



CITY OF CAMBRIDGE

BOARD OF ZONING APPEAL

831 Massachusetts Avenue, Cambridge MA 02139 2022 JAN 13 AM 11:21

617-349-6100

OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

BZA Application Form

BZA Number: 159164

General Information

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

Special Permit: X Variance: Appeal:

PETITIONER: T-Mobile Northeast LLC, for the Owner, Roman Catholic Archbishop of Boston C/O Adam Brailard of Prince Lobel Tye LLP, for T-Mobile

PETITIONER'S ADDRESS: One International Place, Suite 3700, Boston, MA 02110

LOCATION OF PROPERTY: 100 Concord Ave., Cambridge, MA

TYPE OF OCCUPANCY: Telecommunications **ZONING DISTRICT:** Residence C-1 Zone

REASON FOR PETITION:

/Telecommunication Facility (antenna)/

DESCRIPTION OF PETITIONER'S PROPOSAL:

The Applicant seeks to modify its existing wireless communications facility by replacing eight (8) panel antennas with eight (8) new like-kind panel antennas concealed within the existing church steeple located at the Property, and by replacing four (4) Remote Radio Head Units (RRH) with eight (8) new like-kind RRHs, and supporting equipment. All of the proposed antennas will be installed in the same locations as the existing antennas, and will continue to be concealed within the existing Church steeple.

SECTIONS OF ZONING ORDINANCE CITED:

- Article: 4.000 Section: 4.32.G.1 & Sec. 4.40 (Footnote 49) (Telecommunication Facility).
- Article: 10.000 Section: 10.40 (Special Permit)
- Article: 6409 Section: Middle Class Tax Relief Act

Original
Signature(s):

(Petitioner (s) / Owner)

Adam F. Brailard, of Prince Lobel Tye LLP for
the Applicant, T-Mobile Northeast LLC

(Print Name)

One International Place, 3700, Boston MA

Address:

Tel. No.

617-456-8153

E-Mail Address:

abraillard@princelobel.com

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 Roman Catholic Archbishop of Boston , A Corporation Sole (OWNER)

Address 66 Brooks Drive Braintree, MA 02184

State that I/We own the property located at 100 Concord Avenue, Cambridge, MA,
which is the subject of this zoning application.

The record title of this property is in the name of Roman Catholic Archbishop of Boston Corporation

*Pursuant to a deed of duly recorded in the date September 14, 1848, Middlesex South
County Registry of Deeds at Book 530 , Page 357

JL Strub John E. Straub, Chancellor and CFO
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 Norfolk

The above-name John E. Straub personally appeared before me,
this 8th of March, 2021, and made oath that the above statement is true.

Francis O'Connell Notary

My commission expires Oct. 24, 2025 (Notary Seal).

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



January 7, 2022

City of Cambridge
Board of Zoning Appeals
831 Massachusetts Avenue
Cambridge, MA 02139

Re:	Eligible Facilities Request pursuant to Section 6409 of the Spectrum Act and an Application for Special Permit, in the alternative
Property Address:	100 Concord Avenue Assessor’s Map 226, Lot 30 (the “ Property ”)
Applicant:	T-Mobile Northeast LLC (the “ Applicant ”)

Dear Honorable Members of the Board of Zoning Appeals:

This firm represents T-Mobile Northeast LLC in connection with an application for a special permit from the City of Cambridge Board of Zoning Appeals (the “**Board**”), to modify an existing wireless communications facility on the Property. The Property is located in the Residence C-1 District (C-1) zoning district. To the extent that the Board determines that the requirements of Article 4 Section 4.32.G.1 of the City of Cambridge Zoning Ordinance (the “**Ordinance**”) apply, the use of the Property for a wireless telecommunications facility is permitted by special permit from the Board¹. The Applicant’s proposal satisfies the requirements for the grant of a special permit pursuant to Section 10-43 of the Ordinance.

The Applicant’s Proposed Facility (as defined herein) is subject to Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012, more commonly known as the “Spectrum Act” (47 U.S.C. § 1455). As such, we respectfully submit that in the event that the Board determines that the application does not comply with the Spectrum Act, the Applicant hereby states that the special permit requirements set forth in the Ordinance are hereby met by the Applicant, and that relief must be granted to the Applicant. The compliance with the Spectrum Act is shown on the Eligible Facilities Request permit application form attached hereto and incorporated herein by reference (the “**EFR**”).

The Applicant seeks to modify its existing wireless communications facility by replacing eight (8) panel antennas with eight (8) new like-kind panel antennas concealed within the existing church steeple of the church located at the Property (the “**Church**”), and by adding eight (8) Remote Radio Head Units (“**RRH**”) and supporting equipment (the “**Proposed Facility**”).

¹ Pursuant to Section 6409(a) of the Spectrum Act, 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.” As such, the Applicant submits that they need not apply for a special permit from the board. To the extent that this Board determines that the Applicants’ proposed wireless facility must comply with special permit requirements set forth in Section 10-43 of the Ordinance, the Applicants submit that they have complied with said requirements, without waiving the argument that such relief is not required.

► PRINCE LOBEL

All of the proposed antennas will be installed in the same location as the existing antennas, and will continue to be concealed within the existing Church steeple. The Proposed Facility will continue to be out of view from the public. The Proposed Facility is 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 not obstructed or degraded by other buildings or by topographical features such as hills.

II. Project Description

As noted above, the Applicant proposes to modify its existing wireless facility currently operating within the Church steeple of the Church located on the Property, by replacing eight (8) panel antennas with eight (8) new like-kind panel antennas concealed within the existing Church steeple, and by adding eight (8) RRHs, and supporting equipment. All of the new and replaced antennas will be installed and concealed within the Church steeple and out of view. The proposal is consistent with the previous decisions of the Board for this facility, the first of which is dated April 12, 2001 (Case No. 8292) (the “**Original Decision**”), a second decision dated October 28, 2010 (Case No. 10015) (the “**2nd Decision**”), and a third decision dated December 9, 2016 (Case No. BZA-011495-2016) (the “**3rd Decision**”, and together, the Original Decision and the 2nd Decision, the “**Decisions**”). Consequently, the visual change to the Applicant’s existing facility will not change.

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 forth 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 C-1 zoning 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 governmental 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 is being upgraded with new technology to provide the necessary coverage to the subject area of the City of Cambridge. Therefore, the Proposed Facility in the C-1 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 the requested relief under Section 6409 of the Spectrum act or a Special Permit to modify its existing wireless facility in the C-1 zoning district.

Furthermore, 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.

Because federal law now preempts many of the permit application requirements that this jurisdiction would previously have required from an Applicant, we have provided, on the attached EFR, only the information that federal law allows this jurisdiction to consider when reviewing an EFR. As such, we submit that the Wireless Communications set forth in Section 4.32(g), footnote 49 of the Ordinance, provisions are not applicable to Proposed Facility and relief must be granted pursuant to Section 6409(a) of the Spectrum Act.

- 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 on the site.**

The Applicant’s Proposed Facility has no additional visual impact on the existing facility and Church. The Proposed Facility will be installed entirely within the existing Church Steeple and as such will have no change on the existing visual conditions of the Church.

As stated above, federal law now preempts many of the permit applications requirements that the Ordinance sets forth. To the extent that this Board determines that the Applicants’ proposed wireless facility must comply with the Wireless Communications provisions set forth in Section 4.32(g), footnote 49 of the Ordinance, the Applicants submit that they have complied with said requirements, without waiving the argument that such relief is not required.

- 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.**

The Proposed Facility is located in the Residential C-1 Zoning District but nonresidential uses predominate in the area. For example, the Saint Peter School is an abutter to the building and nearby is a section of the Campus for Harvard University, Sarah’s Market and Café, Didriks

Elements of Life Retail Store and an office for Restorative Dental Group. Furthermore, the Board has previously found that nonresidential uses predominate in the area.

As such, the Applicant submits that nonresidential uses predominate in the area, and in keeping with the Decisions, respectfully requests that the Board find the same.

B. The Applicant complies with the Special Permit Criteria set forth in Section 10-43 of the Ordinance²:

1. The requirements of the Ordinance can be met:

As provided above, the Applicant has 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. The use is passive and will not change the current conditions or appearance surrounding the Building. The facility will not produce any odors, fumes, noise or waste. There will be no need for water, sewer, or other municipal services.

As mentioned above, once modified, the facility will be unmanned and will only require infrequent visits by a technician, typically two times per month for routine diagnostics and/or maintenance, except in cases of emergency. These infrequent 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 and illustrated on the attached photograph simulations, the modification of the existing facility will produce no change in the appearance of the Church.

² Pursuant to Section 6409(a) of the Spectrum Act, 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." As such, the Applicant submits that they need not apply for a special permit from the board. To the extent that this Board determines that the Applicants' proposed wireless facility must comply with special permit requirements set forth in Section 10-43 of the Ordinance, the Applicants submit that they have complied with said requirements, without waiving the argument that such relief is not required.

The modification of the existing facility will blend with the existing characteristics of the Building and the surrounding neighborhood. Moreover, the proposed installation will not generate any 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 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 Property, 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 district and is consistent with the Ordinance's intention to allow for less intrusive wireless telecommunications facilities in all districts (other than Open Space), including the C-1 zoning districts.

As mentioned above, the proposed modifications to the existing 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. 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, pursuant to Section 6409(a) of the Spectrum Act. Or, in the alternative, its proposed modifications to the existing telecommunications 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 grant the foregoing relief pursuant to Section 6409(a) of the Spectrum Act or, in the alternative, 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,



Adam F. Braillard
Direct: 617-456-8153
Email: abraillard@princelobel.com

01/11/2022

Date: _____

BZA Application Form

DIMENSIONAL INFORMATION

Applicant: T-Mobile Northeast LLC, for the Owner, Roman Catholic Archbishop of Boston
Location: 100 Concord Ave., Cambridge, MA
Phone: 617-456-8153

Present Use/Occupancy: Telecommunications
Zone: Residence C-1 Zone
Requested Use/Occupancy: Telecommunications

		<u>Existing Conditions</u>	<u>Requested Conditions</u>	<u>Ordinance Requirements</u>
<u>TOTAL GROSS FLOOR AREA:</u>		N/A	no change	N/A (max.)
<u>LOT AREA:</u>		N/A	No Change	N/A (min.)
<u>RATIO OF GROSS FLOOR AREA TO LOT AREA: ²</u>		N/A	No Change	N/A
<u>LOT AREA OF EACH DWELLING UNIT</u>		N/A	No Change	N/A
<u>SIZE OF LOT:</u>	WIDTH	N/A	No Change	N/A
	DEPTH	N/A	No Change	N/A
<u>SETBACKS IN FEET:</u>	FRONT	N/A	No Change	N/A
	REAR	N/A	No Changes	N/A
	LEFT SIDE	N/A	No Change	N/A
	RIGHT SIDE	N/A	No Change	N/A
<u>SIZE OF BUILDING:</u>	HEIGHT	N/A	No Change	N/A
	WIDTH	N/A	No Change	N/A
<u>RATIO OF USABLE OPEN SPACE TO LOT AREA:</u>		N/A	No Change	N/A
<u>NO. OF DWELLING UNITS:</u>		N/A	No Change	N/A
<u>NO. OF PARKING SPACES:</u>		N/A	No Change	N/A
<u>NO. OF LOADING AREAS:</u>		N/A	No Change	N/A
<u>DISTANCE TO NEAREST BLDG. ON SAME LOT</u>		N/A	No Change	N/A

Describe where applicable, other occupancies on the 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, 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'.

T-Mobile

T-MOBILE NORTHEAST, LLC

ANCHOR

SITE #: 4BS0378B
 SITE NAME: BS378/ST PETER CATH CHURCH
 100 CONCORD AVE
 CAMBRIDGE, MA 02138
 MIDDLESEX COUNTY

SITE CONFIG: RAN: 4 SEC-67E5A998E INDOOR
 A&L: 4SEC-67E5998E_1XAIR+10P

B+T GRP
 1717 S. BOULDER
 SUITE 300
 TULSA, OK 74119
 PH: (818) 587-4830
 www.blgrp.com

T-Mobile
 T-MOBILE NORTHEAST, LLC
 15 COMMERCE WAY, SUITE B
 NORTON, MA 02766

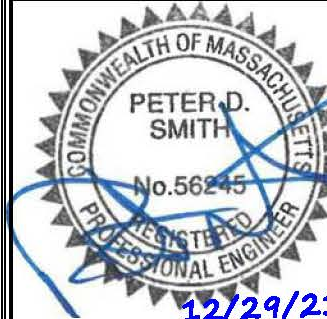
Transcend Wireless
 TRANSCEND WIRELESS
 10 INDUSTRIAL AVENUE
 MAHWAH, NJ 07430

4BS0378B
BS378/ST PETER CATH CHURCH
 100 CONCORD AVE
 CAMBRIDGE, MA 02138

PROJECT NO: 155569.003.01
 CHECKED BY: CLG

ISSUED FOR:			
REV	DATE	DRWN	DESCRIPTION
A	10/12/21	FWP	PRELIMINARY REVIEW
B	11/23/21	MDW	PRELIMINARY REVIEW
C	12/13/21	MEH	PRELIMINARY REVIEW
D	12/29/21	CLG	CONSTRUCTION

B&T ENGINEERING, INC.



IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: **T-1** REVISION: **0**

PROJECT NOTES

GENERAL NOTES:
 THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF T-MOBILE. 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.

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.

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE T-MOBILE NORTHEAST LLC REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SPECIAL STRUCTURAL NOTES:
 TOWER OWNER SHALL PROVIDE GLOBAL STRUCTURAL STABILITY ANALYSIS OF EXISTING ANTENNA SUPPORT STRUCTURE. GENERAL CONTRACTOR SCOPE OF WORK SHALL INCLUDE ALL REQUIRED STRUCTURAL MODIFICATIONS, RE-BUNDLING OF COAXIAL CABLES OR OTHER SPECIAL MODIFICATIONS AS OUTLINED THEREIN.

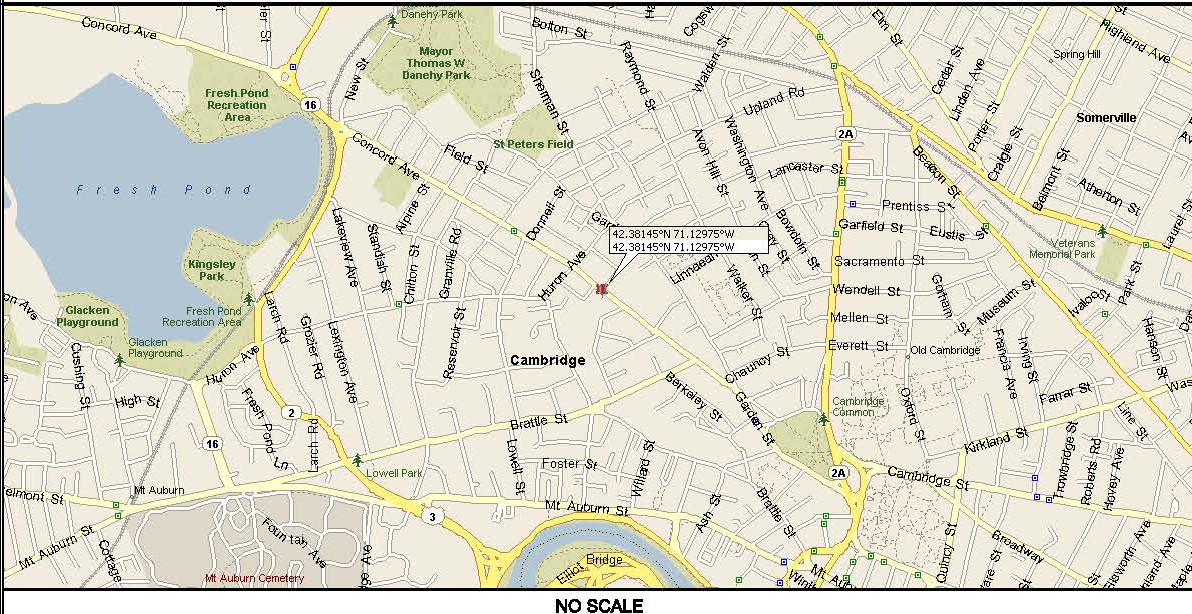
ENGINEER OF RECORD HAS MADE A VISUAL ASSESSMENT ONLY AND HAS DETERMINED THAT THE EXISTING ANTENNA MOUNT SHALL BE REPLACED OR MODIFIED TO ACCOMMODATE ANY ADDITIONAL EQUIPMENT LOAD. STRUCTURAL DESIGNS AND DETAILS AS SHOWN HEREIN FOR STRUCTURAL MODIFICATIONS OF THE EXISTING ANTENNA MOUNT ARE PRELIMINARY ONLY AND FINAL CONSTRUCTION DETAILS ARE SUBJECT TO CHANGE PENDING THE COMPLETION OF AN ANTENNA MOUNT STRUCTURAL ASSESSMENT.

B+T GROUP ASSUMES THAT THE TOWER IS PROPERLY CONSTRUCTED AND MAINTAINED. ALL STRUCTURAL MEMBERS AND THEIR CONNECTIONS ARE ASSUMED TO BE IN GOOD CONDITION AND ARE FREE FROM DEFECTS WITH NO DETERIORATION TO ITS MEMBER CAPACITIES.

T-MOBILE TECHNICIAN SITE SAFETY NOTES

LOCATION	SPECIAL RESTRICTIONS	LOCATION	SPECIAL RESTRICTIONS
SECTOR A:	ACCESS NOT PERMITTED	DIPLEXERS:	UNRESTRICTED
SECTOR B:	ACCESS NOT PERMITTED	RADIO CABINETS:	UNRESTRICTED
SECTOR C:	ACCESS NOT PERMITTED	PPC DISCONNECT:	UNRESTRICTED
RRH:	ACCESS NOT PERMITTED	MAIN CIRCUIT D/C:	UNRESTRICTED
TMA:	ACCESS NOT PERMITTED	NIU/T DEMARC:	UNRESTRICTED
GPS/LMU:	CAUTION: OSHA APPROVED PORTABLE 8' STEP-LADDER REQUIRED	OTHER/SPECIAL:	NONE

LOCATION MAP



PROJECT INFORMATION

SCOPE OF WORK: UNMANNED TELECOMMUNICATIONS FACILITY T-MOBILE EQUIPMENT MODERNIZATION

ZONING JURISDICTION: (TOWN OF CAMBRIDGE) BASED ON INFORMATION PROVIDED BY T-MOBILE, REGULATORY COMPLIANCE AND LEGAL COUNSEL, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS CONSIDERED AN ELIGIBLE FACILITY UNDER THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012, 47 USC 1455(A), SECTION 6409 AND IS SUBJECT TO AN ELIGIBLE FACILITY REQUEST, EXPEDITED REVIEW AND LIMITED/PARTIAL ZONING PRE-EMPTION FOR LOCAL DISCRETIONARY PERMITS (VARIANCE, SPECIAL PERMIT, SITE PLAN REVIEW OR ADMINISTRATIVE REVIEW).

SITE ADDRESS: 100 CONCORD AVE CAMBRIDGE, MA 02138

LATITUDE: 42.38145365° N
 LONGITUDE: 71.12974680° W

JURISDICTION: NATIONAL, STATE & LOCAL CODES & ORDINANCES

CURRENT USE: TELECOMMUNICATIONS FACILITY

PROPOSED USE: TELECOMMUNICATIONS FACILITY

APPROVALS

TITLE	SIGNATURE	DATE
PROJECT MANAGER:		
CONSTRUCTION:		
RF ENGINEERING:		
ZONING/SITE ACQ.:		
OPERATIONS:		
TOWER OWNER:		

ACCEPTANCE DOES NOT CONSTITUTE APPROVAL OF DESIGN, CALCULATIONS, ANALYSIS, TEST METHODS OF MATERIALS DEVELOPED OR SELECTED BY THE SUBCONTRACTOR AND DOES NOT RELIEVE SUBCONTRACTOR FROM FULL COMPLIANCE WITH CONTRACTUAL OBLIGATIONS.

DRAWING INDEX

SHEET #	SHEET DESCRIPTION	REV. #
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C-2.1	EXISTING ANTENNA PLANS	0
C-2.2	PROPOSED ANTENNA PLANS	0
C-3	BUILDING/TOWER ELEVATION	0
C-4	EQUIPMENT DETAILS	0
E-1	GROUNDING DETAILS AND NOTES	0

CALL MASSACHUSETTS DIG SAFE (888) 344-7233
 CALL 3 WORKING DAYS BEFORE YOU DIG!

GROUNDING NOTES:

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI OR NFPA) LIGHTING PROTECTION CODE AND GENERAL COMPLIANCE WITH TELECORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATION OR ADVERSE FINDING TO THE CONTRACTOR FOR RESOLUTION.
2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GE'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OFF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 & 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BUS 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
7. APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDED FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWS COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20' OR MORE OF 1/2" OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BAR TINNED COPPER GROUND WIRE, PER NEC 250.50.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
 CONTRACTOR: TRANSCEND WIRELESS
 SUBCONTRACTOR: GENERAL CONTRACTOR (CONSTRUCTION)
 OWNER: T-MOBILE
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALL AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWINGS. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY, SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS NOTED OTHERWISE, PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WETHER SHALL BE HOT DIPPED GALVANIZED. TOUCH-UP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
16. CONSTRUCTION SHALL COMPLY WITH UMS SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF T-MOBILE SITES."
17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW, USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
19. SINCE THE CELL SITE IS ACTIVE, AL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION, EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT IF ANY DANGEROUS EXPOSURE LEVELS.
20. 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: IBC 2015
 ELECTRICAL CODE: NEC 2017

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, FOURTEENTH 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, METHOD 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.

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL	GC	GENERAL CONTRACTOR	REF.	REFERENCE
AWG	AMERICAN WIRE GAUGE	MAX.	MAXIMUM	REQ.	REQUIRED
BCW	BARE COPPER WIRE	MGB	MASTER GROUND BAR	RF	RADIO FREQUENCY
BTS	BASE TRANSCEIVER STATION	MIN.	MINIMUM	T.B.D.	TO BE DETERMINED
(E)	EXISTING	(N)	PROPOSED	T.B.R.	TO BE REMOVED
EG	EQUIPMENT GROUND	N.T.S.	NOT TO SCALE	T.B.R.R.	TO BE REMOVED AND REPLACED
EGR	EQUIPMENT GROUND RING	RE:	REFERENCE	(TYP)	TYPICAL



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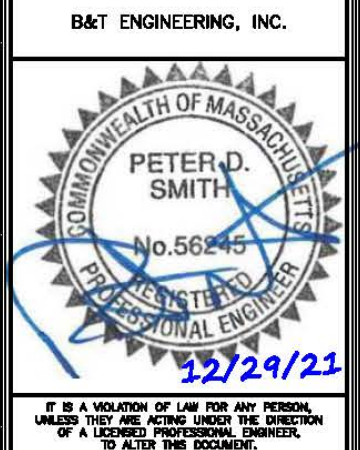
100 CONCORD AVE
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PROJECT NO: 155569.003.01
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A	10/12/21	FWP	PRELIMINARY REVIEW
B	11/23/21	MDW	PRELIMINARY REVIEW
C	12/13/21	MEH	PRELIMINARY REVIEW
D	12/28/21	CLG	CONSTRUCTION

B&T ENGINEERING, INC.



PETER D. SMITH
 No. 56245
 REGISTERED PROFESSIONAL ENGINEER
 12/29/21

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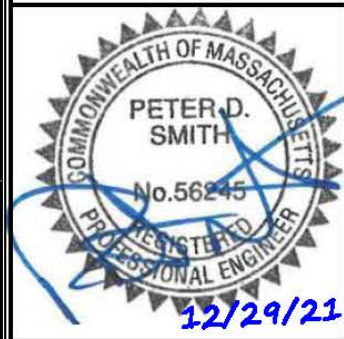
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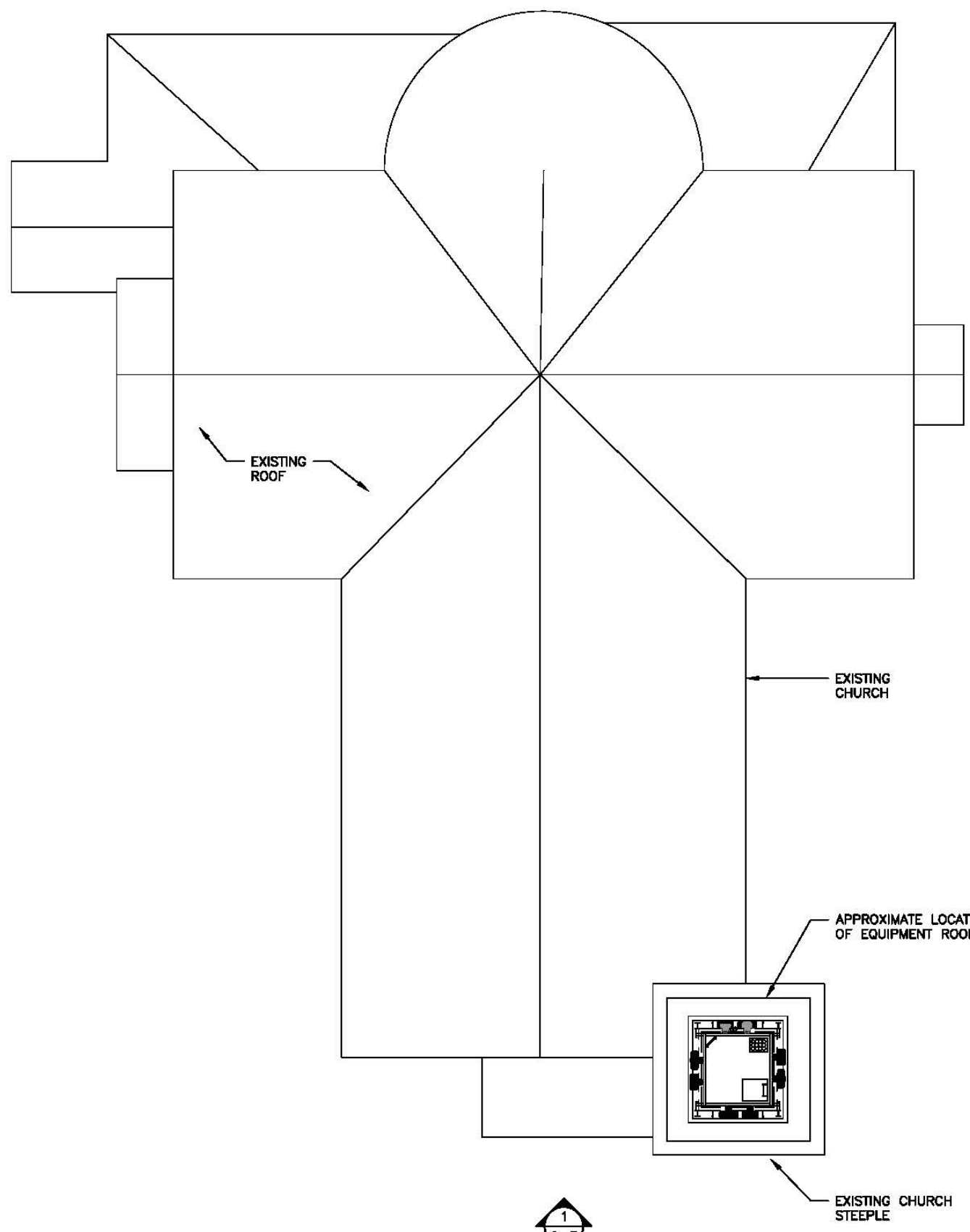
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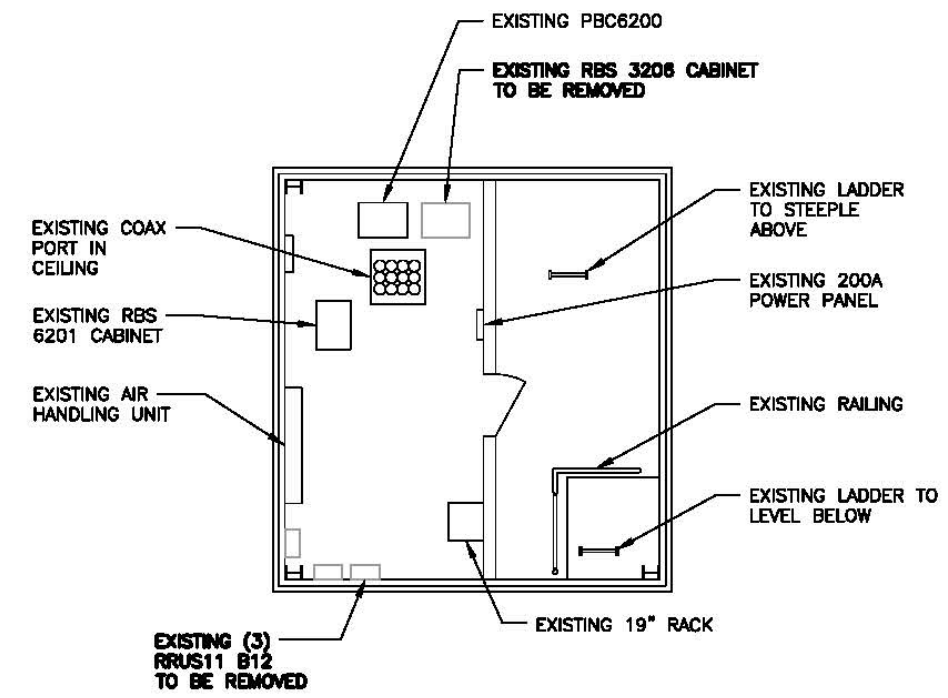


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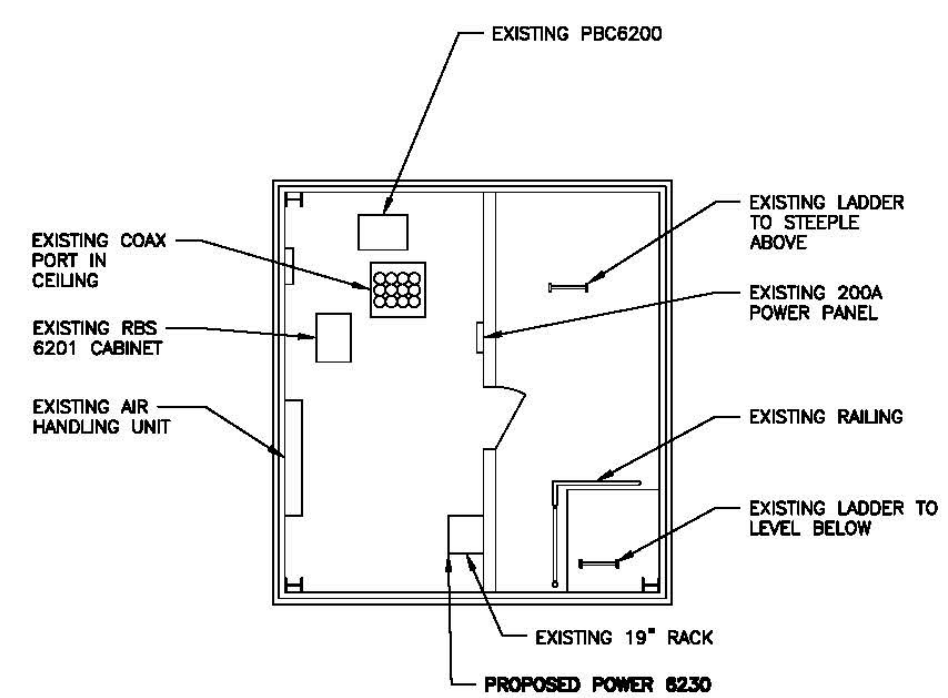
SHEET NUMBER: **C-1** REVISION: **0**



1 OVERALL SITE PLAN
 SCALE: 0' 8' 16' 32' 48'



2 EXISTING EQUIPMENT PLAN
 SCALE: 0' 1' 4' 8' 20'



3 PROPOSED EQUIPMENT PLAN
 SCALE: 0' 1' 4' 8' 20'

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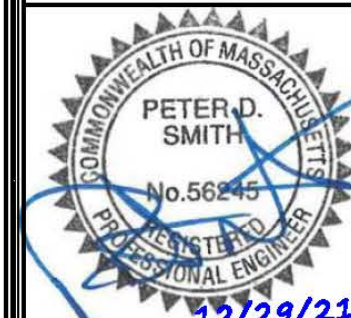
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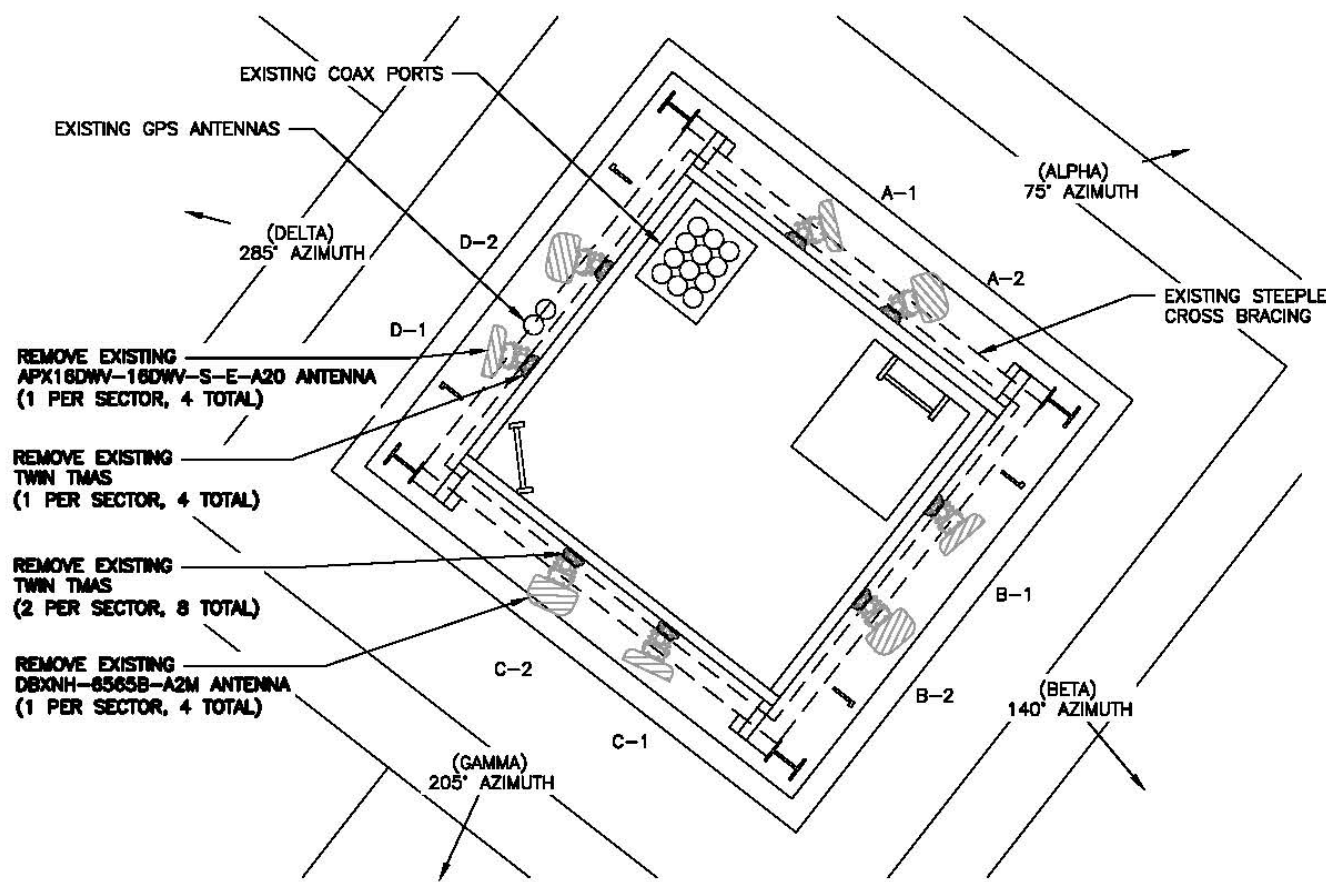
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C-2.1 0



REMOVE EXISTING APX16DWV-16DWV-S-E-A20 ANTENNA (1 PER SECTOR, 4 TOTAL)

REMOVE EXISTING TWIN TMAS (1 PER SECTOR, 4 TOTAL)

REMOVE EXISTING TWIN TMAS (2 PER SECTOR, 8 TOTAL)

REMOVE EXISTING DBXNH-6565B-A2M ANTENNA (1 PER SECTOR, 4 TOTAL)

