

CITY OF CAMBRIDGE

BOARD OF ZONING APPEAL

831 Massachusetts Avenue, Cambridge MA 02139

617-349-6100

2022 JAN 13 AM 11:21

OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

BZA Application Form

BZA Number: 158753

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 Dowse, Inc. C/O Adam Brailard of Prince Lobel Tye LLP, for T-Mobile Northeast LLC

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

LOCATION OF PROPERTY: 14 Arrow St., Cambridge, MA

TYPE OF OCCUPANCY: Telecommunications

ZONING DISTRICT: Office-3

REASON FOR PETITION:

/Telecommunication Facility (antenna)/

DESCRIPTION OF PETITIONER'S PROPOSAL:

The Applicant proposes to modify its existing wireless facility currently operating on the facade of the Smoke Stack by replacing six (6) panel antennas, with six (6) like kind panel antennas, and by replacing three (3) remote radio units (RRUs) with six (6) like kind RRUs. All antennas and supporting equipment will be painted to match the Smoke Stack. The Applicants proposal complies with Section 6409 of the Spectrum Act as the collocation of antennas is not a substantial change to the existing base station. Moreover, the Applicants proposal complies with Section 4.32 and 10.4 of the Cambridge Zoning Code.

SECTIONS OF ZONING ORDINANCE CITED:

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

Original
Signature(s):



(Petitioner (s) / Owner)
Adam Brailard of Prince Lobel Tye for

T-Mobile Northeast LLC
(Print Name)

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 Dowse, Inc. / BBC TRUST
(OWNER)

Address: 25 Mount Auburn St / 10-14 Arrow

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

The record title of this property is in the name of Grant H. Dowse

*Pursuant to a deed of duly recorded in the date 12/10/79, Middlesex South
County Registry of Deeds at Book 13858, Page 208; or

Middlesex Registry District of Land Court, Certificate No. _____

Book _____ Page _____.

Charles Regio
SIGNATURE BY LAND OWNER OR
AUTHORIZED TRUSTEE, OFFICER OR AGENT*

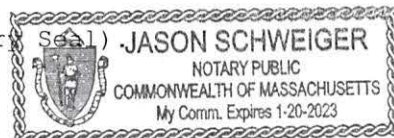
*Written evidence of Agent's standing to represent petitioner may be requested.

Commonwealth of Massachusetts, County of Middlesex

The above-name Charles Regio personally appeared before me,
this 21 of December, 2021, and made oath that the above statement is true.

My commission expires 1/26/2023 (Notary)

JS Notary



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

MEMORANDUM FOR THE RECORD

TO: [illegible] FROM: [illegible] DATE: [illegible]

Subject: [illegible]
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January 4, 2022

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

Re:	Eligible Facilities Request pursuant to Section 6409 of the Spectrum Act and an Application for Special Permit, in the alternative.
Property Address:	14 Arrow Street Assessor's Map 133, Lot 23 (the " Property ")
Applicant:	T-Mobile Northeast LLC (the " Applicant ")

Dear Honorable Members of the Board of Zoning Appeals:

This firm represents T-Mobile Northeast LLC ("**T-Mobile**") (hereinafter, 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 Office 3 (O-3) zoning 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.

The Applicant seeks to modify its existing wireless communications facility by replacing six (6) panel antennas mounted to the façade of the existing smoke stake on the Property (the “**Smoke Stake**”), with six (6) like kind panel antennas, and replacing three (3) Remote Radio Head Units (“**RRU**”) with six (6) like kind RRUs, and supporting equipment (the “**Proposed Facility**”). All of the proposed replacement antennas will be painted to match the existing Smoke Stack. 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 Smoke Stack by replacing six (6) panel antennas, façade mounted to the of the existing Smoke Stack with six (6) like kind panel antennas, mounted at the same location, and by replacing three (3) RRU antennas with six (6) like kind RRUs. All antennas will be painted to match the Smoke Stack. All replacement antennas will be installed to be consistent with the latest decisions of the Board for this facility, dated January 19, 2016 (Case No. BZA-007664-2015), and a second decision dated June 9, 2017 (Case No. BZA-012895-2017) (collectively, 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 O-3 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.

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 O-3 zoning district is necessary to close the coverage gap that is illustrated on the propagation maps submitted herewith. Consequently, T-Mobile is unable to close a gap in its wireless network without obtaining the requested relief under Section 6409 of the Spectrum act or a Special Permit to modify its existing wireless facility in the O-2 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 design minimizes the visual impact of the Proposed Facility. The facility will be installed on the existing rooftop of the Smoke Stack and consistent with the Decisions. The resulting installation will have an increased capacity to better serve the City of Cambridge without the need for an increased number of panel antennas on the Smoke Stack. The proposed replacement antennas will be painted to match the color of the existing Smoke Stack thereby minimizing any visual impacts.

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.**

This is not applicable to the Proposed Facility. The Applicant proposes to install its facility within the O-3 zoning district.

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 Smoke Stack. 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 Smoke Stack.

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 Smoke Stack. The modification of the existing facility will blend with the existing characteristics of the Smoke Stack and the surrounding neighborhood. Moreover, the proposed installation will not generate any traffic, smoke, dust, heat, glare, discharge of noxious

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.

substances, nor will it pollute waterways or groundwater. Conversely, the surrounding properties and general public will benefit from the potential to enjoy improved wireless communication.

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

The operations of the proposed telecommunications facility will not adversely impact the health, safety, and the welfare of the residents of the City of Cambridge. On the contrary, the proposed use will benefit the City and promote the safety and welfare of its residents, businesses and drivers by providing reliable state-of-the-art digital wireless voice and data services. Further, the site will improve the reliability of emergency communications with the police and fire departments by eliminating dropped or blocked calls due to inadequate signal strength or insufficient network capacity to handle call volume, particularly important during emergency situations.

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

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

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

The Proposed Facility is designed to blend with the existing characteristics of the Property, reducing any visual impacts to the surrounding area. Accordingly, the Proposed Facility's design results in a minimal impact on the underlying and adjacent zoning district and is consistent with the Ordinance's intention to allow for less intrusive wireless telecommunications facilities in all districts (other than Open Space), including the O-3 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

Address: One International Place 3700, Boston MA 02110
 Tel. No. 617-456-8153
 E-Mail Address: abraillard@princelobel.com

January 4, 2022

Date: _____

BZA Application Form

DIMENSIONAL INFORMATION

Applicant: T-Mobile Northeast LLC, for Dowse, Inc.

Present Use/Occupancy: Telecommunications

Location: 14 Arrow St., Cambridge, MA

Zone: Office-3

Phone: 617-456-8153

Requested Use/Occupancy: Telecommunications

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

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

The proposed installation involves a modification of an existing Wireless Telecommunications Facility, commonly referred to as a "collocation".

1. SEE CAMBRIDGE ZONING ORDINANCE ARTICLE 5.000, SECTION 5.30 (DISTRICT OF DIMENSIONAL REGULATIONS).

PROJECT INFORMATION		<div>SITE NUMBER: 4BN0019C</div> <div>SITE NAME: BN0019/ 14 ARROW ST SS</div> <div>14 ARROW STREET CAMBRIDGE, MA 02138 SUFFOLK COUNTY</div>																																							
SCOPE OF WORK: UNMANNED TELECOMMUNICATIONS FACILITY MODIFICATIONS SITE ADDRESS: 14 ARROW STREET CAMBRIDGE, MA 02138 LATITUDE: 42.37112300° N LONGITUDE: 71.11497800° W JURISDICTION: NATIONAL, STATE & LOCAL CODES OR ORDINANCES CURRENT USE: TELECOMMUNICATIONS FACILITY PROPOSED USE: TELECOMMUNICATIONS FACILITY PROJECT TYPE: SITE MODIFICATION DESIGN CONFIGURATION: 67D5A997DB INDOOR																																									
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<div>T-1 TITLE SHEET</div> <div>GN-1 GENERAL NOTES</div> <div>A-1 COMPOUND & EQUIPMENT PLANS</div> <div>A-2 ELEVATION</div> <div>A-3 ANTENNA PLANS</div> <div>A-4 DETAILS</div> <div>S-1 ANTENNA ISOMETRICS</div> <div>S-2 ANTENNA MOUNT ISOMETRICS</div> <div>S-3 MOUNT LAYOUT PLAN & DETAILS</div> <div>S-4 MOUNT ELEVATIONS</div> <div>S-5 ANCHOR DETAIL & STRUCTURAL NOTES</div> <div>S-6 ANTENNA MOUNTING DETAILS</div> <div>S-7 CUSTOM ANTENNA MOUNTING DETAILS</div> <div>G-1 GROUNDING, ONE-LINE DIAGRAM & DETAILS</div> <div>APPROVED</div> <div>By Michael DeLia at 8:13 am, Oct 28, 2021</div>		<div>2</div> <div>2</div> <div>2</div> <div>2</div> <div>2</div> <div>2</div> <div>2</div> <div>2</div> <div>2</div> <div>2</div> <div>2</div> <div>2</div> <div>2</div>		<div>1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF T-MOBILE NORTHEAST, LLC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.</div> <div>2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.</div> <div>3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE T-MOBILE REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.</div>																																					
<div>APPROVED</div> <div>SIGNATURES</div> <div>By Michael Granese at 6:30 am, Oct 28, 2021</div> <div><div>CONSTRUCTION</div><div>DATE</div><div>RF ENGINEERING</div><div>DATE</div><div>ZONING / SITE ACQ.</div><div>DATE</div><div>OPERATIONS</div><div>DATE</div><div>LANDLORD</div><div>DATE</div></div> <div></div>				<div><div></div>DIG SAFE SYSTEM, INC.<div></div></div> <div>CALL BEFORE YOU DIG</div> <div>CALL TOLL FREE: 811 OR 888-DIG-SAFE</div>																																					
				UNDERGROUND SERVICE ALERT																																					
<div>ADVANCED ENGINEERING GROUP, P.C. <small>Civil Engineering - Site Development - Surveying - Telecommunications 500 North Broadway East Providence, RI 02914 Phone: (401) 354-2403 Fax: (401) 633-6354</small></div>		<div>Transcend Wireless <small>10 INDUSTRIAL AVENUE MAHWAH, NJ 07430</small></div>	<div>SITE NUMBER: 4BN0019C</div> <div>SITE NAME: BN0019/ 14 ARROW ST SS</div> <div>14 ARROW STREET CAMBRIDGE, MA 02138 SUFFOLK COUNTY</div>	<div>T-MOBILE NORTHEAST LLC</div> <div>15 COMMERCE WAY, SUITE B NORTON, MA 02766 OFFICE: (508) 286-2700 FAX: (508) 286-2893</div>	<table><tr><th>NO.</th><th>DATE</th><th>REVISIONS</th><th>BY</th><th>CHK</th></tr><tr><td>0</td><td>04/15/21</td><td>ISSUED FOR REVIEW</td><td>JWH</td><td>MRC</td></tr><tr><td>1</td><td>05/17/21</td><td>ISSUED FOR CONSTRUCTION</td><td>JWH</td><td>MRC</td></tr><tr><td>2</td><td>10/27/21</td><td>REVISED</td><td>JWH</td><td>MRC</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>	NO.	DATE	REVISIONS	BY	CHK	0	04/15/21	ISSUED FOR REVIEW	JWH	MRC	1	05/17/21	ISSUED FOR CONSTRUCTION	JWH	MRC	2	10/27/21	REVISED	JWH	MRC																<div>TITLE SHEET</div> <div>SHEET NO. T-1</div>
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GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION;

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

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

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

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

BUILDING CODE:

MASSACHUSETTS STATE BUILDING CODE 780 CMR, 9TH EDITION
ELECTRICAL CODE: MASSACHUSETTS 527 CMR 12.00 (NEC 2020)
NFPA 780, 2017

ELECTRICAL AND GROUNDING NOTES

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

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

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

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

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

6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.

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

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

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

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

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

12. PPC SUPPLIED BY PROJECT OWNER.

13. GROUNDING SHALL COMPLY WITH NEC ART. 250.

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

ADDITIONAL NOTE:
GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN ACCORDANCE WITH "T-MOBILE BTS SITE GROUNDING STANDARDS".

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

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

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

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

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

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

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

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

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



ABBREVIATIONS

AAV	ALTERNATIVE ACCESS VENDOR	EG	EQUIPMENT GROUND	N.T.S.	NOT TO SCALE
AC	ALTERNATING CURRENT	EGB	EQUIPMENT GROUND BAR	REF	REFERENCE
AGL	ABOVE GRADE LEVEL	EGR	EQUIPMENT GROUND RING	REQ	REQUIRED
ATS	AUTOMATIC TRANSFER SWITCH	(F)	FUTURE	RF	RADIO FREQUENCY
AWG	AMERICAN WIRE GAUGE	GALV.	GALVANIZED	RGS	RIGID GALVANIZED STEEL
AZ	AZIMUTH	G.C.	GENERAL CONTRACTOR	RRH	REMOTE RADIO HEAD
BCW	BARE COPPER WIRE	KW	KILOWATT	TBD	TO BE DETERMINED
BEP	BUILDING ENTRY POINT	MGB	MASTER GROUND BUS	TBR	TO BE REMOVED
BTS	BASE TRANSCEIVER STATION	MIN.	MINIMUM	TBRR	TO BE REMOVED AND REPLACED
CSC	CELL SITE CONTROLLER	(P)	PROPOSED	TYP	TYPICAL
(E)	EXISTING	PPC	POWER PROTECTION CABINET	U/G	UNDERGROUND



Transcend Wireless

10 INDUSTRIAL AVENUE
MAHWAH, NJ 07430

SITE NUMBER: 4BN0019C

SITE NAME: BN0019/ 14 ARROW ST SS

14 ARROW STREET
CAMBRIDGE, MA 02138
SUFFOLK COUNTY

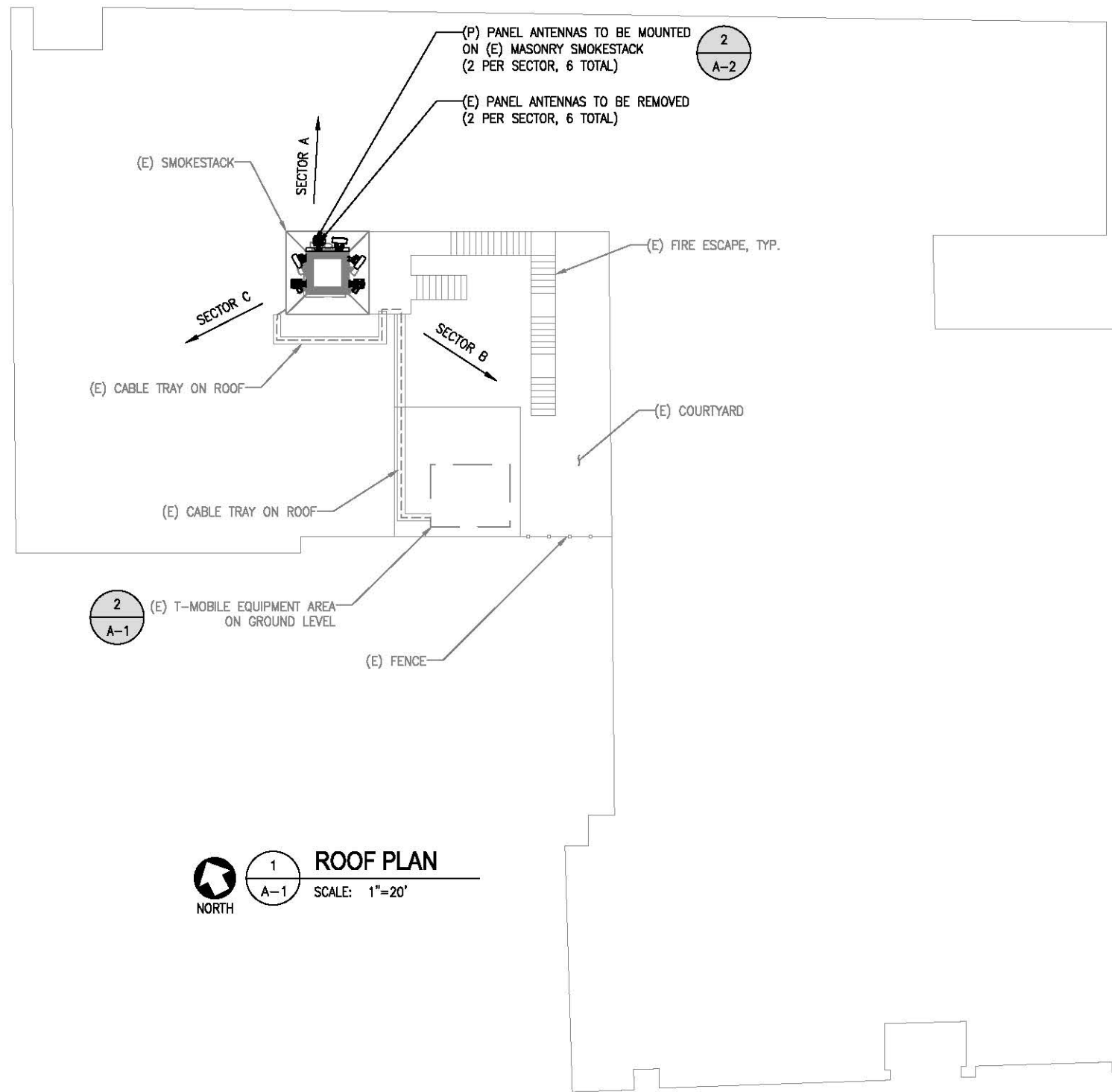
T-MOBILE NORTHEAST LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
OFFICE: (508) 286-2700
FAX: (508) 286-2893

