



Zoning Board of Appeals

Town Of Petersham  
Zoning Board Of Appeals  
3 South Main Street, PO Box 486  
Petersham, Massachusetts 01366-0486  
Phone: 978-724-3353 - Fax 978-724-3501  
Web: [www.townofpetersham.org](http://www.townofpetersham.org)

### **FINAL DECISION**

Upon the application of New Cingular Wireless PCS, LLC, it is hereby certified that the Town of Petersham Zoning Board of Appeals heard and approved a Special Permit and Certain Waivers for the construction of a ninety-foot (90') monopole style tower with 12 panel antennas mounted thereon, together with related associated equipment enclosed in a 75'-by-75' fenced compound at 41 Hall Road, a parcel also identified in the Town Assessor records as Map 0 Lot 322, (the "Facility") at its duly called and posted meetings on July 16, 2013, August 8, 2013, October 1, 2013, October 7, 2013, November 6, 2013 (at which the hearing was closed and deliberations begun), November 20, 2013, and November 21, 2013 at which a quorum was present and voting.

**Property Address:** 41 Hall Road, Petersham, MA 01366

**Property Owner:** Chimney Hill Farm, LLC

**Applicant:** New Cingular Wireless PCS, LLC by  
AT&T Mobility Corporation, Its Manager

**Applicant's Representative:** Brown Rudnick, LLP  
10 Memorial Boulevard, Providence, RI 02903

**Purpose of Request:** Applicant requested various and redundant relief: Special Permit pursuant to Article XVI, Sections 5 (D) (2) and 11 (2) of the General By-Laws of the Town of Petersham, as amended ("By-Laws"), to erect a wireless telecommunications tower (also referred to as a cellular tower) and dimensional variances from Article XVI, Section 5 (D) (6) (e) and (j) of the By-Laws and, to the extent necessary all right reserved; (i) a dimensional variance from the terms of Article XVI, Section 4 pursuant to Article XVI, Section 11 (3); (ii) waivers from the terms of Article XVI, Sections 5 (D) (6) (e) and (j) and from the terms of Article XVI, Section 5 (D) (4) (A) (B) and (C) of the By-Laws pursuant to Article XVI, Section 5 (D) (11) of the By-Laws and the federal Telecommunication Act of 1996, as well as (iii) a variance from the terms of Article XVI, Section 5 (D) (11) of the By-Laws pursuant to Article XVI, Section 11 (3) of the By-Laws; all of the foregoing relief also pursuant to Massachusetts General Laws, Chapter 40A, and the federal Telecommunications Act of 1996 for the construction, operation and maintenance of a Wireless Service Facility.

**Members Sitting:** Maryanne Reynolds, Brian MacEwen, Don Eaton

**History:** New Cingular Wireless PCS, LLC, through its Manager AT&T Mobility Corporation, and its representative Brown Rudnick, LLP, submitted an application requesting a Special Permit, Variances and/or various waivers for the construction, operation and maintenance of a proposed 140' Facility at 41 Hall Road, Petersham, Massachusetts, to the Board and to the Town Clerk on May 31, 2013 and was stamped in by the Town Clerk on June 3, 2013. Legal notices were printed in the Athol Daily News on June 27, 2013 and July 6, 2013 and abutters and adjoining towns were duly notified. A hearing was opened on July 16, 2013. As there was a possibility of defective notice, all abutters were notified again, including notice of an amendment to the Application submitted by the Applicant requesting specific waivers in their correspondence of July 23, 2013, in advance of the August 8, 2013 hearing at which Applicant offered to repeat the subject matter of the first hearing. The hearing was continued to August 8, 2013, October 1, 2013, October 7, and November 6, 2013 to allow the applicant to submit supplementary materials. The Board hired David Maxson, WCP of Isotrope, LLC to review the application from a technical aspect; the Applicant paid his fees. The Board intended to hire a legal consultant to assist with evaluation of the Applicant's claims regarding federal requirements; the Applicant respectfully refused to pay reasonable consultant fees and the Board did not have the benefit of a legal consultant.<sup>1</sup>

During the course of the proceeding, the Applicant voluntarily modified its request and submitted revised plans to build a tower with a maximum height of 90'. The Applicant thereafter withdrew its request for relief from the 90' height limitation in the By-Laws, as confirmed by the Applicant on November 21, 2013.

The hearing was closed on November 6, 2013.

