

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

October 7, 2011

TO: Parties and Intervenors

FROM: Linda Roberts, Executive Director *LRoberts*

RE: **DOCKET NO. 417** - T-Mobile Northeast, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Moose Hill Road, Guilford, Connecticut.

By its Decision and Order dated October 6, 2011, the Connecticut Siting Council granted a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Moose Hill Road, Guilford, Connecticut.

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

LR/cm

Enclosures (3)

c: Julie Kohler, Cohen and Wolf
Jesse Langer, Cohen and Wolf
State Documents Librarian


STATE OF CONNECTICUT)

ss. New Britain, Connecticut :

COUNTY OF HARTFORD)

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

ATTEST:



Linda Roberts
Executive Director
Connecticut Siting Council

I certify that a copy of the Findings of Fact, Opinion, and Decision and Order in Docket No. 417 has been forwarded by Certified First Class Return Receipt Requested mail, on October 7, 2011, to all parties and intervenors of record as listed on the attached service list, dated May 13, 2011.

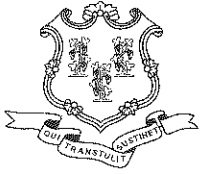
ATTEST:



Carriann Mulcahy
Secretary II
Connecticut Siting Council

**LIST OF PARTIES AND INTERVENORS
SERVICE LIST**

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Applicant	<input type="checkbox"/> E-mail or <input checked="" type="checkbox"/> U.S. Mail	T-Mobile Northeast, LLC	Julie D. Kohler, Esq. Jesse A. Langer, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 (203) 368-0211 (203) 394-9901 fax jkohler@cohenandwolf.com jlanger@cohenandwolf.com
I	<input type="checkbox"/> E-mail or <input type="checkbox"/> U.S. Mail		
	<input type="checkbox"/> E-mail or <input type="checkbox"/> U.S. Mail		
	<input type="checkbox"/> E-mail or <input type="checkbox"/> U.S. Mail		



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October 7, 2011

TO: Classified/Legal Supervisor
417110613
New Haven Register
40 Sargent Drive.
New Haven, CT 06511

FROM: Carriann Mulcahy, Secretary II 

RE: **DOCKET NO. 417** - T-Mobile Northeast, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Moose Hill Road, Guilford, Connecticut.

Please publish the attached notice as soon as possible, but not on Saturday, Sunday, or a holiday.

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

Thank you.

CM



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NOTICE

Pursuant to General Statutes § 16-50p (a), the Connecticut Siting Council (Council) announces that, on October 6, 2011, the Council issued Findings of Fact, an Opinion, and a Decision and Order approving an application from T-Mobile Northeast, LLC for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Moose Hill Road, Guilford, Connecticut. This application record is available for public inspection in the Council's office, Ten Franklin Square, New Britain, Connecticut.



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October 7, 2011

Julie D. Kohler, Esq.
Jesse A. Langer, Esq.
Cohen and Wolf, P.C.
1115 Broad Street
Bridgeport, CT 06604

RE: **DOCKET NO. 417** - T-Mobile Northeast, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Moose Hill Road, Guilford, Connecticut.

Dear Attorneys Kohler & Langer:

By its Decision and Order dated October 6, 2011, the Connecticut Siting Council (Council) granted a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a telecommunications facility located off Moose Hill Road, Guilford, Connecticut.

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

Very truly yours,

Linda Roberts
Executive Director

LR/cm

Enclosures (4)



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CERTIFICATE


OF

ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

DOCKET NO. 417

Pursuant to General Statutes § 16-50k, as amended, the Connecticut Siting Council hereby issues a Certificate of Environmental Compatibility and Public Need to T-Mobile Northeast, LLC for the construction, maintenance and operation of a telecommunications facility located off Moose Hill Road, Guilford, Connecticut. This Certificate is issued in accordance with and subject to the terms and conditions set forth in the Decision and Order of the Council on October 6, 2011.

By order of the Council,



Robert Stein, Chairman

October 6, 2011

DOCKET NO. 417 - T-Mobile Northeast, LLC application for a } Connecticut
 Certificate of Environmental Compatibility and Public Need for the }
 construction, maintenance and operation of a telecommunications } Siting
 facility located at Moose Hill Road, Guilford, Connecticut. } Council

October 6, 2011

Findings of Fact

Introduction

1. T-Mobile Northeast, LLC (T-Mobile), in accordance with the provisions of Connecticut General Statutes (CGS) §§ 16-50g through 16-50aa, applied to the Connecticut Siting Council (Council) on May 13, 2011 for the construction, maintenance, and operation of a 110-foot wireless telecommunications facility located on Moose Hill Road in Guilford, Connecticut. (T-Mobile 1, p. 1)
2. T-Mobile is a Delaware Partnership with an office in Bloomfield, Connecticut. T-Mobile is licensed by the Federal Communications Commission (FCC) to construct and operate a personal wireless service system in Connecticut. (T-Mobile 1, p. 2)
3. The purpose of the proposed facility is to provide wireless service for T-Mobile to the southwest section of Guilford. (T-Mobile 1, Tab H)
4. Pursuant to CGS § 16-50m, the Council held a public hearing on August 18, 2011, beginning at 3:00 p.m. and continuing at 7:00 p.m. at the Guilford Community Center, 32 Church Street, Guilford, Connecticut. (Transcript 1 – 08/18/11, 3:00 p.m. [Tr. 1], p. 2; Transcript 2 – 08/18/11, 7:00 p.m. [Tr. 2], p. 2)
5. The party in the proceeding is the applicant. (Record)
6. The Council and its staff conducted an inspection of the site on August 18, 2011, beginning at 2:00 p.m. The applicant flew a five-foot diameter red balloon at the site from 11:40 a.m. to 6:00 p.m. to simulate the height of the proposed facility. Weather conditions were generally favorable and the balloon reached the intended height of 110 feet above ground level (agl). (Tr. 2, pp. 32-33)
7. Notice of the application was sent to all abutting property owners by certified mail. All return receipts were received except from two property owners (State of Connecticut and Marc Knapp). A second notice was sent to these abutters by first class mail. (T-Mobile 1, Tab G; T-Mobile 2, R. 1)
8. Public notice of the application was published in the New Haven Register on April 10 and 12, 2011. (T-Mobile 1, Tab F)
9. T-Mobile installed a four-foot by six-foot sign at the entrance to the site property on July 30, 2011. The sign presented information regarding the project and the Council's public hearing. (T-Mobile 3e)
10. Pursuant to CGS § 16-50l(b), T-Mobile provided notice of the application to all federal, state and local officials and agencies listed therein. (T-Mobile 1, Tab E)

State Agency Comment

11. Pursuant to CGS § 16-50j(h), on June 27, 2011, and August 19, 2011, the following State agencies were solicited to submit written comments regarding the proposed facility: Department of Energy and Environmental Protection (DEEP), Department of Public Health, Council on Environmental Quality, Public Utility Regulatory Authority, Office of Policy and Management, Department of Economic and Community Development, Department of Public Safety, Department of Transportation, Department of Agriculture, and Department of Emergency Management and Homeland Security. (Record)
12. No state agencies submitted comments to the Council regarding the application. (Record)

