



CITY OF CAMBRIDGE

BOARD OF ZONING APPEAL

831 Massachusetts Avenue, Cambridge MA 02139

617-349-6100

2023 MAY 18 PM 2:46
OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

BZA Application Form

BZA Number: 222855

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 Massachusetts Institute of Technology C/O Adam Brailard of Prince Lobel Tye LLP

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

LOCATION OF PROPERTY: 50 Ames St., Cambridge, MA

TYPE OF OCCUPANCY: Telecommunications and Institutional **ZONING DISTRICT:** Residential C-3B Zone

REASON FOR PETITION:

/Telecommunication Facility (antenna)/

DESCRIPTION OF PETITIONER'S PROPOSAL:

Applicant proposes to modify its existing wireless facility currently operating on the rooftop of the Building by replacing the six (6) existing panel antennas with six (6) new T-Mobile panel antennas and replacing sixteen (16) existing RRUs with six (6) new RRUs, together with supporting equipment. All new and proposed antennas will be mounted within the existing faux vent pipes and on the façade of the penthouse on the roof of the existing Building. The Applicant's facilities are shown on the Plans attached herewith the application.

SECTIONS OF ZONING ORDINANCE CITED:

- Article: 4.000 Section: 4.32.G.1 & Sec. 4.40 (footnote 49) (Telecommunications Facilities).
- Article: 10.000 Section: 10.40 (Special Permit).
- Article: 6409 Section: Federal Middle Class Tax Relief Act (Spectrum 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, Suite 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 Massachusetts Institute of Technology
(OWNER)

Address: 77 Mass Ave, W92-196, Cambridge, MA 02139

State that I/We own the property located at 400 Main Street,
which is the subject of this zoning application.

The record title of this property is in the name of Massachusetts
Institute of Technology

*Pursuant to a deed of duly recorded in the date 12/29/1960, Middlesex South
County Registry of Deeds at Book 9737, Page 321; or
Middlesex Registry District of Land Court, Certificate No. _____

Book _____ Page _____



VP Campus Services
SIGNATURE BY LAND OWNER OR
AUTHORIZED TRUSTEE, OFFICER OR AGENT*

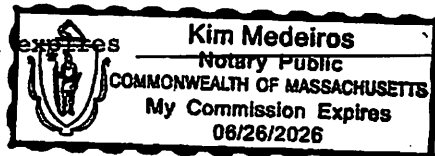
*Written evidence of Agent's standing to represent petitioner may be requested.

Commonwealth of Massachusetts, County of Middlesex

The above-name Joe Higgins personally appeared before me,
this 8 of May, 2023, and made oath that the above statement is true.

Kim Medeiros Notary

My commission expires _____ (Notary Seal).



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

May 12, 2023

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: 50 Ames Street (400 Main Street)
Assessor's Map 48, Lot 129 (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 ("**T-Mobile**" or the "**Applicant**") 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 Residential C-3B (**C-3B**) zoning district and the Planned Unit Development (**PUD-5**) overlay district. To the extent that the Board determines that the requirements of Article 4 Section 4.32G.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**").

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.

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FAX: 617 456 8100

The Applicant seeks to modify its existing wireless communications facility by replacing six (6) existing panel antennas with six (6) new panel antennas and remove sixteen (16) existing Remote Radio Units (“RRUs”) with six (6) new RRUs, all mounted on the roof of the existing building, together with supporting equipment (the “**Proposed Facility**”). All of the proposed antennas will be installed at the same locations as the existing antennas. As noted, the proposed antennas and RRUs will be installed on rooftop of the existing building located at the Property (the “**Building**”). The Applicant’s facilities are shown on the Plans attached hereto and incorporated herein by reference (the “**Plans**”).

I. Background

The Applicant is licensed by the Federal Communications Commission (the “**FCC**”) to construct and operate a wireless telecommunications network in various markets throughout the country, including the Commonwealth of Massachusetts and in particular in the City of Cambridge. A copy of the Applicant’s FCC license is attached hereto. The Applicant is in the process of designing and constructing a telecommunications system to serve all of the Commonwealth of Massachusetts. One of the key design objectives of its systems is to provide seamless coverage. Such a system requires a grid of radio transmitting and receiving links located approximately .5 to 2 miles apart, depending on the location of existing and proposed installations in the surrounding area, the existing use of the network and the existing topography. The radio transmitting and receiving facilities operate on a line-of-sight basis, requiring a clear path from the facility to the user on the ground. This dynamic requires the antennas to be located in a location where the signal is 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 on the rooftop of the Building by replacing the six (6) existing panel antennas with six (6) new T-Mobile panel antennas and replacing sixteen (16) existing RRUs with six (6) new RRUs, together with supporting equipment. All new and proposed antennas will be mounted within the existing faux vent pipes and on the façade of the penthouse on the roof of the existing Building, and finished to match the existing finish of the faux vent pipes and façade of the Building. Two (2) of the existing 20-inch faux vent pipes will be increased to a diameter of 30-inches. The Applicant also proposes to replace and upgrade its existing radio cabinets located within its existing enclosed equipment shelter located on the rooftop of the Building. All new equipment will be installed to be consistent with the previous decisions of the Board for this facility, the most recent of which is dated December 20, 2018 (Case No. BZA-016961-

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2018) (the “**Decisions**”). Consequently, the visual change to the Applicant’s existing facility will be de minimus.

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 BA 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

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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 BA 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 BA 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 Building. The Proposed Facility will continue to comply with the Decisions, and such will have a de-minimus impact on the existing visual conditions of the Building.

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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 Property and Proposed Facility are located in the C-3B zoning district, but nonresidential uses predominate in the area. Pursuant to the requirement that the Board shall grant a special permit to erect a Telecommunications Facility only upon a finding that nonresidential uses predominate in the vicinity of the proposed facility's location the Applicant hereby states that this is a modification of an existing wireless facility and as such respectfully submits to the Board that it has previously found that nonresidential uses predominate in the vicinity of this Proposed Facility. The Board has reached a decision to grant a special permit for the Applicant's Existing Facility the previous Decisions. As such, the Applicant respectfully requests that, in keeping with its prior decisions, the Board find that nonresidential uses predominate in the vicinity of the Proposed Facility and that the Proposed Facility is not inconsistent with the character that does prevail in the surrounding neighborhood.

Further, notwithstanding anything contained herein to the contrary, and in agreement with the aforementioned predominately nonresidential use finding, upon an inspection of the vicinity of the Proposed Facility the Applicant respectfully submits that said finding is reasonable as the character of the surrounding neighborhood consists of nonresidential uses such as, the Cambridge Trust Bank on Main Street, the MIT Cancer Research Center on Main Street, the MIT Biology Building on Ames Street, the Kendall Restaurant and Hotel on Main Street, and Main Street, which is a major thoroughfare in Cambridge.

Moreover, the proposed changes to the Existing Facility are de minimis and therefore, the Proposed Facility is not inconsistent with the character that does

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prevail in the surrounding neighborhood. Finally, as noted above, the proposed installation is a modification to the Applicant's Facility and as such is the preferred location for additional equipment, pursuant to the TCA, as referenced above.

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.

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.

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 a minimal change in the appearance of the Building. 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

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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 BA 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 in 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

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

Date: _____

BZA Application Form

DIMENSIONAL INFORMATION

Applicant: T-Mobile Northeast LLC, for Massachusetts Institute of Technology
Location: 50 Ames St., Cambridge, MA
Phone: 617-456-8153

Present Use/Occupancy: Telecommunications and Institutional
Zone: Residential C-3B 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 Change	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	
	LENGTH	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	N/A	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.

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'.

PROJECT INFORMATION

SCOPE OF WORK:

- REMOVE EXISTING (2) RFS APXVSP18 PANEL ANTENNAS
- REMOVE EXISTING (2) RFS APXVTSM18 PANEL ANTENNAS
- REMOVE EXISTING (2) CCI TPA65R-KE6A PANEL ANTENNAS
- REMOVE EXISTING (8) ALCATEL LUCENT RRH2x50 800MHz RRHs
- REMOVE EXISTING (4) ALCATEL LUCENT RRH4x45 1900MHz RRHs
- REMOVE EXISTING (4) ALCATEL LUCENT FZNH FLEXI 8TR 8x20W RRHs
- REMOVE EXISTING (6) HYBRID TRUNK CABLES
- REMOVE EXISTING (1) GPS & ASSOCIATED 1/2" COAX CABLES
- REMOVE EXISTING (1) ALCATEL LUCENT MM-BTS EQUIPMENT RACK
- REMOVE EXISTING (16) BATTERIES
- REMOVE EXISTING (1) ALCATEL LUCENT NEMA 3R FIBER DISTRIBUTION BOX

- ADD PROPOSED (3) ERICSSON M-MIMO AIR6449 B41 ANTENNAS
- ADD PROPOSED (3) RFS-APXVAALL 18_43-U-NA20 ANTENNAS
- ADD PROPOSED (3) ERICSSON-4460 B25+B66 RRUS
- ADD PROPOSED (3) ERICSSON-4480 B71+B85 RRUS
- ADD PROPOSED (3) 1-5/8" (6x24) HCS FIBER CABLES
- ADD PROPOSED (1) GPS & ASSOCIATED 1/2" COAX CABLE
- ADD PROPOSED (3) SPD UNITS
- ADD PROPOSED (1) ERICSSON 6230 DC POWER SYSTEM
- ADD PROPOSED (1) 19" EQUIPMENT RACK
- ADD PROPOSED (1) SLACKBOX FOR FIBER MANAGEMENT
- ADD PROPOSED (1) WALL MOUNT 19" RACK FOR AAV
- FURNISH & INSTALL POWER RELAY
- PAINT TO MATCH

SITE ADDRESS: 120 VASSAR STREET
CAMBRIDGE, MA 02139

LATITUDE: 42° 21' 44.36" (NAD 83)*

LONGITUDE: 71° 05' 16.04" (NAD 83)*

* PER EXISTING PLANS

JURISDICTION: CITY OF CAMBRIDGE

NAME OF APPLICANT: T-MOBILE
15 COMMERCE WAY
NORTON, MA 02766



T-MOBILE NORTHEAST LLC

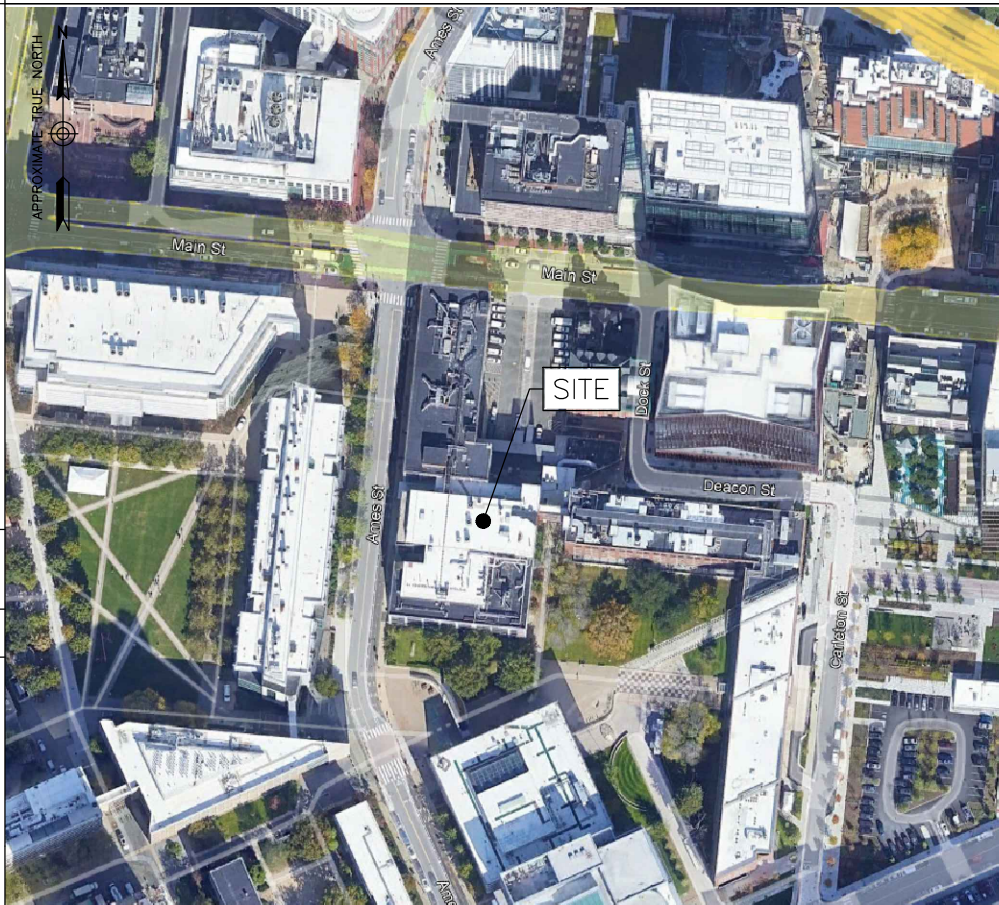
T-MOBILE SITE #: 4BSS001A/BS80XXC001
SITE NAME: 40 AMES STREET
CAMBRIDGE, MA 02139

DRAWING INDEX

REV

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C02	WEST ELEVATION	0
C03	ANTENNA PLANS & DETAILS	0
C04	EQUIPMENT PLANS & DETAILS	0
C05	FINAL EQUIPMENT CONFIGURATION AND FEEDLINE SCHEDULE	0
S01	ANTENNA BRACKET MOUNTING DETAILS	0
S02	STRUCTURAL DETAILS - FAUX FLUE	0
E01	ELECTRICAL & GROUNDING DETAILS	0

VICINITY MAP



APPLICABLE BUILDING CODES AND STANDARDS

CONTRACTOR'S WORK SHALL COMPLY WITH PROJECT STANDARD NOTES, SYMBOLS AND DETAILS (SEE DRAWING INDEX FOR STANDARD NOTES AND DETAILS INCLUDED WITH TYPICAL DRAWING PACKAGE). CONTRACTOR WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE:
MASSACHUSETTS STATE BUILDING CODE (780 CMR)

ELECTRICAL CODE:
NATIONAL ELECTRICAL CODE (NEC)
MASSACHUSETTS ELECTRICAL CODE (527 CMR 12.00)

CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS.
 AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
 AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
 TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-H, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES:
 TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
 IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT
 IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TELCORDIA GR-1503, COAXIAL CABLE CONNECTIONS

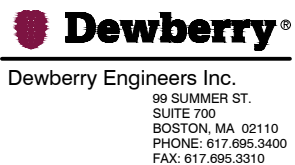
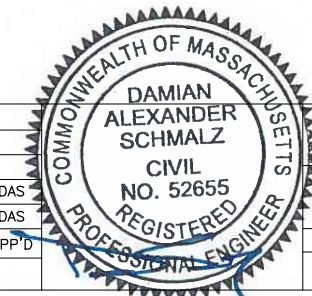
ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL PROTECTION

