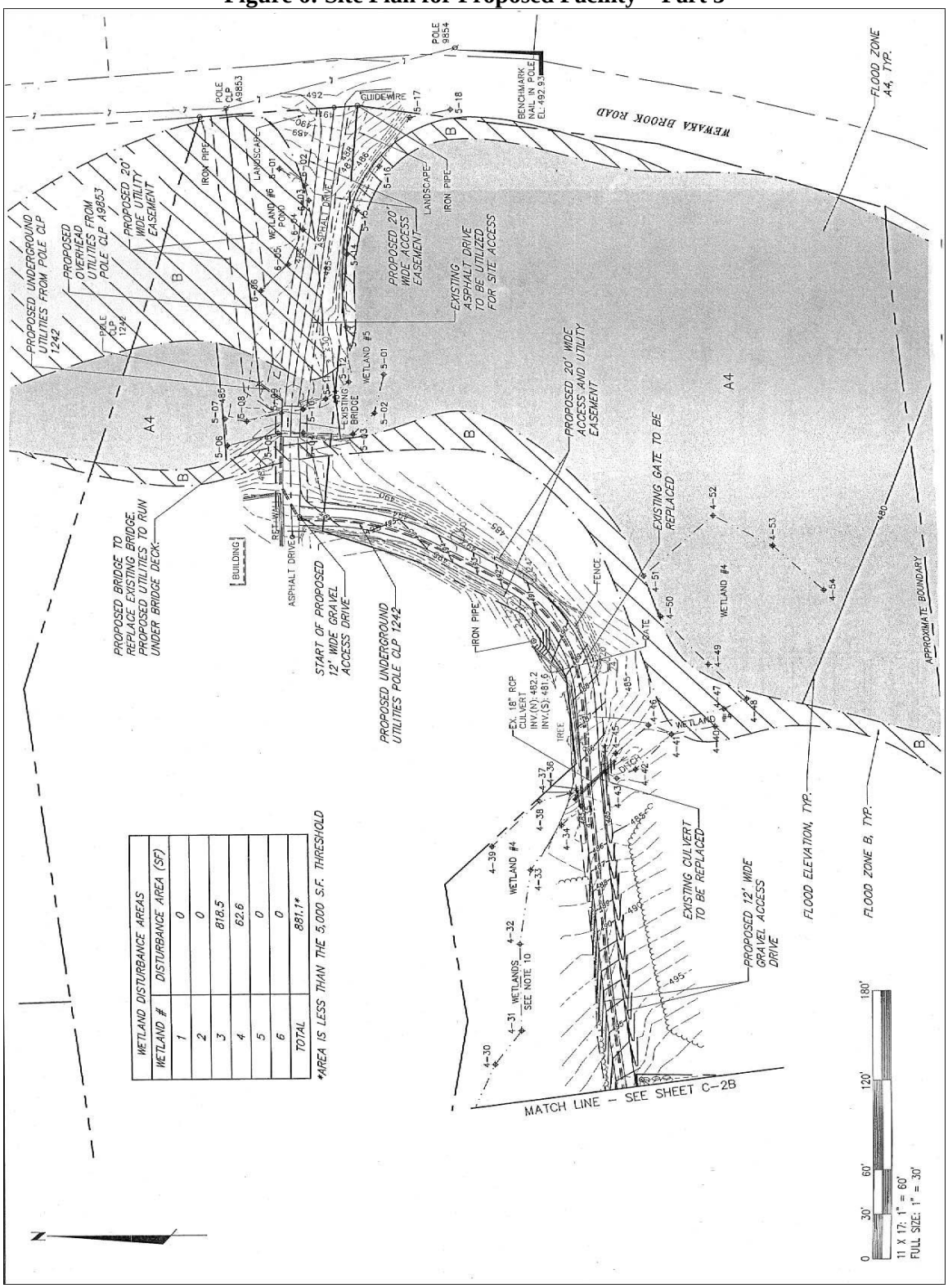
(Applicant 1, Attachment 3)