### **RECORD EVIDENCE**

The Board received and duly considered the following:

#### **Applicant's Plans And Documents:**

- Cover Letter/Memorandum from Brown Rudnick, LLP containing statements in support of application, dated May 24, 2013;
- Cover Letter/Supplemental Memorandum from Michael R. Dolan, Esq., of Brown Rudnick, LLP containing statements in support of application, dated July 23, 2013;
- Cover Letter from Peter LaMontagne, Site Acquisition Agent for AT&T, Centerline Communications, dated September 25, 2013, enclosing additional application exhibits;

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<sup>1</sup> Consequently, the Board makes no findings or conclusions relative to the Applicant's position that it has a "significant gap" in coverage in Petersham. A "significant gap" is a phrase that appears to be a term of art with implications that have not been adequately explained to the Board.

Tab 1: Zoning Board of Appeals, Petersham, Massachusetts Application signed by Peter LaMontagne, agent for AT&T; enclosing checks for application fee, publication fee, and postage fee; and attaching Letter of Authorization, signed by Robert T. Hall, Co-Manager of Chimney Hill Farm, LLC;

Tab 2: Report of Radio Frequency Engineer consisting of statements of AT&T Radio Frequency Engineer Ceferiano ("Renz") Bautista, dated March 5, 2013;

Tab 3: Radio Frequency coverage plots, color coded for signal strength greater than or equal to a range from -74 dBm to -104 dBm and entitled:

- AT&T Current Coverage in Petersham, MA 850 MHz;
- AT&T Current w/other Proposed Site Coverage in Petersham, MA 850 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 140' 850 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 130' 850 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 120' 850 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 110' 850 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 100' 850 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 90' 850 MHz;
- AT&T Current Coverage in Petersham, MA 1900 MHz;
- AT&T Current w/other Proposed Site Coverage in Petersham, MA 1900 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 140' 1900 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 130' 1900 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 120' 1900 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 110' 1900 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 100' 1900 MHz;
- AT&T Future Coverage in Petersham, MA-Hall Rd. @ 90' 1900 MHz"

Tab 4: List of coverage plots of First Congregational Parish Church and 41 Town-owned parcels showing potential coverage from those locations.

Tab 5: Photo Simulations and related documents prepared by Benjamin E. Caron of Caron & Associates Design [prepared for the prior, withdrawn application]:

- Driven/Verified Visibility Map, 2/5/2012;
- Terrain Visualization Map, 2/5/2012;
- Photo from end of Harty Drive, 2/5/2012;
- Photo from Old Barre Road near town line, 2/5/2012;
- Photo from high point of Maple Lane, 2/5/2012;
- Photo from North Common Meadow off of Route 32, 2/5/2012;
- Photo from south end of Connor's Pond, 2/5/2012;
- Photos (2) from backyard of 80 East Street residence, 2/5/2012;
- Photo from Bachrach property, 2/5/2012;
- Report dated November 30, 2011, balloon test synopsis for Friday, 11/18/2011, Saturday, 11/19/2011, and Sunday, 11/20/2011;

- Report titled Tree Heights Surrounding the Proposed Tower Site, 11/20/2011;
- Photographic renderings of view of 90' Tall Monopole, 140' Tall Monopole, 90' Tall Monotree, and 140' Monotree from above listed photo locations, dated 11/29/2011.

Tab 6: TOWAIR Determination Results, dated April 30, 2013;

Tab 7: Reference Copy of Radio Station Authorization issued by Federal Communications Commission, Wireless Telecommunications Bureau, to Licensee AT&T Mobility Spectrum LLC, FCC Registration No. 0014980726, Call Sign WQGA763, Radio Service AW – AWS, 1710-1755/2110-2155 MHz bands, expiration date 11-29-2021;

Tab 8: Copy of Memorandum of Lease between Chimney Hill Farm, LLC, and New Cingular Wireless PCS, LLC, dated July 28, 2010 and recorded in Book 47011, Page 127 on January 25, 2011;

Tab 9: Abutters List, dated 3/19/2013, and expanded Abutters List;

Tab 10 (140' Tower): Zoning Plans (not for construction) prepared by Dewberry Engineers, Inc. of 280 Summer Street, Boston, MA, 02210, entitled, "PETERSHAM-CHIMNEY HILL FARM, SITE NO.: MA1346, 41 HALL ROAD, PETERSHAM, MA 01366", dated March 22, 2013 and stamped by Patrick P. Barry, Civil No. 49188 (Sheets No. T-1, Z-1, Z-1A, Z-2, Z-2A, Z-3 through and including Z-10)(13 Sheets);