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

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

CONTACT INFORMATION

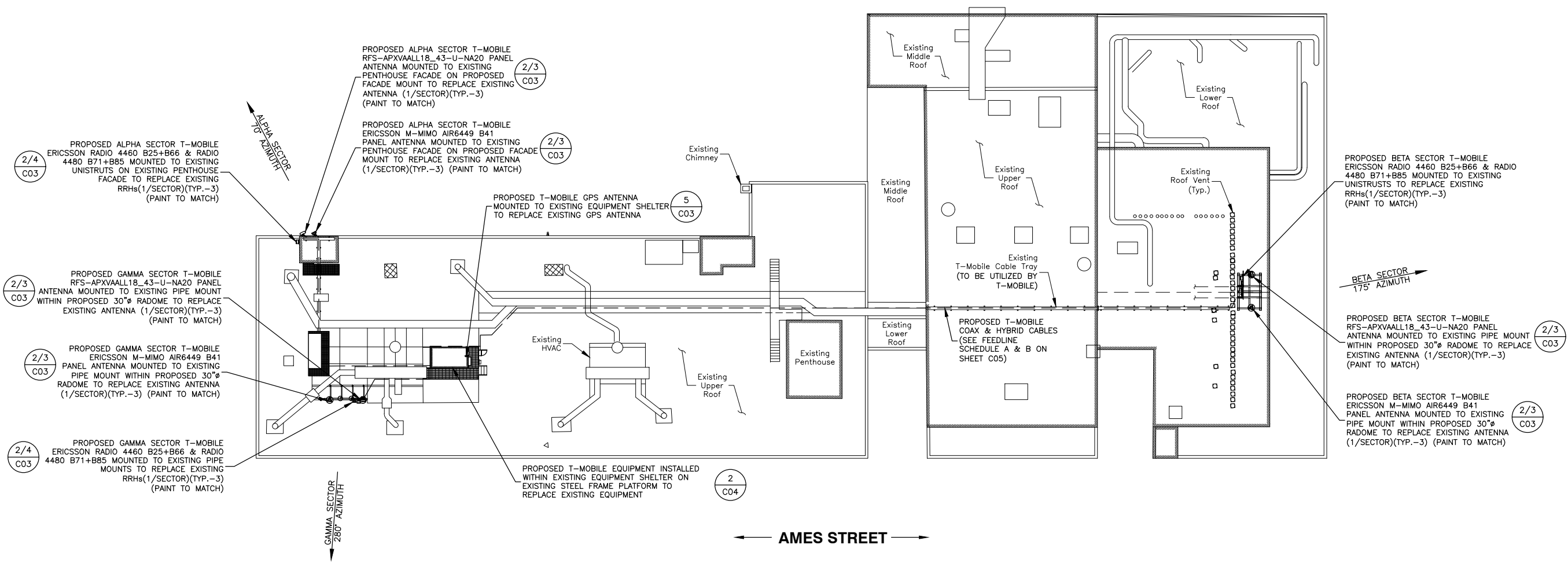
CONTACT	CONTACT	COMPANY	PHONE NO.
ENGINEERING:	DAMIAN SCHMALZ, P.E.	DEWBERRY ENGINEERS INC.	(617) 531-0823
SAC:	STEPHANIE WENDEROTH	SAI GROUP	(603) 590-9710



120 VASSAR STREET
40 AMES STREET
CAMBRIDGE, MA 02139



						T-MOBILE NORTHEAST LLC NORTON, MA 92766	
						TITLE SHEET	
0	04/06/23	ISSUED FOR CONSTRUCTION	MR	CDH	DAS		
A	03/29/23	ISSUED FOR REVIEW	MR	CDH	DAS		
NO.	DATE	REVISIONS	BY	CHK	APP'D		
SCALE: AS SHOWN		DESIGNED BY: CDH	DRAWN BY: MR				
						DEWBERRY NO.	DRAWING NUMBER
						50122947/50122982	T01
							REV
							0

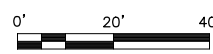


← AMES STREET →



PROPOSED ROOF PLAN

SCALE: 1"=40' FOR 11"x17"
1"=20' FOR 22"x34"



- NOTES:**
- SOME EXISTING & PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
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 - SITE PLAN BASED ON SITE VISIT BY DEWBERRY ENGINEERS INC. ON 03/14/23.
 - CONTRACTOR TO REPAIR ALL ANCHOR PENETRATIONS AFTER REMOVAL & WEATHER SEAL TO MATCH EXISTING CONDITIONS.

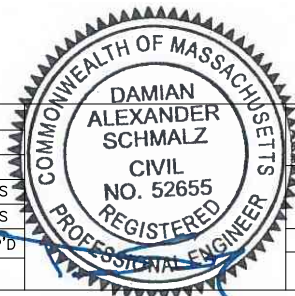
Dewberry
Dewberry Engineers Inc.
99 SUMMER ST.
SUITE 700
BOSTON, MA 02110
PHONE: 617.695.3400
FAX: 617.695.3310

SAI
12 INDUSTRIAL WAY
SALEM, NH 03079

120 VASSAR STREET
40 AMES STREET
CAMBRIDGE, MA 02139

T-Mobile
T-MOBILE NORTHEAST LLC
A DELAWARE LIMITED LIABILITY COMPANY
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
PHONE: (508) 286-2700
FAX: (508) 286-2893

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SCALE: AS SHOWN DESIGNED BY: CDH DRAWN BY: MR					



T-MOBILE NORTHEAST LLC NORTON, MA 92766		
PROPOSED ROOF PLAN		
DEWBERRY NO.	DRAWING NUMBER	REV
50122947/50122982	C01	0

2/3
C03
PROPOSED ALPHA SECTOR T-MOBILE ERICSSON M-MIMO AIR6449 B41 PANEL ANTENNA MOUNTED TO EXISTING PENTHOUSE FACADE ON PROPOSED FACADE MOUNT TO REPLACE EXISTING ANTENNA (1/SECTOR)(TYP.-3) (PAINT TO MATCH)

2/3
C03
PROPOSED ALPHA SECTOR T-MOBILE RFS-APXVAALL18_43-U-NA20 PANEL ANTENNA MOUNTED TO EXISTING PENTHOUSE FACADE ON PROPOSED FACADE MOUNT TO REPLACE EXISTING ANTENNA (1/SECTOR)(TYP.-3) (PAINT TO MATCH)

2/4
C03
PROPOSED ALPHA SECTOR T-MOBILE ERICSSON RADIO 4460 B25+B66 & RADIO 4480 B71+B85 MOUNTED TO EXISTING UNISTRUTS ON EXISTING PENTHOUSE FACADE TO REPLACE EXISTING RRHs(1/SECTOR)(TYP.-3) (PAINT TO MATCH)

C.L. OF PROPOSED T-MOBILE ANTENNAS
ELEV. = 91'-4"± A.G.L.
Top Of Parapet
Elev. = 83'-5"± A.G.L.
Top Of Roof Level
Elev. = 81'-11"± A.G.L.

Grade Level
Elev. = 0'-0"± A.G.L.

2/3
C03
PROPOSED GAMMA SECTOR T-MOBILE ERICSSON M-MIMO AIR6449 B41 PANEL ANTENNA MOUNTED TO EXISTING PIPE MOUNT WITHIN PROPOSED 30" RADOME TO REPLACE EXISTING ANTENNA (1/SECTOR)(TYP.-3) (PAINT TO MATCH)

2/4
C03
PROPOSED GAMMA SECTOR T-MOBILE ERICSSON RADIO 4460 B25+B66 & RADIO 4480 B71+B85 MOUNTED TO EXISTING PIPE MOUNTS TO REPLACE EXISTING RRHs(1/SECTOR)(TYP.-3) (PAINT TO MATCH)

2/3
C03
PROPOSED GAMMA SECTOR T-MOBILE RFS-APXVAALL18_43-U-NA20 PANEL ANTENNA MOUNTED TO EXISTING PIPE MOUNT WITHIN PROPOSED 30" RADOME TO REPLACE EXISTING ANTENNA (1/SECTOR)(TYP.-3) (PAINT TO MATCH)

5
C03
PROPOSED T-MOBILE GPS ANTENNA MOUNTED TO EXISTING EQUIPMENT SHELTER TO REPLACE EXISTING GPS ANTENNA

PROPOSED T-MOBILE COAX CONDUITS (SEE FEEDLINE SCHEDULE A & B ON SHEET A-5)

Existing T-Mobile Cable Tray (TO BE UTILIZED BY T-MOBILE)

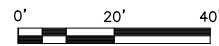
2/4
C03
PROPOSED BETA SECTOR T-MOBILE ERICSSON RADIO 4460 B25+B66 & RADIO 4480 B71+B85 MOUNTED TO EXISTING UNISTRUTS TO REPLACE EXISTING RRHs(1/SECTOR)(TYP.-3) (PAINT TO MATCH)

2/3
C03
PROPOSED BETA SECTOR T-MOBILE RFS-APXVAALL18_43-U-NA20 PANEL ANTENNA MOUNTED TO EXISTING PIPE MOUNT WITHIN PROPOSED 30" RADOME TO REPLACE EXISTING ANTENNA (1/SECTOR)(TYP.-3) (PAINT TO MATCH)

2/3
C03
PROPOSED BETA SECTOR T-MOBILE ERICSSON M-MIMO AIR6449 B41 PANEL ANTENNA MOUNTED TO EXISTING PIPE MOUNT WITHIN PROPOSED 30" RADOME TO REPLACE EXISTING ANTENNA (1/SECTOR)(TYP.-3) (PAINT TO MATCH)

WEST ELEVATION

SCALE: 1"=40' FOR 11"x17"
1"=20' FOR 22"x34"



NOTES:

1. SOME EXISTING & PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
2. ELEVATION SHOWN AS APPROXIMATE.
3. ALL EQUIPMENT TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, STRUCTURAL ANALYSIS BY CHAPPELL ENGINEERING ASSOCIATES, LLC DATED 12/30/21.
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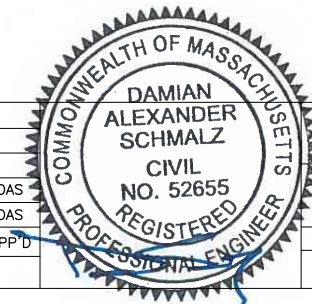
Dewberry
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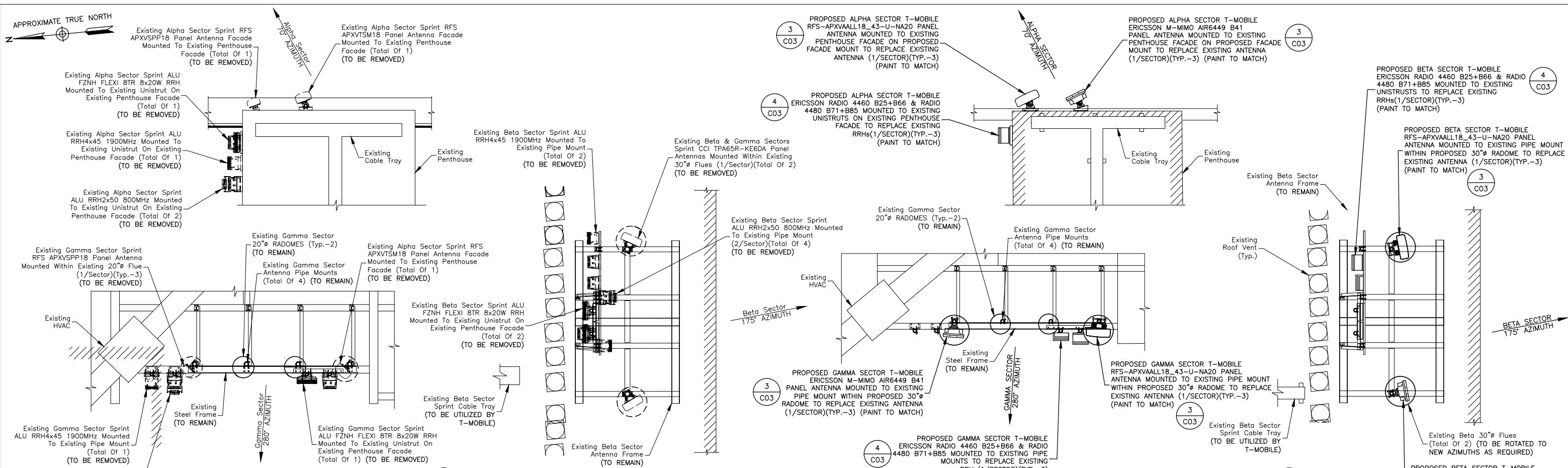
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NO.	DATE	REVISIONS	BY	CHK	APP'D
SCALE: AS SHOWN		DESIGNED BY: CDH	DRAWN BY: MR		