Figure 5: Site Plan for Proposed Facility – Part 2



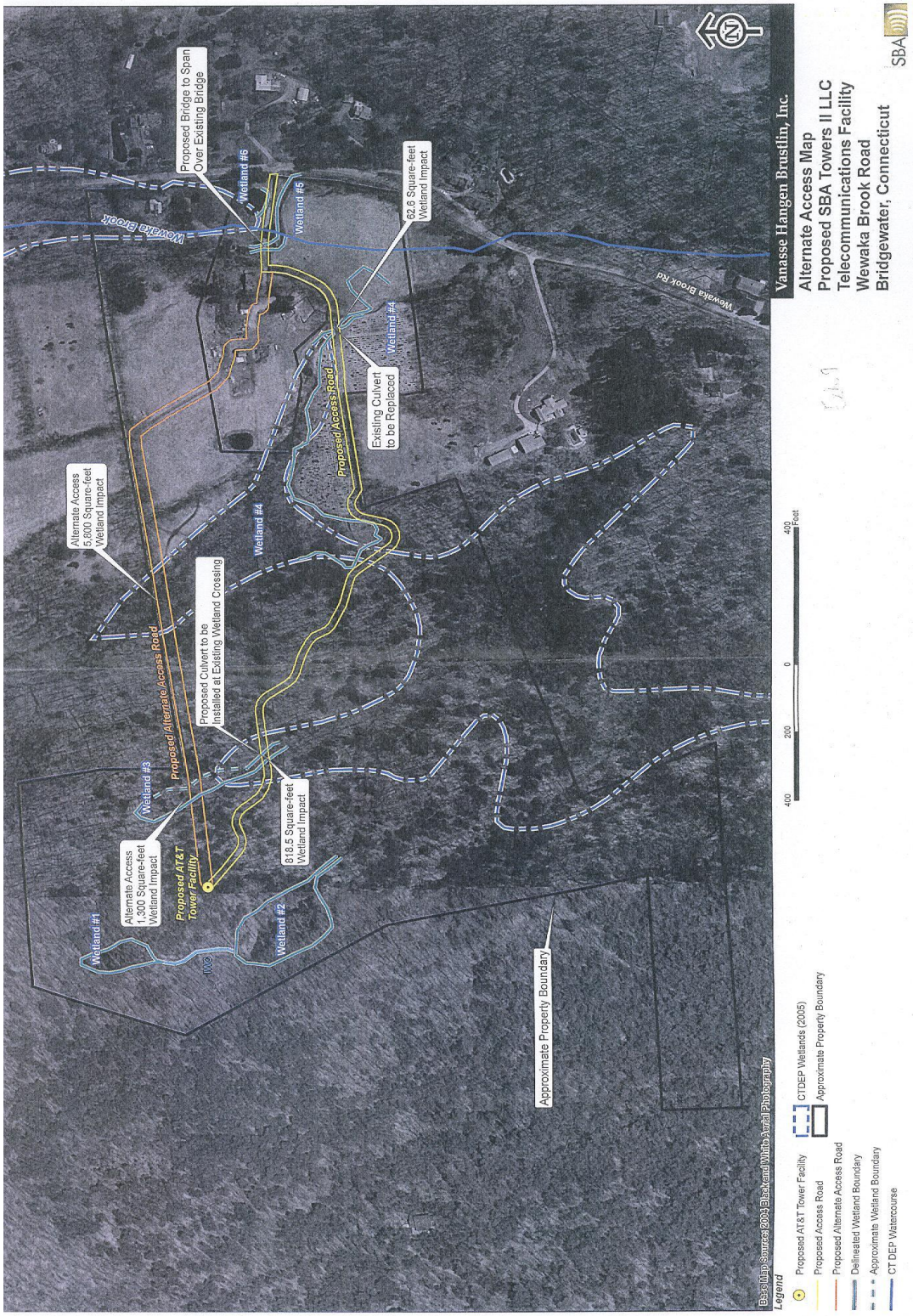
(Applicant 1, Attachment 3)

Figure 6: Site Plan for Proposed Facility – Part 3



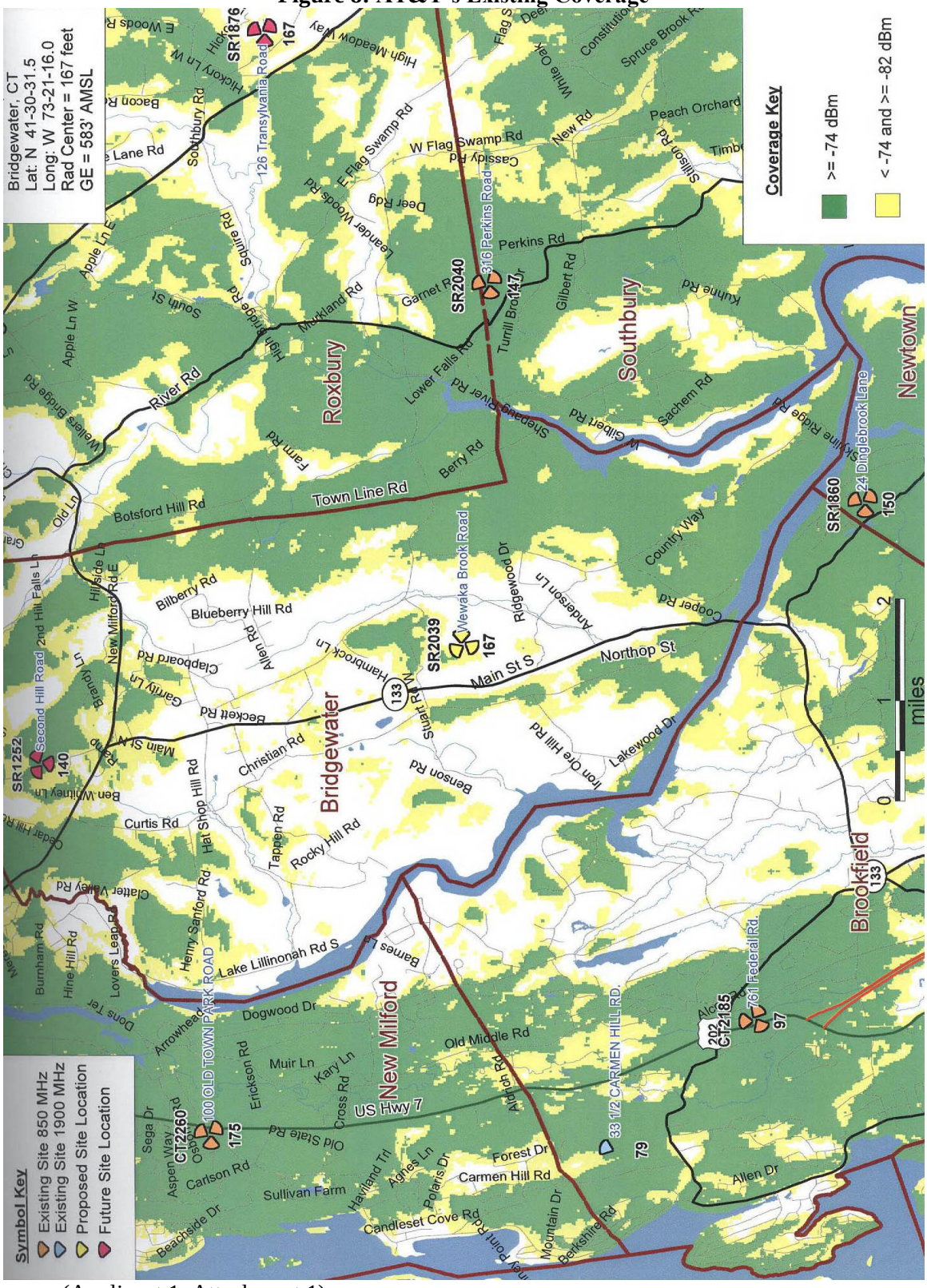
(Applicant 1, Attachment 3)

Figure 7: Alternate Access



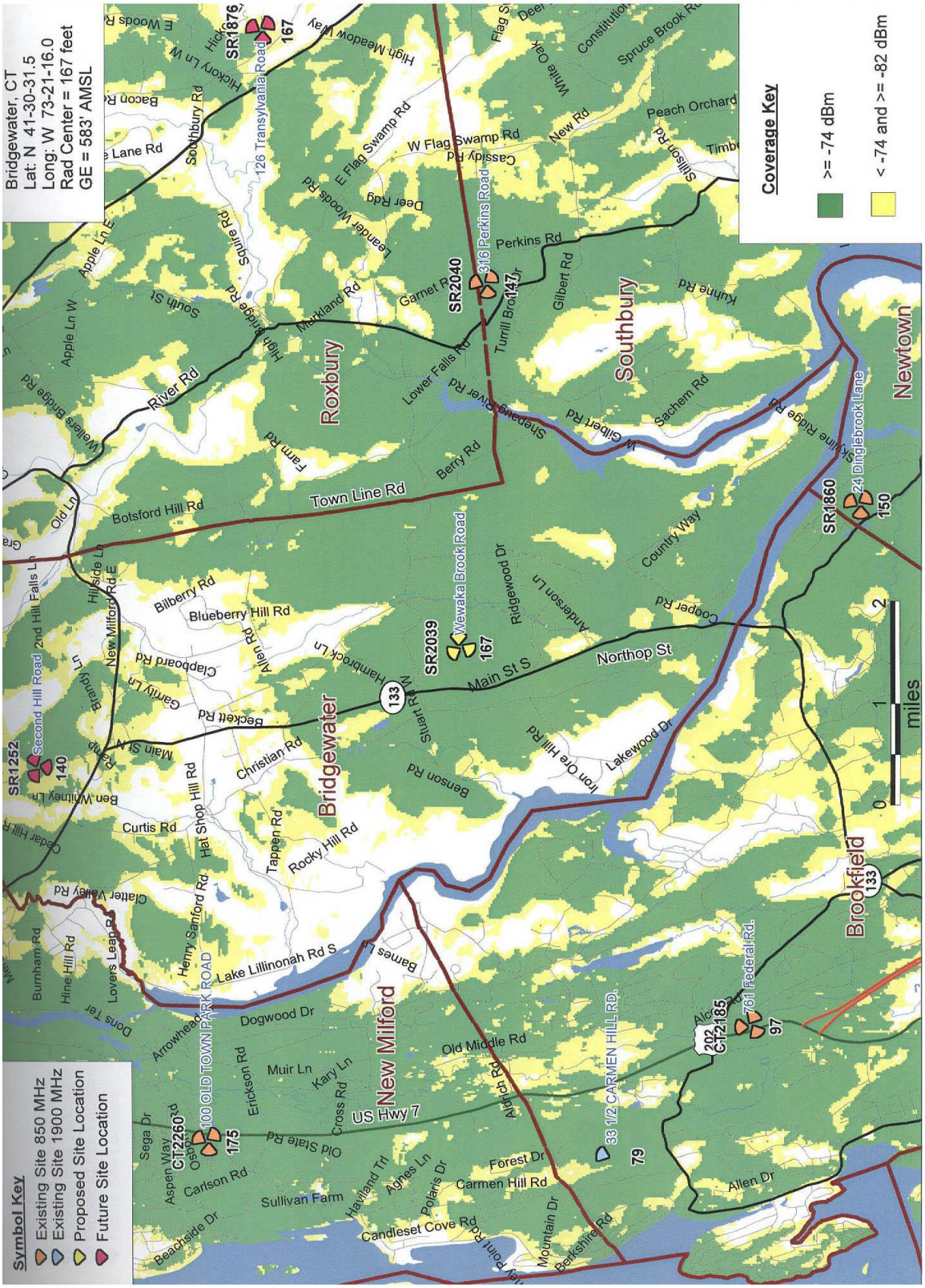
(Applicant 9)

Figure 8: AT&T's Existing Coverage



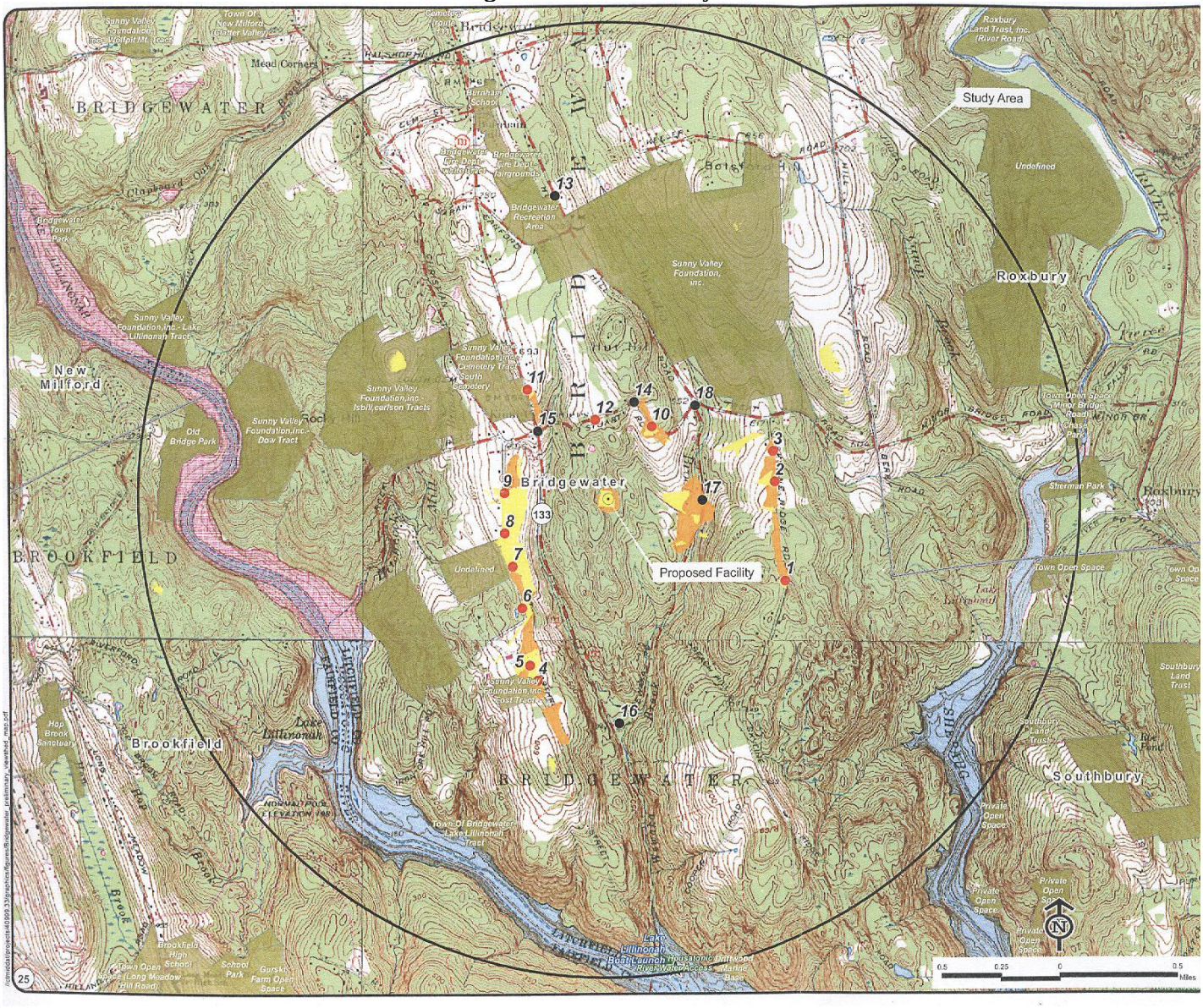
(Applicant 1, Attachment 1)

Figure 9: AT&T's Coverage with Proposed Facility



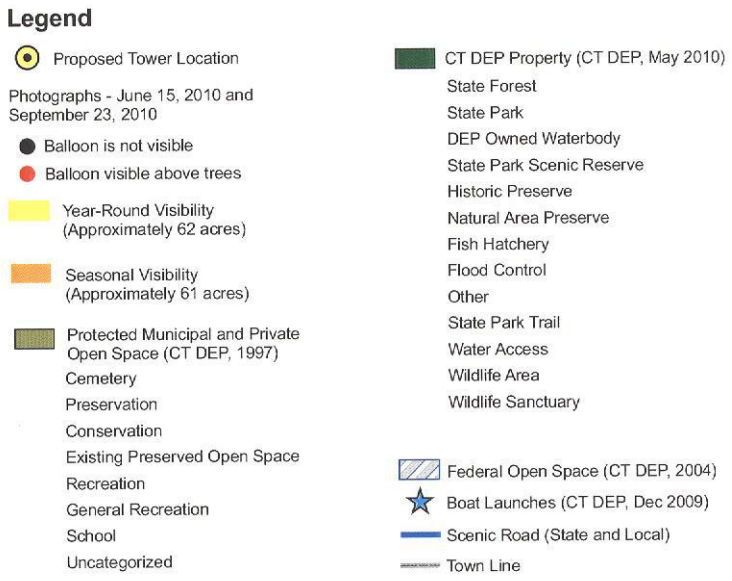
(Applicant 1, Attachment 1)

Figure 10: Visual Analysis



(AT&T 1, Attachment 7)

Figure 11: Viewshed Map Key



(Applicant 1, Attachment 7)