**Tab 10 REVISED (90' Tower):** Zoning Plans (not for construction) prepared by Dewberry Engineers, Inc. of 280 Summer Street, Boston, MA, 02210, entitled, "PETERSHAM-CHIMNEY HILL FARM, SITE NO.: MA1346, 41 HALL ROAD, PETERSHAM, MA 01366", submitted October 7, 2013, and stamped by Benjamin B. Revette, Civil No. 49220 (Sheets No. T-1, Z-1, Z-1A, Z-2, Z-2A, Z-3 through and including Z-10) (13 Sheets);

Tab 11: Topographic Map of Petersham and Surrounding Towns;

Tab 12: Satellite Photograph with S1346 Search Ring Superimposed;

Tab 13: List of Requested Waivers;

Tab 14: Commonwealth of Massachusetts, Executive Office of Health and Human Services, Department of Public Health, Radiation Control Program, Policy Memorandum entitled, "NEW POLICY REGARDING RADIOFREQUENCY FACILITY INSTALLATION APPROVAL" dated March 15, 2002;

Tab 15: Maximum Permissible Exposure Study, prepared and signed by Charleston N. Sibal of SAI Communications, dated March 6, 2013;

**Tab 15 REVISED:** Maximum Permissible Exposure Study, prepared and signed by Mike Lawton of SAI Communications, dated October 3, 2013;

Tab 16: Equipment Specifications;

Tab 17: Alternate Site Analysis: Affidavit of Site Acquisition Specialist Peter LaMontagne of Centerline Communications LLC, dated May 25, 2013;

Tab 18: [placeholder for Response of Massachusetts Historic Commission; not received]

Tab 19: Massachusetts Department of Transportation Average Daily Traffic for Route 32-Barre Road;

Tab 20: Height Reduction Coverage Loss Demonstration, consisting of 23 plots, maps, traffic data and geographic profiles;

Tab 21: Real Estate Consulting Report prepared by George F. Valentine of Valentine Appraisal Associates of 180 Center Avenue, Middletown, RI 02842, dated April 25, 2013 (as revised and submitted Oct. 7, 2013);

Tab 22: Photo Simulations (a/k/a Viewshed Analysis), prepared by Caron Associates Design, dated Sep. 20, 2013, based upon the advertised Balloon Demonstration conducted Sep. 9, 2013. Analysis includes simulations of a Monopole at heights of 140' and 90' as well as a Monotree at 140' and 90, similar to Tab 5 materials, and also including a photo location from the top of Tumbledown Hill, and a photo of the balloons used for test completed on Sep. 9, 2013;

Tab 23: Slope Sketch for Alternate Location (Presented by Board Consultant David Maxson);

Tab 24: Bond Removal Letter from Dewberry Engineers, Inc., of 280 Summer Street, 10<sup>th</sup> Floor, Boston, MA 02210-1131, dated Sep. 6, 2013;

Tab 25: RF Propagation Maps Overlay on Town Map (proposed coverage at 90' and 140');

Tab 26: RF Propagation Maps with Population Counts;

Tab 27: Mass GIS Parcel Maps (Town Map) with Identification of Parcels Affected from 140' vs. 90' Tower.

FEES: Application was accompanied by application fee, publication fee, abutter notice fee, and applicant paid fees for Board Consultant David Maxson of Isotrope.

**Exhibits Entered into Record During Public Hearing:**

Exhibit 1: On behalf of the Applicant, letter from Benjamin E. Caron of Caron & Associates Design dated Aug. 6, 2013, in support of waiver requests pertaining to balloon demonstration requirements;

Exhibit 2: From Board Consultant, Zoning Application Review AT&T Wireless Facility, 41 Hall Road, Petersham, dated Jan. 18, 2012, and reaffirmed Oct. 1 and 2, 2013, prepared and submitted by David Maxon, WCP, of Isotrope, LLC, 505 Main St., Medfield, MA 02052;

Exhibit 3: Petersham Reconnaissance Report, Upper Quaboag Watershed and North Quabbin Region Landscape Inventory, Massachusetts Heritage Landscape Inventory Program, prepared by Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs Department of Conservation and Recreation with the Central Massachusetts Regional Planning Commission, and North Quabbin Regional Landscape Partnership (Spring 2008);

Exhibit 4: Photograph of Connor's Pond, taken by Maryanne Reynolds (2013);

Exhibit 5: Photograph of Sign at Connor's Pond, taken by Maryanne Reynolds (2013);

Exhibit 6: Copy of Town of Petersham's Forest Land Tax Lien on Hall property, including Parcel 322, recorded in Book 16677, Page 4, Worcester Registry of Deeds;

Exhibit 7: Statement of Tree Heights, Benjamin Caron, received Oct. 7, 2013;