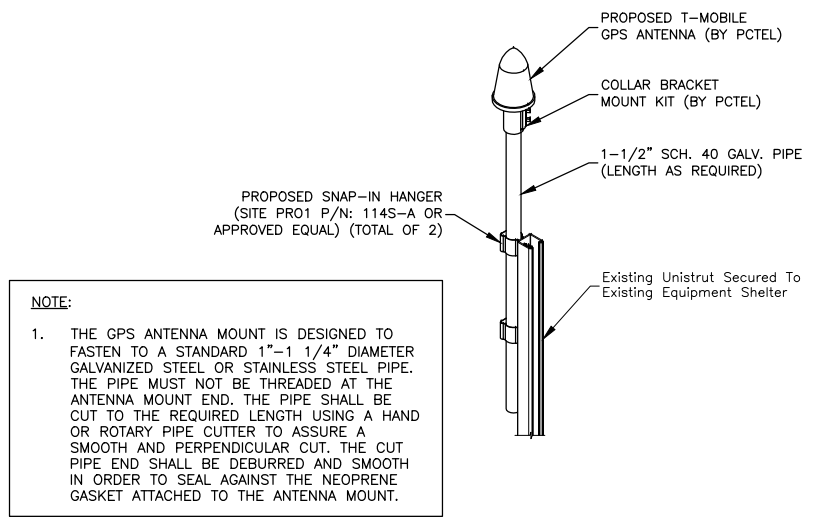
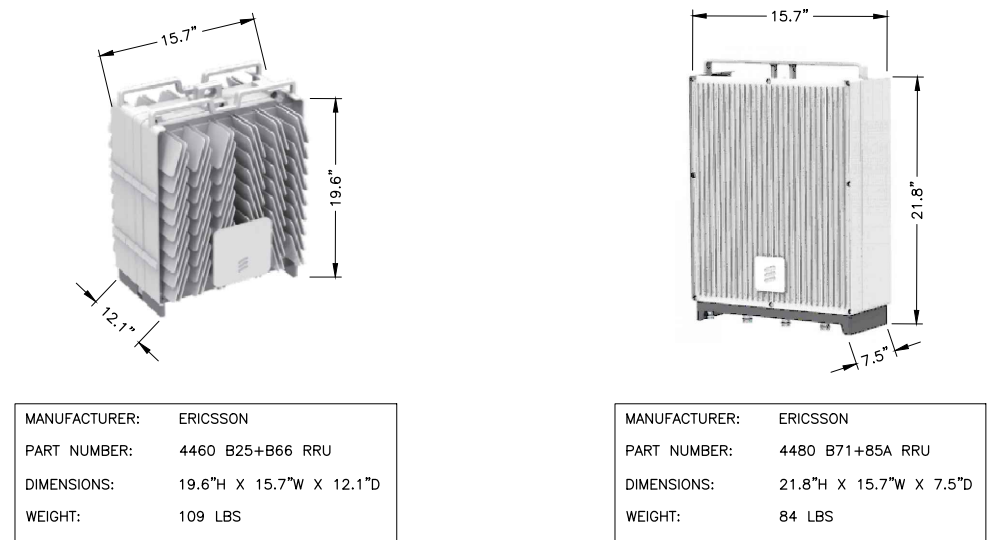
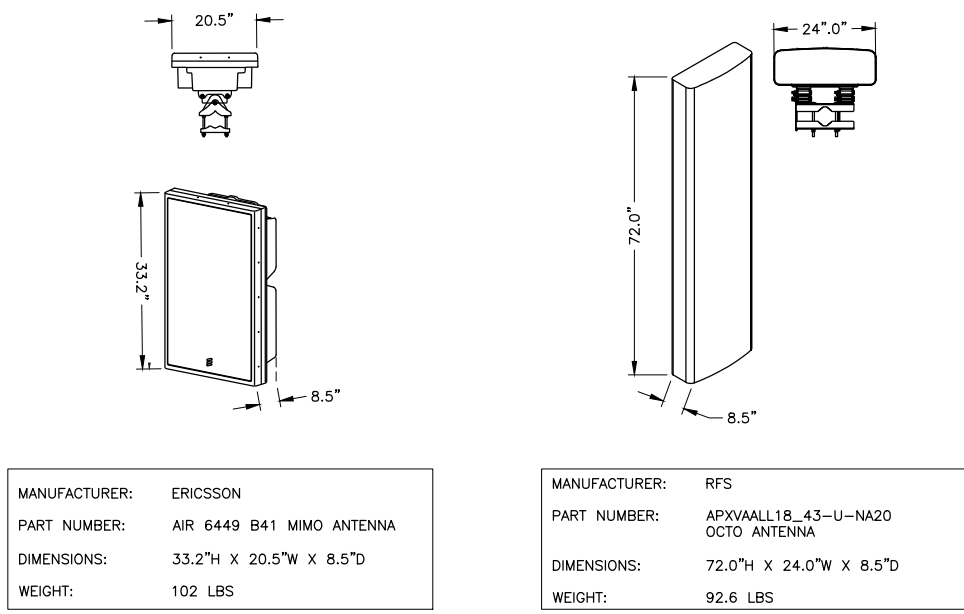
T-MOBILE NORTHEAST LLC
NORTON, MA 92766

WEST ELEVATION

DEWBERRY NO.	DRAWING NUMBER	REV
50122947/50122982	C02	0



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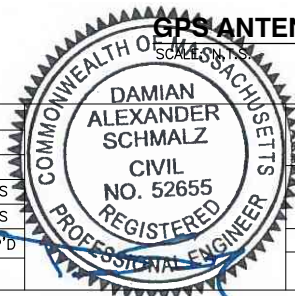
Dewberry
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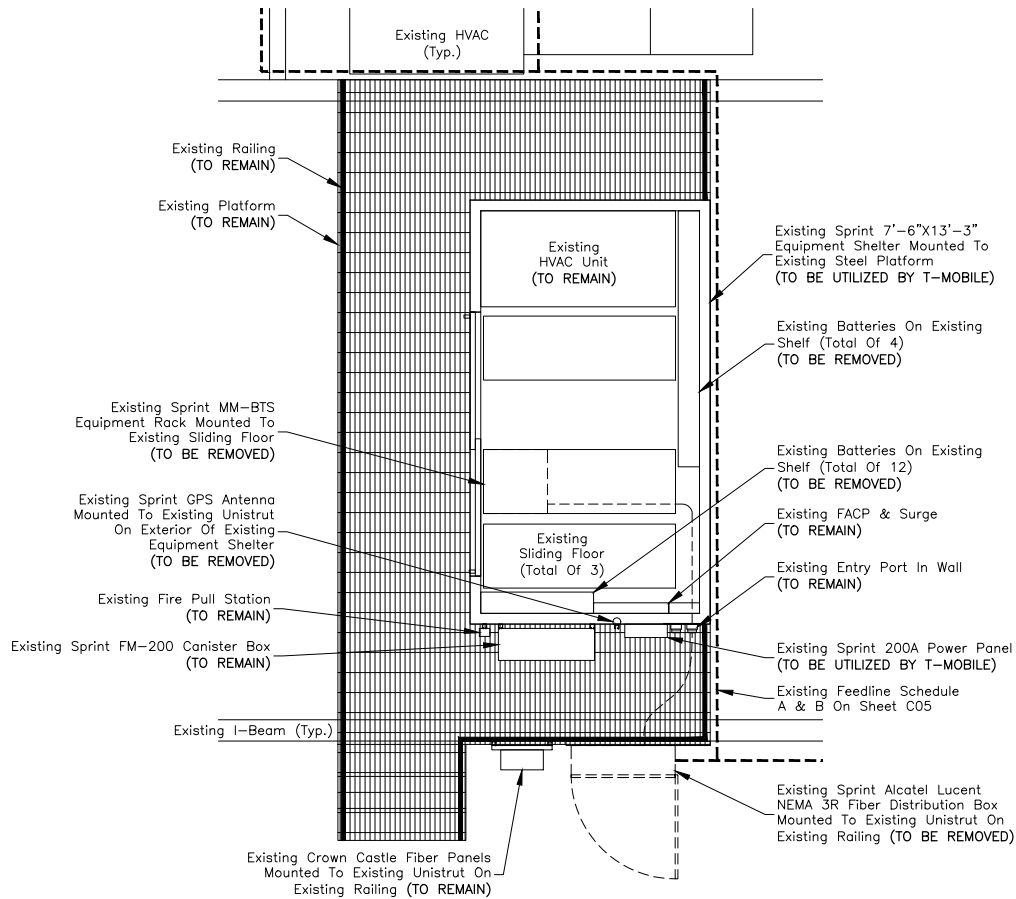
T-MOBILE NORTHEAST LLC
NORTON, MA 92766

ANTENNA PLANS & DETAILS

DEWBERRY NO.	DRAWING NUMBER	REV
50122947/50122982	C03	0

NOTES:

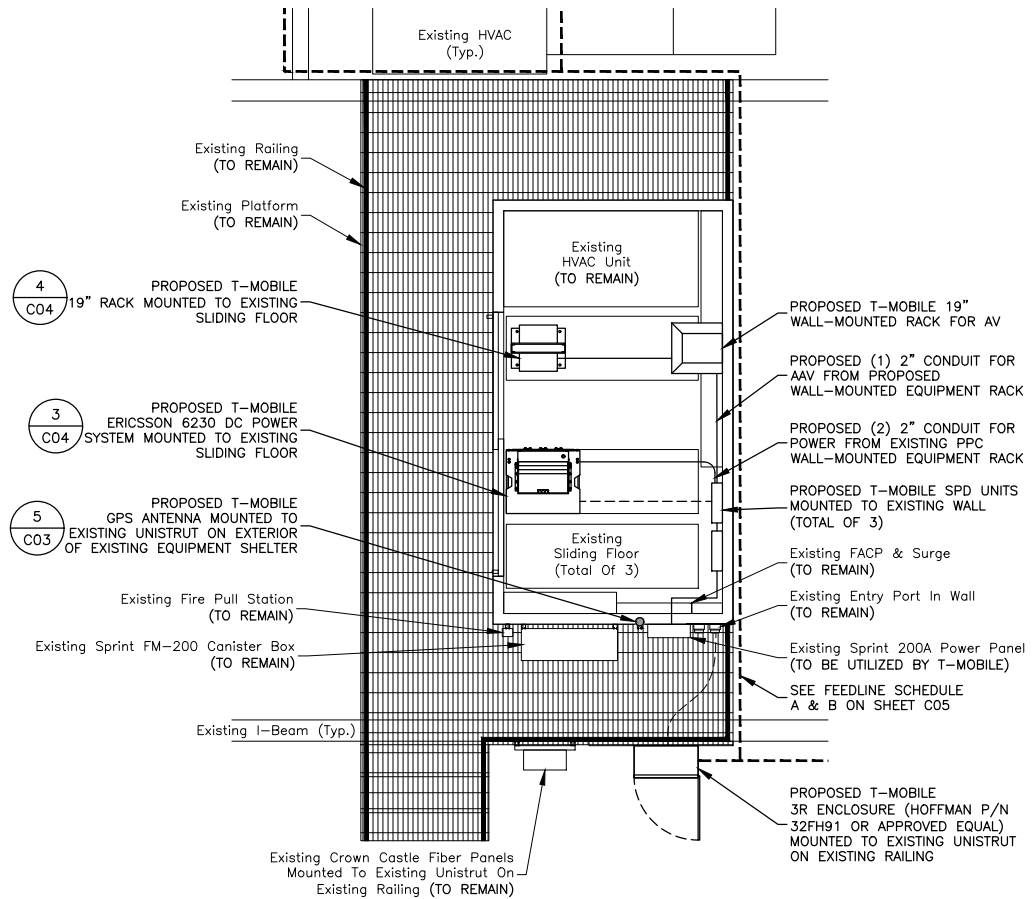
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EXISTING EQUIPMENT PLAN

SCALE: 1"=6' FOR 11"x17"
1"=3' FOR 22"x34"

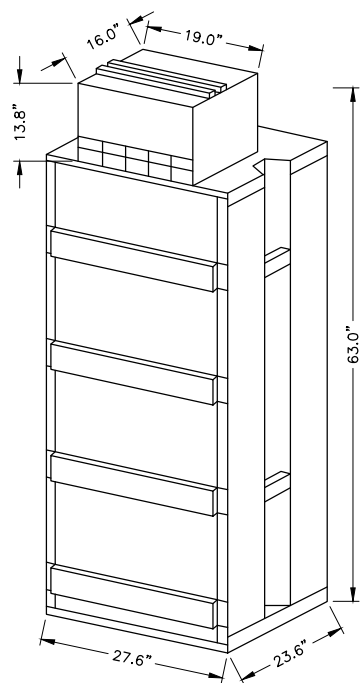
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PROPOSED EQUIPMENT PLAN

SCALE: 1"=6' FOR 11"x17"
1"=3' FOR 22"x34"

2

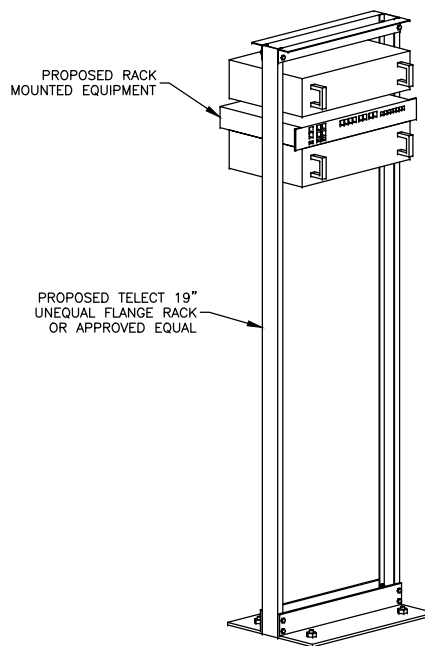


MANUFACTURER: ERICSSON
PART NUMBER: 6230 UNIT
DIMENSIONS RACK: 63.0"H X 27.6"W X 23.6"D
UNIT: 13.8"H X 19.0"W X 16.0"D
WEIGHT RACK: 344 LBS
UNIT: 53LBS

6230 UNIT & POWER RACK

SCALE: N.T.S.

3

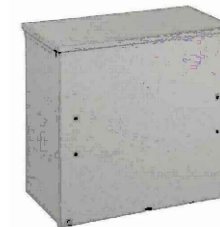


MANUFACTURER: TELECT 19" RACK
DIMENSIONS RACK: 84.0"H X 19.0"W X 23.6"D

TELECT 19" UNEQUAL FLANGE RACK

SCALE: N.T.S.

4

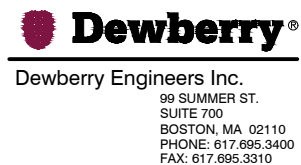


MANUFACTURER: HOFFMAN
PART NUMBER: 32FH91 NEMA 3R ENCLOSURE
DIMENSIONS: 24.0"H X 24.0"W X 12.0"D

HOFFMAN 32FH91 NEMA 3R ENCLOSURE

SCALE: N.T.S.

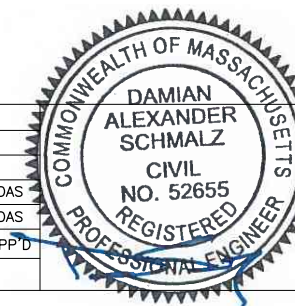
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120 VASSAR STREET
40 AMES STREET
CAMBRIDGE, MA 02139



NO.	DATE	REVISIONS	BY	CHK	APP'D
0	04/06/23	ISSUED FOR CONSTRUCTION	MR	CDH	DAS
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SCALE: AS SHOWN		DESIGNED BY: CDH	DRAWN BY: MR		



T-MOBILE NORTHEAST LLC
NORTON, MA 92766

EQUIPMENT PLANS & DETAILS

DEWBERRY NO.	DRAWING NUMBER	REV
50122947/50122982	C04	0

FINAL EQUIPMENT CONFIGURATION							
SECTOR	BAND	ANTENNA	SIZE (INCHES) (LxWxD)	RAD. CENTER	AZIMUTH	RRU	SIZE (INCHES) (LxWxD)
ALPHA	1605-2690MHz	(PROPOSED) RFS-APXVLL19_43-U-NA20	72.0x24.0x8.5	91'-4"	70°	(P)(1) RRU-4480 B71+B85	19.2x15.1x7.5
	5G 2.5-2.7GHz	(PROPOSED) M-MIMO ERICSSON AIR6449 B41	33.1x20.5x8.3	91'-4"	70°	(P)(1) RRU-4460 B25+B66	17.0x15.1x11.9
BETA	1605-2690MHz	(PROPOSED) RFS-APXVLL19_43-C-A20	72.0x24.0x8.5	91'-4"	175°	(P)(1) RRU-4480 B71+B85	19.2x15.1x7.5
	5G 2.5-2.7GHz	(PROPOSED) M-MIMO ERICSSON AIR6449 B41	33.1x20.5x8.3	91'-4"	175°	(P)(1) RRU-4460 B25+B66	17.0x15.1x11.9
GAMMA	1605-2690MHz	(PROPOSED) RFS-APXVLL19_43-C-A20	72.0x24.0x8.5	91'-4"	280°	(P)(1) RRU-4480 B71+B85	19.2x15.1x7.5
	5G 2.5-2.7GHz	(PROPOSED) M-MIMO ERICSSON AIR6449 B41	33.1x20.5x8.3	91'-4"	280°	(P)(1) RRU-4460 B25+B66	17.0x15.1x11.9

NOTES:

- CONTRACTOR TO VERIFY FINAL EQUIPMENT CONFIGURATION AND SEPARATIONS WITH T-MOBILE PRIOR TO CONSTRUCTION.

FINAL EQUIPMENT CONFIGURATION

SCALE: N.T.S.

1

FEEDLINE SCHEDULE		
SCHEDULE	FEEDLINES	LOCATION
A	EXISTING TO REMAIN: NONE EXISTING TO BE REMOVED: (1) SPRINT 1/2" COAX CABLE FOR GPS ANTENNA (6) SPRINT HYBRID TRUCK CABLES	ROUTED PER STRUCTURAL ANALYSIS
B	PROPOSED: (1) 1/2" COAX CABLE FOR GPS ANTENNA (3) 1-5/8" (6x24) HCS FIBER CABLES	

NOTE:
EXISTING T-MOBILE EQUIPMENT FEEDLINE INVENTORY BASED ON OBSERVED FIELD CONDITIONS. RFDS AND FEEDLINE LEASING ENTITLEMENTS MAY DIFFER.

FEEDLINE SCHEDULE

SCALE: N.T.S.

2

Dewberry
Dewberry Engineers Inc.
99 SUMMER ST.
SUITE 700
BOSTON, MA 02110
PHONE: 617.695.3400
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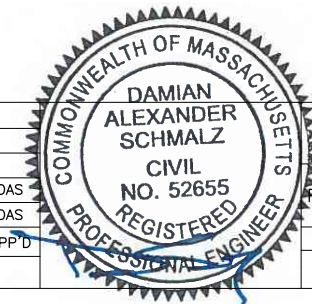
SAI
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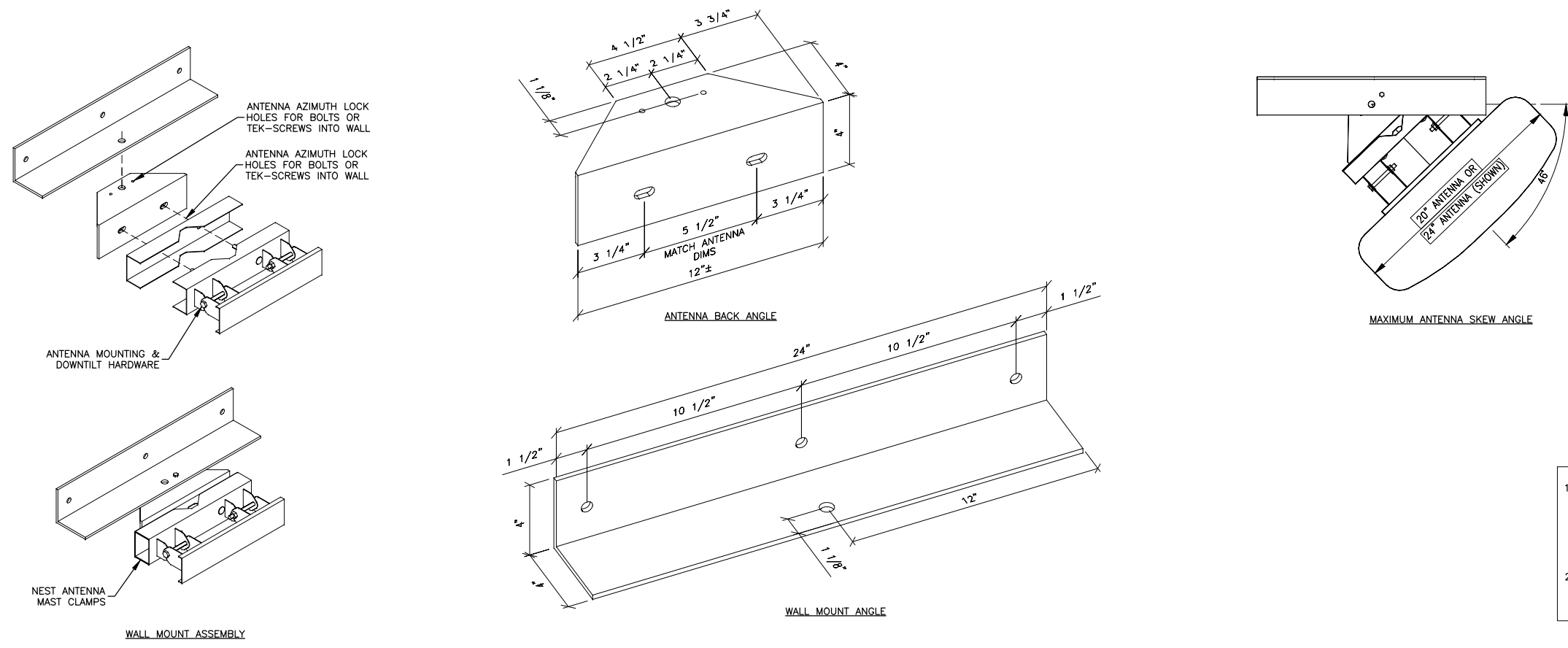
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T-MOBILE NORTHEAST LLC
NORTON, MA 92766

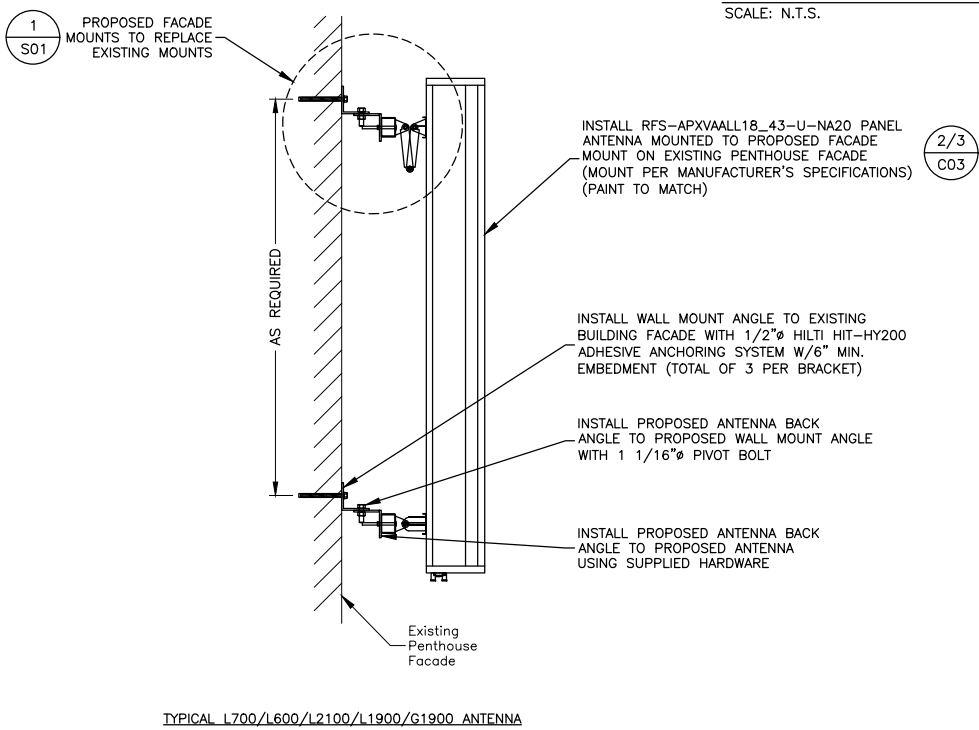
FINAL EQUIPMENT CONFIGURATION & FEED SCHEDULE

DEWBERRY NO.	DRAWING NUMBER	REV
50122947/50122982	C05	0

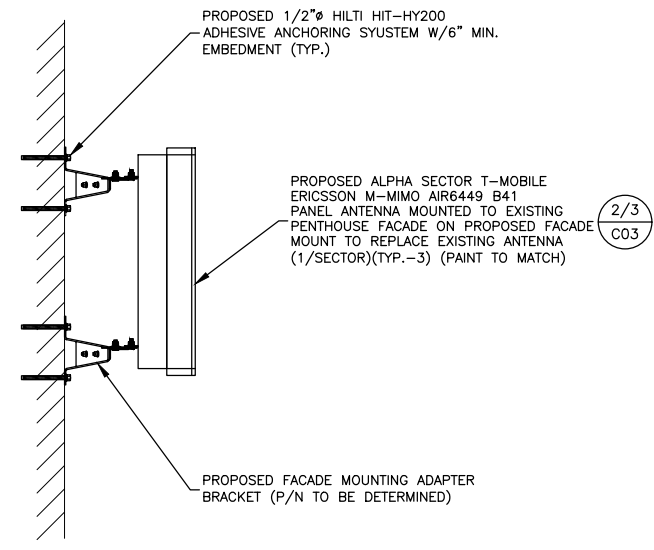


1. ANTENNA DESIGN BY OTHERS. ALL ANTENNA EQUIPMENT AND MOUNTING TO BE INSTALLED IN ACCORDANCE TO STRUCTURAL ANALYSIS BY CHAPPELL ENGINEERING ASSOCIATES, LLC DATED 12/30/21.
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ANTENNA ANGLE DETAILS
SCALE: N.T.S.



TYPICAL L700/L600/L2100/L1900/G1900 ANTENNA



TYPICAL L2500/N2500 ANTENNA

CUSTOM ANTENNA BRACKET DETAIL
SCALE: N.T.S.

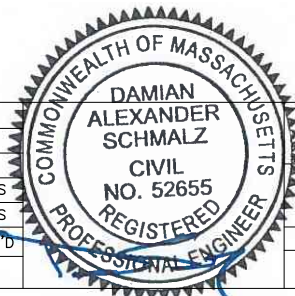
Dewberry
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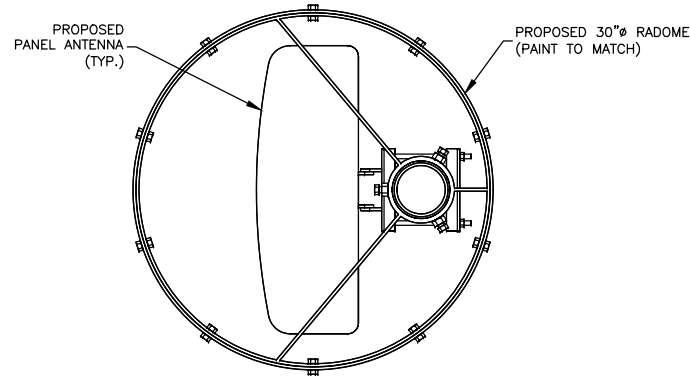
120 VASSAR STREET
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T-Mobile
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T-MOBILE NORTHEAST LLC NORTON, MA 92766		
ANTENNA BRACKET MOUNTING DETAILS		
DEWBERRY NO.	DRAWING NUMBER	REV
50122947/50122982	S01	0

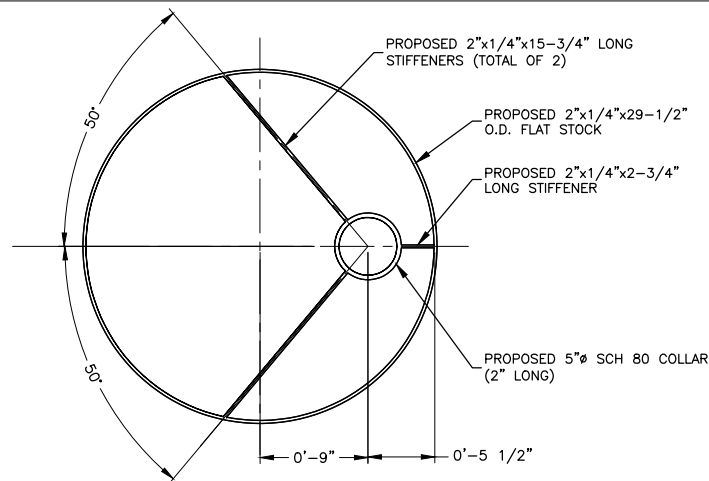


FLUE PLAN VIEW

SCALE: 3/4"=1' FOR 11"x17"
1 1/2"=1' FOR 22"x34"



1



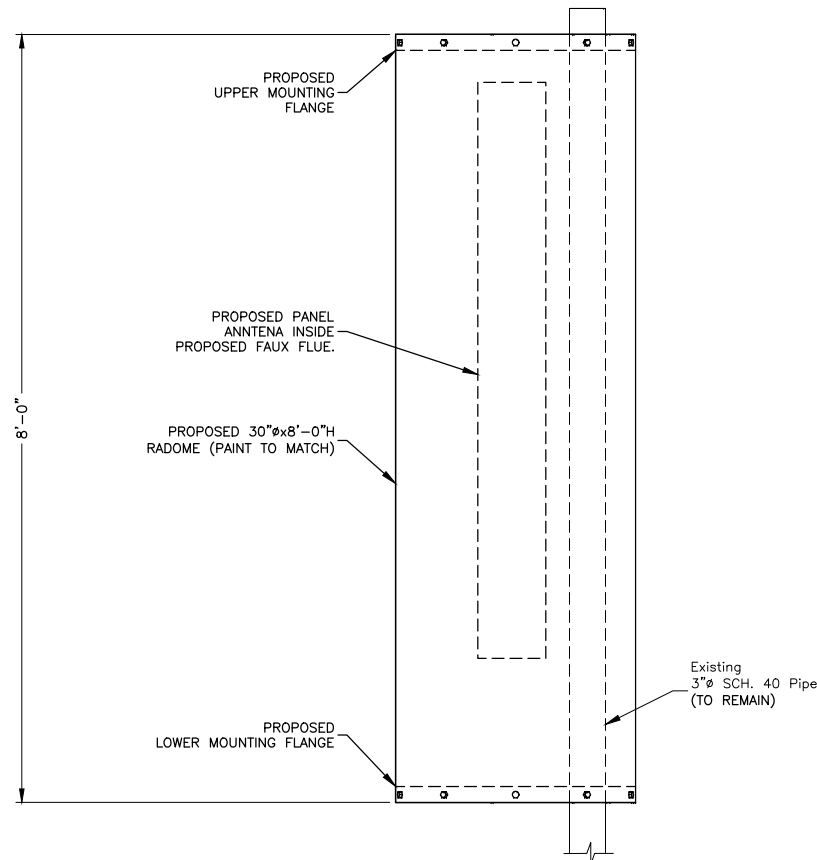
MOUNTING RING DETAIL

SCALE: 3/4"=1' FOR 11"x17"
1 1/2"=1' FOR 22"x34"