Municipal Consultation

13. T-Mobile submitted a technical report to the Town of Guilford First Selectman Joseph Mazza on December 24, 2009. The technical report specified a 140-foot monopole telecommunications facility at the site. (T-Mobile 3e, p. 7)
14. T-Mobile met with Town representatives on January 21, 2010. Although the Town did not request that T-Mobile appear at a public meeting, Town officials requested that T-Mobile consult with local organizations including the Guilford Conservation Land Trust (Land Trust) and the Guilford Preservation Alliance. (T-Mobile 1, p. 23; T-Mobile 3e)
15. T-Mobile met with the Land Trust on June 7, 2010 and agreed to conduct a balloon float to determine the visibility from hiking trails in the Westwoods open space area north and northeast of the site. The Alliance did not request a meeting with T-Mobile. (T-Mobile 1, p. 24; T-Mobile 3e)
16. Additionally, T-Mobile consulted with the Scenic Road Advisory Committee on September 23, 2010 to discuss to the project. The committee expressed their concerns to T-Mobile and the State Historic Preservation Office (SHPO). (T-Mobile 1, p. 24)
17. Based on concerns expressed by these local organizations and SHPO, T-Mobile modified its proposal, reducing the height of the proposed facility from 140 feet to 110 feet with an exterior flush mount antenna configuration. (T-Mobile 1, p. 24)
18. T-Mobile would offer lease free space on the tower for the Town's emergency communications system. The Guilford Fire Department expressed an interest in placing equipment on the tower due to the current lack of emergency communications in this area of town. (T-Mobile 1, Tab R)

Public Need for Service

19. 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 8)
20. 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 8)

21. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item 8)
22. The Telecommunications Act of 1996 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 8)
23. 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. Congress further enacted the Enhanced 911 Act to facilitate emergency response capabilities. (Council Administrative Notice Items 9 & 10)

T-Mobile - Existing and Proposed Wireless Coverage

24. T-Mobile intends to provide personal communication service (PCS - 1900 MHz), and Advanced Wireless Service (AWS - 2100 MHz) from the site. (T-Mobile 3d)
25. T-Mobile designs and operates at a signal level threshold of -84 dBm to maintain reliable voice and data services. Reliable in-building service is at a threshold of -76 dBm. Currently, there is no reliable service in the proposed service area (refer to Figure 1). (T-Mobile 2, R. 4, Tab H)
26. The quality of voice and data services depends on signal strength and the effective placement of the facility to seamlessly hand-off to other adjacent sites. The proposed facility would hand off to the following T-Mobile facilities:

Location	Antenna Height	Distance and Direction from Proposed Site
188 Sachems Head Road	87 feet agl (existing)	1.1 miles east
1919 Boston Post Road, Guilford	147 feet agl (existing)	2.3 miles northeast
723 Leetes Island Road, Branford	80 feet agl (to be installed)	1.1 miles west

These T-Mobile facilities do not provide adequate coverage to the proposed service area. (T-Mobile 1, Tab H, Tab I; T-Mobile 2, R. 6)

27. The proposed facility would provide 4.9 square miles of reliable service to the surrounding land area (does not include open water areas of Long Island Sound). This includes areas adjacent to Route 146, Interstate 95 and the Amtrak rail line (refer to Figure 2). (Tr. 2, pp. 28-30)

Site Selection

28. T-Mobile initiated a site search for the proposed service area in July of 2008. (T-Mobile 3e)
29. The search area was centered on the intersection of Moose Hill Road and Dromara Road. (T-Mobile 3e)

30. T-Mobile did not identify any structures in the search area that would be suitable for a telecommunications facility. (T-Mobile 1, Tab J)
31. After determining there were no viable structures within the search area, T-Mobile researched fourteen other parcels in Guilford but rejected them as follows:
 - a) Leetes Island Road (Map 19/Lot 13) - no response from landowner;
 - b) Leetes Island Road (Map 19/Lot 15) - landowner not interested;
 - c) Leetes Island Road (map 18, Lot 18A) - would not meet coverage objectives;
 - d) New Quarry Road (Map 66/Lots 9B, 17) - would not meet coverage objectives;
 - e) Amtrak Right of Way - location examined too far to west, redundant coverage with existing site;
 - f) Duck Rock Road (Map 69/Lot 13) - would not meet coverage objectives;
 - g) Moose Hill Road Map 69/Lots 1, 1A, 5, 7, 7A) - would not meet coverage objectives;
 - h) 225 Moose Hill Road - would not meet coverage objectives;
 - i) 204 Dromara Road - would not meet coverage objectives;(T-Mobile 1, Tab J)
32. T-Mobile investigated a second potential location for a facility south of the proposed site on the same property but determined this location would require too much land disturbance (tree clearing, blasting, and filling) when compared to the proposed site. (T-Mobile 2, R. 8)

Site Property Description

33. The site is located on a 163-acre parcel on Moose Hill Road, referred to as Map 66, Lot 64 (refer to Figure 3). (T-Mobile 1, Tab C)
34. The parcel is owned by Leete Associates, Inc. (T-Mobile 1, Tab C)
35. The parcel is zoned residential, R-8. (T-Mobile 1, Tab C)
36. The parcel is mostly wooded with two small field areas. Numerous knolls and open ledge areas characterize the parcel's topography. (T-Mobile 1, Tab C; T-Mobile 2, R. 7)
37. The tower site is located in the southwest portion of the parcel, approximately 580 feet east of Moose Hill Road and approximately 400 feet north of the Amtrak railway bed. (T-Mobile 1, Tab C)
38. The proposed tower would be located at an elevation of 52 feet above mean sea level. (T-Mobile 1, Tab C)
39. The nearest property lines to the proposed tower are approximately 350 feet to the west (Leete Associates), 350 feet to the south (Amtrak), and 475 feet to the northwest (133 Moose Hill Road). (T-Mobile 1, Tab C)
40. The nearest residence to the proposed tower site is approximately 535 feet to the southeast (575 Leetes Island Road). (T-Mobile 1, Tab L; T-Mobile 2, R. 9)
41. There are 16 residences within 1,000 feet of the tower site. (T-Mobile 1, Tab L)

Facility Description

42. T-Mobile proposes to construct a 110-foot monopole at site, capable of supporting four levels of exterior, flush-mount antennas.. The tower and foundation would not be designed to support an extension. (T-Mobile 1, Tab C; Tr. 1, pp. 50-51)
43. T-Mobile proposes to install six panel antennas at the 108-foot level of the tower. Each antenna would be capable of providing both PCS and AWS service. (T-Mobile 1, Tab C; Tr. 1, pp. 63-64)
44. The Town would locate the following emergency communication equipment on the tower: one nine-foot tall whip antenna at the top of the tower; one nine-foot tall whip antenna on a stand-off arm at the 77-foot level of the tower; and one four-foot diameter microwave dish at the 77-foot level of the tower. (T-Mobile 1, Tab C; Tr. 1, pp. 16-21, 84-85)
45. Space would be available on the tower for other telecommunication providers at the 98-foot and 88-foot levels. (T-Mobile 1, Tab C)
46. T-Mobile proposes to construct a 50-foot by 50-foot compound within a 50-foot by 60-foot lease area at the base of the tower. T-Mobile would install equipment cabinets on a concrete pad within the compound (refer to Figure 4). (T-Mobile 1, Tab C)
47. Access to the proposed tower site would follow an existing dirt road east from Moose Hill Road for 300 feet before turning north for 460 feet to the compound. T-Mobile would upgrade the road to a 12-foot wide, graveled surface. (T-Mobile 1, Tab C)
48. Overhead utilities would be installed from an existing utility pole along Moose Hill Road. Six new wood poles would be installed along the access road. It would be possible to install utilities underground along the shoulder of the road and within a conduit where the road uses a culvert crossing. (T-Mobile 1, Tab C; Tr. 1, pp. 66-67)
49. The facility would have a battery backup power of eight to ten hours in duration. (Tr. 1, p. 66)
50. The estimated construction cost of the tower and the installation of T-Mobile's equipment is:

Tower and foundation	\$90,000.
Site development	65,000.
Utilities	30,000.
<u>Antennas and radio equipment</u>	<u>75,000.</u>
<u>Total estimated cost</u>	<u>\$260,000.</u>

(T-Mobile 1, p. 26; Tr. 2, p. 28)

Environmental Concerns

51. The compound site and access road is within an area containing records of the Eastern Box Turtle, a State special concern species. T-Mobile performed a box turtle survey and did not identify any box turtles on the site property, although suitable habitat exists. DEEP reviewed the survey and indicated that it was preferable for construction to occur during the turtle's dormant period (November 1 to April 1) but further stipulated that if construction occurs during the turtle's active period, precautionary measures should be undertaken to avoid potential turtle mortality. (T-Mobile 1, Tab O)

52. T-Mobile has developed a box turtle protection program, consistent with DEEP recommendations, that include construction area isolation, contractor education, protective measures and reporting. (T-Mobile 1, Tab K)
53. A Wood Turtle, a State special concern species, was identified during the turtle survey but it was not near the proposed construction area. (T-Mobile 1, Tab O)
54. Development of the site would require the removal of two trees with a diameter of six inches or greater at breast height. (T-Mobile, Tab M)
55. There are no wetlands at the proposed compound site. The existing dirt road crosses an intermittent watercourse associated with a wetland system that extends in a north-south direction through the property. Reconstruction of the access road includes a new 10-foot wide culvert at the stream crossing. It would be designed to maintain the natural substrate of the watercourse, allowing for the movement of aquatic organisms up and down the stream corridor as well as sufficient capacity to convey stormwater flows. (T-Mobile 1, Tab K, Tab O; Tr. 1, pp. 24-26)
56. Installation of the new culvert would result in approximately 150 square feet of direct wetland impact (filling) and 250 square feet of temporary wetland impact (clearing). (T-Mobile 1, Tab K, Tab O; Tr. 1, pp. 21-22)
57. T-Mobile would restore temporarily disturbed wetland areas using a native New England wetland seed mix and native wetland shrubs. (T-Mobile 1, Tab K)
58. Due to the amount of wetland impact, the project would require a filing with the United States Army Corp of Engineers. Additionally, unconfined streamwork must occur during the period of July 1 to September 30. (T-Mobile 1, Tab K; Tr. 1, pp. 23, 88-89)
59. Erosion and sedimentation controls consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* and other best management practices would be established and maintained during construction. (T-Mobile 1, Tab K)
60. The proposed facility is not located within any Federal Emergency Management Agency designated 100-year or 500 year flood zones. (T-Mobile 1, Tab O)
61. The proposed facility is within the Connecticut Coastal Management Act's (CCMA) coastal boundary. The nearest coastal resources are tidal wetlands located approximately 1,050 feet southeast of the proposed tower site. No coastal resources, as defined in the CCMA, would be adversely affected by development of the proposed facility. (T-Mobile 1, Tab O)
62. Aircraft hazard obstruction marking or lighting of the tower would not be required. (T-Mobile 1, Tab S)
63. The design of the proposed tower would comply with recommended guidelines of the United States Fish and Wildlife Service for minimizing the potential for telecommunications towers to impact bird species. The guidelines recommend that towers be less than 199 feet tall, avoid the use of aviation lighting, and avoid guy wires as tower supports. (Council Administrative Notice 39)
64. The proposed facility is not near any areas identified by the National Audubon Society as a Connecticut Important Bird Area. (Council Administrative Notice 29)

65. The Connecticut coastline is within the Atlantic Flyway, a generalized regional migratory bird flyway used as a stopover for migratory birds. The nearest coastal area is Shell Beach, 0.3 miles to the south. An intertidal marsh associated with Shell Beach is located 0.2 miles to the south. The proposed facility would not affect any coastal avian habitat and no impact on migratory birds is expected. (T-Mobile 3c)
66. The proposed facility is approximately 530 feet north of the Route 146 Historic District at its closest point. The Route 146 Historic District is a linear designation through the southwest portion of Guilford and the southeast portion of Branford that encompasses Route 146 and land on both sides of the road. The SHPO determined the facility, as proposed, would not have an adverse impact on this resource. (T-Mobile 1, Tab J, Tab N)
67. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of the proposed T-Mobile antennas is calculated to be 9.5% of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed 110-foot 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. (T-Mobile 1, p. 15, Tab P)

Visibility

68. The proposed tower would be visible year-round from approximately 1,072 acres within a two-mile radius of the proposed site (refer to Figure 5). Most of this visibility is from open waters of Long Island Sound, 0.4 miles to the south at its closest point. Other areas of year-round visibility include views from marshland east of the site, select views from area roads and views from open yard areas from the Shell Beach/Joshua Point area 0.3 miles to the south, and Sachem Head, 1.1 miles to the south. (T-Mobile 1, Tab N)
69. The following roads and adjacent residences would have year-round views of the upper portion of the tower:

Road	Road length of year-round visibility	Number of residences	Approx. Distance from Tower
Moose Hill Road	255 feet	2	1,075 feet northwest
Old Sachems Head Road	100 feet	8	6,335 feet southeast
Uncas Point Road	775 feet	6	6,865 feet south
Uncas Circle	290 feet	1	6,330 feet south
Shell Beach Road	1,975 feet	14	1,500 feet south
Joshua Point Road	1,025 feet	8	3,520 feet south
Rockledge Circle	330 feet	8	3,575 feet south
Birch Grove	480 feet	10	2,805 feet south
Beach Road	315 feet	9	2,565 feet south
Hickory Lane	300 feet	4	2,640 feet south
Juniper Knoll	170 feet	1	3,170 feet south

Views from these roads and residences would range from the very top of the tower to the upper 50 feet. (T-Mobile 1, Tab N; Tr. 2, pp. 30-31)

70. The tower would be visible during leaf-off conditions from an additional 54 acres. The following roads and adjacent residences would have round views of the tower during “leaf-off” conditions:

Road	Road length with seasonal visibility	Number of residences	Approx. Distance from Tower
Moose Hill Road	2,610 feet	13	620 feet west
Dromara Road	1,230 feet	7	842 feet west
Leetes Island Road (Route 146)	2,840 feet	2	1,386 feet southwest
Sanborn Road	350 feet	3	1,068 feet southwest

(T-Mobile 1, Tab N; T-Mobile 3b)

71. Visibility of the proposed tower from specific locations within a two-mile radius of the site is as follows:

Specific Location	Photo location on Map*	Approx. Portion of Tower Visible	Approx. Distance from Tower
Moose Hill Road	1	30 feet - unobstructed	1,075 feet northwest
Moose Hill Road	2	50 feet - through trees	694 feet northwest
Dromara Road	3	50 feet - through trees	842 feet west
Shell Beach Road	4	50 feet - unobstructed	1,849 feet south
Leetes Island Road	5	20 feet - through tree top.	1,809 feet east
Uncas Point Road	6	10 feet - unobstructed	6,987 feet south
Old Sachems Head Road	7	Not visible	6,156 feet southeast
Moose Hill Road	8	20 feet - through trees	1,829 feet northwest
Moose Hill Road	9	20 feet - through trees	875 feet northwest
Moose Hill Road	10	50 feet - through trees	620 feet west
Dromara Road	11	40 feet - through trees	1,030 feet west
Dromara Road	12	40 feet - through trees	1,503 feet northwest
Shell Beach Road	13	Not visible	1,441 feet south
Leetes Island Road	14	10 feet - through trees	1,386 feet southwest
Leetes Island Road	15	Not visible	3,089 feet east
Leetes Island Road	16	Not visible	1,321 feet east
Old Sagem Head Road	17	Not visible	6,401 feet southeast
Westwoods - Lost Lake	18	Not visible	3,656 feet east
Westwoods - vista	-	Not visible	7,713 feet northeast
Quarry Road	-	Not visible	8,856 feet northwest
Three Mile Course	-	Not visible	8,728 feet northeast
Norton Avenue	-	Not visible	10,343 feet east
Leetes Island Road	23	Not visible	6,069 feet west
Flying Point Road	24	Not visible	9,003 feet west
Westwoods - White Trail	25	Not visible	4,150 feet east
Westwoods - White Trail at carved rocks	26	Not visible	3,700 feet east
Westwoods - Blue Trail	-	Not visible	5,150 feet north
Westwoods - Yellow Trail	-	Not visible	5,800 feet north
Westwoods - Green Trail	-	Not visible	8,720 feet north
Westwoods - Dunk Rock Road	-	Not visible	7,760 feet northeast

* A map showing projected visibility is included as Figure 5. (T-Mobile 1, Tab N)

72. The tower would not be visible from any hiking trails within the Westwoods open space area, approximately 0.5 miles east and northeast of the site. (T-Mobile 1, Tab N)
73. The upper 25 feet of the tower would be visible above the treeline when viewed from Long Island Sound at distances between 0.4 miles and 1.5 miles from the tower (refer to Figures 8 & 9). (T-Mobile 3b)
74. Although the upper portion of the tower would be visible from portions of Long Island Sound at distances greater than 1.5 miles, the tower is not prominent. This visibility includes the Thimble Island Historic District, located 1.7 miles southwest of the tower site. (T-Mobile 3b)
75. The tower would conform to the visual quality portion of the CCMA in that no vistas or viewpoints would be significantly altered. (T-Mobile 1, Tab O)
76. The tower would not be visible year-round from Route 146. Seasonal visibility would occur from a 440-foot long section of the road, 1,386 feet southwest of the tower site, and from a 2,400-foot long section of the road, 1,800 feet southeast of the tower site. (T-Mobile 1, Tab N)
77. The Guilford Scenic Road Advisory Committee requests that a tower be designed at the lowest possible height using a flush-mount antenna configuration. (T-Mobile 1, Tab N)
78. The tower would be painted a grey-brown color to blend in with the surrounding vegetation. (T-Mobile 1, Tab C; Tr. 1, pp. 51-52)

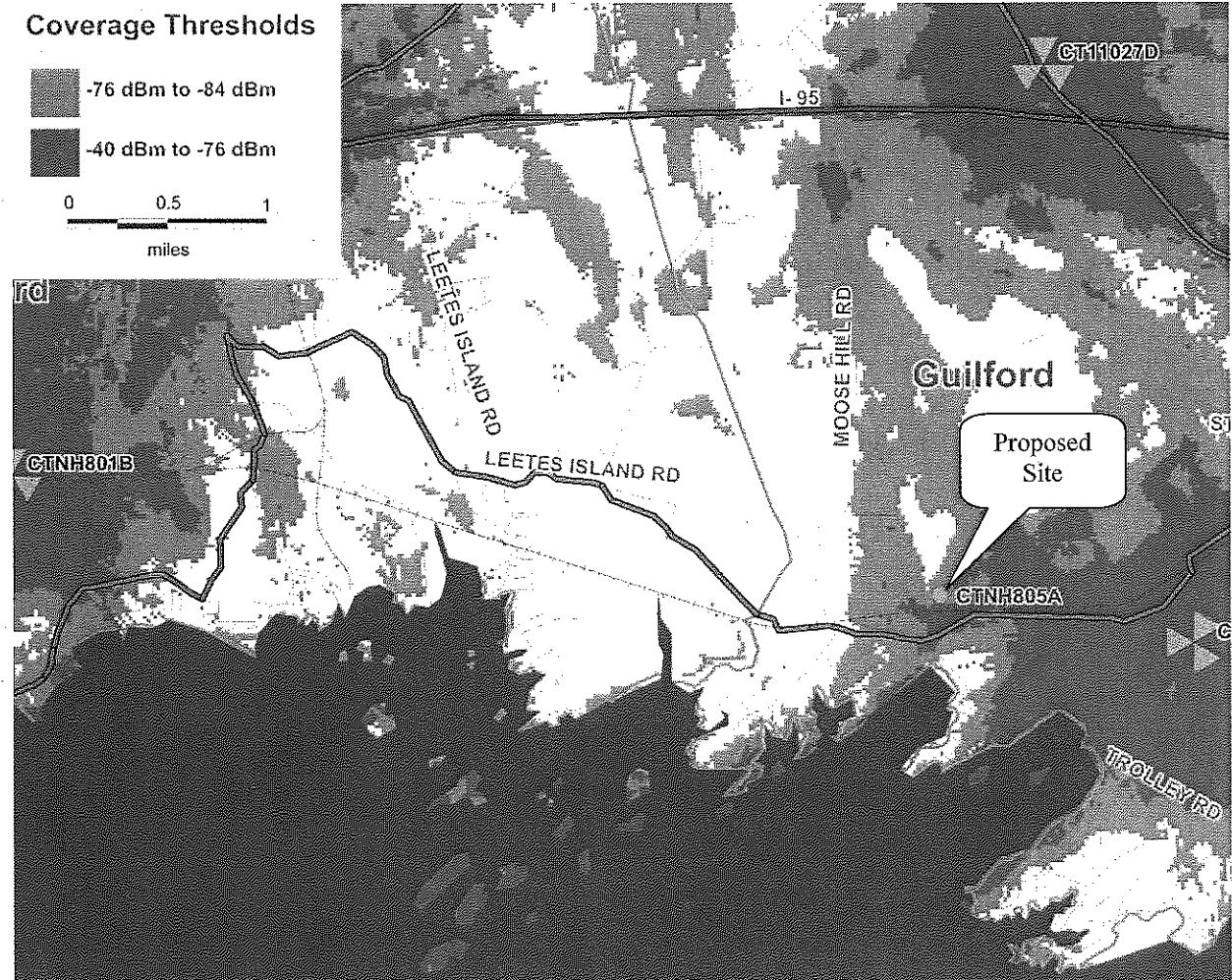


Figure 1: T-Mobile existing wireless service. (T-Mobile 1, Tab H)

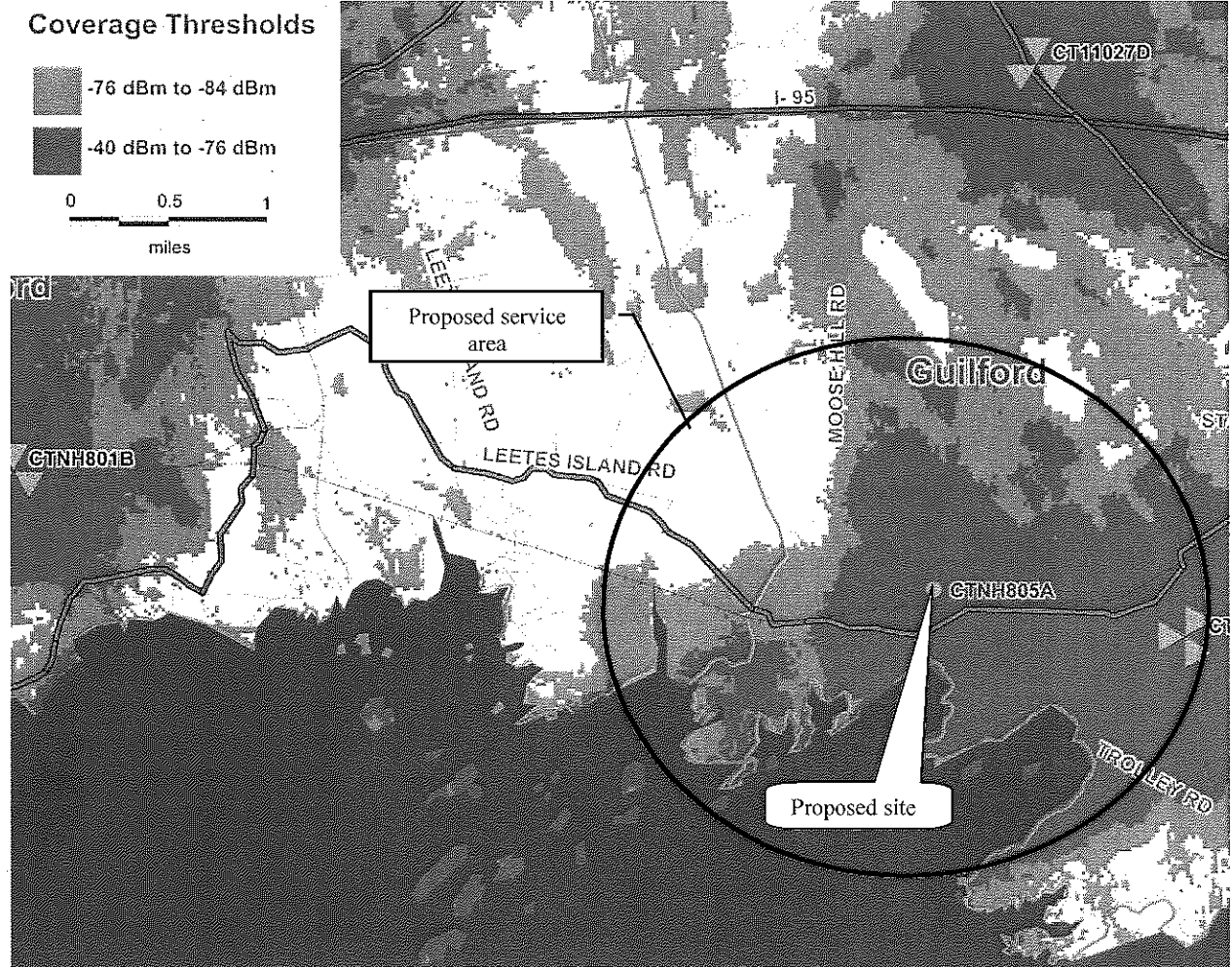


Figure 2: T-mobile proposed service area with antennas at 107 feet above ground level.
(T-Mobile 1, Tab H)

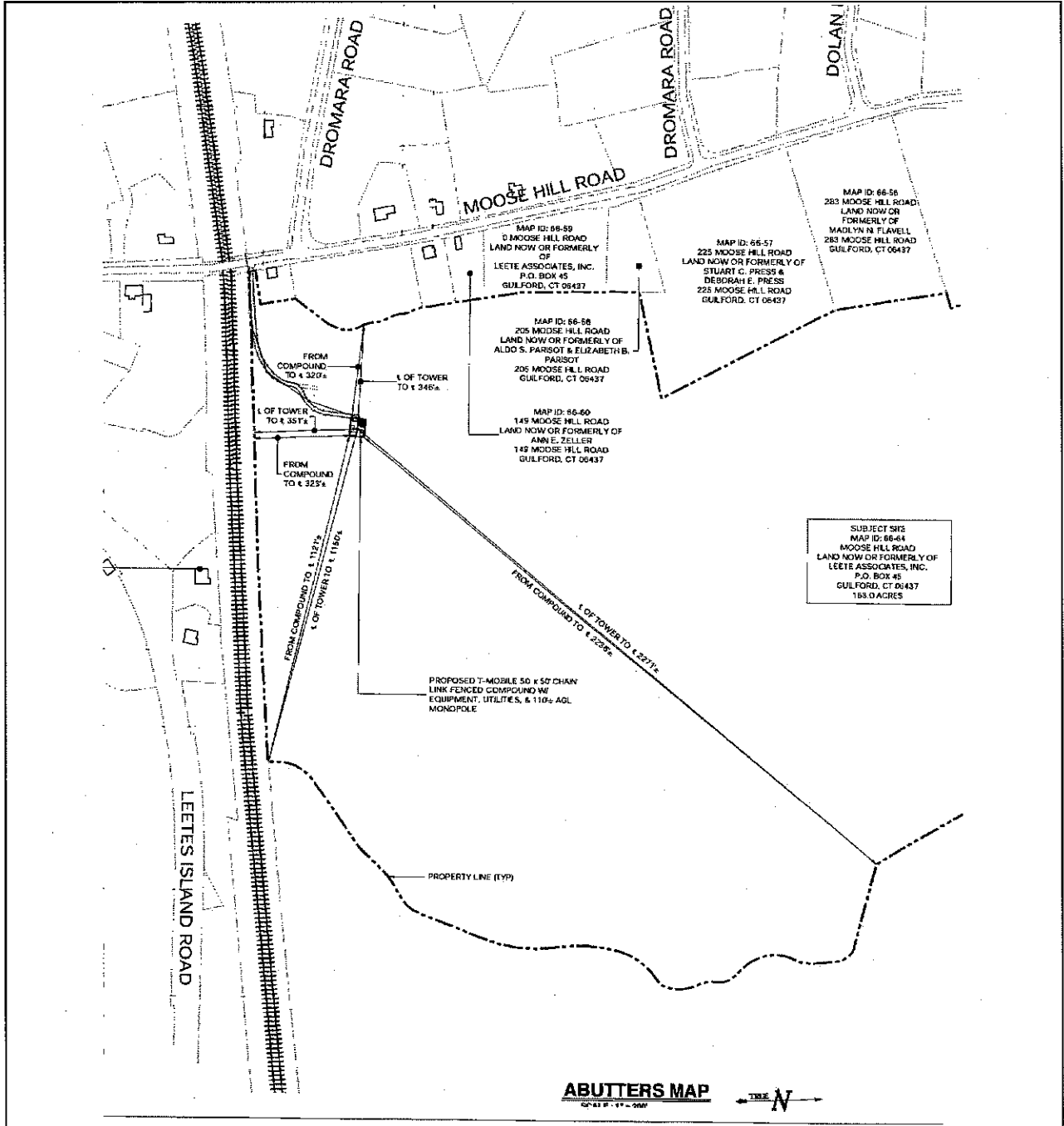


Figure 3: Site location off Moose Hill Road. (T-Mobile 1, Tab C)

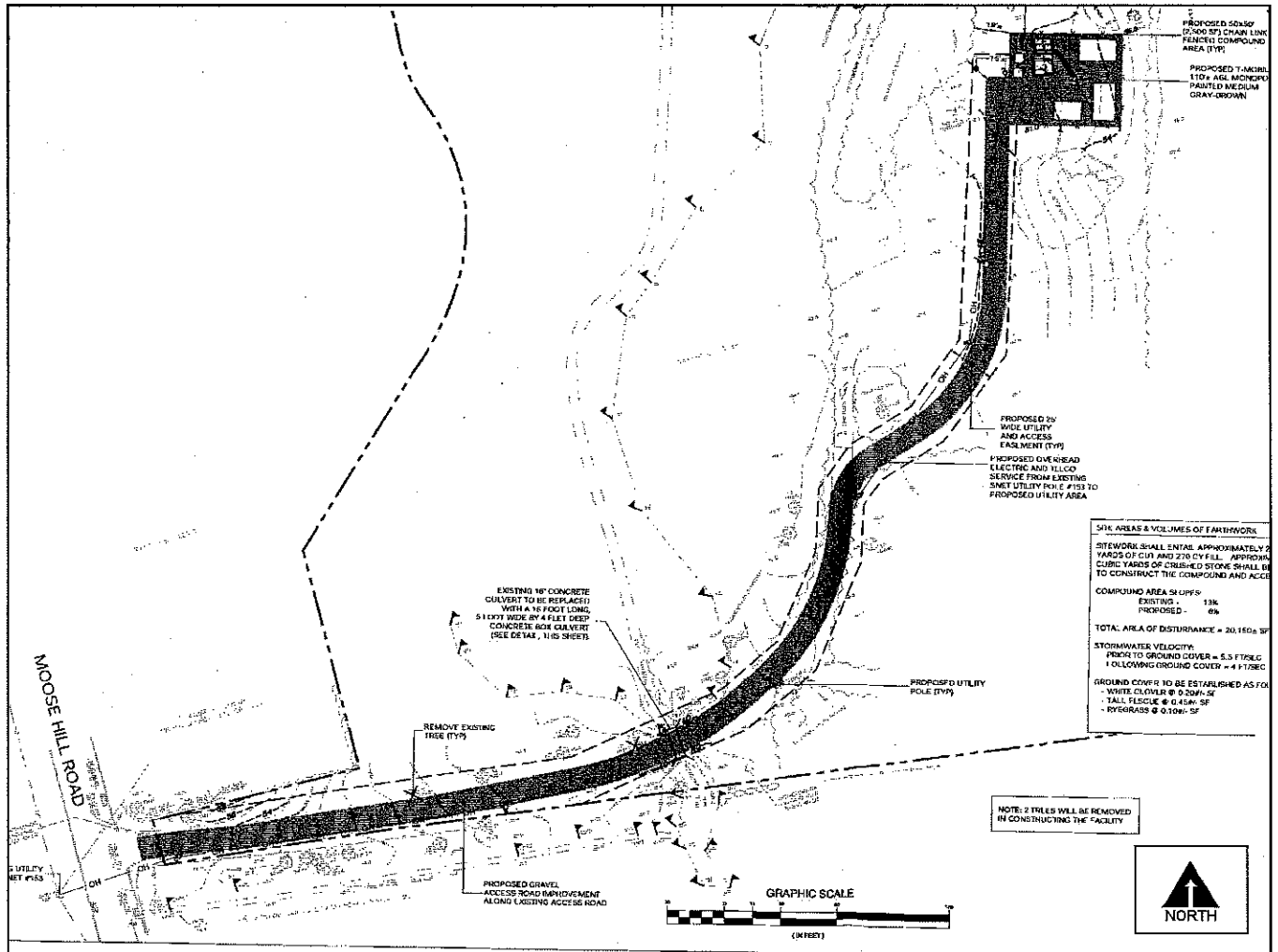
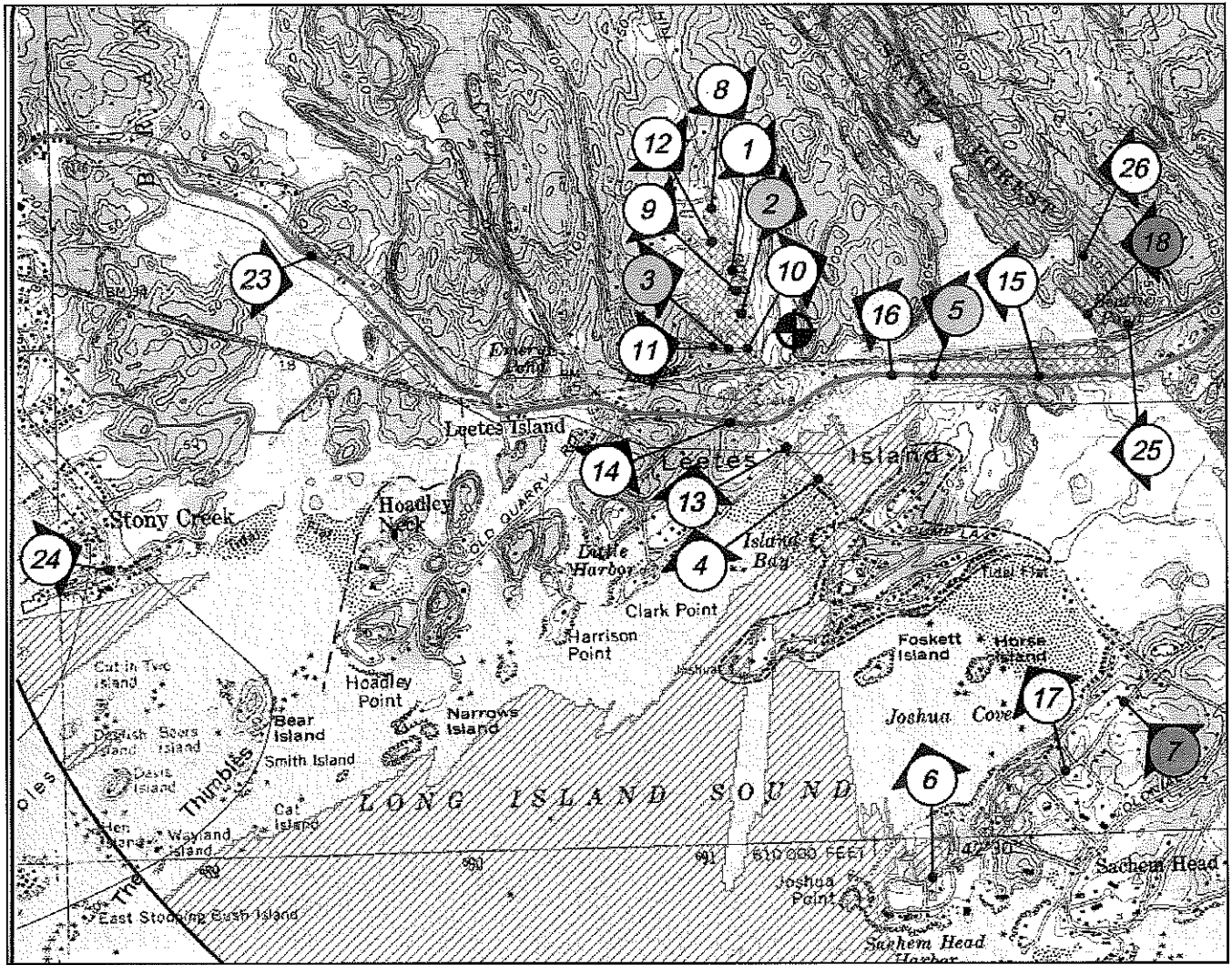


Figure 4: Proposed site plan featuring 110-foot monopole, 50-foot x 50-foot compound, and access road culvert over intermittent watercourse.



Legend

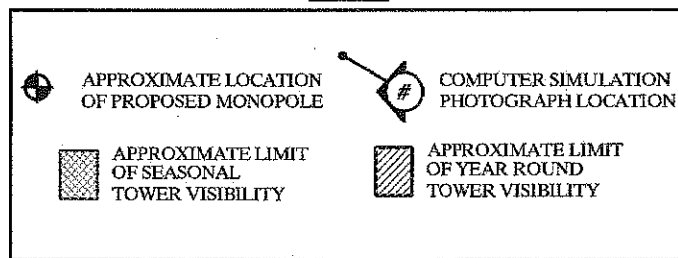


Figure 5: Projected visibility of proposed site. (T-Mobile 1, Tab N)



Figure 6: Photosimulation of tower from Dromara Road (view 3). (T-Mobile late file)



Figure 7: Photosimulation of tower from Shell Beach Road (view 4). (T-Mobile late file)



Figure 8: Photosimulation of tower from Joshua Cove, ~1 mile south of site. (T-Mobile 3b)



Figure 9: Photosimulation of tower from Island Bay, ~0.5 mile south of site. (T-Mobile 3b)

<p>DOCKET NO. 417 - T-Mobile Northeast, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at Moose Hill Road, Guilford, Connecticut.</p>	<p>} } }</p>	<p>Connecticut Siting Council</p>
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October 6, 2011

Opinion

On May 13, 2011, T-Mobile Northeast, LLC (T-Mobile) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a wireless telecommunications facility located off Moose Hill Road in Guilford, Connecticut. The proposed facility would provide T-Mobile with wireless service to the southwest section of Guilford, Connecticut.

T-Mobile proposes to construct a 110-foot monopole on a 163-acre undeveloped parcel on the east side of Moose Hill Road, identified as Map 66, Lot 64. The tower site would be located in a field area 580 feet east of Moose Hill Road and 400 feet north of the Amtrak rail way. The tower setback radius would be contained within the site parcel.

The proposed tower site is located in the southwest corner of the parcel. The remaining portion of the parcel is heavily wooded. A large marsh and open space area is located north and east of the site. Residential areas are located to the northwest, west, southwest, and south, beyond the Amtrak rail way. The nearest residence is 535 feet to the southwest at 575 Leetes Island Road.

T-Mobile proposes to install six panel antennas in an exterior flush-mount configuration at the 108-foot level of the tower. To meet the Town's emergency communication needs, one whip antenna would be installed at the top of the tower and a second whip antenna and a microwave dish would be installed at the 77-foot level of the tower. Additional space for tower sharing would be available at the 88-foot and 98-foot levels of the tower.

T-Mobile proposes to operate 1900 MHz (personal communication service) and 2100 MHz (Advanced Wireless Service) equipment at the site. T-Mobile currently has non-reliable service to the area, defined by T-Mobile as less than -84 dBm. The site would provide reliable coverage, defined by T-Mobile as a signal level above -84 dBm, to 4.9 square miles of the surrounding area. This includes areas adjacent to Route 146, Interstate 95, and the Amtrak rail line.

Based on the lack of existing structures suitable for antenna mounting and unreliable service to the southwest section of Guilford, the Council finds a need for a new tower. Although the tower is proposed on a relatively large parcel, the Council notes most of the parcel is wooded, with ledges and numerous knolls. Constructing a tower at the interior of the parcel, instead of at the proposed site, would significantly increase the adverse environmental impact associated with clearing, grading, and rock removal.

The Council finds a 110-foot tower at the proposed site would provide T-Mobile sufficient coverage to the proposed service area and would seamlessly interact with an existing T-Mobile telecommunications site to the east and a recently Council-approved facility to the west. In addition, the tower would serve the Town's emergency communication needs and allow co-location opportunities for other telecommunication providers.

Development of the site would require the removal of only two trees with a diameter six inches or greater. The site is in an area with records of the Eastern Box Turtle, a State species of special concern. Additionally, a Wood Turtle, also a State species of special concern, was identified on the property, although not in the proposed development area. T-Mobile has developed box turtle protection measures to be used during construction. The Council will require T-Mobile to develop similar measures for the Wood Turtle as part of the Development and Management Plan for this site.

Access to the tower site would be from an existing dirt drive that extends 960 feet from Moose Hill Road to the proposed compound area. T-Mobile would upgrade the drive to a 12-foot wide graveled surface. A 50-foot by 50-foot fenced compound would be constructed, enclosing the tower and equipment cabinets. Although T-Mobile proposes to install overhead utilities to the site, the Council will require that utilities be installed underground along the access road from Moose Hill Road.

Reconstruction of the access drive would require filling 160 square feet of wetlands where the driveway crosses an intermittent watercourse. Approximately 250 square feet of temporary impacts would also occur. T-Mobile would install a 10-foot wide culvert at the crossing, designed to maintain the natural substrate of the stream, allowing for unimpeded movement of fish and other organisms up and down the stream. Disturbed areas would be restored through the planting of native wetland vegetation.

Views of the tower within a half-mile of the site would mostly occur during leaf-off conditions where portions of the tower would be visible through trees. Some year-round views would occur from the Shell Beach Road area, across an open marsh. Fourteen residences located in the Shell Beach Road area may have year-round views of the upper portion of the tower. Most of these homes are located along the shoreline of Island Bay, and thus their main views are orientated away from the direction of the tower, toward the bay. A year-round view of the upper portion of the tower would also occur from an open field area along Moose Hill Road northwest of the tower. Year-round views from more distant locations include areas of Leetes Island, 0.6 to 0.8 miles south of the tower, where 40 residences may have views of the upper portion of the tower, and from the Joshua Point area, over a mile south of the site. Views of the upper portion of the tower would occur from Long Island Sound, but the Council finds these views do not have a significant adverse affect on the scenic quality of the shoreline.

Scenic resources in the area include the Westwoods preserve, an open space area containing hiking trails that is 0.5 miles east of the proposed site, and the Route 146 Historic District, a linear historic district that is 530 feet south of the proposed site at its closest point. Tower visibility impacts to these resources were reviewed by the Guilford Land Trust, the Scenic Road Advisory Committee, and the State Historic Preservation Office (SHPO). The visibility analysis indicates the tower would not be visible from the Westwoods area but would be visible year-round from a short section of Route 146. The scenic road committee and the SHPO were satisfied that this visibility would not have an adverse affect on the historic district as long as the tower would be no taller than 110 feet and that antennas were mounted on the tower in a flush-mount configuration rather than a platform array. T-Mobile has agreed to this request and designed the tower to address these concerns.

Although the Council recognizes the cooperation between T-Mobile and these organizations in reducing the visual impact of the tower to the greatest extent possible, the Council also recognizes that rapidly changing wireless technologies could require more antennas to meet various service demands. The Council seeks to promote tower sharing wherever possible; however, restricting a tower to flush-mounted antennas tends to reduce co-location opportunities by limiting the number and orientation of antennas that can be installed, or by requiring a carrier to use multiple tower levels. In this case, finding the visibility impact of platform-mounted antennas to be minimal, the Council in its Decision and Order will not restrict carriers from using platform-mounted antennas. Additionally, pursuant to the tower sharing policy of the state under C.G.S. §16-50aa, the Council will require T-Mobile to install a tower foundation and tower that is capable of supporting an extension. Any future extension of the tower shall be subject to approval by the Council.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the combined radio frequency power density levels of T-Mobile's antennas proposed to be installed on the tower have been calculated to amount to 9.5% of the FCC's Maximum Permissible Exposure, as measured at the base of the tower. This percentage is well below federal and state standards established for the frequencies used by wireless companies. The Council will require that the power densities be recalculated in the event other carriers add antennas to the tower, including the Town's emergency communication antennas. Also, if federal or state standards change, the Council will require that the tower be brought into compliance with such standards. The Telecommunications Act of 1996 prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions.

Based on the record in this proceeding, the Council finds that the effects associated with the construction, operation, and maintenance of the telecommunications facility at the proposed site, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with policies of the State concerning such effects, and are not sufficient reason to deny this application. Therefore, the Council will issue a Certificate for the construction, operation, and maintenance of a 110-foot monopole telecommunications facility at the proposed site.

DOCKET NO. 417 - T-Mobile Northeast, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at Moose Hill Road, Guilford, Connecticut.

} Connecticut
} Siting
} Council
October 6, 2011

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, maintenance, and operation of a telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to T-Mobile Northeast, LLC, hereinafter referred to as the Certificate Holder, for a telecommunications facility located off Moose Hill Road (Map 66, Lot 64) in Guilford, Connecticut.

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

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of the applicant and other entities, both public and private, but such tower shall not exceed a height of 110 feet above ground level. The height at the top of the Certificate Holder's antennas shall not exceed 100 feet above ground level.
2. The Certificate Holder shall install a tower foundation and tower that is capable of supporting an extension. Any extension of the tower must be approved by the Council.
3. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Guilford for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line, and landscaping;
 - b) construction plans for site clearing, grading, landscaping, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, and;
 - c) provisions for a contractor awareness program for the Eastern Box Turtle and Wood Turtle.

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

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

Pursuant to General Statutes § 16-50p, the Council hereby directs that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in the *New Haven Register*.

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

The parties and intervenors to this proceeding are:

Applicant

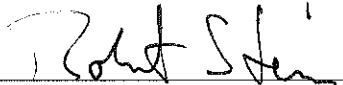
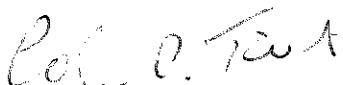


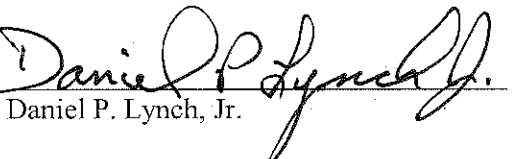
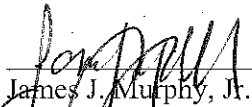
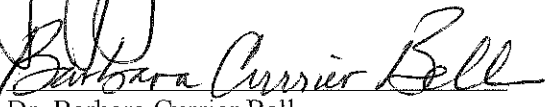
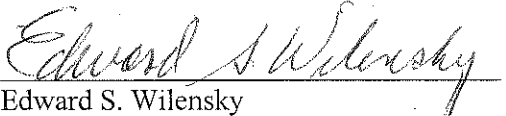
T-Mobile Northeast LLC

Its Representative

Julie D. Kohler, Esq.
Jesse A. Langer, Esq.
Cohen and Wolf, P.C.
1115 Broad Street
Bridgeport, CT 06604

CERTIFICATION

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in **DOCKET NO. 417** - T-Mobile Northeast, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Moose Hill Road, Guilford, Connecticut, and voted as follows to approve the proposed facility:

<u>Council Members</u>	<u>Vote Cast</u>
 _____ Robert Stein, Chairman	Yes
 _____ Colin C. Tait, Vice Chairman	Yes
 _____ Chairman Kevin M. DelGobbo Designee: Larry P. Levesque	Yes
 _____ Commissioner Dan Esty Designee: Brian Golembiewski	Yes
_____ Philip T. Ashton	Absent
 _____ Daniel P. Lynch, Jr.	Yes
 _____ James J. Murphy, Jr.	Yes
 _____ Dr. Barbara Currier Bell	Yes
 _____ Edward S. Wilensky	Yes

Dated at New Britain, Connecticut, October 6, 2011.