# AMERICAN TOWER CORP. (ATC) AND NEW CINGULAR WIRELESS PCS, LLC (AT&T)

## APPLICATION TO THE STATE OF CONNECTICUT SITING COUNCIL

### FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

-MANCHESTER RISLEY FACILITY-

DOCKET NO.\_\_\_\_



AMERICAN TOWER CORP. (ATC)

10 PRESIDENTIAL WAY

WOBURN, MASSACHUSETTS 01801



NEW CINGULAR WIRELESS PCS, LLC (AT&T) 500 ENTERPRISE DRIVE ROCKY HILL, CONNECTICUT 06067

| <u>TAB</u> | TABLE OF CONTENTS  |    |  |
|------------|--|----|--|
| l.         | Introduction   | 1  |  |
| A.         | Purpose and Authority  | 1  |  |
| В.         | Executive Summary  | 1  |  |
| C.         | The Applicants   | 2  |  |
| D.         | Application Fee  | 3  |  |
| E.         | Compliance with C.G.S. §16-50/ (c)                           | 4  |  |
| II.        | Service and Notice Required by C.G.S. § 16-50/(b)            |    |  |
| III.       | Statements of Need and Benefits                              | 4  |  |
| A.         | Statement of Need  | 4  |  |
| В.         | Statement of Benefits  | 9  |  |
| C.         | Technological Alternatives                                   | 10 |  |
| IV.        | Site Selection and Tower Sharing                             | 10 |  |
| A.         | Site Selection   | 10 |  |
| B.         | Tower Sharing  | 11 |  |
| V.         | Facility Design  | 11 |  |
| VI.        | Environmental Compatibility                                  | 12 |  |
| A.         | Visual Assessment  | 13 |  |
| В.         | Solicitation of State and Federal Agency Comments            | 13 |  |
| C.         | Power Density  | 14 |  |
| D.         | Other Environmental Factors                                  | 14 |  |
| E.         | National Environmental Policy Act Review                     | 14 |  |
| F.         | Air Navigation   | 15 |  |
| VII.       | Consistency with the Town of Manchester Land Use Regulations | 15 |  |
| A.         | Manchester's Plan of Conservation and Development            | 15 |  |
| В.         | Manchester's Zoning Regulations and Zoning Classification    | 15 |  |
| C.         | Planned and Existing Land Uses                               | 17 |  |
| D.         | Manchester's Inland Wetlands and Watercourses Regulations    | 18 |  |

| IX.  | Estimated Cost and Schedule   |
|------|---|
| A.   | Overall Estimated Cost 19   |
| В.   | Overall Scheduling  |
| Χ.   | Conclusion  |
|      |   |
| LIST | OF ATTACHMENTS  |
| 1.   | AT&T's Statement of Radio Frequency (RF) Need with RF Report and Coverage Plots   |
| 2.   | Summary of Site Search and List of Existing Tower/Cell Sites  |
| 3.   | General Facility Description, Site Evaluation Report, Facilities and Equipment Specifications   |
| 4.   | Drawings, Aerial Map, Site Impact Statement, 1000' Residential Building List,<br>Tree Inventory, 1-A Survey Certification, TOWAIR Determination Results |
| 5.   | Environmental Assessment Statement  |
| 6.   | Wetland Analysis  |
| 7.   | Power Density Report  |
| 8.   | Visibility Analysis   |
| 9.   | Correspondence with the Department of Energy and Environmental Protection (DEEP) and the State Historic Preservation Officer (SHPO)                     |
| 10.  | Municipal Consultation Information <sup>1</sup>   |
| 11.  | Notice to Abutting Landowners with Legal Notice published in <u>The Journal</u> <u>Inquirer</u> ; List of Abutting Landowners; Certification of Service |
| 12.  | Certification of Service on Government Officials and Agencies including List of Officials and Agencies Served   |
| 13.  | Connecticut Siting Council Community Antennas, Television and Telecommunication Facilities Application Guide  |

<sup>1</sup> A Copy of the Technical Report sent to Manchester on May 30, 2014 is included in the Bulk Filing.

iii

C&F: 2505024.7

### APPLICATION FOR CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

#### 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, American Tower Corp. ("ATC") and New Cingular Wireless PCS, LLC ("AT&T) (together the "Applicants"), hereby submit an application and supporting documentation (collectively, the "Application") for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications tower facility (the "Facility") to be located at 701 Lydall Street in the Town of Manchester. The proposed site is an approximately 64 acre vacant parcel of land owned by Gerald W. Reid. The proposed Facility will permit AT&T and other FCC licensed wireless carriers, to provide reliable wireless services to an area not currently served in the vicinity of Vernon Street, Lydall Street, Meadowbrook Drive, State Highway 85 (Lake Street) and other local roads and homes in the surrounding Manchester area as well as the adjacent communities of Bolton and Vernon.

#### B. Executive Summary

The Facility is proposed to be located on an approximately 64 acre parcel property owned by Gerald Reid located at 701 Lydall Street, Manchester, Connecticut (the "Parcel"). The Parcel is vacant and includes hay fields and a small quarry operation. ATC proposes to construct the proposed wireless telecommunications tower and ATC has entered into a long term ground lease with Gerald W. Reid. The anchor tenant on this project is New Cingular Wireless PCS, LLC ("AT&T") which has entered into a long term lease with ATC for use of the proposed tower facility. The tower component is a proposed 104' monopole with antennas located at a centerline height of approximately 100'. This tower facility is proposed to allow AT&T, as well as other FCC licensed wireless carriers to provide reliable wireless services in the northeastern area of Town. AT&T has determined that a new facility is required to provide reliable

wireless services to the northeastern area of Manchester on the Vernon and Bolton borders. Once this search was identified by AT&T, AT&T assigned the search for available sites to ATC. The search for a wireless site in this area of Manchester focused first on trying to identify any existing tall structures or any existing wireless site locations that could be used to provide service to the area. There are no structures of sufficient height in the immediate area and other tower sites were not considered technically viable for AT&T's purposes in serving this area of the state. After determining that no existing structures were reliable, the search for sites consisted of review of larger parcels where a tower facility might be constructed. The subject parcel at 701 Lydall Street was a location that otherwise met AT&T's technical criteria and is a large parcel where ATC could design a tower to minimize community visibility of a new structure.

The proposed facility includes an approximately 100' x 100' lease area in the northern portion of the Parcel. AT&T would install up to twelve (12) panel antennas at a centerline height of approximately 100' AGL on the 104' tall monopole along with additional equipment on the tower. An associated 2,500 square foot equipment compound would accommodate an equipment shelter at the tower base on a concrete pad together with provisions for a back-up power generator. The compound will include equipment space for at least one other carrier and will be enclosed by an eight (8) foot tall chain link fence. Vehicle access to the Facility would be provided from Lydall Street over the existing dirt driveway, a distance of approximately 850', then over a proposed limited use 12' wide gravel access driveway a distance of approximately 730' to the tower compound. Utility connections will be routed underground from an existing SNET utility pole #1441 on Lydall Street.

#### C. The Applicants

Applicant American Tower Corp. ("ATC") is a Massachusetts corporation with offices at 10 Presidential Way, Woburn, Massachusetts. ATC owns and/or operates numerous facilities in the State of Connecticut. ATC is a lessee pursuant to an agreement with Gerald W. Reid. ATC will construct, maintain and own the proposed Facility and would be the Certificate holder. Applicant New Cingular Wireless PCS, LLC ("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). The company does not conduct any other business in the State of Connecticut other than the 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, 14<sup>th</sup> Floor
White Plains, New York 10601
Lucia Chiocchio, Esq.
Attention: Christopher B. Fisher, Esq.

A copy of all correspondence shall also be sent to:

American Tower Corp.

10 Presidential Way

Woburn, Massachusetts 01801

Attention: Blake Paynter

AT&T
500 Enterprise Drive
Rocky Hill, Connecticut
Attention: Michele Briggs

#### 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, if any, associated therewith. A copy of the Siting Council's Community Antenna Television and Telecommunication Facilities Application Guide with page references from this Application is also included in Attachment 13.

#### 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 12. Pursuant to C.G.S. § 16-50/ (b), notice of the Applicant's intent to submit this application was published on two occasions in <a href="#">The Journal Inquirer</a>, a paper of wide circulation in the area. The text of the published legal notice and publisher's affidavits of publication are included in Attachment 11. 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 Parcel 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 11.

#### III. Statements of Need and Benefits

#### A. Statement of Need

#### 1. <u>United States Policy & Law</u>

United States policy and laws continue to support the growth of wireless networks. In 1996, 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.

Eighteen years later, it remains clear that the current White House administration, 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.<sup>2</sup>

President Obama further identified the critical role of robust mobile broadband networks in his 2011 State of the Union address.<sup>3</sup> 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").<sup>4</sup> Although broad in scope, the Plan's goal is undeniably clear:

<sup>&</sup>lt;sup>2</sup> Presidential Proclamation No. 8460, 74 C.F.R. 234 (2009).

<sup>&</sup>lt;sup>3</sup> 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."

<sup>&</sup>lt;sup>4</sup> Connecting America: The National Broadband Plan, Federal Communications Commission (2010), *available at* http://www.broadband.gov/plan/.

[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.<sup>5</sup> [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." 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."

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 better wireless access for the public.<sup>8</sup> 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.<sup>9</sup> 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 preempts a discretionary review process for eligible modifications of existing wireless towers or base stations.<sup>10</sup>

<sup>&</sup>lt;sup>5</sup> Id. at XI.

<sup>&</sup>lt;sup>6</sup> Id. at 76.

<sup>&</sup>lt;sup>7</sup> Id. at 25.

<sup>&</sup>lt;sup>8</sup> 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.

<sup>&</sup>lt;sup>9</sup> 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").

<sup>&</sup>lt;sup>10</sup> Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, §6409 (2012), available at <a href="http://gpo.gov/fdsys/pkg/BILLS-112hr3630enr/pdf/BILLS-112hr3630enr.pdf">http://gpo.gov/fdsys/pkg/BILLS-112hr3630enr.pdf</a>; see also H.R. Rep. No. 112-399 at 132-33 (2012)(Conf. Rep.), available at <a href="http://www.gpo.gov/fdsys/pkg/CRPT-112hrpt399/pdf/CRPT-112hrt399.pdf">http://www.gpo.gov/fdsys/pkg/CRPT-112hrpt399/pdf/CRPT-112hrt399.pdf</a>.

#### 2. <u>United States Wireless Usage Statistics</u>

Over the past thirty years, wireless communications have revolutionized the way Americans live, work and play. 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 2012, there were an estimated 321.7 million wireless subscribers in the United States. Wireless network data traffic was reported at 341.2 billion megabytes, which represents a 111% increase from the prior year. 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. By 2012, that number grew exponentially to an astonishing 38.2% of all households. Connecticut in contrast lags behind in this statistic with 20.6% wireless only households.

Wireless access has also provided individuals a newfound form of safety. Today, approximately 70% of *all* 911 calls made each year come from a wireless device. <sup>17</sup> Beginning May 15, 2014, wireless carriers in the U.S. will voluntarily support 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. <sup>18</sup> Parents and teens have also benefited from access to wireless

<sup>&</sup>lt;sup>11</sup> See, generally, History of Wireless Communications, *available at* http://www.ctia.org/media/industry\_info/index.cfm/AID/10388 (2011)

<sup>&</sup>lt;sup>12</sup> CTIA's Wireless Industry Indices: Semi-Annual Data Survey Results, A Comprehensive Report from CTIA Analyzing the U.S. Wireless Industry, Mid-Year 2012 Results (Semi-Annual Data Survey Results). See also, "CTIA-The Wireless Association Semi-Annual Survey Reveals Historical Wireless Trend" available at <a href="http://www.ctia.org/media/press/body.cfm/prid/2133">http://www.ctia.org/media/press/body.cfm/prid/2133</a>.

<sup>&</sup>lt;sup>13</sup> Id.

<sup>&</sup>lt;sup>14</sup> CTIA Wireless Quick Facts, available at <a href="http://www.cita.org/your-wireless-life/how-wireless-works/wireless-quick-facts">http://www.cita.org/your-wireless-life/how-wireless-works/wireless-quick-facts</a> citing Early Release of Estimates from the National Health Interview Survey, December 2012, National Center for Health Statistics, June 2013.

<sup>&</sup>lt;sup>15</sup> Id

<sup>&</sup>lt;sup>16</sup> 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.

<sup>&</sup>lt;sup>17</sup> Wireless 911 Services, FCC, available at http://www.fcc.gov/guides/wireless-911-services

<sup>&</sup>lt;sup>18</sup> See *Text-to-911: What you need to know (FAQ) available at* <a href="http://www.cnet.com/news/text-to-911-what-you-need-to-know-faq">http://www.cnet.com/news/text-to-911-what-you-need-to-know-faq</a>. 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

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. 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.

Wireless access to the internet has also grown exponentially since the advent of the truly "smartphone" device. Cisco recently reported that global mobile data traffic grew 81% in 2013.<sup>21</sup> In 2013, mobile data traffic alone was eighteen times greater than all global Internet traffic in 2000.<sup>22</sup> Indeed, with the expansion of tablets, netbooks and wearable devices to the marketplace and increased M2M ("Machine to Machine") connectivity, this type of growth is expected to persist with Cisco projecting that mobile data traffic will grow at a compound annual growth rate (CAGR) of 61% from 2013 to 2018.<sup>23</sup>

#### 3. <u>Site Specific Public Need</u>

The Facility proposed in this Application is an integral component of AT&T's network in its FCC licensed areas throughout the state. There is a significant coverage deficiency in the existing AT&T wireless communications network in Manchester, in the area of Risley Reservoir on the Manchester/Vernon boundary including main and secondary roads and homes in the surrounding area. A deficiency in coverage is evidenced by the inability to adequately and reliably transmit/receive quality calls and/or utilize data services offered by the network. The proposed facility, in conjunction with other existing and approved facilities in and around Manchester is needed by AT&T to provide its wireless services to people living in and traveling through this area of the state. Attachment 1 of this Application includes a Radio Frequency ("RF") Engineering Report with propagation plots and other information which identifies and demonstrates

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 <a href="https://www.fcc.gov/text-to-911">www.fcc.gov/text-to-911</a>.

<sup>&</sup>lt;sup>19</sup> 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

<sup>&</sup>lt;sup>20</sup> ld.

<sup>&</sup>lt;sup>21</sup> Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2013-2018 (Feb. 5, 2014).

<sup>&</sup>lt;sup>22</sup> ld

<sup>&</sup>lt;sup>23</sup> Id.; see also Connecticut Siting Council, 2013 Connecticut State-Wide Telecommunications Coverage Plan (Feb. 6, 2014).

the specific need for a facility in this area of the State to serve the public and meet its need and demand for wireless services.

#### B. Statement of Benefits

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. 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 will require 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. <u>Technological Alternatives</u>

The FCC licenses granted to AT&T authorize it to provide wireless services in this area of the state through deployment of a network of wireless transmitting sites. Repeaters, microcell transmitters, distributed antenna systems (DAS) and other types of transmitting technologies are not a practicable or feasible means to providing service within the service area for this site. These technologies are better suited for specifically defined areas where new coverage is necessary, such as commercial buildings, shopping malls, and tunnels, or to address capacity. Closing the coverage gaps and providing reliable wireless services in northeastern Manchester requires a tower site that can provide reliable service over a footprint that spans several hundred acres. The Applicant submits that there are no equally effective technological alternatives to the construction of one of the proposed facilities for providing reliable personal wireless services in this area of Connecticut.

#### IV. Site Selection and Tower Sharing

#### A. <u>Site Selection</u>

AT&T's network lacks reliable radiofrequency coverage in this area of Manchester. After identifying this search area, AT&T assigned the review of sites to ATC. ATC's search for a wireless site in this area of Manchester focused first on trying to identify any existing tall structures or any existing wireless site locations. After determining that there are no structures of sufficient height in the immediate area and that other

tower sites are not considered technically viable for AT&T's purposes in serving this area of the state, the search for sites then turned to larger parcels where a tower facility might be constructed. This area is comprised by a mix of residential and municipal Water Department property. The Water Department property in the search area is characterized by low elevation and significant wetlands. The Risley Reservoir is used for recreational purposes. The subject parcel at 701 Lydall Street was a location that otherwise met AT&T's technical criteria and is a large parcel where ATC could design a tower to minimize community visibility of a new structure. Ultimately it was determined that at this location AT&T would require antennas located at a centerline height of approximately 100' AGL. AT&T then developed a proposal in conjunction with ATC to develop a tower Facility on the Reid property which is larger and at a higher elevation than surrounding residential parcels. The subject Parcel is vacant with hay fields and a small quarry operation, and the proposal does not require tree removal or significant excavation and grading.

#### B. <u>Tower Sharing</u>

The proposed Facility is designed to accommodate the antennas and equipment of AT&T, and will support the antennas and equipment of other carriers as may be needed.

#### V. Facility Design

The proposed Facility is located in the northern portion of the Parcel and consists of a self-supporting 104' AGL monopole tower designed to accommodate antennas of federally licensed wireless carriers. AT&T would install up to twelve (12) panel antennas at a centerline height of approximately 100' AGL and some additional equipment on the tower. The tower will be designed for future shared use by other FCC licensed carriers. The tower compound would consist of a 50' x 50' area (2,500 sq. ft.) to accommodate AT&T's ground equipment and provide for future shared use of the facility. An AT&T 11.5 x 16' equipment shelter will be installed within the equipment compound on a concrete pad together with provisions for a fixed back-up emergency power generator. The equipment compound will be enclosed by an 8' tall chain link fence. Site improvements will require approximately 600 cubic yards of cut for utility trenching and approximately 100 cubic yards of fill. Approximately 400 cubic yards of broken stone is required for the compound and driveway construction.

Vehicle access to the Facility would extend from Lydall Street over an existing dirt driveway a distance of approximately 850', then along a proposed 12' wide gravel driveway a distance of approximately 730' to the tower compound. Utility connections would extend underground from an existing SNET utility pole #1441 on Lydall Street.

Attachments 3 and 4 contain the specifications for the proposed Facility, including an abutters map, site plan, a compound plan, tower elevation, sedimentation and erosion control details and other relevant details of the proposed Facility.

Included as attachments 5, 6, 7, 8, and 9 are various documents obtained or created as part of the Applicants environmental review including a Visibility Analysis (attachment 8). Some of the relevant information included in Attachments 3, 4, 5, 6, 7, 8 and 9 reveals that:

- Modest clearing, grading, cut and fill would be required for the construction of the proposed Facility, with no tree removal;
- The proposed Facility will have no impact on water flow, water quality, or air quality;
- Areas from where the proposed Facility would be visible above the tree canopy year-round comprise a total of approximately 50 acres;
- When the leaves are off the trees, seasonal views through intervening tree trunks and branches are anticipated to occur over some locations within an area of ±198 acres; and
- The modest height of 104' AGL, together with topography and the dense mature tree canopy will minimize visibility of the facility.

#### VI. Environmental Compatibility

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 proposed Facility will be constructed in compliance with applicable regulations and guidelines, and best practices will be

followed to ensure that the construction of the proposed Facility will not have a significant adverse environmental impact. In addition, the regular operation and monthly maintenance of the Facility will not have a significant environmental impact.

#### A. <u>Visual Assessment</u>

Included in Attachment 8 is a Visual Analysis which contains a viewshed map and photo simulations of off-site views. As detailed in the enclosed Visual Analysis, it is anticipated that only approximately 50 acres of the 8,042-acre study area will have visibility of the proposed Facility above the tree canopy year round. Moreover, the Visual Analysis concludes that only approximately 198 acres (or approximately 2.5% of the study area) will experience seasonal views through intervening branches and tree trunks during leaf-off conditions. Topography, vegetation and existing mature tree canopy would obscure, partially or totally, views of the 104' tower from several locations. The Visual Analysis indicates that anticipated visibility of the structure will be principally limited to areas located within a one-half mile radius of the proposed Facility.

No schools or commercial day care facilities are located within 250' of the Parcel.

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. Solicitation of State and Federal Agency Comments

Various consultations and analyses for potential environmental impacts are summarized and included in Attachments 5, 6, 7, 8 and 9. Representatives of the Applicants submitted 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). Based on review and screening by the Applicants' consultants, no impacts to State or Federal listed species or significant natural communities are anticipated. CTDEEP confirmation is pending. SHPO's review is also pending and research by the Applicants' consultants to date indicates no potential adverse effect on any historic resources eligible for or listed on the National Register of Historic Places.

Any correspondence from either agency will be forwarded to the Siting Council once received. 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. <u>Power Density</u>

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. To ensure compliance with the applicable standards, a maximum power density report is included herein as part of Attachment 7. The report concludes that the calculated worst-case emissions from AT&T's antennas are 7.66% of the MPE standard.

#### D. 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 same 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 installed by carriers. During power outages an emergency generator would be utilized from which some emissions and noise would be produced. Overall, the construction and operation of the proposed Facility will not have a significant impact on the air, water, or noise quality of the area.

#### E. <u>National Environmental Policy Act Review</u>

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 existing site 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 or threatened or endangered species will be impacted by the proposed Facility.

#### F. <u>Air Navigation</u>

The Applicants utilized the FCC's TOWAIR program to determine whether the proposed Facility would require registration with the Federal Aviation Administration (FAA). The TOWAIR program results for the proposed Facility, a copy of which is included in Attachment 4, indicates that the proposed Facility will not need to be registered with the FAA, and that the FAA will not need to review the proposed Facility as a potential hazard to air navigation. Accordingly, no FAA marking or lighting will be required for the proposed Facility.

#### VII. Consistency with the Town of Manchester Land Use Regulations

Pursuant to the Siting Council's Application Guide, a narrative summary of the consistency of the project with the local municipality'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. Manchester's Plan of Conservation and Development

The Town of Manchester Plan of Conservation & Development ("Plan"), effective January 14, 2013, is included in the Bulk Filing. The Plan does not directly address wireless telecommunication facilities. Nevertheless, it is respectfully submitted that the proposed Facility will contribute to the plan goals of building a vibrant economy and appealing to the rising population of Gen Y and baby boomers by providing reliable wireless services that are integral to business, home life and public safety.

#### B. Manchester's Zoning Regulations and Zoning Classification

Article IV, Section 19 of the Town of Manchester Zoning Regulations sets forth the standards for communications tower siting. The Parcel is classified in the Rural Residential (RR) Zoning District where wireless facilities are permitted by special exception and site plan approval. The table below provides a review of general

requirements of tower facilities under the Town of Manchester Zoning Regulations accompanied by conformity of the Facility with these requirements.

| Zoning<br>Regulation | Standard or Preference  | Proposed Facility  |
|----------------------|---|--|
| § 19.06              | A tower site shall not be located within 200' of a residence.   | The closest residence to the existing facility is located approximately 452' to the northeast. |
| § 19.06              | No tower exceeding 60 feet in height shall be located w/in 1,000' of a historic district.   | The proposed Facility site is not located within 1000' of a Historic District.                 |
| § 19.06              | Tower shall not be lighted unless otherwise required by the FAA. Shall be blue grey or black if not required to be marked by FAA. | No lighting or marking of the tower is required or proposed.                                   |
| § 19.06              | No commercial signs are permitted.  | No commercial signs are proposed.  |
| § 19.06              | All towers shall be designed as a monopole.   | The proposed tower is a self-supporting monopole design.                                       |
| § 19.06              | Towers shall be designed to accommodate at least one additional carrier if under 150' tall.                                       | The proposed tower will be designed to accommodate at least one additional carrier.            |

| Zoning<br>Regulation | Standard or Preference  | Proposed Facility   |
|----------------------|---|---|
| § 19.06              | A telecommunications facility shall have a paved driveway and at least one parking space.               | To minimize disturbance and clearing a portion of the proposed access drive will utilize an existing dirt driveway. The remainder of limited use access driveway will be upgraded to a gravel surface. The compound area will have sufficient room for maintenance vehicle parking. |
| § 19.06              | All utilities shall be underground.   | Utilities are proposed to be installed underground.   |
| § 19.07              | Wireless facilities (new towers) limited to 175' AGL.   | The height of the proposed tower is 104' AGL.   |
| §19.07               | Monopole or tower shall be set back from the property line a distance equal to the height of the tower. | The height of the proposed monopole is 104'. The distance of the monopole to the closest property boundary is 145' to the west.   |

#### C. <u>Planned and Existing Land Uses</u>

The new tower Facility is proposed in the northern portion of a vacant 64+/- acre parcel of land that currently consists of agricultural hay fields and a small quarry operation. The surrounding land uses consist of primarily residential development, agricultural fields and forest. Consultation with municipal officials did not indicate any planned changes to the existing or surrounding land uses. Copies of the Manchester Plan of Conservation and Development, Zoning Regulations, Zoning Map, Wetlands Regulations and Wetland Map are included in the Bulk Filing.

#### D. <u>Manchester's Wetlands Regulations</u>

Manchester's Inland Wetlands and Watercourses Regulations ("Local Wetlands Regulations") regulate certain activities conducted in "Wetlands" and "Watercourses" as defined therein. The Town established upland review areas for wetlands and watercourses of 100' for regulated activities.

The Wetlands Investigation Report in Attachment 6 finds that the proposed activities will not result in adverse impacts to wetland resources. As set forth in the Wetlands Investigation Report, the proposed Facility compound is located approximately 350' from the wetland. The closest point of the existing access drive to the wetland is approximately 17'. Underground utilities are located to avoid direct impacts to wetlands.

As noted in the enclosed report, the proposed gravel access drive is located near the vernal pool habitat associated with the wetland. A Vernal Pool Evaluation is being prepared to assess vernal pool habitat and appropriate protection strategies to avoid impact to vernal pool herpetofauna. Mitigation measures will likely include the isolation of the perimeter/limits of construction, inspection and maintenance of isolation structures, herpetofauna sweeps, education of contractors and sub-contractors prior to initiation of construction activities, protective measures and reporting. Short term protective measures also include installation and maintenance of erosion and sedimentation controls in accordance with 2002 Connecticut Guidelines For Soil Erosion and Sediment Control, as established by the Council of Soil and Water Conservation. Soil erosion control measures and other best management practices will be established and maintained throughout the construction of the proposed Facility. Therefore, the Applicants do not anticipate an adverse impact on any wetland or water resource.

#### VIII. Consultations with Local Officials

C.G.S. § 16-50/ (e) requires an applicant to consult about any proposed facility with the municipality in which a proposed Facility may be located and with any adjoining municipality having a boundary of 2,500 feet from the proposed Facility. The Towns of Bolton and Vernon are located within 2,500' of the proposed Facility.

On May 30, 2014, the Applicants forwarded a Technical Report to the Town of Manchester and the Towns of Bolton and Vernon. As a follow up to the Technical Report submission, representatives of the Applicant spoke with the Manchester Town Planner who requested additional visual materials. On July 17, 2014, a detailed visibility analysis was submitted to the Town of Manchester as well as the Towns of The Town of Manchester Planning & Zoning Commission Bolton and Vernon. requested a presentation at their August 4, 2014 meeting. At the Planning and Zoning Commission meeting, the Applicants' representatives provided an overview of AT&T's need in the area and details of the proposed Facility and answered questions from those in attendance. No comments, suggestions or alternative sites were offered by the Planning & Zoning Commission. A follow up phone call on August 18, 2014 with the Town Planner confirmed that the Town did not have any formal comments. comments or suggestions were provided by the Town of Bolton or the Town of Vernon.

#### 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     | \$92,875   |
| Utility Installation   | \$59,500   |
| Facility Installation  | \$152,000  |
| Subtotal ATC Cost      | \$304,375  |
| Antennas and Equipment | \$250,000  |
| Subtotal AT&T Cost     | \$250,000  |
| Total Estimated Costs  | \$554,375  |

#### 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 Manchester. The site preparation phase is expected to be completed within approximately 5 weeks. Installation of the tower, compound and utilities is expected to take an additional three weeks. It is anticipated that installation of carrier antennas and equipment as needed will be approximately another two weeks making the duration of the total construction schedule is approximately 10 weeks. Carriers typically require an additional two weeks post-construction for Facility integration and system testing.

#### X. Conclusion

This Application and the accompanying materials and documentation clearly demonstrate that a public need exists for a new tower facility in northeastern Manchester to provide both emergency communications and wireless service to the AT&T has gaps in reliable wireless service 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 resulting from the proposed Facility at the site, none of which have been identified as substantial or significant. Accordingly, the Applicants respectfully request that the Siting Council grant a Certificate of Environmental Compatibility and Public Need to ATC for а telecommunications Facility in northeastern Manchester.

Respectfully Submitted,

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