2

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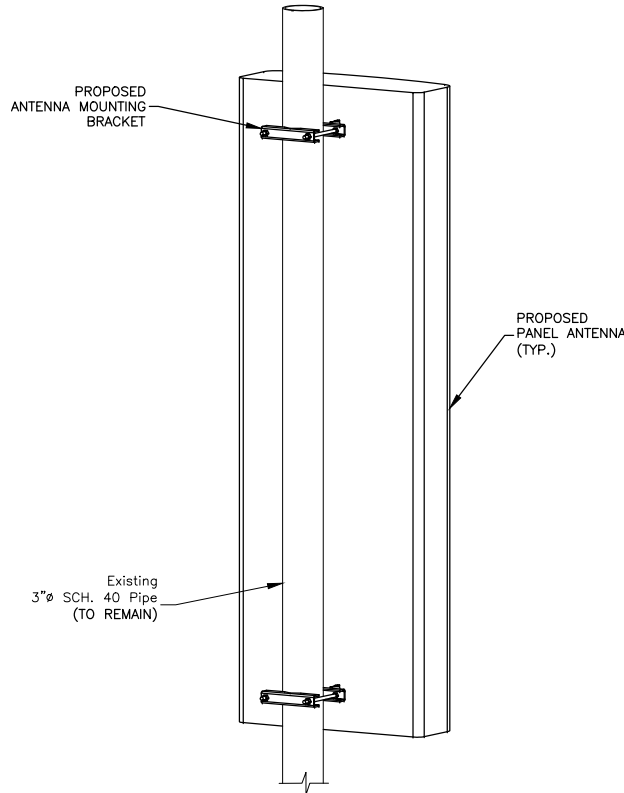


FLUE ELEVATION

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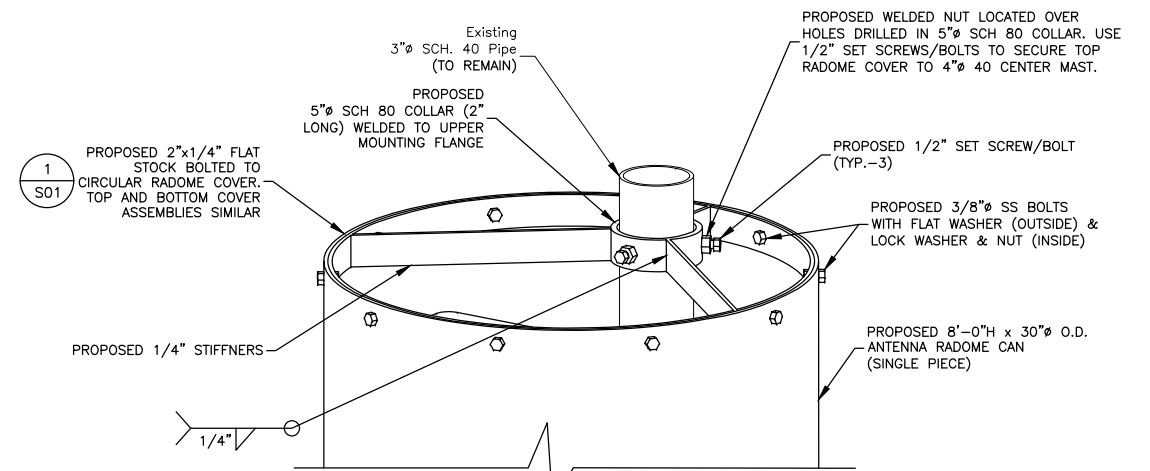
3



ANTENNA MOUNTING ISOMETRIC

SCALE: N.T.S.

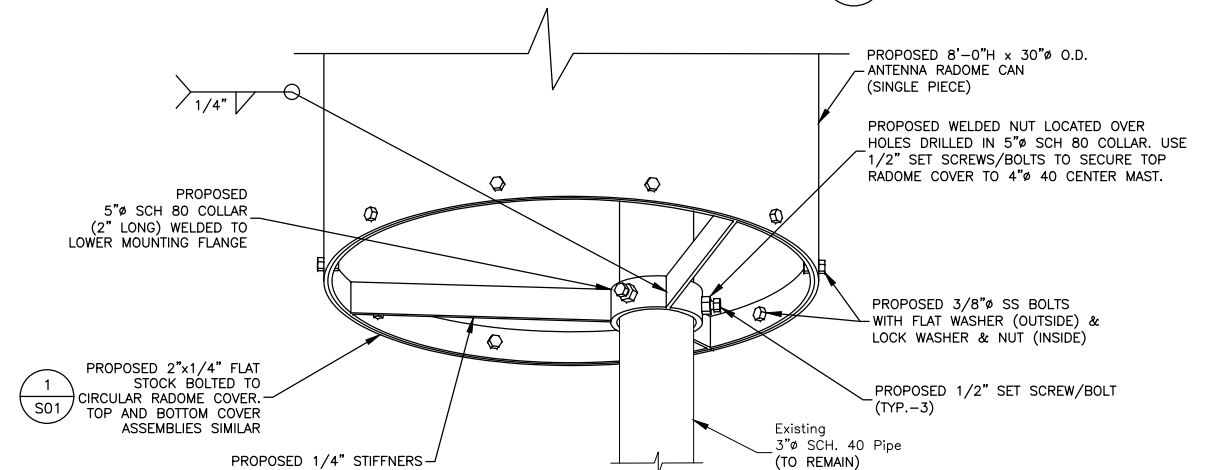
4



RADOME CAP PLATE-TOP ASSEMBLY

SCALE: N.T.S.

5



RADOME CAP PLATE-BOTTOM ASSEMBLY

SCALE: N.T.S.

6

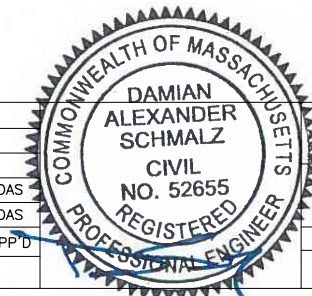
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T-Mobile
T-MOBILE NORTHEAST LLC
A DELAWARE LIMITED LIABILITY COMPANY
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
PHONE: (508) 286-2700
FAX: (508) 286-2893

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	04/06/23	ISSUED FOR CONSTRUCTION	MR	CDH	DAS
A	03/29/23	ISSUED FOR REVIEW	MR	CDH	DAS
SCALE: AS SHOWN		DESIGNED BY: CDH	DRAWN BY: MR		



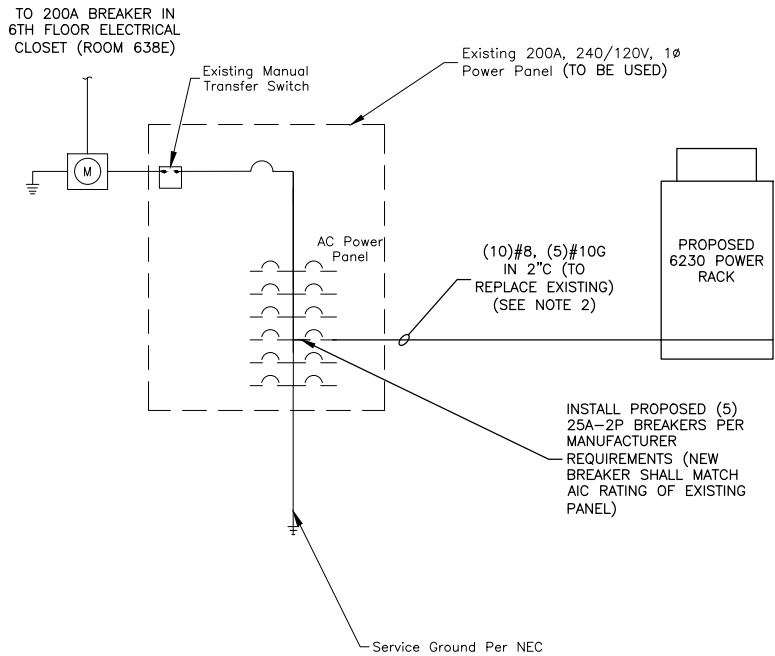
T-MOBILE NORTHEAST LLC
NORTON, MA 92766

STRUCTURAL DETAILS - FAUX FLUE

DEWBERRY NO.	DRAWING NUMBER	REV
50122947/50122982	S02	0

GROUNDING NOTES:

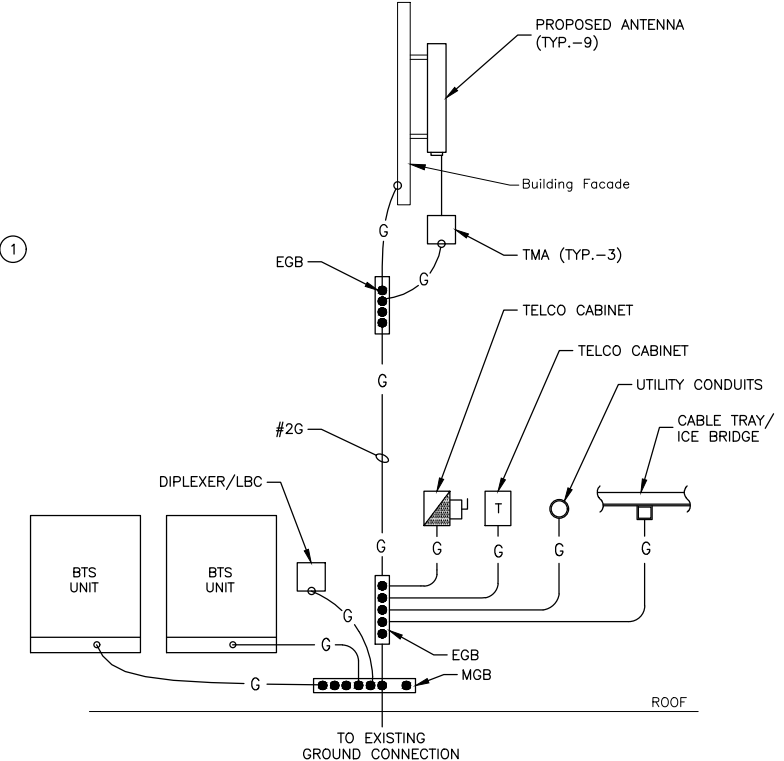
- THE CONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ). THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE CONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS. ALL AVAILABLE GROUNDING ELECTRODES SHALL BE CONNECTED TOGETHER IN ACCORDANCE WITH THE NEC.
- THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS. USE OF OTHER METHODS MUST BE PRE-APPROVED BY CONTRACTOR IN WRITING.
- THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS ON TOWER SITES AND 10 OHMS OR LESS ON ROOFTOP SITES. WHEN ADDING ELECTRODES, CONTRACTOR SHALL MAINTAIN A MINIMUM DISTANCE BETWEEN THE ADDED ELECTRODE AND ANY OTHER EXISTING ELECTRODE EQUAL TO THE BURIED LENGTH OF THE ROD. IDEALLY, CONTRACTOR SHALL STRIVE TO KEEP THE SEPARATION DISTANCE EQUAL TO TWICE THE BURIED LENGTH OF THE RODS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
- METAL CONDUIT AND TRAY SHALL BE GROUND AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE AND UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- 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 TRANSMISSION EQUIPMENT.
- CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK-TO-BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED. IN ALL CASES, BENDS SHALL BE MADE WITH A MINIMUM BEND RADIUS OF 8 INCHES.
- EACH INTERIOR TRANSMISSION CABINET FRAME/PLINTH SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH 6 AWG STRANDED, GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRE UNLESS NOTED OTHERWISE IN THE DETAILS. EACH OUTDOOR CABINET FRAME/PLINTH SHALL BE DIRECTLY CONNECTED TO THE BURIED GROUND RING WITH 2 AWG SOLID TIN-PLATED COPPER WIRE UNLESS NOTED OTHERWISE IN THE DETAILS.
- ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE 2 AWG SOLID TIN-PLATED COPPER UNLESS OTHERWISE INDICATED.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE. CONNECTIONS TO ABOVE GRADE UNITS SHALL BE MADE WITH EXOTHERMIC WELDS WHERE PRACTICAL OR WITH 2 HOLE MECHANICAL TYPE BRASS CONNECTORS WITH STAINLESS STEEL HARDWARE, INCLUDING SET SCREWS. HIGH PRESSURE CRIMP CONNECTORS MAY ONLY BE USED WITH WRITTEN PERMISSION FROM SAI COMMUNICATIONS MARKET REPRESENTATIVE.
- EXOTHERMIC WELDS SHALL BE PERMITTED ON TOWERS ONLY WITH THE EXPRESS APPROVAL OF THE TOWER MANUFACTURER OR THE CONTRACTORS STRUCTURAL ENGINEER.
- ALL WIRE TO WIRE GROUND CONNECTIONS TO THE INTERIOR GROUND RING SHALL BE FORMED USING HIGH PRESS CRIMPS OR SPLIT BOLT CONNECTORS WHERE INDICATED IN THE DETAILS.
- ON ROOFTOP SITES WHERE EXOTHERMIC WELDS ARE A FIRE HAZARD COPPER COMPRESSION CAP CONNECTORS MAY BE USED FOR WIRE TO WIRE CONNECTORS. 2 HOLE MECHANICAL TYPE BRASS CONNECTORS WITH STAINLESS STEEL HARDWARE, INCLUDING SET SCREWS SHALL BE USED FOR CONNECTION TO ALL ROOFTOP TRANSMISSION EQUIPMENT AND STRUCTURAL STEEL.
- COAX BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR USING TWO-HOLE MECHANICAL TYPE BRASS CONNECTORS AND STAINLESS STEEL HARDWARE.
- APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- BOND ALL METALLIC OBJECTS WITHIN 6 FT OF THE BURIED GROUND RING WITH 2 AWG SOLID TIN-PLATED COPPER GROUND CONDUCTOR. DURING EXCAVATION FOR NEW GROUND CONDUCTORS, IF EXISTING GROUND CONDUCTORS ARE ENCOUNTERED, BOND EXISTING GROUND CONDUCTORS TO NEW CONDUCTORS.
- GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT WITH LISTED BONDING FITTINGS.



PANEL SCHEDULE						
W/200A MAIN C/B						
CKT #	DESCRIPTION	KVA	AMP	AMP	KVA	DESCRIPTION
1	6230 #1 (TO REPLACE EXISTING)	3.1	25	25	3.1	6230 #3 (TO REPLACE EXISTING)
3						4
5	6230 #2 (TO REPLACE EXISTING)	3.1	25	25	3.1	6230 #4 (TO REPLACE EXISTING)
7						8
9	6230 #5 (TO REPLACE EXISTING)	3.1	25	-	-	Spare
11						10
13	HVAC #1	10.56	60	50	9.12	HVAC #2
15						12
17	GFI	.18	20	20	.48	Lights
19	MM-BTS (TO BE REMOVED)	-	20	20	.36	Smoke
21	Spare	-	-	-	-	Spare
23	Spare	-	-	-	-	Spare
25	Spare	-	-	-	-	Spare
27	Spare	-	-	-	-	Spare
29	Spare	-	-	-	-	Spare
31	Spare	-	-	-	-	Spare
33	Spare	-	-	-	-	Spare
35	Spare	-	-	-	-	Spare
37	Spare	-	-	20	0	Surge
39	Spare	-	-	-	-	

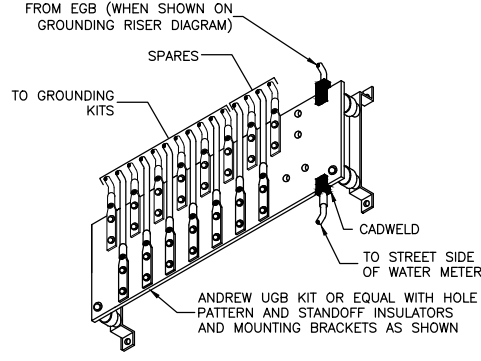
NOTES:

- ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING 30A/2P BREAKER AND REPLACE WITH NEW 25A/2P BREAKER. NEW BREAKERS SHOULD BE 10KAIC RATED AND MATCH THE SQUARE-D PANEL TYPE.
- IF CONTRACTOR TO RE-USE EXISTING CONDUIT AND FEEDERS FROM EXISTING RECTIFIERS, ELECTRICAL CONTRACTOR TO TEST EXISTING WIRES WITH MEG-OHMETER & REPLACE ANY FOUND TO HAVE DAMAGED INSULATION.