EXISTING

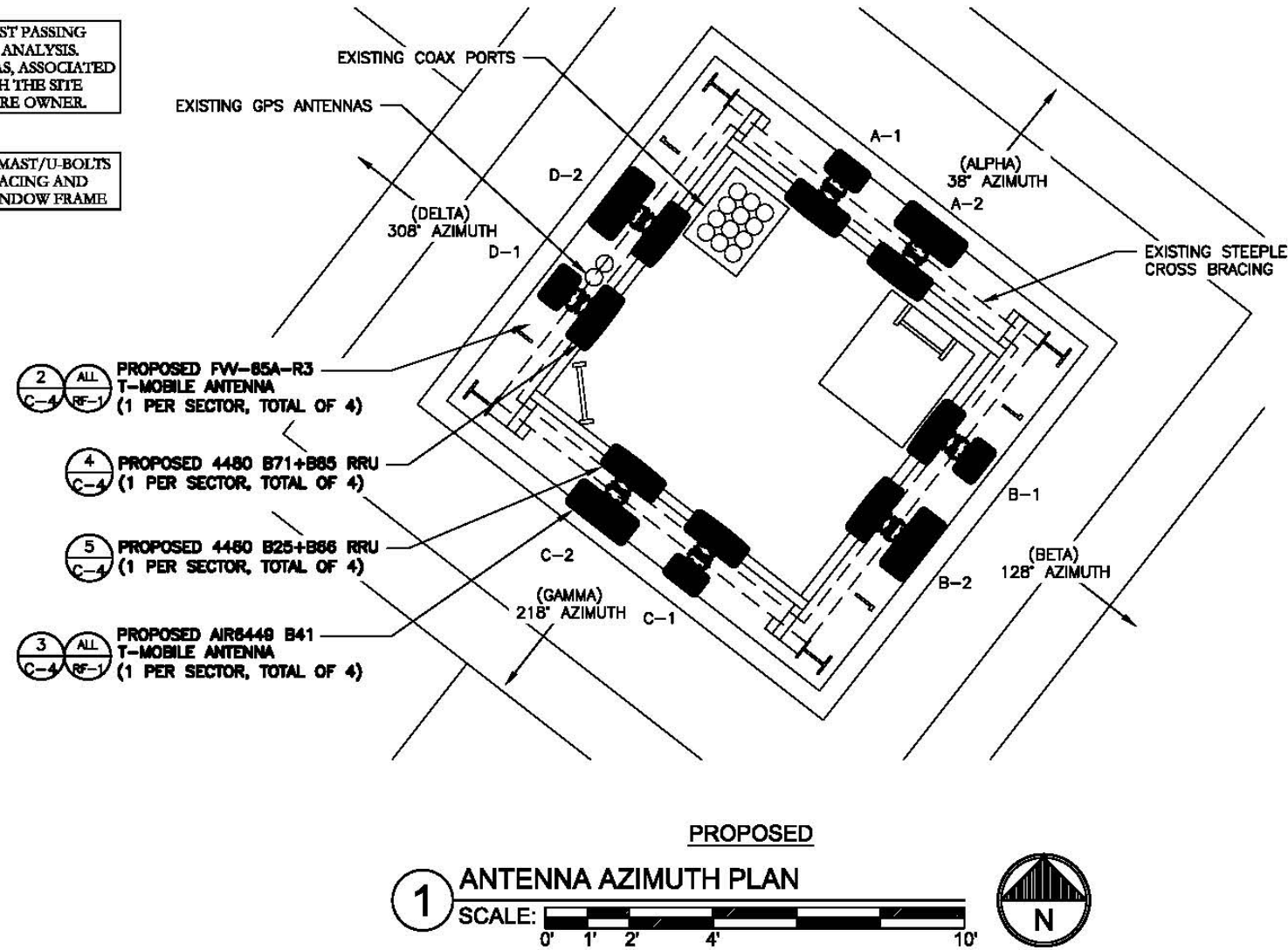


EXISTING ANTENNA SCHEDULE

SECTOR	TECH	ANTENNA MODEL	AZIMUTH	RAD CENTER	M-TILT	E-TILT	EQUIPMENT	CABLE TYPE	CABLE LENGTH
ALPHA	G1900/L1900/U2100	APX16DWV-16DWV-S-E-A20	75°	62'-0"	0/0	2/2'	(1) TWIN TMA 1A (1) TWIN TMA 1B	(2) 7/8" COAX	40'
	L700/L2100	DBXNH-6565B-A2M	75°	62'-0"	0/0	2/2'	(1) TWIN TMA 1B	(2) 7/8" COAX	40'
BETA	G1900/L1900/U2100	APX16DWV-16DWV-S-E-A20	140°	62'-0"	0/0	2/2'	(1) TWIN TMA 1A (1) TWIN TMA 1B	(2) 7/8" COAX	40'
	L700/L2100	DBXNH-6565B-A2M	140°	62'-0"	0/0	2/2'	(1) TWIN TMA 1B	(2) 7/8" COAX	40'
GAMMA	G1900/L1900/U2100	APX16DWV-16DWV-S-E-A20	205°	62'-0"	0/0	2/2'	(1) TWIN TMA 1A (1) TWIN TMA 1B	(2) 7/8" COAX	40'
	L700/L2100	DBXNH-6565B-A2M	205°	62'-0"	0/0	2/2'	(1) TWIN TMA 1B	(2) 7/8" COAX	40'
DELTA	G1900/L1900/U2100	APX16DWV-16DWV-S-E-A20	285°	62'-0"	0/0	2/2'	(1) TWIN TMA 1A (1) TWIN TMA 1B	(2) 7/8" COAX	40'
	L700/L2100	DBXNH-6565B-A2M	285°	62'-0"	0/0	2/2'	(1) TWIN TMA 1B	(2) 7/8" COAX	40'

CONTRACTOR SHALL REFER TO THE LATEST PASSING MOUNT ANALYSIS AND/OR STRUCTURAL ANALYSIS. CONTRACTOR SHALL COORDINATE ANTENNAS, ASSOCIATED EQUIPMENT AND CABLE MOUNTING WITH THE SITE CONSTRUCTION MANAGER AND STRUCTURE OWNER.

CONTRACTOR TO RELOCATE EXISTING PIPE MAST/U-BOLTS AS NEEDED TO AVOID STEEPLE CROSS-BRACING AND ENSURE THERE IS NO SHADOWING FROM WINDOW FRAME



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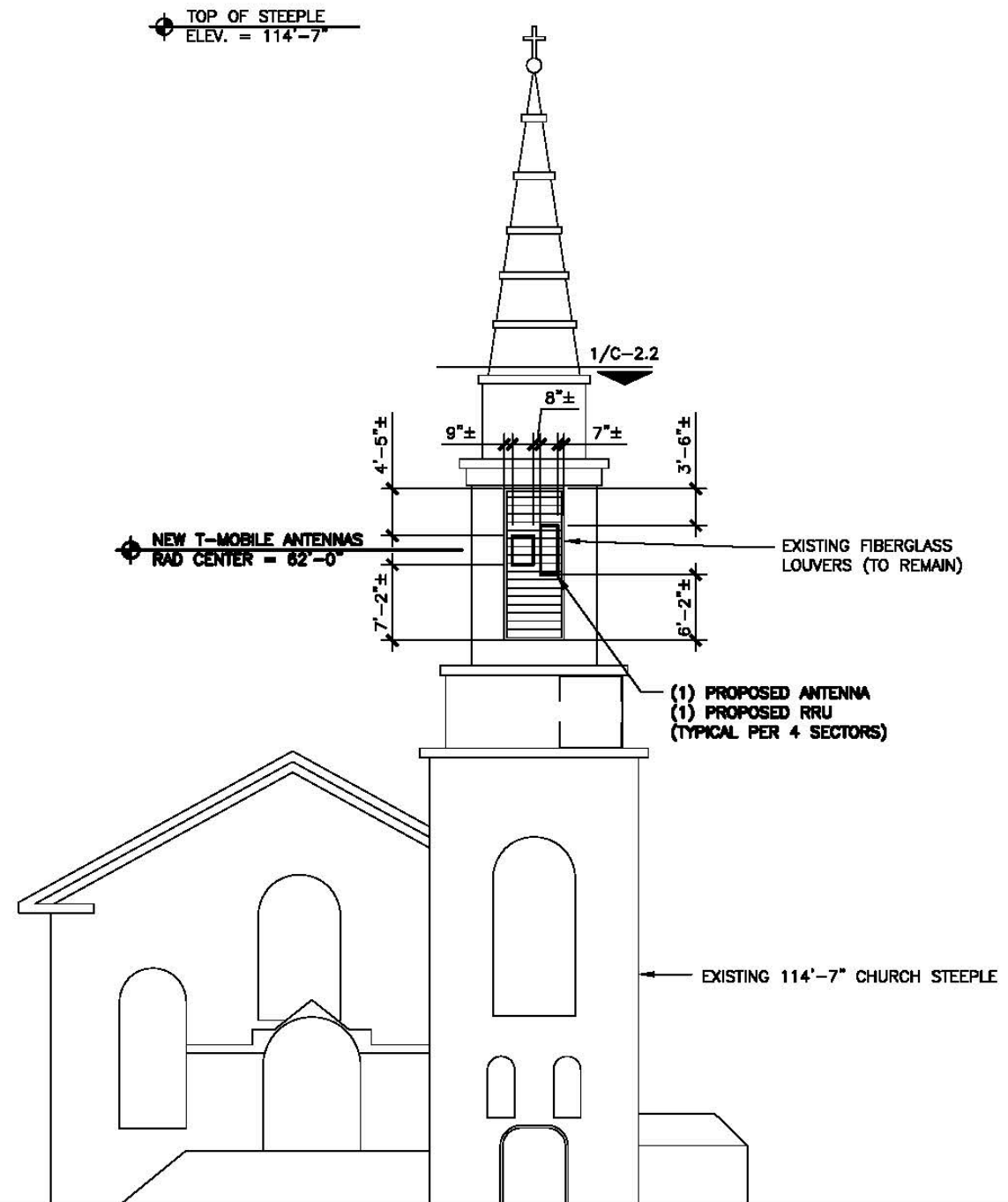
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C-2.2 0

FINAL ANTENNA SCHEDULE									
SECTOR	TECH	ANTENNA MODEL	AZIMUTH	RAD CENTER	M-TILT	E-TILT	EQUIPMENT	CABLE TYPE	CABLE LENGTH
ALPHA	N800/L700/L800 L2100/L1900/ G1900/U2100	FW-65A-R3	38°	82'-0"	0/0	Z/Z	(1) 4480 B71+B85	(1) 6x24 HCS FIBER	40'
	L2500/N2500	AIR6449 B41	38°	82'-0"	0/0	Z/Z	(1) 4480 B25+B86	(1) 6x24 HCS FIBER (SHARED)	40'
BETA	N800/L700/L800 L2100/L1900/ G1900/U2100	FW-65A-R3	128°	82'-0"	0/0	Z/Z	(1) 4480 B71+B85	(1) 6x24 HCS FIBER	40'
	L2500/N2500	AIR6449 B41	128°	82'-0"	0/0	Z/Z	(1) 4480 B25+B86	(1) 6x24 HCS FIBER (SHARED)	40'
GAMMA	N800/L700/L800 L2100/L1900/ G1900/U2100	FW-65A-R3	218°	82'-0"	0/0	Z/Z	(1) 4480 B71+B85	(1) 6x24 HCS FIBER	40'
	L2500/N2500	AIR6449 B41	218°	82'-0"	0/0	Z/Z	(1) 4480 B25+B86	(1) 6x24 HCS FIBER (SHARED)	40'
DELTA	N800/L700/L800 L2100/L1900/ G1900/U2100	FW-65A-R3	308°	82'-0"	0/0	Z/Z	(1) 4480 B71+B85	(1) 6x24 HCS FIBER	40'
	L2500/N2500	AIR6449 B41	308°	82'-0"	0/0	Z/Z	(1) 4480 B25+B86	(1) 6x24 HCS FIBER (SHARED)	40'

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CONTRACTOR SHALL REFER TO THE LATEST PASSING MOUNT ANALYSIS AND/OR STRUCTURAL ANALYSIS. CONTRACTOR SHALL COORDINATE ANTENNAS, ASSOCIATED EQUIPMENT AND CABLE MOUNTING WITH THE SITE CONSTRUCTION MANAGER AND STRUCTURE OWNER.



1 BUILDING DIRECTION ELEVATION
 SCALE: 0' 8' 16' 32' 48'

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12/29/21

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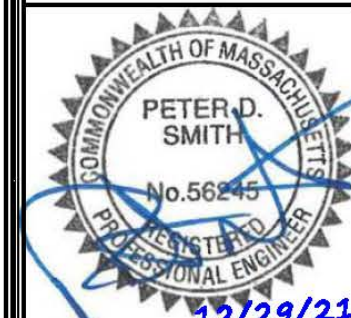
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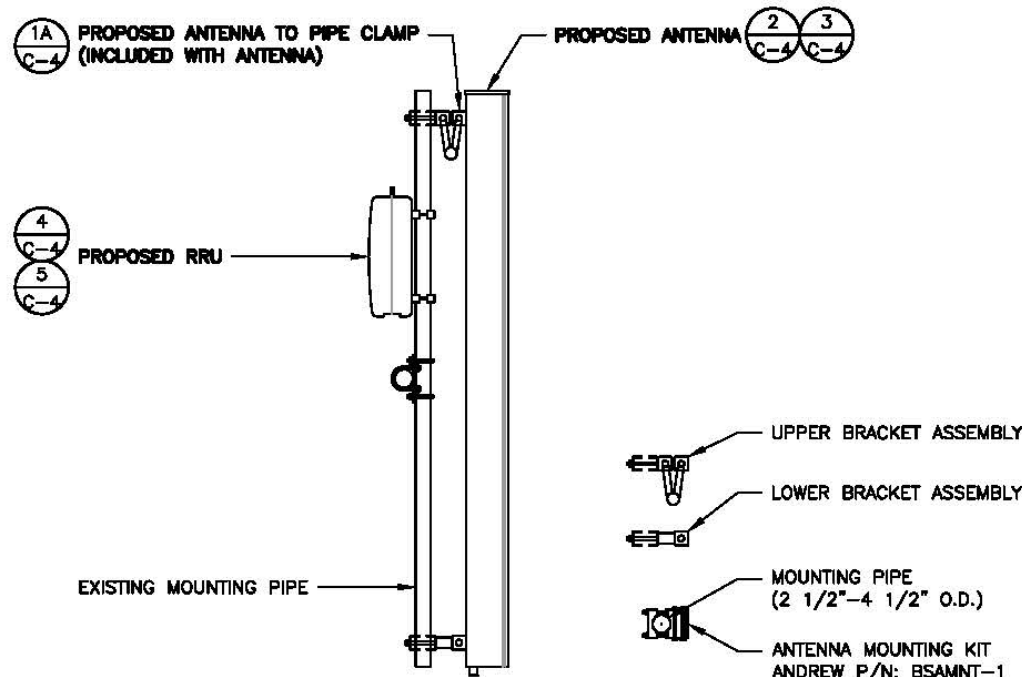
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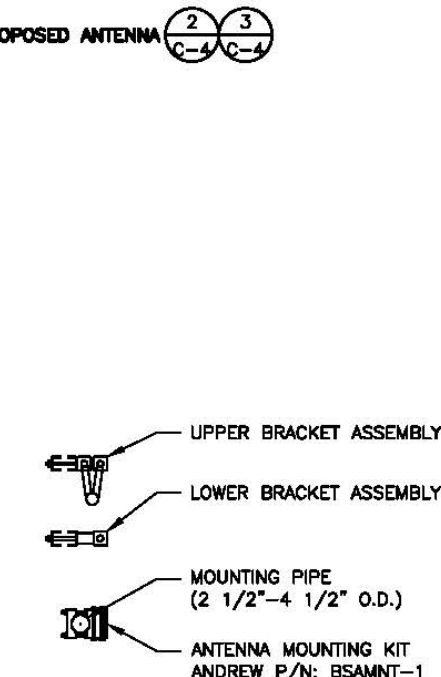
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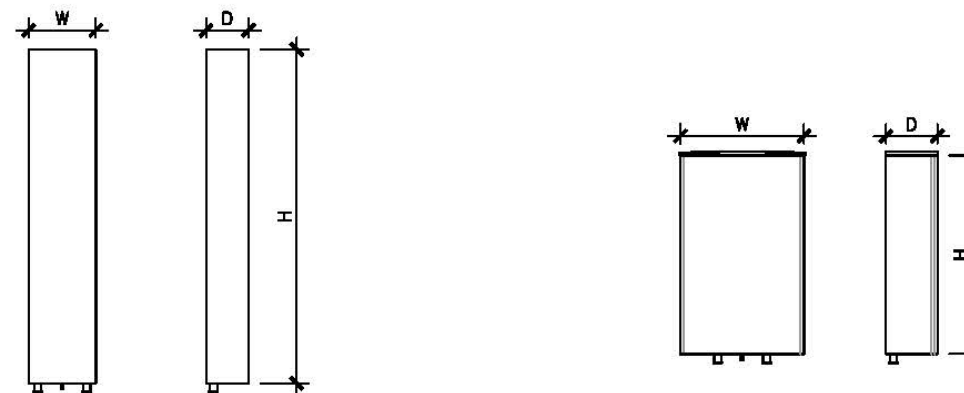
C-4 0



1 TYPICAL ANTENNA & RRU MOUNTING DETAIL
 SCALE: N.T.S.



1A ANTENNA MOUNTING BRACKET
 SCALE: N.T.S.



ANTENNA SPECS

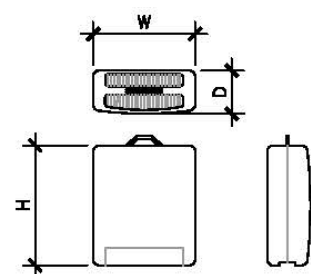
MANUFACTURER	COMMSCOPE
MODEL #	FV-85A-R3
WIDTH	11.81"
DEPTH	7.12"
HEIGHT	55.63"
WEIGHT	34.61 LBS

2 ANTENNA DETAIL
 SCALE: N.T.S.

ANTENNA SPECS

MANUFACTURER	ERICSSON
MODEL #	AIR6449 B41
WIDTH	20.6"
DEPTH	8.6"
HEIGHT	33.1"
WEIGHT	104 LBS

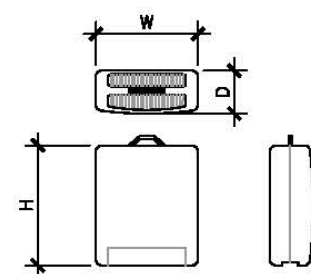
3 ANTENNA DETAIL
 SCALE: N.T.S.



RRU SPECIFICATIONS

MANUFACTURER	ERICSSON
MODEL #	4480 B71+B85
WIDTH	13.2"
DEPTH	5.4"
HEIGHT	14.9"
WEIGHT	74 LBS

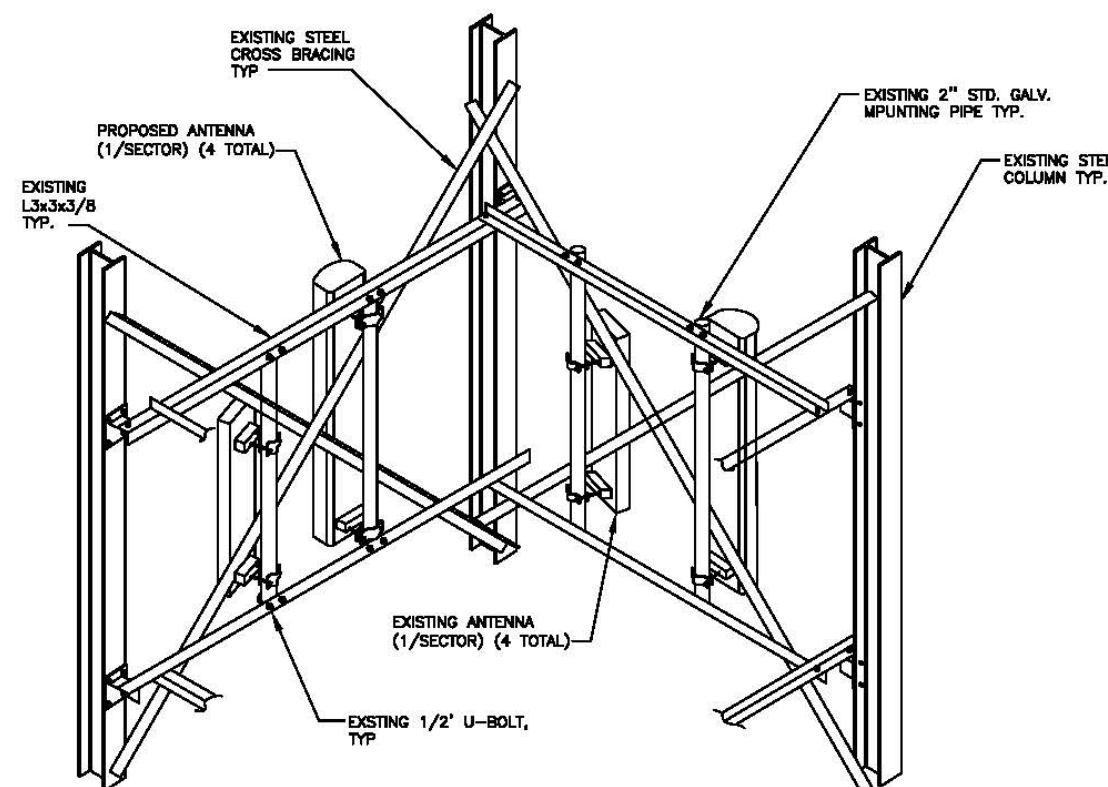
4 REMOTE RADIO UNIT (RRU)
 SCALE: N.T.S.



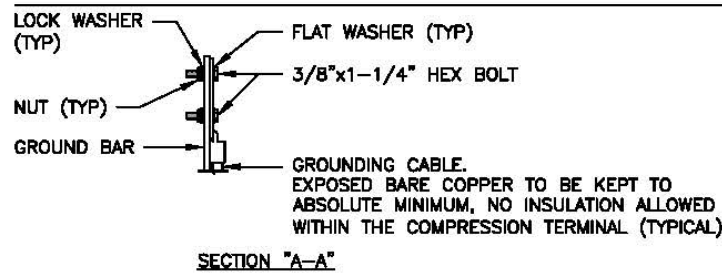
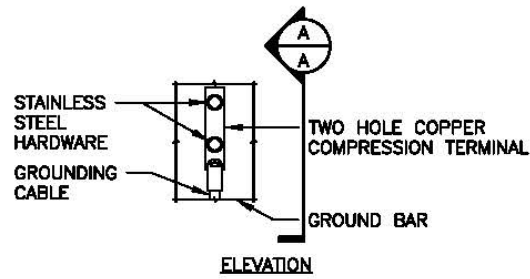
RRU SPECIFICATIONS

MANUFACTURER	ERICSSON
MODEL #	4460 B25+B66
WIDTH	15.7"
DEPTH	12.1"
HEIGHT	19.6"
WEIGHT	109 LBS

5 REMOTE RADIO UNIT (RRU)
 SCALE: N.T.S.

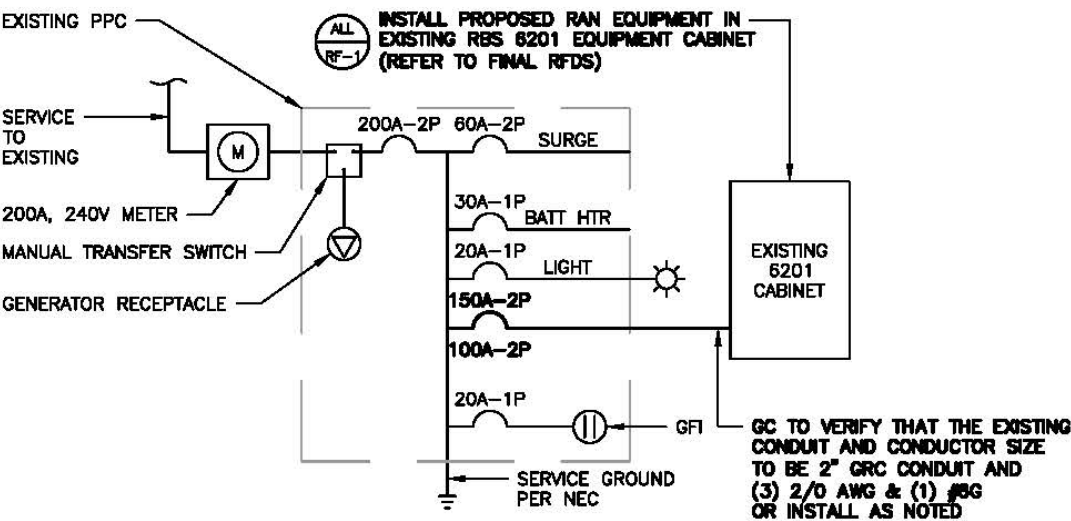


6 ANTENNA MOUNTING
 SCALE: N.T.S.



- NOTE:
- "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
 - OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
 - CADWELDED DOWNLEADS FROM UPPER EGB, LOWER EGB AND MGB.

1 TYPICAL GROUND BAR CONNECTION DETAIL
SCALE: N.T.S.

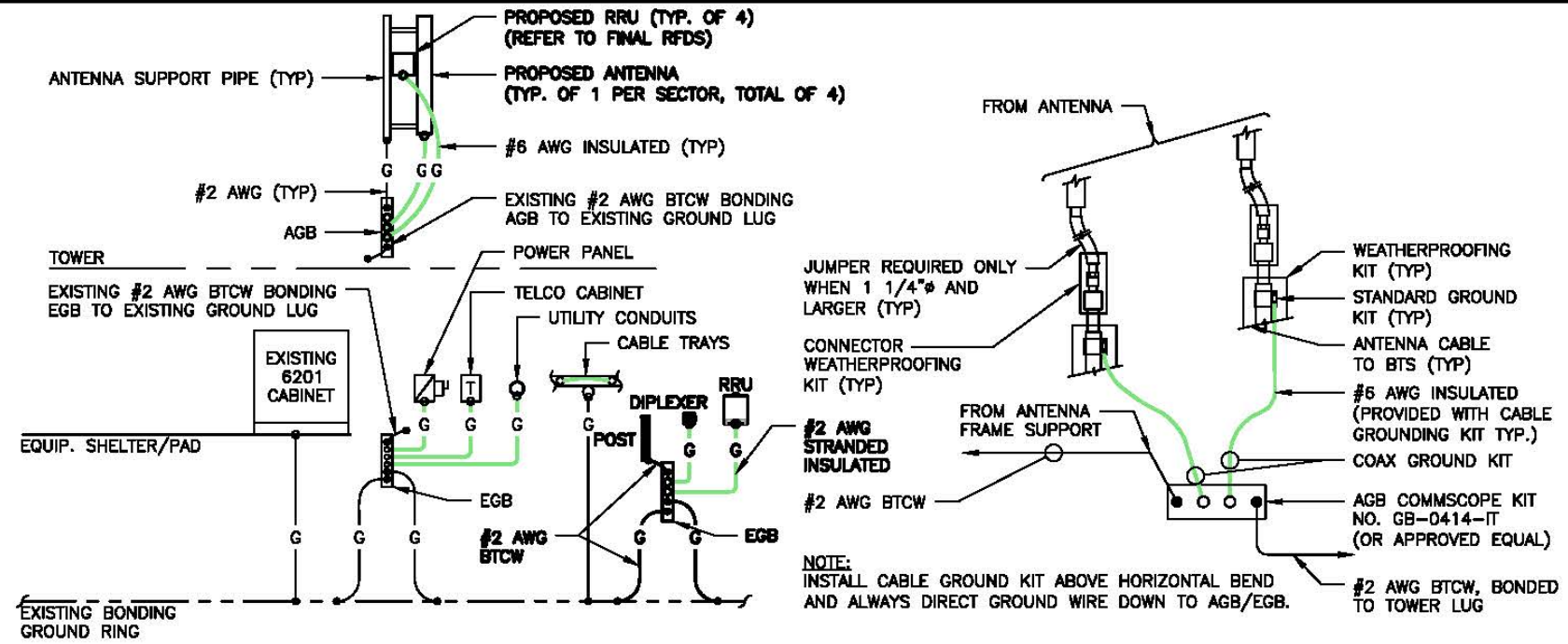


4 ONE-LINE POWER DIAGRAM
SCALE: N.T.S.

ELECTRICAL LEGEND	
A	AMPERE
BTWC	BARE TINNED (SOLID) COPPER WIRE
C	CONDUIT
GRC	GALVANIZED RIGID CONDUIT
KWH	KILOWATT - HOUR
PPC	POWER PROTECTION CABINET
V	VOLT
⊕	5/8\"/>
⊕	GROUND
⊕	EXOTHERMIC CONNECTION (CAD WELD)
⊕	MECHANICAL CONNECTION
AGB/EGB	ANTENNA GROUND BAR/EQUIPMENT GROUND BAR
MGB	MASTER GROUND BAR
—	GROUND COPPER WIRE, SIZED AS NOTED
—	EXPOSED WIRING, SIZE AS NOTED
—	INSULATED WIRING, SIZE AS NOTED
⊕	OMNI-DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALL

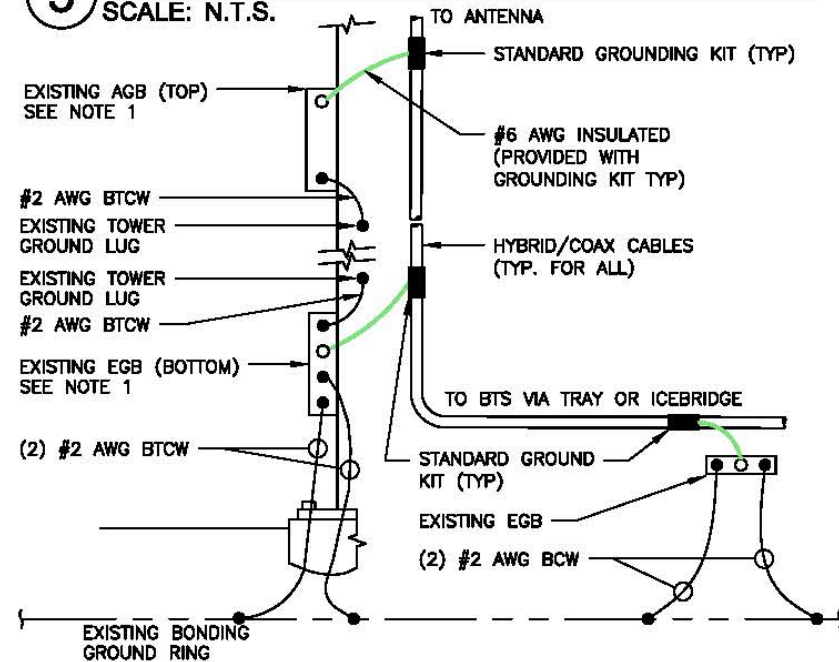
ELECTRICAL & GROUNDING NOTES

- ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
- ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
- THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATIONS INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
- GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
- 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.
- RIGID STEEL CONDUITS SHALL BE GROUNDED AT BOTH ENDS.
- ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THHN, OR THIN INSULATION.
- RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL ROOM AND PROPOSED CELL SITE POWER PEDESTAL AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
- RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROPOSED CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON DRAWING A-1. PROVIDE FULL LENGTH PULL ROPE IN INSTALLED TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
- ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
- GROUNDING SHALL COMPLY WITH NEC ART. 250.
- GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.



2 TYPICAL GROUNDING RISER DIAGRAM
SCALE: N.T.S.

3 TOWER TOP CABLE GROUNDING DETAIL
SCALE: N.T.S.



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

5 TOWER BOTTOM CABLE GROUNDING DETAIL
SCALE: N.T.S.

- 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.
- ALL GROUND CONNECTIONS TO BE BURNDY HYDROGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- 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 7 FEET OF PROPOSED EQUIPMENT OR CABINET TO MASTER GROUND BAR.
- CONNECTIONS TO MGB SHALL BE ARRANGED IN THREE MAIN GROUPS: SURGE PRODUCERS (COAXIAL CABLE GROUND KITS, TELCO AND POWER PANEL GROUND); (GROUNDING ELECTRODE RING OR BUILDING STEEL); NON-SURGING OBJECTS (EGB GROUND IN BTS UNIT).
- CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS.
- APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
- BOND ANTENNA MOUNTING BRACKETS, COAXIAL CABLE GROUND KITS, AND ALNA TO EGB PLACED NEAR THE ANTENNA LOCATION.
- BOND ANTENNA EGB'S AND MGB TO WATER MAIN.
- TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION.
- BOND ANY METAL OBJECTS WITHIN 7 FEET OF PROPOSED EQUIPMENT OR CABINET TO MASTER GROUND BAR.
- VERIFY PROPOSED SERVICE UPGRADE WITH LOCAL UTILITY COMPANY PRIOR TO CONSTRUCTION.

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74118
PH: (918) 587-4830
www.btgrp.com

T-Mobile
T-MOBILE NORTHEAST, LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02788

Transcend Wireless
TRANSCEND WIRELESS
10 INDUSTRIAL AVENUE
MAHWAH, NJ 07430

4BS0378B
**BS378/ST
PETER
CATH
CHURCH**
100 CONCORD AVE
CAMBRIDGE, MA 02138

PROJECT NO: 155569.003.01
CHECKED BY: CLG

ISSUED FOR:				
REV	DATE	DRWN	DESCRIPTION	
A	10/12/21	FWP	PRELIMINARY REVIEW	
B	11/23/21	MDW	PRELIMINARY REVIEW	
C	12/13/21	MEH	PRELIMINARY REVIEW	
D	12/28/21	CLG	CONSTRUCTION	

B&T ENGINEERING, INC.
PETER D. SMITH
No. 56245
12/29/21
PROFESSIONAL ENGINEER

SHEET NUMBER: **E-1** REVISION: **0**







January 7, 2022

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 **100 Concord Avenue, 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 100 Concord Avenue, 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.

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 one hundred and fourteen feet (114’) 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 one hundred and fourteen feet (114’) high. The proposed replacement and addition of the antennas will not affect the height of the Base Station, as the proposed modifications will take place at a height of sixty-two feet (62’).
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 and additional antennas will not protrude from the edge of the building and therefore will not exceed the six (6) foot limitation. All of the proposed antennas will be concealed within the existing church steeple. As such, the proposed modification will not protrude from the edge of the building by more than six (6) feet.
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. There are currently four (4) equipment cabinets existing at the Base Station. 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 original decision by the Zoning Board of Appeal for the City of Cambridge (the “Board”) for this facility, April 12, 2001 (Case No. 8292) (the “Original Decision”), a second decision dated October 28, 2010 (Case No. 10015) (the “2nd Decision”), and a third decision dated December 9, 2016 (Case No. BZA-011495-2016) (the “3rd Decision”, and together, the Original Decision and the 2nd Decision, the “Decisions”), all of which are attached hereto, the existing antennas are located in the preferred location within the existing church steeple and comply with the required conditions for a stealth design. The replacement and addition of the antennas will not defeat the existing stealth design as all antennas will be concealed within the existing steeple. As such, the proposed modification will not defeat any existing concealed or stealth design.
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 100 Concord Avenue, 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,

A handwritten signature in black ink, appearing to read 'A. Braillard', with a stylized flourish at the end.

Adam F. Braillard

Direct: 617-456-8153

Email: abraillard@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: 100 Concord Avenue

Existing Facilities

The Existing Facility is comprised of eight (8) panel antennas all mounted within the steeple of the existing church, together with supporting equipment.

Height of Base Station

Height above ground level of the tallest point on the existing base station: 114' (feet)

Height above ground level of the tallest point of the existing base station after the installation of the *proposed* equipment: 62'(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)

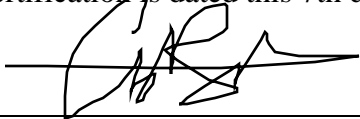
Comment: a. Pursuant to the original decision by the Zoning Board of Appeal for the City of Cambridge (the “Board”) for this facility, April 12, 2001 (Case No. 8292) (the “Original Decision”), a second decision dated October 28, 2010 (Case No. 10015) (the “2nd Decision”), and a third decision dated December 9, 2016 (Case No. BZA-011495-2016) (the “3rd Decision”, and together, the Original Decision and the 2nd Decision, the “Decisions”), all of which are attached hereto, the existing antennas are located in the preferred location within the existing church steeple and comply with the required conditions for a stealth design. The replacement of the eight (8) antennas and the addition eight (8) RRUs will not defeat the existing stealth design as all antennas will be concealed within the existing steeple. As such, the proposed installation will be in conformity with the Decisions and do not defeat the existing stealth design. The proposed installations will not substantially increase the facility and as such the proposed visual impact will be de minimus for many of the same reasons stated in the Decisions attached hereto.

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 Decisions. Furthermore, in the Decisions 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 7th day of January, 2022.



Signature

Adam F. Braillard, Esq., of Prince Lobel Tye LLP, for the Applicant, T-Mobile Northeast LLC
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:

List Cabinets that will be Removed at the Site:

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: T-MOBILE LICENSE LLC

ATTN: FCC REGULATORY COMPLIANCE
T-MOBILE LICENSE LLC
12920 SE 38TH STREET
BELLEVUE, WA 98006

Call Sign WQIZ578	File Number 0008577570
Radio Service WY - 700 MHz Lower Band (Blocks A, B & E)	

FCC Registration Number (FRN): 0001565449

Grant Date 05-30-2019	Effective Date 05-30-2019	Expiration Date 06-13-2029	Print Date 05-31-2019
Market Number BEA003	Channel Block A	Sub-Market Designator 0	
Market Name Boston-Worcester-Lawrence-Lowe			
1st Build-out Date	2nd Build-out Date 06-13-2019	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

If the facilities authorized herein are used to provide broadcast operations, whether exclusively or in combination with other services, the licensee must seek renewal of the license either within eight years from the commencement of the broadcast service or within the term of the license had the broadcast service not been provided, whichever period is shorter in length. See 47 CFR §27.13(b).

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §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. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

Licensee Name: T-MOBILE LICENSE LLC

Call Sign: WQIZ578

File Number: 0008577570

Print Date: 05-31-2019

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: T-MOBILE LICENSE LLC

T-MOBILE LICENSE LLC
12920 SE 38TH STREET
BELLEVUE, WA 98006

Call Sign WQZL852	File Number
Radio Service WT - 600 MHz Band	

FCC Registration Number (FRN): 0001565449

Grant Date 06-14-2017	Effective Date 06-15-2017	Expiration Date 06-14-2029	Print Date
---------------------------------	-------------------------------------	--------------------------------------	-------------------

Market Number PEA007	Channel Block B	Sub-Market Designator 0
--------------------------------	---------------------------	-----------------------------------

Market Name Boston, MA

1st Build-out Date 06-14-2023	2nd Build-out Date 06-14-2029	3rd Build-out Date	4th Build-out Date
---	---	---------------------------	---------------------------

Waivers/Conditions:

NONE

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §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. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

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Licensee Name: T-MOBILE LICENSE LLC

Call Sign: WQZL852

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: T-MOBILE LICENSE LLC

T-MOBILE LICENSE LLC
12920 SE 38TH STREET
BELLEVUE, WA 98006

Call Sign WQZL853	File Number
Radio Service WT - 600 MHz Band	

FCC Registration Number (FRN): 0001565449

Grant Date 06-14-2017	Effective Date 06-15-2017	Expiration Date 06-14-2029	Print Date
Market Number PEA007	Channel Block C	Sub-Market Designator 0	
Market Name Boston, MA			
1st Build-out Date 06-14-2023	2nd Build-out Date 06-14-2029	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §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. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

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Licensee Name: T-MOBILE LICENSE LLC

Call Sign: WQZL853

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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Reference Copy

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: T-MOBILE LICENSE LLC

ATTN: FCC REGULATORY COMPLIANCE
T-MOBILE LICENSE LLC
12920 SE 38TH ST.
BELLEVUE, WA 98006

Table with Call Sign (WRAM889), File Number (0008585885), and Radio Service (CW - PCS Broadband).

FCC Registration Number (FRN): 0001565449

Table with columns: Grant Date, Effective Date, Expiration Date, Print Date, Market Number, Channel Block, Sub-Market Designator, Market Name, 1st Build-out Date, 2nd Build-out Date, 3rd Build-out Date, 4th Build-out Date.

Waivers/Conditions:

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.

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §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.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS).

Licensee Name: T-MOBILE LICENSE LLC

Call Sign: WRAM889

File Number: 0008585885

Print Date: 05-31-2019

Spectrum Lease associated with this license. See Spectrum Leasing Arrangement Letter dated 07/27/2004 and File No. 0001765259.

Reference Copy

Licensee Name: T-MOBILE LICENSE LLC

Call Sign: WRAM889

File Number: 0008585885

Print Date: 05-31-2019

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: T-MOBILE LICENSE LLC

ATTN: FCC REGULATORY COMPLIANCE
T-MOBILE LICENSE LLC
12920 S.E. 38TH STREET
BELLEVUE, WA 98006

Call Sign KNLH311	File Number 0007725350
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0001565449

Grant Date 06-08-2017	Effective Date 06-08-2017	Expiration Date 06-27-2027	Print Date 06-09-2017
Market Number BTA201	Channel Block D	Sub-Market Designator 0	
Market Name Hyannis, MA			
1st Build-out Date 06-27-2002	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

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.

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §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. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

Licensee Name: T-MOBILE LICENSE LLC

Call Sign: KNLH311

File Number: 0007725350

Print Date: 06-09-2017

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.

Preferred
Copy

Licensee Name: T-MOBILE LICENSE LLC

Call Sign: KNLH311

File Number: 0007725350

Print Date: 06-09-2017

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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Reference Copy

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: T-MOBILE LICENSE LLC

ATTN: FCC REGULATORY COMPLIANCE
T-MOBILE LICENSE LLC
12920 SE 38TH ST.
BELLEVUE, WA 98006

Table with Call Sign (WPOJ753), File Number (0008585870), and Radio Service (CW - PCS Broadband).

FCC Registration Number (FRN): 0001565449

Table with columns: Grant Date, Effective Date, Expiration Date, Print Date, Market Number, Channel Block, Sub-Market Designator, Market Name, 1st Build-out Date, 2nd Build-out Date, 3rd Build-out Date, 4th Build-out Date.

Waivers/Conditions:

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.

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §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.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS).

Licensee Name: T-MOBILE LICENSE LLC

Call Sign: WPOJ753

File Number: 0008585870

Print Date: 05-31-2019

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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Reference Copy

3D



City of Cambridge

MASSACHUSETTS

BOARD OF ZONING APPEAL

831 Mass Avenue, Cambridge, MA.
(617) 349-6100

2001 MAY -3 A 11: 08
FILED
CLERK
CAMBRIDGE MASSACHUSETTS

CASE NO: 8292

LOCATION: 100 Concord Avenue Residence C-2 Zone
Cambridge, MA

PETITIONER: Omnipoint Holdings, Inc. - ~~Thomas J. Fields~~
2678-3aa

PETITION: Special Permit: To install telecommunication radios and antennas. The complete installation will be inside the church's steeple and will not be visible to the public.

VIOLATIONS: Art. 4.000, Sec. 4.32.G.1 (Telecommunication Uses).

DATE OF PUBLIC NOTICE: March 23 & 30, 2001

DATE OF PUBLIC HEARING: April 12, 2001

MEMBERS OF THE BOARD:	THOMAS SIENIEWICZ - CHAIR	✓
	ARCH HORST	✓
	CHARLES PIERCE	✓
	JOHN O'CONNELL	✓
	SUSAN SPURLOCK	✓
ASSOCIATE MEMBERS:	JENNIFER PINCK - VICE-CHAIR	✓
	MARC TRUANT	✓
	SUSAN CONNELLY	✓
	REBECCA TEPPER	✓
	KEEFE B. CLEMONS	✓

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.

MSD 06/20/01 09:28:31 890 32.25

Case No. 8292
Location: 100 Concord Ave.
Petitioner: Omnipoint Holdings, Inc. - Thomas J. Fields

On April 12, 2001, Petitioner Thomas J. Fields and RF Engineer Mirela Marku appeared before the Board of Zoning Appeal requesting a special permit to install telecommunications radios and antennas. The complete installation is to be inside the church's steeple and is not to be visible to the public. The Petitioner submitted plans and photographs.

Board member Clemons stated that he is regulatory counsel for Verizon and offered to recuse himself. Petitioner Fields stated that he had no problem with Mr. Clemons sitting on the case.

Mr. Fields stated that the entire installation will be inside the church and that Omnipoint holds an FCC license.

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

After discussion, the Chair moved that the Board find that the proper license has been displayed, that the visual impact is negligible, and that residential uses do not predominate in this locus. The Chair moved further that on the basis of these findings that the Board grant a special permit to install telephone equipment at 100 Concord Avenue on the following conditions,

1. that the equipment be removed should it not be used anymore.
2. that the work be done in conformance with drawings and photo simulations submitted in support of the application entitled St. Peter's Church, Harvard Observatory, Voice Stream, at 50 Vision Boulevard in East Providence, RI consisting of sheet T-1, Z-1, Z-2, Z-3 bearing the date of 8th of December 2000, and also the photographs of the steeple which bear stamp of the Zoning Board and the Case No. 8292. There are three 11 x 17 color photos.

The five member Board voted unanimously in favor of the findings and of granting a special permit (Sieniewicz, Pinck, Pierce, Horst, and Clemons) with the above conditions. Therefore, the special permit is granted.

The Board based its decision upon 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, and;
- 5) The proposed use would not impair the integrity of the district or adjoining district or otherwise derogate for the Ordinance, and in fact be a significant improvement to the structure and benefit the neighborhood.

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 regulation 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.

Tom Sieniewicz

 Tom Sieniewicz, Chair

Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 5.03.01 by Leslie P. Johnson, 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: 5/31/01 D. Margaret Dwyer City Clerk.





City of Cambridge

MASSACHUSETTS

BOARD OF ZONING APPEAL

831 Mass Avenue, Cambridge, MA.
(617) 349-6100

2010 DEC -1 A 11:21

OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

CASE NO: 10015

LOCATION: 100 Concord Avenue Residence C-1 Zone
Cambridge, MA

PETITIONER: T-Mobile Northeast LLC
C/o Peter Cooke

PETITION: Special Permit: To add one antenna and associated cabling within
steeple. Add one equipment cabinet and booster cabinet within belfry
area. Relocate three existing antennas to middle of louvers.

VIOLATION: Art. 4.000, Sec. 4.32.G.1 and 4.10 (footnote 49) (Telecommunication
Facility). Art. 10.000, Sec. 10.40 (Special Permit).

DATE OF PUBLIC NOTICE: October 8 & 15, 2010

DATE OF PUBLIC HEARING: October 28, 2010



2011 00007917

Bk: 56260 Pg: 146 Doc: DECIS
Page: 1 of 4 01/10/2011 03:37 PM

MEMBERS OF THE BOARD:

CONSTANTINE ALEXANDER - CHAIR
TIMOTHY HUGHES - VICE CHAIR
BRENDAN SULLIVAN
THOMAS SCOTT

ASSOCIATE MEMBERS:

CHRISTOPHER CHAN
MAHMOOD R. FIROUZBAKHT
DOUGLAS MYERS
SLATER W. ANDERSON
TAD HEUER

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.

2878-322

Case No. 10015
Location: 100 Concord Avenue
Petitioner: T-Mobile Northeast LLC c/o Peter Cooke

On October 28, 2010, Petitioner's representative Peter Cooke appeared before the Board of Zoning Appeal requesting a special permit in order to add one antenna and associated cabling within the belfry and to relocate three existing antennas to the middle of the louvers. The Petitioner requested relief from Article 4, Sections 4.32.G.1 and 4.10 of the Cambridge Zoning Ordinance ("Ordinance"). The Petitioner submitted application materials including information about the project, plans, and photographs.

Mr. Cooke stated that currently there existed a telecommunications facility within the steeple, hidden from view behind louvers. He stated that the Petitioner had an increased need and required the proposed equipment at the site. He stated that all equipment would continue to remain out of sight, within the structure. He stated that nonresidential uses predominated in the vicinity due to the large church property and the adjoining institutional and commercial uses. He stated that the Planning Board supported the proposal.

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

After discussion, the Chair moved that the Board grant the special permit for relief in order to add one antenna and associated cabling within the belfry and to relocate three existing antennas to the middle of the louvers based on the finding that nonresidential uses predominate in the vicinity of the proposed location and the telecommunication facility is not inconsistent with the character that does prevail in the surrounding neighborhood. The Chair moved that the Board find that the Board previously made the above finding in granting the original special permit, and that nothing has changed with respect to the character of the neighborhood that would change that finding. The Chair moved that the Board find that there is almost no visual impact from the proposed installation, because its location within the structure and its covering of louvers results in essentially no visual changes to the exterior of the structure, as demonstrated by the photo simulations submitted by the Petitioner. The Chair moved that the Board find that the proposed work will not impact traffic or patterns of access or egress or cause congestion, hazard or substantial change in established neighborhood character. The Chair moved that the Board find that the continued operation of adjacent uses would not be adversely affected by the proposed use. The Chair moved that the Board find that no nuisance or hazard would be created to the detriment of the health, safety and welfare of the occupant or the citizens of the city. The Chair moved that the Board find that the proposed use would not impair the integrity of the district or

adjoining district or otherwise derogate from the intent or purpose of the Ordinance, due to the very modest visual impact, and the petitioner submitted evidence to indicate the need for this additional equipment. The Chair moved that the Board grant the special permit on the condition that the work proceed in accordance with two sheets of plans submitted by the Petitioner, being T-1 and Z-1, with both pages initialed by the Chair and be consistent with the photo simulations, submitted by the Petitioner, but not initialed due to lamination.

The five member Board voted unanimously in favor of granting the special permit (Alexander, Hughes, Sullivan, Scott, and Heuer) with the above conditions. 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

Constantine Alexander, Chair

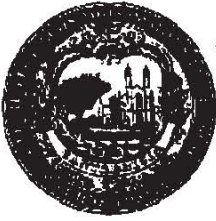
Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 12/4/10 by Maria Pasheco, Clerk.

Twenty days have elapsed since the filing of this decision.

No appeal has been filed

Appeal has been filed and dismissed or denied.

Date: Jan. 4, 2011 D. Margaret Drury Clerk.



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

fy

2016 DEC -9 AM 10:34

CASE NO: BZA-011495-2016 Residence C-1 Zone

LOCATION: 100 Concord Ave
Cambridge, MA 02138

2678-322

PETITIONER: T-Mobile Northeast LLC - C/O Ricardo M. Sousa, Esq.

PETITION: Special Permit: To modify its existing Wireless Telecommunications Facility by collocating four (4) new L700 antennas concealed within the church steeple, together with supporting equipment. All four (4) proposed antennas will be mounted adjacent to the existing antennas and not visible to the public. The Applicants proposal complies with Seciton 6409 of the Spectrum Act as the collocation of the 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.

VIOLATION :

Article <u>4.000</u>	Section <u>4.32.G.1 (Telecommunications Facility).</u>
Article <u>4.000</u>	Section <u>4.40 (Footnote 49) (Telecommunication Facility).</u>
Article <u>6409</u>	Section <u>(Middle Class Tax Relief & Job Creation Act).</u>
Article <u>10.000</u>	Section <u>10.40 (Special Permit).</u>

DATE OF PUBLIC NOTICE: October 13, 2016 and October 20, 2016

DATE OF PUBLIC HEARING: October 27, 2016;



2017 00003183

Bk: 68722 Pg: 72 Doc: DECIS
Page: 1 of 7 01/06/2017 12:50 PM

MEMBERS OF THE BOARD:

CONSTANTINE ALEXANDER - CHAIR	_____
BRENDAN SULLIVAN - VICE-CHAIR	_____✓
JANET O. GREEN	_____✓
PATRICK TEDESCO	_____✓
ANDREA A. HICKEY	_____✓

ASSOCIATE MEMBERS:

DOUGLAS MYERS	_____
SLATER W. ANDERSON	_____
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-011495-2016
Location: 100 Concord Avenue
Petitioner: T-Mobile Northeast LLC – c/o Ricardo Sousa, Esq.

On October 27, 2016, Petitioner's attorney Daniel Glissman appeared before the Board of Zoning Appeal requesting a special permit in order to modify its existing wireless telecommunications facility by collocating four new L700 antennas concealed within the church steeple, together with supporting equipment, where all four proposed antennas will be mounted adjacent to the existing antennas and not visible to the public. The Petitioner requested relief under Article 4, Section 4.32.G.1 and Article 10, Section 10.40 of the Cambridge Zoning Ordinance ("Ordinance") and Section 6409 of the Middle Class Tax Relief & Job Creation Act. The Petitioner submitted materials in support of their application including information about the project, plans, and photographs.

Mr. Glissman stated that as part of a system wide upgrade, the Petitioner wished to add four new antennas to an existing telecommunications site. He stated that the site was and would continue to be housed within the church steeple. He stated that the proposed work did not constitute a substantial change under Section 6409. He stated that while the site sat within a residential district, residential uses did not predominate as the area consisted largely of commercial and institutional uses. He stated that the Petitioner was FCC licensed.

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

After discussion, the Chair moved that the Board make the following findings based upon the application materials submitted and all evidence before the Board and that based upon the findings the Board grant the requested relief as described in the Petitioner's submitted materials and the evidence before the Board: that the Board find that the requirements of the Ordinance could be met; that the Board find that traffic generated or patterns of access or egress would not cause congestion, hazard, or substantial change in the established neighborhood character; that the Board find that the continued operation or development of adjacent uses as permitted in the Ordinance would not be adversely affected by the proposed use; that the Board find that there would be no nuisance or hazard created to the detriment of the health, safety, and/or welfare of the occupants of the proposed use or the citizens of the City; that the Board find that the proposed use would not impair the integrity of the district or adjoining district or otherwise derogate from the intent and purpose of the Ordinance; that the Board find that the proposed use was a continuation of an existing use and that it was consistent with the existing facility; and that the Board find that the proposed modification of the existing telecommunication facility would not substantially change the physical dimensions of the existing wireless tower or base station at the facility within the meaning of Section 6409(a) of The Middle Class Tax Relief and Job Creation Act of 2012, also known as The

Spectrum Act.

The Chair further moved that based upon all the information presented the Board grant the requested relief as described in the Petitioner's submitted materials and the evidence before the Board on the following conditions:


1. that the work proceed in accordance with plans submitted by the petitioner, as initialed by the Chair,
2. that upon completion of the work, the physical appearance and visual impact of the proposed work be consistent with the photo simulations submitted by the petitioner, as initialed by the Chair,
3. that the petitioner at all times maintain the proposed work so that its physical appearance and visual impact remain consistent with the photo simulations previously referred to,
4. that should the petitioner cease to utilize the equipment approved tonight for a continuous period of six months or more, it promptly thereafter remove such equipment and restore the building on which it was located to its prior condition and appearance to an extent reasonably practicable,
5. that the petitioner continue to comply with the conditions imposed by the Board with respect to previous Special Permits granted to the petitioner with regard to the site in question,
6. that inasmuch as the health effects of the transmission of electromagnetic energy waves is a matter of ongoing societal concern and scientific study, the Special Permit is also subject to the following conditions:
 - A. that the petitioner shall file with the Inspectional Services Department each report it files with the federal authorities regarding electromagnetic energy wave emissions emanating from all of the petitioner's equipment on the site. Each such report shall be filed with the Inspectional Services Department no later than ten business days after the report has been filed with the federal authorities. Failure to timely file any such report with the Inspectional Services Department shall ipso facto terminate the Special Permit granted tonight.
 - B. that in the event that at any time federal authorities notify the petitioner that its equipment on the site, including, but not limited to the special permit granted tonight, fails to comply with the requirements of law or governmental regulations, whether with regard to the emissions of electromagnetic energy waves or otherwise, the petitioner, within ten business days of receipt of such notification of such failure, shall file with the Inspectional Services Department a report disclosing in reasonable detail that such failure has occurred and the basis for such claimed failure. The special permit shall ipso facto terminate if any of the petitioner's federal licenses are suspended, revoked, or terminated.
 - C. that to the extent a special permit has terminated pursuant to the foregoing paragraphs A and B, the petitioner may apply to this Board

for a new special permit provided that the public notice containing such application discloses in reasonable detail that the application has been filed because of a termination of the special permit pursuant to paragraphs A or B above. Any such new application shall not be deemed a repetitive petition and therefore will not be subject to the two-year period during which repetitive petitions may not be filed.

- D. that within ten business days after receipt of a Building Permit for installation of equipment subject to this petition, the petitioner shall file with the Inspectional Services Department a sworn Affidavit of the person in charge of the installation of equipment by the petitioner of the geographical area that includes Cambridge. Stating that A, he or she has such responsibility, and B that the equipment being installed pursuant to the special permit will comply with all federal safety rules and will be situated and maintained in locations with appropriate barricades and other protections, such that individuals, including nearby residents and occupants of nearby structures, will be sufficiently protected from excessive radio frequency radiation under federal law.

The five member Board voted unanimously in favor of granting the special permit with the above conditions (Sullivan, Green, Hickey, Tedesco, and Wernick). Therefore, the special permit is granted as conditioned.

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.


Brendan Sullivan, Chair

Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 12-9-16 by Maria Pacheco, Clerk.

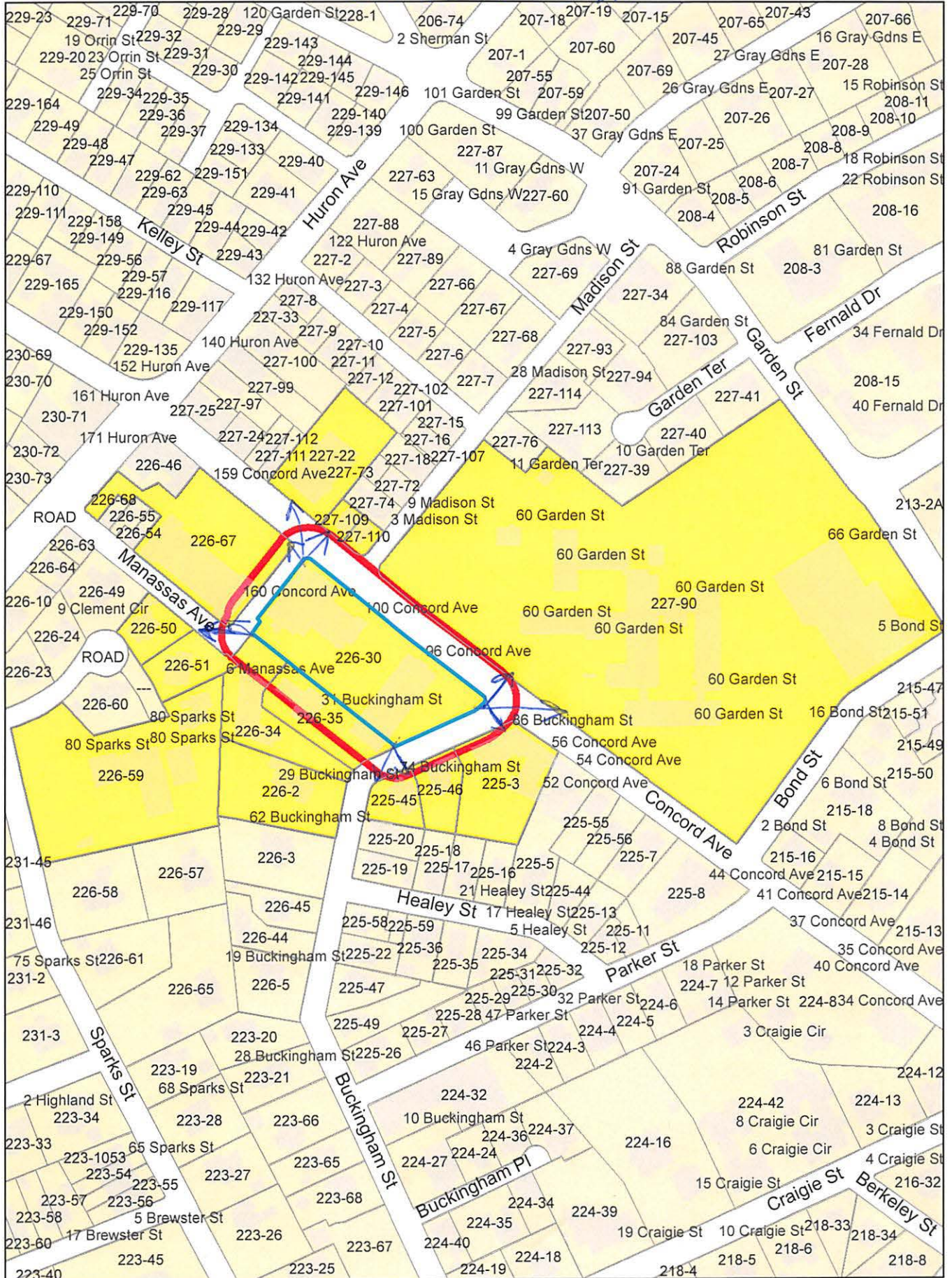
Twenty days have elapsed since the filing of this decision.

No appeal has been filed

Appeal has been filed and dismissed or denied.

Date: January 6, 2017 Anna P. Kopy City Clerk.

100 Concord Ave



100 Concord Ave

Petitioner
PRINCE LOBEL TYE LLP
C/O ADAM F. BRAILLARD, ESQ.
ONE INTERNATIONAL PLACE – SUITE 3700
BOSTON, MA 02110

225-3
FORBES, J. MALCOLM & ARIADNE H. FORBES
3 GERRY'S LANDING
CAMBRIDGE, MA 02138

225-3
GALLUCCIO, NANCY W.
86 BUCKINGHAM ST
CAMBRIDGE, MA 02138-2231

225-3
MORAT, CATHERINE A.
C/O CHESTNUT HILL REALTY CORP.
P.O BX 396
CHESTNUT HILL, MA 02467

225-3
NELSON, JANE A.
56 CONCORD AVE, UNIT #12
CAMBRIDGE, MA 02138

225-3
ARSHAD, GULREZ, GULREZ ARSHAD &
SHEHIME ARSHAD TRUSTEE
12 WESTON RD.
LINCOLN, MA 01773

225-3
VAUGHN, DAVID C.
56 CONCORD AVE., #1
CAMBRIDGE, MA 02138

225-3
ZHEUTLIN, LESLIE
56 CONCORD AVE UNIT 5
CAMBRIDGE, MA 02138

225-3
ASHENBERG, JOSHUA & ALENA ASHENBERG
5 CHARLES WAY
CHELMSFORD, MA 01824

225-3
BHIDE, AMARNATH
86 BUCKINGHAM ST., #11
CAMBRIDGE, MA 02138

225-3
SALVI, JUDITH
86 BUCKINGHAM ST., UNIT #28
CAMBRIDGE, MA 02138

225-3
NGUYEN, TRANG
86 BUCKINGHAM ST., #30
CAMBRIDGE, MA 02138

226-50
FORNEY, G. DAVID JR., & ELIZABETH D COXE
9 CLEMENT CIRCLE
CAMBRIDGE, MA 02138

227-22
DIBBLE, TIMOTHY L. & MAUREEN T. DIBBLE
42 NASHOBA RD.
CONCORD, MA 01742

227-22
HE, GUOJIN & JENNIFER HE
159 CONCORD AVE UNIT #1D
CAMBRIDGE, MA 02138

227-22
MAZZARELLI, MARC F. & HIROKO M. TAKESHITA
159 CONCORD AVE. UNIT#3B
CAMBRIDGE, MA 02138

227-22
STERN, ELLEN D.
159 CONCORD AVE
CAMBRIDGE, MA 02138

225-45
SANDER, ALISON
74 BUCKINGHAM ST
CAMBRIDGE, MA 02138

227-22
DHAKA, SHANTANU & SARITA RANI
159 CONCORD AVE 2B
CAMBRIDGE, MA 02138

227-22
159 CONCORD LLC
P.O. BOX 661382
ARCADIA, CA 91006

225-3
YOUNG, LOUISA B. & RAYMOND H. YOUNG,
TRS THE LBY NOMINEE TRUST
1010 WALTHAM STREET # 319
LEXINGTON, MA 02421

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GABRIELLE, ANDREA,
TRS THE NETTUNO TRUST
985 MEMORIAL DR UNIT #601
CAMBRIDGE, MA 02138

226-30-67
ROMAN CATHOLIC ARCHBISHOP OF BOSTON
CORPORATION SOLE
C/O CAMCO MGMT CO
127 MT AUBURN ST, STE 100A
CAMBRIDGE, MA 02138

226-34-35
ROMAN CATHOLIC ARCHBISHOP OF BOSTON
CORPORATION SOLE
31 BUCKINGHAM STREET
CAMBRIDGE, MA 02138

227-22
MACEVITT, MARJORIE E.
159 CONCORD AVE., #1B
CAMBRIDGE, MA 02138

227-22
TENENBAUM, JANE
159 CONCORD AVE., UNIT 3A
CAMBRIDGE, MA 02138

227-22
SIMMS, PEGGY, J.
159 CONCORD AVE, #4B
CAMBRIDGE, MA 02138

227-90
PRESIDENT & FELLOWS OF HARVARD COLLEGE
C/O HARVARD REAL ESTATE, INC.
HOLYOKE CENTER, ROOM 1000
1350 MASSACHUSETTS AVE
CAMBRIDGE, MA 02138-3895

225-3
CONCORD AVE, 56 LLC
968 LOWELL RD
CONCORD, MA 01742

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FERRARO, MATTHEW J.
24 GRAFTON ST.
ARLINGTON, MA 02474

100 Concord Ave

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CHETHAM, DEIRDRE K.
56 CONCORD AVE., UNIT #8
CAMBRIDGE, MA 02138-2344

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STARKEY, MEGAN S.
C/O PENG, YIJUN
287 MARLBOROUGH ST
BOSTON, MA 02116

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SMITH, SUSAN JANE
56 CONCORD AVE., APT. #26
CAMBRIDGE, MA 02138-2344

225-3
PORTER, JULIE A. & BEATRICE A. PORTER
86 BUCKINGHAM ST., UNIT #22
CAMBRIDGE, MA 02138

225-3
SECUNDY, CLAUDIA
86 BUCKINGHAM ST., #17
CAMBRIDGE, MA 02138

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LEE, ELIZABETH
86 BUCKINGHAM ST., #24
CAMBRIDGE, MA 02138

225-3
MOULIN, DANIEL,
TRUSTEE THE MOULIN INVESTMENT TURST
56 CONCORD AVENUE, UNIT #27
CAMBRIDGE, MA 02138

225-46
PATTERSON, NICK J. & ANNE PATTERSON
80 BUCKINGHAM ST
CAMBRIDGE, MA 02138

225-3
HAMORY, MATTHEW W. & BETH A. HAMORY
56 CONCORD AVE., UNIT #34
CAMBRIDGE, MA 02138

226-59
BUCKINGHAM BROWNE AND NICHOLS SCHOOL
80 GERRYS LANDING ROAD
CAMBRIDGE, MA 02138

227-22
BARBARICS, EVA
159 CONCORD AVE., #2D
CAMBRIDGE, MA 02139

227-22
WHITNEY, RUTH ANN
159 CONCORD AVE #3D
CAMBRIDGE, MA 02138-2325

227-22
DRESKIN, JANE E.
159 CONCORD AVE. #4C
CAMBRIDGE, MA 02138

227-110
MCKENNAN, MARGARET L. &
MARGARET A. MCCONNELL
145 CONCORD AVE
CAMBRIDGE, MA 02138

227-22
MCGINN NOEL F
TRS MARY LOU MCGINN FAMILY TR
38 SHERIDAN RD
SWAMPSCOTT, MA 02138

225-3
ZHANG, SHANGJUN
CITY OF CAMBRIDGE TAX TITLE
56 CONCORD AVE., #1
CAMBRIDGE, MA 02138

227-109
JORDAN, NOELLE T.N.
147 CONCORD AVE
CAMBRIDGE, MA 02138

226-2
SINGER MAUREEN WHITLEY
TRS SINGER JEFFREY W TRS
26 BUCKINGHAM ST
CAMBRIDGE, MA 02138

225-3
SCHOEN, WALTER & LUCAS, SETH
56 CONCORD AVE., UNIT 22
CAMBRIDGE, MA 02138

227-22
JAMES, SPIROS DEBBIE BANG JAMES
159 CONCORD AVE UNIT 1A
CAMBRIDGE, MA 02138

227-22
UMANZIO, CLARIE-FRANCES
159 CONCORD AVE - UNIT 2C
CAMBRIDGE, MA 02139

225-3
NELSON JANE A
56 CONCORD AVE UNIT 13
CAMBRIDGE, MA 02138

225-3
SCHEMBOR RICHARD E CURTIS FRANCES C TR
56 CONCORD AVE - UNIT 26
CAMBRIDGE, MA 02138

225-3
DUNCAN SHARON L & THOMAS M POTTER
TRS SHARON L DUNCAN TR
39 HARVARD RD
BELMONT, MA 02478

226-51
KAYDEN, JEROLD S,
TRS 11 CLEMENT CIRCLE REALTY TR
11 CLEMENT CIR
CAMBRIDGE, MA 02138

227-22
MORRISON AMANDA L &
CHRISTOPHER S Y CHIN
159 CONCORD AVE - UNIT 4A
CAMBRIDGE, MA 02139

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CONCORD, MA 01742

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WINSTON MAX,
ELLIOT SCUZZARELLA JANEY WELCH
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