

**BZA APPLICATION FORM**

**GENERAL INFORMATION**

2017 APR - 4 AM 11:42  
CITY CLERK  
CAMBRIDGE

The undersigned hereby petitions the Board of Zoning Appeal for the following:

Special Permit:   x   Variance: \_\_\_\_\_ Appeal: \_\_\_\_\_

and relief pursuant to Section 6409 of the Middle Class Tax Relief Act

PETITIONER:   T-Mobile Northeast LLC  

PETITIONER'S ADDRESS:   Prince Lobel Tye, LLP, Attn. Ricardo M. Sousa, Esq., One International Place, Suite 3700, Boston, MA  

LOCATION OF PROPERTY:   14 Arrow Street  

TYPE OF OCCUPANCY:   Telecommunications   ZONING DISTRICT:   Office-3 (O-3) and Harvard Square Overlay District  

**REASON FOR PETITION:**

\_\_\_\_\_ Additions \_\_\_\_\_ New Structure  
\_\_\_\_\_ Change in Use/Occupancy \_\_\_\_\_ Parking  
\_\_\_\_\_ Conversion to Addi'l Dwelling Unit's \_\_\_\_\_ Sign  
\_\_\_\_\_ Dormer \_\_\_\_\_ Subdivision  
  X   Other:   Section 6409(a) of the Spectrum Act relief for Special Permit for the collocation of a Wireless Facility  

**DESCRIPTION OF PETITIONER'S PROPOSAL:**

The Applicant proposes to modify its existing Wireless Telecommunications Facility by replacing three (3) new panel antennas on the existing smoke stack, together with supporting equipment. The Applicants proposal complies with Section 6409 of the Spectrum Act as the collocation of antennas is not a substantial change to the existing base station. Moreover, the Applicants proposal complies with Section 4.32 and 10.4 of the Cambridge Zoning Code.

**SECTIONS OF ZONING ORDINANCE CITED:**

Article   4.00   Section   4.32 (g)(1) Utilities - Telephone Exchange  

Article   10.00   Section   10.4 - Special Permit  

Article   6409   Section   Middle Class Tax Relief Act  

Applicants for a **Variance** must complete Pages 1-5  
Applicants for a **Special Permit** must complete Pages 1-4 and 6  
Applicants for an **Appeal** to the BZA of a Zoning determination by the Inspectional Services Department must attach a statement concerning the reasons for the appeal

**Original Signature(s):** \_\_\_\_\_  
*(Petitioner(s)/Owner)*  
Ricardo M. Sousa, Esq.  
*(Print Name)*  
**Address:**   One International Place, Suite 3700    
  Boston, MA 02110    
**Tel. No.:**   617-456-8123    
**E-Mail Address:**   rsousa@princelobel.com  

Date:   March 30, 2017

**BZA APPLICATION FORM - OWNERSHIP INFORMATION**

To be completed by OWNER, signed before a notary and returned to The Secretary of the Board of Zoning Appeals.

I/We BBC Trust c/o Dowse Inc. (OWNER)

Address: 14 Arrow Street, Cambridge, MA 02138

State that I/We own the property located at 14 Arrow Street, Cambridge, MA, which is the subject of this zoning application.

The record title of this property is in the name of Granton H. Dowse, Jr., Irene A.M. Dowse, and Leonard H. Dowse, Trustees of BBC Trust

\*Pursuant to a deed of duly recorded in the date 12/10/1979, Middlesex South County Registry of Deeds at Book 13858, Page 207; or Middlesex Registry District of Land Court, Certificate No. \_\_\_\_\_ Book \_\_\_\_\_ Page \_\_\_\_\_.

*Charles D. Reggio*

SIGNATURE BY LAND OWNER OR AUTHORIZED TRUSTEE, OFFICER OR AGENT\*

\*Written evidence of Agent's standing to represent petitioner may be requested.

Commonwealth of Massachusetts, County of Middlesex

The above-name Charles Reggio personally appeared before me, this 11th of July, 2016, and made oath that the above statement is true.

*Mary C. Greene* Notary

My commission expires 2-5-21 (Notary Seal).



MARY C. GREENE Notary Public Commonwealth of Massachusetts My Commission Expires February 5, 2021

- If ownership is not shown in recorded deed, e.g. if by court order, recent deed, or inheritance, please include documentation.

STATE OF MASSACHUSETTS

IN SENATE, January 11, 1921.

REPORT OF THE COMMISSIONERS OF THE LAND OFFICE

IN RESPONSE TO A RESOLUTION PASSED BY THE SENATE

AT ITS SESSION ON JANUARY 11, 1921.

ALBANY: PRINTED BY THE STATE PRINTING OFFICE, 1921.

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MARY C. GREENE  
Notary Public  
Commission Expires  
February 3, 1921



**BZA APPLICATION FORM**

**DIMENSIONAL INFORMATION**

APPLICANT: T-Mobile Northeast PRESENT USE/OCCUPANCY: Wireless Telecommunications

LOCATION: 14 Arrow Street ZONE: 0-3 and Harvard Square Overlay District

PHONE: 617-456-8123 REQUESTED USE/OCCUPANCY: Wireless Telecommunications

	<u>EXISTING CONDITIONS</u>	<u>REQUESTED CONDITIONS</u>	<u>ORDINANCE REQUIREMENTS<sup>1</sup></u>
<u>TOTAL GROSS FLOOR AREA:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
<u>LOT AREA:</u>	<u>N/A</u>		<u>N/A</u> (min.)
<u>RATIO OF GROSS FLOOR AREA TO LOT AREA:<sup>2</sup></u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
<u>LOT AREA FOR EACH DWELLING UNIT:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
<u>SIZE OF LOT:</u>	<u>N/A</u>		<u>N/A</u> (min.)
WIDTH			
DEPTH			
<u>Setbacks in Feet:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
FRONT			
REAR	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
LEFT SIDE	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
RIGHT SIDE	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
<u>SIZE OF BLDG.:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
HEIGHT			
LENGTH			
WIDTH			
<u>RATIO OF USABLE OPEN SPACE TO LOT AREA:<sup>3)</sup></u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
<u>NO. OF DWELLING UNITS:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
<u>NO. OF PARKING SPACES:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min./max)
<u>NO. OF LOADING AREAS:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
<u>DISTANCE TO NEAREST BLDG. ON SAME LOT:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)

Describe where applicable, other occupancies on same lot, the size of adjacent buildings on same lot, and type of construction proposed, e.g.; wood frame, concrete, brick, steel, etc.

The proposed installation involves a modification of an existing Wireless Telecommunications Facility,

more commonly referred to as a "collocation".

1. SEE CAMBRIDGE ZONING ORDINANCE ARTICLE 5.000, SECTION 5.30 (DISTRICT OF DIMENSIONAL REGULATIONS).
2. TOTAL GROSS FLOOR AREA (INCLUDING BASEMENT 7'-0" IN HEIGHT AND ATTIC AREAS GREATER THAN 5') DIVIDED BY LOT AREA.
3. OPEN SPACE SHALL NOT INCLUDE PARKING AREAS, WALKWAYS OR DRIVEWAYS AND SHALL HAVE A MINIMUM DIMENSION OF 15'.



March 30, 2017

City of Cambridge  
Board of Zoning Appeals  
831 Massachusetts Avenue  
Cambridge, MA

Re: Application for Special Permit  
Property Address: 14 Arrow Street  
Assessor's Map 133, Lot 23 (the "Property")  
Applicant: T-Mobile Northeast LLC (the "Applicant")

Dear Honorable Members of the Board of Zoning Appeals:

This firm represents the Applicant in connection with an application for a special permit from the City of Cambridge Board of Zoning Appeals (the "Board") to modify its existing telecommunications facility (the "Existing Facility") on the Property. The Property is located in the O-3 (Office 3) zoning district and the Harvard Square Overlay District. Pursuant to Article 4, Section 4.32(g), footnote 49 of the City of Cambridge Zoning Ordinance (the "Ordinance"), the use of the Property for a wireless telecommunications facility is permitted by special permit. The Applicant's proposal satisfies the requirements for the grant of a special permit pursuant to Article 10-40 of the Ordinance.

The Applicant seeks to modify its existing wireless communications facility by replacing three (3) existing panel antennas with three (3) new, but substantially similar in size and shape, panel antennas, to continue to be located on the façade of the existing smoke stack on the rooftop of the building (the "Smoke Stack"), together with supporting equipment (the "Proposed Facility"). The Applicants facilities are shown on the plans attached hereto, and incorporated herein by reference (the "Plans").

## **I. Background**

The Applicant is licensed by the Federal Communications Commission (the "FCC") to construct and operate a wireless telecommunications network in various markets throughout the country, including the Commonwealth of Massachusetts and in particular in the City of Cambridge. A copy of the Applicant's FCC license is attached hereto. The Applicant is in the process of designing and constructing a telecommunications system to serve all of the Commonwealth of Massachusetts. One of the key design objectives of its systems is to provide seamless coverage. Such a system requires a grid of radio transmitting and receiving links located approximately .5 to 2 miles apart, depending on the location of existing and proposed installations in the surrounding area, the existing use of the network and the existing topography. The radio transmitting and receiving facilities operate on a line-of-sight basis, requiring a clear path from the facility to the user on the ground. This dynamic requires the antennas to be located in a location where the signal is

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One International Place  
Suite 3700  
Boston, MA 02110  
TEL: 617 456 8000  
FAX: 617 456 8100

not obstructed or degraded by other buildings or by topographical features such as hills.

## II. The Facility

The Applicant proposes to modify its existing wireless telecommunications facility at the Property with a like-for-like swap out of three (3) existing panel antennas with three (3) new panel antennas mounted in the same location, together with supporting equipment. The proposed panel antennas will be façade mounted to the Smoke Stack and painted to match. Coaxial cabling will run from the BTS equipment to the antennas within a cable tray which will be painted to match the existing color of the building and Smoke Stack.

After installation, the Proposed Facility will be unmanned and will only require twice a month maintenance visits per carrier. The only utilities required to operate this Proposed Facility are standard 120-volt electrical power as well as telephone service. These are presently in place at the Property. The traffic generated by the Proposed Facility will be approximately two vehicle trips per month by maintenance personnel who will inspect the Proposed Facility to ensure it remains in good working order. The Proposed Facility will comply with all applicable local, state and federal safety codes.

## III. Legal Arguments

### A. The Applicant complies with the Wireless Communications provisions set for the in Section 4.32(g), footnote 49 of the Ordinance

Pursuant to Section 4.32(g) of the Ordinance the Applicant's proposed use for a wireless communications facility in the Office 3 zoning district and Harvard Square Overlay district is permitted by special permit. The Applicant's Proposed Facility further complies with the provisions set forth in Section 4.32(g), footnote 49 of the Ordinance:

- 1. The Board of Zoning Appeal shall consider the scope of or limitations imposed by any license secured from any state or federal agency having jurisdiction over such matters.**

Enclosed herewith is the Applicant's FCC license. The Applicant meets all requirements imposed by government authorities having jurisdiction over the Proposed Facility, including by the FCC to provide wireless communications in this market area.

The intent of the U.S. Congress, when it enacted the Telecommunications Act of 1996 ("TCA") was to institute a framework to promote competition and innovation within the telecommunications industry. Under its license from the FCC, T-Mobile is obligated to provide a reliable "product" (i.e. wireless communications service) to the population of the City of Cambridge. Likewise, consumer expectations for increasingly robust and reliable service requires competing service providers (including T-Mobile) to identify and remedy existing gaps in reliable network coverage, or gaps that result from increasing subscriber voice and data traffic beyond the limits of existing network infrastructure. A carrier's failure to remedy network gaps in a timely fashion can result in a significant loss of subscribers to competing telecommunications carriers. As demonstrated

in the Affidavit of Radio Frequency Expert provided by the Applicant and attached hereto, the Proposed Facility and corresponding relief requested are necessary to remedy a gap in reliable service coverage within T-Mobile's existing network infrastructure.

T-Mobile investigated alternative sites in and around the defined geographic area within which its engineers determined that a facility must be located to fill the gap in service coverage and to function effectively within its network of existing and planned facilities. This is an existing location that we are upgrading with new technology to provide the necessary coverage to the subject area of the City of Cambridge. Therefore, the Proposed Facility in the Office O-3 zoning district is necessary to close the coverage gap that is illustrated on the propagation maps submitted herewith. Consequently, T-Mobile is unable to close a gap in its wireless network without obtaining a Special Permit to modify its existing wireless facility in the O-3 zoning district.

- 2. The Board of Zoning Appeal shall consider the extent to which the visual impact of the various elements of the proposed facility is minimized: (1) through the use of existing mechanical elements on the building's roof or other features of the building as support and background, (2) through the use in materials that in texture and color blend with the materials to which the facilities are attached, or (3) other effective means to reduce the visual impact of the facility off the site.**

The visual impact of the Proposed Facility will be minimized by the use of the existing Smoke Stack on the building and by designing the Proposed Facility to blend with the existing characteristics of the building and the Smoke Stack. As noted on the Plans, all of the proposed antennas and supporting coaxial cabling will be camouflaged and painted to match the existing color and texture of the Smoke Stack. The existing BTS equipment cabinets are installed within the basement of the building and completely out of view.

- 3. Where it is proposed to erect such a facility in any residential zoning district, the extent to which there is a demonstrated public need for the facility at the proposed locations, the existence of alternative, functionally suitable sites in nonresidential locations, the character of the prevailing uses in the area, and the prevalence of other existing mechanical systems and equipment carried on or above the roof of nearby structures. The Board of Zoning Appeal shall grant a special permit to erect such a facility in a residential zoning district only upon a finding that nonresidential uses predominate in the vicinity of the proposed facility's location and that the telecommunications facility is not inconsistent with the character that does prevail in the surrounding neighborhood.**

Not Applicable. The Applicant proposes to install its facility within the Office 3 zoning district.

**B. The Applicant complies with the Special Permit Criteria set forth in Section 10-43 of the Ordinance:**

**1. The requirements of the Ordinance can be met:**

As provided above, the Applicant had met the requirements set forth in Section 4.32(g), footnote 49 of the Ordinance.

**2. Traffic generated or patterns of access or egress would not cause congestion hazard, or substantial change in established neighborhood character for the following reasons:**

The proposed installation will not obstruct existing rights-of-way or pedestrian access and will not change the daily conditions of access, egress, traffic, congestion hazard, or character of the neighborhood. The installation will not require the addition of any new parking or loading spaces that would necessitate the need to change the existing access, egress, traffic congestion hazard, or character of the neighborhood. The proposed installation will not change the current conditions or appearance surrounding the building. There will be no need for water, sewer, or other municipal services.

As mentioned above, once constructed, the facility will be unmanned and only require frequent visits by a technician, typically two times per month for routine diagnostics and/or maintenance, except in cases of emergency. These frequent visits will not result in any material increase in traffic or disruption to patterns of access or egress that will cause congestion hazards or cause a substantial change in the established neighborhood character. The Applicant's maintenance personnel will make use of the existing access roads and parking at the building.

**3. The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would not be adversely affected by the nature of the proposed use for the following reasons:**

As described above, the Proposed Facility will produce a minimal change in the appearance of the Smoke Stack. The Proposed facility will blend with the existing characteristics of the Site and the surrounding neighborhood. The proposed antennas and coaxial cabling will be painted to match the color of the existing building and Smoke Stack. Moreover, the proposed installation will not generate any obtrusive traffic, smoke, dust, heat, glare, discharge of noxious substances, nor will it pollute waterways or groundwater. Conversely, the surrounding properties and general public will benefit from the potential to enjoy improved wireless communication.

**4. Nuisance or hazard would not be created to the detriment of the health, safety, and/or welfare of the occupant of the proposed use or the citizens of the City for the following reasons:**

The operations of the proposed telecommunications facility will not adversely impact the health, safety, and the welfare of the residents of the City of Cambridge. On the contrary, the

proposed use will both benefit the city and promote the safety and welfare of its residents, businesses and drivers by providing reliable state-of-the-art digital wireless voice and data services. Further, the site will improve the reliability of emergency communications with the police and fire departments by eliminating dropped or blocked calls due to inadequate signal strength or insufficient network capacity to handle call volume, particularly important during emergency situations.

The Proposed Facility will comply with all federal, state and local safety requirements including the standards established by the FCC, Federal Aviation Administration (FAA), the American Standards Institute (ANSI), and the Massachusetts Department of Public Health (MDPH).

Accordingly, the Proposed Facility will not adversely impact the health, safety and/or welfare of the neighborhood or the residents of the City of Cambridge.

**5. For other reasons, the proposed installation will not impair the integrity of the district or adjoining district or otherwise derogate from the intent or purpose of this ordinance for the following reasons:**

The Proposed Facility is designed to blend with the existing characteristics of the Site, reducing any visual impacts to the surrounding area. Accordingly, the Proposed Facility's design results in a minimal impact on the underlying and adjacent zoning districts and is consistent with the Ordinance's intention to allow for less intrusive wireless telecommunications facilities in all districts (Other than Open Space), including Office districts. As mentioned above, the proposed installation will not generate any traffic, smoke, dust, heat, glare, discharge or noxious substances, nor will it pollute waterways or groundwater.

**6. The new use of the building construction is consistent with the Urban Design Objective set for tin Section 19.30 of the Ordinance:**

Not Applicable. The Applicant is not proposing to construct a new building or structure.

**IV. Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012**

Although the City of Cambridge has provisions within the Ordinance that regulate the construction of wireless communication facilities, the standard of review for an application request involving the modification of an existing wireless communication facility on an existing wireless tower or base station has been changed by the passage of an important provision of the Middle Class Tax Relief and Job Creation Act of 2012 ("TRA"). The TRA is a Federal Act that was signed into law on February 22, 2012. Section 6409 of the TRA requires a streamlined modification and collocation approval process to ensure timely deployment of wireless services.

In particular, Section 6409 of the TRA mandates that State and local governments

must approve an eligible facilities request<sup>1</sup> for the modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station. The approval cannot be discretionary if the proposed modification does not *substantially* change the physical dimensions of such tower or base station.

Further, the Federal Communications Commission (“FCC”) under the Nationwide Collocation Agreement defines a substantial change as “the mounting of the proposed antenna would involve adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet” or “the mounting of a proposed antenna on the tower that would increase the existing height of the tower by more than 10%...”

Because the Proposed Facility is not increasing the overall height of the Existing Facility it is our understanding that the City of Cambridge, acting through the Board or the Building Department, has the right to authorize the construction of the Proposed Facility with the issuance of a Building Permit, pursuant to this eligible facilities request. Moreover, to the extent that the Bylaws require that the proposed modification request be subjected to a review by the Board, that review is preempted by the TRA. As such, the Applicant requests that the Board determine that the construction of the Proposed Facility may be authorized by the issuance of a Building Permit and to the extent necessary the Applicant reserves its rights to request the same and reserves its rights under the TRA.

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<sup>1</sup> The TRA defines “eligible facilities request” as any request for modification of an existing wireless tower or base station that involves:

- Collocation of new transmission equipment;
- Removal of transmission equipment; or
- Replacement of transmission equipment.

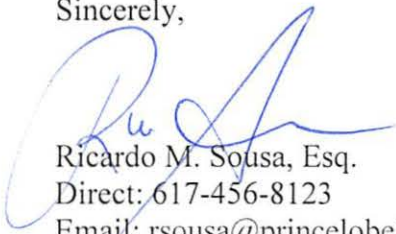
In the *Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (2001)*, the Federal Communications Commission (“FCC”) defines “collocation” as the “mounting or installation of antennas on an existing tower, building or structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.”

V. Summary

The Applicant hereby requests that the Board determine that the City of Cambridge has the right to authorize the construction of the Proposed Facility through the issuance of a Building Permit or, in the alternative, that they have satisfied the requirements for the grant of a Special Permit and to further determine that the Proposed Facility will not have any adverse effect on the neighborhood within which the Property is located in particular, and the City of Cambridge as a whole. The findings are made in view of the particular characteristics of the Property and of the Applicant's proposed siting and equipment, as detailed above. This Property is the most appropriate location for the installation and operation of the wireless communications facility.

For the foregoing reasons the Applicant respectfully requests that the Board determine that the City of Cambridge has the right to authorize the construction of the Proposed Facility through the issuance of a Building Permit or grant the foregoing zoning relief in the form of a Special Permit and such other relief as the Board deems necessary to allow the installation and operation of the Applicant's Proposed Facility.

Sincerely,



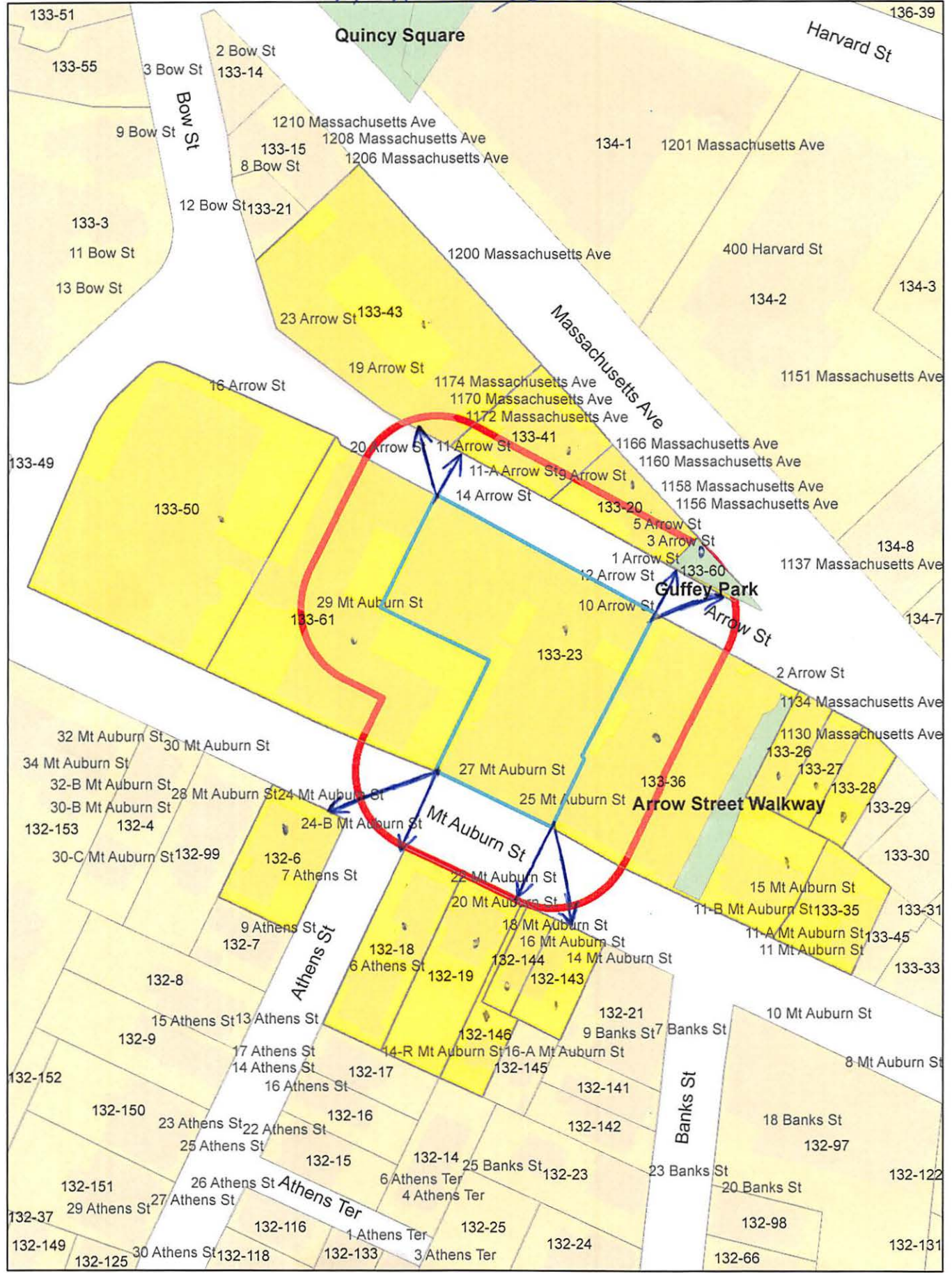
Ricardo M. Sousa, Esq.

Direct: 617-456-8123

Email: [rsousa@princelobel.com](mailto:rsousa@princelobel.com)



*14 Arrow Street*





14 Arrow St.

Petitioner

192

132-6  
POST, ROSALIE N. & THOMAS F. O'LEARY  
7 ATHENS ST  
CAMBRIDGE, MA 02138

132-18  
MURPHY, BRIAN P. & KATHERINE C. MURPHY  
22 MT. AUBURN ST., #1  
CAMBRIDGE, MA 02138

PRINCE LOBEL TYE LLP  
C/O RICARDO M. SOUSA, ESQ.  
ONE INTERNATIONAL PLACE, SUITE 3700  
BOSTON, MA 02110

132-18  
SHEU, SHU-HSIEN  
6 ATHENS ST., UNIT B  
CAMBRIDGE, MA 02138

132-19  
CHEN, YILING & XIAOGANG JIN  
18 MT AUBURN ST  
CAMBRIDGE, MA 02138

132-19  
REDDIEN PETER  
20 MT AUBURN ST  
CAMBRIDGE, MA 02139

132-143  
CARDINGTON, LLC  
C/O PRAGUE & COMPANY P.C.  
15 WALNUT ST., SUITE 150  
WELLESLEY, MA 02481

132-144  
SCHLOERB, DAVID & CHERYL ROBERTSON  
16 MT. AUBURN ST  
CAMBRIDGE, MA 02138

132-146  
FARMER, BRENT H.  
16A MOUNT AUBURN ST  
CAMBRIDGE, MA 02138

133-20  
1154-1166 MASS AVE, LLC  
C/O ORIENTAL FURNITURE  
68 MOULTON ST 3RD FLR  
CAMBRIDGE, MA 02138

133-23  
DOWSE, GRANTON H., JR.,  
IRENE A. M. DOWSE & LEONARD  
H. DOWSE, TRS. OF BBC TR  
14 ARROW ST. SUITE 21  
CAMBRIDGE, MA 02138

133-26  
1134 MASS LLC,  
C/O JINNY NATHANS  
5 CHESTER STREET  
CAMBRIDGE, MA 02140

133-27  
COSTELLO, MICHAEL C. & JANET A. COSTELLO  
20 LOOMIS ST  
CAMBRIDGE, MA 02139

133-28  
ANDRADE, AMERICO  
1130 MASS. AVENUE  
CAMBRIDGE, MA 02138

133-35  
THE PACKARD HUMANITIES INSTITUTE  
300 SECOND STREET, SUITE #201  
LOS ALTOS, CA 94022

133-61-50  
ROMAN CATHOLIC ARCHBISHOP OF BOSTON  
CORPORATION SOLE  
29 MT AUBURN STREET  
CAMBRIDGE, MA 02138

133-41  
AUGMENT INVESTMENTS, LLC  
4 TROWBRIDGE PLACE, UNIT 2D  
CAMBRIDGE, MA 02138

133-41  
TOPGYAL, TSERING  
1174 MASSACHUSETTS AVE., #74C  
CAMBRIDGE, MA 02138

133-41  
LOPEZ, CATHERINE ORTIZ  
1168-1 MASS AVE  
CAMBRIDGE, MA 02138

133-41  
MERRILL, ROBERT D.  
1168 MASS AVE. UNIT#68/2  
CAMBRIDGE, MA 02139

133-41  
YANG, LIN  
1168 MASSACHUSETTS AVE., #68/3  
CAMBRIDGE, MA 02138

133-41  
STEINBERGH, ALEX M. GENERAL PARTNER THE  
1168 MASSACHUSETTS AVENUE LIMITED PART.  
C/O GEORGE & FIDA SARKIS  
1170 MASS AVE., UNIT #2  
CAMBRIDGE, MA 02139

133-41  
GISABELLA, BARBARA  
11 BOWDON ST  
SOMERVILLE, MA 02143

133-41  
LIU, WEI & WEI SUN  
1170 MASSACHUSETTS AVE., #70/7  
CAMBRIDGE, MA 02138

133-41  
WOLFE-SIDBERRY, NANCY  
6413 WATERFORD DR  
BRENTWOOD, TN 37027

133-41  
MUGAMBI, ROSEMARY  
330 BROADWAY  
CAMBRIDGE, MA 02139

133-41  
SCADDEN, DAVID T. & KATHLEEN T. O'CONNELL  
62 LEXINGTON STREET  
WESTON, MA 02493

133-41  
PANGANAMATA, JOYCE RAO  
1172 MASSACHUSETTS AVE., #72/11  
CAMBRIDGE, MA 02138

133-43  
ARROW ASSOCIATES, L.L.C  
C/O HAMILTON REALTY CO.  
39 BRIGHTON AVE  
ALLSTON, MA 02134

132-18  
RICE, ROBERT J. & JESSICA C. RICE  
6 ATHENS ST. UNIT#2  
CAMBRIDGE, MA 02138

14 Arrow St.

212

133-60  
CITY OF CAMBRIDGE  
C/O LOUIS DePASQUALE  
CITY MANAGER

133-60  
CITY OF CAMBRIDGE  
C/O NANCY GLOWA  
CITY SOLICITOR

133-36  
MT. AUBURN CONDOMINIUM LLC,  
453 HARRIS RD.  
BEDFORD HILL, NY 10507

133-36  
PRESIDENT & FELLOWS OF HARVARD COLLEGE  
C/O HARVARD REAL ESTATE SERVICES,  
1350 MASS AVE  
CAMBRIDGE, MA 02139



# CAMBRIDGE HISTORICAL COMMISSION

831 Massachusetts Avenue, 2<sup>nd</sup> Fl., Cambridge, Massachusetts 02139  
Telephone: 617 349 4683 Fax: 617 349 3116 TTY: 617 349 6112  
E-mail: histcomm@cambridgema.gov URL: http://www.cambridgema.gov/Historic

William B. King, *Chair*, Bruce A. Irving, *Vice Chair*, Charles M. Sullivan, *Executive Director*  
William G. Barry, Jr., Robert G. Crocker, Chandra Harrington, Jo M. Solet, *Members*  
Joseph V. Ferrara, Kyle Sheffield, Susannah Barton Tobin, *Alternates*

## CERTIFICATE OF NONAPPLICABILITY

Property: 14 Arrow Street

Applicant: BBC Trust c/o Dowse Inc. o/b/o  
T-Mobile Northeast LLC

Attention: Ricardo Sousa

The Cambridge Historical Commission hereby certifies, pursuant to Chapter 2.78, Article III of the Code of the City of Cambridge and order establishing the Harvard Square Conservation District, that the work described below does not involve any activity requiring issuance of a Certificate of Appropriateness or Hardship:

**Swap out 3 panel antennas on smokestack.**

**BZA 012895-2017**

All improvements shall be carried out as shown on the plans and specifications submitted by the applicant, except as modified above. Approved plans and specifications are incorporated by reference into this certificate.

This certificate is granted upon the condition that the work authorized herein is commenced within six months after the date of issuance. If the work authorized by this certificate is not commenced within six months after the date of issuance or if such work is suspended in significant part for a period of one year after the time the work is commenced, such certificate shall expire and be of no further effect; provided that, for cause, one or more extensions of time for periods not exceeding six months each may be allowed in writing by the Chair.

Case Number: 3782 Date of Certificate: April 13, 2017

Attest: A true and correct copy of decision filed with the office of the City Clerk and the Cambridge Historical Commission

on April 13, 2017.

By Charles M. Sullivan/slb, Executive Director.

.....  
Twenty days have elapsed since the filing of this decision.  
No appeal has been filed \_\_\_\_\_. Appeal has been filed \_\_\_\_\_.  
Date \_\_\_\_\_, City Clerk



# CAMBRIDGE HISTORICAL COMMISSION

831 Massachusetts Avenue, 2<sup>nd</sup> Floor, Cambridge, Massachusetts 02139  
Telephone: 617 349 4683 TTY: 617 349 6112  
E-mail: histcomm@cambridgema.gov URL: http://www.cambridgema.gov/Historic

William B. King, *Chair*, Bruce A. Irving, *Vice Chair*, Charles M. Sullivan, *Executive Director*  
William G. Barry, Jr., Robert G. Crocker, Chandra Harrington, Jo M. Solet, *Members*  
Joseph V. Ferrara, Kyle Sheffield, Susannah Barton Tobin, *Alternates*

## Jurisdiction Advice

To the Owner of Property at 14 Arrow Street

The above-referenced property is subject to the jurisdiction of the Cambridge Historical Commission (CHC) by reason of the status referenced below:

- Old Cambridge Historic District
  - Fort Washington Historic District  
(M.G.L. Ch. 40C, City Code §2.78.050)
  - Avon Hill Neighborhood Conservation District
  - Half Crown – Marsh Neighborhood Conservation District
  - Harvard Square Conservation District *No hearing required to swap out panel antennas.*
  - Mid Cambridge Neighborhood Conservation District
  - Designated Landmark
  - Property is being studied for designation: \_\_\_\_\_  
(City Code, Ch. 2.78., Article III, and various City Council Orders)
  - Preservation Restriction or Easement (as recorded)
  - Structure is fifty years or more old and therefore subject to CHC review of any application for a demolition permit, if one is required by ISD. (City Code, Ch. 2.78, Article II). **See the back of this page for definition of demolition.**
  - No jurisdiction: not a designated historic property and the structure is less than fifty years old.
  - No local jurisdiction, but the property is listed on the National Register of Historic Places; CHC staff is available for consultation, upon request.
- Staff comments: \_\_\_\_\_

The Board of Zoning Appeal advises applicants to complete Historical Commission or Neighborhood Conservation District Commission reviews before appearing before the Board.

**If a line indicating possible jurisdiction is checked, the owner needs to consult with the staff of the Historical Commission to determine whether a hearing will be required.**

CHC staff initials SLB

Date April 13, 2017

Received by Uploaded to Energov

Date April 13, 2017

Relationship to project BZA 12895-2017

cc: Applicant  
Inspectional Services Commissioner

## Demolition Delay Ordinance and Application Information

The Demolition Delay Ordinance (Chapter 2.78, Article II of the Cambridge Municipal Code) was adopted by the City Council in 1979 to afford public review of demolition permit applications for potentially significant buildings. When the Historical Commission determines that a building is significant and should be preserved, demolition will be delayed for up to six months so that solutions can be sought to preserve the building indefinitely. The Ordinance covers all buildings over 50 years old, city-wide. The Historical Commission archives provide dates of construction for all properties in the City.

Demolition is defined in the ordinance as "the act of pulling down, destroying, removing or razing a building or commencing the work of total or substantial destruction with the intent of completing the same." The Inspectional Services Commissioner has provided further guidelines to outline what actions require a demolition permit. **In addition to complete demolition of a building, the following actions may require a demolition permit,**

- **removal of a roof,**
- **removal of one side of a building,**
- **gutting of a building's interior to the point where exterior features (windows, etc.) are impacted, and**
- **removal of more than 25% of a structure.**

Please contact the building inspector or a staff member of the Historical Commission if you have questions about whether a demolition permit is required for a particular project.

Demolition permit applications can be obtained from the Inspectional Services Department. The completed application should be submitted to the Historical Commission, where the staff will review the application. If the Executive Director of the Historical Commission makes an initial determination that the building is significant, a public hearing will be scheduled with Historical Commission. If the staff makes an initial determination that the building is not significant, the application is released for further review by the Building Commissioner.

More information about the demolition permit application procedures is available on the Historical Commission's web site or by calling or dropping by the Historical Commission office.

July 2003

Cambridge Historical Commission  
831 Massachusetts Ave., 2<sup>nd</sup> Fl.  
Cambridge, MA 02139  
Ph: 617/349-4683 or TTY: 617/349-6112  
<http://www.cambridgema.gov/Historic>

---

**APPLICATION FOR SPECIAL PERMIT  
For a  
WIRELESS COMMUNICATION FACILITY**

---

**T-Mobile Northeast LLC  
15 Commerce Way, Suite B  
Norton, MA 02766**

**c/o Ricardo M. Sousa, Esq.  
Prince Lobel Tye LLP  
One International Place, Suite 3700  
Boston, MA 02110**

**Applicant**

---

**Property Location:  
14 Arrow Street  
Cambridge, MA  
Map 133, Lot 23**

---

**Prepared by: Ricardo M. Sousa, Esq.  
Prince Lobel Tye LLP  
One International Place, Suite 3700  
Boston, MA 02110  
Telephone: (617) 456-8135  
Facsimile: (617) 456-8100**

March 30, 2017

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**APPLICATION TO THE BOARD OF ZONING APPEALS  
For a Special Permit  
for a  
WIRELESS COMMUNICATION FACILITY**

**Property located at:**

**14 Arrow Street  
Cambridge, MA 02138**

**Map 133, Lot 23**

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Board of Zoning Appeals Special Permit Application	Tab 1
Zoning Supporting Statement	Tab 2
Plans	Tab 3
Photograph Simulations	Tab 4
FCC License	Tab 5
Previous Decision	Tab 6
Eligible Facilities Request	Tab 7

**1**



**BZA APPLICATION FORM**

**CHECK LIST**

PROPERTY LOCATION: 14 Arrow Street DATE: 3/30/2016

PETITIONER OR REPRESENTATIVE: Ricardo M. Sousa, Esq. for T-Mobile Northeast LLC

ADDRESS & PHONE: One International Place, Suite 3700, Boston, MA 02110

BLOCK: 133 LOT: 23

**PLEASE CHECK THAT YOU HAVE INCLUDED THE FOLLOWING WITH YOUR APPLICATION. APPLICATIONS WILL NOT BE ACCEPTED FOR PROCESSING & SCHEDULING UNLESS ALL REQUIRED DOCUMENTS ARE PROVIDED.**

*PLEASE INCLUDE THIS CHECKLIST WITH YOUR APPLICATION.  
ALL DOCUMENTS ARE TO BE TYPED OR WRITTEN LEGIBLY.*

<u>DOCUMENTS</u>	<u>REQUIRED</u>	<u>ENCLOSED</u>
Application Form	<u>X</u>	<u>X</u>
3 Forms with Original Signatures		
Supporting Statements - Scanned & 1 set to Zoning	<u>X</u>	<u>X</u>
Application Fee (You will receive invoice online)	<u>X</u>	<u>X</u>
Assessor's GIS "Block Map" (Available on line or At Engineering Dept. - 147 Hampshire Street)	<u>X</u>	<u>X</u>
Dimensional Form - Refer to Cambridge Zoning Ordinance - Scanned & 1 set to Zoning (Subject to further review by Zoning Specialist)	<u>X</u>	<u>X</u>
Ownership Certificate, Notarized - Scanned & 1 set to Zoning	<u>X</u>	<u>X</u>
Floor Plans - Scanned & 1 set to Zoning	<u>X</u>	<u>X</u>
Elevations - Scanned & 1 set to Zoning	<u>X</u>	<u>X</u>
Certified Plot Plan - Scanned & 1 set to Zoning (By Registered Land Surveyor)	<u>N/A</u>	<u>N/A</u>
Photographs of Property - Scanned & 1 set to Zoning	<u>X</u>	<u>X</u>
Parking Plan (if relevant to your application) Scanned & 1 set to Zoning	<u>N/A</u>	<u>N/A</u>
<b><u>FOR SUBDIVISION ALSO INCLUDE:</u></b> Scanned & 1 set to Zoning		
Proposed Deeds	<u>N/A</u>	<u>N/A</u>
Evidence of Separate Utilities **	<u>N/A</u>	<u>N/A</u>
Proposed Subdivision Plan	<u>N/A</u>	<u>N/A</u>

Petitioners are advised to refer to Attachment A (Procedures for applying to the Board of Zoning Appeal) & consult zoning staff for review.

**It is advisable for the Petitioner to discuss the petition with the abutters as listed in the Zoning BZA Case file.**

\* For Special Permits under Art. 4.32.G.1 (Communication Towers and Antennas), include a photo simulation.

\*\* Can be submitted after subdivision has been approved.



**BZA APPLICATION FORM - OWNERSHIP INFORMATION**

To be completed by OWNER, signed before a notary and returned to The Secretary of the Board of Zoning Appeals.

I/we BBC Trust c/o Dowse Inc. (OWNER)

Address: 14 Arrow Street, Cambridge, MA 02138

State that I/We own the property located at 14 Arrow Street, Cambridge, MA, which is the subject of this zoning application.

The record title of this property is in the name of Granton H. Dowse, Jr., Irene A.M. Dowse, and Leonard H. Dowse, Trustees of BBC Trust

\*Pursuant to a deed of duly recorded in the date 12/10/1979, Middlesex South County Registry of Deeds at Book 13858, Page 207; or Middlesex Registry District of Land Court, Certificate No. \_\_\_\_\_ Book \_\_\_\_\_ Page \_\_\_\_\_.

Charles D. Reggio  
SIGNATURE BY LAND OWNER OR  
AUTHORIZED TRUSTEE, OFFICER OR AGENT\*

\*Written evidence of Agent's standing to represent petitioner may be requested.

-----  
Commonwealth of Massachusetts, County of Middlesex

The above-name Charles Reggio personally appeared before me, this 11th of July, 2016, and made oath that the above statement is true.

Mary C. Greene Notary

My commission expires 2-5-21 (Notary Seal).



MARY C. GREENE  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
February 5, 2021

- If ownership is not shown in recorded deed, e.g. if by court order, recent deed, or inheritance, please include documentation.

BZA APPLICATION FORM

DIMENSIONAL INFORMATION

APPLICANT: T-Mobile Northeast PRESENT USE/OCCUPANCY: Wireless Telecommunications

LOCATION: 14 Arrow Street ZONE: 0-3 and Harvard Square Overlay District

PHONE: 617-456-8123 REQUESTED USE/OCCUPANCY: Wireless Telecommunications

	<u>EXISTING</u> <u>CONDITIONS</u>	<u>REQUESTED</u> <u>CONDITIONS</u>	<u>ORDINANCE</u> <u>REQUIREMENTS</u> <sup>1</sup>
<u>TOTAL GROSS FLOOR AREA:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
<u>LOT AREA:</u>	<u>N/A</u>		<u>N/A</u> (min.)
<u>RATIO OF GROSS FLOOR AREA</u> <u>TO LOT AREA:</u> <sup>2</sup>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
<u>LOT AREA FOR EACH DWELLING UNIT:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
<u>SIZE OF LOT:</u>			
WIDTH	<u>N/A</u>		<u>N/A</u> (min.)
DEPTH			
<u>Setbacks in</u> <u>Feet:</u>			
FRONT	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
REAR	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
LEFT SIDE	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
RIGHT SIDE	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
<u>SIZE OF BLDG.:</u>			
HEIGHT	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
LENGTH			
WIDTH			
<u>RATIO OF USABLE OPEN SPACE</u> <u>TO LOT AREA:</u> <sup>3</sup>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
<u>NO. OF DWELLING UNITS:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
<u>NO. OF PARKING SPACES:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min./max)
<u>NO. OF LOADING AREAS:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
<u>DISTANCE TO NEAREST BLDG.</u> <u>ON SAME LOT:</u>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)

Describe where applicable, other occupancies on same lot, the size of adjacent buildings on same lot, and type of construction proposed, e.g.; wood frame, concrete, brick, steel, etc.

The proposed installation involves a modification of an existing Wireless Telecommunications Facility,

more commonly referred to as a "collocation".

1. SEE CAMBRIDGE ZONING ORDINANCE ARTICLE 5.000, SECTION 5.30 (DISTRICT OF DIMENSIONAL REGULATIONS).
2. TOTAL GROSS FLOOR AREA (INCLUDING BASEMENT 7'-0" IN HEIGHT AND ATTIC AREAS GREATER THAN 5') DIVIDED BY LOT AREA.
3. OPEN SPACE SHALL NOT INCLUDE PARKING AREAS, WALKWAYS OR DRIVEWAYS AND SHALL HAVE A MINIMUM DIMENSION OF 15'.

BZA APPLICATION FORM

SUPPORTING STATEMENT FOR A VARIANCE

EACH OF THE FOLLOWING REQUIREMENTS FOR A VARIANCE MUST BE ESTABLISHED AND SET FORTH IN COMPLETE DETAIL BY THE APPLICANT IN ACCORDANCE WITH MGL 40A, SECTION 10:

- A) A Literal enforcement of the provisions of this Ordinance would involve a substantial hardship, financial or otherwise, to the petitioner or appellant for the following reasons:

N/A

- B) The hardship is owing to the following circumstances relating to the soil conditions, shape or topography of such land or structures and especially affecting such land or structures but not affecting generally the zoning district in which it is located for the following reasons:

N/A

- C) *DESIRABLE RELIEF MAY BE GRANTED WITHOUT EITHER:*

- 1) Substantial detriment to the public good for the following reasons:

N/A

- 2) Relief may be granted without nullifying or substantially derogating from the intent or purpose of this Ordinance for the following reasons:

N/A

- \* If You have any questions as to whether you can establish all of the applicable legal requirements, you should consult with your own attorney.

BZA APPLICATION FORM

SUPPORTING STATEMENT FOR A SPECIAL PERMIT

Please describe in complete detail how you meet each of the following criteria referring to the property and proposed changes or uses which are requested in your application. Attach sheets with additional information for special permits which have additional criteria, e.g.; fast food permits, comprehensive permits, etc., which must be met.

Granting the Special Permit requested for 14 Arrow Street (location) would not be a detriment to the public interest because:

- A) Requirements of the Ordinance can or will be met for the following reasons:

Please see the attached supporting statement.

- B) Traffic generated or patterns of access or egress would not cause congestion hazard, or substantial change in established neighborhood character for the following reasons:

Please see the attached supporting statement.

- C) The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would not be adversely affected by the nature of the proposed use for the following reasons:

Please see the attached supporting statement.

- D) Nuisance or hazard would not be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the citizens of the City for the following reasons:

Please see the attached supporting statement.

- E) For other reasons, the proposed use would not impair the integrity of the district or adjoining district or otherwise derogate from the intent or purpose of this ordinance for the following reasons:

**BZA APPLICATION FORM**

**CHECK LIST**

PROPERTY LOCATION: 14 Arrow Street DATE: 3/30/2016

PETITIONER OR REPRESENTATIVE: Ricardo M. Sousa, Esq. for T-Mobile Northeast LLC

ADDRESS & PHONE: One International Place, Suite 3700, Boston, MA 02110

BLOCK: 133 LOT: 23

**PLEASE CHECK THAT YOU HAVE INCLUDED THE FOLLOWING WITH YOUR APPLICATION. APPLICATIONS WILL NOT BE ACCEPTED FOR PROCESSING & SCHEDULING UNLESS ALL REQUIRED DOCUMENTS ARE PROVIDED.**

*PLEASE INCLUDE THIS CHECKLIST WITH YOUR APPLICATION.  
ALL DOCUMENTS ARE TO BE TYPED OR WRITTEN LEGIBLY.*

<u>DOCUMENTS</u>	<u>REQUIRED</u>	<u>ENCLOSED</u>
Application Form 3 Forms with Original Signatures	<u>x</u>	<u>x</u>
Supporting Statements - Scanned & 1 set to Zoning	<u>x</u>	<u>x</u>
Application Fee (You will receive invoice online)	<u>x</u>	<u>x</u>
Assessor's GIS "Block Map" (Available on line or At Engineering Dept. - 147 Hampshire Street)	<u>x</u>	<u>x</u>
Dimensional Form - Refer to Cambridge Zoning Ordinance - Scanned & 1 set to Zoning (Subject to further review by Zoning Specialist)	<u>x</u>	<u>x</u>
Ownership Certificate, Notarized - Scanned & 1 set to Zoning	<u>x</u>	<u>x</u>
Floor Plans - Scanned & 1 set to Zoning	<u>x</u>	<u>x</u>
Elevations - Scanned & 1 set to Zoning	<u>x</u>	<u>x</u>
Certified Plot Plan - Scanned & 1 set to Zoning (By Registered Land Surveyor)	<u>N/A</u>	<u>N/A</u>
Photographs of Property - Scanned & 1 set to Zoning	<u>x</u>	<u>x</u>
Parking Plan (if relevant to your application) Scanned & 1 set to Zoning	<u>N/A</u>	<u>N/A</u>
<b><u>FOR SUBDIVISION ALSO INCLUDE:</u></b> Scanned & 1 set to Zoning		
Proposed Deeds	<u>N/A</u>	<u>N/A</u>
Evidence of Separate Utilities **	<u>N/A</u>	<u>N/A</u>
Proposed Subdivision Plan	<u>N/A</u>	<u>N/A</u>

Petitioners are advised to refer to Attachment A (Procedures for applying to the Board of Zoning Appeal) & consult zoning staff for review.

**It is advisable for the Petitioner to discuss the petition with the abutters as listed in the Zoning BZA Case file.**

\* For Special Permits under Art. 4.32.G.1 (Communication Towers and Antennas), include a photo simulation.

\*\* Can be submitted after subdivision has been approved.

BZA APPLICATION FORM

GENERAL INFORMATION

The undersigned hereby petitions the Board of Zoning Appeal for the following:

Special Permit:  Variance: \_\_\_\_\_ Appeal: \_\_\_\_\_  
and relief pursuant to Section 6409 of the Middle Class Tax Relief Act

PETITIONER: T-Mobile Northeast LLC

PETITIONER'S ADDRESS: Prince Lobel Tye, LLP, Attn. Ricardo M. Sousa, Esq., One International Place, Suite 3700, Boston, MA

LOCATION OF PROPERTY: 14 Arrow Street

TYPE OF OCCUPANCY: Telecommunications ZONING DISTRICT: Office-3 (O-3) and Harvard Square Overlay District

REASON FOR PETITION:

\_\_\_\_\_ Additions  \_\_\_\_\_ New Structure

\_\_\_\_\_ Change in Use/Occupancy  \_\_\_\_\_ Parking

\_\_\_\_\_ Conversion to Addi'l Dwelling Unit's  \_\_\_\_\_ Sign

\_\_\_\_\_ Dormer  \_\_\_\_\_ Subdivision

Other: Section 6409(a) of the Spectrum Act relief for Special Permit for the collocation of a Wireless Facility

DESCRIPTION OF PETITIONER'S PROPOSAL:

The Applicant proposes to modify its existing Wireless Telecommunications Facility by replacing three (3) new panel antennas on the existing smoke stack, together with supporting equipment. The Applicants proposal complies with Section 6409 of the Spectrum Act as the collocation of antennas is not a substantial change to the existing base station. Moreover, the Applicants proposal complies with Section 4.32 and 10.4 of the Cambridge Zoning Code.

SECTIONS OF ZONING ORDINANCE CITED:

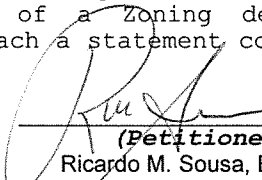
Article 4.00 Section 4.32 (g)(1) Utilities - Telephone Exchange

Article 10.00 Section 10.4 - Special Permit

Article 6409 Section Middle Class Tax Relief Act

Applicants for a **Variance** must complete Pages 1-5  
Applicants for a **Special Permit** must complete Pages 1-4 and 6  
Applicants for an **Appeal** to the BZA of a Zoning determination by the Inspectional Services Department must attach a statement concerning the reasons for the appeal

Original Signature(s):

  
\_\_\_\_\_  
(Petitioner(s)/Owner)  
Ricardo M. Sousa, Esq.  
\_\_\_\_\_  
(Print Name)

Address: One International Place, Suite 3700

Boston, MA 02110

Tel. No.: 617-456-8123

E-Mail Address: rsousa@princelobel.com

Date: March 30, 2017



**BZA APPLICATION FORM - OWNERSHIP INFORMATION**

To be completed by OWNER, signed before a notary and returned to The Secretary of the Board of Zoning Appeals.

I/We BBC Trust c/o Dowse Inc. (OWNER)

Address: 14 Arrow Street, Cambridge, MA 02138

State that I/We own the property located at 14 Arrow Street, Cambridge, MA, which is the subject of this zoning application.

The record title of this property is in the name of Granton H. Dowse, Jr., Irene A.M. Dowse, and Leonard H. Dowse, Trustees of BBC Trust

\*Pursuant to a deed of duly recorded in the date 12/10/1979, Middlesex South County Registry of Deeds at Book 13858, Page 207; or Middlesex Registry District of Land Court, Certificate No. \_\_\_\_\_ Book \_\_\_\_\_ Page \_\_\_\_\_.

Oliver D. Regan  
SIGNATURE BY LAND OWNER OR AUTHORIZED TRUSTEE, OFFICER OR AGENT\*

\*Written evidence of Agent's standing to represent petitioner may be requested.

-----  
Commonwealth of Massachusetts, County of Middlesex

The above-name Charles Reggio personally appeared before me, this 11th of July, 2016, and made oath that the above statement is true.

Mary C. Greene Notary

My commission expires 2-5-21 (Notary Seal).



MARY C. GREENE  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
February 5, 2021

- If ownership is not shown in recorded deed, e.g. if by court order, recent deed, or inheritance, please include documentation.

BZA APPLICATION FORM

DIMENSIONAL INFORMATION

APPLICANT: T-Mobile Northeast PRESENT USE/OCCUPANCY: Wireless Telecommunications

LOCATION: 14 Arrow Street ZONE: 0-3 and Harvard Square Overlay District

PHONE: 617-456-8123 REQUESTED USE/OCCUPANCY: Wireless Telecommunications

	<u>EXISTING</u> <u>CONDITIONS</u>	<u>REQUESTED</u> <u>CONDITIONS</u>	<u>ORDINANCE</u> <u>REQUIREMENTS</u> <sup>1</sup>
TOTAL GROSS FLOOR AREA:	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
LOT AREA:	<u>N/A</u>		<u>N/A</u> (min.)
RATIO OF GROSS FLOOR AREA TO LOT AREA: <sup>2</sup>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
LOT AREA FOR EACH DWELLING UNIT:	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
SIZE OF LOT:			
WIDTH	<u>N/A</u>		<u>N/A</u> (min.)
DEPTH			
Setbacks in			
Feet:			
FRONT	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
REAR	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
LEFT SIDE	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
RIGHT SIDE	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
SIZE OF BLDG.:			
HEIGHT	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
LENGTH			
WIDTH			
RATIO OF USABLE OPEN SPACE TO LOT AREA: <sup>3</sup> )	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
NO. OF DWELLING UNITS:	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
NO. OF PARKING SPACES:	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min./max)
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DISTANCE TO NEAREST BLDG. ON SAME LOT:	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)

Describe where applicable, other occupancies on same lot, the size of adjacent buildings on same lot, and type of construction proposed, e.g.; wood frame, concrete, brick, steel, etc.

The proposed installation involves a modification of an existing Wireless Telecommunications Facility,

more commonly referred to as a "collocation".

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BZA APPLICATION FORM

SUPPORTING STATEMENT FOR A VARIANCE

EACH OF THE FOLLOWING REQUIREMENTS FOR A VARIANCE MUST BE ESTABLISHED AND SET FORTH IN COMPLETE DETAIL BY THE APPLICANT IN ACCORDANCE WITH MGL 40A, SECTION 10:

- A) A Literal enforcement of the provisions of this Ordinance would involve a substantial hardship, financial or otherwise, to the petitioner or appellant for the following reasons:

N/A

- B) The hardship is owing to the following circumstances relating to the soil conditions, shape or topography of such land or structures and especially affecting such land or structures but not affecting generally the zoning district in which it is located for the following reasons:

N/A

- C) *DESIRABLE RELIEF MAY BE GRANTED WITHOUT EITHER:*

- 1) Substantial detriment to the public good for the following reasons:

N/A

- 2) Relief may be granted without nullifying or substantially derogating from the intent or purpose of this Ordinance for the following reasons:

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- \* If You have any questions as to whether you can establish all of the applicable legal requirements, you should consult with your own attorney.

BZA APPLICATION FORM

SUPPORTING STATEMENT FOR A SPECIAL PERMIT

Please describe in complete detail how you meet each of the following criteria referring to the property and proposed changes or uses which are requested in your application. Attach sheets with additional information for special permits which have additional criteria, e.g.; fast food permits, comprehensive permits, etc., which must be met.

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- A) Requirements of the Ordinance can or will be met for the following reasons:

Please see the attached supporting statement.

- B) Traffic generated or patterns of access or egress would not cause congestion hazard, or substantial change in established neighborhood character for the following reasons:

Please see the attached supporting statement.

- C) The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would not be adversely affected by the nature of the proposed use for the following reasons:

Please see the attached supporting statement.

- D) Nuisance or hazard would not be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the citizens of the City for the following reasons:

Please see the attached supporting statement.

- E) For other reasons, the proposed use would not impair the integrity of the district or adjoining district or otherwise derogate from the intent or purpose of this ordinance for the following reasons:

**BZA APPLICATION FORM**

**CHECK LIST**

PROPERTY LOCATION: 14 Arrow Street DATE: 3/30/2016  
PETITIONER OR REPRESENTATIVE: Ricardo M. Sousa, Esq. for T-Mobile Northeast LLC  
ADDRESS & PHONE: One International Place, Suite 3700, Boston, MA 02110

BLOCK: 133 LOT: 23

**PLEASE CHECK THAT YOU HAVE INCLUDED THE FOLLOWING WITH YOUR APPLICATION. APPLICATIONS WILL NOT BE ACCEPTED FOR PROCESSING & SCHEDULING UNLESS ALL REQUIRED DOCUMENTS ARE PROVIDED.**

**PLEASE INCLUDE THIS CHECKLIST WITH YOUR APPLICATION. ALL DOCUMENTS ARE TO BE TYPED OR WRITTEN LEGIBLY.**

<u>DOCUMENTS</u>	<u>REQUIRED</u>	<u>ENCLOSED</u>
Application Form	<u>x</u>	<u>x</u>
3 Forms with Original Signatures	<u>x</u>	<u>x</u>
Supporting Statements - Scanned & 1 set to Zoning	<u>x</u>	<u>x</u>
Application Fee (You will receive invoice online)	<u>x</u>	<u>x</u>
Assessor's GIS "Block Map" (Available on line or At Engineering Dept. - 147 Hampshire Street)	<u>x</u>	<u>x</u>
Dimensional Form - Refer to Cambridge Zoning Ordinance - Scanned & 1 set to Zoning (Subject to further review by Zoning Specialist)	<u>x</u>	<u>x</u>
Ownership Certificate, Notarized - Scanned & 1 set to Zoning	<u>x</u>	<u>x</u>
Floor Plans - Scanned & 1 set to Zoning	<u>x</u>	<u>x</u>
Elevations - Scanned & 1 set to Zoning	<u>x</u>	<u>x</u>
Certified Plot Plan - Scanned & 1 set to Zoning (By Registered Land Surveyor)	<u>N/A</u>	<u>N/A</u>
Photographs of Property - Scanned & 1 set to Zoning	<u>x</u>	<u>x</u>
Parking Plan (if relevant to your application) Scanned & 1 set to Zoning	<u>N/A</u>	<u>N/A</u>
<b><u>FOR SUBDIVISION ALSO INCLUDE:</u></b> Scanned & 1 set to Zoning		
Proposed Deeds	<u>N/A</u>	<u>N/A</u>
Evidence of Separate Utilities **	<u>N/A</u>	<u>N/A</u>
Proposed Subdivision Plan	<u>N/A</u>	<u>N/A</u>

Petitioners are advised to refer to Attachment A (Procedures for applying to the Board of Zoning Appeal) & consult zoning staff for review.

**It is advisable for the Petitioner to discuss the petition with the abutters as listed in the Zoning BZA Case file.**

\* For Special Permits under Art. 4.32.G.1 (Communication Towers and Antennas), include a photo simulation.

\*\* Can be submitted after subdivision has been approved.

**BZA APPLICATION FORM**

**GENERAL INFORMATION**

The undersigned hereby petitions the Board of Zoning Appeal for the following:

Special Permit:   x   Variance:            Appeal:             
and relief pursuant to Section 6409 of the Middle Class Tax Relief Act

PETITIONER:   T-Mobile Northeast LLC  

PETITIONER'S ADDRESS:   Prince Lobel Tye, LLP, Attn. Ricardo M. Sousa, Esq., One International Place, Suite 3700, Boston, MA  

LOCATION OF PROPERTY:           14 Arrow Street          

TYPE OF OCCUPANCY:   Telecommunications   ZONING DISTRICT:   Office-3 (O-3) and Harvard Square Overlay District  

**REASON FOR PETITION:**

- |  |  |
|--|--|
| <input type="checkbox"/> Additions   | <input type="checkbox"/> New Structure |
| <input type="checkbox"/> Change in Use/Occupancy   | <input type="checkbox"/> Parking       |
| <input type="checkbox"/> Conversion to Addi'l Dwelling Unit's  | <input type="checkbox"/> Sign          |
| <input type="checkbox"/> Dormer  | <input type="checkbox"/> Subdivision   |
| <input checked="" type="checkbox"/> Other: <u>  Section 6409(a) of the Spectrum Act relief for Special Permit for the collocation of a Wireless Facility  </u> |  |

**DESCRIPTION OF PETITIONER'S PROPOSAL:**

The Applicant proposes to modify its existing Wireless Telecommunications Facility by replacing three (3) new panel antennas on the existing smoke stack, together with supporting equipment. The Applicants proposal complies with Section 6409 of the Spectrum Act as the collocation of antennas is not a substantial change to the existing base station. Moreover, the Applicants proposal complies with Section 4.32 and 10.4 of the Cambridge Zoning Code.

**SECTIONS OF ZONING ORDINANCE CITED:**

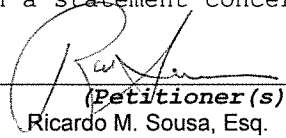
Article   4.00   Section   4.32 (g)(1) Utilities - Telephone Exchange  

Article   10.00   Section   10.4 - Special Permit  

Article   6409   Section   Middle Class Tax Relief Act  

Applicants for a **Variance** must complete Pages 1-5  
Applicants for a **Special Permit** must complete Pages 1-4 and 6  
Applicants for an **Appeal** to the BZA of a Zoning determination by the Inspectional Services Department must attach a statement concerning the reasons for the appeal

Original Signature(s):

  
\_\_\_\_\_  
**(Petitioner(s)/Owner)**  
Ricardo M. Sousa, Esq.  
\_\_\_\_\_  
**(Print Name)**

Address:   One International Place, Suite 3700  

  Boston, MA 02110  

Tel. No.:   617-456-8123  

E-Mail Address:   rsousa@princelobel.com  

Date:   March 30, 2017

**BZA APPLICATION FORM - OWNERSHIP INFORMATION**

To be completed by OWNER, signed before a notary and returned to The Secretary of the Board of Zoning Appeals.

I/We BBC Trust c/o Dowse Inc. \_\_\_\_\_  
(OWNER)

Address: 14 Arrow Street, Cambridge, MA 02138 \_\_\_\_\_

State that I/We own the property located at 14 Arrow Street, Cambridge, MA \_\_\_\_\_, which is the subject of this zoning application.

The record title of this property is in the name of Granton H. Dowse, Jr., Irene A.M. Dowse, and Leonard H. Dowse, Trustees of BBC Trust \_\_\_\_\_

\*Pursuant to a deed of duly recorded in the date 12/10/1979 \_\_\_\_\_, Middlesex South County Registry of Deeds at Book 13858 \_\_\_\_\_, Page 207 \_\_\_\_\_; or Middlesex Registry District of Land Court, Certificate No. \_\_\_\_\_  
Book \_\_\_\_\_ Page \_\_\_\_\_.

Charles D. Reggio  
SIGNATURE BY LAND OWNER OR  
AUTHORIZED TRUSTEE, OFFICER OR AGENT\*

\*Written evidence of Agent's standing to represent petitioner may be requested.

-----  
Commonwealth of Massachusetts, County of Middlesex \_\_\_\_\_

The above-name Charles Reggio \_\_\_\_\_ personally appeared before me, this 11th of July, 2016, and made oath that the above statement is true.

Mary C. Greene \_\_\_\_\_ Notary

My commission expires 2-5-21 \_\_\_\_\_ (Notary Seal).



MARY C. GREENE  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
February 5, 2021

- If ownership is not shown in recorded deed, e.g. if by court order, recent deed, or inheritance, please include documentation.

BZA APPLICATION FORM

DIMENSIONAL INFORMATION

APPLICANT: T-Mobile Northeast PRESENT USE/OCCUPANCY: Wireless Telecommunications

LOCATION: 14 Arrow Street ZONE: 0-3 and Harvard Square Overlay District

PHONE: 617-456-8123 REQUESTED USE/OCCUPANCY: Wireless Telecommunications

	<u>EXISTING</u> <u>CONDITIONS</u>	<u>REQUESTED</u> <u>CONDITIONS</u>	<u>ORDINANCE</u> <u>REQUIREMENTS</u> <sup>1</sup>
TOTAL GROSS FLOOR AREA:	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
LOT AREA:	<u>N/A</u>		<u>N/A</u> (min.)
RATIO OF GROSS FLOOR AREA TO LOT AREA: <sup>2</sup>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
LOT AREA FOR EACH DWELLING UNIT:	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
SIZE OF LOT:			
WIDTH	<u>N/A</u>		<u>N/A</u> (min.)
DEPTH			
Setbacks in Feet:			
FRONT	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
REAR	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
LEFT SIDE	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
RIGHT SIDE	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
SIZE OF BLDG.:			
HEIGHT	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
LENGTH			
WIDTH			
RATIO OF USABLE OPEN SPACE TO LOT AREA: <sup>3</sup>	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
NO. OF DWELLING UNITS:	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (max.)
NO. OF PARKING SPACES:	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min./max)
NO. OF LOADING AREAS:	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)
DISTANCE TO NEAREST BLDG. ON SAME LOT:	<u>N/A</u>	<u>No Change</u>	<u>N/A</u> (min.)

Describe where applicable, other occupancies on same lot, the size of adjacent buildings on same lot, and type of construction proposed, e.g.; wood frame, concrete, brick, steel, etc.

The proposed installation involves a modification of an existing Wireless Telecommunications Facility,

more commonly referred to as a "collocation".

1. SEE CAMBRIDGE ZONING ORDINANCE ARTICLE 5.000, SECTION 5.30 (DISTRICT OF DIMENSIONAL REGULATIONS).
2. TOTAL GROSS FLOOR AREA (INCLUDING BASEMENT 7'-0" IN HEIGHT AND ATTIC AREAS GREATER THAN 5') DIVIDED BY LOT AREA.
3. OPEN SPACE SHALL NOT INCLUDE PARKING AREAS, WALKWAYS OR DRIVEWAYS AND SHALL HAVE A MINIMUM DIMENSION OF 15'.



BZA APPLICATION FORM

SUPPORTING STATEMENT FOR A VARIANCE

EACH OF THE FOLLOWING REQUIREMENTS FOR A VARIANCE MUST BE ESTABLISHED AND SET FORTH IN COMPLETE DETAIL BY THE APPLICANT IN ACCORDANCE WITH MGL 40A, SECTION 10:

- A) A Literal enforcement of the provisions of this Ordinance would involve a substantial hardship, financial or otherwise, to the petitioner or appellant for the following reasons:

N/A

- B) The hardship is owing to the following circumstances relating to the soil conditions, shape or topography of such land or structures and especially affecting such land or structures but not affecting generally the zoning district in which it is located for the following reasons:

N/A

- C) *DESIRABLE RELIEF MAY BE GRANTED WITHOUT EITHER:*

- 1) Substantial detriment to the public good for the following reasons:

N/A

- 2) Relief may be granted without nullifying or substantially derogating from the intent or purpose of this Ordinance for the following reasons:

N/A

- \* If You have any questions as to whether you can establish all of the applicable legal requirements, you should consult with your own attorney.

BZA APPLICATION FORM

SUPPORTING STATEMENT FOR A SPECIAL PERMIT

Please describe in complete detail how you meet each of the following criteria referring to the property and proposed changes or uses which are requested in your application. Attach sheets with additional information for special permits which have additional criteria, e.g.; fast food permits, comprehensive permits, etc., which must be met.

Granting the Special Permit requested for 14 Arrow Street (location) would not be a detriment to the public interest because:

- A) Requirements of the Ordinance can or will be met for the following reasons:

Please see the attached supporting statement.

- B) Traffic generated or patterns of access or egress would not cause congestion hazard, or substantial change in established neighborhood character for the following reasons:

Please see the attached supporting statement.

- C) The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would not be adversely affected by the nature of the proposed use for the following reasons:

Please see the attached supporting statement.

- D) Nuisance or hazard would not be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the citizens of the City for the following reasons:

Please see the attached supporting statement.

- E) For other reasons, the proposed use would not impair the integrity of the district or adjoining district or otherwise derogate from the intent or purpose of this ordinance for the following reasons:

**2**

March 30, 2017

City of Cambridge  
Board of Zoning Appeals  
831 Massachusetts Avenue  
Cambridge, MA

Re: Application for Special Permit  
Property Address: 14 Arrow Street  
Assessor's Map 133, Lot 23 (the "Property")  
Applicant: T-Mobile Northeast LLC (the "Applicant")

Dear Honorable Members of the Board of Zoning Appeals:

This firm represents the Applicant in connection with an application for a special permit from the City of Cambridge Board of Zoning Appeals (the "Board") to modify its existing telecommunications facility (the "Existing Facility") on the Property. The Property is located in the O-3 (Office 3) zoning district and the Harvard Square Overlay District. Pursuant to Article 4, Section 4.32(g), footnote 49 of the City of Cambridge Zoning Ordinance (the "Ordinance"), the use of the Property for a wireless telecommunications facility is permitted by special permit. The Applicant's proposal satisfies the requirements for the grant of a special permit pursuant to Article 10-40 of the Ordinance.

The Applicant seeks to modify its existing wireless communications facility by replacing three (3) existing panel antennas with three (3) new, but substantially similar in size and shape, panel antennas, to continue to be located on the façade of the existing smoke stack on the rooftop of the building (the "Smoke Stack"), together with supporting equipment (the "Proposed Facility"). The Applicants facilities are shown on the plans attached hereto, and incorporated herein by reference (the "Plans").

**I. Background**

The Applicant is licensed by the Federal Communications Commission (the "FCC") to construct and operate a wireless telecommunications network in various markets throughout the country, including the Commonwealth of Massachusetts and in particular in the City of Cambridge. A copy of the Applicant's FCC license is attached hereto. The Applicant is in the process of designing and constructing a telecommunications system to serve all of the Commonwealth of Massachusetts. One of the key design objectives of its systems is to provide seamless coverage. Such a system requires a grid of radio transmitting and receiving links located approximately .5 to 2 miles apart, depending on the location of existing and proposed installations in the surrounding area, the existing use of the network and the existing topography. The radio transmitting and receiving facilities operate on a line-of-sight basis, requiring a clear path from the facility to the user on the ground. This dynamic requires the antennas to be located in a location where the signal is

Prince Lobel Tye LLP  
One International Place  
Suite 3700  
Boston, MA 02110  
TEL: 617 456 8000  
FAX: 617 456 8100

not obstructed or degraded by other buildings or by topographical features such as hills.

## II. The Facility

The Applicant proposes to modify its existing wireless telecommunications facility at the Property with a like-for-like swap out of three (3) existing panel antennas with three (3) new panel antennas mounted in the same location, together with supporting equipment. The proposed panel antennas will be façade mounted to the Smoke Stack and painted to match. Coaxial cabling will run from the BTS equipment to the antennas within a cable tray which will be painted to match the existing color of the building and Smoke Stack.

After installation, the Proposed Facility will be unmanned and will only require twice a month maintenance visits per carrier. The only utilities required to operate this Proposed Facility are standard 120-volt electrical power as well as telephone service. These are presently in place at the Property. The traffic generated by the Proposed Facility will be approximately two vehicle trips per month by maintenance personnel who will inspect the Proposed Facility to ensure it remains in good working order. The Proposed Facility will comply with all applicable local, state and federal safety codes.

## III. Legal Arguments

### A. The Applicant complies with the Wireless Communications provisions set for the in Section 4.32(g), footnote 49 of the Ordinance

Pursuant to Section 4.32(g) of the Ordinance the Applicant's proposed use for a wireless communications facility in the Office 3 zoning district and Harvard Square Overlay district is permitted by special permit. The Applicant's Proposed Facility further complies with the provisions set forth in Section 4.32(g), footnote 49 of the Ordinance:

- 1. The Board of Zoning Appeal shall consider the scope of or limitations imposed by any license secured from any state or federal agency having jurisdiction over such matters.**

Enclosed herewith is the Applicant's FCC license. The Applicant meets all requirements imposed by government authorities having jurisdiction over the Proposed Facility, including by the FCC to provide wireless communications in this market area.

The intent of the U.S. Congress, when it enacted the Telecommunications Act of 1996 ("TCA") was to institute a framework to promote competition and innovation within the telecommunications industry. Under its license from the FCC, T-Mobile is obligated to provide a reliable "product" (i.e. wireless communications service) to the population of the City of Cambridge. Likewise, consumer expectations for increasingly robust and reliable service requires competing service providers (including T-Mobile) to identify and remedy existing gaps in reliable network coverage, or gaps that result from increasing subscriber voice and data traffic beyond the limits of existing network infrastructure. A carrier's failure to remedy network gaps in a timely fashion can result in a significant loss of subscribers to competing telecommunications carriers. As demonstrated

in the Affidavit of Radio Frequency Expert provided by the Applicant and attached hereto, the Proposed Facility and corresponding relief requested are necessary to remedy a gap in reliable service coverage within T-Mobile's existing network infrastructure.

T-Mobile investigated alternative sites in and around the defined geographic area within which its engineers determined that a facility must be located to fill the gap in service coverage and to function effectively within its network of existing and planned facilities. This is an existing location that we are upgrading with new technology to provide the necessary coverage to the subject area of the City of Cambridge. Therefore, the Proposed Facility in the Office O-3 zoning district is necessary to close the coverage gap that is illustrated on the propagation maps submitted herewith. Consequently, T-Mobile is unable to close a gap in its wireless network without obtaining a Special Permit to modify its existing wireless facility in the O-3 zoning district.

- 2. The Board of Zoning Appeal shall consider the extent to which the visual impact of the various elements of the proposed facility is minimized: (1) through the use of existing mechanical elements on the building's roof or other features of the building as support and background, (2) through the use in materials that in texture and color blend with the materials to which the facilities are attached, or (3) other effective means to reduce the visual impact of the facility off the site.**

The visual impact of the Proposed Facility will be minimized by the use of the existing Smoke Stack on the building and by designing the Proposed Facility to blend with the existing characteristics of the building and the Smoke Stack. As noted on the Plans, all of the proposed antennas and supporting coaxial cabling will be camouflaged and painted to match the existing color and texture of the Smoke Stack. The existing BTS equipment cabinets are installed within the basement of the building and completely out of view.

- 3. Where it is proposed to erect such a facility in any residential zoning district, the extent to which there is a demonstrated public need for the facility at the proposed locations, the existence of alternative, functionally suitable sites in nonresidential locations, the character of the prevailing uses in the area, and the prevalence of other existing mechanical systems and equipment carried on or above the roof of nearby structures. The Board of Zoning Appeal shall grant a special permit to erect such a facility in a residential zoning district only upon a finding that nonresidential uses predominate in the vicinity of the proposed facility's location and that the telecommunications facility is not inconsistent with the character that does prevail in the surrounding neighborhood.**

Not Applicable. The Applicant proposes to install its facility within the Office 3 zoning district.

**B. The Applicant complies with the Special Permit Criteria set forth in Section 10-43 of the Ordinance:**

**1. The requirements of the Ordinance can be met:**

As provided above, the Applicant had met the requirements set forth in Section 4.32(g), footnote 49 of the Ordinance.

**2. Traffic generated or patterns of access or egress would not cause congestion hazard, or substantial change in established neighborhood character for the following reasons:**

The proposed installation will not obstruct existing rights-of-way or pedestrian access and will not change the daily conditions of access, egress, traffic, congestion hazard, or character of the neighborhood. The installation will not require the addition of any new parking or loading spaces that would necessitate the need to change the existing access, egress, traffic congestion hazard, or character of the neighborhood. The proposed installation will not change the current conditions or appearance surrounding the building. There will be no need for water, sewer, or other municipal services.

As mentioned above, once constructed, the facility will be unmanned and only require frequent visits by a technician, typically two times per month for routine diagnostics and/or maintenance, except in cases of emergency. These frequent visits will not result in any material increase in traffic or disruption to patterns of access or egress that will cause congestion hazards or cause a substantial change in the established neighborhood character. The Applicant's maintenance personnel will make use of the existing access roads and parking at the building.

**3. The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would not be adversely affected by the nature of the proposed use for the following reasons:**

As described above, the Proposed Facility will produce a minimal change in the appearance of the Smoke Stack. The Proposed facility will blend with the existing characteristics of the Site and the surrounding neighborhood. The proposed antennas and coaxial cabling will be painted to match the color of the existing building and Smoke Stack. Moreover, the proposed installation will not generate any obtrusive traffic, smoke, dust, heat, glare, discharge of noxious substances, nor will it pollute waterways or groundwater. Conversely, the surrounding properties and general public will benefit from the potential to enjoy improved wireless communication.

**4. Nuisance or hazard would not be created to the detriment of the health, safety, and/or welfare of the occupant of the proposed use or the citizens of the City for the following reasons:**

The operations of the proposed telecommunications facility will not adversely impact the health, safety, and the welfare of the residents of the City of Cambridge. On the contrary, the

proposed use will both benefit the city and promote the safety and welfare of its residents, businesses and drivers by providing reliable state-of-the-art digital wireless voice and data services. Further, the site will improve the reliability of emergency communications with the police and fire departments by eliminating dropped or blocked calls due to inadequate signal strength or insufficient network capacity to handle call volume, particularly important during emergency situations.

The Proposed Facility will comply with all federal, state and local safety requirements including the standards established by the FCC, Federal Aviation Administration (FAA), the American Standards Institute (ANSI), and the Massachusetts Department of Public Health (MDPH).

Accordingly, the Proposed Facility will not adversely impact the health, safety and/or welfare of the neighborhood or the residents of the City of Cambridge.

**5. For other reasons, the proposed installation will not impair the integrity of the district or adjoining district or otherwise derogate from the intent or purpose of this ordinance for the following reasons:**

The Proposed Facility is designed to blend with the existing characteristics of the Site, reducing any visual impacts to the surrounding area. Accordingly, the Proposed Facility's design results in a minimal impact on the underlying and adjacent zoning districts and is consistent with the Ordinance's intention to allow for less intrusive wireless telecommunications facilities in all districts (Other than Open Space), including Office districts. As mentioned above, the proposed installation will not generate any traffic, smoke, dust, heat, glare, discharge or noxious substances, nor will it pollute waterways or groundwater.

**6. The new use of the building construction is consistent with the Urban Design Objective set for tin Section 19.30 of the Ordinance:**

Not Applicable. The Applicant is not proposing to construct a new building or structure.

**IV. Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012**

Although the City of Cambridge has provisions within the Ordinance that regulate the construction of wireless communication facilities, the standard of review for an application request involving the modification of an existing wireless communication facility on an existing wireless tower or base station has been changed by the passage of an important provision of the Middle Class Tax Relief and Job Creation Act of 2012 ("TRA"). The TRA is a Federal Act that was signed into law on February 22, 2012. Section 6409 of the TRA requires a streamlined modification and collocation approval process to ensure timely deployment of wireless services.

In particular, Section 6409 of the TRA mandates that State and local governments



must approve an eligible facilities request<sup>1</sup> for the modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station. The approval cannot be discretionary if the proposed modification does not *substantially* change the physical dimensions of such tower or base station.

Further, the Federal Communications Commission (“FCC”) under the Nationwide Collocation Agreement defines a substantial change as “the mounting of the proposed antenna would involve adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet” or “the mounting of a proposed antenna on the tower that would increase the existing height of the tower by more than 10%...”

Because the Proposed Facility is not increasing the overall height of the Existing Facility it is our understanding that the City of Cambridge, acting through the Board or the Building Department, has the right to authorize the construction of the Proposed Facility with the issuance of a Building Permit, pursuant to this eligible facilities request. Moreover, to the extent that the Bylaws require that the proposed modification request be subjected to a review by the Board, that review is preempted by the TRA. As such, the Applicant requests that the Board determine that the construction of the Proposed Facility may be authorized by the issuance of a Building Permit and to the extent necessary the Applicant reserves its rights to request the same and reserves its rights under the TRA.

---

<sup>1</sup> The TRA defines “eligible facilities request” as any request for modification of an existing wireless tower or base station that involves:

- Collocation of new transmission equipment;
- Removal of transmission equipment; or
- Replacement of transmission equipment.

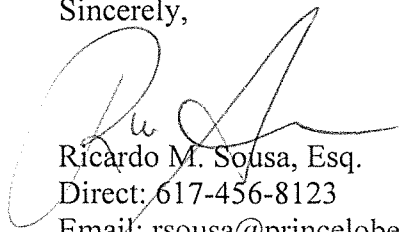
In the *Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (2001)*, the Federal Communications Commission (“FCC”) defines “collocation” as the “mounting or installation of antennas on an existing tower, building or structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.”

V. Summary

The Applicant hereby requests that the Board determine that the City of Cambridge has the right to authorize the construction of the Proposed Facility through the issuance of a Building Permit or, in the alternative, that they have satisfied the requirements for the grant of a Special Permit and to further determine that the Proposed Facility will not have any adverse effect on the neighborhood within which the Property is located in particular, and the City of Cambridge as a whole. The findings are made in view of the particular characteristics of the Property and of the Applicant's proposed siting and equipment, as detailed above. This Property is the most appropriate location for the installation and operation of the wireless communications facility.

For the foregoing reasons the Applicant respectfully requests that the Board determine that the City of Cambridge has the right to authorize the construction of the Proposed Facility through the issuance of a Building Permit or grant the foregoing zoning relief in the form of a Special Permit and such other relief as the Board deems necessary to allow the installation and operation of the Applicant's Proposed Facility.

Sincerely,



Ricardo M. Sousa, Esq.

Direct: 617-456-8123

Email: [rsousa@princelobel.com](mailto:rsousa@princelobel.com)

**3**

**PROJECT INFORMATION**

SCOPE OF WORK: UNMANNED TELECOMMUNICATIONS FACILITY MODIFICATIONS  
 SITE ADDRESS: 14 ARROW STREET  
 CAMBRIDGE, MA 02138  
 LATITUDE: 42° 22' 16" N  
 LONGITUDE: 71° 06' 53" W  
 JURISDICTION: NATIONAL, STATE & LOCAL CODES OR ORDINANCES  
 CURRENT USE: TELECOMMUNICATIONS FACILITY  
 PROPOSED USE: TELECOMMUNICATIONS FACILITY  
 DESIGN GUIDELINE: 792DBE

**SITE NUMBER: 4BN0019C**  
**SITE NAME: BN019/14 ARROW ST SS**

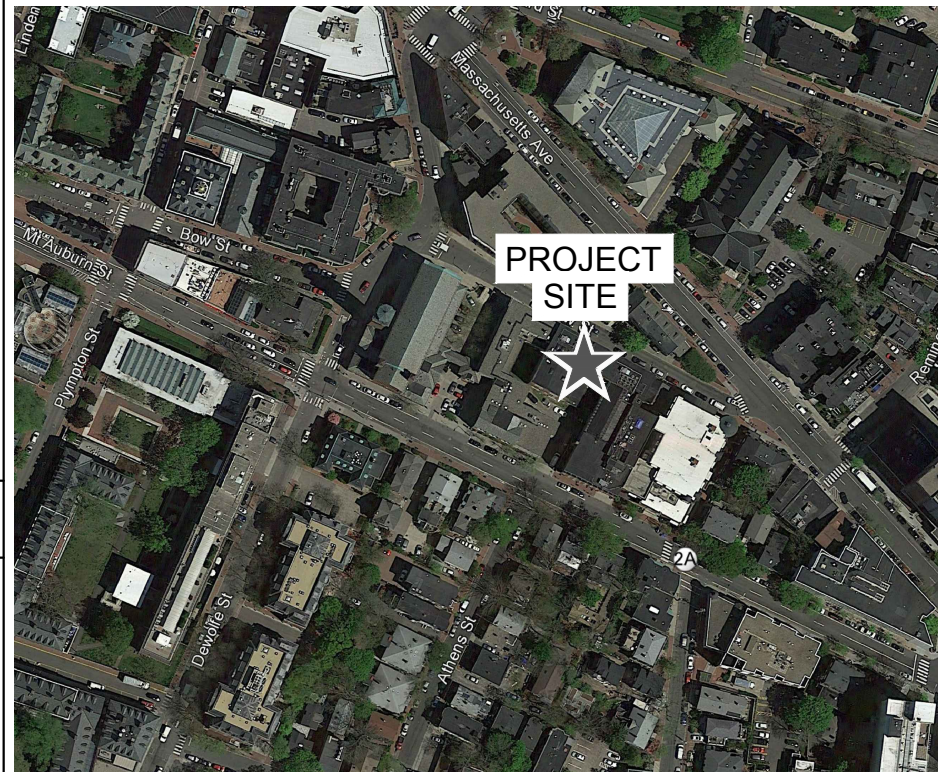
14 ARROW STREET  
 CAMBRIDGE, MA 02138  
 MIDDLESEX COUNTY

**DRAWING INDEX**

**REV**

<b>T-1</b>	<b>TITLE SHEET</b>	<b>0</b>
<b>GN-1</b>	<b>GENERAL NOTES</b>	<b>0</b>
<b>A-1</b>	<b>COMPOUND &amp; EQUIPMENT PLANS</b>	<b>0</b>
<b>A-2</b>	<b>ELEVATION &amp; ANTENNA PLAN</b>	<b>0</b>
<b>A-3</b>	<b>DETAILS</b>	<b>0</b>
<b>G-1</b>	<b>GROUNDING, ONE-LINE DIAGRAM &amp; DETAILS</b>	<b>0</b>

**LOCUS MAP**



**GENERAL NOTES**

1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF T-MOBILE NORTHEAST, LLC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE T-MOBILE REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

**SIGNATURES**

CONSTRUCTION \_\_\_\_\_ DATE \_\_\_\_\_  
 RF ENGINEERING \_\_\_\_\_ DATE \_\_\_\_\_  
 ZONING / SITE ACQ. \_\_\_\_\_ DATE \_\_\_\_\_  
 OPERATIONS \_\_\_\_\_ DATE \_\_\_\_\_  
 LANDLORD \_\_\_\_\_ DATE \_\_\_\_\_



CALL

BEFORE YOU DIG

CALL TOLL FREE 811 OR 888-DIG-SAFE



**UNDERGROUND SERVICE ALERT**



**SITE NUMBER: 4BN0019C**  
**SITE NAME: BN019/14 ARROW ST SS**  
 14 ARROW STREET  
 CAMBRIDGE, MA 02138  
 MIDDLESEX COUNTY

T-MOBILE NORTHEAST LLC  
 15 COMMERCE WAY, SUITE B  
 NORTON, MA 02766  
 OFFICE: (508) 286-2700  
 FAX: (508) 286-2893

NO.	DATE	REVISIONS	BY	CHK
0	02/17/17	ISSUED FOR REVIEW	MER	MRC

TITLE SHEET

SHEET NO. **T-1**



## GENERAL NOTES

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.

2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.

3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE LESEE/LICENSEE REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.

4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.

5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS / CONTRACT DOCUMENTS.

7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.

8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.

9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.

12. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.

13. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.

14. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.

15. THE CONTRACTOR SHALL NOTIFY THE LESEE/LICENSEE REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE LESEE/LICENSEE REPRESENTATIVE.

16. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.

17. ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK. CALL THE FOLLOWING FOR ALL PRE-CONSTRUCTION NOTIFICATION 72-HOURS PRIOR TO ANY EXCAVATION ACTIVITY: DIG SAFE SYSTEM (MA, ME, NH, RI, VT): 1-888-344-7233 CALL BEFORE YOU DIG (CT): 1-800-922-4455

18. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS SHOWN HEREIN.

19. ALL DIMENSIONS SHOWN THUS ± ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WHICH EFFECT THE CONTRACTORS WORK. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH PROJECT OWNER PRIOR TO CONSTRUCTION.

20. NORTH ARROW SHOWN ON PLANS REFERS TO APPROXIMATE TRUE NORTH. PRIOR TO THE START OF CONSTRUCTION, ORDERING OR FABRICATING OF ANTENNA MOUNTS, CONTRACTOR SHALL CONSULT WITH PROJECT OWNER'S RF ENGINEER AND FIELD VERIFY ALL ANTENNA SECTOR LOCATIONS AND ANTENNA AZIMUTHS.

21. THE CONTRACTOR AND OR HIS SUB CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.

22. ANTENNA INSTALLATION SHALL BE CONDUCTED BY FIELD CREWS EXPERIENCED IN THE ASSEMBLY AND ERECTION OF RADIO ANTENNAS, TRANSMISSION LINES AND SUPPORT STRUCTURES.

23. COAXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE PROVIDED BY THE PROJECT OWNER AND IS NOT INCLUDED IN THESE CONSTRUCTION DOCUMENTS. A SCHEDULE OF PROJECT OWNER SUPPLIED MATERIALS IS ATTACHED TO THE BID DOCUMENTS (SEE EXHIBIT 3). ALL OTHER HARDWARE TO BE PROVIDED BY THE CONTRACTOR. CONNECTION HARDWARE SHALL BE STAINLESS STEEL.

24. WHEN "PAINT TO MATCH" IS SPECIFIED FOR ANTENNA CONCEALMENT, PAINT PRODUCT FOR ANTENNA RADOME SHALL BE SHERWIN WILLIAMS COROTHANE II. SURFACE PREPARATION AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND PROJECT OWNER'S GUIDELINE'S.

25. COORDINATION, LAYOUT, AND FURNISHING OF CONDUIT, CABLE AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

26. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.

27. ALL (E)ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW.

28. ALL (E)INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF UTILITY COMPANY ENGINEERING. THE AREAS OF THE PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT, DRIVEWAY OR

29. GRAVEL, SHALL BE GRADED TO A UNIFORM SLOPE, FERTILIZED, SEEDED AND COVERED WITH MULCH UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN SOIL EROSION AND SEDIMENTATION CONTROLS AT ALL TIMES

30. DURING CONSTRUCTION. PER FCC MANDATE, ENHANCED EMERGENCY (E911) SERVICE IS REQUIRED TO MEET NATIONWIDE STANDARDS

31. FOR WIRELESS COMMUNICATIONS SYSTEMS. PROJECT OWNER'S IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GENERALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CABINETS. PROJECT OWNER RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO E911 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS.

32. APPLICABLE BUILDING CODES: SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE:

MASSACHUSETTS STATE BUILDING CODE 8TH EDITION  
ELECTRICAL CODE: MASSACHUSETTS 527 CMR 12:00 (NEC 2014)  
LIGHTING CODE: MASSACHUSETTS 527 CMR 12:00 (NEC 2014)

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION;

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL

ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES; REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

## ELECTRICAL AND GROUNDING NOTES

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.

2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.

3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.

4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.

5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.

6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.

7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THHN INSULATION.

8. RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.

9. RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE AND GREENLEE CONDUIT MEASURING TAPE IN EACH INSTALLED TELCO CONDUIT.

10. WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BTS AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND USE PVC, SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE PVC CONDUIT.

11. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.

12. PPC SUPPLIED BY PROJECT OWNER.

13. GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN ACCORDANCE WITH "T-MOBILE BTS SITE GROUNDING STANDARDS".

14. GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.

15. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.

16. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.

17. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.

18. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.

19. BOND ANTENNA MOUNTING BRACKETS, COAXIAL CABLE GROUND KITS, AND ALNA TO EGB PLACED NEAR THE ANTENNA LOCATION.

20. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.

21. CONTRACTOR SHALL PROVIDE AND INSTALL OMNI DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXISTING TOWER/ (E) MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING.

22. CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMS MAXIMUM RESISTANCE REQUIRED.

23. CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE- TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT.



## ABBREVIATIONS

AGL	ABOVE GRADE LEVEL	G.C.	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
AWG	AMERICAN WIRE GAUGE	MGB	MASTER GROUND BUS		
BCW	BARE COPPER WIRE	MIN	MINIMUM	TBD	TO BE DETERMINED
BTS	BASE TRANSCEIVER STATION	(P)	PROPOSED/NEW	TBR	TO BE REMOVED
(E)	EXISTING	N.T.S.	NOT TO SCALE	TBRR	TO BE REMOVED AND REPLACED
EG	EQUIPMENT GROUND	REF	REFERENCE	TYP	TYPICAL
EGR	EQUIPMENT GROUND RING	REQ	REQUIRED		
(F)	FUTURE				



**SITE NUMBER: 4BN0019C**  
**SITE NAME: BN019/14 ARROW ST SS**  
14 ARROW STREET  
CAMBRIDGE, MA 02138  
MIDDLESEX COUNTY

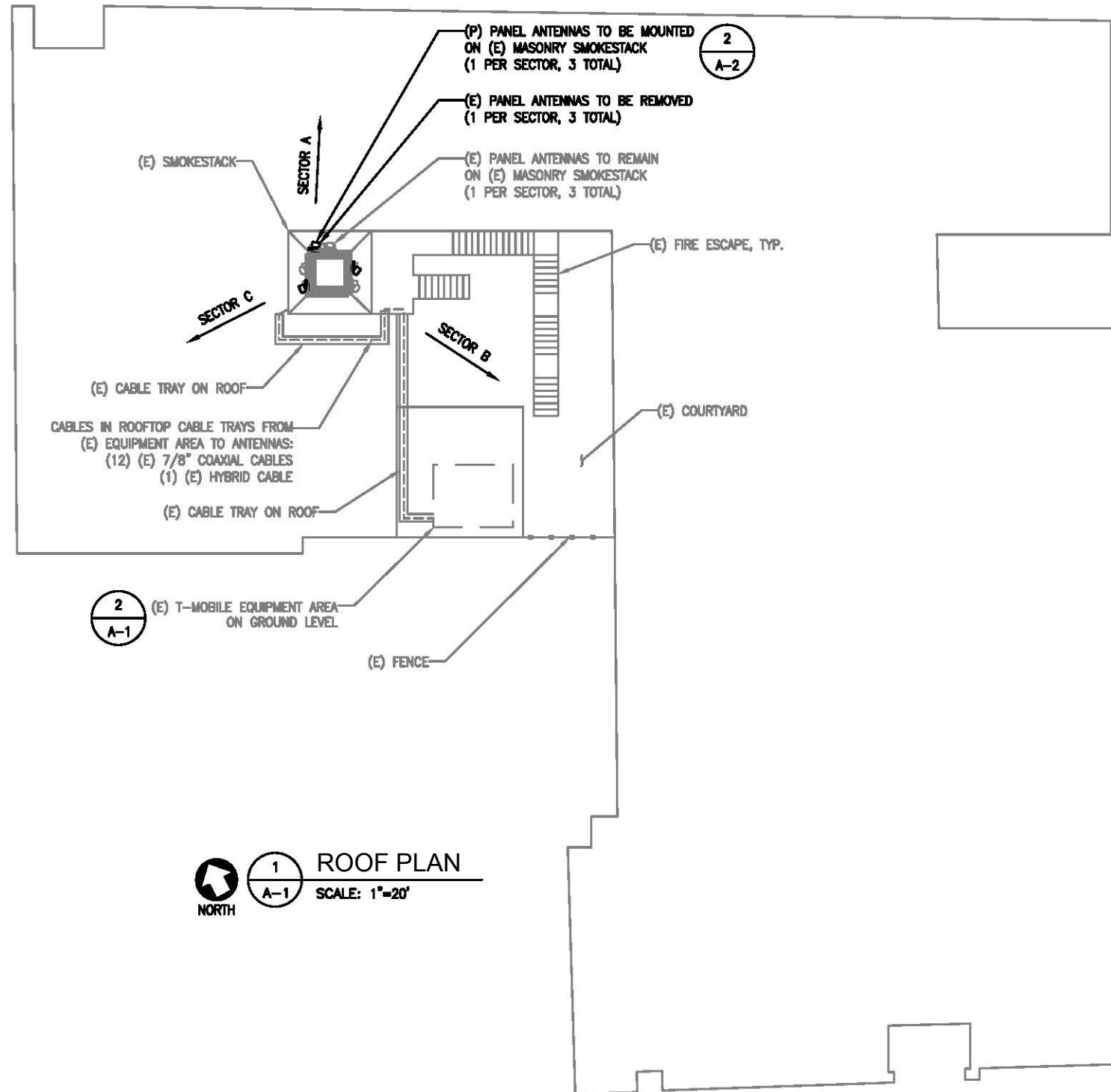
T-MOBILE NORTHEAST LLC  
15 COMMERCE WAY, SUITE B  
NORTON, MA 02766  
OFFICE: (508) 286-2700  
FAX: (508) 286-2893

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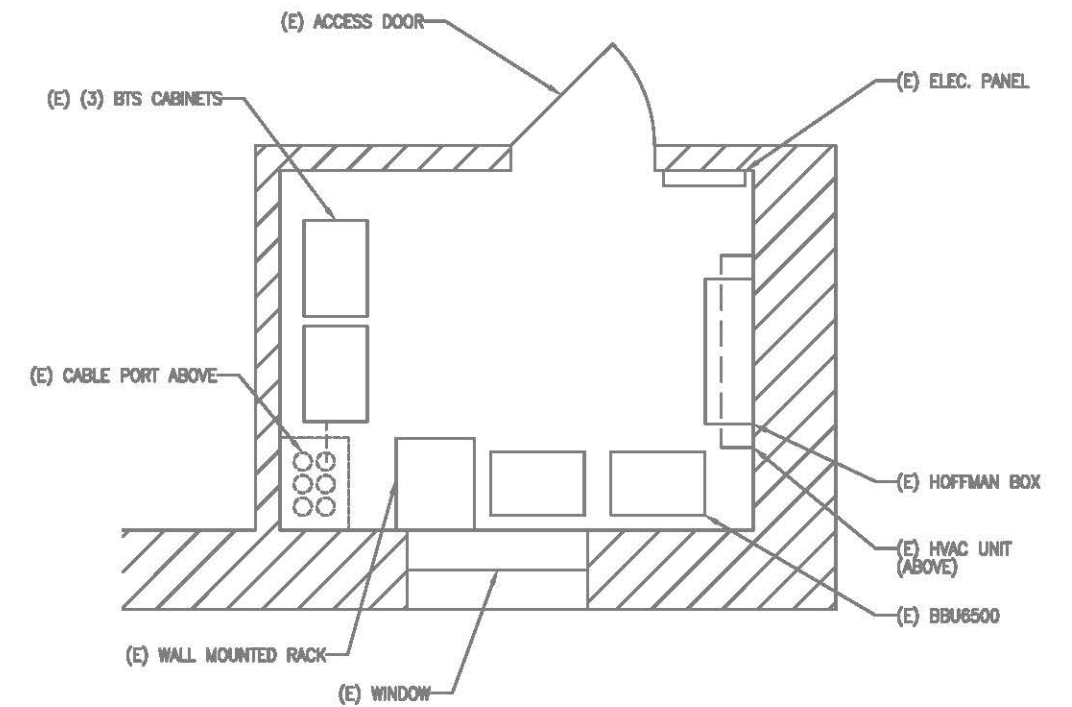
GENERAL NOTES

SHEET NO.

**GN-1**



1 ROOF PLAN  
SCALE: 1"=20'  
NORTH

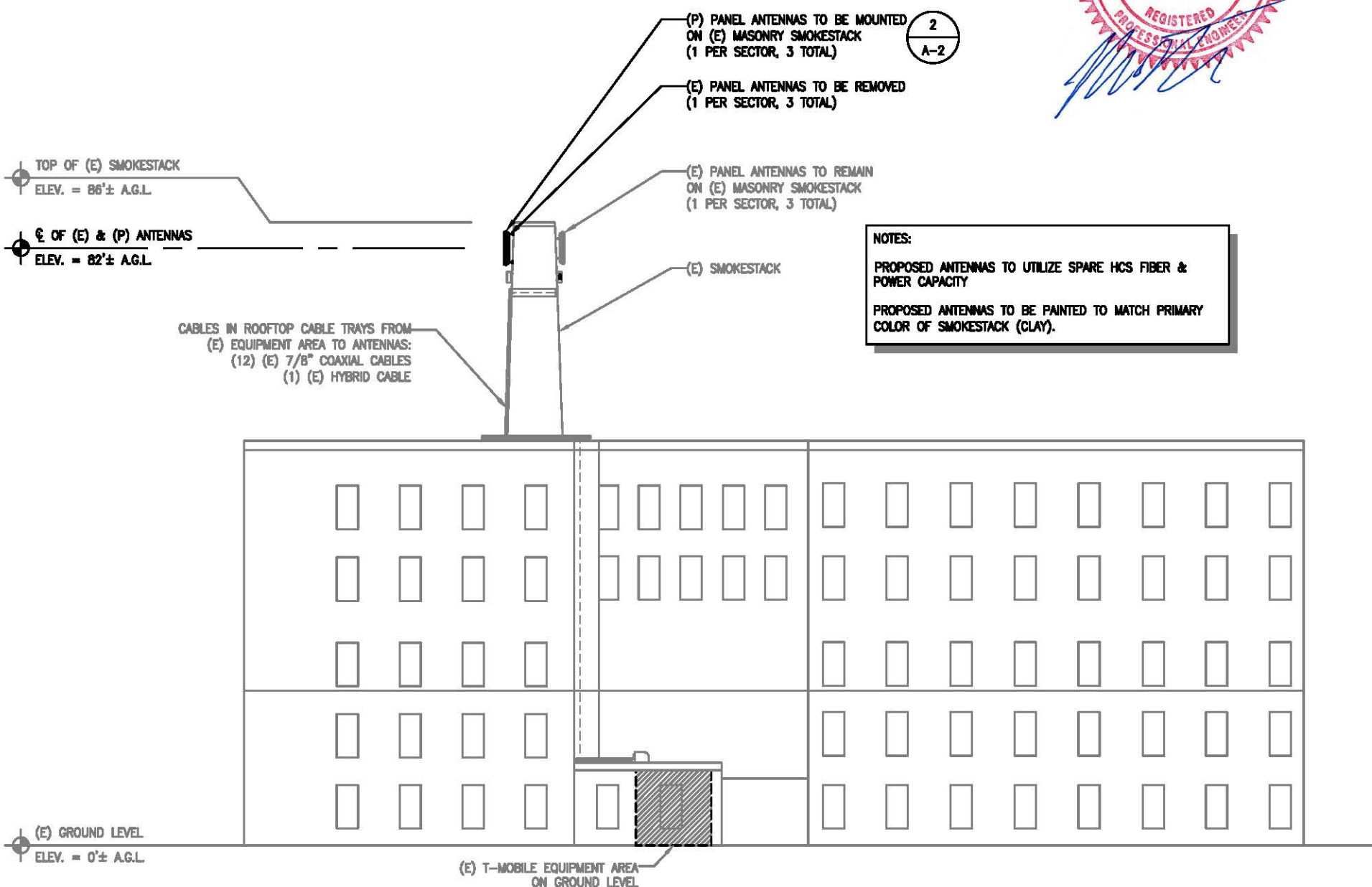


2 EQUIPMENT PLAN  
SCALE: 1/2"=1'-0"  
NORTH



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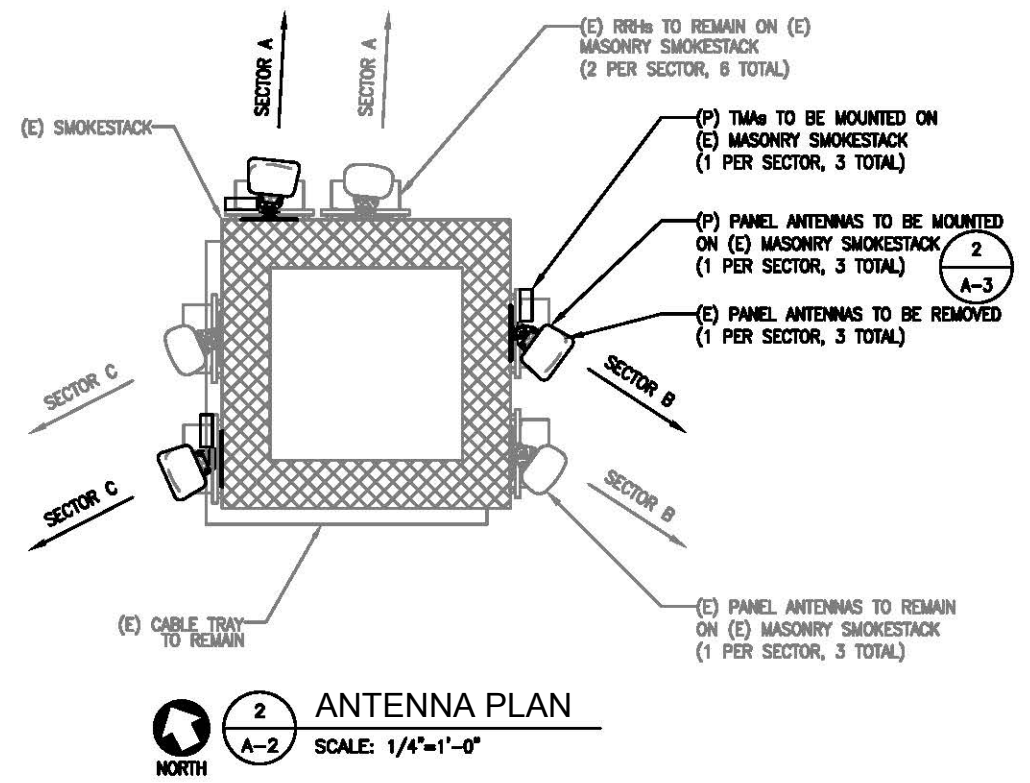




**NOTES:**  
 PROPOSED ANTENNAS TO UTILIZE SPARE HCS FIBER & POWER CAPACITY  
 PROPOSED ANTENNAS TO BE PAINTED TO MATCH PRIMARY COLOR OF SMOKESTACK (CLAY).

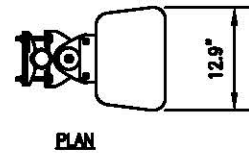
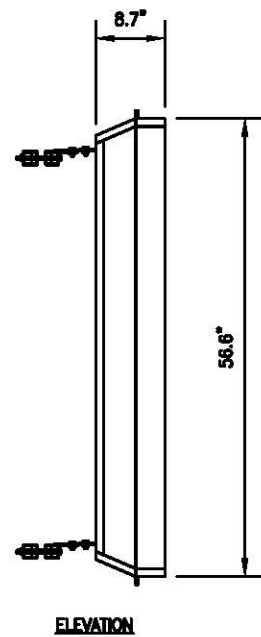
1 SOUTH ELEVATION  
 A-2 SCALE: 1"=20'

EQUIPMENT SCHEDULE	
<b>CURRENT EQUIPMENT</b>	
QUANTITY	DESCRIPTION
3	ERICSSON AIR21 B2A/B4P PANEL ANTENNAS
3	ERICSSON AIR21 KRC 118057-1 PANEL ANTENNAS
6	RRUS11 B12 (RRHs)
12	7/8" COAXIAL CABLES
1	DC/FIBER CABLE
<b>EQUIPMENT TO BE REMOVED</b>	
3	ERICSSON AIR21 B2A/B4P PANEL ANTENNAS
<b>EQUIPMENT TO BE ADDED</b>	
3	ERICSSON AIR32 B66Aa/B2A PANEL ANTENNAS
3	GENERIC STYLE 1B TWIN AWS TMA <sub>s</sub>
<b>FINAL EQUIPMENT CONFIGURATION</b>	
3	ERICSSON AIR21 B2A/B4P PANEL ANTENNAS
3	ERICSSON AIR32 B66Aa/B2A PANEL ANTENNAS
6	RRUS11 B12 (RRHs)
3	GENERIC STYLE 1B TWIN AWS TMA <sub>s</sub>
12	7/8" COAXIAL CABLES
1	DC/FIBER CABLE
EXISTING EQUIPMENT CABINETS WILL NOT CHANGE	
RF CONFIGURATION 792DBE	
<b>SCOPE OF WORK</b>	
1. REMOVE (3) (E) ANTENNAS AND MOUNTS, (1) PER SECTOR.	
2. INSTALL (3) NEW PANEL ANTENNAS, (1) PER SECTOR.	
3. INSTALL (3) NEW TMA <sub>s</sub> , (1) PER SECTOR.	



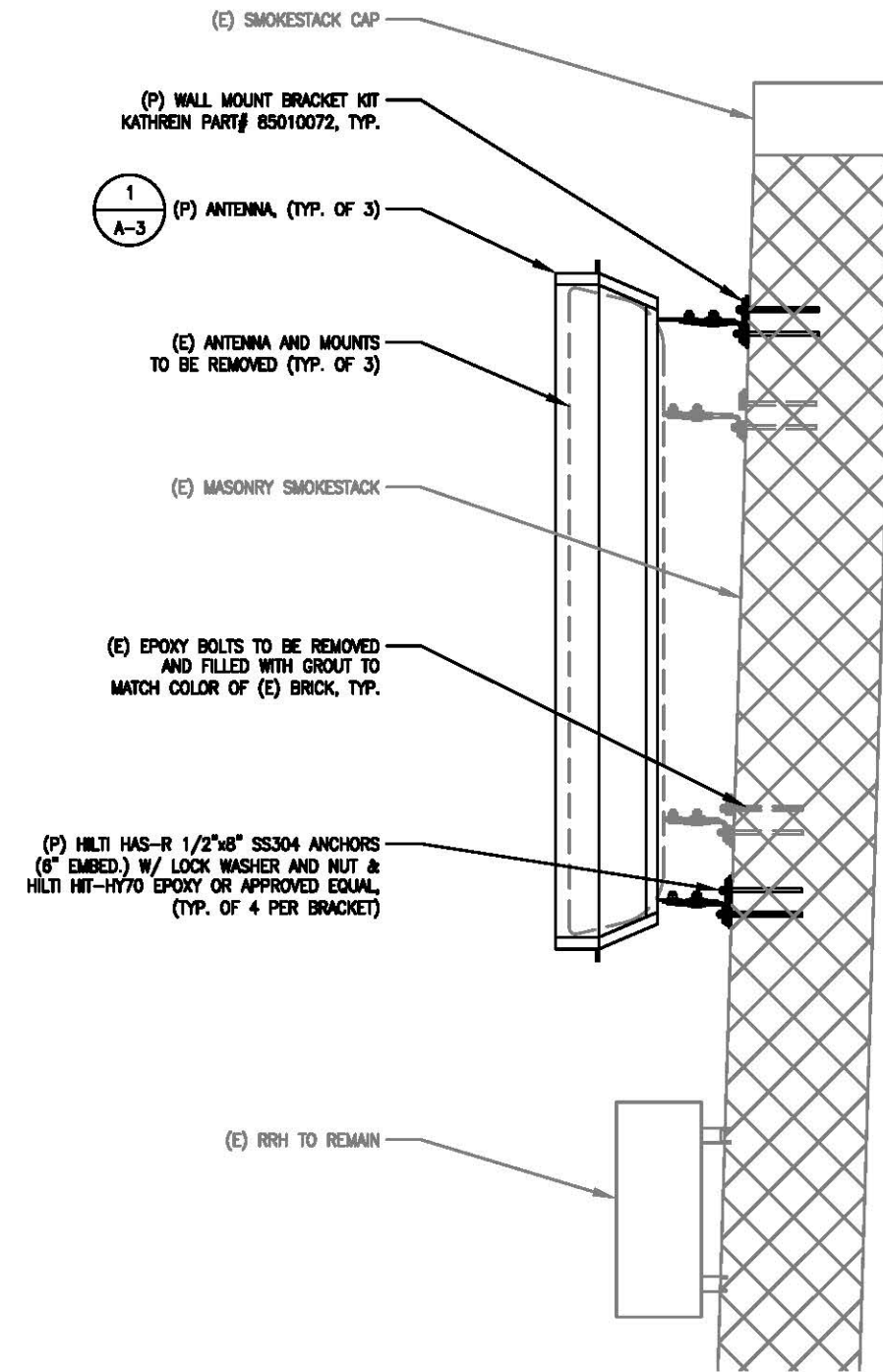
2 ANTENNA PLAN  
 A-2 SCALE: 1/4"=1'-0"

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**AIR 32 B66Aa/B2a**  
 MANUFACTURER: ERICSSON  
 DIMENSIONS (HxWxD): 56.6"x12.9"x8.7"  
 WEIGHT: 132.2 LBS.

1 TYP. ANTENNA DETAIL  
 A-3 SCALE: N.T.S.

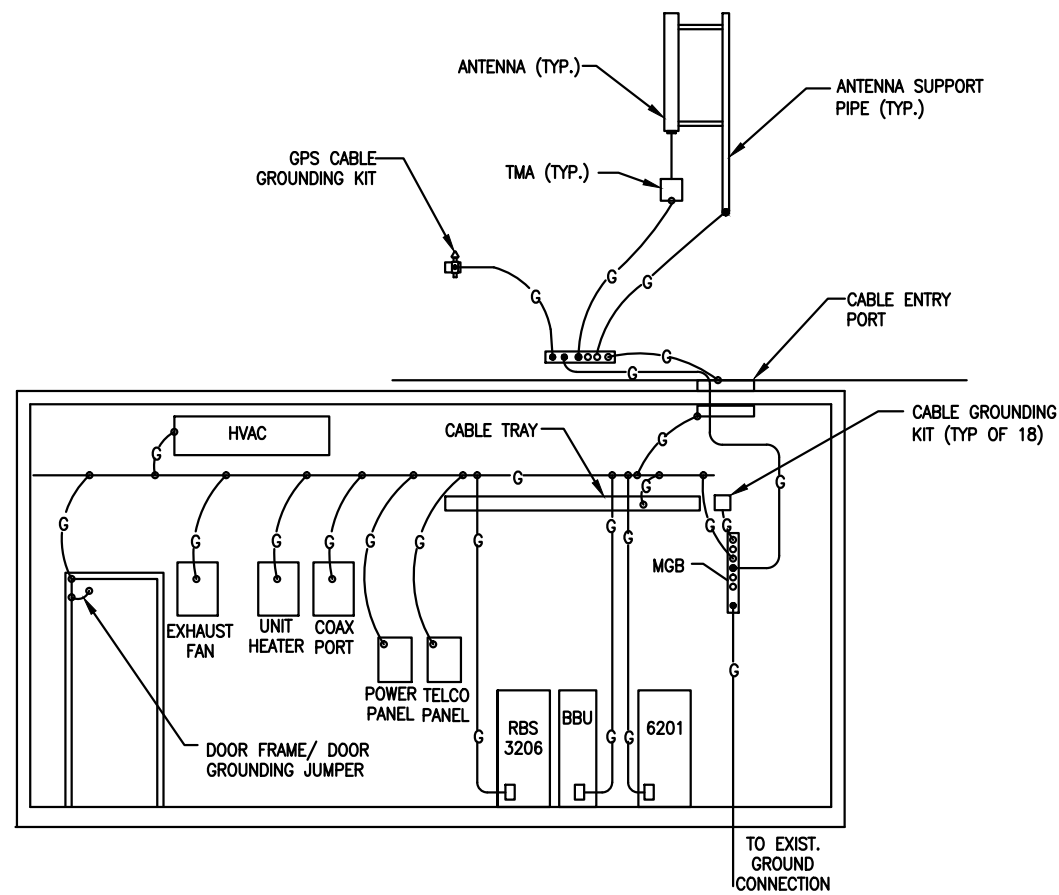


2 ANTENNA MOUNT DETAIL  
 A-3 SCALE: N.T.S.

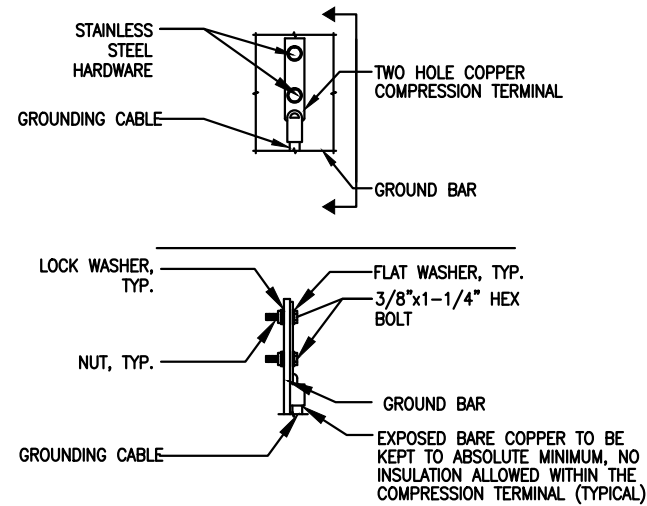


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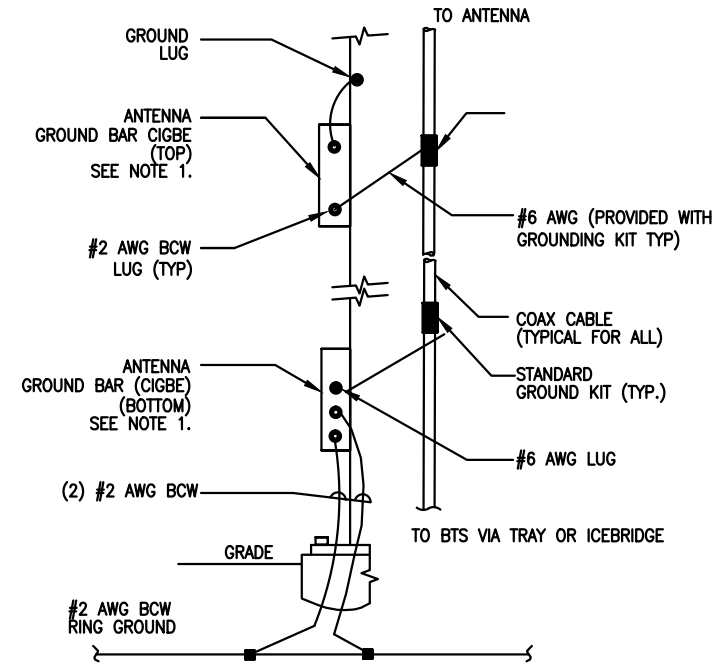


1 TYP. GROUNDING RISER DIAGRAM  
G-1 SCALE:N.T.S.



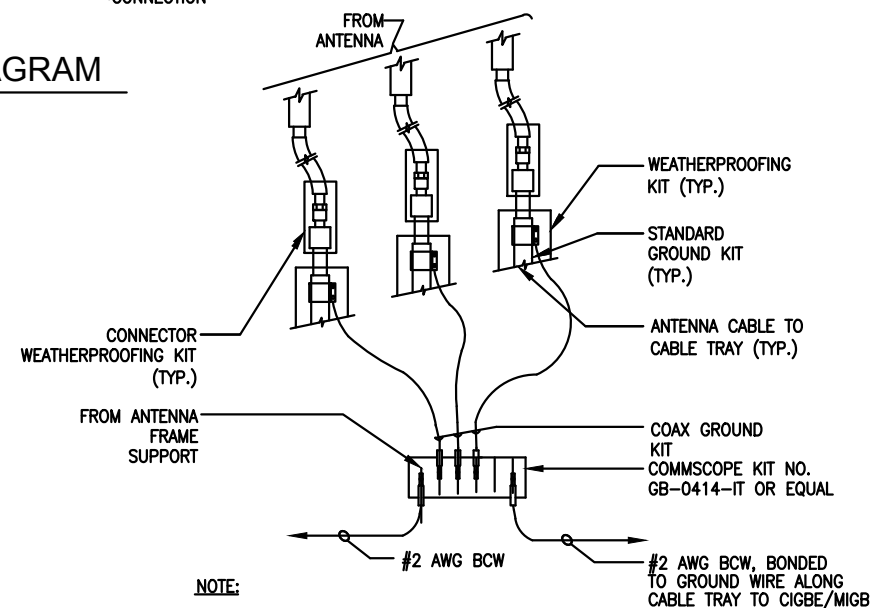
- NOTES:  
 1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.  
 2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.  
 3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB.  
 4. ALL GROUND LUGS MUST BE HEAT SHRUNK AT WIRE/LUG CONNECTION

2 TYP. GROUND BAR CONNECTION DETAIL  
G-1 SCALE:N.T.S.



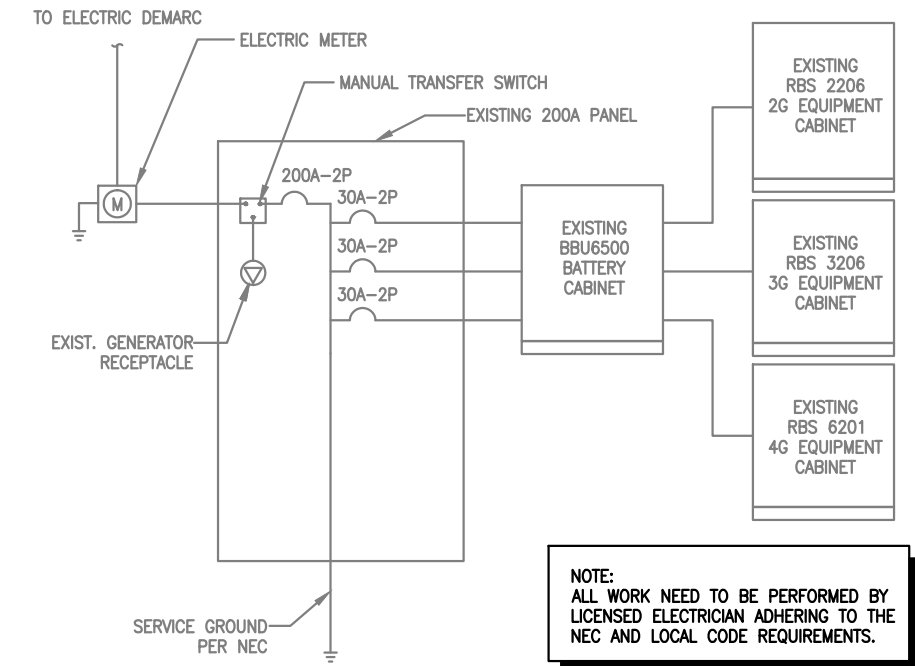
- NOTE:  
 1. NUMBER OF GROUND BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION AND CONNECTION ANTENNA LOCATION AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.  
 2. A SEPARATE GROUND BAR TO BE USED FOR GPS ANTENNA IF REQUIRED.

3 ANTENNA CABLE GROUNDING  
G-1 SCALE:N.T.S.



- NOTE:  
 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE.  
 2. ALL PROPOSED COAXIAL CABLING TO BE GROUNDED IN (3) LOCATIONS; BELOW JUMPER/HARDLINE CONNECTION, AT BASE OF TOWER & PRIOR TO BUILDING/CABINET ENTRY.

4 GROUND WIRE TO GROUND BAR CONNECTION DETAIL  
G-1 SCALE:N.T.S.



- NOTE:  
 ALL WORK NEED TO BE PERFORMED BY LICENSED ELECTRICIAN ADHERING TO THE NEC AND LOCAL CODE REQUIREMENTS.

5 ONE LINE POWER DIAGRAM  
G-1 SCALE:N.T.S.



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4

Existing



Photo #	Location	Gps Coordinates	Distance to site	Orientation	Bearing to site	Visibility
2	Athens St.	42.37052 -71.11535	+/- 0.05 Miles	South	10.61	Year Round

Site: 4BN0019C BN19/14 Arrow ST SS

Photo Simulations are for demonstration purposes only. It should not be used in any other fashion or with any other intent. The accuracy of the resulting data is not guaranteed and is not for redistribution





Simulation



Photo #	Location	Gps Coordinates	Distance to site	Orientation	Bearing to site	Visibility
2	Athens St.	42.37052 -71.11535	+/- 0.05 Miles	South	10.61	Year Round

Site: 4BN0019C BN19/14 Arrow ST SS

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Existing



Photo #	Location	Gps Coordinates	Distance to site	Orientation	Bearing to site	Visibility
3	Mass Ave. and Remington St.	42.37087 -71.11377	+/- 0.07 Miles	West	284.64	Year Round

Site: 4BN0019C BN19/14 Arrow ST SS

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Simulation



Photo #	Location	Gps Coordinates	Distance to site	Orientation	Bearing to site	Visibility
3	Mass Ave. and Remington St.	42.37087 -71.11377	+/- 0.07 Miles	West	284.64	Year Round

Site: 4BN0019C BN19/14 Arrow ST SS

Photo Simulations are for demonstration purposes only. It should not be used in any other fashion or with any other intent. The accuracy of the resulting data is not guaranteed and is not for redistribution



**5**

Federal Communications Commission  
Wireless Telecommunications Bureau

Radio Station Authorization (Reference Copy Only)

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.

Licensee: T-Mobile License LLC

ATTN Dan Menser  
T-Mobile License LLC  
12920 SE 38th St.  
Bellevue, WA 98006

FCC Registration Number (FRN): 0001565449	
Call Sign: KNLF954	File Number: 0002991471
Radio Service: CW - PCS Broadband	

Grant Date 06/05/2007	Effective Date 06/05/2007	Expiration Date 06/27/2017	Print Date 09/06/2007
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Market Number: BTA051	Channel Block: D	Sub-Market Designator: 0
Market Name: Boston, MA		

1st Build-out Date 06/27/2002	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
----------------------------------	--------------------	--------------------	--------------------

**Special Conditions or Waivers/Conditions** This authorization is subject to the condition that the remaining balance of the winning bid amount will be paid in accordance with Part 1 of the Commission's rules, 47 C.F.R. Part 1.

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

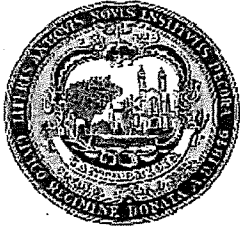
**Conditions**  
Pursuant to Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. Section 309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. Section 310(d). This license is subject in terms to the right of use or control conferred by Section 706 of the Communications Act of 1934, as amended. See 47 U.S.C. Section 606.

To view the geographic areas associated with the license, go to the Universal Licensing System (ULS) homepage at <http://wireless.fcc.gov/uls/> and select "License Search". Follow the instruction on how to search for license information

FCC 601 - MB



6



**CITY OF CAMBRIDGE  
 MASSACHUSETTS  
 BOARD OF ZONING APPEAL  
 831 MASSACHUSETTS AVENUE  
 CAMBRIDGE, MA 02139  
 617 349-6100**

2016 JAN 19 PM 12:07

OFFICE OF THE CITY CLERK  
 CAMBRIDGE, MASSACHUSETTS

CASE NO: BZA-007664-2015 Office-3 Zone/Harvard Square Overlay Dis

LOCATION: 14 Arrow St  
 Cambridge, MA 02138

PETITIONER: T-Mobile Northeast LLC - C/O Anne K. Reynolds, Esq.

PETITION: Special Permit: To modify its existing wireless communications facility at the Property by adding three (3) new panel antennas and three (3) remote radio head units, together with supporting equipment. The antennas and supporting equipment will be facade mounted on the existing smoke stack at the property and will be painted to match its facade.

**VIOLATION :**

Article <u>4.000</u>	Section <u>4.32(G)(1) (Telecommunication Facility).</u>
Article <u>4.000</u>	Section <u>4.40 (Footnote 49) (Telecommunication Facility).</u>
Article <u>10.000</u>	Section <u>10.40 (Special Permit).</u>

DATE OF PUBLIC NOTICE: August 13 & 20, 2015

DATE OF PUBLIC HEARING: August 27, 2015; November 5, 2015; November 19, 2015; January 7, 2016

**MEMBERS OF THE BOARD:**

- CONSTANTINE ALEXANDER - CHAIR
- TIMOTHY HUGHES - VICE-CHAIR
- BRENDAN SULLIVAN
- THOMAS SCOTT
- JANET O. GREEN

**ASSOCIATE MEMBERS:**

- DOUGLAS MYERS
- SLATER W. ANDERSON
- ANDREA A. HICKEY
- ALISON HAMMER
- JIM MONTEVERDE
- GEORGE BEST
- LAURA WERNICK

Members of the Board of Zoning Appeal heard testimony and viewed materials submitted regarding the above request for relief from the requirements of the Cambridge Zoning Ordinance. The Board is familiar with the location of the petitioner's property, the layout and other characteristics as well as the surrounding district.

Case No. BZA-007664-2015  
Location: 14 Arrow Street  
Petitioner: T-Mobile Northeast LLC – c/o Anne Reynolds, Esq.

On January 7, 2016, Petitioner's attorney Ricardo Sousa appeared before the Board of Zoning Appeal requesting a special permit in order to modify its existing wireless communications facility by adding three new panel antennas and three remote radio head units, together with supporting equipment, where the antennas and supporting equipment would be façade mounted on the existing smoke stack and be painted to match the façade. The Petitioner requested relief under Article 4, Section 4.32.G of the Cambridge Zoning Ordinance ("Ordinance"). The Petitioner submitted application materials including information about the project, plans, and photographs.

Mr. Sousa stated that the case had been continued from November 19, 2015, in order to request that the special permit application be reopened, since there was no final written decision, and that the City believed that a special permit was required. He stated that he therefore wished to proceed with the special permit.

After further deliberations, the Chair moved that the Board reconsider its decision of November 19th, 2015, with regard to the request to withdraw the application for a special permit and to reopen the application for the special permit.

The five member Board voted unanimously in favor of allowing the special permit to reopen (Alexander, Sullivan, Scott, Green, and Anderson).

Mr. Sousa stated that that the proposed modifications would not substantially change the physical dimensions of the existing station. He stated that the changes would not increase the height of the station by more than 10 feet or 10%, would not protrude more than 6 feet, would not add more than four cabinets, would not entail excavation, would not defeat existing concealment, and would comply with all conditions. He stated he had the support of the Planning Board and the Harvard Square Advisory Commission.

The Chair asked if anyone wished to be heard on the matter, no one indicated such.

After discussion, the Chair moved that the Board find that the requirements of the Ordinance could not be met without the granting the special permit. The Chair moved that the Board find that traffic generated or patterns of access or egress resulting from the proposed work would not cause congestion, hazard, or substantial change in established neighborhood character. The Chair moved that the Board find that continued operation or development of adjacent uses as

permitted in the Ordinance would not be adversely affected by what was proposed. The Chair moved that the Board find that no nuisance or hazard would be created to the detriment of the health, safety, or welfare of the occupant or the citizens of the City. The Chair moved that the Board find that what was proposed would not impair the integrity of the district or adjoining district or otherwise derogate from the intent and purpose of the Ordinance. The Chair moved that the Board find that the proposal had the support of the Harvard Square Advisory Commission and the Planning Board. The Chair moved that the Board find that the proposal satisfied the requirements of section 6409 (a) of the Middle Class Tax Relief and Job Creation Act of 2012 (Spectrum Act). The Chair moved that the Board find that the proposed facility did not substantially change the physical dimensions of the existing wireless tower or base station within the meeting of Section 6409(a) of The Spectrum Act and, therefore, the petitioner was entitled to the special permit under the Ordinance. The Chair moved that the Board grant the special permit on the following conditions:

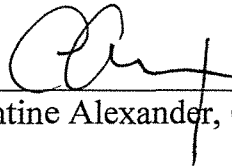
1. that the work proceed in accordance with the plans submitted by the petitioner, as initialed by the Chair,
2. that, upon completion of the work, the physical appearance and impact of the proposed work be consistent with the photo simulations submitted by the petitioner and initialed by the Chair,
3. that the petitioner at all times maintain the proposed work so that its physical appearance and impact will remain consistent with the photo simulations previously referred to,
4. that should the petitioner cease to maintain or utilize the equipment for a continuous period of six months or more, it remove promptly thereafter such equipment and return the building on which it is located to its prior condition to the extent reasonably practicable, and
5. that the antennas match the color of the facade of the building, as with the prior antennas.

The five member Board voted unanimously in favor of the granting the special permit (Alexander, Sullivan, Scott, Green, and Anderson). Therefore, the special permit is granted.

The Board based its decision upon all the information presented, the above findings and upon the following:

- 1) The meeting of the requirements of the Ordinance;
- 2) Traffic generated or patterns of access or egress would not cause congestion, hazard, or substantial change in the established neighborhood character;
- 3) The continued operation of or the development of adjacent uses as permitted in the Ordinance would not be adversely affected by the nature of the proposed uses;
- 4) Nuisance or hazard would not be created to the detriment of the health, safety and /or welfare of the occupants of the proposed use;
- 5) The proposed use would not impair the integrity of the district or adjoining district or otherwise derogate from the Ordinance, and in fact would be a significant improvement to the structure and benefit the neighborhood, and;
- 6) The new use or building construction is not inconsistent with the Urban Design Objectives set forth in Section 19.30 of the Cambridge Zoning Ordinance.

The Board of Zoning Appeal is empowered to waive local zoning regulations only. This decision therefore does not relieve the petitioner in any way from the duty to comply with local ordinances and regulations of the other local agencies, including, but not limited to the Historical Commission, License Commission and/or compliance with requirements pursuant to the Building Code and other applicable codes.



Constantine Alexander, Chair

Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 1-19-16 by Maria Pacheco, Clerk.

Twenty days have elapsed since the filing of this decision.

No appeal has been filed \_\_\_\_\_.

Appeal has been filed and dismissed or denied.

Date: \_\_\_\_\_ City Clerk.

**7**

March 30, 2017

**VIA HAND DELIVERY**

Ranjit Singanayagam  
Commissioner of Inspectional Services/Building Commissioner  
City of Cambridge  
831 Massachusetts Avenue  
Cambridge, MA 02139

Re: Eligible Facilities Request to Modify Transmission Equipment at an Existing Base Station located at **14 Arrow Street, Cambridge, MA 02138.**

Dear Mr. Singanayagam:

A. T-Mobile is Filing an Eligible Facilities Request

Prince Lobel Tye LLP, on behalf of T-Mobile Northeast LLC is submitting the attached Eligible Facilities Request application to add, remove, modify, or replace Transmission Equipment at an Existing Base Station located at 14 Arrow Street, Cambridge, MA 02138.

Because this jurisdiction has not yet developed an Eligible Facilities Request permit application form that complies with Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012, commonly known as the "Spectrum Act" (Pub. Law No. 112-96, 126 Stat 156) (codified at 47 U.S.C. § 1455), this Eligible Facilities Request is attached to the Building Permit Application form which was customarily used by this jurisdiction when reviewing requests to collocate or modify wireless telecommunications facilities. Because federal law now preempts many of the permit application requirements that this jurisdiction would previously have required from an applicant, this Eligible Facilities Request application provides only the information that federal law allows this jurisdiction to consider when reviewing an Eligible Facilities Request.

Section 6409(a) of the Spectrum Act mandates that state and local governments "*may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.*" Under Section 6409(a)(2)(A)-(C) an Eligible Facilities Request is any request to modify a Tower or Base Station that involves "collocations of new Transmission Equipment," "removal," or "replacement" of Transmission Equipment.

Prince Lobel Tye LLP  
One International Place  
Suite 3700  
Boston, MA 02110  
TEL: 617 456 8000  
FAX: 617 456 8100

## B. Why this Eligible Facilities Request Must Be Granted

This Eligible Facilities Request involves an effort to collocate, remove, modify, or replace Transmission Equipment at an existing Base Station operated by an FCC licensed wireless carrier. The FCC has defined Base Station as “the equipment and non-tower supporting structure at a fixed location that enable Commission-licensed or authorized wireless communications between user equipment and a communications network . . . the term includes equipment associated with wireless communications service including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supply, and comparable equipment.” The term existing base station also includes a structure that currently houses or supports an antenna, transceiver or other associated equipment that constitutes part of a Base Station at the time the application is filed even if the structure was not built solely or primarily to provide such support. The existing Base Station in this application is approximately eighty-six feet (86’) high and presently contains wireless facilities. The existing Base Station meets the Federal Communications Commission (“FCC”) definition of a Base Station.

The list of equipment identified in the Eligible Facilities Request application that will be collocated, removed, or replaced at the Base Station also is Transmission Equipment as determined by the FCC. The FCC has defined Transmission Equipment as “any equipment that facilitates transmission for any Commission-licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas and other relevant equipment associated with and necessary to their operation, including coaxial or fiber-optic cable, and regular and back-up power supply. This definition includes equipment used in any technological configuration associated with any Commission-authorized wireless transmission, licensed or unlicensed, terrestrial or satellite, including commercial mobile, private mobile, broadcast and public safety services, as well as fixed wireless services such as microwave backhaul or fixed broadband.”

The FCC, in a Report and Order adopted on October 17, 2014, determined that any modification to an existing telecommunications Base Station that meets the following six criteria does not substantially change the physical dimensions of the existing Base Station and therefore is an Eligible Facilities Request which must be granted:

1. *The modifications to the Transmission Equipment do not increase the height of the Base Station by more than 10 percent (10%) or ten (10) feet, whichever is greater.*
  - a. The height of the Base Station is approximately eighty-six feet (86’) high. The proposed in-kind replacement of three (3) existing panel antennas with three (3) new panel antennas will not increase the height of the Base Station by more than ten feet (10’).
2. *The modifications to the Transmission Equipment do not protrude from the edge of the support structure by more than six (6) feet.*
  - a. The proposed replacement antennas will not protrude from the edge of the building and therefore will not exceed the six (6) foot limitation.



3. *The modifications to the Transmission Equipment do not involve the installation of more than the standard number of equipment cabinets for the technology involved, not to exceed four.*
  - a. The Applicant does not propose to install any additional equipment cabinets.
4. *The modifications to the Transmission Equipment do not entail any excavation or deployment outside of the Base Station site.*
  - a. There will be no excavation or deployment outside of the Base Station site.
5. *The modifications to the Transmission Equipment do not defeat any existing concealed or stealth-design.*
  - a. Pursuant to the previous decision by the Zoning Board of Appeal for the City of Cambridge (the “Board”) for this site, dated January 7, 2016 (Case No. BZA-007664-2015) (the “Decision”), and attached hereto as Tab 6, the existing panel antennas are located in the preferred location on the smoke stack and comply with the required conditions for a stealth design, which conditions were more specifically, (a) that the antennas and supporting equipment (including cable trays) be painted to blend in with the smoke stack and (b) that the design be approved by the City of Cambridge Historical Commission. The proposed replacement antennas will not defeat the existing stealth design as the replacement antennas will be located in the same exact position and are only 1’ 5” longer than the existing antennas they are replacing. The replacement antennas will also be similarly painted to match the smoke stack. As such, the proposed modification will not exceed what the facility was originally approved for. The installation of the new antennas will not substantially increase the physical dimensions of the facility and as such its impact will be de minimus for many of the same reasons stated in the Decision.
6. *The modifications to the Transmission Equipment comply with prior conditions of approval of the Base Station, unless the non-compliance is due to an increase in height, increase in width, addition of equipment cabinets, or new excavation that does not exceed the corresponding “substantial change” thresholds in numbers 1-4.*
  - a. Based on the foregoing, the proposed modifications to the Base Station fully conform to Section 6409(a) of the Spectrum Act and comply with the prior conditions of approval of the Base Station.

There is a certification attached to the accompanying Eligible Facilities Request that identifies how each of the six review criteria identified by the FCC is met. The modifications to the Transmission Equipment at the Base Station located at 14 Arrow Street, Cambridge, MA 02138 contained in this Eligible Facilities Request fully conform to Section 6409(a) as enacted by

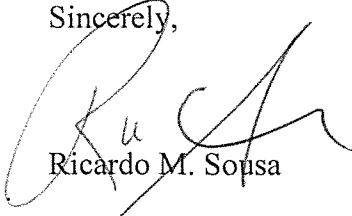
Congress and as interpreted by the FCC. Accordingly, this Eligible Facilities Request must be approved within 60 days, as required by federal law and FCC implementing regulations.

C. Notice of Federal Law Expedited Permit Processing and Deemed Granted

Under federal law, an Eligible Facilities Request is deemed granted sixty (60) days after a complete application is filed with a local jurisdiction. If sixty days pass after the submission of T-Mobile's accompanying Eligible Facilities Request and the City of Cambridge has not acted to grant or deny the request, it will be deemed granted. At that time, the applicant may advise the City of Cambridge that the application has been deemed granted. If the City of Cambridge wishes to contest whether the Eligible Facilities Request has been deemed granted, the burden is on the City of Cambridge to file a lawsuit in a court of competent jurisdiction within 30 days after receipt of a written communication notifying it that the Eligible Facilities Request has been deemed granted. Failure to file a lawsuit in a timely manner may forever bar this jurisdiction from contesting that this Eligible Facilities Request has been deemed granted.

T-Mobile is committed to working cooperatively with you, and all jurisdictions around the country, to secure expeditious approval of requests to modify existing personal wireless service facilities. Please do not hesitate to contact me if you have questions.

Sincerely,



Ricardo M. Sousa

Direct: 617-456-8123

Email: [rsousa@princelobel.com](mailto:rsousa@princelobel.com)

**ELIGIBLE FACILITIES REQUEST CERTIFICATION FOR NON-SUBSTANTIAL  
CHANGES  
TO AN EXISTING BASE STATION**

“Base Station” means the equipment and non-tower supporting structure at a fixed location that allow Commission-licensed or authorized wireless communications between user equipment and a communications network. The term base station includes any equipment associated with wireless communications services including but not limited to radio transceivers, antennas, coaxial or fiber-optic cables, regular or back up power supply, and comparable equipment. The term existing base station also includes a structure that currently houses or supports an antenna, transceiver or other associated equipment that constitutes part of a base station at the time the application is filed even if the structure was not built solely or primarily to provide such support. “Base Station” includes the relevant equipment in any technological configuration, including small cells and DAS. Remember “Base Station” has two separate meanings: (1) the supporting structure that houses FCC licensed or authorized wireless equipment and (2) the wireless equipment itself. Keep this distinction in mind when calculating a substantial change in physical dimensions.

“Transmission Equipment” means any equipment that facilitates transmission for any FCC licensed or authorized wireless communication service, including but not limited to, radio transceivers, antennas and other relevant equipment associated with and necessary to their operation, including coaxial or fiber-optic cable, and regular and back-up power supply. This definition includes equipment used in any technological configuration associated with any Commission-authorized wireless transmission, licensed or unlicensed, terrestrial or satellite, including commercial mobile, private mobile, broadcast and public safety services, as well as fixed wireless services such as microwave backhaul or fixed broadband.

“Collocation” means the addition, removal or replacement of Transmission Equipment to an existing tower or a base station. This means that the existing support structure, be it a tower or a building or some other structure, must presently support FCC licensed or authorized wireless facilities. The FCC further requires that the site (tower, building, or other structure) was previously approved by the appropriate agency of government to house wireless facilities. Illegal wireless installations cannot be the basis for an eligible facilities request. However, if a communications Tower was erected at a time when it was exempt from zoning, the Tower can be modified through the Eligible Facilities Request process even if the Tower is no longer exempt from zoning.

Site Address: 14 Arrow Street, Cambridge, MA 02139

**Existing Facilities**

The Existing Facility is comprised of six (6) panel antennas façade mounted to the existing smoke stack on the building, together with supporting equipment, cabling and equipment cabinets located in an equipment room within the building.

### Height of Base Station

Height above ground level of the tallest point on the existing base station: 86 (feet)

Height above ground level of the tallest point of the existing base station after the installation of the *proposed* equipment: 86 (feet)

- 1) Does the height above ground level of the proposed equipment exceed the height of the tallest point on the existing base station by more than 10 percent (10%) or ten (10) feet, whichever is greater?

Yes  No

### Width of Base Station

- 2) Will any of the proposed equipment protrude from the edge of the support structure by more than six (6) feet?

Yes  No

### Excavation or Equipment Placement

- 3) Will the proposed changes in Transmission Equipment involve excavation or placement of new equipment outside the existing Base Station site or outside any access or utility easements currently related to the site?

Yes  No

### Equipment Cabinets

- 4) Will the proposed modification in Transmission Equipment involve installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four?

Yes  No

### Concealed or Stealth-Designed Wireless Facilities

5)

- a) Is the existing wireless facility concealed or stealth- designed?

Yes  No

- b) If the answer to 5a) is "Yes," will the proposed modification in Transmission Equipment defeat the existing concealed or stealth-design?

Yes  No

## Compliance with Preexisting Conditions of Approval for the Base Station

6)

- a) Were there any conditions of approval stated in the original government approval of the Base Station?

Yes  No

- b) Will the proposed modification in Transmission Equipment comply with conditions of approval imposed on the Base Station prior to February 22, 2012?

Yes  No

- c) If the answer to 6b) is “No,” is the non-compliance due solely to any of the conditions addressed in Questions 1-5 above?

Yes  No

**If the answers to questions 1-4 are “No,” the answer to either 5a) or b) is “No,” and the answers to 6a) is “No” or the answers to either 6b) or 6c) are “Yes,” then the proposed modifications do not substantially change the physical dimensions of the existing Base Station.**

Explanatory Comments:

Question No. 5 (b)

Comment: Pursuant to the previous decision by the Zoning Board of Appeal for the City of Cambridge (the “Board”) for this site, dated January 7, 2016 (Case No. BZA-007664-2015) (the “Decision”), and attached hereto as Tab 6, the existing panel antennas are located in the preferred location on the smoke stack and comply with the required conditions for a stealth design, which conditions were more specifically, (a) that the antennas and supporting equipment (including cable trays) be painted to blend in with the smoke stack and (b) that the design be approved by the City of Cambridge Historical Commission. The proposed replacement antennas will not defeat the existing stealth design as the replacement antennas will be located in the same exact position and are only 1’ 5” longer than the existing antennas they are replacing. The replacement antennas will also be similarly painted to match the smoke stack. As such, the proposed modification will not exceed what the facility was originally approved for. The installation of the new antennas will not substantially increase the physical dimensions of the facility and as such its impact will be de minimus for many of the same reasons stated in the Decision.

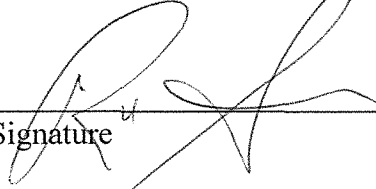
Question No. 6 (c)

Comment: Notwithstanding the aforementioned showing that the proposed modification to this site does not substantially change the physical dimensions of the existing Base Station and is subject to the Spectrum Act, this site is the proper location for a wireless installation pursuant to the Decision. Furthermore, in the Decision the Board stated that continued operation of adjacent

uses would not be adversely affected by the previously proposed equipment addition, and no nuisance or hazard would be created to the detriment of the health, safety or welfare of the occupant or the citizens of the City of Cambridge. The proposed modification to this site is very similar to the previous modification approved by this board and as such, we submit will have the same de minimis impact. Moreover, the proposed installation is necessary to accommodate the existing and future customer base as demand for data and cell service has steadily increased and continues to do so.

---

This certification is dated this 30 day of March, 2017.

  
\_\_\_\_\_  
Signature

Ricardo M. Sousa, Esq., Attorney for Applicant  
Name & Title

**Eligible Facilities Request (EFR) Application Form**

[Attach this EFR form to the local jurisdiction form used to process cell site modifications.]

Date of Submittal: \_\_\_\_\_

Submitted by:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Contact information: \_\_\_\_\_

Name of Jurisdiction: \_\_\_\_\_

Address of Jurisdiction: \_\_\_\_\_

Contact Name for Jurisdiction: \_\_\_\_\_

Name of Local Government Permit Application: \_\_\_\_\_

Local Government File #: \_\_\_\_\_

Street Address of Site: \_\_\_\_\_

Tax Parcel # of Site: \_\_\_\_\_

Latitude/Longitude of Site: \_\_\_\_\_

List Each Piece of Transmission Equipment that will be Collocated or Added:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

List Each Piece of Transmission Equipment that will be Removed:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

List Cabinets that will be Collocated or Added at the Site:

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List Cabinets that will be Removed at the Site:

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Permit Application Deposit Amount: \_\_\_\_\_

Municipal Consultant Review Fee Deposit (if applicable): \_\_\_\_\_





# INSPECTIONAL SERVICES DEPARTMENT

City of Cambridge • 831 Massachusetts Avenue • Cambridge, Massachusetts 02139

617-349-6100 • TTY 617-349-6112 • Fax 617-349-6132

Ranjit Singanayagam - Commissioner

**Application for a PERMIT to Build, Alter, or Repair ANY BUILDING**  
(other than a 1 or 2 family Dwelling) in accordance with Massachusetts State Building Code 780 CMR (MSBC).  
**Application must be filled out COMPLETELY in ink.**

**Building Address** 14 Arrow Street, Cambridge, MA  
**Building Owner** BBC Trust, c/o Dowse Inc. **Phone #** 617-864-4320  
**Owner Address** 14 Arrow Street, Cambridge, MA 02138  
**Contractor** Aerial Wireless **Phone #** 508-272-1631  
**Contractor Address** 125 Depot Street, Bellingham, MA 02019  
**Architect/Engineer** Advanced Engineering Group, P.C. **Phone #** 401-354-2403  
**Address** 500 North Broadway, East Providence, RI 02914

**TYPE OF WORK:** New Construction  Addition  Change of Occupancy   
 Repair  Alteration Level 1  Alter Level 2  Alter Level 3  Roof

Wireless Upgrade

## EXISTING BUILDING INFORMATION (Required - MSBC Ch. 34 Sec 101.5.4.0 Amended)

**Current Use** Wireless Base Station Facility **Proposed Use** Wireless Base Station Facility  
**For Residential Use:** Current number of dwelling units \_\_\_\_\_ Proposed number of dwelling units \_\_\_\_\_

**Building Construction type:**  
 Non-Combustible (Type I/II)  Masonry/Wood (III)  Wood (IV,V)

**Building Equipped with :** Sprinkler System  Yes / No Fire Alarm:  Yes / No Smoke Detection:  Yes / No

**Provide a description of the building:** 86' Smokestack on top of a 6 story building

**Description of Proposed Work:** Include effects of the proposed work on the structural, egress, fire protection, energy conservation, light, and ventilation systems of the space or building. Include any changes as listed in Zoning Information (pg 2).  
Swap 3 antennas for 3 new antennas, install (3) tower mounted amplifiers (TMA's)

**Note: 2 sets of construction documents, plus 1 set in digital format, required to be submitted for review.**

## ESTIMATED COST OF CONSTRUCTION:

**Building** \$50,000 **HVAC** \_\_\_\_\_  
**Electric** \_\_\_\_\_ **Sprinklers** \_\_\_\_\_  
**Plumbing/Gas** \_\_\_\_\_ **Fire Detection** \_\_\_\_\_  
**Gas Fitting** \_\_\_\_\_ **Fire Suppression** \_\_\_\_\_

**Total Estimated Cost of Construction** \$50,000

Total Construction costs include all work done concurrently with the work contemplated by the Building Permit including demolition, plumbing, heating, electrical, air conditioning, painting, wall to wall carpeting, landscaping, site improvements, etc. Furnishings and portable equipment are not part of the total construction cost. A signed copy of contractor/client contract must be included with Application. A final cost affidavit completed by the owner will be required at construction completion for all projects (affidavit required for final sign-off).

# ZONING INFORMATION (REQUIRED)

The Applicant is responsible for proving Zoning compliance.

007664-2015

Current Use Wireless Proposed Use Wireless Zone O-3 BZA/PB Case # \_\_\_\_\_

For residential: Current number of dwelling units N/A Proposed number of dwelling units N/A

Proposed work includes – reconstruction of an existing exterior building element (porch, deck, etc.). Provide recent photos of existing conditions, and fully dimensioned plans and elevations.

Proposed work includes - enclose a covered porch, build uncovered exterior stairs, build decks at the 1<sup>st</sup> floor level, build roof decks over existing 1<sup>st</sup> or 2<sup>nd</sup> floors, create new windows (including moving existing windows), doors, or skylights. Provide a stamped and scalable surveyor's plot plan, the height of the highest point of the roof, recent photos of existing conditions, and fully dimensioned plans and elevations. If Zoning Appeal case, include copy of registered decision.

Proposed work includes – new construction, additions, dormers, bays, balconies, covered stairs/landings and/or porches, decks at the 2<sup>nd</sup> floor level or higher, roof decks over the 3<sup>rd</sup> floor or higher, or to excavate a basement, change any floor or ceiling height, change the use or increase the number of dwelling units of a building, erect an outbuilding, or to do any similar work. Provide all previously listed documents, plus a comprehensive Zoning Analysis showing compliance with all aspects of the Cambridge Zoning Ordinances. If BZA or Planning Board case, include copy of registered decision.

None of the above. The proposed work is not of the types listed above and is not regulated by the Zoning Ordinance.

**Certified Plot Plan:** For new structures and additions, a certified plot plan shall be submitted after the foundation is poured and before further work commences.

**Energy Conservation:** Effective July 1, 2010, the City of Cambridge has adopted the Stretch Energy Code, 780 CMR115AA. The Stretch Code requirements are in addition to the requirements of the most recently published version of the ICC International Energy Conservation Code (IECC). Check all applicable:

- The proposed project is subject to Stretch Code and/or IECC provisions and documentation indicating compliance has been included with this application.
- The proposed work involves changes to the building lighting system and a Lighting Power Density Report has been included with this application.
- The proposed work does not access or affect the building energy envelop.

All Residential work requires a completed Energy Star Qualified Homes Thermal Bypass Inspection Checklist at final inspection. This form is available at [www.energystar.gov](http://www.energystar.gov) or from the Building Official.

## Fire Protection:

For proposed work that may include any fire protection work as regulated by MSBC Ch. 9 Fire Protection Systems, review and approval of the construction documents by the Cambridge Fire Department is required before submittal.  
**Camb. Fire Dept. has reviewed this application** Yes /  No

A Narrative Report describing all fire protection systems and their operation is required to be submitted with this application ( Sec 902.1 #1a, MSBC Amended). **This report has been submitted** Yes /  No

All Fire Protection design documents and calculations are required to be submitted as part of the Building Permit Application.

## Noise Ordinance Affidavit

The undersigned as the Architect/Construction Supervisor for this proposed construction, do hereby certify knowledge of Chap 8.16 of the Cambridge Municipal Code concerning noise control.

I certify that necessary actions will be taken concerning the design, specification of, and location of noise producing equipment: e.g., transformers, air handling units, etc., to insure that this project will not result in noise levels that exceed that allowed by the Municipal Code.

Name Anthony Golini

Title Director

Signature Anthony W. Golini

Registration/License # Kevin Cunningham - Aerial Wireless Services  
CS-088703

Please note that additional Mechanical Permits and Sheet Metal permits may be required for installation of any mechanical system. New rooftop units (including solar panels) require an existing building analysis by a Registered Structural Engineer for suitability of the installation.

# CONSTRUCTION SERVICES (REQUIRED)

Any project proposed for any building over 35000 ft<sup>3</sup> must meet the requirements of Sec.107.6 & Chapter 17, MSBC.

## Architect / Registered Design Professional (Construction Control Sec 107, MSBC Amended)

Name Marc Chretien Phone # 401-354-2403

Firm Advanced Engineering Group P.C. Cell Phone# \_\_\_\_\_

Address 500 North Broadway, East Providence, RI 02914

MA Registration Number 40313 Email Address: mchretien@aegpc.net

Application shall include signed and stamped letter from Registered Design Professional attesting to duties and obligations required by Sections 107.6 (Construction Control) and Chapter 17 (Structural Tests and Special Inspections) MSBC Amended. Application shall also include schedule of tests, inspections and observations as required by Section 1701.1.1 MSBC Amended.

## Structural Peer Review (MSBC 780 CMR 105.9 Amended):

Is Independent Structural Engineering Peer Review required Yes \_\_\_\_\_ No x

If Yes, review must be submitted with application. Peer Review is required for high rise construction or buildings of unusual complexity as determined by the BBRs.

**Read Before Signing:** The undersigned hereby certifies that he/she has read and examined this application and that the proposed work subject to the provisions of the Massachusetts State Building Code and other applicable laws and ordinances is accurately represented in the statements made in this application and that the work shall be carried out in accordance with the foregoing statements and in compliance with the provisions of law and ordinance in force on the date of this application to the best of his/her ability.

## Licensed Construction Supervisor

Name Kevin Cunningham Phone # 508-272-1631

Address 125 Depot Street, Bellingham, MA 02019 Cell Phone # \_\_\_\_\_

License Number CS-088703 Expiration Date 10/9/2017 Class CS

Signature Anthony W. Bai c/o Kevin Cunningham Date 3/24/17

Email Address KCunningham@aerialwireless.com

## Registered Home Improvement Contractor (required only for 3 or 4 family owner-occupied dwellings)

Name N/A Phone # \_\_\_\_\_

Address \_\_\_\_\_ Cell Phone # \_\_\_\_\_

Registration Number \_\_\_\_\_ Expiration Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

## Building Owner of Record (application must be signed by OWNER of Building)

Name BBC Trust, c/o Dowse Inc. Phone # 617-864-4320

Address 14 Arrow Street, Cambridge, MA 02138

Signature See Attached Letter of Authorization Date \_\_\_\_\_

Email Address cdreggio.dowseinc@gmail.com

**Hold Harmless Clause:** The Permittee(s) by acceptance of this permit agree(s) to indemnify and hold harmless the City of Cambridge, and its employees, from and against any and all claims, demands and actions for damages resulting from operations under this permit, regardless of negligence of the City of Cambridge, and its employees, are to assume the defense of the City of Cambridge, and its employees, against all claims, demands and actions.

PERMIT NO.

FEE

MASSACHUSETTS GENERAL LAW REQUIREMENTS

Workers Compensation Insurance Affidavit (MGL c. 152 §25C96)

A Certificate of Insurance indicating Worker's Compensation coverage or a completed Workers Compensation Insurance Affidavit must be submitted with this application. Failure to provide this affidavit will result in the denial of the issuance of the Building Permit. Failure to secure coverage as required under Section 25A of MGL c.152 can lead to imposition of a fine of up to \$1500.00 and/or one-year imprisonment, as well as civil penalties in the form of a STOP WORK ORDER and a fine of up to \$250.00 a day against the violator.

Signed Affidavit Attached Yes x No

Construction Debris Affidavit (MGL c 40 §54)

As result of the provisions of MGL c 40 §54, I acknowledge that as a condition of the Building Permit, all debris resulting from the construction activity governed by this Building Permit shall be disposed of in a properly licensed waste disposal facility, as defined by MGL c 111 §150A.

The debris will be disposed at/by Aerial Wireless Services - 125 Depot St, Bellingham, MA, 02019

Roll-Off Dumpster or Container? Yes (No) / Specify Dumpster Permit # N/A

Signature Anthony W. DeW Date 3/24/17

I certify that I will notify the Building Official by (two months maximum) of the location of the solid waste disposal facility where the debris resulting from said construction activity shall be disposed of, and I shall submit he appropriate form for attachment to the Building Permit

Signature Date

OFFICIAL USE ONLY

Department Approvals

BZA Date Electrical Date
Planning Board Date Plumbing Date
Historic Date D.P.W. Date
Fire Dept. Date Parking Date

Application Approval (Subject to the provisions of the Massachusetts State Building Code 780 CMR and the Zoning Laws of the City of Cambridge.)

Application and Plans Accepted By: Bin Date

Zoning Approved By: Date

Plan Review Approved By: Date AAB Review by: Date

Permit Approved/Granted By: Date

Inspection Record

Final Inspection Made
Date By:

Certified Foundation Plan submitted: Yes No Certificate of Occupancy issued: Yes No
Final Cost Affidavit: Yes No General Contractor Final Affidavit: Yes No
Architect Final Affidavit: Yes No Structural Engineer Final Affidavit: Yes No
Final as-built drawings submitted in digital format? Yes No



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
9/7/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement.

PRODUCER: Oswald Companies - Detroit, MI
CONTACT NAME: Wanda Mondry
PHONE (A/C, No, Ext): (248) 433-7616
INSURED: Aerial Wireless Services LLC
125 Depot Street
Bellingham, MA 02019

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES.

Table with columns: INSR LTR, TYPE OF INSURANCE, ADDL INSD, SUBR WVD, POLICY NUMBER, POLICY EFF (MM/DD/YYYY), POLICY EXP (MM/DD/YYYY), LIMITS. Rows include Commercial General Liability, Automobile Liability, Umbrella Liability, and Workers Compensation.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

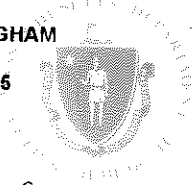
CERTIFICATE HOLDER: For Information Purposes
CANCELLATION: SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
AUTHORIZED REPRESENTATIVE: Jacob Madry



Massachusetts Department of Public Safety  
Board of Building Regulations and Standards

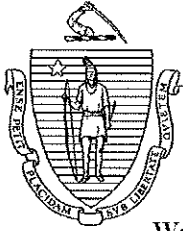
License: **CS-088703**  
Construction Supervisor

**KEVIN CUNNINGHAM**  
29 HALE RD  
STOW MA 01775



*Matthew Ci...*  
Commissioner

Expiration:  
**10/09/2017**



The Commonwealth of Massachusetts  
 Department of Industrial Accidents  
 1 Congress Street, Suite 100  
 Boston, MA 02114-2017  
 www.mass.gov/dia

Workers' Compensation Insurance Affidavit: Builders/Contractors/Electricians/Plumbers.  
 TO BE FILED WITH THE PERMITTING AUTHORITY.

**Applicant Information**

Please Print Legibly

Name (Business/Organization/Individual): Aerial Wireless Services, LLC

Address: 125 Depot Street

City/State/Zip: Bellingham, MA 02019

Phone #: 508-657-1213

Are you an employer? Check the appropriate box:

1.  I am an employer with 83 employees (full and/or part-time).\*
2.  I am a sole proprietor or partnership and have no employees working for me in any capacity. [No workers' comp. insurance required.]
3.  I am a homeowner doing all work myself. [No workers' comp. insurance required.] †
4.  I am a homeowner and will be hiring contractors to conduct all work on my property. I will ensure that all contractors either have workers' compensation insurance or are sole proprietors with no employees.
5.  I am a general contractor and I have hired the sub-contractors listed on the attached sheet. These sub-contractors have employees and have workers' comp. insurance. ‡
6.  We are a corporation and its officers have exercised their right of exemption per MGL c. 152, §1(4), and we have no employees. [No workers' comp. insurance required.]

Type of project (required):

7.  New construction
8.  Remodeling
9.  Demolition
10.  Building addition
11.  Electrical repairs or additions
12.  Plumbing repairs or additions
13.  Roof repairs
14.  Other \_\_\_\_\_

\*Any applicant that checks box #1 must also fill out the section below showing their workers' compensation policy information.

† Homeowners who submit this affidavit indicating they are doing all work and then hire outside contractors must submit a new affidavit indicating such.

‡ Contractors that check this box must attached an additional sheet showing the name of the sub-contractors and state whether or not those entities have employees. If the sub-contractors have employees, they must provide their workers' comp. policy number.

**I am an employer that is providing workers' compensation insurance for my employees. Below is the policy and job site information.**

Insurance Company Name: Zurich American Ins Co

Policy # or Self-ins. Lic. #: WC014710500

Expiration Date: 9/9/2017

Job Site Address: \_\_\_\_\_ City/State/Zip: \_\_\_\_\_

**Attach a copy of the workers' compensation policy declaration page (showing the policy number and expiration date).**

Failure to secure coverage as required under MGL c. 152, §25A is a criminal violation punishable by a fine up to \$1,500.00 and/or one-year imprisonment, as well as civil penalties in the form of a STOP WORK ORDER and a fine of up to \$250.00 a day against the violator. A copy of this statement may be forwarded to the Office of Investigations of the DIA for insurance coverage verification.

**I do hereby certify under the pains and penalties of perjury that the information provided above is true and correct.**

Signature: [Handwritten Signature]

Date: 9/8/2016

Phone #: 508-657-1213

**Official use only. Do not write in this area, to be completed by city or town official.**

City or Town: \_\_\_\_\_ Permit/License # \_\_\_\_\_

Issuing Authority (circle one):

1. Board of Health 2. Building Department 3. City/Town Clerk 4. Electrical Inspector 5. Plumbing Inspector  
 6. Other \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone #: \_\_\_\_\_