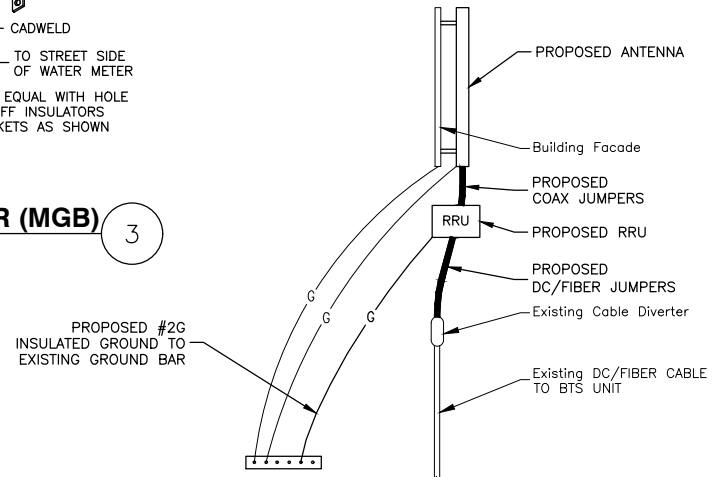
GROUNDING RISER DIAGRAM

SCALE: N.T.S.



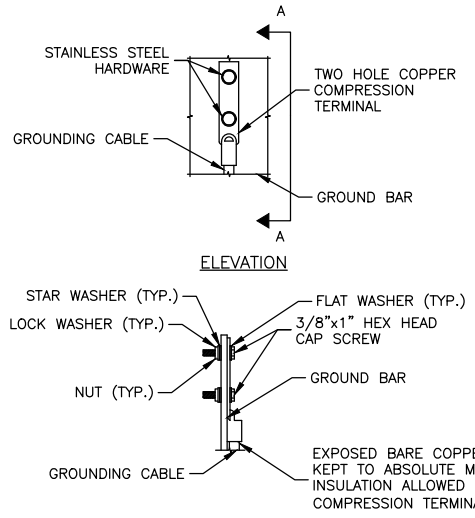
MASTER GROUND BAR (MGB)

SCALE: N.T.S.



COAX CABLE CONNECTION AND GROUNDING DETAIL

SCALE: N.T.S.



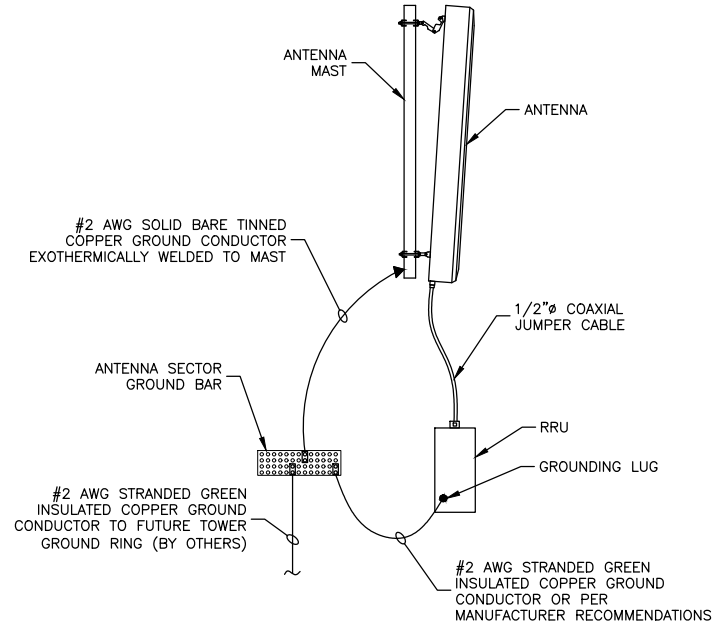
ELEVATION

NOTES:

- DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED.
- OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

TYPICAL GROUND BAR MECHANICAL CONNECTION DETAIL

SCALE: N.T.S.



NOTES:

- VERIFY EXISTING GROUNDING SYSTEM IS INSTALLED PER T-MOBILE STANDARDS.
- BOND NEW EQUIPMENT INTO EXISTING GROUND SYSTEM IN ACCORDANCE WITH T-MOBILE STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

TYPICAL ANTENNA/RRU GROUNDING DETAIL

SCALE: N.T.S.

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A	03/29/23	ISSUED FOR REVIEW	MR	CDH	DAS
SCALE: AS SHOWN		DESIGNED BY: CDH	DRAWN BY: MR		

Professional Engineer Seal for Joseph Gigante, No. 49692, State of Massachusetts, dated 04/06/23.

T-MOBILE NORTHEAST LLC
NORTON, MA 92766
ELECTRICAL & GROUNDING DETAILS
DEWBERRY NO. 50122947/50122982
DRAWING NUMBER E01
REV 0

May 12, 2023

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: 50 Ames Street (400 Main Street)
Assessor's Map 48, Lot 129 (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 ("**T-Mobile**" or the "**Applicant**") 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 Residential C-3B (**C-3B**) zoning district and the Planned Unit Development (**PUD-5**) overlay district. To the extent that the Board determines that the requirements of Article 4 Section 4.32G.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**").

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.

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The Applicant seeks to modify its existing wireless communications facility by replacing six (6) existing panel antennas with six (6) new panel antennas and remove sixteen (16) existing Remote Radio Units (“RRUs”) with six (6) new RRUs, all mounted on the roof of the existing building, together with supporting equipment (the “**Proposed Facility**”). All of the proposed antennas will be installed at the same locations as the existing antennas. As noted, the proposed antennas and RRUs will be installed on rooftop of the existing building located at the Property (the “**Building**”). The Applicant’s facilities are shown on the Plans attached hereto and incorporated herein by reference (the “**Plans**”).

I. Background

The Applicant is licensed by the Federal Communications Commission (the “**FCC**”) to construct and operate a wireless telecommunications network in various markets throughout the country, including the Commonwealth of Massachusetts and in particular in the City of Cambridge. A copy of the Applicant’s FCC license is attached hereto. The Applicant is in the process of designing and constructing a telecommunications system to serve all of the Commonwealth of Massachusetts. One of the key design objectives of its systems is to provide seamless coverage. Such a system requires a grid of radio transmitting and receiving links located approximately .5 to 2 miles apart, depending on the location of existing and proposed installations in the surrounding area, the existing use of the network and the existing topography. The radio transmitting and receiving facilities operate on a line-of-sight basis, requiring a clear path from the facility to the user on the ground. This dynamic requires the antennas to be located in a location where the signal is 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 on the rooftop of the Building by replacing the six (6) existing panel antennas with six (6) new T-Mobile panel antennas and replacing sixteen (16) existing RRUs with six (6) new RRUs, together with supporting equipment. All new and proposed antennas will be mounted within the existing faux vent pipes and on the façade of the penthouse on the roof of the existing Building, and finished to match the existing finish of the faux vent pipes and façade of the Building. Two (2) of the existing 20-inch faux vent pipes will be increased to a diameter of 30-inches. The Applicant also proposes to replace and upgrade its existing radio cabinets located within its existing enclosed equipment shelter located on the rooftop of the Building. All new equipment will be installed to be consistent with the previous decisions of the Board for this facility, the most recent of which is dated December 20, 2018 (Case No. BZA-016961-

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2018) (the “**Decisions**”). Consequently, the visual change to the Applicant’s existing facility will be de minimus.

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 BA 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

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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 BA 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 BA 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 Building. The Proposed Facility will continue to comply with the Decisions, and such will have a de-minimus impact on the existing visual conditions of the Building.

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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 Property and Proposed Facility are located in the C-3B zoning district, but nonresidential uses predominate in the area. Pursuant to the requirement that the Board shall grant a special permit to erect a Telecommunications Facility only upon a finding that nonresidential uses predominate in the vicinity of the proposed facility's location the Applicant hereby states that this is a modification of an existing wireless facility and as such respectfully submits to the Board that it has previously found that nonresidential uses predominate in the vicinity of this Proposed Facility. The Board has reached a decision to grant a special permit for the Applicant's Existing Facility the previous Decisions. As such, the Applicant respectfully requests that, in keeping with its prior decisions, the Board find that nonresidential uses predominate in the vicinity of the Proposed Facility and that the Proposed Facility is not inconsistent with the character that does prevail in the surrounding neighborhood.

Further, notwithstanding anything contained herein to the contrary, and in agreement with the aforementioned predominately nonresidential use finding, upon an inspection of the vicinity of the Proposed Facility the Applicant respectfully submits that said finding is reasonable as the character of the surrounding neighborhood consists of nonresidential uses such as, the Cambridge Trust Bank on Main Street, the MIT Cancer Research Center on Main Street, the MIT Biology Building on Ames Street, the Kendall Restaurant and Hotel on Main Street, and Main Street, which is a major thoroughfare in Cambridge.

Moreover, the proposed changes to the Existing Facility are de minimis and therefore, the Proposed Facility is not inconsistent with the character that does

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prevail in the surrounding neighborhood. Finally, as noted above, the proposed installation is a modification to the Applicant's Facility and as such is the preferred location for additional equipment, pursuant to the TCA, as referenced above.

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.

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.

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 a minimal change in the appearance of the Building. 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

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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 BA 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

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

**Prepared for:
T-Mobile**

**40 Ames Street
Cambridge, MA 02139**

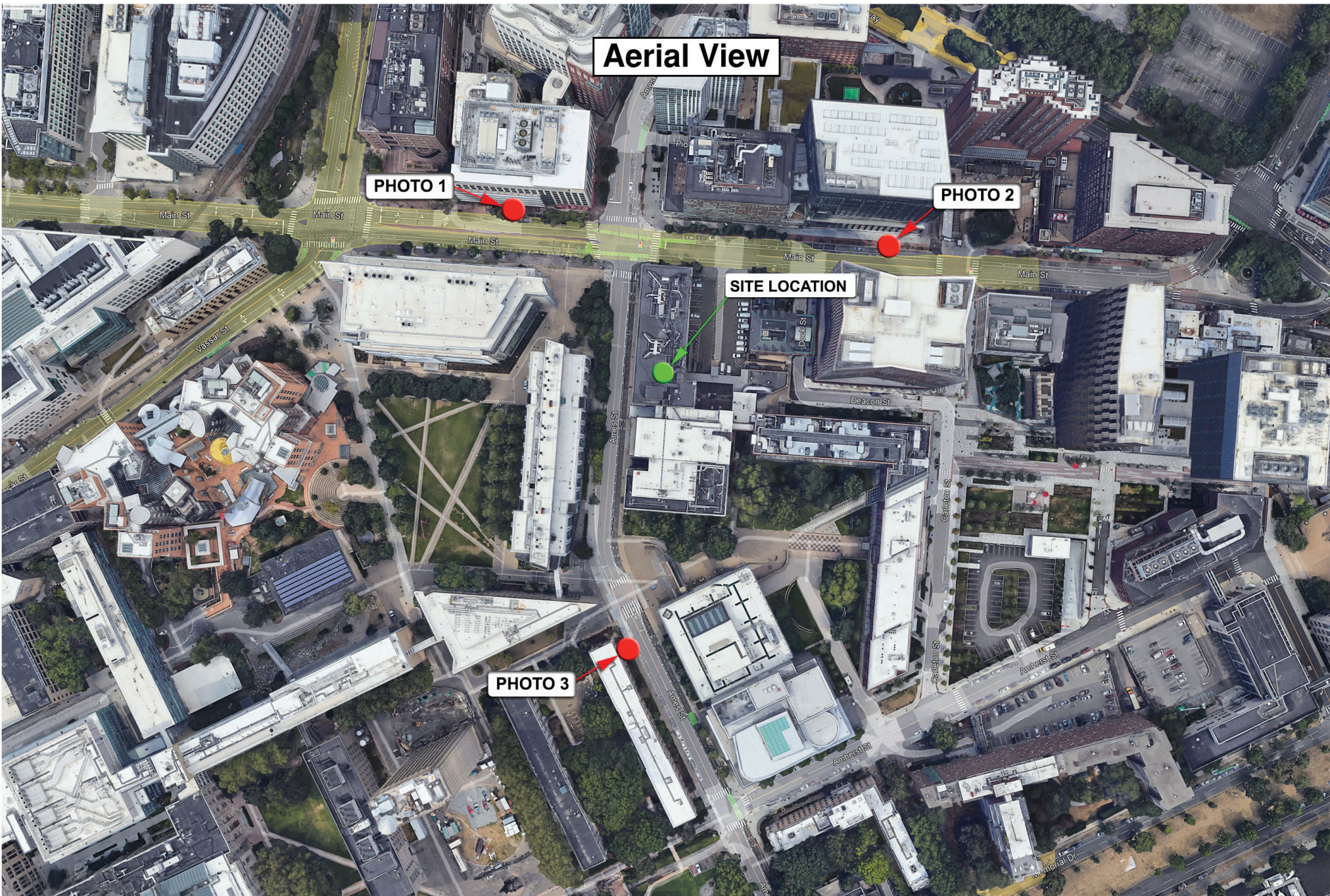


Simulations Based On Rev-A Construction Drawings By Dewberry.
Photos Taken On: 04/03/23



40 Ames Street
Cambridge, MA 02139
(Page 1 of 8)





Aerial View

PHOTO 1

PHOTO 2

SITE LOCATION

PHOTO 3

Existing View



Proposed View

Proposed Gamma Sector Radome (Typ.-2)
Concealing Proposed Antennas (Typ.-2)