Exhibit 8: Correspondence to Board from Charles Crowley, 17 Common St., Petersham, MA 01366, dated Oct. 2, 2013;

Exhibit 9: Memorandum from Board Consultant David Maxson of Isotrope dated Oct. 2, 2013;

Exhibit 10: Copy of Correspondence to Centerline Communications from Town of Petersham Administrative Coordinator Dale S. Bull, dated Jan. 7, 2010;

Exhibit 11: Copy of Correspondence to Centerline Communications LLC from Petersham Zoning Board of Appeals Chairman Robert Paquet, dated May 31, 2011;

Exhibit 12: RF Plot showing coverage if tower sited on Town Parcels 10 and 32 (both at 90'), prepared by Applicant;

Exhibit 13: Copy of Correspondence to Massachusetts Historical Commission from EBI Consulting Architectural Historian Kathryn Emmitt, 21 B St., Burlington, MA 01803, dated Nov. 16, 2010;

Exhibit 14: Copy of Correspondence to Architectural Historian Kathryn Emmitt of EBI Consulting from Petersham Historic District Commission Chair Nancy Allen, dated Dec. 14, 2010, with attachments;

Exhibit 15: Federal Communications Commission, Public Notice (Government Shutdown), released Oct. 1, 2013;

Exhibit 16: Copy of Correspondence to Massachusetts Historical Commission from EBI Consulting Architectural Historian Meghan Bezio, dated April 23, 2013, without attachments;

Exhibit 17: Copy of Correspondence to Petersham Historical Society from EBI Consulting (M. Bezio), dated April 23, 2013, without attachment;

Exhibit 18: Proof of shipping from EBI Consulting to Mass. Historical Commission, ship date Apr. 24, 2013;

Exhibit 19: Proof of shipping from EBI Consulting to Petersham Historic District Commission, ship date Apr. 24, 2013;

Exhibit 20: Licenses packet – Reference copies of licenses issued by Federal Communications Commission:

- Radio Station Authorization, Call Sign WQJU427, Radio Service WY – 700 MHz Lower Band (Blocks A, B, E), expiration date 06-13-2019;
- Radio Station Authorization, Call Sign WPWU950, Radio Service WZ-700 MHz Lower Bank (Blocks C, D), expiration date 06-13-2019;
- Radio Station Authorization, Call Sign WQGA763, Radio Service AW-AWS, 171-1755/2110-2155 MHz;
- Cellular License, Call Sign KNKA252, Radio Service CL – Cellular, expiration date 10/01/2016;
- Cellular License, Call Sign KNKA359, Radio Service CL – Cellular, expiration date 10/01/2015; and
- PCS Broadband License, Call Sign LNL216, Radio Service CW – PCS Broadband, expiration date 06/23/2015.

Exhibit 21: View of the Gross Family property abutting the Hall property showing relationship of proposed tower location to property line, submitted by Ethel Gross for Fred and Ethel Gross;

Exhibit 22: Correspondence to Board from Ethel and Fred Gross, 257 Candlelight Dr., Glastonbury, CT 06033, dated Oct. 7, 2013, attaching information about fires at cell phone towers;

Exhibit 23: Correspondence to Board from Katja Esser, 19 Oliver St., Petersham, MA 01366, dated Oct. 2, 2013;

Exhibit 24: Correspondence to Board from Nancy Allen, 17 Common St., Petersham, MA 01366, dated Oct. 7, 2013, attaching copy of Mass. General Laws Chapter 61A, Section 14;

Exhibit 25: Correspondence to Board from Ethel Gross, dated Oct. 12, 2013, enclosing copy of her letter to Town of Petersham Fire Chief Dana Robinson, dated Oct. 12, 2013;

Exhibit 26: Correspondence to Board from Ethel Gross, in envelop postmarked Oct. 21, 2013, enclosing news clipping, Wall Street Journal, Mon., Oct. 21, 2013, page B7, “Crown Castle To Pay AT&T \$4.85 Billion For Towers”;

Exhibit 27: Correspondence to Board from Town of Petersham Board of Health Chair Robert Pasic, dated Nov. 4, 2013;

Exhibit 28: FCC NEPA Summary Report prepared by EBI Consulting, undated and submitted Nov. 6, 2013;

Exhibit 29: Correspondence to Board from Dr. Alan Bachrach, Debra Bachrach, Fred Gross, Ethel Gross, Charles Crowley and Nancy Allen, dated Nov. 6, 2013, attaching copy of Mass. General Laws Chapter 61, Section 8; and

Exhibit 30: Copy of e-mail messages from Board to town officials dated Sep. 2, 2013, and July 15, 2013.

### **Testimony and Oral Representations:**

The Board heard testimony and received other input for consideration offered by the Applicant and members of the public. The proceeding was transcribed and the record includes the transcript of hearing on July 16, 2013 (184 pages), Aug. 8, 2013 (82 pages), Oct. 1, 2013 (209 pages), Oct. 7, 2013 (175 pages), Nov. 6, 2013 (77 pages), and Nov. 21, 2013 (128 pages.) No transcript was made of the hearing on Nov. 20, 2013, because the only business conducted at the hearing was a vote to continue the meeting to Nov. 21, due to a schedule conflict on the Town's calendar. Hearings were transcribed by Melinda M. Piccirilli, a certified shorthand reporter and registered professional reporter. Her fees were paid by the Applicant.

## **DISCUSSION**

### **Waiver, Balloon Test:**

The Board approves the Applicant's request for a waiver from the terms of Article XVI, Section 5 (D) (4) (A) (B) and (C) of the By-Laws. The Board states as its reasons:

Article XVI, Section 5 (D) (4) (A) (B) and (C) states:

4. ***ON SITE DEMONSTRATION: The Town's populace shall be provided meaningful opportunity to assess impact of the proposed tower as follows:***
  - A. *The Applicant shall conduct an initial (3) three-day balloon test, at times and dates specified by the Zoning Board of Appeals. The balloon shall (i) have a diameter of at least ten (10) feet, (ii) be brightly colored orange and (iii) be guy-wired from the North, East, South, and West so as to maintain a persistent vertical (the Applicant also may employ the use of a crane in lieu of guy wiring.) The balloon shall be flown at the height of the proposed tower, measured from the ground to the base of the balloon. The Applicant shall cause notice to be published in a local newspaper designated by the Board at least one week in advance of the days selected.*
  - B. *The Applicant shall then conduct a (1) one-day balloon test at a date and time specified by the Zoning Board of Appeals. At that time, the Applicant shall photograph the balloon from eight (8) selected Town locations. The Applicant shall*



*then superimpose a tower directly beneath the photographed balloon and avail the result to the Town populace. The balloon test shall conform to the size, color, guy wiring, height and notice requirements stated herein at Subsection 4A.*

- C. The Applicant shall then conduct a final, (3) three-day balloon test, at times and dates specified by the Zoning Board of Appeals. The balloon test shall conform to the size, color, guy wiring, height, and notice requirements stated herein at Subsection 4A.*
- D. Any unapproved deviations from the above (see Subsections 4A, 4B, and 4C herein) will not be considered compliant and will not be counted towards fulfillment of this by-law.*

The Board may waive strict compliance with this section “only if it finds such waiver absolutely necessary and that failure to grant the same will . . . prohibit or have the effect of prohibiting the provision of personal wireless services in the Town of Petersham.” Art. XVI, Section 5(D)(11)(a). The Board grants requests for waivers “only upon unanimous vote . . . [and] shall in writing: (i) state the reason(s) for the waiver and (ii) state the grounds therefore.” Id. at (d).

The Applicant requested waiver from the requirement for guy wires and crane, and the diameter and color of the balloon, and requested a reduction in the number of days required for the balloon demonstration. The Board finds that, due to the existing tree growth on the Site, as well as the terrain, the use of guy wires, or a crane, is not possible at this location.

The Board also finds that, due to a current shortage of helium supply, it is not possible to obtain a quantity sufficient to fill a 10’ diameter balloon at reasonable cost. Smaller balloons will make the cost reasonable, and more importantly, the smaller balloons are less likely to break during the test. Avoiding breakage is absolutely necessary to maximize the usefulness of the balloon demonstration to Town’s residents. Based on the experience of Ben Caron as well as the Board’s experience in a prior balloon test, the Board finds that red is more visible than orange and produces a better result when producing a view shed analysis. In light of tree cover, local weather patterns, and reasonable cost considerations, the Board also approves the Applicant’s request that the number of days of balloon demonstration be reduced from seven to three with conditions. For the aforementioned reasons, the waivers are granted, subject to the condition that the Balloon Demonstration be conducted in accordance with the procedures described by Mr. Ben Caron of Caron Associates Design, the consultant retained by the Applicant and a person familiar to the Board.

Pursuant to the Board’s decision, the first day of the balloon demonstration was to be on a weekday and the day selected was Monday, Sep. 9, 2013. If inclement weather forced a cancellation of the scheduled demonstration, the demonstration was to be conducted on Sep. 10, with additional rain dates of Sep. 11, 12, and 13, if necessary. The weekend balloon demonstration was to take place on Saturday, Sep. 14, and Sunday, Sep. 15, 2013. If inclement weather forced a cancellation of either or both of the weekend balloon demonstrations, then an additional weekend day demonstration would be held the following weekend (Saturday, Sep. 21 and, if necessary, Sunday, Sep. 22). Mr. Caron provided notice of whether weather conditions were favorable for flying the balloons through an updated website that was available to the public.

**Waiver, Slope Requirement:**

The Board approves the Applicant's request for a waiver from the terms of Article XVI, Section 5(D) (6) (e) of the By-Laws. The Board states as its reasons:

The By-law states in pertinent part:

*In considering an application for a special permit for a Telecommunications and Cellular Tower, the Zoning Board of Appeals shall consider the following factors: . . . (e) Setback from . . . areas with a slope in excess of five (5%) percent shall be at least one hundred (100') feet.*

For purposes of this decision, the Board accepts the Applicant's position that it is not sufficient for the Board to merely consider the slope; some relief from the slope factor must be granted. The Applicant has requested relief in the form of either a variance or a waiver, having no preference between the two. The Board envisioned granting a variance at its deliberations on November 6, but upon reconsideration and upon unanimous vote taken on November 21, the Board grants a waiver. The Board prefers to grant a waiver in order to meet the applicant's need, without more. If the Board were to grant a variance, the variance might be construed as running with the land independent of applicant's proposed use, contrary to the Board's intent.

The Board may waive strict compliance to sections of the By-laws "only if it finds such waiver absolutely necessary and that failure to grant the same will . . . prohibit or have the effect of prohibiting the provision of personal wireless services in the Town of Petersham." Art. XVI, Section 5(D)(11)(a). The Board grants requests for waivers "only upon unanimous vote . . . [and] shall in writing: (i) state the reason(s) for the waiver and (ii) state the grounds therefore." Id. at (d).

The Board finds that the Facility's site does not have a 100 foot setback from areas with slope in excess of five percent. The evidence on the slope requirement was examined primarily at public hearing on August 8, October 7, November 6, and November 21. Application Tabs 10, 20 and Tab 23 pertain to slope. The Board further finds as follows: the site's slope varies from at least five percent up to ranges of about 20 percent. The Applicant demonstrated that this Site was selected after a careful screening process and there are no viable alternative sites from which the Applicant can provide the network coverage it wants to provide to residents and other members of the public. The Applicant attempted to secure access to multiple, alternative municipal and private sites in town and the proposed site was the best option that it was able to secure. Presently, there are no cellular towers in Town.

Due to the varying elevation in Petersham, the way cell towers work, and the By-Law's general guidelines for the siting of a cellular tower, including the Town's intent "to minimize the number of towers throughout the community," it is necessary that a cell tower be located where there is adequate elevation relative to the surrounding area. The Chimney Hill area is a steep part of Town and the site gives the Applicant about as much altitude as it can from the proposed facility without encroaching on the property line setbacks. A representative of the Board (Mr. MacEwen) made a site visit and found the proposed site acceptable from a slope perspective.

The site complies with the requirements in subsection d ("The setback from property lines shall be a minimum of a distance at least equal to the height of the tower") and subsection f ("Distance from all existing buildings shall be at least five hundred feet"). The Facility will immediately benefit those living and working in, and traveling through the coverage area by providing enhanced wireless telecommunication services. In the future, the Facility may provide such services to additional residents if and when technology improves (the applicant has indicated its technology is advancing) or if and when another facility is constructed in a different part of Town because the network's honey-comb like construction.

The record is devoid of any evidence that a failure to mandate strict compliance with the slope requirement would be derogatory to the purpose of the By-law. At the location, the Facility will not generate any objectionable noise, odor, fumes, glare, smoke, or dust or require additional lighting or signage. No significant increase in traffic or hindrance to pedestrian movements will result from the Facility.

Accordingly, the Board finds that the waiver of the slope requirement is absolutely necessary to maximize compliance with the By-Laws while allowing AT&T to adequately fill its existing gap in network coverage in this area of Petersham.

**Special Permit:**

The Board may allow the use of a communications facility by special permit, after a public hearing and subject to such conditions and safeguards as the Board may impose, subject to certain requirements. By-Laws Art. XVI, Sec. 5(B)(c) and 5(D). "In no event shall any tower exceed ninety (90) feet in height." By-Laws Art. XVI, Sec. 5D(6)(j). The Board grants the Applicant's request for a special permit, finding that the location of the tower is necessary and that the size and height is the minimum necessary for the purpose, subject to conditions.

The Board finds that the Site is located in a Residential-Agricultural zoning district. The Applicant, as a federally licensed wireless communications services provider, will lease a portion of the property from the owner. The Facility will be designed and constructed to accommodate the antennas of multiple wireless services providers and through collocation upon a single structure will help to minimize the overall number of towers in the area. The Facility will not cause any nuisance such as unreasonable noise, vibration, smoke, odor or dust. The Facility will improve communication coverage to residents, commercial establishments and travelers through the area and improves call connections in this area of the Town of Petersham. The Facility will improve emergency communications for police and fire personnel by reducing the number and frequency of dropped and incomplete calls due to weak signals and adding an additional layer of communication to traditional land lines.

The Applicant's Zoning Plans (Tab 10 REVISED with related testimony of Applicant's witnesses) satisfy the site plan requirements of Section 5 (D) and are of sufficient detail for the Board to make an informed decision. The Applicant also has submitted reports from Radio Frequency Engineers and other professionals which sufficiently describe the tower and the technical, economic and other reasons for the tower design and illustrating the need for a tower at the proposed location. These reports, coupled with the oral testimony offered by the Applicant

at the public hearings, are of sufficient clarity for the Board to determine that the Applicant has demonstrated a need for the Facility.

The Applicant has submitted detailed evidence of its investigation of alternative sites which are of sufficient clarity for the Board to determine that there are no existing tall structures from which the Applicant may provide the coverage, nor any less obtrusive raw land candidates upon which a tower may be constructed.

The Applicant has represented that it and the Facility will comply with all applicable federal and state laws, regulations, standards and guidelines.

The Applicant has demonstrated, and the Board finds, that a Facility of 90' AGL at this location will provide adequate coverage to fill a gap in the Applicant's wireless communications services network in this area. The Applicant has demonstrated, and the Board finds, that AT&T will construct the Monopole for multiple wireless providers to minimize the number of towers in Town.

The Applicant has represented that it is licensed by the FCC to provide wireless services to this area and the Board relies upon that representation. The Applicant has represented that there is not a need for navigational lighting of the Monopole and the Board has relied upon that representation.

The Board finds that the Applicant has successfully concluded the On Site Balloon Demonstration. The Applicant has demonstrated that the Monopole shall be set back from property lines a distance greater than the height of the Monopole and the Board relies upon that representation. The Applicant has demonstrated, and the Board finds, that the Monopole shall be set back from the nearest existing building a distance of over 500'. The Applicant has demonstrated, and the Board finds, that the Applicant will enclose the Facility with an 8' high chain link fence and that no barbed or razor wire will be installed at the Facility.

The Applicant has represented to the Board that the proposed grading and layout of the 12' wide gravel access drive from Hall Road to the Site will be sufficient to provide safe and adequate access for emergency vehicles and will have minimal impact upon the natural landscape. The Applicant has demonstrated, and the Board finds, that the Monopole and access road will be constructed in a manner which minimizes potential erosion.

The Applicant has demonstrated, and the Board finds, that it will comply with the sign requirement of the By-Laws, and the only sign on Site shall be a small sign providing a 24 hour phone number where the owner of the Facility may be reached.

The Applicant has demonstrated, and the Board finds, that the Applicant's proposed equipment shelter will comply with the dimensional restrictions placed on accessory buildings by the provisions of Section 5 (D) of Art. XVI of the By-Laws.

The Applicant has demonstrated, and the Board finds, that adverse visual impacts of the Facility on the environment and the people of the Town of Petersham will be minimal with the proposed Monopole height of 90'.

The Applicant has demonstrated, and the Board finds, that there will be one parking space to be used in connection with the Facility.

### **DECISION**

Based on the credible record evidence and in good faith reliance on the representations made by or on behalf of the Applicant, the Board approves a Special Permit for the Facility with the following conditions:

#### **Conditions**

1. The tower shall be constructed and maintained, and the site developed, in accordance with the application materials. If the Applicant believes any change is necessary, it shall obtain Board approval before implementing the change.
2. Work to complete the installation shall be completed within two years of the date of this decision. Failure to complete the installation by that date shall result in the permit automatically becoming null and void.
3. The Facility shall be maintained in good condition.
4. This Decision shall be recorded at the registry of Deeds of Worcester County. Prior to any site work, the applicant shall provide proof of recording of this Decision to the Building Inspector.
5. The Applicant shall provide the Board with a certified copy of the discharge of the Town's Forest Land Tax Lien with respect to the Facility's site and competent written evidence confirming the Applicant's ability to access the site from Hall Road without running afoul of any Town lien. See Exhibits 6 and 29.
6. A five hundred foot wood lot buffer shall be maintained around the Facility's site (or to the boundary line if 500 feet is not available) and the wood lot will be logged using selected logging techniques so that there will not be clear cutting but that with careful husbandry of the existing wooded area trees could be selectively taken out from time to time without affecting the wooded nature of the lot. See Tab 10 Revised page Z-2; testimony of George Valentine on Oct. 1 and Tab 21; testimony of David Maxson on Oct. 1; testimony of Ethel Gross, Bob Clark, Debra Bachrach, Katja Esser, Chris Mandel, Charles Crowley, and Nancy Allen; Exhibits 3, 7, 8, 23, 24 and 29.
7. The Applicant shall provide the Board with a written representation signed and notarized by the property owner that the property owner agrees to the above tree cutting condition prior to its application for Building/Electrical permits. Failure to comply shall result in the permit automatically becoming null and void.
8. The Applicant shall consult with the appropriate utility(s) and thereafter specify in writing what, if any, additional utilities on Quaker Drive or Hall Road or other Town designated scenic road are required to service the cell tower into the foreseeable future, including

consideration of potential collocation. If more than one additional above-ground pole is required, the Applicant shall come back to the Board for approval before any building permit issues. See Oct. 1 Transcript at pages 174-175; testimony of Nancy Allen on Oct. 1; and Exhibits 3, 23, and 29.

9. The Monopole structure shall be built to be capable of being extended.
10. The Monopole will be constructed to accommodate a total of three wireless providers. Any collocation remains subject to Board approval. See Oct. 1 Transcript at pages 112-116.
11. Customary Fire Department, Police Department (local and state), and Highway Department equipment shall be allowed in the Facility's shelter, free of charge, to promote and improve public safety.
12. The Applicant shall conduct post-construction, periodic (not less than annual intervals), routine, on-site monitoring of the environmental effects of radio frequency emissions from the tower and submit to the Town, through the Board, an affidavit by a qualified person reporting the results every five years or, if the measurements of emissions approach safety limits, immediately after the monitoring and accompanied by an action plan to address the concerns. See Tabs 2 and 15; testimony of David Maxson on Oct. 1 and in-part Ex. 9; and see also testimony of Katja Esser on Oct. 1 and Ex. 23.
13. The tower shall be constructed and maintained as a stealth tree facility, the height being consistent with the photographic renditions submitted for "90'." See Tabs 5 and 22 (90' Monotree) and Ex. 2.
14. Due to public safety concerns raised during the proceeding, the Applicant shall file a copy of the as-built plans with the Board.
15. Simultaneously with its application for Building/Electrical permits, the Applicant will submit tower and foundation design drawings, prepared and stamped by a Structural Engineer, licensed in the Commonwealth of Massachusetts, to the Building Inspector.
16. Simultaneously with its application for Building/Electrical permits, the Applicant will submit a certificate of insurance to the Building Inspector and the Town Clerk to demonstrate that the Applicant maintains insurance of the Facility in an amount to be determined and required by the Town.
17. Simultaneously with its application for Building/Electrical permits, the Applicant will submit to the Building Inspector a Construction Control Affidavit, stamped by the engineer, licensed in the Commonwealth of Massachusetts, who will supervise the construction of the Facility.
18. Simultaneously with its application for Building/Electrical permits, the Applicant will submit a Removal Bond in the amount of no less than \$ 80,000. The Applicant must also submit a new removal bond every five years thereafter in an amount of no less than the prior

amount plus Consumer Price Index increases for the five years, subject to additional increase by the Town in the event necessary to reflect current conditions. See generally Tab 24.

19. The Facility will operate, in compliance with all applicable lawful requirements imposed by local, state, and/or federal authorities.

In witness whereof, the undersigned do set their hands and seals to this Special Permit and Waiver Approval for the construction, operation and maintenance of AT&T's Wireless Communication Facility at 41 Hall Road, Petersham.

**ZONING BOARD OF APPEALS**



Maryanne Reynolds, Chair



Brian MacEwen, Clerk



Don Eaton, Member

Date: March 10, 2013

APPEAL: Any appeal of this decision shall be made pursuant to M.G.L. Chapter 40A, Section 17, and shall be filed with the Town Clerk and the Superior Court within 20 days after the filing of this decision with the Town Clerk.

Filing date with the Town Clerk: March 10, 2014

Appeal date: March 30, 2014 - end of appeal period

No appeal received:

