DOCKET NO. 503 - Arx Wireless Infrastructure, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at 43 Osgood Avenue, New Britain, Connecticut.	}	Connecticut
	}	Siting
	}	Council

December 10, 2021

DRAFT Findings of Fact

Introduction

1. Arx Wireless Infrastructure, LLC (Arx or Applicant), in accordance with provisions of Connecticut General Statutes (C.G.S.) § 16-50g, et seq, applied to the Connecticut Siting Council (Council) on May 14, 2021, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a 104-foot monopole wireless telecommunications facility at 43 Osgood Avenue in New Britain, Connecticut. (Applicant 1, p. 1)

2. Arx is a Delaware limited liability company with an office located at 110 Washington Avenue, North Haven, Connecticut. Arx constructs and owns wireless telecommunications facilities throughout the United States. Arx would construct, maintain and own the proposed facility and would be the Certificate Holder. (Applicant 1, pp. 2 and 5)

3. The parties in this proceeding are the Applicant and the City of New Britain (City). The intervenor in this proceeding is New Cingular Wireless PCS, LLC (AT&T). (Transcript 1, July 20, 2021, 2 p.m. [Tr. 1], p. 5-6)

4. AT&T is licensed by the Federal Communications Commission (FCC) to provide personal wireless communication service in the State of Connecticut. (AT&T 1, p. 1)

5. The purpose of the proposed facility is to provide coverage to substantial portions of Farmington Avenue, Eddy Glover Boulevard, and surrounding residences and businesses in this area. (AT&T 1, p. 1)

6. Pursuant to C.G.S. § 16-50*l* (b), the Applicant provided public notice of the filing of the application that was published in the New Britain Herald on May 12, 2021 and May 13, 2021. (Applicant 1, p. 6-7 and Attachment C; Applicant 3, response 2, Tab 2)

7. Pursuant to C.G.S. § 16-50*l* (b), notice of the application was provided to all abutting property owners by certified mail on May 12, 2021. Certified Mail receipts were received from 18 of the 21 abutters. The status of the remaining three notices as of July 20, 2021 was as follows:

    a) Renita Ezell, 69 Osgood Avenue, New Britain, was returned to sender;

    b) Robert Brulotte, 70 Osgood Avenue, New Britain, was identified as in transit; and

    c) Izabela Oquendo, 257 Spruce Street, Manchester was returned as "Forward Time Expired." Notice was resent via Certified Mail on July 1, 2021 to 30 Beach Street, New Britain.

    (Applicant 1, p. 7, Attachment D; Applicant 3, Response 1, Tab 1; Tr. 1, pp. 23-24)

8. On May 14, 2021, the Applicant provided notice to all federal, state and local officials and agencies listed in C.G.S. § 16-50*l* (b). (Applicant 1, p. 6; Attachment B)

Procedural Matters

9. On March 10, 2020, Governor Lamont issued a Declaration of Public Health and Civil Preparedness Emergencies, proclaiming a state of emergency throughout the state as a result of the COVID-19 pandemic. (Council Administrative Notice Items No. 54 and 55)

10. On March 12, 2020, Governor Lamont issued Executive Order No. (EO) 7 ordering a prohibition of large gatherings, among other orders and directives. (Council Administrative Notice Item No. 54).

11. On March 14, 2020, and as subsequently extended, Governor Lamont issued EO 7B ordering suspension of in-person open meeting requirements of all public agencies under CGS §1-225. The Freedom of Information Act (FOIA) defines "meeting" in relevant part as "any hearing or other proceeding of a public agency." (Council Administrative Notice Item No. 54 and 55; CGS §1-200, *et seq.* (2021)).

12. EO 7B allows public agencies to hold remote meetings provided that:
    a) The public has the ability to view or listen to each meeting or proceeding in real-time, by telephone, video, or other technology;
    b) Any such meeting or proceeding is recorded or transcribed and such recording or transcript shall be posted on the agency's website within seven (7) days of the meeting or proceeding;
    c) The required notice and agenda for each meeting or proceeding is posted on the agency's website and shall include information on how the meeting will be conducted and how the public can access it any materials relevant to matters on the agenda shall be submitted to the agency and posted on the agency's website for public inspection prior to, during and after the meeting; and
    d) All speakers taking part in any such meeting shall clearly state their name and title before speaking on each occasion they speak.

    (Council Administrative Notice Item No. 54 and 55)

13. On March 25, 2020, and as subsequently extended, Governor Lamont issued EO 7M allowing for an extension of all statutory and regulatory deadlines of administrative agencies for a period of no longer than 90 days. (Record; Council Administrative Notice Item No. 55)

14. Upon receipt of the application, the Council sent a letter to the City on May 17, 2021, as notification that the application was received and is being processed, in accordance with C.G.S. § 16-50gg. (Record)

15. Local zoning regulations do not apply to facilities under the exclusive jurisdiction of the Council. Pursuant to CGS §16-50x, the Council has exclusive jurisdiction over telecommunications facilities throughout the state. It shall consider any location preferences provided by the host municipality under CGS §16-50gg as the Council shall deem appropriate. (CGS §16-50x (2021))

16. During a regular Council meeting on June 3, 2021, the application was deemed complete pursuant to Regulations of Connecticut State Agencies (R.C.S.A.) § 16-50*l*-1a and the public hearing schedule was approved by the Council. (Record)

17. Pursuant to Governor Lamont's EO 7B, as extended, and C.G.S. § 16-50m, on June 7, 2021, the Council sent a letter to the Town to provide notification of the scheduled public hearing via Zoom conferencing and to invite the municipality to participate. (Record)

18. Pursuant to Governor Lamont's EO 7B, as extended, and C.G.S. § 16-50m, the Council published legal notice of the date and time of the remote public hearing via Zoom conferencing in the Hartford Courant on June 9, 2021. (Record)

19. In compliance with Governor Lamont's EO 7 prohibition of large gatherings, the Council's Hearing Notice did not refer to a public field review of the proposed site. (Record)

20. Field reviews are neither required by statute nor an integral part of the public hearing process. The purpose of a site visit is an investigative tool to acquaint members of a reviewing commission with the subject property. (Council Administrative Notice Item Nos. 56 and 57)

21. On June 7, 2021, in lieu of an in-person field review of the proposed site, the Council requested that Arx submit photographic documentation of site-specific features into the record intended to serve as a "virtual" field review of the site. By letter dated June 14, 2021, Arx requested an extension of time until July 6, 2021 to respond to the Council's interrogatories. On June 14, 2021, the Council granted an extension of time until July 7, 2021 to respond to the Council's interrogatories. On July 7, 2021, Arx submitted the photographic documentation information in response to the Council's interrogatories. (Record; Applicant 3, response 27)

22. On June 23, 2021, the Council held a pre-hearing teleconference on procedural matters for parties and intervenors to discuss the requirements for pre-filed testimony, exhibit lists, administrative notice lists, expected witness lists and filing of pre-hearing interrogatories. Procedures for the remote public hearing via Zoom conferencing were also discussed. (Council Pre-Hearing Conference and remote hearing procedure Memoranda, dated June 15, 2021)

23. In compliance with R.C.S.A. § 16-50j-21, the Applicant installed a four-foot by six-foot sign at the entrance to the subject property on July 2, 2021. The sign presented information regarding the project and the Council's public hearing. (Applicant 4)

24. The Council's project evaluation criteria under CGS § 16-50p does not include the consideration of property values nor is the Council otherwise obligated to take into account the status of property values. (CGS §16-50p (2021); *Westport v. Conn. Siting Council*, 47 Conn. Supp. 382 (2001), affirmed, 260 Conn. 266 (2002); *Goldfisher v. Conn. Siting Council*, 2005 Conn. Super. LEXIS 306 (2005), affirmed, 95 Conn. App. 193 (2006)) *Westport v. Conn. Siting Council*, 47 Conn. Supp. 382 (2001); Tr. 1, p. 7; Tr. 3, p. 5; Tr. 4, p. 5)

25. Pursuant to C.G.S. § 16-50m, the Council gave due notice of a remote public hearing to be held on July 20, 2021, beginning with the evidentiary session at 2:00 p.m. and continuing with the public comment session at 6:30 p.m. via Zoom conferencing. The Council provided information for video/computer access or audio only telephone access. (Council's Hearing Notice dated June 7, 2021; Tr. 1, p. 1)

26. EO 7B expired on June 30, 2021. Public Act (PA) 21-2 took effect on July 1, 2021. Section 149 permits public agencies to hold remote meetings under FOIA and the Uniform Administrative Procedure Act until April 30, 2022. (Council Administrative Notice Item No. 54 and 55).

27. In compliance with Governor Lamont's EO 7B and PA 21-2:
    a) The public had the ability to view and listen to the remote public hearing in real-time, by computer, smartphone, tablet or telephone;
    b) The remote public hearing was recorded and transcribed, and such recording and transcript were posted on the Council's website on July 21, 2021 and August 4, 2021; September 3, 2021 and September 29, 2021; and October 20, 2021 and October 26, 2021 respectively;
    c) The Hearing Notice, Hearing Program, Citizens Guide for Siting Council Procedures and Instructions for Public Access to the Remote Hearing were posted on the agency's website;
    d) The record of the proceeding is available on the Council's website for public inspection prior to, during and after the remote public hearing; and
    e) The Council, parties and intervenors provided their information for identification purposes during the remote public hearing.

    (Hearing Notice dated June 7, 2021; Tr. 1; Record)

28. On July 16, 2021, the Council issued a Protective Order related to the disclosure of the monthly rent and financial terms contained within the lease agreement for the proposed site, pursuant to CGS §1-210(b) and consistent with the Conclusions of Law adopted in Docket 366. (Record)

29. The Council continued the remote evidentiary hearing session via Zoom conferencing on September 2, 2021 beginning at 2:00 p.m. (Council Evidentiary Hearing Continuation Memorandum dated July 21, 2021; Transcript 3 – 2:00 p.m. [Tr. 3], p. 1)

30. At the close of the September 2, 2021 remote evidentiary hearing session, the Council announced that briefs and proposed findings of fact may be filed by any party or intervenor no later than October 2, 2021. (Tr. 3, p. 105)

31. By letter dated September 10, 2021, the City requested an extension of time until November 5, 2021 to submit briefs and proposed findings of fact so that the following alternative sites suggested by the City could be evaluated: Eversource property at 148 Farmington Avenue (Eversource Property) and Bethalom Cemetery Association, Inc. property at 48 Allen Street (Cemetery Property). (City 6)

32. On September 23, 2021, the Council, on its own motion, voted to reopen the evidentiary record in this proceeding specifically limited to consideration of whether the two additional alternative sites suggested by the City are available and feasible options for tower development. (Council Memorandum Regarding the Continuation of the Evidentiary Hearing Session dated July 21, 2021)

33. The Council's decision to reopen the evidentiary record rendered moot the City's request for an extension of time to submit briefs and proposed findings of fact. (Council Memorandum Regarding the Continuation of the Evidentiary Hearing Session dated July 21, 2021)

34. The Council held a remote evidentiary hearing session for the reopened proceeding via Zoom conferencing on October 5, 2021 beginning at 2:00 p.m. (Council Memorandum Regarding the Continuation of the Evidentiary Hearing Session dated July 21, 2021; Transcript 4 – 2:00 p.m. [Tr. 4], p. 1)

State Agency Comment

35. Pursuant to C.G.S. § 16-50j (g), on June 7, 2021, the following state agencies were solicited by the Council to submit written comments regarding the proposed facility: Department of Energy and Environmental Protection (DEEP); Department of Public Health (DPH); Council on Environmental Quality (CEQ); Public Utilities Regulatory Authority (PURA); Office of Policy and Management (OPM); Department of Economic and Community Development (DECD); Department of Agriculture (DOAg); Department of Transportation (DOT); Connecticut Airport Authority (CAA); Department of Emergency Services and Public Protection (DESPP); and State Historic Preservation Office (SHPO). (Record)

36. The Council did not receive any comments from state agencies. (Record)

37. While the Council is obligated to consult with and solicit comments from state agencies by statute, the Council is not required to abide by the comments from state agencies. (*Corcoran v. Connecticut Siting Council*, 284 Conn. 455 (2007)).

Municipal Consultation

38. In compliance with the National Historic Preservation Act, by letter dated September 17, 2020, Arx notified the City of the proposed facility. In its September 23, 2020 response, the City noted that, while the existing building on the subject property (i.e. former Israel Putnam School) is not listed on the National Register of Historic Places or located in a historic district, the building should be accorded historical deference because it was constructed in 1905. (Applicant 1, Attachment M)

39. The City views the subject property has having high potential for historic restoration and adaptive re-use, either for housing or as an assisted care living facility. It is concerned that the proposed cell tower on the property would preclude such re-use in the future and result in a blighting influence for the surrounding neighborhood. Other City concerns relate to visibility, property values and radio frequency emissions. (Applicant 1, Attachment M; City 1; City 3; City 4)

40. Pursuant to CGS § 16-50*l*(f), On November 14, 2020, Arx commenced the 90-day pre-application municipal consultation process by submitting a technical report to the City. (Applicant 1, p. 30 and Attachment M)

41. The City responded to Arx on November 17, 2020, reiterating its concerns in the September 23, 2020 correspondence and proposed the following alternative sites: a water tank on Elam Street (a/k/a 1780 Corbin Avenue); and Osgood Park located at 470 Osgood Avenue. (Applicant 1, p. 30 and Attachment M; Applicant 6, pp. 3-4)

42. Arx responded to the City on March 5, 2021 indicating the two alternative sites suggested by the City were rejected by AT&T as not viable and are also located in residential neighborhoods, Arx offered to hold a Zoom meeting with the City to discuss Arx's proposed site. (Applicant 1, Attachment M – Email correspondence between Arx and City dated March 5, 2021)

43. In response to Arx's March 5, 2021 offer to hold a Zoom meeting, the City reiterated its concerns about the location of the proposed site in a residential neighborhood and indicated that it would contact Arx regarding the Zoom meeting offer. (Applicant 1, Attachment M – Email correspondence between Arx and City dated March 5, 2021)

Public Need for Service

44. In 1996, the United States Congress recognized a nationwide need for high quality wireless telecommunications services, including cellular telephone service. Through the Federal Telecommunications Act of 1996, Congress seeks to promote competition, encourage technical innovations, and foster lower prices for telecommunications services. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996)

45. 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 to Hartford County, Connecticut. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996; AT&T 1, p. 1)

46. Section 253 of the Telecommunications Act of 1996 prohibits any state or local statute or regulation, or other state or local legal requirement from prohibiting or having the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996)

47. Section 704 of the Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services and from prohibiting or having the effect of prohibiting the provision of personal wireless services. This section also requires state or local governments to act on applications within a reasonable period of time and to make any denial of an application in writing supported by substantial evidence in a written record. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996)

48. Section 704 of the Telecommunications Act of 1996 also prohibits any state or local entity from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions, which include effects on human health and wildlife, to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996)

49. Section 706 of the Telecommunications Act of 1996 requires each state commission with regulatory jurisdiction over telecommunications services to encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans, including elementary and secondary schools, by utilizing regulating methods that promote competition in the local telecommunications market and remove barriers to infrastructure investment. (Council Administrative Notice Item No. 4 – Telecommunications Act of 1996)

50. In December 2009, President Barack Obama recognized cell phone towers as critical infrastructure vital to the United States. The Department of Homeland Security, in collaboration with other federal stakeholders, state, local, and tribal governments, and private sector partners, has developed the National Infrastructure Protection Plan (NIPP) to establish a framework for securing resources and maintaining resilience from all hazards during an event or emergency. (Council Administrative Notice Item No. 11 –Presidential Proclamation 8460, Critical Infrastructure Protection)

51. In February 2012, Congress adopted the Middle Class Tax Relief and Job Creation Act (also referred to as the Spectrum Act) to advance wireless broadband service for both public safety and commercial users. The Act established the First Responder Network Authority to oversee the construction and operation of a nationwide public safety wireless broadband network. Section 6409 of the Act contributes to the twin goals of commercial and public safety wireless broadband deployment through several measures that promote rapid deployment of the network facilities needed for the provision of broadband wireless services. (Council Administrative Notice Item No. 8 – Middle Class Tax Relief and Job Creation Act of 2012)

52. In June 2012, President Barack Obama issued an Executive Order to accelerate broadband infrastructure deployment declaring that broadband access is a crucial resource essential to the nation's global competitiveness, driving job creation, promoting innovation, expanding markets for American businesses and affording public safety agencies the opportunity for greater levels of effectiveness and interoperability. (Council Administrative Notice Item No. 23 – FCC Wireless Infrastructure Report and Order; Council Administrative Notice Item No. 12 – Presidential Executive Order 13616, Accelerating Broadband Infrastructure Development)

53. Pursuant to Section 6409(a) of the Spectrum Act, a state or local government may not deny and shall approve any request for collocation, removal or replacement of equipment on an existing wireless tower provided that this does not constitute a substantial change in the physical dimensions of the tower. (Council Administrative Notice Item No. 8 – Middle Class Tax Relief and Job Creation Act of 2012; Council Administrative Notice Item No. 23 – FCC Wireless Infrastructure Report and Order; Council Administrative Notice Item No. 27)

54. In June 2020, the FCC issued a declaratory ruling that heights of existing towers located outside of the public right-of-way could increase by up to 20 feet plus the height of a new antenna without constituting a substantial change in the physical dimensions of a tower. (Council Administrative Notice Item No. 27)

55. In November 2020, the FCC issued an order that ground excavation or deployment up to 30 feet in any direction beyond the site boundary of existing towers located outside of the public right-of-way does not constitute a substantial change in the physical dimensions of a tower (Council Administrative Notice Item No. 28)

56. According to state policy, if the Council finds that a request for shared use of a facility by a municipality or other person, firm, corporation or public agency is technically, legally, environmentally and economically feasible, and the Council finds that the request for shared use of a facility meets public safety concerns, the Council shall issue an order approving such shared use to avoid the unnecessary proliferation of towers in the state. (Conn. Gen. Stat. §16-50aa)

57. On June 7, 2021, the Council sent correspondence to other telecommunications carriers requesting that carriers interested in locating on the proposed facility in the foreseeable future to notify the Council by July 13, 2021. No carriers responded to the Council's solicitation. (Record)

58. As of September 2, 2021, no wireless carriers other than AT&T have expressed an interest to Arx to co-locate on the proposed facility. (Tr. 3, p. 8)

59. In addition to AT&T, the facility is designed to accommodate three other wireless carriers and local emergency service providers. (Applicant 1, p. 19; Applicant 7, pp. 3-4; Tr. 1, pp. 62-63)

60. As of July 7, 2021, the City has not expressed an interest in co-locating emergency services antennas on the proposed facility. (Applicant 3, response 21)

AT&T's Existing and Proposed Wireless Services

61. AT&T is experiencing coverage gaps within its 700 MHz, 850 MHz, 1900 MHz, 2100 MHz and 2300 MHz frequencies along portions of Farmington Avenue, Eddy Glover Boulevard, and the residential neighborhoods and business/retail areas in the vicinity of these roads. The proposed facility would provide coverage to these areas. (Applicant 1, p. 8 and Attachment E, Radio Frequency Analysis Report, pp. 9-10; AT&T 2, response 15; Tr. 1, p. 93)

62. AT&T currently operates equipment on 14 existing facilities within a four-mile radius of the site. As a result of distance from the target area and the geographical terrain, none of these facilities are able to provide adequate coverage and improve network reliability to the proposed service area. (Applicant 1, p. 18 and Attachment E, Radio Frequency Analysis Report, pp. 2-3, 7-8; AT&T 2, response 10)

63. AT&T's wireless service deficiency in the area was confirmed through propagation modeling and an analysis of ineffective attempts (i.e. dropped/blocked call data) from neighboring sites CT1072 and CT1152. (Applicant 1, Attachment E, Radio Frequency Analysis Report, pp. 1-5, 9-10; AT&T 2, response 19)

64. The table below indicates approximate coverage gaps in miles for certain main roads.

Street Name	**700 MHz Coverage Gap**	**850 MHz Coverage Gap**	**1900 MHz PCS Coverage Gap**	**1700 MHz/2100 MHz AWS Coverage Gap**	**2300 MHz WCS Coverage Gap**
Corbin Avenue	0.73 mile	0.73 mile	1.21 miles	1.31 miles	1.43 miles
Allen Street	0.03 mile	0.04 mile	0.04 mile	0.05 mile	0.06 mile
Farmington Avenue	N/A	0.12 mile	0.48 mile	0.77 mile	1.14 miles
Washington Street	N/A	N/A	0.09 mile	0.20 mile	0.22 mile
Main Road Total	0.76 miles	0.89 mile	1.82 miles	2.33 miles	2.85 miles

(AT&T 2, response 15; Tr. 1, p. 93)

65. AT&T would provide voice and data services to the proposed service area utilizing the 700 MHz, 850 MHz, 1900 MHz, 2100 MHz and 2300 MHz, frequency bands. (AT&T 2, response 12)

66. AT&T's 4G LTE technology is designed to thresholds of -83 dBm and -93 dBm for the 700 MHz LTE system and -86 dBm and -96 dBm for 1900 MHz. The stronger thresholds (-83 dBm and -86 dBm) yield greater throughputs and improved customer experience. The -93 dBm and -96 dBm thresholds are the minimum acceptable levels required to meet customer expectations for 4G service. (Applicant 1, Tab E, pp. 1, 2)

67. AT&T's signal strength for 700 MHz and other proposed frequency bands are below the design threshold of -93 dBm. (AT&T 2, response 18)

68. The chart below represents the coverage statistics for AT&T's 700 MHz network with the deployment of the proposed facility.

	Incremental Coverage from Proposed Site (700 MHz)	
Population:[2]	(≥ -83 dBm)	5,089
	(≥ -93 dBm)	1,456
Business Pops: [3]	(≥ -83 dBm)	410
	(≥ -93 dBm)	86
Area (mi²):	(≥ -83 dBm)	0.39
	(≥ -93 dBm)	0.21
Roadway (mi):	Main (-93 dBm):	0.3
	Secondary (-93 dBm):	3.9
	Total (-93 dBm):	4.2

(Applicant 1, p. 8 and Attachment E, Radio Frequency Analysis Report, p. 4)

69. AT&T's facility at the proposed site would provide voice and data services over its 5G low-band spectrum using 700 MHz, 850 MHz, 1900 MHz, 2100 MHz and 2300 MHz frequency bands. The proposed AT&T antennas would be unable to provide AT&T's 5G+ which use 24 to 39 gigahertz frequency bands at this time. Future use of 5G+ would require installing antennas that support 5G+. (AT&T 2, response 13; Applicant 1, Attachment J)

70. AT&T's neighboring sites CT1072 and CT1152 have sectors that face the target area. Dropped/blocked call data from these sectors indicate elevated voice and data drops/blocks in the target area. (AT&T 2, response 19)

71. While the primary driver for the proposed facility is to enhance coverage, the facility would also enhance capacity. AT&T is experiencing its greatest capacity exhaustion at 700 MHz for CT1072 and CT1152 sectors that face directly into the area where reliable service is needed. (AT&T 2, responses 11 and 19)

72. The proposed facility would interact with surrounding existing AT&T facilities as shown in the following table:

AT&T Site Designation	**Site Address**	**Municipality**	**Distance/direction from Proposed Site**	**Antenna Height (agl)**	**Structure Type**
CT1024	10 Loon Lake Road	New Britain	1.7 miles WSW	100 feet	Monopole
CT1028	723 Farmington Avenue	New Britain	0.9 mile NNW	98 feet	Monopole
CT1072	35 Washington Street (Columbus Boulevard)	New Britain	1.2 miles SSW	116 feet	Rooftop
CT1152	60 Paul Manafort Drive	New Britain	1.2 miles ENE	84 feet	Rooftop
CT1160	Belden Street	New Britain	2.2 miles SE	114 feet	Light pole
CT5254	1 Hartford Square	New Britain	1.8 miles SW	162 feet	Self-Support Lattice
CT5379	178 Lester Street	New Britain	1.7 miles ENE	189 feet	Monopole
CT5419	732 Slater Road	New Britain	0.9 mile WNW	51 feet	Rooftop

(Applicant 1, Attachment E, Radio Frequency Analysis Report, pp. 7-8)

73. AT&T's antennas are proposed to be installed at a centerline height of 100-feet agl, which is the minimum height required to achieve its coverage objectives. (Applicant 1, Tab G, Project Plans Sheet TR-2; AT&T 2, response 16)

74. Incremental coverage in the area would be reduced if the facility were ten feet shorter (i.e. the antenna centerline height were 90 feet), and the height reduction would also impact future co-location opportunities. (AT&T 2, response 16; Applicant 1, Tab G, Project Plans Sheet TR-2)

Site Selection

75. Arx established a search ring for the target area approximately March 2020 when it was contacted by AT&T for a potential site in this area. Arx's search ring had a 0.25 mile radius* and was centered at approximately Farmington Avenue and Allen Street.

*The size of Arx's search ring was determined by AT&T according to the size of their coverage needs.

(Application 1, p. 18; Applicant 3, responses 5 and 6; Tr. 1, pp. 19-20)

76. After determining there were no suitable structures within the search area, AT&T and Arx searched for properties suitable for tower development. Arx and AT&T investigated 15 sites, one of which was selected for site development. AT&T agreed to support an application by Arx to construct a new facility in this location to provide the required coverage. The 15 sites investigated are as follows:

a) **43 Osgood Avenue, New Britain -** ARX entered into a lease agreement with the owner of this property, Osgood Avenue Property, LLC, for the development of the Facility;
b) **314 Osgood Avenue, New Britain** – The property owner was not interested in a potential lease;
c) **662 Burritt Street, New Britain** – The property owner was not interested in a potential lease;
d) **285 Osgood Avenue, New Britain** – The property owner was not interested in a potential lease;
e) **221 Farmington Avenue, New Britain (school property)** – The property is for sale, and the current property owner was not interested in a potential lease;
f) **210 Farmington Avenue, New Britain (church property) –** The property owner was neither interested in a potential lease for a new facility nor a lease for installation of non-tower antenna arrays in the steeple*;
g) **48 Allen Street, New Britain** – The property owner was not interested in a potential lease;
h) **224 Allen Street, New Britain** – AT&T determined this site is unsuitable because it is located too far from its target area;
i) **52 Derby Street, New Britain** – AT&T explored this parcel for the possible development of a faux church steeple or flagpole, but this site was deemed unsuitable because a potential structure would not be tall enough to meet AT&T's coverage requirements;
j) **92 McClintock Street, New Britain** – AT&T explored this parcel for the possible development for a telecommunications facility, but this site was deemed unsuitable because it would not meet AT&T's coverage objectives;

k) **370 High Street, New Britain** – AT&T explored this parcel for the possible development of a rooftop unipole, but this site was deemed unsuitable by AT&T from an RF perspective because it is located too far from AT&T's target area;
l) **75 Carmody Street, New Britain** – AT&T explored this parcel for the possible development of a light stanchion replacement, but this site was deemed unsuitable by AT&T from an RF perspective because it is located too far from AT&T's target area**;**
m) **607 Burritt Street, New Britain –** AT&T explored this parcel for the possible development of a rooftop unipole, but this site was deemed unsuitable by AT&T due to space constraints;
n) **1780 Corbin Avenue, New Britain** – AT&T explored the use of a water tank on this property, but this site was deemed unsuitable by AT&T from an RF perspective because it is 0.4 mile from another AT&T site (CT5419) and 1.1 miles from the search ring; and
o) **470 Osgood Avenue, New Britain** – This site was deemed unsuitable by AT&T from an RF perspective because it is located 0.2 mile from another AT&T site (CT5419) and 1.2 miles from the search ring.

*T-Mobile currently maintains a non-tower antenna array in the church steeple at approximately 107 feet above ground level. The principal use of the church steeple is not for the provision of wireless services. It is therefore not a "telecommunications tower" that is jurisdictional to the Council under CGS §16-50i(a)(6).

(Applicant 1, pp. 18-19 and Attachment F; Applicant 6, p. 3; Tr. 1, pp. 12-13, 35-36, 41)

77. Filling the coverage gap in the proposed service area would require a tower facility due to the geographical terrain and the distance to the existing adjacent sites. (Applicant 1, p. 17, Attachment E, p. 2)

78. The Council has no authority to compel a parcel owner to sell or lease property, or portions thereof, for the purpose of siting a facility nor shall the Council be limited in any way by the applicant having already acquired land or an interest therein for the purpose of constructing a facility. (*Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007); CGS §16-50p(g)(2019))

City-suggested Alternative Sites

79. The Elam Street (a/k/a 1780 Corbin Avenue) site was rejected by AT&T because it is located 0.4-mile from an existing AT&T site and 1.1 miles from the search ring. (Applicant 1, p. 30; Applicant 6, p. 4)

80. The Osgood Park site was rejected by AT&T because it is located 0.2-mile from an existing AT&T site and 1.2 miles from the search ring. (Applicant 1, p. 30; Applicant 6, p. 4)

81. The 723 Farmington Avenue site already contains an existing AT&T co-location that does not provide the necessary coverage to the target area. (AT&T 6, responses 1 and 2)

82. On September 10, 2021, Arx contacted Eversource to inquire about leasing the Eversource Property at 148 Farmington Avenue. Eversource advised Arx that property currently hosts an electric distribution substation, this parcel is not available for tower development; and the minimal amount of excess land outside the substation fence is reserved for future use. (Applicant 6, pp. 1-2)

48, 65 and 73 Allen Street

83. The Cemetery Property is located at 48 Allen Street and is owned by the Beth Alom Cemetery Association Inc. (BACA). BACA also owns two vacant lots across the street at 65 Allen Street and 73 Allen Street, with lot sizes of 0.34 acre and 0.17 acre, respectively. (City 8; City 9; Tr. 4, pp. 15-16, 59-60)

84. Arx discussed with BACA the possibility of access to a tower site at the 48 Allen Street parcel from either Eddy Glover Boulevard or Marbelle Court. The Marbelle Court access would lead to the top of a hill, which is AT&T's preference, but BACA rejected tower access from Marbelle Court. (Tr. 4, pp. 18-19, 28-29, 36)

85. The nearest residence from 65 Allen Street is approximately 54 feet away. The nearest residence from 73 Allen Street is approximately 45 feet away. (Tr. 4, pp. 15-16, 57-62)

86. On September 23, 2021, Arx contacted BACA to inquire as to whether it would be interested in negotiating a lease for a tower site on the 48 Allen Street property. (Applicant 11)

87. On October 1, 2021, BACA contacted Arx to discuss specifics of the tower site proposal. BACA indicated it might be interested in locating a tower site on the 48 Allen Street property, but a final determination would require a 100 percent approval by BACA's board. Due to the board's meeting schedule, this could take at least 30 days. (Tr. 4, pp. 10-15)

88. A facility located on the 48 Allen Street property could potentially meet AT&T's wireless service objectives, subject to the final location on the property. For example, a location on the top of the hill on the property would meet AT&T's wireless service needs. A location farther away from the hilltop (i.e. downhill) would have to be evaluated based on the precise location. (Tr. 4, pp. 28-29)

89. On the 48 Allen Street property, a 100-foot tower would generally be a sufficient height for AT&T's wireless objectives. (Tr. 4, p. 29)

90. For the 65 and 73 Allen Street properties, a 100-foot tower would likely meet AT&T's wireless service objectives, but a final evaluation has not been performed. (Tr. 4, p. 30)

91. Any of the 48, 65 and 73 Allen Street properties would be suitable to accommodate FirstNet service. (Tr. 4, p. 30)

92. The City has no preference as far as the 48, 65 and 73 Allen Street properties and is supportive of any of the three sites. (Tr. 4, pp. 45, 55, 59-60)

93. On October 4, 2021, BACA contacted the City indicating Arx's proposal for tower development at 48 Allen Street is unacceptable. BACA noted it is in discussions with MCM Holdings, LLC regarding a tower development location on the property. BACA further noted that it is not obligated to approve and enter into any lease on its property. (City 10)

94. Arx is willing to further discuss options with BACA even if such discussion would require, for example, 30 to 60 days. (Tr. 4, pp. 23-24)

Small Cells

95. Utilizing small cell facilities would not be an effective, efficient or feasible replacement for a macro facility. Approximately 12 small cell facilities would be required to achieve AT&T's -83 dBm minimum in-building signal strength for the target area. (AT&T 5, p. 3; Tr. 1, pp. 88-89; Applicant 1, p. 17 and Tab E, pp. 1, 2)

96. Small cells are intended for capacity needs not primary coverage. The target area is better suited for a macro facility due to the need for primary coverage. (Tr. 3, pp. 99-100)

97. The low power output and lower height of small cell facilities restrict the coverage footprint, and the availability of utility poles to support small cell facilities are physically limited by existing wires, attachments, streetlights, and transformers. Thus, many utility poles cannot accommodate a small cell installation. (AT&T 5, p. 4)

98. Small cells typically do not have backup power due to the limitations of using existing or proposed utility poles in the public right-of-way. Notwithstanding, even if small cells are equipped with short term backup power (e.g. battery backup), it would be for approximately an hour or two. In the event of an extended power outage, all coverage from the small cells would be lost. (AT&T 5, p. 4; Tr. 1, p. 90)

99. AT&T currently has two small cell facilities in New Britain: 89 Grove Street and 865 East Street. There are approximately 150 small cell facilities in Connecticut. (AT&T 5, pp. 4-5; Tr. 3, pp. 86-87)

100. There are no existing small cells within a four-mile radius of the proposed site that could feasibly be upgraded to macro sites. (Tr. 3, p. 87)

Facility Description

101. Pursuant to RCSA §16-50j-2a(29), "Site" means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located. (RCSA §16-50j-2a (29))

102. The subject property is a 2.62-acre parcel zoned S-3 District (single family residential on 6,000 square foot lot area) and located at the northeast corner of Osgood Avenue and Beach Street, and it is owned by Osgood Avenue Property, LLC. The parcel is developed with a one-story building that was formerly used as an elementary school in the 1970s. The school subsequently closed, and the building has been privately owned since 1982. The building is currently vacant and has a designated land use of commercial warehouse per City tax assessment records. (Applicant 1, pp. 7, 27 and Attachment G – Sheet T-1; Applicant 1, Attachment H, Visual Assessment, p. 1; Applicant 1b – City of New Britain Zoning Regulations, Section 5-10-10)

103. If the project is approved, Arx will purchase the subject property. While Arx does not have plans to improve the property beyond the proposed tower development at this time, Arx would ensure that the existing building remains secure and does not become dilapidated. The outside property grounds would be maintained. (Tr. 1, p. 50, 59)

104. Land use surrounding the subject property is residential. (Applicant 1, Attachment H, Visual Assessment, p. 1)

105. The proposed tower site is located in the south-central portion of the host parcel within a courtyard area* south of the existing building. It has an elevation of approximately 344 feet amsl.

*The courtyard area on the subject property was selected to locate the tower as far as possible from the neighboring properties.

(Applicant 1, Attachment G, Project Plans, Sheet TR-2 and Drawing ENG20-0605; Tr. 1, p. 22)

106. The proposed facility would consist of a 104-foot monopole within a 75-foot by 75-foot leased area. The tower would be approximately 48 inches in diameter at the base, tapering to 30 inches at the top. (Refer to Figure 2). (Applicant 1, pp. 1, 7 and Attachment G, Project Plans Sheet TR-2; Applicant 3, response 9; Tr. 2, p. 138)

107. A lightning rod on top of the tower would not be necessary. (Tr. 1, p. 30)

108. The tower would have a galvanized gray finish. The tower and antennas could be painted brown or blue-green to blend in with the sky if requested by the Council. (Applicant 3, response 11; Applicant 7, pp. 3-4)

109. The tower and foundation would be designed to accommodate an increase in tower height of up to 30 feet. (Applicant 3, response 13; Tr. 1, p. 53)

110. AT&T would install six panel antennas and 12 remote radio heads on a sector mount frames at a centerline height of 100 feet agl. (AT&T 2, responses 3 and 4; Applicant 1, Attachment G, Project Plans, Sheet TR-2; Applicant 7, p. 4)

111. A 50-foot by 50-foot fenced equipment compound would be established at the base of the tower. The size of the equipment compound would be able to accommodate the equipment of four wireless carriers and emergency services equipment. (Applicant 1, Attachment G, Project Plans, Sheet TR-2; Tr. 1, pp. 62-63; Tr. 2, p. 138)

112. Development of the equipment compound would require the removal of approximately 8 cubic yards (cy) of material and approximately 12 to 16 cy of fill. The tower foundation, if a pad and pier, would require the replacement of 120 cubic yards of material with concrete. If the geotechnical investigation results necessitate the use of a caisson foundation, this would result in the replacement of approximately 36 cy of additional material with concrete. (Applicant 3, response 14)

113. AT&T would install one 6-foot square walk-in equipment cabinet on an 8-foot 6-inch square concrete pad. (Applicant 1, Attachment G, Project Plans, Sheet TR-2)

114. The proposed equipment compound will be surrounded by an eight-foot high chain link fence with a 10-foot wide gate that would be locked for security purposes. The fence would have two-inch mesh and three strands of barbed wire on top. Arx is amenable to installing an anti-climb wire mesh fence. (Applicant 3, response 17; Tr. 1, pp. 50-51; Applicant 7, p. 4)

115. Access to the tower site off of Beach Street would be via an existing paved parking lot. Improvement of the access road and construction of the utility route would require the removal of 140 cy of material and the installation of approximately 150 cy of gravel to improve the existing surface. No new access would be necessary for the project. (Applicant 1, Attachment G, Project Plans, Sheet TR-2; Applicant 3, response 14; Tr. 1, pp. 25-26; Applicant 7, p. 4)

116. Utilities would extend underground from the northeast corner of the compound and along the proposed access route to an existing utility pole on Beach Street. (Applicant 1, Attachment G, Project Plans, Sheet TR-1; Applicant 7, p. 5)

117. The nearest property boundary (40 Richmond Avenue) from the proposed tower is approximately 90 feet to the north of the tower and 58 feet north of the compound fence. (Applicant 1, Attachment G, Project Plans, Sheet TR-1)

118. There are approximately 302 residences within 1,000 feet of the proposed tower site. The nearest residence is located at 40 Richmond Avenue, approximately 128 feet north of the tower. (Applicant 3, responses 7 and 8; Applicant 1, Attachment G, Project Plans Drawing ENG20-0605; Tr. 1, p. 27)

119. Site preparation and engineering would commence following Council approval of a Development and Management Plan (D&M Plan) and are expected to be completed within four to five weeks. Monopole, antennas and associated equipment installation are expected to take an additional eight weeks. After the equipment installation, cell site integration and system testing would require about two additional weeks. (Applicant 1, p. 32)

120. The estimated cost of the proposed facility is:

Tower and Foundation	$ 85,000*
Site Development	$160,000
Utility Installation	$ 30,000
AT&T Equipment and Materials	$ 114,000
AT&T Construction	$ 179,000
AT&T Integration and Optimization	$ 15,300
Total Estimated Costs	**$ 583,300**

*Installation of a yield point on the tower would add approximately $500 to the tower cost.

(Applicant 1, pp. 31-32; Applicant 3, response 10; AT&T 2, response 1)

121. Arx would recover construction costs associated with the facility by the revenue generated from leasing space on the facility to other wireless providers. (Applicant 3, response 3)

122. AT&T would recover the costs of its equipment as part of its business operations and services provided. (AT&T 2, response 2)

Public Safety

123. The Wireless Communications and Public Safety Act of 1999 (911 Act) was enacted by Congress to promote and enhance public safety by making 9-1-1 the universal emergency assistance number, by furthering deployment of wireless 9-1-1 capabilities, and by encouraging construction and operation of seamless ubiquitous and reliable networks for wireless services. (Council Administrative Notice Item No. 6 - Wireless Communications and Public Safety Act of 1999)

124. The proposed facility would be in compliance with the requirements of the 911 Act and would provide Enhanced 911 services. (Applicant 1, pp. 9-10 and Attachment F, p. 2; AT&T 2, response 23)

125. Wireless carriers have voluntarily begun supporting text-to-911 services nationwide in areas where municipal Public Safety Answering Points (PSAP) support text-to-911 technology. Text-to-911 will extend emergency services to those who are deaf, hard of hearing, have a speech disability, or are in situations where a voice call to 911 may be dangerous or impossible. However, even after a carrier upgrades its network, a user's ability to text to 911 is limited by the ability of the local 911 call center to accept a text message. The FCC does not have the authority to regulate 911 call centers; therefore, it cannot require them to accept text messages. (Council Administrative Notice Item No. 22 – FCC Text-to-911: Quick Facts & FAQs)

126. AT&T's proposed equipment installation would be capable of supporting text-to-911 service. (AT&T 2, response 22)

127. Pursuant to the Warning, Alert and Response Network Act of 2006, "Wireless Emergency Alerts" (WEA) is a public safety system that allows customers who own enabled mobile devices to receive geographically-targeted, text messages alerting them of imminent threats to safety in their area. WEA complements the existing Emergency Alert System that is implemented by the FCC and FEMA at the federal level through broadcasters and other media service providers, including wireless carriers. (Council Administrative Notice No. 5 – FCC WARN Act)

128. AT&T's proposed equipment installation would comply with the Warning, Alert and Response Network Act of 2006. (AT&T 2, response 24)

129. AT&T's equipment would be designed to support FirstNet services. FirstNet is a federal agency with a mandate to create a nationwide, interoperable public safety broadband network for first responders. FirstNet selected AT&T to build, manage and operate the Public Safety Broadband Network using FirstNet's Band 14 spectrum, together with AT&T's own wireless network. AT&T would deploy FirstNet services at this facility. (Applicant 1, pp. 16-17, Attachment E, p. 1)

130. Pursuant to C.G.S. §16-50p(a)(3)(G), the tower would be constructed in accordance with the current governing standard in the State of Connecticut for tower design in accordance with the currently adopted International Building Code. (Applicant 3, response 12; AT&T 2, response 7)

131. The tower does not exceed obstruction standards and would not be a hazard to air navigation; therefore, it would not require any obstruction marking or lighting. (Applicant 1, p. 31 and Attachment N)

132. AT&T's radio equipment cabinets would be equipped with silent intrusion alarms. If there is unauthorized access to the equipment cabinets, cell site technicians monitoring the site would be alerted and the police would be contacted. (AT&T 2, response 6)

133. The tower setback radius* for the proposed site location would extend beyond the boundary of the subject property to the north by 14 feet. Arx could design a tower yield point at the 85-foot agl of the tower to ensure the tower setback radius remains within the boundaries of the subject property. (Applicant 3, response 10; Applicant 1, p. 1)

*The horizontal distance equal to the tower height that extends radially from the center of the tower.

134. Construction noise is exempt from the DEEP Noise Control Regulations §22a-69-1.8(g), which includes, but is not limited to, "physical activity at a site necessary or incidental to the erection, placement, demolition, assembling, altering, blasting, cleaning, repairing, installing, or equipping of buildings or other structures, public or private highways, roads, premises, parks, utility lines, or other property." (R.C.S.A. §22a-69-1.8(g))

135. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T's antennas is 17.1% of the standard* for the General Public/Uncontrolled 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 in a sector 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.

*This includes a 10 dB off-beam pattern loss to account for the lower relative gain below the antennas.

(Applicant 1, p. 24 and Attachment J; Council Administrative Notice Item No. 2 – FCC OET Bulletin No. 65)

Emergency Backup Power

136. In response to two significant storm events in 2011, Governor Malloy formed a Two Storm Panel (Panel) that was charged with an objective review and evaluation of Connecticut's approach to the prevention, planning and mitigation of impacts associated with emergencies and natural disasters that can reasonably be anticipated to impact the state. (Final Report of the Two Storm Panel, (Council Administrative Notice Item No. 50)

137. Consistent with the findings and recommendations of the Panel, and in accordance with C.G.S. §16-50*ll*, the Council, in consultation and coordination with DEEP, DESPP and PURA, studied the feasibility of requiring backup power for telecommunications towers and antennas as the reliability of such telecommunications service is considered to be in the public interest and necessary for the public health and safety. (Council Administrative Notice Item No. 33 – Council Docket No. 432)

138. Commercial Mobile Radio Service (CMRS) providers are licensed by and are under the jurisdiction and authority of the FCC. At present, no standards for backup power for CMRS providers have been promulgated by the FCC. Every year since 2006, AT&T, Sprint, T-Mobile, and Verizon have certified their compliance with the CTIA Business Continuity/Disaster Recovery Program and the Communications Security, Reliability and Interoperability Council standards and best practices to ensure network reliability during power outages. (Council Administrative Notice Item No. 33 – Council Docket No. 432)

139. For backup power, AT&T originally proposed a 15-kilowatt diesel-fueled emergency backup generator that holds 54 gallons of fuel and could operate for approximately 90 hours before refueling is required. (AT&T 2, responses 20a, 20b and 20e; Tr. 1, p. 25)

140. Natural gas is available on the street. Thus, Arx would bring natural gas service to the site for backup generator fuel purposes. (Tr. 1, p. 25)

141. AT&T would utilize a natural gas-fueled generator in lieu of a diesel-fueled generator due to the availability of natural gas at the site. (Tr. 3, p. 44; AT&T 2, response 20e)

142. The generator would be owned by AT&T and would be for AT&T's own use. Future co-located carriers would install their own generators and could utilize natural gas. (Tr. 1, pp. 52-53, 56; Tr. 3, p. 44)

143. AT&T would have battery backup in order to prevent a "reboot" condition during the generator start-up delay period or during an outage of short duration. (Tr. 1, p. 97)

144. The generator would run once per week for maintenance purposes for approximately 30 minutes during daytime hours. (AT&T 2, response 20f)

145. The proposed project is considered a Class B (e.g. utility/communications) emitter for DEEP Noise Control Standards purposes. The abutting residential land is considered a Class A (residential) receptor. Thus, the DEEP Daytime Noise Limits are 55 dBA, and the DEEP Nighttime Noise Limits are 45 dBA. (AT&T 8 – Environment Sound Assessment, p. 5)

146. The predicted worst-case* sound levels at the nearest receptors are indicated below:

Predicted Worst-Case Daytime Sound Levels at Receptors

Receptor Location	Distance (ft) (from Source)	Ambient Level Day (dBA L_{90})	Sound Level Standard (dBA)	Cooler+ Generator Worst Case Level
P/L, North	100	40	55	51 dBA
Residence, NW	140	40	55	49 dBA
Residence, NE	150	40	55	48 dBA
P/L, East	160	40	55	28 dBA
P/L, South	240	40	55	25 dBA
P/L, West	260	40	55	25 dBA

*Worst-case operation means that a door-mounted cooler (attached to AT&T's walk-in equipment cabinet) is operating to provide additional cooling, and the emergency backup generator is also operating.
(AT&T 8 – Environment Sound Assessment, p. 12; Tr. 3, p. 23)

147. Supplemental cooling via the door-mounted cooler would be expected to be limited to the hottest summer conditions generally during the afternoon. Generator testing would typically occur in the late morning. Thus, the door-mounted cooler and emergency backup generator operating simultaneously (i.e. the worse-case noise scenario) is not expected to occur. (AT&T 8 – Environmental Sound Assessment, p. 12)

148. According to R.C.S.A. §22a-69-1.8, noise created as a result of, or relating to, an emergency, such as an emergency backup generator, is exempt from the DEEP Noise Control Regulations. (R.C.S.A. §22a-69-1.8)

149. The predicted noise levels at the nearest receptors while taking into the account the door-mounted cooler and neglecting the backup generator due to the DEEP exemption are listed below.

Predicted Cabinet Cooler Sound Levels at Receptors

Receptor Location	Distance (ft) (from Source)	Ambient Level Night (dBA L_{90})	Sound Level Standard (dBA)	Cabinet Cooler Level
P/L, North	100	40	45	37 dBA
Residence, NW	140	40	45	35 dBA
Residence, NE	150	40	45	34 dBA
P/L, East	160	40	45	10 dBA
P/L, South	240	40	45	6 dBA
P/L, West	260	40	45	7 dBA

(AT&T 8 – Environment Sound Assessment, p. 12; R.C.S.A. §22a-69-1.8)

150. The proposed facility would comply with DEEP Noise Control Standards. (AT&T 8 – Environment Sound Assessment, p. 13)

151. Pursuant to R.C.S.A. §22a-174-3b, the generator would be managed to comply with DEEP's "permit by rule" criteria. Therefore, the generator would be exempt from general air permit requirements. (R.C.S.A. §22a-174-3b)

Environmental Considerations

152. The Inland Wetlands and Watercourses Act (IWWA), CGS §22a-36, et seq., contains a specific legislative finding that the inland wetlands and watercourses of the state are an indispensable and irreplaceable but fragile natural resource with which the citizens of the state have been endowed, and the preservation and protection of the wetlands and watercourses from random, unnecessary, undesirable and unregulated uses, disturbance or destruction is in the public interest and is essential to the health, welfare and safety of the citizens of the state. (CGS §22a-36, et seq.)

153. The IWWA grants regulatory agencies with the authority to regulate upland review areas in its discretion if it finds such regulations necessary to protect wetlands or watercourses from activity that will likely affect those areas. (CGS §22a-42a)

154. The IWWA forbids regulatory agencies from issuing a permit for a regulated activity unless it finds on the basis of the record that a feasible and prudent alternative does not exist. (CGS §22a-41)

155. No wetlands or watercourses are located within or immediately adjacent to the subject property. The nearest wetland to the proposed facility is approximately 0.6 mile to the east. (Applicant 1, Tab L, Wetland Inspection report, p. 2 and Wetland Inspection Map)

156. The proposed project would be constructed consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control*. (Applicant 1, p. 26)

157. There are no prime farmland soils located on the site. (Applicant 3, response 22)

158. Net excavation material would be removed from the site and properly disposed of. Imported (fill) material for backfilling a tower pad and pier foundation would have the proper analysis/certification before it is utilized at the site. (Tr. 1, pp. 26-27)

159. The proposed site is not located within a Federal Emergency Management Agency designated 100-year or 500-year flood zones. (Applicant 1, p. 26; Applicant 1, Tab I – NEPA Report, p. 6 and FEMA Flood Map)

160. The proposed site is not located within a state-designated aquifer protection area (APA). (Council Administrative Notice Item No. 74 – DEEP APA Map for City of New Britain)

161. The proposed site is not located within a DEEP Natural Diversity Database (NDDB) buffer area. (Applicant 1, p. 23; Council Administrative Notice Item No. 73 – DEEP NDDB Map for City of New Britain)

162. Development of the proposed facility would not require the removal of any existing trees. (Applicant 1, p. 2 and Tab K, Avian Resources Evaluation, p. 8)

163. Connecticut is within the range of the northern long-eared bat (NLEB), a federally-listed threatened species and state-listed endangered species. There are no known NLEB hibernacula or known maternity roost trees within 0.25 miles and 150-feet, respectively, of the proposed tower location. (Council Administrative Notice Item No. 75)

164. The proposed facility is not located proximate to an Important Bird Area (IBA), as designated by the National Audubon Society. The nearest IBA to the proposed site is Great Meadows located in the Wethersfield area approximately 7.18 miles to the east. This IBA is not expected to be adversely impacted by the proposed facility due to the distance. (Applicant 1, Tab K, Avian Resources Evaluation, p. 2)

165. The proposed facility would comply with the USFWS guidelines for minimizing the potential for telecommunications towers to impact bird species. (Applicant 1, Attachment K, Avian Resources Evaluation, p. 10)

166. A Phase IA Cultural Resources Assessment Survey Report (Phase 1A Report) was prepared for the proposed project. SHPO concluded that no previously identified archaeological sites are located within 1 mile of the project area; the project area possesses a low potential to contain intact archaeological deposits; and additional archaeological investigations are not warranted. (Applicant 1, Attachment I, SHPO Determination dated November 24, 2020; Applicant 8, pp. 6-7)

167. By letter dated November 24, 2020, SHPO determined that the subject property (containing the Israel Putnam Elementary School) does not appear to be eligible for listing on the National Register of Historic Places (NRHP) and that the proposed project would not have an adverse effect on sites that are listed on or eligible for listing on the NRHP. (Applicant 1, p. 22 and Attachment I, SHPO Determination dated November 24, 2020; Applicant 8, p. 6)

168. Arx does not anticipate the need for blasting at the site. (Applicant 3, response 15)

Visibility

169. Arx used a combination of predictive computer models, in-field analysis, and a review of various data sources to evaluate the visibility of the proposed facility on both a quantitative and qualitative basis. (Applicant 1, p. 20 and Attachment H, Visual Assessment)

170. On March 8, 2021, Arx conducted a balloon test and field reconnaissance at the proposed tower site. The balloon test consisted of flying a 4-foot diameter helium filled balloon to a height of approximately 104-feet agl* at the proposed tower location. Weather conditions were favorable for the in-field activity with light winds and clear skies.

*This is the height at the bottom of the balloon based on the string length. The top of the balloon reached a height of approximately 108 feet.

(Applicant 1, pp. 20-21 and Attachment H, Visual Assessment, pp. 3-4; Applicant 8, p. 4)

171. Information obtained during the field reconnaissance was incorporated into mapping data layers, including observations of the field reconnaissance, photo-simulation locations, areas that experienced land use changes, and places where the initial modeling was found to over- or under-predict visibility to produce a final predictive viewshed map for areas within a two-mile radius of the site. (Applicant 1, Attachment H, Visual Assessment, p. 8)

172. Based on the final viewshed analysis, the proposed tower would be visible year-round from approximately 47 acres or about 0.58 percent of the 2-mile radius study area* (refer to Figure 6). The tower would be seasonally visible (leaf-off conditions) from approximately 87 acres or about 1.08 percent of the study area.

*The study area is comprised of 8,042 acres.
(Applicant 1, Attachment H, Visual Assessment, p. 8 and viewshed maps; Applicant 8, p. 5)

173. Views of the proposed facility would be limited primarily to locations within approximately 0.5 mile of the site. Adjacent neighborhoods within approximately 0.25 mile of the site would have both year-round and seasonal views of the facility. Seasonal visibility is expected to extend approximately 0.36 mile from the facility. (Applicant 1, Attachment H, Visual Assessment, p. 8; Applicant 8, p. 5)

174. Generally, the tower would be visible from the residences immediately to the north. Views of the tower are also expected from the residences located across Beach Street. While some residences would have obstructed views due to a slight existing treeline, the tower would be visible from the majority of the abutters. Such visibility would be a mix of year-round views from those residences closest to the facility and directly across Beach Street and seasonal views for those farther away on Beach Street and subject to the intervening trees. (Tr. 1, pp. 28-29; Tr. 3, p. 9)

175. Intermittent seasonal views may extend to select locations between 0.4 mile and 0.6 mile to the south, southeast and east of the site. Additional year-round views are expected between 0.86 mile to 1.58 miles from the site to the northeast, south and northwest. (Applicant 1, Attachment H, Visual Assessment, p. 8; Applicant 8, p. 5)

176. Pursuant to CGS §16-50p(a)(3)(F), no public schools or commercial child day care facilities are located within 250 feet of the site. The nearest school is E.C. Goodwin Technical High School located approximately 0.73 mile west of the site at 735 Slater Road in New Britain. The nearest commercial child day care facility is Learn ‘n Play Childcare located approximately 0.82 mile east of the site at 357 Allen Street in New Britain. The tower is not expected to be visible from either location. (Applicant 1, Tab H, Visual Assessment, p. 8; Applicant 8, p. 5)

177. There are no state or locally-designated scenic roads located within the two-mile study area. (Applicant 1, p. 25 and Tab H, Viewshed map; Tr. 1, p. 29)

178. A unipole design would eliminate all external appurtenances but would require a larger diameter structure to accommodate internal antennas and equipment. It is likely that the height would need to be increased to accommodate multiple antenna centerlines to provide comparable coverage to the proposed facility. A unipole would cost approximately $85,000. (Applicant 3, response 23)

179. A faux tree tower or "monopine" could soften the views from certain locations where the tower may be visible through the trees. While the proposed antenna configuration and centerline could be maintained on a monopine, the diameter of the pole would increase due to the weight of the faux branches. The faux branches would substantially increase the overall width of the structure and would likely draw attention (from a visual standpoint) from most visible locations. A monopine would cost approximately $90,000. (Applicant 3, response 23)

180. A faux chimney, faux smokestack or flagpole would result in co-located carriers requiring two levels of antennas due to the narrow diameter, and this would result in an increase in tower height. (Tr. 1, pp. 22-23, 32)

181. A rooftop facility attached to the top of the building was not considered as an alternative. (Tr. 1, p. 22)

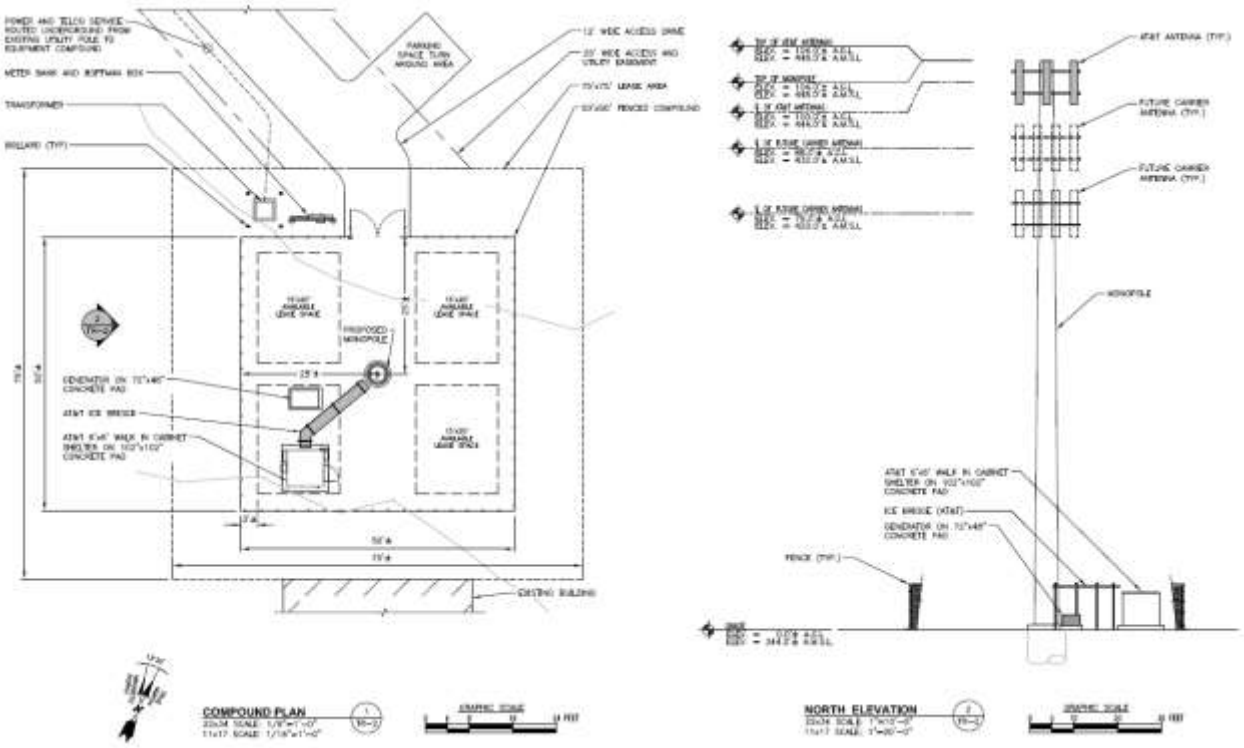
182. No screening or landscaping around the compound is currently proposed. However, the Applicant is amenable to developing a landscaping plan. (Applicant 1, Tab G, Project Plans Sheet TR-2; Tr. 1, p. 28)

183. There are no "blue-blazed" hiking trails maintained by the Connecticut Forest and Park Association within one-mile of the site. (Applicant 1, Tab H, Viewshed map)

Figure 1 – Aerial Map

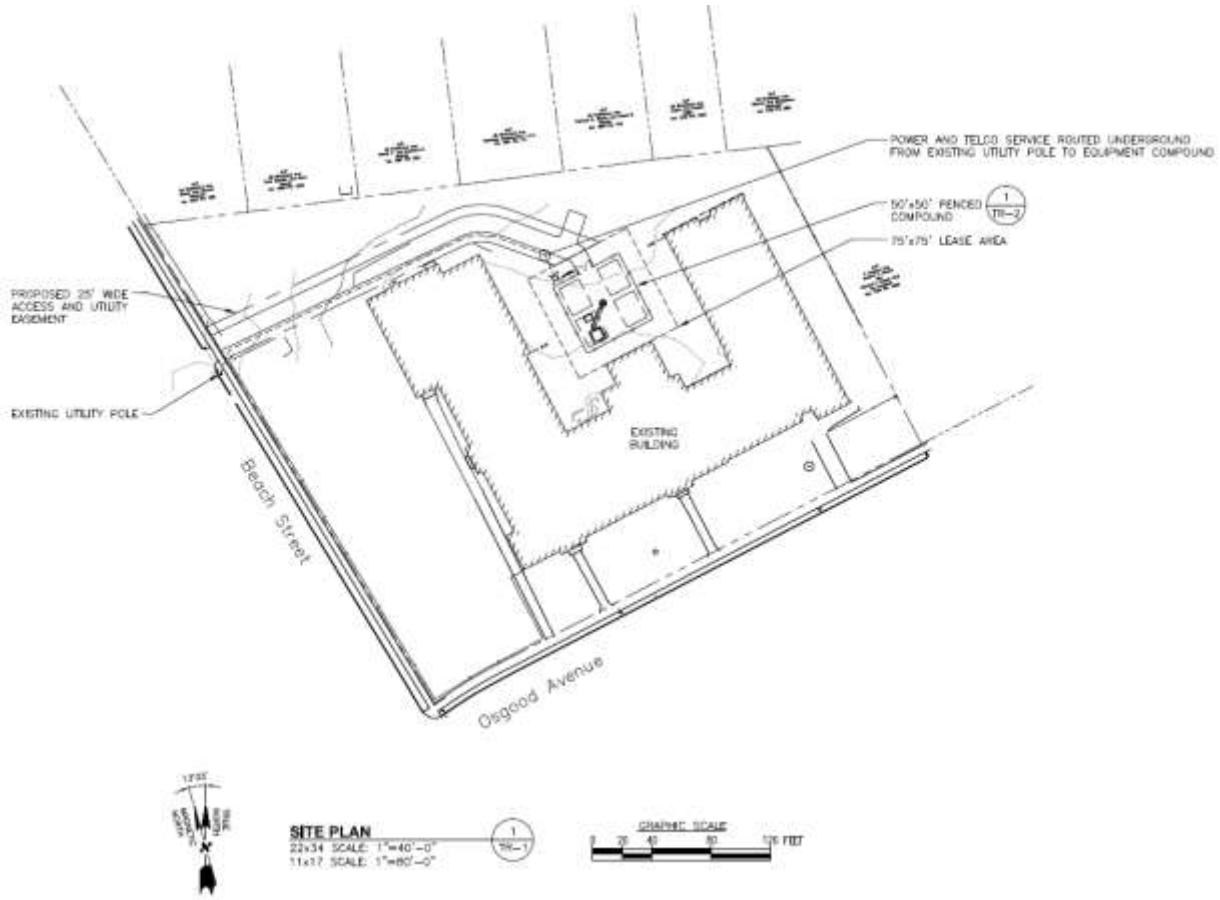
(Applicant 1, Attachment P, Aerial Photograph)

Figure 2 – Site Plan and elevation: Proposed Tower Location



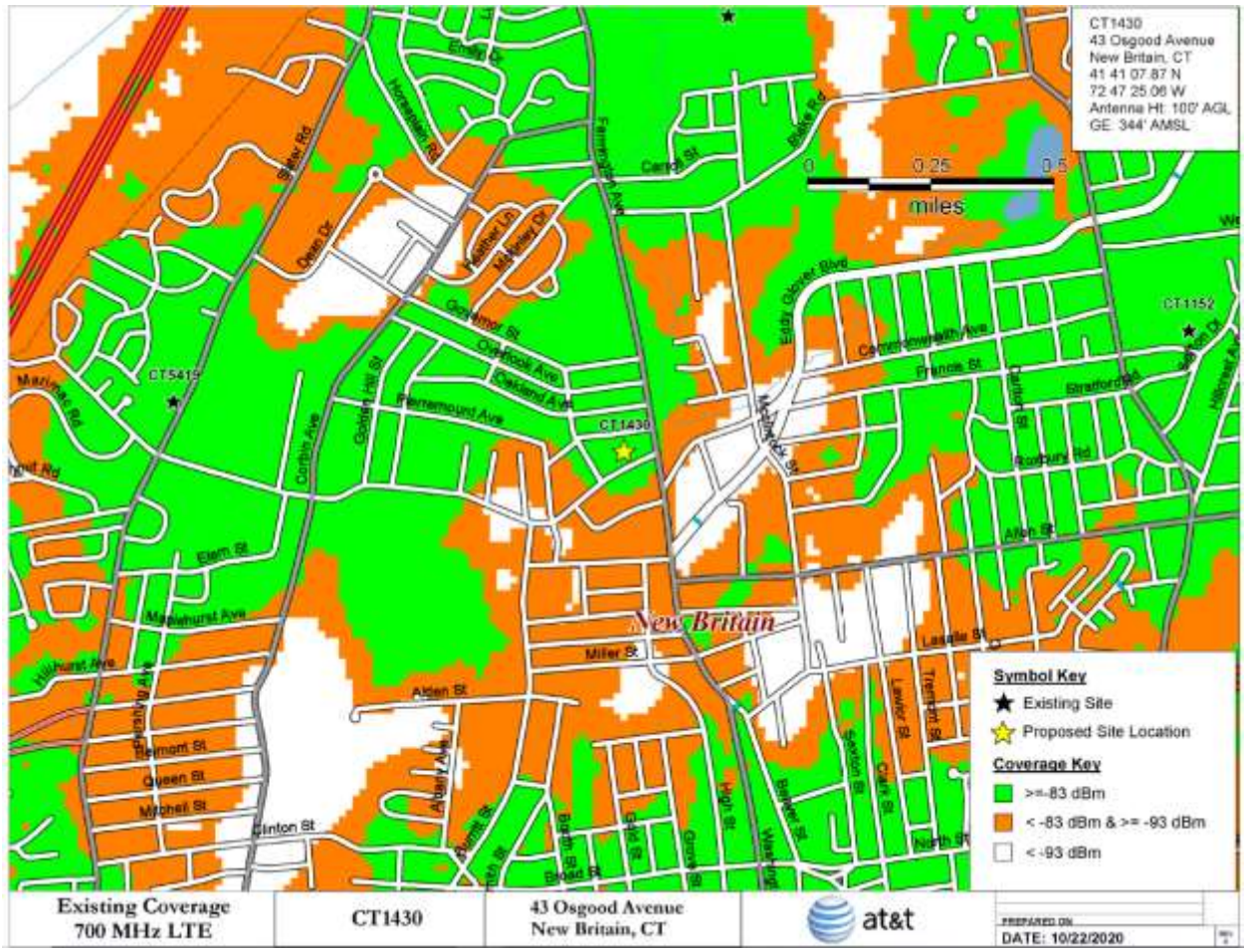
(Applicant 1, Tab G, Project Plans Sheet TR-2)

Figure 3 – Site overview with access and utility easement: proposed tower location



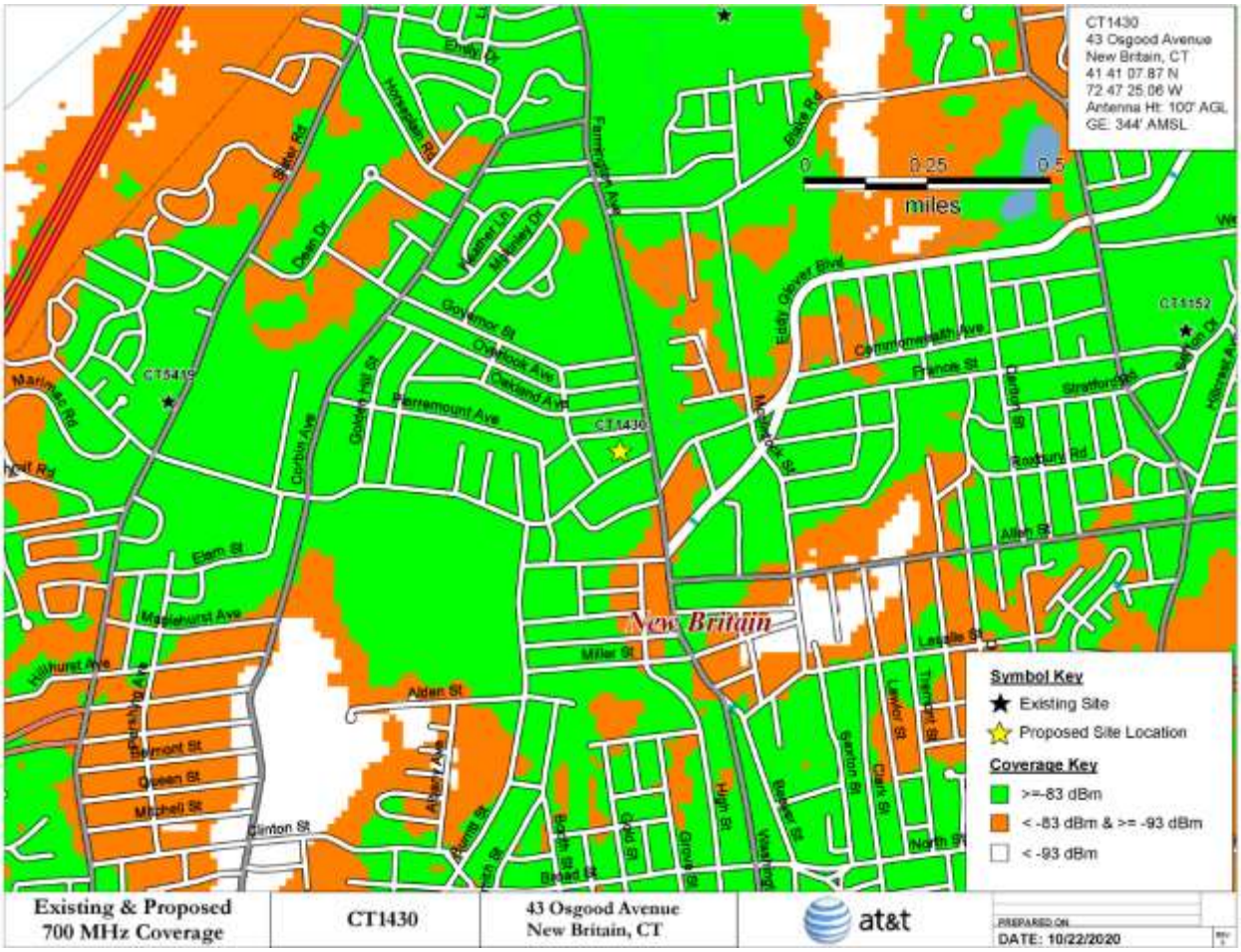
(Applicant 1, Tab G, Project Plans sheet TR-1)

Figure 4 – AT&T Existing 700 MHz Coverage



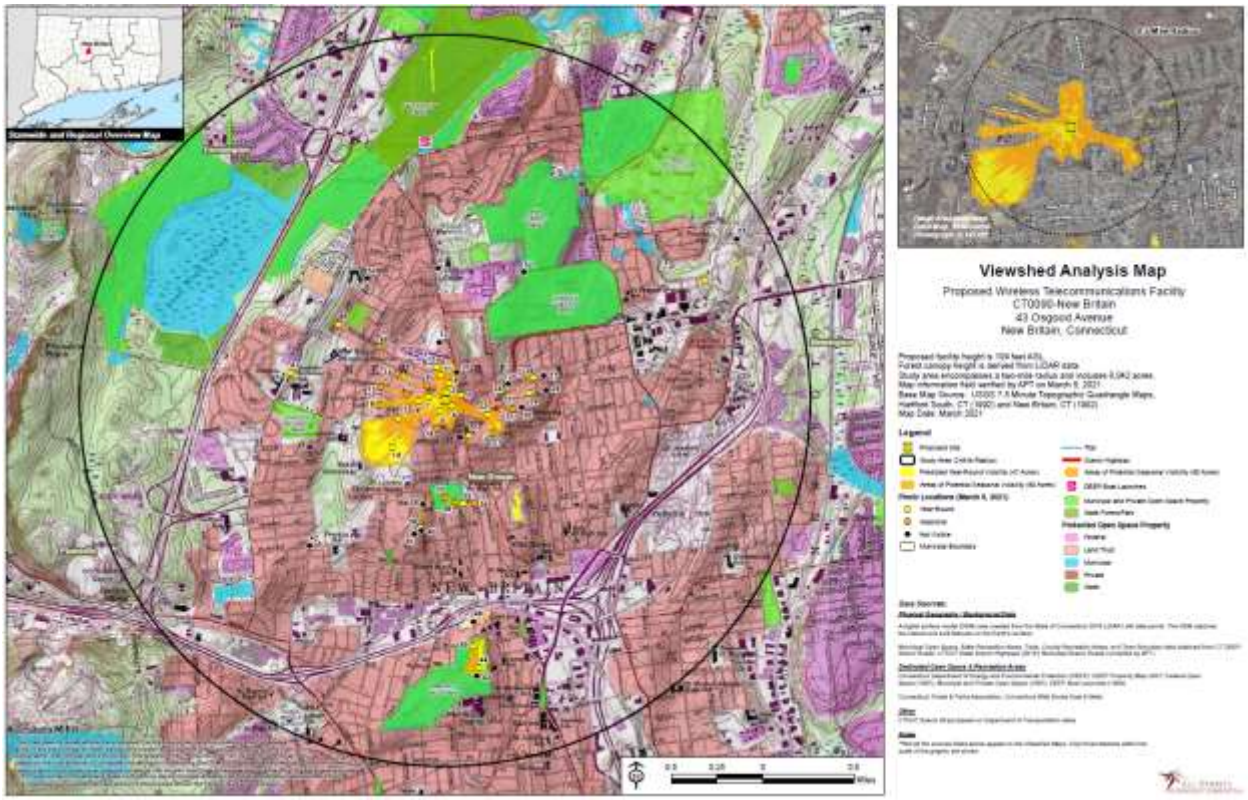
(Applicant 1, Attachment E, Coverage maps)

Figure 5 – AT&T Existing and Proposed 700 MHz Coverage



(Applicant 1, Attachment E, Coverage maps)

Figure 6 - Viewshed Map/Analysis of the proposed site



(Applicant 1, Tab H, Viewshed map)

Figure 7 – Photolog

Photo	Location	Orientation	Distance to Site	Visibility	Height of Tower Visible in Photograph
1	Highview Avenue	East	± 479 Feet	Year Round	60'-80'
2	Richmond Avenue*	South	± 232 Feet	Year Round	60'-80'
3	Farmington Avenue	Southwest	± 462 Feet	Year Round	60'-80'*
4	Osgood Avenue*	Northwest	± 241 Feet	Year Round	60'-80'
5	Osgood Avenue at Beach Street**	Northeast	± 361 Feet	Year Round	60'-80'
6	Pierremount Avenue**	East	± 0.14 Mile	Year Round	40'-60'
7	Pierremount Avenue	East	± 0.22 Mile	Seasonal	20'-40'*
8	Oakland Avenue	Southeast	± 0.13 Mile	Seasonal	40'-60'*
9	Oakland Avenue	South	± 0.10 Mile	Year Round	40'-60'
11	Overlook Avenue	South	± 0.14 Mile	Year Round	20'-40'
12	Governor Street	South	± 0.19 Mile	Year Round	20'-40'
14	Oakland Avenue at Selander Street	Southeast	± 0.30 Mile	Seasonal	20'-40'*
15	Pierremount Avenue	Southeast	± 0.36 Mile	Seasonal	20'-40'*
16	St. Mary's Ukrainian Orthodox Cemetery	East	± 0.36 Mile	Seasonal	40'-60'*
17	Osgood Avenue	Northeast	± 0.27 Mile	Year Round	40'-60'
18	Sacred Heart Cemetery	Northeast	± 0.39 Mile	Year Round	20'-40'
19	Acton Street	Northeast	± 0.16 Mile	Seasonal	1'-20'*
20	Eddy Glover Boulevard	Northwest	± 0.23 Mile	Year Round	1'-10'
21	Beth Alom Cemetery	Northwest	± 0.32 Mile	Seasonal	40'-60'*
22	Eddy Glover Boulevard	Northwest	± 0.25 Mile	Year Round	20'-40'
23	Eddy Glover Boulevard	West	± 0.29 Mile	Seasonal	1'-20'*
24	Eddy Glover Boulevard	Southwest	± 0.34 Mile	Seasonal	20'-40'*
26	Francis Street	Southwest	± 0.50 Mile	Year Round	1'-20'
29	Hawthorne Street	West	± 0.46 Mile	Year Round	40'-60'
31	Grandview Street	West	± 0.37 Mile	Seasonal	20'-40'
32	Kaiser Parking Lot Central Connecticut State University	Southwest	± 1.58 Miles	Year Round	20'-40'
34	Carmody Street adjacent to Washington School Apartments	Northwest	± 0.59 Mile	Seasonal	1'-20'*
35	Carmody Street adjacent to Washington School Apartments	North	± 0.57 Mile	Year Round	1'-20'
36	Washington Bark Park Carmody Street	North	± 0.56 Mile	Seasonal	20'-40'*
37	Washington Park	North	± 0.56 Mile	Seasonal	1'-20'
39	Smith Street at Booth Street	Northeast	± 0.71 Mile	Year Round	20'-40'
44	Walnut Hill Park	North	± 1.47 Miles	Year Round	20'-40'
45	Walnut Hill Park	North	± 1.35 Miles	Year Round	20'-40'
47	Slater Road	East	± 0.86 Mile	Year Round	20'-40'
48	Governor Street	Southeast	± 0.47 Mile	Seasonal	1'-20'*
49	Walker Road at Dean Drive	Southeast	± 0.72 Mile	Year Round	40'-60'
* Tower is visible within the treeline					

(Applicant 3, response 24, Tab 24, Photo visibility chart)