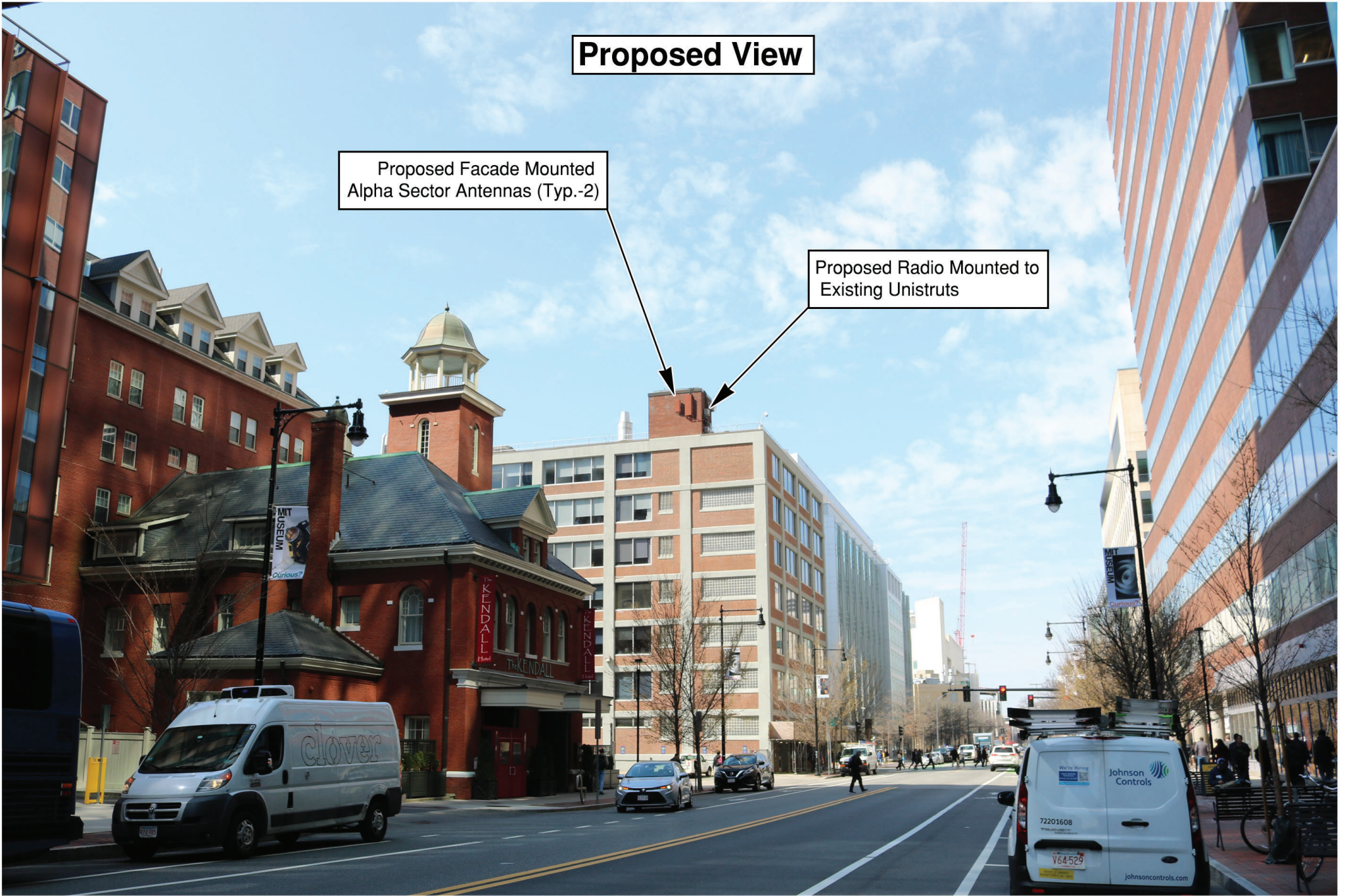
Existing View



Proposed View

Proposed Facade Mounted Alpha Sector Antennas (Typ.-2)

Proposed Radio Mounted to Existing Unistruts



Existing View



Proposed View

Proposed Beta Sector Radome (Typ.-2)
Concealing Proposed Antennas (Typ.-2)



City of Cambridge

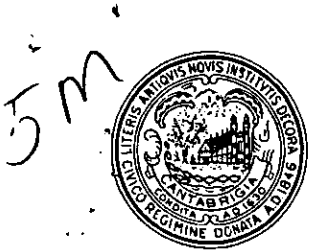
MASSACHUSETTS

BOARD OF ZONING APPEAL

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



Bk: 49402 Pg: 218 Doc: DECIS
Page: 1 of 5 05/04/2007 12:41 PM



NOTICE OF DECISION

MAR 08 2007

DECISION FILED WITH THE OFFICE OF THE CITY CLERK ON _____

Any person aggrieved by a decision of the Board of Zoning Appeal may appeal to the Superior Court or Land Court. Appeals, if any, shall be made pursuant to Section 17, Chapter 40A, Massachusetts General Laws and shall be filed within twenty calendar days from the above date, and a copy thereof shall be filed with the Cambridge City Clerk's office by that same date.

PREMISES: 400 Main Street (MIT Bldgs. E19, E18 & E17) ✓
Cambridge, MA

Tenant: **Massachusetts Institute of Technology**
Title Reference: Book43358, Page 395

PETITIONER: William J. Hanrahan, Project Manager
Nextel Communications

PETITION: Special Permit: To install and operate a Wireless Telecommunication facility at 400 Main Street and to be located on MIT Buildings E19, E18 and E17 at the Southeastern corner of Main Street and Ames Street.

DECISION: **GRANTED W/ CONDITIONS**

01/21/07 B P Seven Cambridge Center LLC ✓

CASE NO: 9379

*For full details, please refer to the decision available at Inspectional Services Dept.

**PRINCE, LOBEL, GLOVSKY & TYE LLC
ATTORNEYS AT LAW
100 CAMBRIDGE STREET
SUITE 2200
BOSTON, MASSACHUSETTS 02114**



City of Cambridge

MASSACHUSETTS

2007 MAR -8 A 11: 19

BOARD OF ZONING APPEAL

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

CASE NO: 9379 Residence C-3B Zone

LOCATION: 400 Main Street (MIT BLDGS. E19, E18 & E17)
Cambridge, MA

PETITIONER: William J. Hanrahan, Project Manager
Nextel Communications

PETITION: Special Permit: To install and operate a Wireless Telecommunication facility a 400 Main Street and to be located on MIT Buildings E19, E18 and E17 at the Southeastern corner of Main Street & Ames Street.

VIOLATIONS: Art. 4.000, Sec. 4.32.G.1 (Telecommunication Facility).
Art. 10.000, Sec. 10.40 (Special Permit).

DATE OF PUBLIC NOTICE: October 13 & 20, 2006

DATE OF PUBLIC HEARING: November 2, 2006

MEMBERS OF THE BOARD: THOMAS SIENIEWICZ – CHAIR _____
 JENNIFER PINCK – VICE CHAIR _____
 SUSAN SPURLOCK _____ ✓
 CONSTANTINE ALEXANDER _____ ✓

ASSOCIATE MEMBERS: BRENDAN SULLIVAN _____ ✓
 CHRISTOPHER CHAN _____ ✓
 PAUL D. GRIFFIN _____
 EDWARD W. WAYLAND _____
 TIMOTHY HUGHES _____
 STACYJHON THOMAS _____

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. 9379
Location: 400 Main Street
Petitioner: William Hanrahan, Project manager for Nextel Communications

On January 11, 2007, Petitioner William Hanrahan appeared before the Board of Zoning Appeal requesting a special permit in order to install and operate a Wireless Telecommunication facility. The Petitioner requested relief from Article 4, Section 4.32.g.1 and Article 10, Section 10.40 of the Cambridge Zoning Ordinance ("Ordinance"). The Petitioner submitted application materials including information about the project, plans, and photographs.

This case was originally heard on November 2, 2006, where the Petitioner was informed that a five member Board was not available and that the Petitioner could choose to continue the case until a five member Board could be assembled or could proceed with a four member Board, where a unanimous vote would be required in order to prevail. The Petitioner chose to proceed with the four member Board. The case was continued in order to allow the Petitioner the opportunity to reduce the size of the equipment shelter, in light of input from the Planning Board. Mr. Hanrahan stated that the property was in a residential district, but that nonresidential uses predominated because the area was largely office and MIT's institutional uses.

At the January 11, 2007 hearing, Mr. Hanrahan stated that he had reduced the size of the equipment shelter and would paint it to match the building on which it sat.

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

After discussion, the Acting-Chair moved that the Board grant the special permit for relief in order to install and operate a Wireless Telecommunication facility based on the finding that, although the site is in a residential district, nonresidential uses predominate in the vicinity of the proposed facility's location and that the telecommunication's facility is not inconsistent with the character that does prevail in the surrounding neighborhood, because the proposed location is in the midst of an area of MIT buildings and office buildings, where there is very little residential use. The Acting-Chair moved that the Board find that the Petitioner is licensed by the FCC, based on the license being submitted to the file. The Acting-Chair moved that the Board find that the visual impact of the elements of the structure have been minimalized, because the revised proposal shows a minimized shelter, painted to match the colors of the building. The Acting-Chair moved that the Board find that traffic generated or patterns of access would not cause congestion, hazards, or substantial changes in the established neighborhood character would not be created, because servicing of telecommunications antennae

is very infrequent and there is no traffic that is going to be created by the erection of this facility on the roof. The Acting-Chair moved that the Board find that there would be no adverse affects on adjacent uses, because this is an area of large buildings and not residential areas. The Acting-Chair moved that the Board find that granting relief would not impair the integrity of the adjoining district, because this installation would be consistent with the general neighborhood in terms of the buildings and their roof top mechanicals. The Acting-Chair moved that, based on those findings, the Board grant the special permit on the following conditions:

1. that, should the telecommunications facility use be discontinued, the Petitioner remove the structure,
2. that the work be performed in substantial conformance with plans submitted to the file and prepared by Dewberry-Goodkind, dated 12/14/06, consisting of pages T-1, Z-1, Z-2, and Z-3, and
3. that the Petitioner will paint the structure consistent with the colors of the building to minimize the effect.

The four member Board voted unanimously in favor of granting the special permit (Alexander, Spurlock, Sullivan, and Chan) 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, Acting-Chair

Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 3-8-07 by Maria Casheco, 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: 3-29-07 B. Marguerite City Clerk.

Carman C. Brown
Attest. Middlesex S. Register





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Page: 1 of 4 03/02/2010 11:20 AM



City of Cambridge

MASSACHUSETTS

BOARD OF ZONING APPEAL

2009 DEC -8 A 11:40

831 Mass Avenue, Cambridge, MA. OFFICE OF THE CITY CLERK
(617) 349-6100 CAMBRIDGE, MASSACHUSETTS

CASE NO: 9861

Residence C-3B/Partial MXR Overlay

LOCATION: 400 Main Street
Cambridge, MA

PETITIONER: Sprint Spectrum, LLC
C/o Adam F. Braillard, Esq.

*A. Braillard
Prince Lobel
100 Cambridge St
Suite # 2200
Boston, MA 02114*

Owner! MIT
PETITION: Special Permit: To install three (3) sectors of four (4) antennas per sector to be mounted on the rooftop of the existing building on the property. Petitioner also proposed to install an equipment shelter toward the center of the rooftop of the building. Power & Telco are to come from existing sources within the buildings.

VIOLATIONS: Art. 4.000, Sec. 4.32.G.1 (Footnote 49) (Telecommunication Facility).
Art. 10.000, Sec. 10.40 (Special Permit).

43358-395

DATE OF PUBLIC NOTICE: October 16 & 23, 2009

DATE OF PUBLIC HEARING: November 5, 2009

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.

Case No. 9861
Location: 400 Main Street
Petitioner: Sprint Spectrum, LLC c/o Adam Braillard, Esq.

On November 5, 2009, Petitioner Adam Braillard appeared before the Board of Zoning Appeal requesting a special permit in order to install three sectors of four antennas per sector to be mounted on the rooftop of the existing building on the property and to install an equipment shelter toward the center of the rooftop of the building with power and telco to come from existing sources within the building. The Petitioner requested relief from Article 4, Section 4.32.g.1 of the Cambridge Zoning Ordinance ("Ordinance"). The Petitioner submitted application materials including information about the project, plans, and photographs.

Mr. Braillard stated that the Board had previously granted the requested relief, but that the equipment had not been installed and that the special permit had lapsed. He stated that there were slight design changes in response to the wishes of the Planning Board, which now supported the proposal. He stated that Sprint was properly licensed by the FCC and that the visual impact of the installation was minimized by concealing antennas inside false vent pipes. He stated that the installation would fill a coverage gap and therefore would fill a public need. He stated that there were no alternative non-residential sites because the MIT campus is largely in a residential district, that this particular building contained a lab use, and that there were no residential uses in the area.

The Chair read a letter of support from the Planning Board. 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 install three sectors of four antennas per sector to be mounted on the rooftop of the existing building on the property and to install an equipment shelter toward the center of the rooftop of the building with power and telco to come from existing sources within the building based on the finding that the proposed work will not cause congestion, hazard or substantial change in established neighborhood character, because these antenna are mounted on the rooftop and will not affect patterns of egress or access. The Chair moved that the Board find that the proposed installation will not obstruct existing rights of way or pedestrian's access to the property. The Chair moved that the Board find that the continued operation or development of adjacent uses permitted by the Ordinance would not be adversely affected by the nature of the proposed use, because this area is generally office buildings or other nonresidential types of buildings and in no way will these antennas affect the uses of the adjoining buildings. The Chair moved that the Board find that no nuisance or hazard would be created to the detriment of the health, safety or welfare of the occupants. The Chair moved that

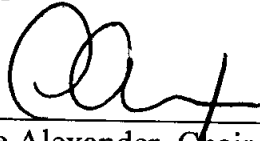
the Board find that the proposed installation will not impair the integrity of the district or derogate from the intent or purpose of the Ordinance. The Chair moved that the Board note that the proposal has been vetted by the Planning Board and the Community Development Department staff and has received their recommendation. The Chair moved that the Board find that nonresidential uses predominate in the vicinity. The Chair moved that the Board find that the telecommunications facility is not inconsistent with the character that prevails in the surrounding neighborhood, because the surrounding structures are not single family homes but rather are nonresidential buildings, very much like the subject building. The Chair moved that the Board find that there is a demonstrated public need for the facility at the location. The Chair moved that the Board find that there are no viable alternative sites in nonresidential locations. The Chair moved that the Board find that the visual impact of the various elements will be minimized. The Chair moved that the Board grant the special permit on the following conditions:

1. that the work proceed in accordance with the plans submitted by the petitioner, most recently dated 10/29/09, being pages T1, Z1, Z2, and Z3, the first page being initialed by the Chair,
2. that the work proceed in accordance with the photo simulations submitted by the petitioner, prepared by Dewberry, with the first page being initialed by the Chair, and
3. that should this equipment not be used any longer, it be promptly removed and the building be restored, to the extent possible, to the condition as it was prior to the installation of these antennas.

The five member Board voted unanimously in favor of granting the special permit (Alexander Sullivan, Heuer, Scott, Myers) 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: The meeting of the requirements of the Ordinance; Traffic generated or patterns of access or egress would not cause congestion, hazard, or substantial change in the established neighborhood character; 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; Nuisance or hazard would not be created to the detriment of the health, safety and /or welfare of the occupants of the proposed use; 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; The new use or building construction is not inconsistent with the Urban Design Objectives set forth in Section 19.30 of the Cambridge Zoning Ordinance.

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



Constantine Alexander, Chair

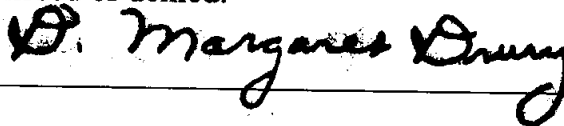
Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 12/8/09 by Maria Pacheco, Clerk.

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 11, 2010


_____ City Clerk.

05



City of Cambridge

MASSACHUSETTS



2013 00138681

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Page: 1 of 6 08/27/2013 12:51 PM

BOARD OF ZONING APPEAL

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

NOTICE OF DECISION

DECISION FILED WITH THE OFFICE OF THE CITY CLERK ON JUN 06 2013

Any person aggrieved by a decision of the Board of Zoning Appeal may appeal to the Superior Court or Land Court. Appeals, if any, shall be made pursuant to Section 17, Chapter 40A, Massachusetts General Laws and shall be filed within twenty calendar days from the above date, and a copy thereof shall be filed with the Cambridge City Clerk's office by that same date.

PREMISES: 400 Main Street
Cambridge, MA

*Owner Massachusetts Institute of
Technology*

PETITIONER: Sprint Spectrum, L.P.
C/o Ricardo M. Sousa, Esq.

PETITION: Special Permit: To replace three (3) existing panel antennas with three (3) updated panel antennas 2 inside faux chimneys and 1 façade mounted together with adding six (6) remote radio heads on the mounts and replacing one (1) equipment cabinet to the Applicant's existing and previously approved wireless communications facility currently operating on the rooftop of the building.

DECISION:

GRANTED

BK 9737 PG 321

BK 12083 PG 668

BK 12954 PG 374

CASE NO: 10423

*For full details, please refer to the decision available at Inspectional Services Dept.



City of Cambridge

MASSACHUSETTS

BOARD OF ZONING APPEAL

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

OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

2013 JUN 6 PM 11 45

CASE NO: 10423

LOCATION: 400 Main Street Residence C-3B Zone
Cambridge, MA

PETITIONER: Sprint Spectrum, L.P.
C/o Ricardo M. Sousa, Esq.

PETITION: Special Permit: To replace three (3) existing panel antennas with three (3) updated panel antennas 2 inside faux chimneys and 1 façade mounted together with adding six (6) remote radio heads on the mounts and replacing one (1) equipment cabinet to the Applicant's existing and previously approved wireless communications facility currently operating on the rooftop of the building.

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

DATE OF PUBLIC NOTICE: April 11 & 18, 2013

DATE OF PUBLIC HEARING: April 25, 2013

MEMBERS OF THE BOARD:

CONSTANTINE ALEXANDER – CHAIR	<input checked="" type="checkbox"/>
TIMOTHY HUGHES – VICE-CHAIR	<input checked="" type="checkbox"/>
BRENDAN SULLIVAN	<input checked="" type="checkbox"/>
THOMAS SCOTT	<input checked="" type="checkbox"/>
JANET O. GREEN	<input checked="" type="checkbox"/>

ASSOCIATE MEMBERS:

MAHMOOD R. FIROUZBAKHT	<input type="checkbox"/>
DOUGLAS MYERS	<input type="checkbox"/>
SLATER W. ANDERSON	<input type="checkbox"/>
LINDSEY T. THORNE-BINGHAM	<input type="checkbox"/>
ANDREA A. HICKEY	<input type="checkbox"/>
KEVIN C. McAVEY	<input type="checkbox"/>

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. 10423
Location: 400 Main Street
Petitioner: Sprint Spectrum, L.P. c/o Ricardo Sousa, Esq.

On April 25, 2013, Petitioner's attorney Brian Grossman appeared before the Board of Zoning Appeal requesting a special permit in order to replace three existing panel antennas with three updated panel antennas, two inside faux chimneys and one façade mounted, to add six remote radio heads on the mounts, and to replace one equipment cabinet at the Applicant's existing and previously approved wireless communications facility currently operating on the rooftop. The Petitioner requested relief from Article 4, Section 4.32.G.1 of the Cambridge Zoning Ordinance ("Ordinance"). The Petitioner submitted application materials including information about the project, plans, and photographs.

Mr. Grossman stated that the proposal was to upgrade an existing installation. He stated that there would be only minor changes to the visual impacts, which were and would remain minimal. He stated that there would be no visual change to the antennae in the faux chimney, that the façade mounted antennae would not stick up above the penthouse, and that the radio heads would be located low near the roof so that they would not be visible from the street. He stated that the neighborhood, while residentially zoned, was predominately institutional and commercial in nature.

The Chair asked if anyone wished to be heard on the matter, no one indicated such. The Chair read a letter of support for the Planning Board.

After discussion, the Chair moved that the Board grant the special permit for relief in order to replace three existing panel antennas with three updated panel antennas, two inside faux chimneys and one façade mounted, to add six remote radio heads on the mounts, and to replace one equipment cabinet at the Applicant's existing and previously approved wireless communications facility currently operating on the rooftop based on the finding that the Petitioner had demonstrated compliance with Footnote 49 of Article 4, Section 4.32.G.1 of the Ordinance. The Chair moved that the Board find that the Petitioner was a licensed federal telecommunications carrier in good standing. The Chair moved that the Board find that the Petitioner minimized the visual impact of the installation. The Chair moved that the Board find that, although the site was located in a residential district, nonresidential uses predominate in the vicinity of the proposed facility's location. The Chair moved that the Board find that the proposed telecommunications facility was not inconsistent with the character that prevailed in the surrounding neighborhood. The Chair moved that the Board find that in 2009, the Board granted relief to the Petitioner for the original installation and

made findings that Footnote 49 was complied with. The Chair moved that the Board find that there had been no material changes to the area that would make those findings no longer applicable. The Chair moved that the Board incorporate those findings as part of the decision. The Chair moved that the Board find that the remaining findings from the 2009 grant be incorporated as part of the decision. The Chair moved that the Board find that what was proposed would not affect the neighborhood and was basically unchanged, being simply an upgrading of the facility. The Chair moved that the Board find that the Planning Board supported the proposal and that there were no letters or commentary in opposition. The Chair moved that the Board find that allowing the upgrade would improve telecommunication within the City of Cambridge, which was a desirable goal. The Chair moved that the Board grant the special permit on the condition that the work proceed in accordance with the plans and photo simulations submitted by the Petitioner and initialed by the Chair.

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

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

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

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



Constantine Alexander, Chair

Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 6/6/13 by Marie Jackson, 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: 6/27, 2013 Donna P. Lopez City Clerk.

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

2018 DEC 20 AM 11:33
OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

CASE NO: BZA-016961-2018 Residence C-3B Zone

LOCATION: 400 Main St
Cambridge, MA 02142

PETITIONER: Sprint Spectrum Realty Company, LLC - C/O Simon Brighenti, Centerline
Communications

PETITION: Special Permit: To remove existing previously-permitted rooftop telecommunication
equipment and replace with upgraded equipment. This is an eligible facility request
pursuant to 47 USC 1455 (a).

VIOLATION :

Article <u>4.000</u>	Section <u>4.32.G.1 (Telecommunication Facility).</u>
Article <u>4.000</u>	Section <u>4.40 (Footnote 49) (Telecommunication Facility).</u>
Article <u>6409</u>	Section <u>47 USC 1455 (a)</u>

43358-395

DATE OF PUBLIC NOTICE: November 15, 2018 and November 22, 2018

DATE OF PUBLIC HEARING: November 29, 2018;

MEMBERS OF THE BOARD:

- CONSTANTINE ALEXANDER - CHAIR
- BRENDAN SULLIVAN - VICE-CHAIR
- JANET O. GREEN
- ANDREA A. HICKEY

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ASSOCIATE MEMBERS:

- SLATER W. ANDERSON
- ALISON HAMMER
- JIM MONTEVERDE
- 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-016961-2018
Location: 400 Main Street
Petitioner: Sprint Spectrum Realty Company, LLC - c/o Simon Brighenti

On November 29, 2018, Petitioner's attorney Simon Brighenti appeared before the Board of Zoning Appeal requesting a special permit in order to replace previously permitted rooftop telecommunication equipment with upgraded equipment. The Petitioner requested relief under Article 4, Sections 4.32.G.1 and 4.40 of the Cambridge Zoning Ordinance ("Ordinance"). The Petitioner submitted materials in support of the application including information about the project, plans, and photographs.

Mr. Brighenti stated that the proposal was to modify an existing permitted telecommunications facility by swapping antennas within three existing RF transparent flues and adding one new flue. He stated that while the site was in a residential zone, residential uses did not predominate in the vicinity as it was a mixed-use area. He stated that the modifications would not create traffic or noise and would not otherwise be a detriment to the neighborhood.

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 not be met without the special permit sought; that the Board find that traffic generated or patterns of access or egress resulting from what was proposed would not cause congestion, hazard, or substantial change in established neighborhood character; that the Board find that the proposal was simply to substitute antennas within existing flues and to add an additional flue, so that there would be no impact on congestion or hazard or substantial change in 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 swapping out of antennas within existing flues and the addition of a new flue; that the Board find that no nuisance or hazard would 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; that the Board find that generally what was proposed would not impair the integrity of the district or adjoining district or otherwise derogate from the intent and purpose of the Ordinance; that the Board find that, as found in the previous special permit for the existing facility, nonresidential uses predominated in the vicinity of the structure; that the Board find that what was proposed was not inconsistent with the character that did prevail in the surrounding neighborhood; that the Board find that it would be consistent with what was already on the roof, namely, flues; that the Board find that the proposed modification of the telecommunication facility at the site proposed by the petitioner did not substantially change the physical

dimensions of the existing wireless tower or base station at such facility within the meanings of Section 6409(a) of The Middle Class 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 what existed on site, with the addition of a new flue,
3. that the petitioner at all times maintain the proposed work so that its physical appearance and visual impact remain consistent,
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 (Alexander, Sullivan, Green, Hickey, and Monteverde). 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.

Constantine Alexander, Chair

ATTEST: A true and accurate copy of the above decision has been filed on 12-20-18 with the Offices of the City Clerk and the Planning Board by Maria Pacheco, duly authorized representative of the Board of Zoning Appeal.

Twenty days have elapsed since the above decision was filed in the office of the City Clerk and:

no appeal has been filed; or
 an appeal has been filed within such twenty days.

The person exercising rights under a duly appealed special permit does so at risk that a court will reverse the permit and that any construction performed under the permit may be ordered undone. This certification shall in no event terminate or shorten the tolling, during the pendency of any appeals, of the periods provided under the second paragraph of G.L. c. 40A, §6.

Date: 1/10/19

Donna P. Lopez, City Clerk

Appeal has been dismissed or denied.

Date: _____

_____, City Clerk

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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.

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: WQZL853

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

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

Call Sign WRAM889	File Number 0008585885
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0001565449

Grant Date 05-30-2019	Effective Date 05-30-2019	Expiration Date 06-30-2029	Print Date 05-31-2019
Market Number BTA201	Channel Block C	Sub-Market Designator 4	
Market Name Hyannis, MA			
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. 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: 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

50 Ames Street



50 Ames St.

Petitioner

48-159-157-129 /52A-22 -19-21 / 43-77
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
C/O MIT INVESTMENTS MANAGEMENT CO
ONE BROADWAY, 9TH FL. - SUITE 200
CAMBRIDGE, MA 02142

48-154
NEW ENGLAND MUTUAL LIFE INSURANCE COMPANY
C/O THE DOLBEN CO.
100 MEMORIAL DRIVE
CAMBRIDGE, MA 02142

PRINCE LOBEL TYE LLP
C/O ADAM F. BRAILLARD, ESQ.
ONE INTERNATIONAL PLACE, SUITE 3700
BOSTON, MA 2110

44-105
BP FIVE CC LLC, C/O BOSTON PROPERTIES LP
800 BOYLSTON ST., SUITE 1900
BOSTON, MA 02199

48-158
FIREHOUSE INN, LLC
350 MAIN ST
CAMBRIDGE, MA 02142

44-99
ZUCKERMAN, MORTIMER B., EDWARD H. LINDE &
DAVID BARRETT, TRS. OF THREE CAMBRIDGE
C/O BOSTON PROPERTIES INC
800 BOYLSTON ST., SUITE 1900
BOSTON, MA 02199

48-156
CITY OF CAMBRIDGE
C/O YI-AN HUANG
CITY MANAGER

48-156
CAMBRIDGE CITY OF
C/O NANCY GLOWA
CITY SOLICITOR

48-20
MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY
10 PARK PLAZA
BOSTON, MA 02116

May 12, 2023

VIA HAND DELIVERY

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

Re: Eligible Facilities Request to Modify Transmission Equipment at an Existing Base Station located at **50 Ames Street (400 Main Street), Cambridge, MA 02141.**

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 10 Canal Park, Cambridge, MA 02141.

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 a Federal Communications Commission (“**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 ninety-one feet (91’) high and presently contains wireless facilities. The existing Base Station meets the 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 ninety-one feet (91’) high. The proposed replacement of the existing antennas will not affect the height of the Base Station.
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 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 is currently an equipment shelter existing at the Base Station. The Applicant propose no additional equipment shelters at this locaiton.

4. *The modifications to the Transmission Equipment do not entail any excavation or deployment outside of the Base Station site.*
 - a. There will be no excavation or deployment outside of the Base Station site.
5. *The modifications to the Transmission Equipment do not defeat any existing concealed or stealth-design.*
 - a. Pursuant to the previous decisions by the Board of Zoning Appeal for the City of Cambridge (the “**Board**”) for this site, the last of which is dated December 2018 (the “**Decisions**”), the existing panel antennas are located in the preferred location on the building, and the proposed modifications to the equipment will not defeat the existing stealth design as all the antennas will be installed on low profile mounts painted to match the existing building, and within the existing faux vent pipes. Furthermore, all proposed antennas will be integrated into the building to the extent possible. As such, the proposal will be in conformity with the Decision and do not defeat the existing stealth design. Finally, any visual change to the Facility will be de minimus for many of the same reasons stated in the Decision attached hereto.
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 in Cambridge, MA 02141 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 long horizontal line extending to the right.

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: 50 Ames Street (400 Main Street)

Existing Facilities

The Existing Facility is comprised of six(6) panel antennas mounted as follows: four (4) antennas within four (4) faux vent pipes and two (2) antennas mounted on the façade of the existing penthouse on the roof of the building, together with supporting equipment.

Height of Base Station

Height above ground level of the tallest point on the existing base station: 91' (feet)

Height above ground level of the tallest point of the existing base station after the installation of the *proposed* equipment: 91'(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? N/A

Yes No

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

Explanatory Comments:

Question No.5 (b)

Comment: Pursuant to the previous decisions by the Board of Zoning Appeal for the City of Cambridge (the “Board”) for this site, the latest dated December 2018 (the “Decision”), the existing panel antennas are located in the preferred location on the building. The replacement of the six (6) existing panel antennas with six (6) new panel antennas and the replacement of sixteen (16) RRHs with six (6) new RRHs, will not defeat the existing stealth design as all the antennas will be installed at the same locations as the existing antennas, including the existing faux vent pipes, and visible equipment will be finished and painted to match the existing building. Furthermore, all proposed antennas will be integrated into the building to the extent possible. As such, the proposed modifications to the existing telecommunications facility will be in conformity with the Decision 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 Decision attached hereto.

This certification is dated this 12th day of May, 2023.



Signature

Adam F. Braillard, Attorney for Applicant
Name & Title

Eligible Facilities Request (EFR) Application Form

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:
