



TOWERCo & AT&T

**Application to the
State of Connecticut Siting Council**

**For a Certificate of
Environmental Compatibility and Public Need**

–ROSE HILL ROAD - BRANFORD FACILITY–

**TowerCo 2013, LLC
5000 Valleystone Drive
Cary, North Carolina**

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I. Introduction

A. Purpose and Authority

Pursuant to Chapter 277a, § 16-50g et seq. of the Connecticut General Statutes (C.G.S.), as amended, and § 16-50j-1 et seq. of the Regulations of Connecticut State Agencies (R.C.S.A.), as amended, TowerCo 2013, LLC (“TowerCo”) and New Cingular Wireless PCS, LLC (“AT&T”) hereby submit an application and supporting documentation (collectively, the “Applicants”) for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications tower facility (the “Facility”). The Facility is proposed on a 2 acre parcel of land owned by Paul Santa Barbara (the “Parcel”) with an address of 45 Rose Hill Road in the Town of Branford. The Parcel is currently used as part of a dumpster rental refuse and recycling services company known as Waste Tech (www.purpledumpster.com). The Facility is proposed in the southwestern portion of the Parcel. The Facility will permit AT&T and other FCC licensed wireless carriers to provide 4G LTE wireless services to thousands of residents and significant portions of Branford and East Haven that are not reliably served.

B. Executive Summary

AT&T's 4G LTE network requires a new transmitting facility near the border of Branford and East Haven south of I-95 and north of Short Beach Road. AT&T's objective in this Application is to improve 4G LTE service to thousands of residents, businesses and roads not adequately served from its existing wireless sites which include towers along Route 1 and I-95, in Short Beach and at Tweed Airport, and a rooftop facility in downtown East Haven. This part of Connecticut is characterized by significant changes in ground elevation with coastal lowlands, the beginning portions of a traprock ridge, and an otherwise heavily populated demographic and land use profile which includes single family, multifamily, commercial, high volume interstate and state roads. Other land uses in the area include open space associated with Beacon Hill Preserve and other properties maintained by the Branford Land Trust and the Trolley Museum and trail. Overall topography and the areas for improved service result in limited siting opportunities for the provision of reliable 4G LTE wireless services to the public.

The lack of reliable service in this part of the state is fundamentally due to the growth in demand for wireless services and absence of any existing tower infrastructure or other siting opportunities in the Beacon Hill area of Branford and East Haven. TowerCo and AT&T have each independently investigated sites in Branford and East Haven for construction of a new facility. As part of initial site searches by TowerCo and AT&T, and a joint analysis undertaken as part of the municipal consultation process, the companies have evaluated seventeen different locations. Based on the coverage objective which includes service to the geography on all sides of Beacon Hill, only those properties on Beacon Hill were qualified by AT&T's radiofrequency engineers. Of all the sites evaluated, the Waste Tech site location was deemed by TowerCo and AT&T to best meet technical service requirements, be legally available for tower siting, and otherwise minimize environmental effects to the extent practicable. Other locations evaluated, including any sites suggested by the public, were either legally unavailable for tower siting, technically inadequate to satisfy coverage requirements in this part of the state or determined by the Applicants to have comparatively greater overall environmental effects.

The tower facility is proposed as a 134' AGL monopole, within a 3,600 square foot "L"-shaped fenced compound. AT&T's antennas would be installed at the 130' level of the tower with an equipment shelter and generator in the compound. In municipal consultations, the Town of Branford Police Department requested space on the tower for its own communications antennas and equipment used in its public safety communications network and noted that both cellular and emergency communications can be poor, particularly in lower lying areas given the terrain and signal shadowing associated with ridges including Beacon Hill. TowerCo has coordinated with the Police Department to include its antenna and equipment specifications into the project plans. The FAA has determined that the tower must be marked and include a steady red beacon due to its proximity to Tweed Airport. The tower and fenced area are also designed to support the antennas and equipment of other FCC licensed wireless carriers. An access driveway and utilities will be extended to the facility from Rose Hill Road. The facility will be unmanned with no sanitary or water services and generates on average 1 vehicle trip per month by each wireless carrier consisting of a service technician in a light duty van or truck. The tower site location is currently used as part of the on-site dumpster operations by Waste Tech.

The Applicants respectfully submit that the public need for a tower in this area of Branford outweighs the environmental effects from the Facility as proposed in this Application which are principally limited to tower visibility. The proposed Facility will provide the important benefits of reliable wireless services for both commercial and public safety networks. Other environmental effects have been minimized by the Applicants' selection of a tower site location on a property with a commercial dumpster operation and in an area of the site that is already cleared.

C. The Applicants

The Applicant TowerCo is a Delaware limited liability company with its headquarters at 5000 Valleystone Drive in Cary, North Carolina. TowerCo develops/builds, owns and leases numerous communications towers in the United States and has developed tower sites in Connecticut. TowerCo entered into a long term lease with Paul Santa Barbara and subsequently, a lease with AT&T. TowerCo will construct, maintain and own the proposed Facility and would be the Certificate holder.

Applicant AT&T is a Delaware limited liability company with an office at 500 Enterprise Drive, Rocky Hill, Connecticut 06067. The company's member corporation is licensed by the Federal Communications Commission ("FCC") to construct and operate a personal wireless services system, which has been interpreted as a "cellular system", within the meaning of C.G.S. Section 16-50i(a)(6).

Neither company conducts any other business in the State of Connecticut other than the development of tower sites and provision of personal wireless services under FCC rules and regulations. Correspondence and/or communications regarding this Application shall be addressed to the attorneys for the Applicants:

Cuddy & Feder, LLP
445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
Attention: Christopher B. Fisher, Esq.

A copy of all correspondence shall also be sent to:

TowerCo
5000 Valleystone Drive
Cary, NC 27519
Attention: Amanda Adams

AT&T
500 Enterprise Drive
Rocky Hill, CT 06067
Attention: Jessica Rincon

D. Application Fee

Pursuant to R.C.S.A. § 16-50v-1a (b), a check made payable to the Siting Council in the amount of \$1,250 accompanies this Application. Included in this Application and its accompanying attachments are reports, plans and visual materials detailing the design and location for the proposed Facility and the environmental effects associated therewith. A copy of the Siting Council's Community Antennas Television and Telecommunication Facilities Application Guide with page references from this Application is also included in Attachment 16.

E. Compliance with C.G.S. §16-50/ (c)

Neither of the Applicants is engaged in generating electric power in the State of Connecticut. Therefore, the Facility is not subject to C.G.S. § 16-50r. Furthermore, the proposed Facility has not been identified in any annual forecast reports. Accordingly, the proposed Facility is not subject to § 16-50/ (c).

II. Service and Notice Required by C.G.S. § 16-50/ (b)

Pursuant to C.G.S. § 16-50/ (b), copies of this Application have been sent by certified mail, return receipt requested, to municipal, regional, state, and federal officials. A certificate of service, along with a list of the parties served with a copy of the Application is included in Attachment 15. Pursuant to C.G.S. § 16-50/ (b), notice of the Applicant's intent to submit this application was published on two occasions in The Sound. The text of the published legal notice is included in Attachment 14. The original affidavits of publication will be provided to the Siting Council once received

from the publisher. Furthermore, in compliance with C.G.S. § 16-50/ (b), notices were sent to each person or entity appearing of record as the owner of a property which abuts the premises on which the Facility is proposed. Certification of such notice, a sample notice letter, and the list of property owners to whom the notice was mailed are also included in Attachment 14.

III. Statements of Need and Benefits

A. Statement of Need

1. United States Policy & Law - Wireless Facilities

United States policy and laws support the growth of wireless networks. In 1996, the United States Congress recognized the important public need for high quality wireless communications service throughout the United States in part through adoption of the Telecommunications Act (the "Act"). A core purpose of the Act was to "provide for a competitive, deregulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies to all Americans." H.R. Rep. No. 104-458, at 206 (1996) (Conf. Rep.). With respect to wireless communications services, the Act expressly preserved state and/or local land use authority over wireless facilities, placed several requirements and legal limitations on the exercise of such authority, and preempted state or local regulatory oversight in the area of emissions as more fully set forth in 47 U.S.C. § 332(c)(7). In essence, Congress struck a balance between legitimate areas of state and/or local regulatory control over wireless infrastructure and the public's interest in its timely deployment to meet the public need for wireless services.

Nineteen years later, it remains clear that the current White House administration, The Congress and the FCC continue to take a strong stance and act in favor of the provision of wireless service to all Americans. In December 2009, President Obama issued Proclamation 8460 which included wireless facilities within his definition of the nation's critical infrastructure and declared in part:

Critical infrastructure protection is an essential element of a resilient and secure nation. Critical infrastructure are the assets, systems, and networks, whether physical or virtual, so vital to the United States that their incapacitation or destruction would have a debilitating effect on

security, national economic security, public health or safety. From water systems to computer networks, power grids to cellular phone towers, risks to critical infrastructure can result from a complex combination of threats and hazards, including terrorist attacks, accidents, and natural disasters.¹

President Obama further identified the role of robust mobile broadband networks in his 2011 State of the Union address.² In 2009, The Congress directed the FCC to develop a national broadband plan to ensure that every American would have access to “broadband capability” whether by wire or wireless. What resulted in 2010 is a document entitled “Connecting America: The National Broadband Plan” (the “Plan”).³ Although broad in scope, the Plan’s goal is undeniably clear:

[A]dvance consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, employee training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes.⁴ [internal quotes omitted]

The Plan notes that wireless broadband access is growing rapidly with “the emergence of broad new classes of connected devices and the rollout of fourth-generation (4G) wireless technologies such as Long Term Evolution (LTE) and WiMAX.”⁵ A specific goal of the Plan is that “[t]he United States should lead the world in mobile innovation, with the fastest and most extensive wireless networks of any nation.”⁶

In April 2011, the FCC issued a Notice of Inquiry concerning the best practices available to achieve wide-reaching broadband capabilities across the nation including

¹ Presidential Proclamation No. 8460, 74 C.F.R. 234 (2009).

² Cong. Rec. H459 (Jan. 25, 2011), also *available at* <http://www.whitehouse.gov/the-press-office/2011/01/25/remarks-president-state-union-address>. Specifically the President stressed that in order “[t]o attract new businesses to our shores, we need the fastest, most reliable ways to move people, goods, and information—from high-speed rail to high-speed Internet.”

³ Connecting America: The National Broadband Plan, Federal Communications Commission (2010), *available at* <http://www.broadband.gov/plan/>.

⁴ *Id.* at XI.

⁵ *Id.* at 76.

⁶ *Id.* at 25.

better wireless access for the public.⁷ The public need for timely deployment of wireless infrastructure is further supported by the FCC's Declaratory Ruling interpreting § 332(c)(7)(B) of the Telecommunications Act and establishing specific time limits for decisions on land use and zoning permit applications.⁸ More recently, the critical importance of timely deployment of wireless infrastructure to American safety and economy was confirmed in the Middle Class Tax Relief and Job Creation Act of 2012, which included a provision, Section 6409, that together with 2015 FCC regulations, preempts a discretionary review process for eligible modifications of existing wireless towers or base stations.⁹

2. United States Wireless Usage Statistics

Over the past thirty years, wireless communications have revolutionized the way Americans live, work and play.¹⁰ The ability to connect with one another in a mobile environment has proven essential to the public's health, safety and welfare. As of June 2013, there were an estimated 336 million wireless subscribers in the United States.¹¹ Wireless network data traffic was reported at 3.2 trillion megabytes, which represents a 723% increase from 2010.¹² Other statistics provide an important sociological understanding of how critical access to wireless services has become. In 2005, 8.4% of households in the United States had cut the cord and were wireless only.¹³ By December 2014, that number grew exponentially to an astonishing 44% of

⁷ FCC 11-51: Notice of Inquiry, In the Matter of Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2011/db0407/FCC-11-51A1.pdf.

⁸ WT Docket No. 08-165- Declaratory Ruling on Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt Under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance ("Declaratory Ruling").

⁹ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, §6409 (2012), available at <http://gpo.gov/fdsys/pkg/BILLS-112hr3630enr/pdf/BILLS-112hr3630enr.pdf>; see also H.R. Rep. No. 112-399 at 132-33 (2012)(Conf. Rep.), available at <http://www.gpo.gov/fdsys/pkg/CRPT-112hrpt399/pdf/CRPT-112hrt399.pdf>.

¹⁰ See, generally, History of Wireless Communications, available at http://www.ctia.org/media/industry_info/index.cfm/AID/10388 (2011)

¹¹ CTIA's Wireless Industry Indices: Semi-Annual Data Survey Results, A Comprehensive Report from CTIA Analyzing the U.S. Wireless Industry, Mid-Year 2013 Results (Semi-Annual Data Survey Results). See also, "CTIA's Annual Survey Says US Wireless Providers Handled 3.2 Trillion Megabytes of Data Traffic in 2013 for a 120 Percent Increase Over 2012" available at <http://www.ctia.org/resource-library/press-releases/archive/ctia-annual-survey-2013>.

¹² Id.

¹³ CTIA Wireless Quick Facts, available at <http://www.ctia.org/your-wireless-life/how-wireless-works/wireless-quick-facts> citing *Early Release of Estimates from the National Health Interview Survey, December 2012, National Center for Health Statistics*, June 2013.

all households.¹⁴ Connecticut in contrast lags behind in this statistic with 20.6% wireless only households.¹⁵

Wireless access has also provided individuals a newfound form of safety. Today, approximately 70% of *all* 9-1-1 calls made each year come from a wireless device.¹⁶ Beginning May 15, 2014, wireless carriers in the U.S. voluntarily supported Text-to-911, a program that allows users to send text messages to emergency services as an alternative to placing a phone call. AT&T and other licensed FCC wireless carriers will support Text-to-911.¹⁷ Parents and teens have also benefited from access to wireless service. In a 2010 study conducted by Pew Internet Research, 78% of teens responded that they felt safer when they had access to their cell phone.¹⁸ In the same study, 98% of parents of children who owned cell phones stated that the main reason they have allowed their children access to a wireless device is for the safety and protection that these devices offer.¹⁹

Wireless access to the internet has also grown exponentially since the advent of the truly “smartphone” device. Cisco reports that in 2014 global mobile data traffic grew 69 percent reaching 2.5 exabytes a month.²⁰ Notably, mobile data traffic in 2014 was nearly 30 times the size of the entire global internet in 2000; specifically, one exabyte of traffic traversed the global Internet in 2000 and in 2014 mobile networks carried

¹⁴ Stephen J. Blumberg, Ph.D., and Julian V. Luke, Division of Health Interview Statistics, National Center for Health Statistics, “Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, January - June 2014”, released December 12, 2014 and *available at* <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201412.pdf>.

¹⁵ *Early Release of Estimates from the National Health Interview Survey, December 2012*, National Center for Health Statistics, June 2013. See also, “Wireless Substitution: State-level Estimates From the National Health Interview Survey, 2012”, National Health Statistics Report, No. 70, December 18, 2013.

¹⁶ Wireless 911 Services, FCC, *available at* <http://www.fcc.gov/guides/wireless-911-services>

¹⁷ See *Text-to-911: What you need to know (FAQ)* *available at* <http://www.cnet.com/news/text-to-911-what-you-need-to-know-faq>. It should be noted that while the carriers have committed to supporting 911 texting in their service areas, text-to-911 will not be available everywhere. Emergency call centers, called PSAPs (Public Safety Answering Points), are the bodies in charge of implementing text messaging in their areas. These PSAPs are under the jurisdiction of their local states and counties, not the FCC, which governs the carriers. See also, *What You Need to Know About Text-to-911* *available at* www.fcc.gov/text-to-911. At the time of writing there are no known areas in Connecticut that yet support Text-to-911, see https://transition.fcc.gov/pshs/911/Text911PSAP/Text_911_Master_PSAP_Registry.xlsx.

¹⁸ Amanda Lenhart, *Attitudes Towards Cell Phones*, Pew Research, *available at* <http://www.pewinternet.org/Reports/2010/Teens-and-Mobile-Phones/Chapter-3/Overall-assessment-of-the-role-of-cell-phones.aspx>

¹⁹ *Id.*

²⁰ Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2014-2019, February 3, 2015.

nearly 30 exabytes of traffic.²¹ Indeed Cisco projects that overall mobile data traffic will grow to 24.3 exabytes per month by 2019, nearly a tenfold increase over 2014; this represents a compound annual growth rate (CAGR) of 57% from 2014 to 2019.²²

3. Public Need For A Tower For Wireless Services

The Facility proposed in this Application will be an integral component of AT&T's network in its FCC licensed areas throughout the state. There is a significant deficiency in 4G LTE wireless communications service in this area of Branford and East Haven. The proposed facility in the vicinity of Beacon Hill will provide reliable services in AT&T's network to a significant geographic area including portions of State Highway 142, Route 1 (West Main Street), Interstate 95, Burban Drive, Alps Road and other local roads in Branford and East Haven. The facility is needed in conjunction with other existing and proposed facilities for AT&T to provide reliable 4G LTE service to the public that is not currently provided in this part of the state. Attachment 1 is a Radio Frequency Engineering Report with coverage plots depicting the "Current Coverage" provided by AT&T's existing facilities in this area of the state and "Proposed Coverage" as predicted from the proposed facilities together with existing coverage from adjacent sites. Additional statistics regarding the overall area, population and roadway miles of expanded coverage in the community are included in AT&T's report noting new and reliable 4G LTE services for nearly 5,000 people who live in this part of Connecticut.

B. Statement of Benefits

The coverage area for reliable wireless services encompasses an area of Branford and East Haven that has dense housing and development with land trust and open space parcels interspersed. The benefits associated with the tower Facility are significant and include among others:

- 1) Reliable in-building and in-vehicle AT&T 4G LTE high speed wireless services to nearly five thousand residents;
- 2) Town of Branford Police Department public safety communications network improvements in support of first responders;

²¹ Id.

²² Id.

- 3) An FAA air navigation aid for pilots and nearby Tweed Airport.
- 4) Improved service along major roadways including Interstate I-95, Route 1, State Route 142 and secondary roads in the Branford and East Haven.

Wireless carriers have seen the public's demand for traditional cellular telephone services in a mobile setting develop into a requirement for anytime-anywhere wireless connectivity with critical reliance placed on the ability to send and receive, voice, text, image and video at broadband speeds. Provided that network service is available, modern devices allow for interpersonal and internet connectivity, irrespective of whether a user is mobile or stationary, which has led to an increasing percentage of the population to rely on their wireless devices as their primary form of communication for personal, business and emergency needs. The proposed facility would allow AT&T and other carriers to provide these benefits to the public that are not offered by any other form of communication system.

Moreover, AT&T will provide "Enhanced 911" services from the Facility, as required by the Wireless Communications and Public Safety Act of 1999, Pub. L. No. 106-81, 113 Stat. 1286 (codified in relevant part at 47 U.S.C. § 222) ("911 Act"). The purpose of this federal legislation was to promote public safety through the deployment of a seamless, nationwide emergency communications infrastructure that includes wireless communications services. In enacting the 911 Act, Congress recognized that networks that provide for the rapid, efficient deployment of emergency services would enable faster delivery of emergency care with reduced fatalities and severity of injuries. With each year since passage of the 911 Act, additional anecdotal evidence supports the public safety value of improved wireless communications in aiding lost, ill, or injured individuals, such as motorists and hikers. Carriers are able to help 911 public safety dispatchers identify wireless callers' geographical locations within several hundred feet, a significant benefit to the community associated with any new wireless site.

In 2009, Connecticut became the first state in the nation to establish a statewide emergency notification system. The CT Alert ENS system utilizes the state Enhanced 911 services database to allow the Connecticut Department of Homeland Security and Connecticut State Police to provide targeted alerts to the public and local emergency response personnel alike during life-threatening emergencies, including potential terrorist attacks, Amber Alerts and natural disasters. Pursuant to the Warning, Alert and Response Network Act, Pub. L. No. 109-437, 120 Stat. 1936 (2006) (codified at 47

U.S.C. § 332(d)(1) (WARN), the FCC has established the Personal Localized Alerting Network (PLAN). PLAN requires wireless service providers to issue text message alerts from the President of the United States, the U.S. Department of Homeland Security, the Federal Emergency Management Agency and the National Weather Service using their networks that include facilities such as the one proposed in this Application. Telecommunications facilities like the one proposed in this Application enable the public to receive e-mails and text messages from the CT Alert ENS system on their mobile devices. The ability of the public to receive targeted alerts based on their geographic location at any given time represents the next evolution in public safety, which will adapt to unanticipated conditions to save lives.

C. Technological Alternatives

The FCC licenses granted to wireless carriers operating in Connecticut authorize them to provide wireless services in this area of the state through deployment of a network of wireless transmitting sites. Existing tower sites or non-tower tall structures in the this area of Branford and East Haven are either not tall enough to overcome terrain blocking or located in areas that would not meet the technical requirements of AT&T in providing reliable 4G LTE services. In addition, repeaters, microcell transmitters, distributed antenna systems and other types of transmitting technologies are not a practicable or feasible means to providing services as compared with the proposed tower site. These technologies are better suited for specifically defined areas where coverage and capacity are needed, such as in commercial buildings and shopping malls, tunnels, stadiums or discrete topologies. Closing the coverage gaps and providing reliable 4G LTE wireless services in Branford and East Haven require a tower site that can provide service over a footprint that spans square miles and overcomes terrain in this part of Connecticut. The Applicants submit that there are no equally effective, feasible technological alternatives to a new tower for providing reliable personal wireless services in this area of Branford and East Haven.

IV. **Site Selection and Tower Sharing**

A. Site Selection

AT&T currently does not provide reliable 4G LTE services in this area of Branford and East Haven. This particular site search area in the Beacon Hill area along the

Branford and East Haven municipal boundary line is predominated by a mix of commercial, residential and other land uses including open space and the Beacon Hill Preserve. There are no existing commercial towers or tall non-tower structures located within the identified search area. TowerCo and AT&T independently investigated a number of different parcels of land for construction of a new facility including a short abandoned tower on an adjacent ridge line. TowerCo and AT&T also evaluated properties suggested by the public as part of the municipal consultation process. As provided in Attachment 2, other than the proposed location, other sites investigated were either legally unavailable, technically too close to other AT&T sites, at too low a ground elevation to provide reliable and comparable services or deemed to have greater comparative environmental effects to those associated with the proposed site, a commercial property with a refuse and dumpster operation located thereon. Additionally, TowerCo and AT&T noted that all sites at ground elevations and tower heights acceptable for the provision of service would require FAA marking and lighting.

B. Tower Sharing

The proposed Facility is designed to accommodate the antennas and equipment of AT&T, the Branford Police Department and up to three (3) additional wireless carriers.

V. Facility Design

The proposed Facility includes an approximately 3,600 s.f. lease area located in the southwestern portion of the approximately two acre parcel located at 45 Rose Hill Road. The tower is proposed as a new self-supporting monopole 134' in height. AT&T would install up to twelve (12) panel antennas and related equipment at a centerline height of 130' above grade level (AGL) on the tower. The Town of Branford Police Department would install one 10' whip antenna and two dish antennas on a platform at the 115' level of the tower. The tower would be designed for future shared use of the structure by three other FCC licensed wireless carriers. The tower itself would have alternating bands of marking and two steady red lights at the top of the tower in accordance with FAA AC 70/7460-1K.

The tower compound would consist of a fenced 3,600 s.f. compound enclosed by an 8' high chain link fence. An AT&T 11'-5" x 16' equipment shelter would be installed at the tower base on a concrete pad within the tower compound together with

provisions for a fixed back-up power generator. Space for Town of Branford Police Department and other FCC wireless carrier equipment is included in the tower compound area. At the request of an abutting property owner, as part of the municipal consultations process, a row of evergreen trees along the southern fence line have been incorporated into the facility design.

Vehicle access to the facility would be provided from Rose Hill Road over a proposed 12' wide new gravel driveway. The gravel access drive will run across the parcel a distance of approximately 252' to the proposed tower compound and will include a 10' x 20' turn-around/parking area. Utility connections would be routed underground from an existing utility pole #37355 at Rose Hill Road. Attachments 3 and 4 contain the specifications for the proposed Facility, including an abutters map, existing conditions survey, site plan, compound plan and tower elevation, sedimentation and erosion control details and other relevant details of the proposed Facility.

Included as Attachments 5 through 12 are various documents developed as part of the Applicants' due diligence including a Visibility Analysis (Attachment 8). Some of the relevant information identifies that:

- The total area of disturbance is low and no mature trees will need to be removed with the tower site location in an already cleared area of the site currently used for dumpster storage.
- The proposed Facility will have little to no impact on water flow or water quality and no direct impacts to any wetlands or watercourses are anticipated, the nearest wetland being off-site over 130' away.
- Views of the top of the tower are primarily limited to areas of open water/tidal marsh and Tweed Airport with approximately 63 acres of scattered and year round views in residential areas immediately east and southeast of the site and an approximately 1800' section of Short Beach Trail a half mile to the south.

At grade conditions do not present significant changes in environmental effects as compared with current development and use of the site as part of refuse and dumpster storage operations.

VI. Environmental Effects

Pursuant to C.G.S. §16-50p (a) (3) (B), the Siting Council is required to find and determine as part of the Application process any probable impact of the Facility on the natural environment, ecological balance, public health and safety, scenic, historic and recreational values, forest and parks, air and water purity, and fish and wildlife. As demonstrated in this Application, the Facility will be constructed in compliance with applicable regulations and guidelines, and best practices will be followed to ensure that construction of the proposed Facility will minimize any significant adverse environmental impact to the extent practicable.

A. Visual Assessment

The principal environmental effects associated with the Facility are visibility from residential areas, Beacon Hill Preserve and the Short Beach Trail. Included in Attachment 8 is a Visibility Analysis which contains a view shed map and photo simulations of off-site views where the tower was visible. As detailed in the enclosed Visibility Analysis, it is anticipated that approximately 858 acres in the study area will have year round visibility of the proposed Facility with 670 of those acres being over open water or tidal marsh areas. An additional 984 acres is expected to have seasonal views with the majority of that being over .5 miles away (and referenced in the study principally related to FAA lighting). Topography, vegetation and the relative height of the tower will obscure, partially or totally, views of the tower from many locations in the study area during leaf-on conditions with the greatest visibility occurring in areas of Branford with condominiums, single family residences, and religious land uses or senior living facilities to the east and southeast. Some limited views of the facility from the Short Beach Trail are also noted in the report. No schools or licensed day care centers are located within 250' of the site. Weather permitting, the Applicants will raise a balloon with a diameter of at least three (3) feet at the proposed site on the day of the Siting Council's first hearing session on this Application, or at a time otherwise specified by the Siting Council.

B. CT DEEP, SHPO and Other State and Federal Agency Comments

Various consultations and analyses for potential environmental impacts are summarized and included in Attachments 5-12. Representatives of the Applicants submitted reports

and requests for review from federal and state entities including the Connecticut Department of Energy and Environmental Protection (CTDEEP) and the Connecticut State Historic Preservation Officer (SHPO). It was noted that there are no known federally listed threatened or endangered species in the project site vicinity and CTDEEP indicated that they do not anticipate negative impacts to any State listed species resulting from the proposed activity at the site based on its developed condition. See CTDEEP correspondence in Attachment 9 (site is in an NDDDB mapped area). SHPO issued a no adverse effect determination on any historic resources eligible for or listed on the National Register of Historic Places. See SHPO correspondence in Attachment 10. A Coastal Consistency Assessment was conducted and the site falls outside the Coastal Zone as noted on the map in Attachment 11. US Fish and Wildlife Service and analysis of Important Bird Area ("IBA") maps were also conducted and as noted from the maps included in Attachment 12, the closest IBA is over a mile away. As required by statute, this Application is being served on state and local agencies, which may choose to comment on the Application prior to the close of the Siting Council's public hearing.

C. Power Density

In August of 1996, the FCC adopted a standard for Maximum Permissible Exposure (MPE) for RF emissions from telecommunications facilities like the one proposed in this Application. The tower site will fully comply with federal and state MPE standards. The cumulative worst-case calculation of power density from AT&T's operations in combination with the public safety antennas would be 4.88% of the MPE standard. A power density report is included in Attachment 7.

D. Wetlands, Drainage & Other Environmental Factors

The proposed Facility would be unmanned, requiring monthly maintenance visits approximately one hour long. Carriers that maintain antennas and equipment at an approved Facility monitor their facility 24 hours a day, seven days a week from a remote location. The proposed Facility does not require a water supply or wastewater utilities. No outdoor storage or solid waste receptacles will be needed. Furthermore, the proposed Facility will neither create nor emit any smoke, gas, dust, other air contaminants, noise, odors, nor vibrations other than those created by any heating and ventilation equipment or generators installed by the carriers. During power outages

and weekly equipment cycling an emergency generator would be utilized with air emissions in compliance with State of Connecticut requirements.

The tower site is at a high point relative to surrounding terrain. To the west of the project is a headwater wetland which is off-site and approximately 138' west/southwest from the proposed tower compound and access drive. The lease area and proposed areas of disturbance are located within an otherwise active commercial and cleared area of the parcel. No direct impact to any wetlands or watercourses are anticipated as a result of the tower site construction. A wetland investigation is included in Attachment 6. Overall, the construction and operation of the proposed Facility will not have an impact on wetlands or water quality and drainage will be appropriately managed on-site.

E. National Environmental Policy Act Review

The Applicants have evaluated the project in accordance with the FCC's regulations implementing the National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat. 852(codified in relevant part at 42 U.S.C. § 4321 et seq.) ("NEPA"). The parcel was not identified as a wilderness area, wildlife preserve, National Park, National Forest, National Parkway, Scenic River, State Forest, State Designated Scenic River or State Gameland. Furthermore, according to the site survey and field investigations, no federally regulated wetlands or watercourses will be impacted by the proposed Facility.

F. Air Navigation

The proposed Facility was analyzed for potential impacts to air navigation. The Applicants prepared an FAA 1-A Survey and obtained an FAA Determination of No Hazard for a tower 140' or less in height. Due to the proximity to Tweed Airport the tower is required to maintain FAA approved marking and lighting for air navigation safety. See materials included in Attachment 4. Of note, only a tower below the ambient tree line would not require FAA marking and lighting, a height which is not viable for providing reliable wireless services in this part of Connecticut.

VII. Consistency with the Town of Branford's Land Use Regulations

Pursuant to the Siting Council's Application Guide, a narrative summary of the consistency of the project with the Town's zoning and wetland regulations and plan of

conservation and development is included in this section. A description of the zoning classification of the site and the planned and existing uses of the proposed site location are also detailed in this section.

A. Branford's Plan of Conservation and Development

The Branford Plan of Conservation & Development ("POCD"), effective December 15, 2008 is included in the Bulk Filing. POCD Section 12 addresses wireless service and infrastructure and notes the poor wireless telephone service in some areas of Branford. POCD Section 12 does not outline specific municipal plans to facilitate the provision of reliable wireless service in Branford.

B. Branford's Zoning Regulations and Zoning Classification

The Town of Branford Zoning Regulations set forth general requirements for telecommunications facilities under Section 4.8M, which essentially permits non tower structures in non-residential zoning districts. The proposed tower Facility site is classified in the R-4 (residential) zoning district where wireless communications facilities are not listed as a permitted, specially permitted, or a prohibited use. This is likely as a result of Siting Council jurisdiction over tower sites in the State of Connecticut.

C. Planned and Existing Land Uses

The Facility is proposed on a two-acre parcel of land owned by Paul Santa Barbara near another commercial site, residences and Beacon Hill Preserve to the west, I-95 to the north and a mix of commercial properties, single family residences and open space in this part of Branford and East Haven. Consultation with municipal officials did indicate an approved and undeveloped residential subdivision to the south. The Applicants spoke with the owner of this site which is reflected in the site search in Attachment 2 as site #17. Copies of the Town of Branford Zoning Code, Inland Wetlands Regulations, Zoning Map and Plan of Conservation and Development are included in the Bulk Filing.

D. Branford's Inland Wetlands and Watercourses Regulations

The Branford Inland Wetlands Regulations ("Local Wetlands Regulations") regulate certain activities conducted in "Wetlands" and "Watercourses" as defined therein. The

Town establishes upland review areas for wetlands and watercourses of 75' for regulated activities. As set forth in the Wetland Investigation Report in Attachment 6 and Drawings in Attachment 4, the proposed facility is located approximately 138' west/southwest of the proposed tower compound and access drive. The lease area and proposed areas of disturbance are located within an otherwise active commercial and cleared area of the parcel. No direct impact to any wetlands or watercourses are anticipated as a result of the tower site construction.

Additionally, the overall impervious surface associated with the Facility is low in comparison to other development and storm water will be managed with Best Management Practices to be implemented during construction in accordance with the Connecticut Soil Erosion Control Guidelines, as established by the Connecticut Council of Soil and Water Conservation and DEEP (2002). Soil erosion control measures and other best management practices will be established and maintained throughout the construction of the proposed Facility. The Applicants do not anticipate an adverse impact on any wetland or water resources as part of construction or longer term operation of the Facility and respectfully submit any indirect impacts would be less than those associated with current uses of the Parcel.

VIII. Consultation with Town Officials

C.G.S. § 16-50/ generally requires an applicant to consult with the municipality in which a new tower facility may be located for a period of ninety days prior to filing any application with the Siting Council. With respect to the Facility as proposed in this Application, a Technical Report was filed with the Towns of Branford and East Haven on January 16, 2015. Meetings were held on February 13th and March 2nd, 2015 with First Selectman Cosgrove, Police Chief Halloran, Economic Development Director Elton, State Representative Reed and others to discuss the project. A publicly noticed public information meeting was held on March 30, 2015 at which the Applicants made a presentation, answered questions from the public and solicited further information regarding any alternative site suggestions. A copy of correspondence with First Selectman Cosgrove is included in Attachment 13 and summarizes the technical consultation process. The public power point presentation is being bulk filed.

IX. Estimated Cost and Schedule

A. Overall Estimated Cost

The total estimated cost of construction for the proposed Facility is represented in the table below:

Requisite Component:	Cost (USD)
Tower & Foundation	59,500
Site Development	57,850
Utility Installation	28,860
Subtotal TowerCo	146,210
Antennas and Equipment	250,000
Subtotal AT&T Cost	250,000
Total Estimated Costs	396,210

B. Overall Scheduling

Site preparation work would commence following Siting Council approval of a Development and Management (“D&M”) Plan and the issuance of a Building Permit by the Town of Branford. The site preparation phase is expected to be completed in 4-5 weeks. Installation of the monopole, antennas and associated equipment is expected to take an additional three weeks. The duration of the total construction schedule is approximately 8 weeks. Facility integration and system testing for carrier equipment is expected to require an additional 2 weeks after construction is completed.

X. **Conclusion**

This Application and the accompanying materials and documentation clearly demonstrate that a public need for a new tower in Branford exists to provide reliable wireless services to the public. AT&T has gaps in reliable 4G LTE communications in and around this area of the state. The Applicants respectfully submit that the public need for the proposed Facility outweighs any potential environmental effects from development of the tower which are principally limited to tower visibility in a mixed use area of Branford that includes commercial, residential and open space parcels. Accordingly, the Applicants respectfully request that the Siting Council grant a

Certificate of Environmental Compatibility and Public Need to TowerCo for a new wireless telecommunications Facility in Branford.

Respectfully Submitted,

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