NO.	DATE	REVISIONS	BY	CHK
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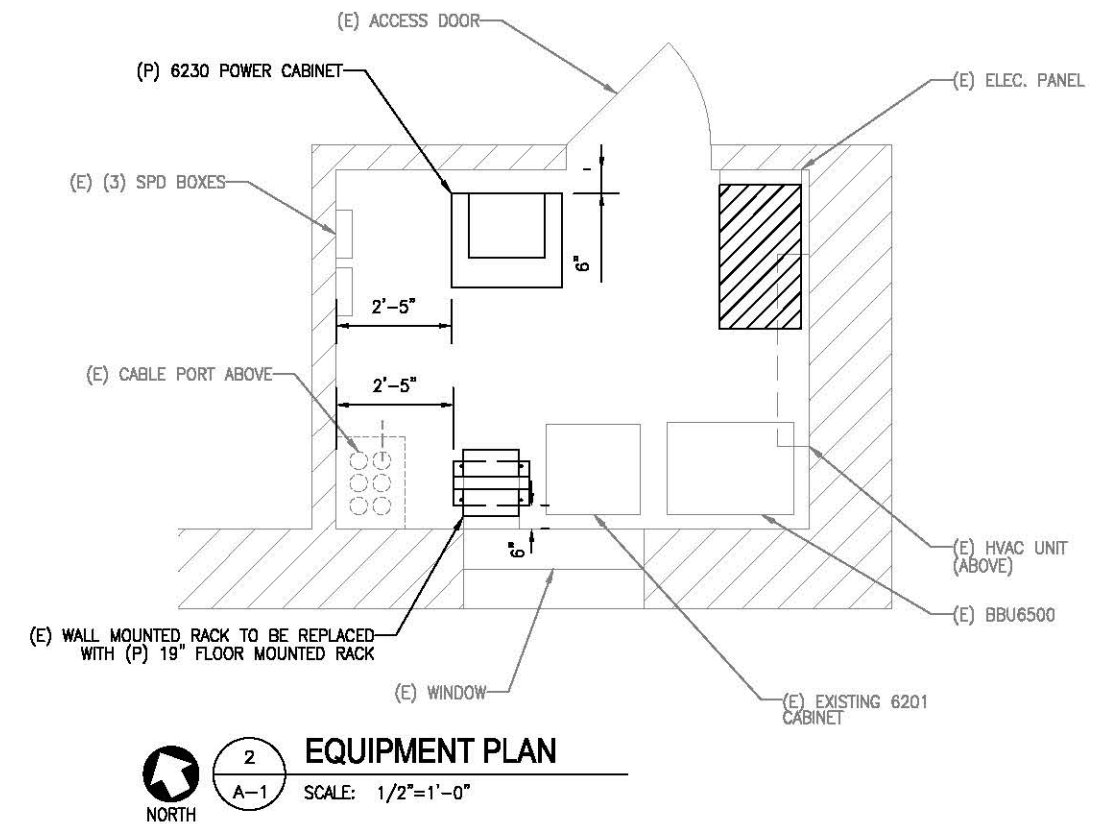
GENERAL NOTES

SHEET NO.

GN-1



1 ROOF PLAN
SCALE: 1"=20'
NORTH



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



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NOTES:
PROPOSED ANTENNAS TO BE PAINTED TO MATCH PRIMARY
COLOR OF SMOKESTACK (CLAY).

(P) T-MOBILE PANEL ANTENNA (RFS
APXVAALL18-43-U-NA20) TYP. OF (1)
PER SECTOR (3) TOTAL

(P) T-MOBILE PANEL ANTENNA (RFS
APXVAALL18-43-U-NA20) TYP. OF (1)
PER SECTOR (3) TOTAL

(P) PANEL ANTENNAS TO BE MOUNTED
ON (E) MASONRY SMOKESTACK
(2 PER SECTOR, 6 TOTAL)

(E) PANEL ANTENNAS TO BE RELOCATED
ON (E) MASONRY SMOKESTACK
(1 PER SECTOR, 3 TOTAL)

(P) REMOTE RADIO HEAD TO BE
MOUNTED ON (E) MASONRY SMOKESTACK
(3 PER SECTOR, 9 TOTAL)

(P) T-MOBILE RRH
(ERICSSON RRUS 4480 B71+B85),
TYP. OF (1) PER SECTOR, (3) TOTAL

(P) T-MOBILE RRH
(ERICSSON RRUS 4460 B25+B66), TYP.
OF (1) PER SECTOR, (3) TOTAL

2 ENLARGED ELEVATION

SCALE: 1"=20'

(E) T-MOBILE EQUIPMENT AREA
ON GROUND LEVEL

1 SOUTH ELEVATION

SCALE: 1"=20'

EQUIPMENT SCHEDULE

CURRENT EQUIPMENT

QUANTITY	DESCRIPTION
3	ERICSSON AIR21 B2A/B4P PANEL ANTENNAS
3	ERICSSON AIR32 B66A/B2a PANEL ANTENNAS
3	ERICSSON RRUS-11-B12
12	7/8" DIA. COAX CABLES (CAPPED)
3	3x6 HCS DC/FIBER CABLES
1	ERICSSON RBS 6201 EQUIPMENT CABINET

EQUIPMENT TO BE REMOVED

3	ERICSSON AIR21 B4A/B12P PANEL ANTENNAS
3	ERICSSON AIR32 B66A/B2a PANEL ANTENNAS
3	ERICSSON RRUS-11 B12
12	7/8" DIA. COAX CABLES (CAPPED)

EQUIPMENT TO BE ADDED

3	ERICSSON AIR6449 B41 PANEL ANTENNAS
3	RFS APXVAALL18_43-U-NA20
3	REMOTE RADIO HEAD ERICSSON# RRUS 4480
6	REMOTE RADIO HEAD: ERICSSON# RRUS 4460
3	QUADPLEXER PER T-MOBILE SPEC.
3	6x24 DC/FIBER CABLES
1	6230 POWER CABINET
1	19 INCH RACK

FINAL EQUIPMENT CONFIGURATION

3	ERICSSON AIR6449 B41 PANEL ANTENNAS
3	RFS APXVAARR18_43-U-NA20 PANEL ANTENNAS
3	ERICSSON RADIO 4480
3	ERICSSON RADIO 4460
3	3x6 HCS DC/FIBER CABLES
3	6x24 HCS DC/FIBER CABLES
1	ERICSSON RBS 6201 EQUIPMENT CABINET
1	6230 POWER CABINET
1	19 INCH RACK

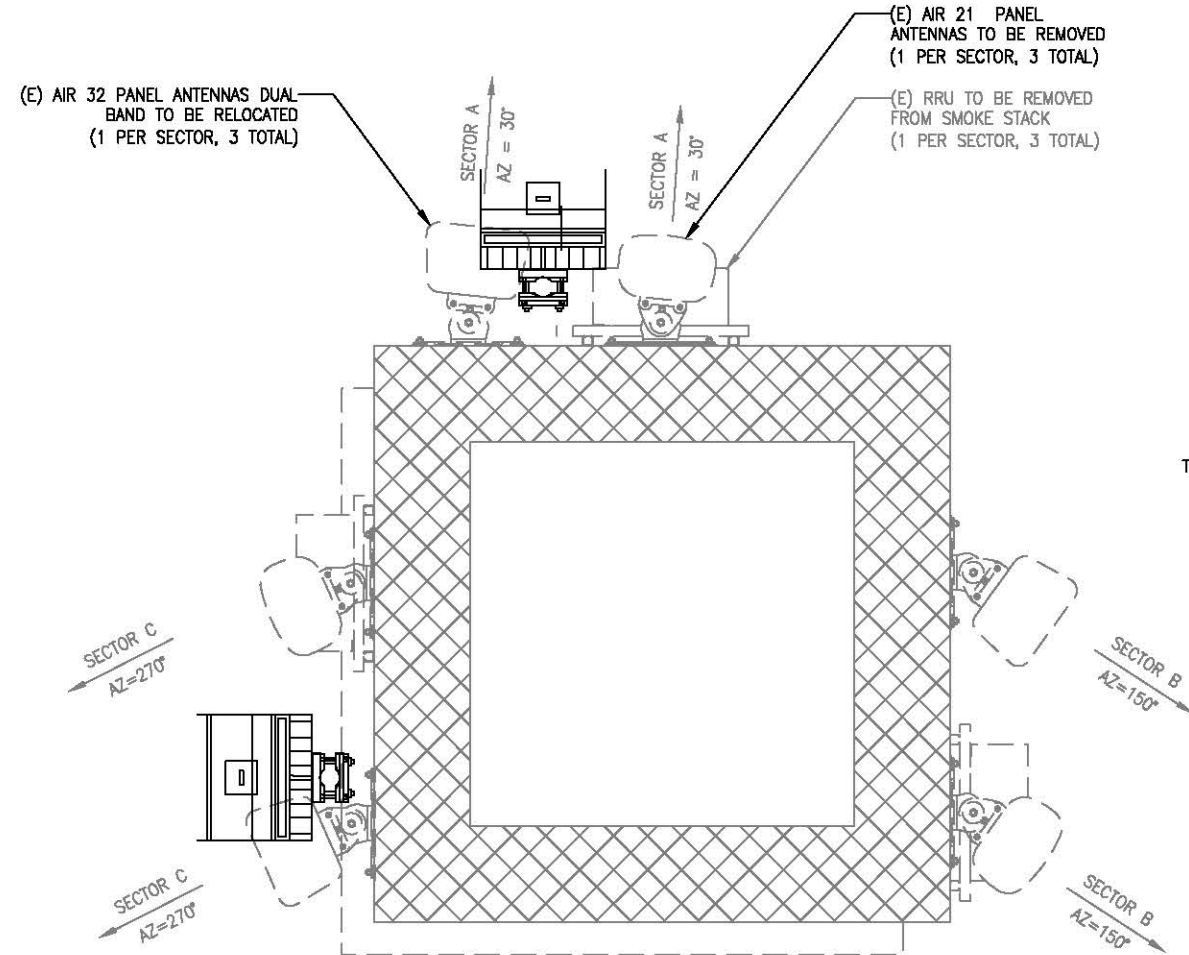
RF CONFIGURATION 67D5A997DB INDOOR

SCOPE OF WORK

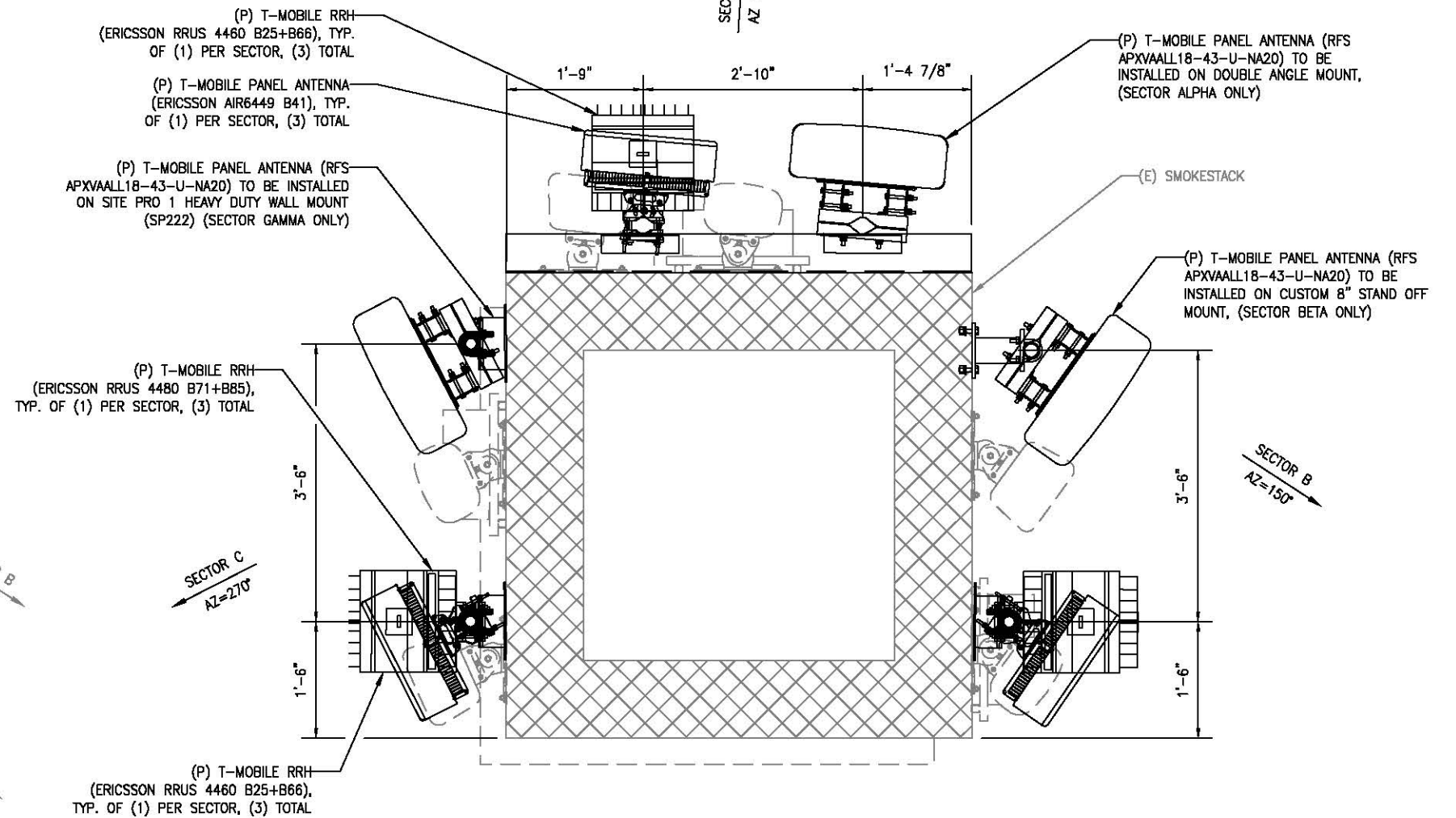
- REMOVE (6) PANEL ANTENNAS, (2) PER SECTOR
- REMOVE (3) RRHs, (1) PER SECTOR
- REMOVE (1) EQUIPMENT CABINET
- REMOVE (12) COAXIAL CABLES
- INSTALL (6) NEW PANEL ANTENNAS, (2) PER SECTOR
- INSTALL (6) RRHs, (2) PER SECTOR
- INSTALL (6) ANTENNA WALL MOUNTS, (2) PER SECTOR
- INSTALL (1) POWER CABINET
- INSTALL (1) 19' RACK



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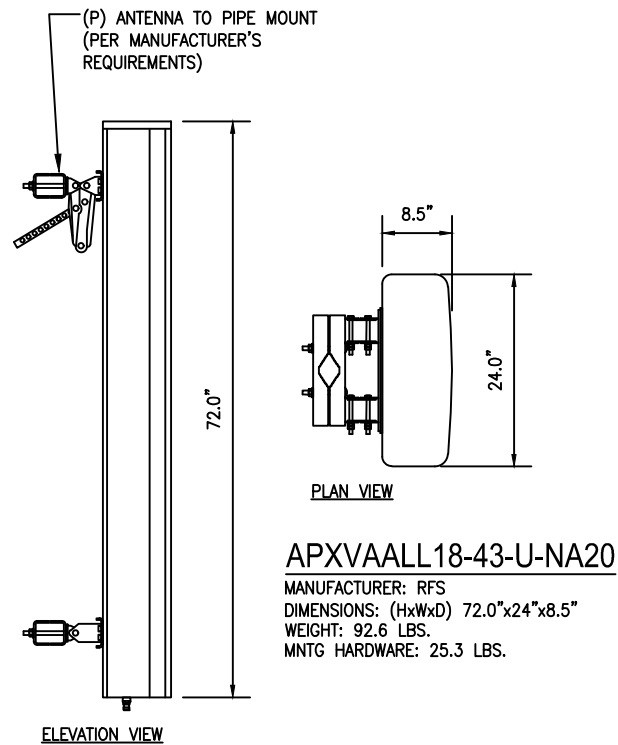
1 EXISTING ANTENNA PLAN
 A-3 SCALE: 1/2"=1'-0"
 0 1'-0" 2'-0" 4'-0"



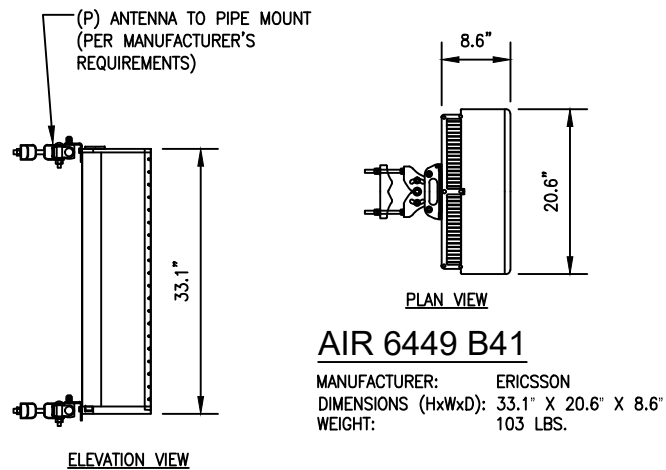
2 PROPOSED ANTENNA PLAN
 A-3 SCALE: 1/2"=1'-0"
 0 1'-0" 2'-0" 4'-0"



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1 TYP. ANTENNA DETAIL
A-4 SCALE: N.T.S.



2 TYP. ANTENNA DETAIL
A-4 SCALE: N.T.S.



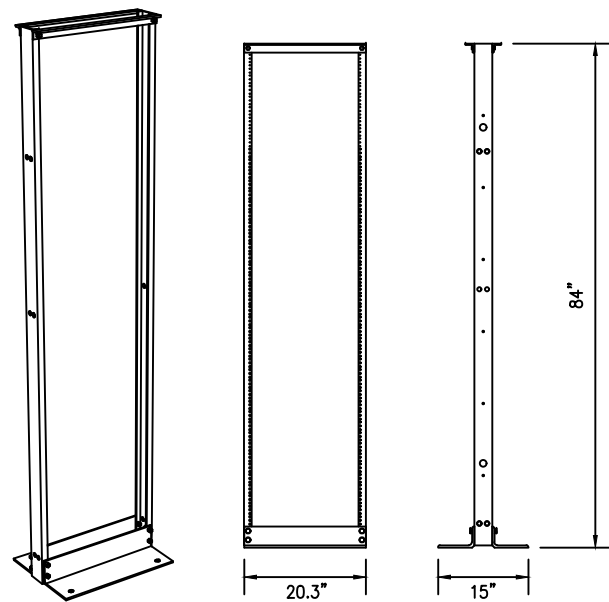
4480 B71+B85
 MANUFACTURER: ERICSSON
 DIMENSIONS (HxWxD): 21.8"x15.7"x7.5"
 WEIGHT: 84 LBS

3 TYP. RRH DETAIL
A-4 SCALE: N.T.S.



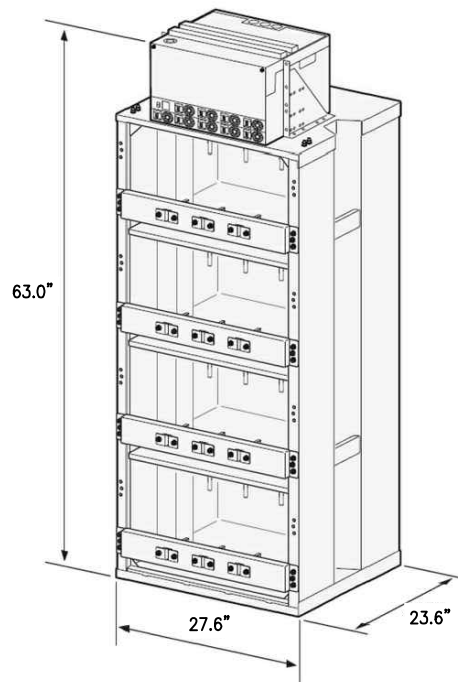
4460 B25+B66
 MANUFACTURER: ERICSSON
 DIMENSIONS (HxWxD): 19.6"x15.7"x12.1"
 WEIGHT: 109 LBS

4 TYP. RRH DETAIL
A-4 SCALE: N.T.S.



UNIVERSAL RACK 2-POST
 MANUFACTURER: CHATSWORTH PRODUCTS, INC.*
 DIMENSIONS WxDxH 19"-45U (7'H) 20.3"x15"x84"
 19"-37U (6'H) 20.3"x15"x72"
 (* OR AN APPROVED EQUAL)

5 19" EQUIPMENT RACK DETAIL
A-4 SCALE: N.T.S.

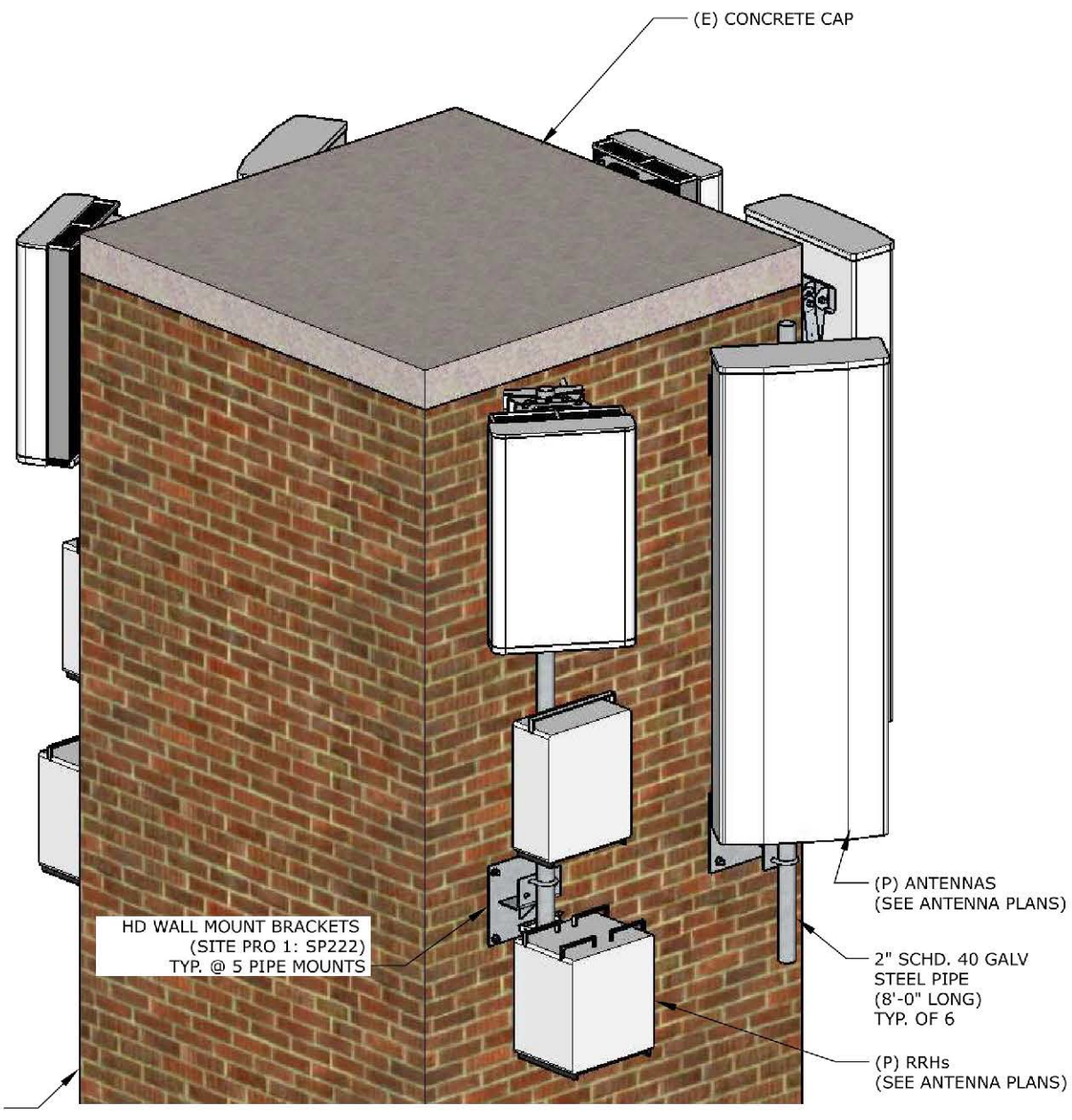


POWER 6230
 MANUFACTURER: ERICSSON
 DIMENSIONS WDXH: 27.6"x23.6"x63.0"

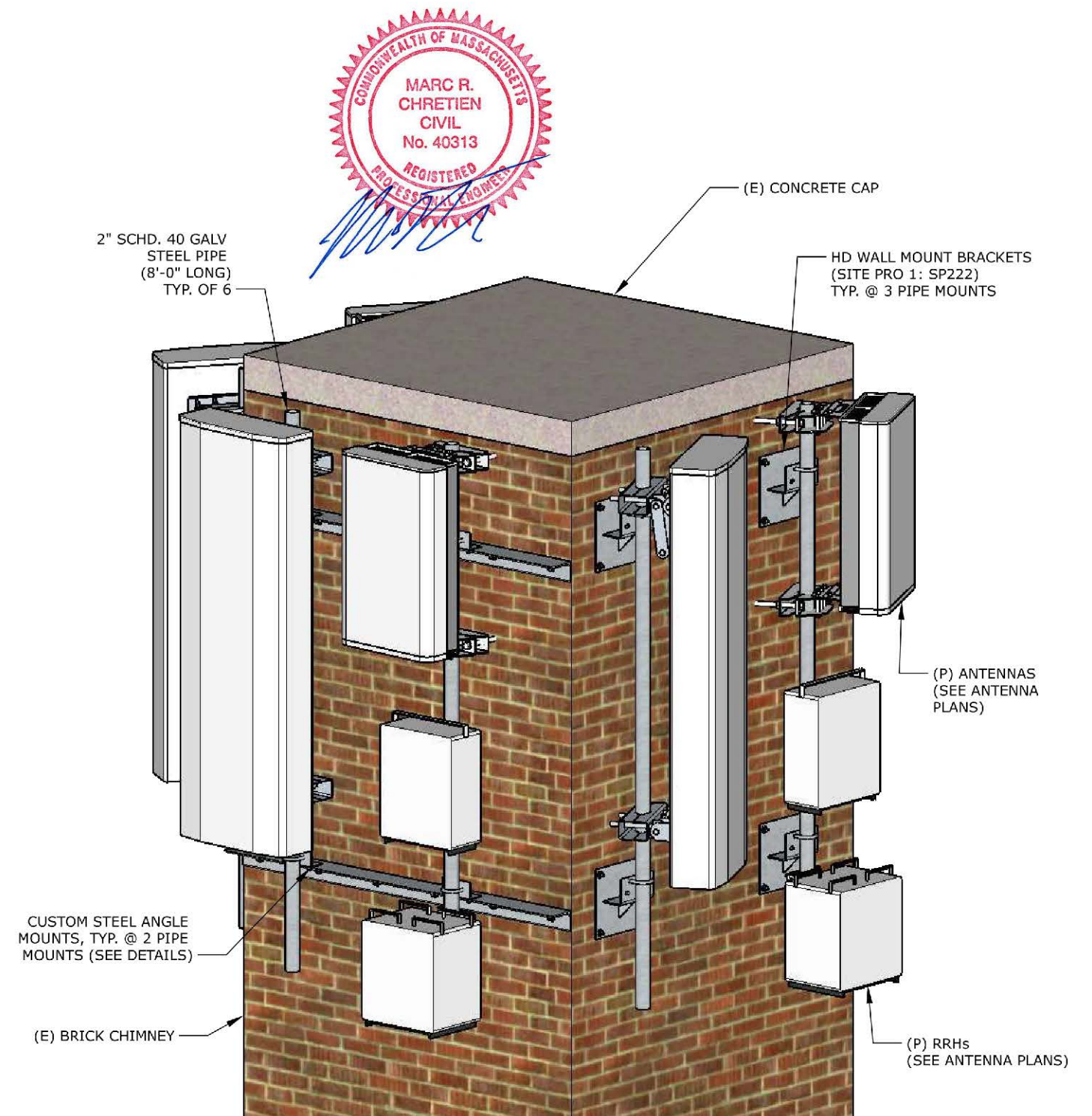
6 POWER PLANT DETAIL
A-4 SCALE: N.T.S.



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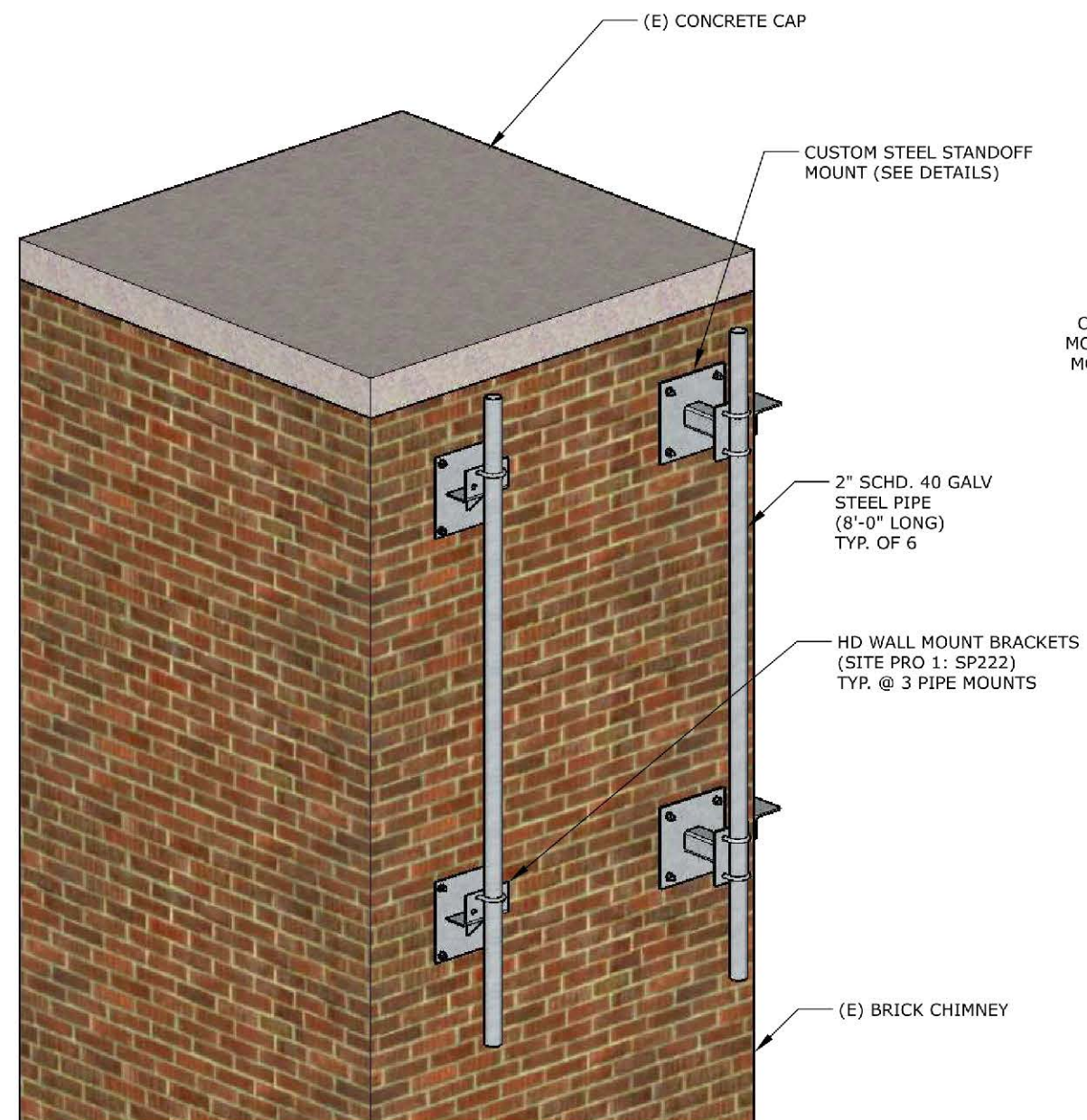


1 ISOMETRIC
S-1 Scale: NTS

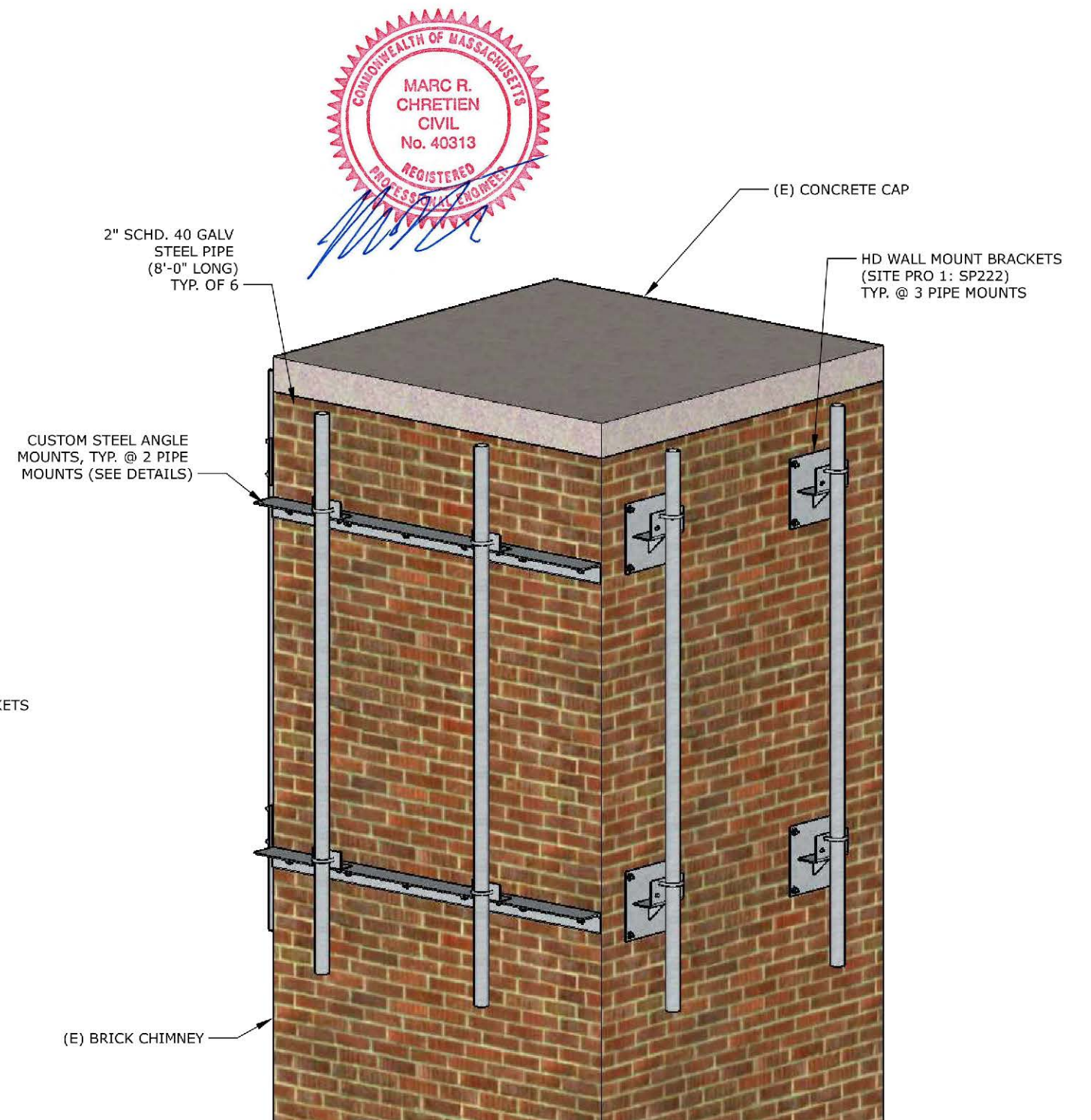


2 ISOMETRIC
S-1 Scale: NTS

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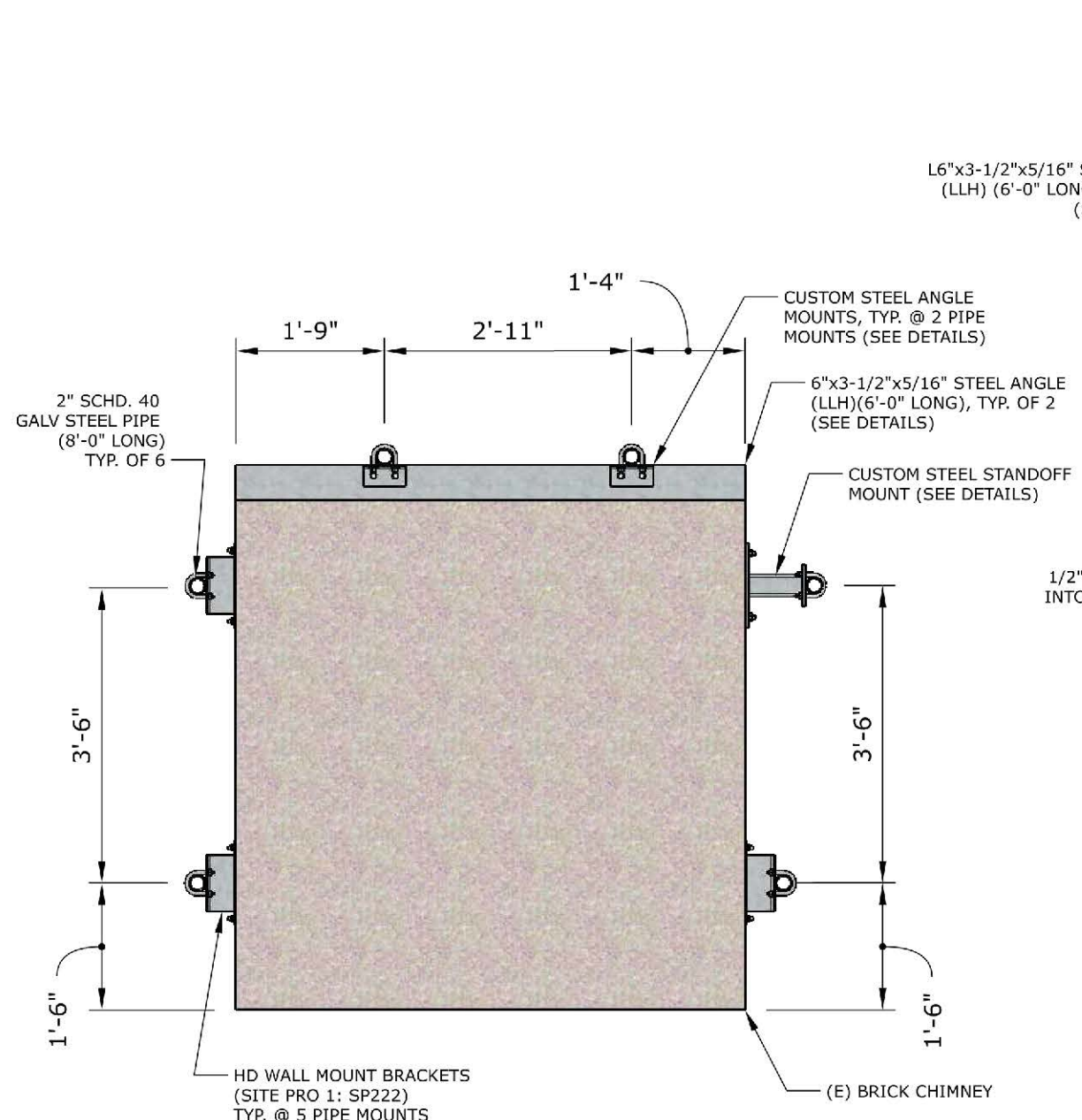


1 FRAMING ISOMETRIC
S-2 Scale: NTS

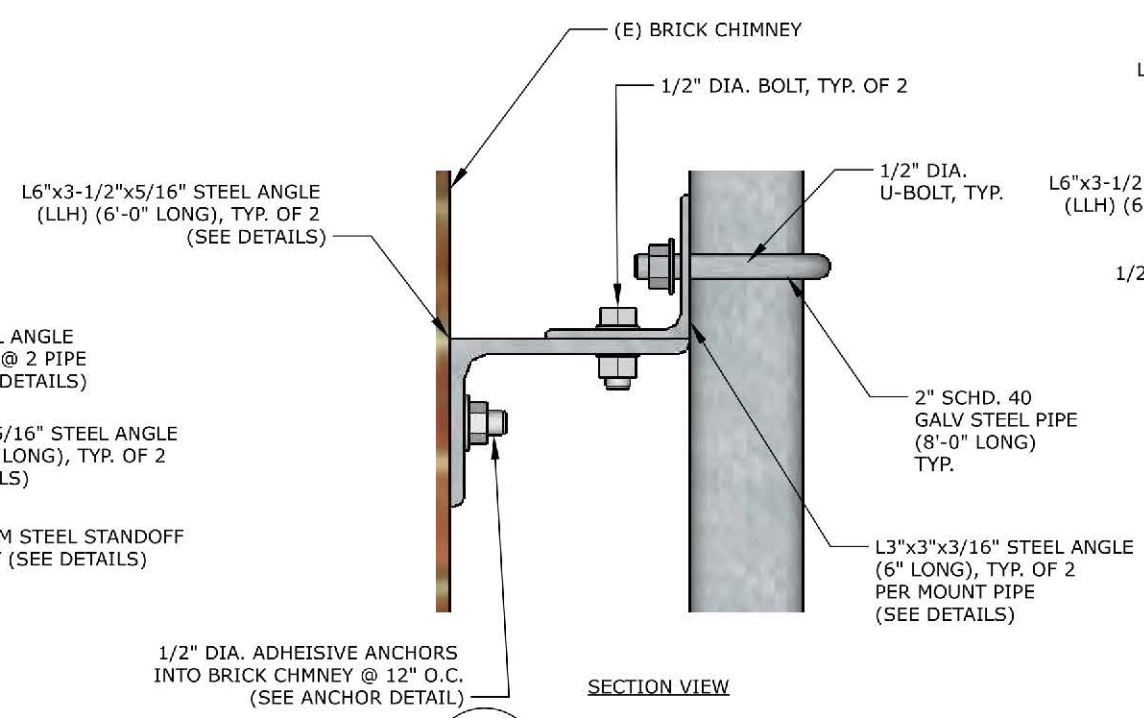


2 FRAMING ISOMETRIC
S-2 Scale: NTS

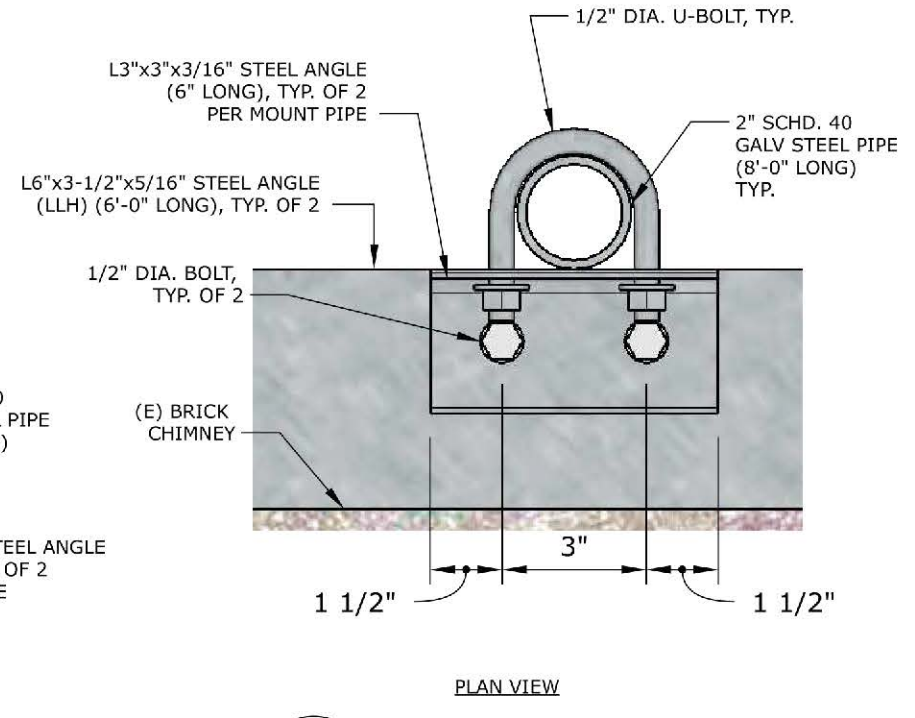
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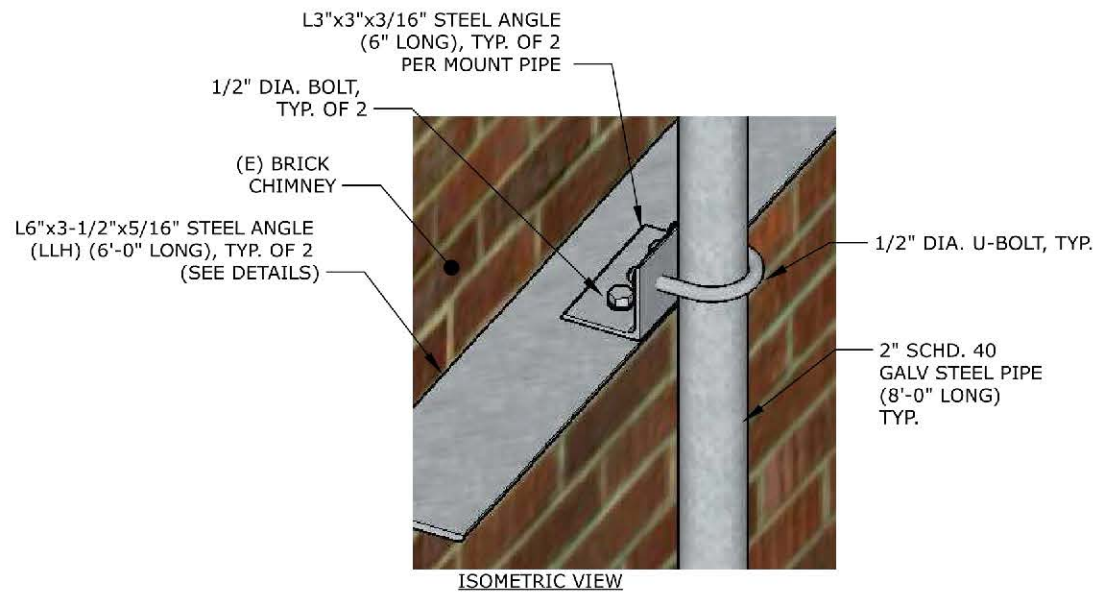
1 MOUNT LAYOUT PLAN
S-3 Scale: 1/2" = 1'-0"



2 MOUNT DETAIL
S-3 Scale: 3" = 1'-0"

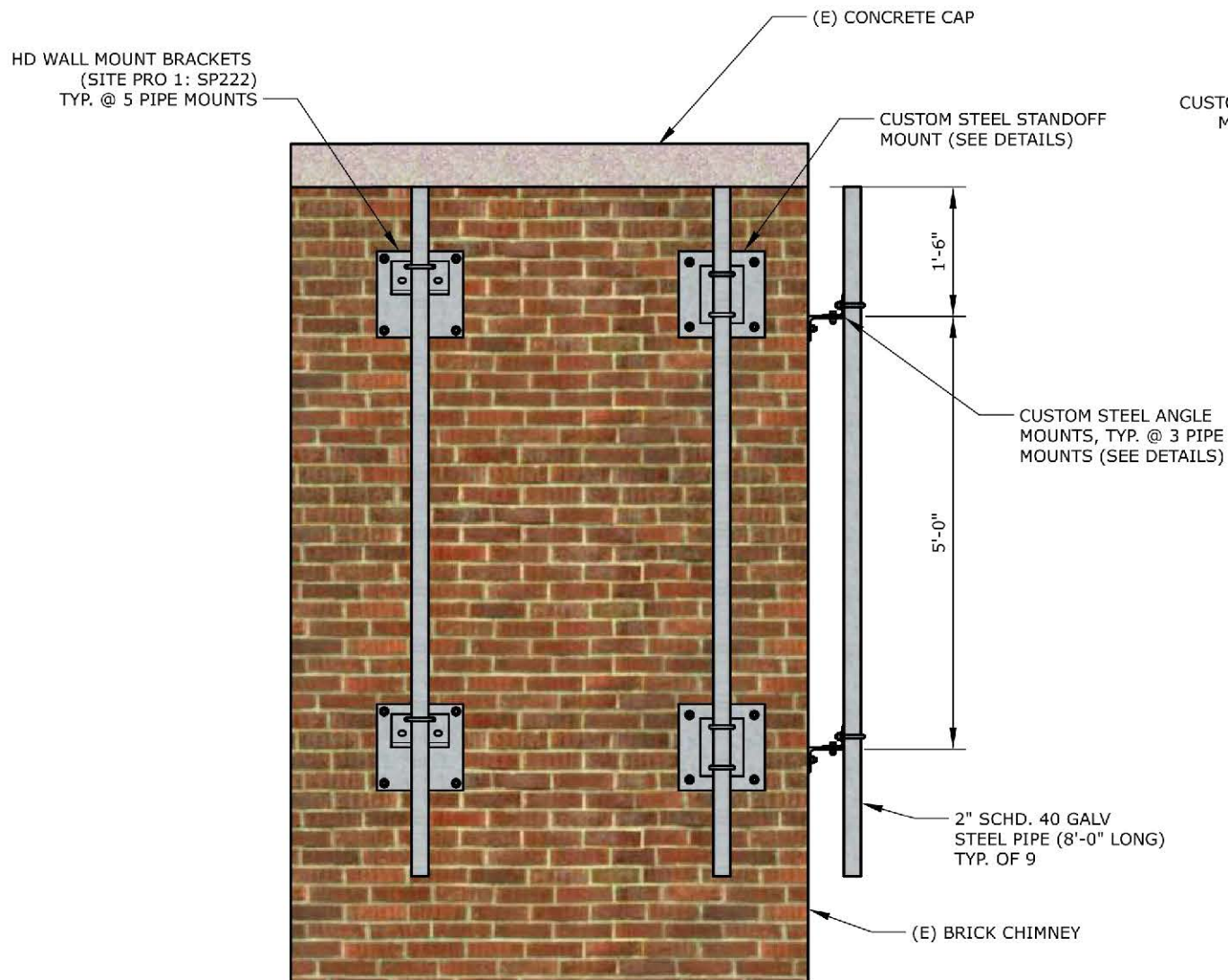


3 MOUNT DETAIL
S-3 Scale: 3" = 1'-0"

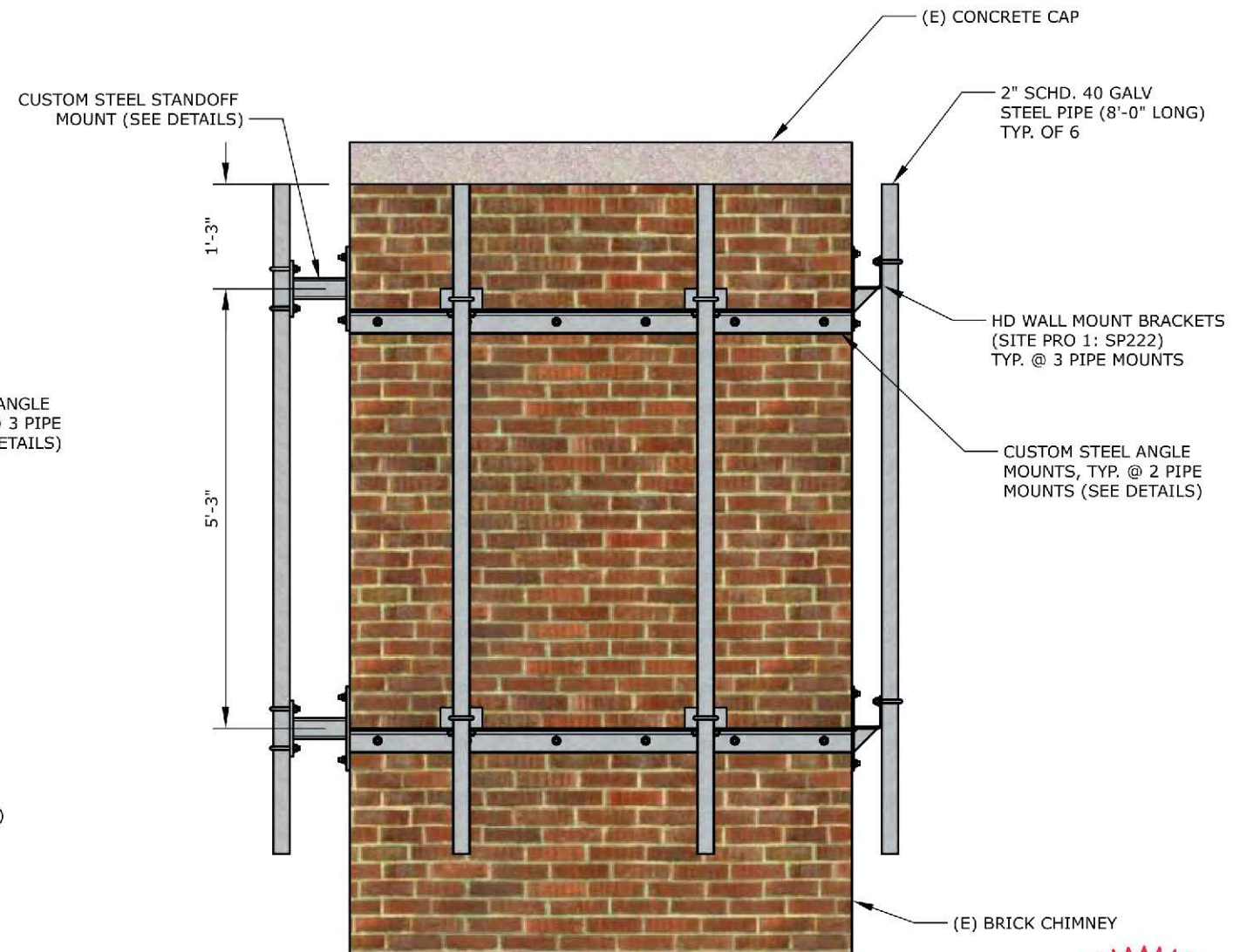


4 MOUNT DETAIL
S-3 Scale: 3" = 1'-0"





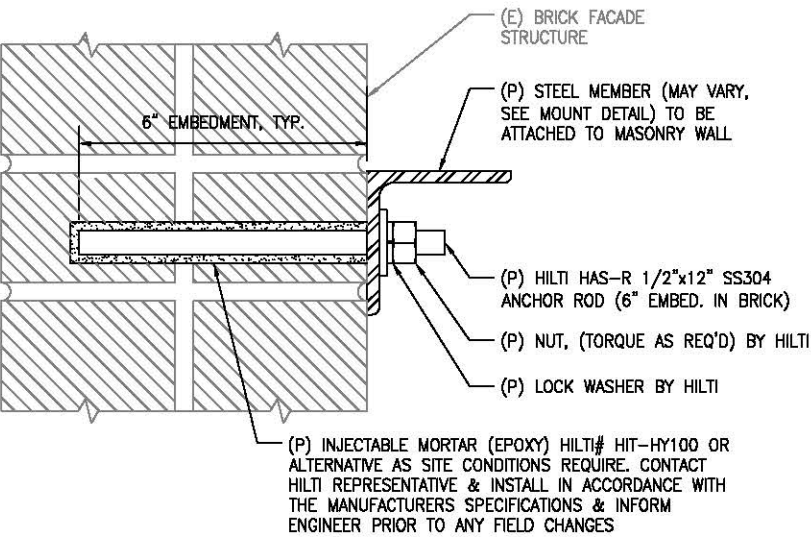
1 MOUNT LAYOUT ELEVATION
S-4 Scale: 1/2" = 1'-0"



2 MOUNT LAYOUT ELEVATION
S-4 Scale: 1/2" = 1'-0"



NO.	DATE	REVISIONS	BY	CHK
0	04/15/21	ISSUED FOR REVIEW	JWH	MRC
1	05/17/21	ISSUED FOR CONSTRUCTION	JWH	MRC
2	10/27/21	REVISED	JWH	MRC



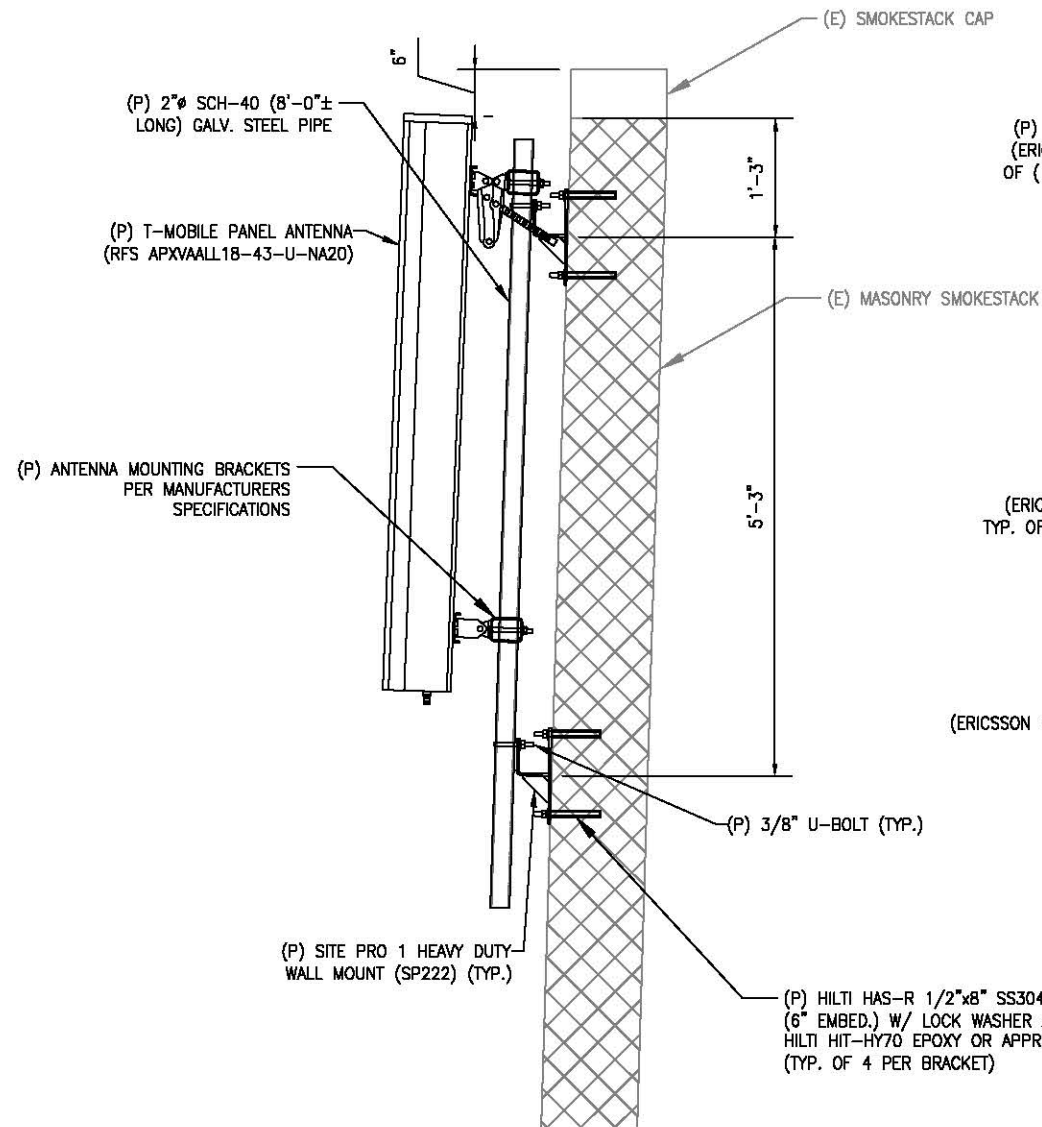
1 WALL ANCHOR DETAIL
S-5 SCALE: N.T.S.

STRUCTURAL STEEL NOTES

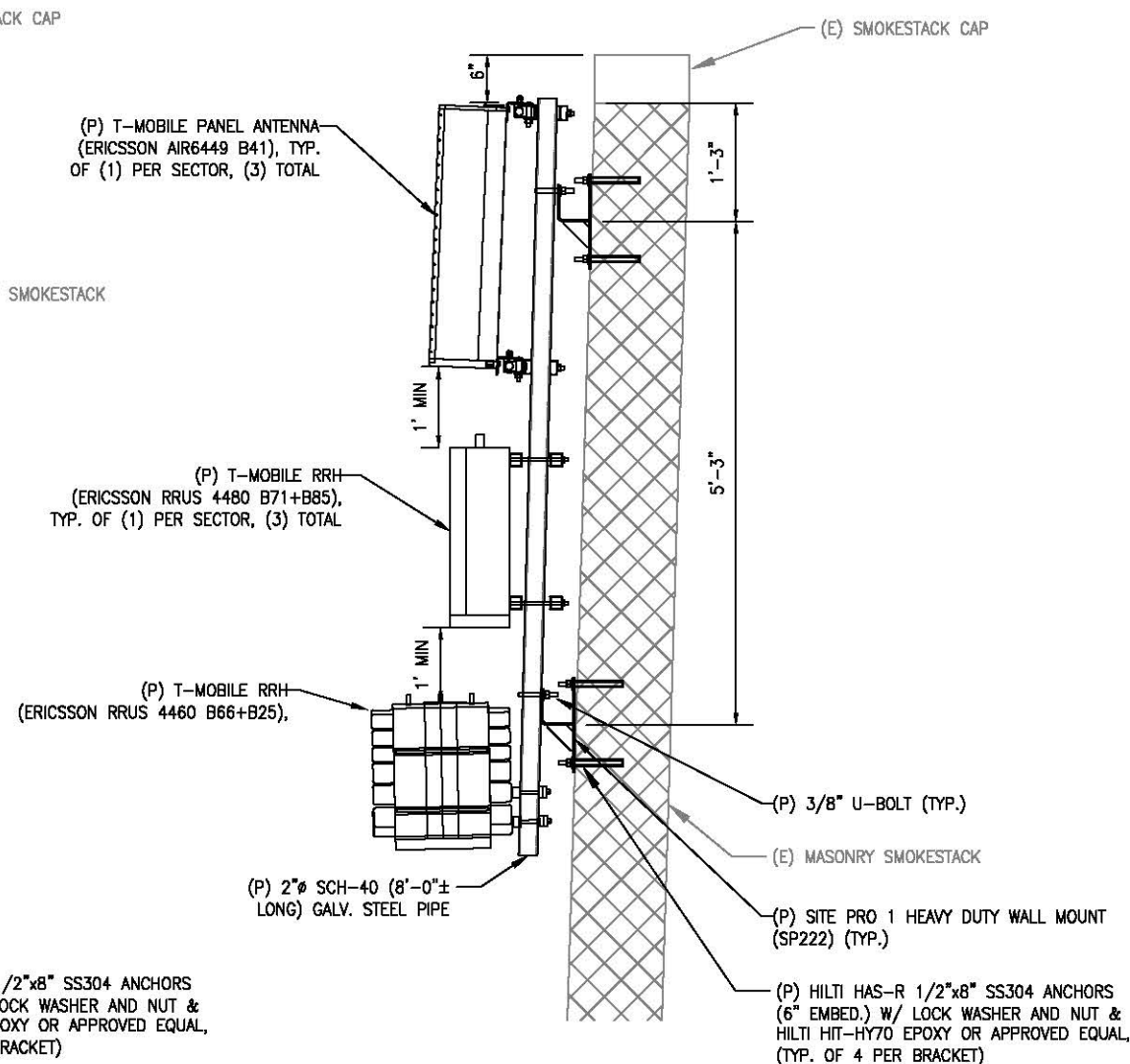
1. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, "MANUAL OF STEEL CONSTRUCTION, ASD (LATEST EDITION).
2. ALL STEEL DETAILS AND CONNECTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", LATEST EDITION
3. STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE NOTED ON THE DRAWINGS:
 - 3.1. ALL ROLLED SHAPES AND CHANNELS: ASTM A-572 OR A-992, MIN. YIELD STRENGTH OF 50 KSI
 - 3.2. MISCELLANEOUS ANGLES: ASTM A-36, MIN YIELD STRENGTH OF 36 KSI
 - 3.3. HOLLOW STRUCTURAL STEEL SECTIONS, (TUBES & PIPES): ASTM A500 GRADE B, MIN YIELD STRENGTH OF 42 KSI FOR PIPES AND 46 KSI FOR TUBES.
4. ALL BOLTS SHALL CONFORM TO ASTM A325 OR A490, NUTS SHALL CONFORM TO ASTM A563 AND WASHERS SHALL CONFORM TO ASTM A-F436.
5. ALL ANCHOR BOLTS/RODS SHALL CONFORM TO ASTM F-1554 GRADE 36 WITH WELD ABILITY SUPPLEMENT S1, UNLESS OTHERWISE NOTED. SUBMIT GRADE CERTIFICATIONS FOR RECORD. STEEL SUPPLIER SHALL SUPPLY RIGID STEEL TEMPLATES FOR ANCHOR ROD INSTALLATION.
6. ALL SHOP OR FIELD BOLTED CONNECTIONS, SHALL BE BOLTED CONNECTIONS USING 1/2 INCH DIAMETER A325 N BOLTS IN STANDARD HOLES, UNLESS SPECIFICALLY NOTED OTHERWISE.
7. OVERSIZED OR SLOTTED HOLES SHALL NOT BE USED FOR ANY CONNECTIONS UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS OR APPROVED IN WRITING BY THE ENGINEER.
8. ALL BUTT AND FULL PENETRATION WELDS SHALL BE MADE USING RUN OFF TABS WHICH SHALL BE REMOVED AND GROUND SMOOTH AFTER WELD IS COMPLETED.
9. ALL WELD BACK UP BARS SHALL BE REMOVED AND GROUND SMOOTH AFTER WELD IS COMPLETED, UNLESS NOTED OTHERWISE.
10. ALL WELDS INDICATED SHALL MEET THE MINIMUM WELD SIZE SPECIFIED BY THE AISC MANUAL OF STEEL DESIGN. (SINGLE PASS AS REQUIRED)
11. ALL WELDS SHALL BE PERFORMED BY QUALIFIED WELDERS IN ACCORDANCE WITH A.W.S. SPECIFICATIONS, LATEST EDITIONS. ALL WELDING ELECTRODES SHALL CONFORM TO A.W.S. A5.1 GRADE E-70. BARE ELECTRODES AND GRANULAR FLUX SHALL CONFORM TO A.W.S. A5.17, F70 A.W.S. FLUX CLASSIFICATION.
12. ALTERNATE CONNECTIONS WILL BE ACCEPTED ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER. HOWEVER, THE ENGINEER SHALL BE THE SOLE JUDGE OF THE ACCEPTABILITY AND THE CONTRACTOR'S BID SHALL ANTICIPATE THE USE OF THOSE SPECIFIC DETAILS SHOWN ON THE DRAWINGS. IN ANY EVENT THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF SUCH ALTERNATE DETAILS WHICH THEY PROPOSE.
13. SHOP AND FIELD CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE BOLTED OR WELDED.
14. WHEN NOT SPECIFICALLY DETAILED ELSEWHERE ON THE DRAWINGS, ALL BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS SHALL BE DETAILED AS SHOWN IN THE TYPICAL BEAM CONNECTION DETAILS.
15. ALL BEAM AND GIRDERS SHALL BE CONNECTED FOR 115% OF THE REACTION DENOTED BY THE SYMBOL V ON THE PLAN. PROVIDE A MINIMUM 2 BOLT CONNECTION. IF NO REACTION IS GIVEN PROVIDE CONNECTION FOLLOWING NOTE 16.
16. ALL BEAM AND GIRDER CONNECTIONS SHALL BE AT LEAST CAPABLE OF DEVELOPING THE UNIFORMLY DISTRIBUTED LOAD CAPACITY OF THE MEMBER USING THE REACTION FROM THE ALLOWABLE LOAD OF BEAM AS TABULATED IN THE AISC MANUAL OF STEEL CONSTRUCTION LATEST EDITION UNLESS NOTED OTHERWISE. FOR COMPOSITE BEAMS MULTIPLY THE REACTION BY THE RATIO S_{tr}/S WHERE S_{tr} = SECTION MODULUS OF THE TRANSFORMED COMPOSITE CROSS SECTION WITH RESPECT TO THE BOTTOM FLANGE, AND S = SECTION MODULUS OF THE STRUCTURAL STEEL ALONE.
17. ALL HOLES AND CUTS SHALL BE SHOWN ON THE SHOP DRAWINGS AND MADE IN THE SHOP. CUTS OR BURNING OF HOLES IN STRUCTURAL STEEL MEMBERS IN THE FIELD WILL NOT BE PERMITTED.
18. PROVIDE ANY TEMPORARY BRACING OR GUYS TO PROVIDE LATERAL SUPPORT OF THE STRUCTURES AND INDIVIDUAL ELEMENTS UNTIL PERMANENT FRAME IS COMPLETELY INSTALLED.
19. ALL STRUCTURAL STEEL EXPOSED TO WEATHER SHALL BE GALVANIZED.
20. ALL TUBE & PIPE SECTIONS EXPOSED TO WEATHER SHALL HAVE OPEN ENDS CAPPED WITH 1/4" PLATE.
21. ALL STRUCTURAL STEEL TO RECEIVE SPRAY APPLIED FIRE PROTECTION SHALL BE LEFT UNCOATED.
22. FOR EXPOSED INTERIOR STRUCTURAL STEEL, REFER TO DRAWINGS AND SPECIFICATIONS FOR SURFACE PREPARATION AND FINISH REQUIREMENTS.
23. STEEL FABRICATOR SHALL COORDINATE ALL HOLE LOCATIONS FOR SIMPSON TIE DOWN ANCHORS. ALL HOLES SHALL BE SHOP DRILLED THROUGH BEAM FLANGES.



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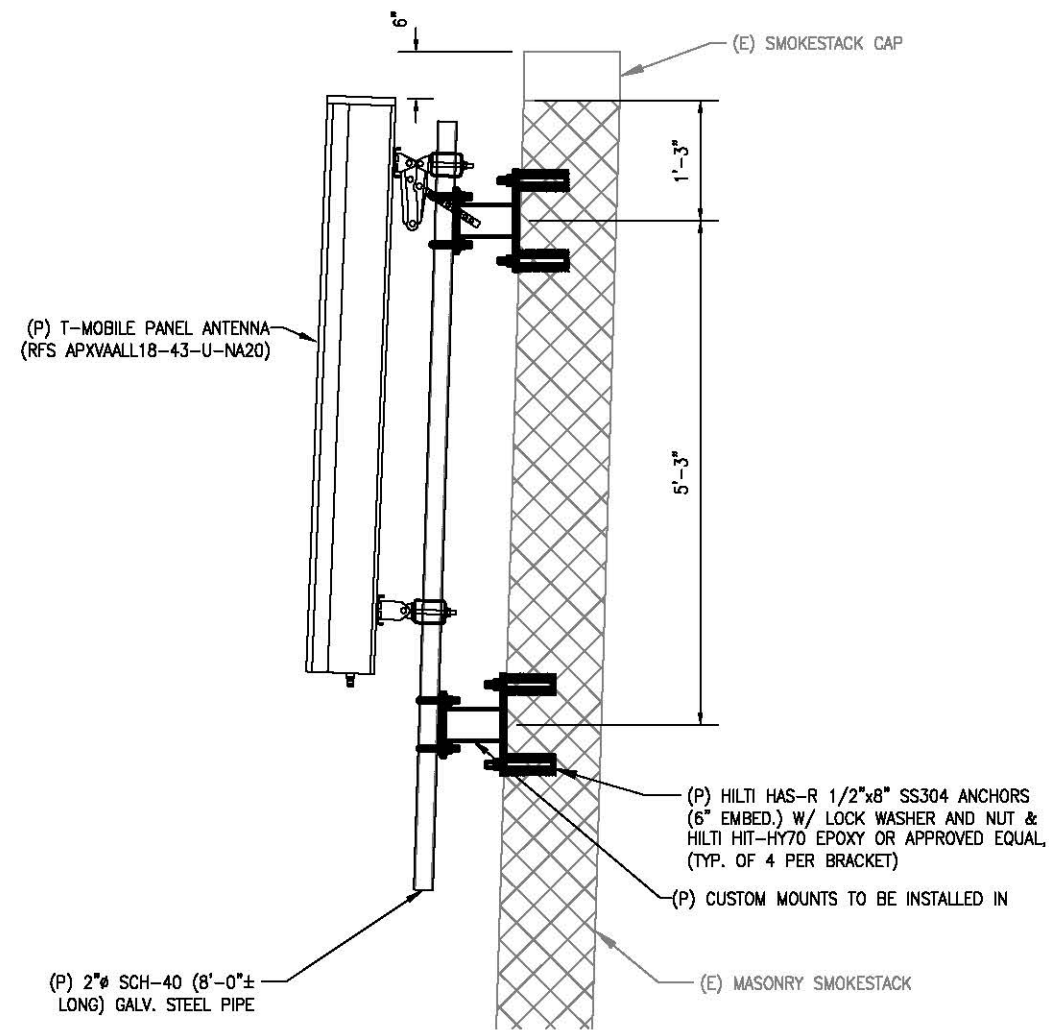
1 PROPOSED RFS ANTENNA PLAN
S-6 SCALE: 1/2"=1'-0"



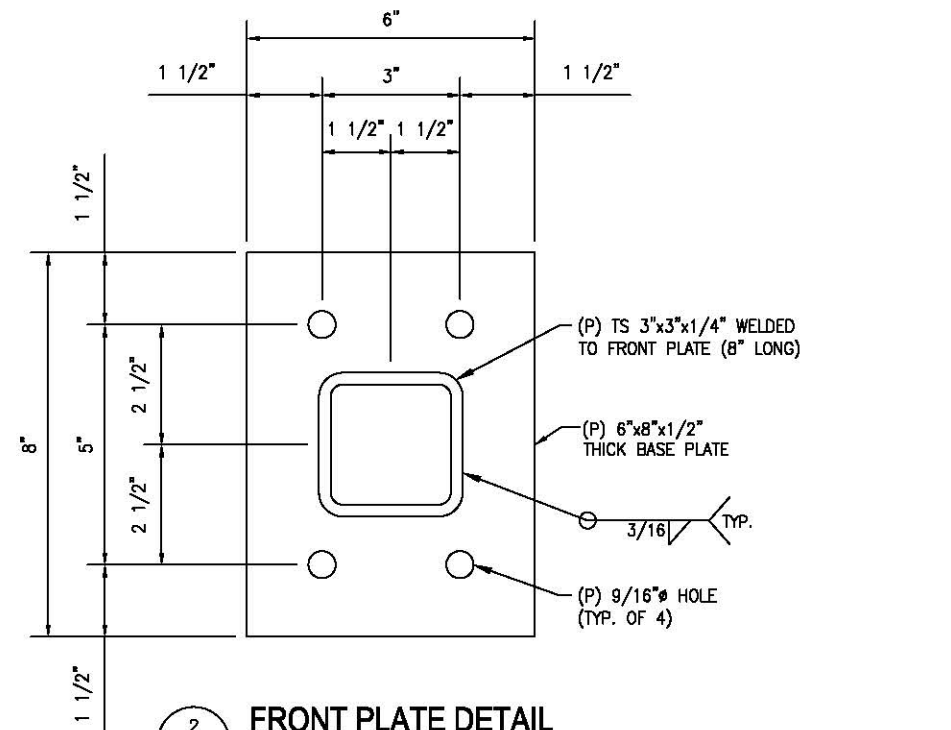
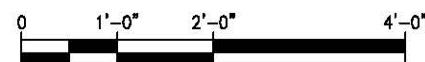
2 PROPOSED AIR 6449 ANTENNA PLAN
S-6 SCALE: 1/2"=1'-0"



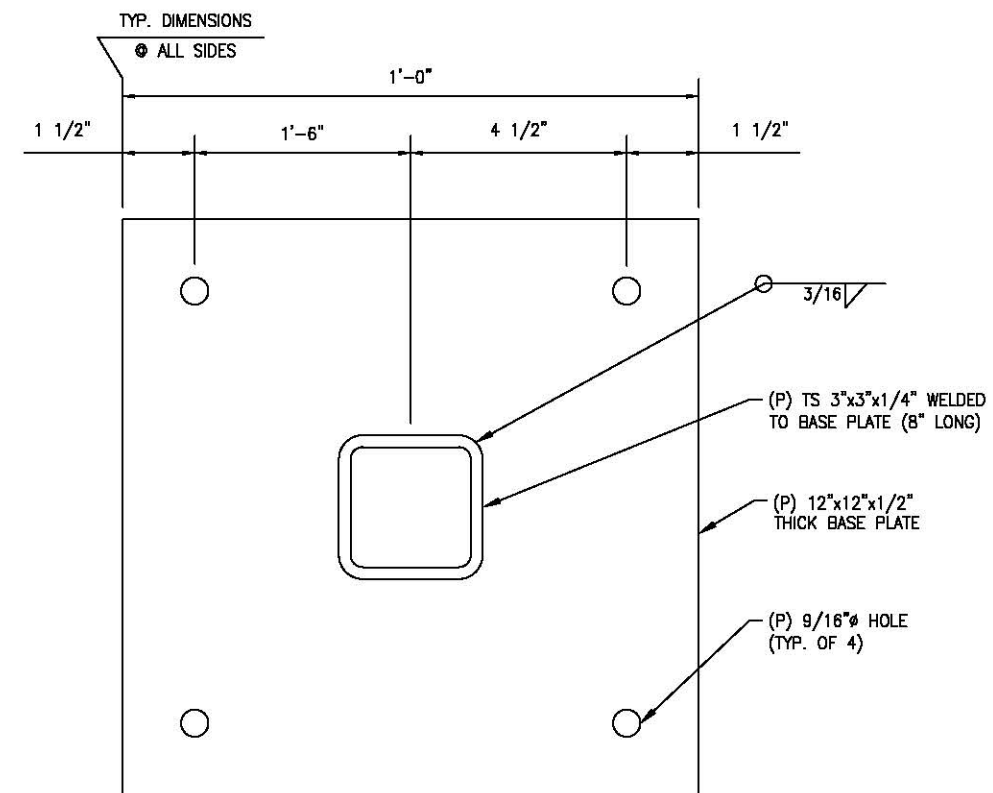
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1 PROPOSED RFS ANTENNA PLAN
S-7 SCALE: 1/2"=1'-0"



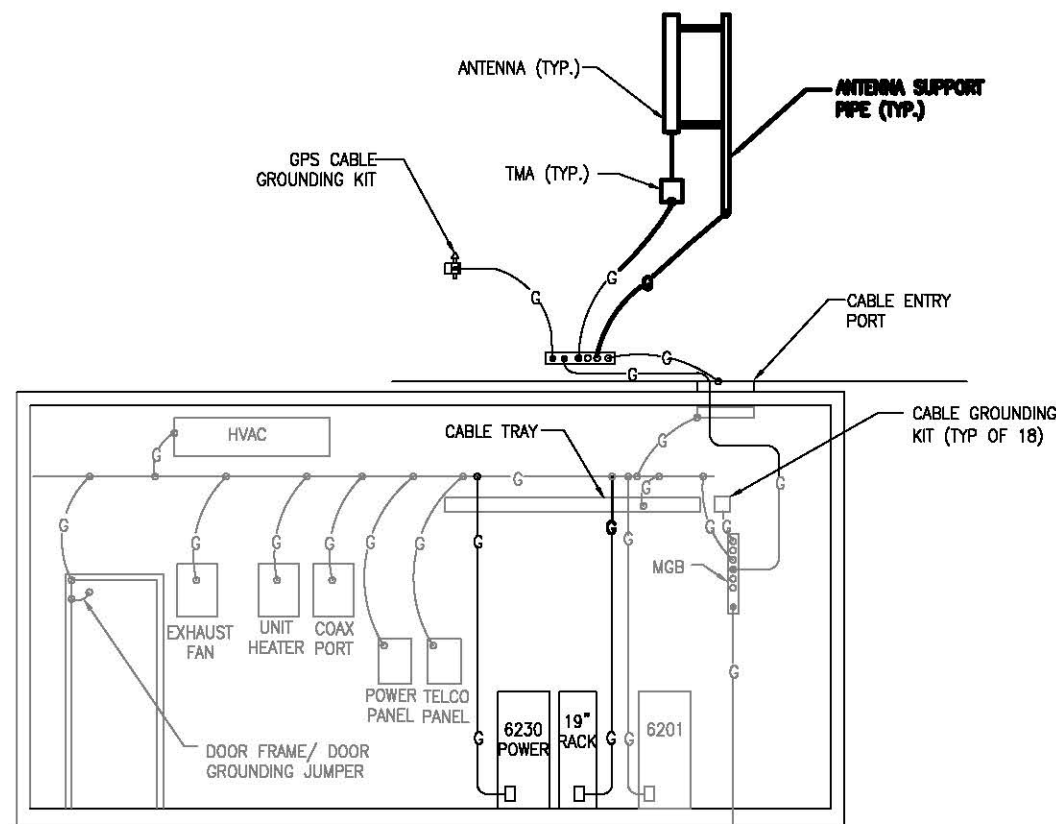
2 FRONT PLATE DETAIL
S-7 SCALE: 3" = 1'-0"



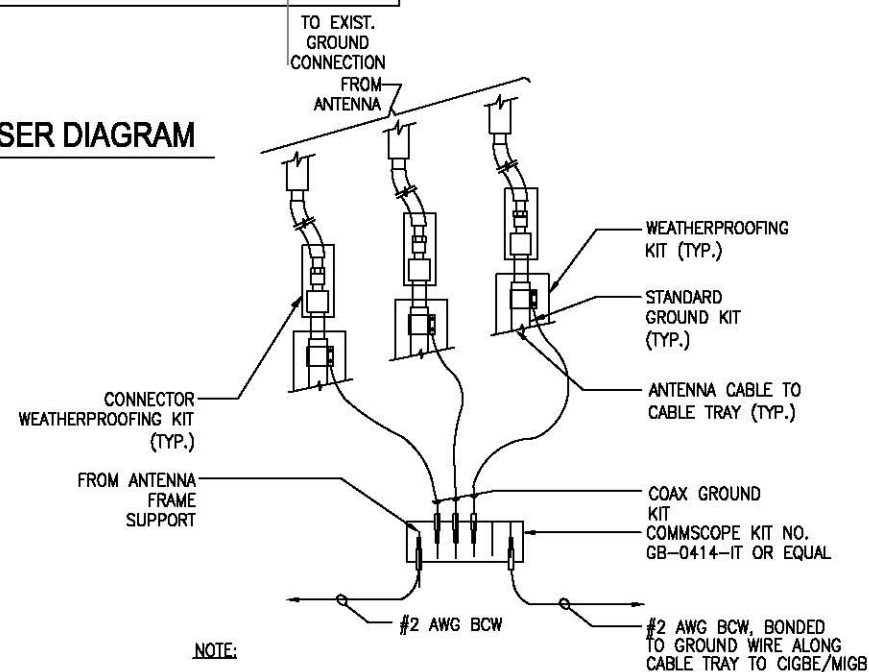
3 BASE PLATE DETAIL
S-7 SCALE: 3" = 1'-0"



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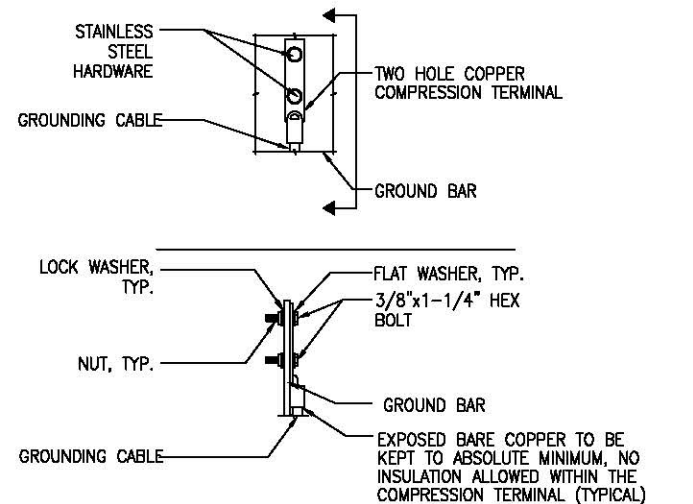


1 TYP. GROUNDING RISER DIAGRAM
G-1 SCALE: N.T.S.



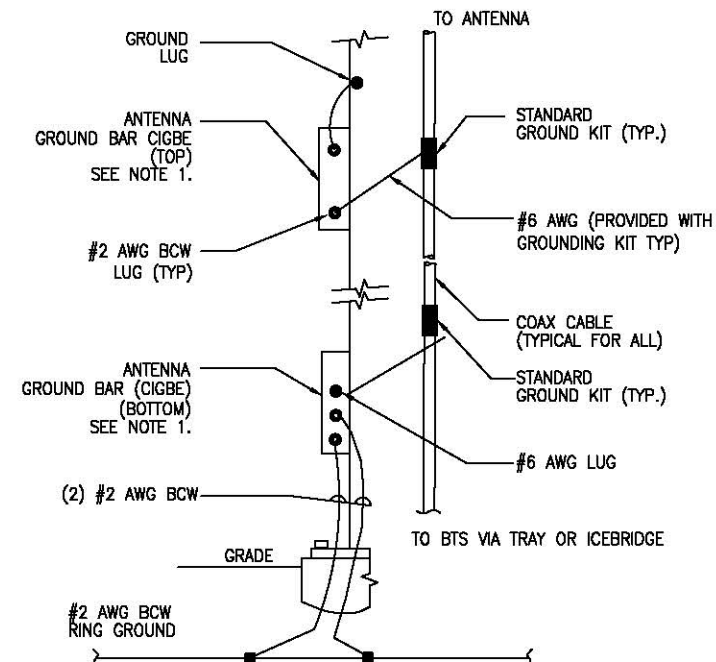
- NOTE:
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE.
 - ALL PROPOSED COAXIAL CABLING TO BE GROUNDED IN (3) LOCATIONS; BELOW JUMPER/HARDLINE CONNECTION, AT BASE OF TOWER & PRIOR TO BUILDING/CABINET ENTRY.

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



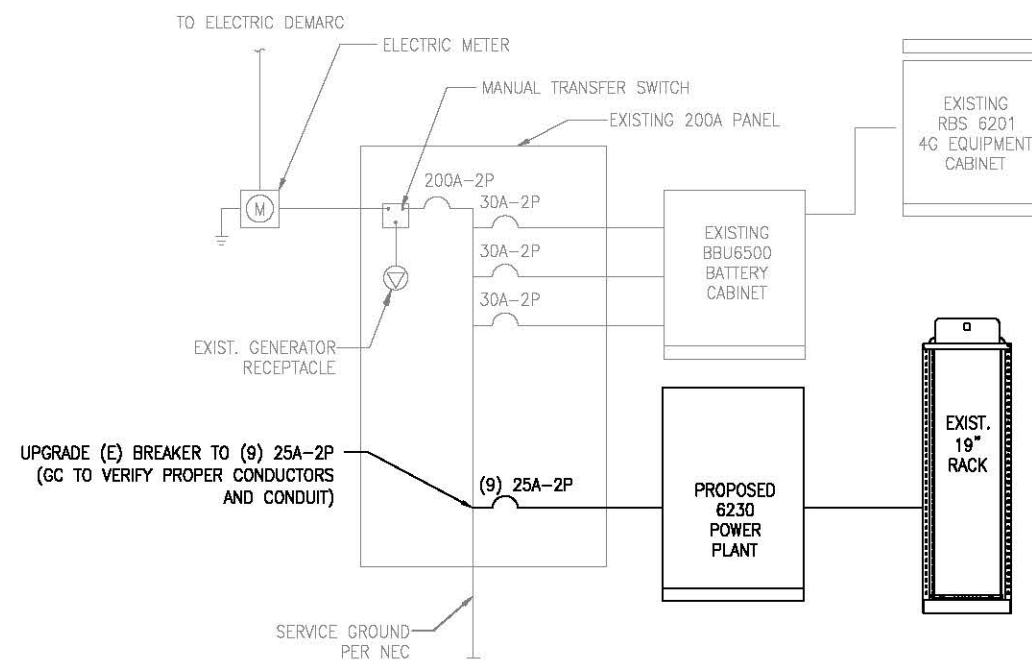
- NOTES:
- "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
 - OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
 - CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB.
 - ALL GROUND LUGS MUST BE HEAT SHRUNK AT WIRE/LUG CONNECTION

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



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

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



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

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



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January 4, 2022

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

Re:	Eligible Facilities Request pursuant to Section 6409 of the Spectrum Act and an Application for Special Permit, in the alternative.
Property Address:	14 Arrow Street Assessor's Map 133, Lot 23 (the " Property ")
Applicant:	T-Mobile Northeast LLC (the " Applicant ")

Dear Honorable Members of the Board of Zoning Appeals:

This firm represents T-Mobile Northeast LLC ("**T-Mobile**") (hereinafter, 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 Office 3 (O-3) zoning 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.

The Applicant seeks to modify its existing wireless communications facility by replacing six (6) panel antennas mounted to the façade of the existing smoke stake on the Property (the “**Smoke Stake**”), with six (6) like kind panel antennas, and replacing three (3) Remote Radio Head Units (“**RRU**”) with six (6) like kind RRUs, and supporting equipment (the “**Proposed Facility**”). All of the proposed replacement antennas will be painted to match the existing Smoke Stack. 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 Smoke Stack by replacing six (6) panel antennas, façade mounted to the of the existing Smoke Stack with six (6) like kind panel antennas, mounted at the same location, and by replacing three (3) RRU antennas with six (6) like kind RRUs. All antennas will be painted to match the Smoke Stack. All replacement antennas will be installed to be consistent with the latest decisions of the Board for this facility, dated January 19, 2016 (Case No. BZA-007664-2015), and a second decision dated June 9, 2017 (Case No. BZA-012895-2017) (collectively, 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 O-3 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.

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 O-3 zoning district is necessary to close the coverage gap that is illustrated on the propagation maps submitted herewith. Consequently, T-Mobile is unable to close a gap in its wireless network without obtaining the requested relief under Section 6409 of the Spectrum act or a Special Permit to modify its existing wireless facility in the O-2 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 design minimizes the visual impact of the Proposed Facility. The facility will be installed on the existing rooftop of the Smoke Stack and consistent with the Decisions. The resulting installation will have an increased capacity to better serve the City of Cambridge without the need for an increased number of panel antennas on the Smoke Stack. The proposed replacement antennas will be painted to match the color of the existing Smoke Stack thereby minimizing any visual impacts.

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.**

This is not applicable to the Proposed Facility. The Applicant proposes to install its facility within the O-3 zoning district.

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 Smoke Stack. 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 Smoke Stack.

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 Smoke Stack. The modification of the existing facility will blend with the existing characteristics of the Smoke Stack and the surrounding neighborhood. Moreover, the proposed installation will not generate any traffic, smoke, dust, heat, glare, discharge of noxious

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.

substances, nor will it pollute waterways or groundwater. Conversely, the surrounding properties and general public will benefit from the potential to enjoy improved wireless communication.

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

The operations of the proposed telecommunications facility will not adversely impact the health, safety, and the welfare of the residents of the City of Cambridge. On the contrary, the proposed use will benefit the City and promote the safety and welfare of its residents, businesses and drivers by providing reliable state-of-the-art digital wireless voice and data services. Further, the site will improve the reliability of emergency communications with the police and fire departments by eliminating dropped or blocked calls due to inadequate signal strength or insufficient network capacity to handle call volume, particularly important during emergency situations.

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

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

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

The Proposed Facility is designed to blend with the existing characteristics of the Property, reducing any visual impacts to the surrounding area. Accordingly, the Proposed Facility's design results in a minimal impact on the underlying and adjacent zoning district and is consistent with the Ordinance's intention to allow for less intrusive wireless telecommunications facilities in all districts (other than Open Space), including the O-3 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.

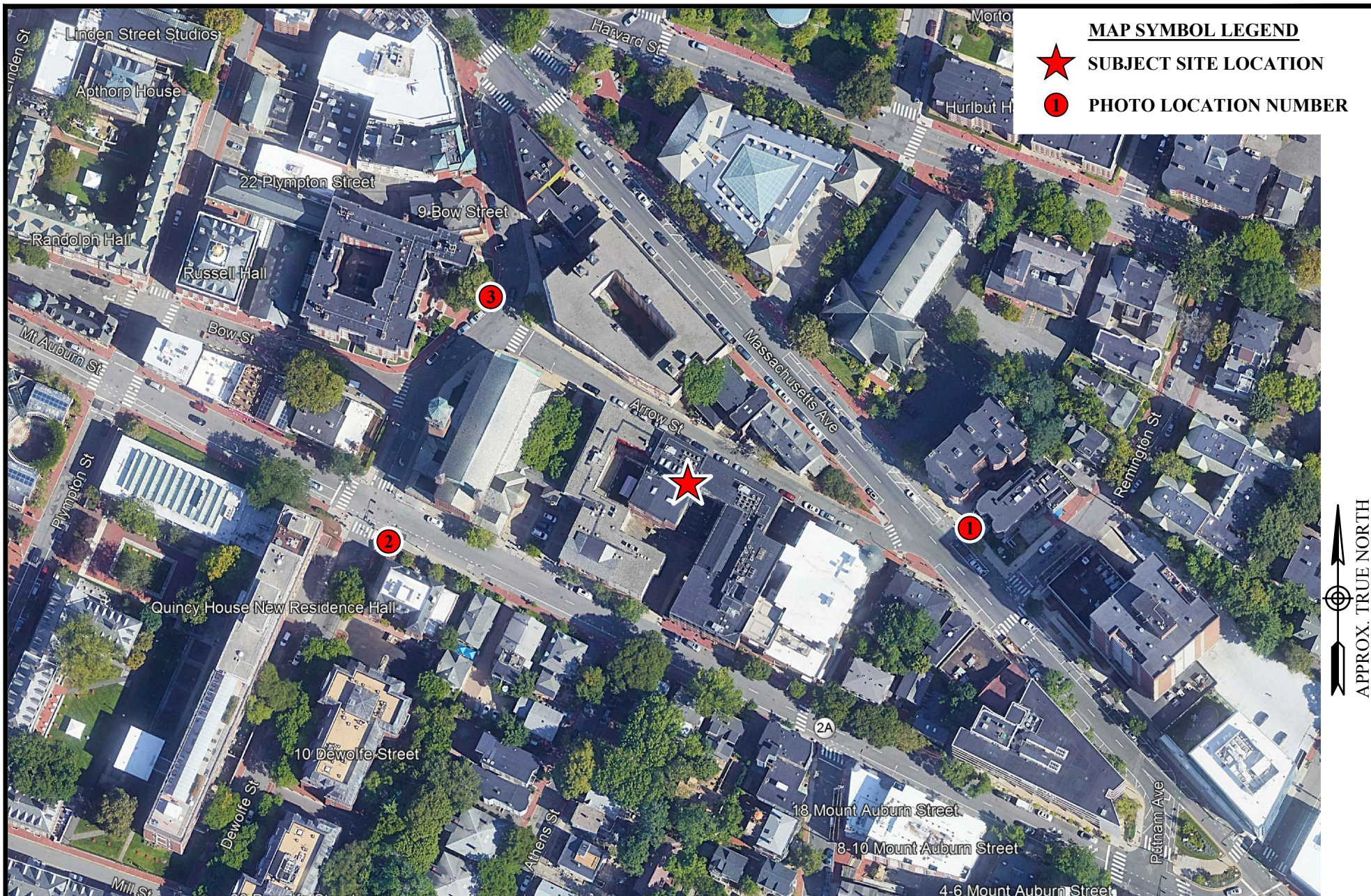
Sincerely,

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

Adam F. Braillard

Direct: 617-456-8153

Email: abraillard@princelobel.com



MAP SYMBOL LEGEND



SUBJECT SITE LOCATION



PHOTO LOCATION NUMBER

PREPARED FOR:

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

PREPARED BY:

ADVANCED
ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
500 NORTH BROADWAY
EAST PROVIDENCE, 02914
PH: (401) 354-2403
FAX: (401) 633-6354

SITE NO: 4BN0019C

SITE NAME: BN0019/ 14 ARROW ST SS

ADDRESS: 14 ARROW STREET
CAMBRIDGE, MA 02138

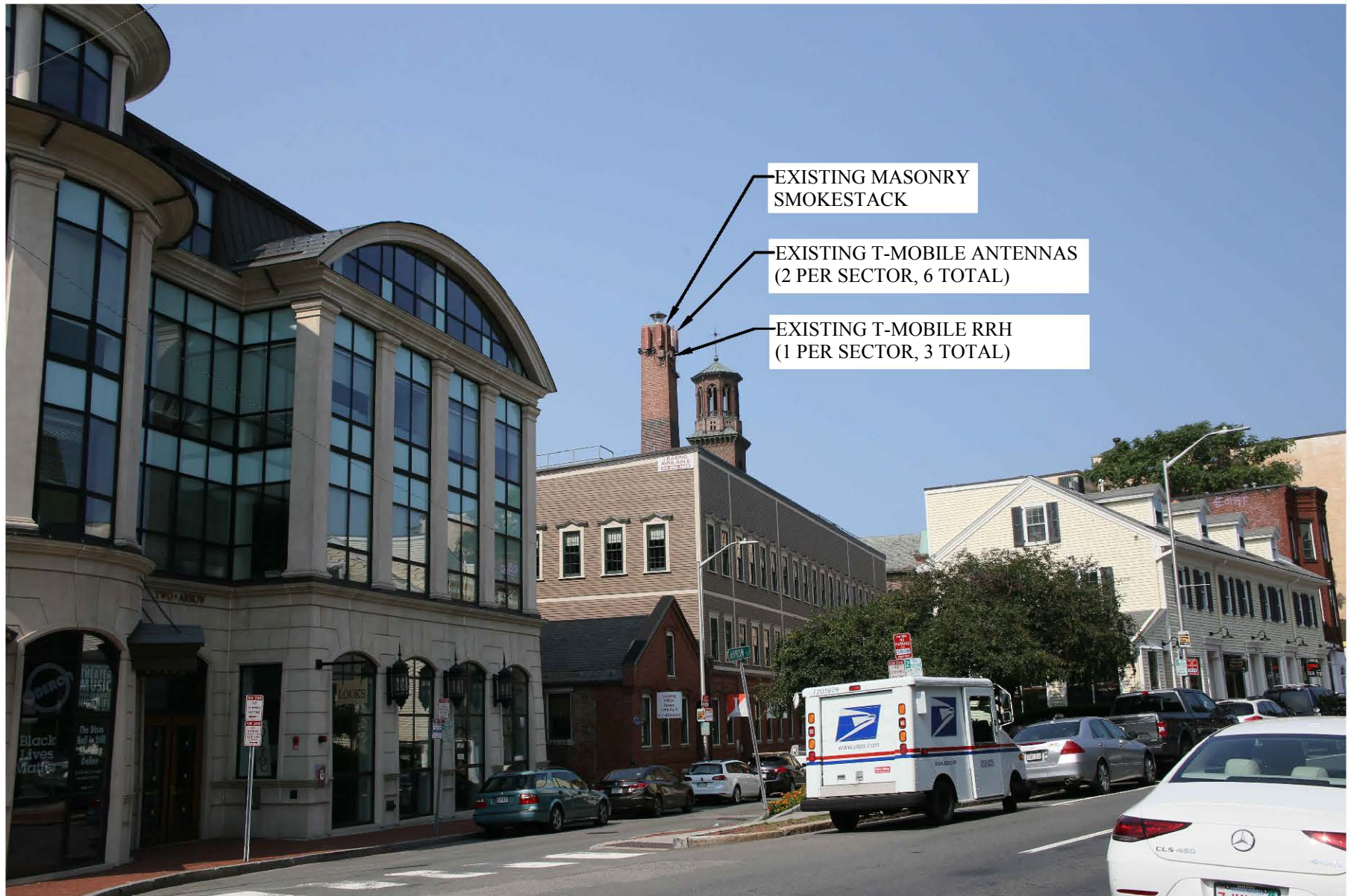
KEY MAP OF PHOTOS

PAGE: MAP-1

DATE: 12/28/2021

DRAWN BY: MR

REVISION: 1



PREPARED FOR:

T-MOBILE NORTHEAST, LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02788
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FAX: (508) 286-2893

PREPARED BY:

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ENGINEERING GROUP, P.C.
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Surveying - Telecommunications
990 NORTH BROADWAY
SUITE 200
BOSTON, MA 02114
TEL: (617) 324-3400
FAX: (617) 324-3404

SITE NO: 4BN0019C

SITE NAME: BN0019/ 14 ARROW ST SS

ADDRESS: 14 ARROW STREET
CAMBRIDGE, MA 02138

VIEW #1
EXISTING VIEW FROM THE EAST,
ON MASSACHUSETTS AVENUE

PAGE: V-1E

DATE: 12/28/2021

DRAWN BY: MR

REVISION: 1



PREPARED FOR:

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

PREPARED BY:

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EAST PROVIDENCE, 02914
PH: (401) 354-2403
FAX: (401) 633-6354

SITE NO: 4BN0019C

SITE NAME: BN0019/ 14 ARROW ST SS

ADDRESS: 14 ARROW STREET
CAMBRIDGE, MA 02138

VIEW #1
PROPOSED VIEW FROM THE EAST,
ON MASSACHUSETTS AVENUE

PAGE: V-1P

DATE: 12/28/2021

DRAWN BY: MR

REVISION: 1



PREPARED FOR:

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PREPARED BY:

ADVANCED
ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
990 NORTH BROADWAY
EAST PROVIDENCE, 02914
PH: (401) 354-3400
FAX: (401) 633-6364

SITE NO: 4BN0019C

SITE NAME: BN0019/ 14 ARROW ST SS

ADDRESS: 14 ARROW STREET
CAMBRIDGE, MA 02138

VIEW #2
EXISTING VIEW FROM THE WEST,
ON MOUNT AUBURN STREET

PAGE: V-2E

DATE: 12/28/2021

DRAWN BY: MR

REVISION: 1



PREPARED FOR:

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

PREPARED BY:

ADVANCED
ENGINEERING GROUP, P.C.
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Surveying - Telecommunications
500 NORTH BROADWAY
EAST PROVIDENCE, 02914
PH: (401) 354-2403
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SITE NO: 4BN0019C

SITE NAME: BN0019/ 14 ARROW ST SS

ADDRESS: 14 ARROW STREET
CAMBRIDGE, MA 02138

VIEW #2
PROPOSED VIEW FROM THE WEST,
ON MOUNT AUBURN STREET

PAGE: V-2P

DATE: 12/28/2021

DRAWN BY: MR

REVISION: 1



EXISTING MASONRY
SMOKESTACK

EXISTING T-MOBILE ANTENNAS
(2 PER SECTOR, 6 TOTAL)

EXISTING T-MOBILE RRH
(1 PER SECTOR, 3 TOTAL)

PREPARED FOR:

T-MOBILE NORTHEAST, LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02788
OFFICE: (508) 288-2700
FAX: (508) 288-2893

PREPARED BY:

ADVANCED
ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
990 NORTH BROADWAY
SUITE 200, CAMBRIDGE, MA 02142
TEL: (617) 354-3400
FAX: (617) 354-3404

SITE NO: 4BN0019C

SITE NAME: BN0019/ 14 ARROW ST SS

ADDRESS: 14 ARROW STREET
CAMBRIDGE, MA 02138

VIEW #3

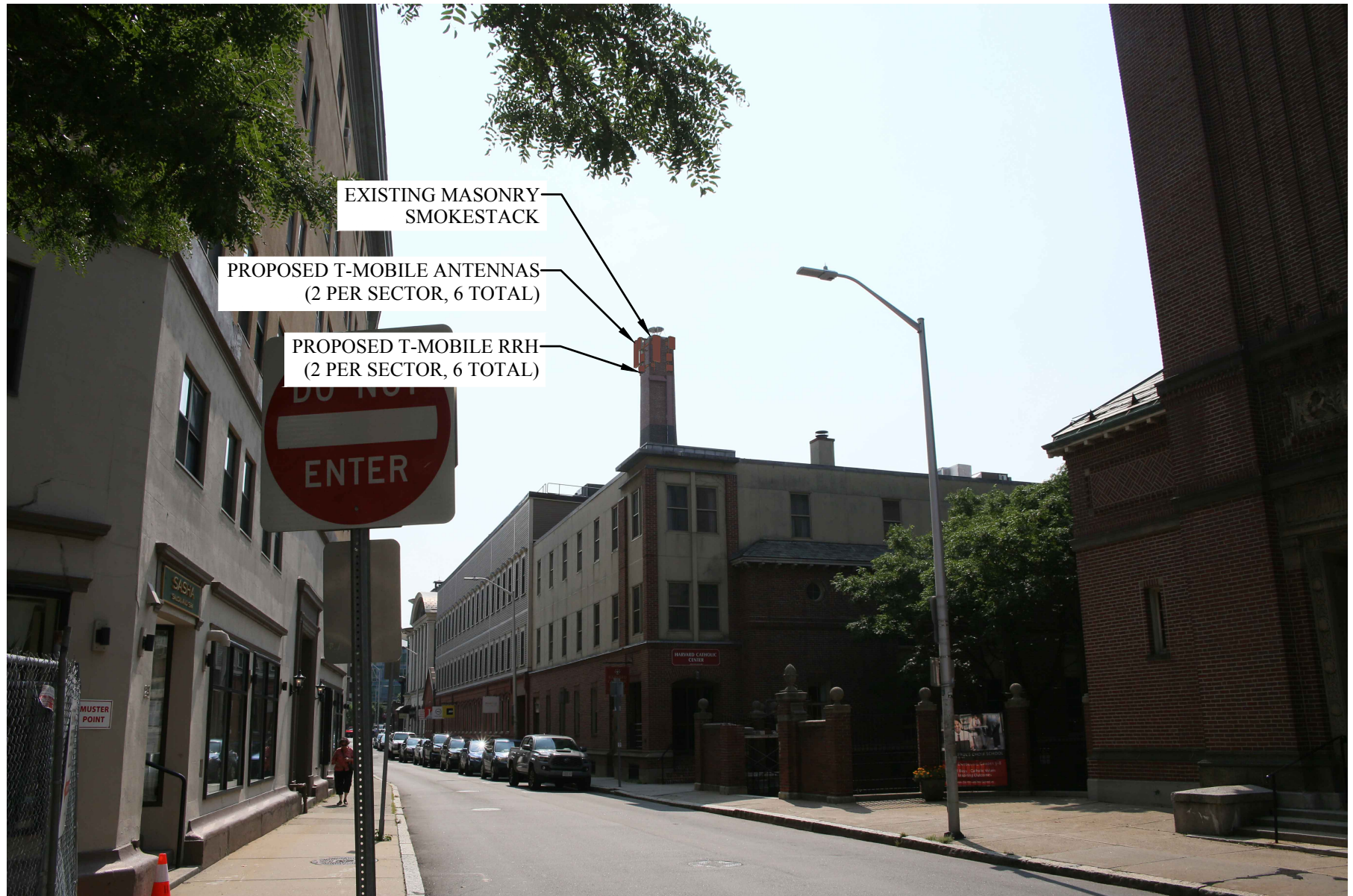
EXISTING VIEW FROM THE NORTHWEST,
ON ARROW STREET

PAGE: V-3E

DATE: 12/28/2021

DRAWN BY: MR

REVISION: 1



PREPARED FOR:

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

PREPARED BY:

ADVANCED
ENGINEERING GROUP, P.C.
Civil Engineering - Site Development
Surveying - Telecommunications
500 NORTH BROADWAY
EAST PROVIDENCE, 02914
PH: (401) 354-2403
FAX: (401) 633-6354

SITE NO: 4BN0019C

SITE NAME: BN0019/ 14 ARROW ST SS

ADDRESS: 14 ARROW STREET
CAMBRIDGE, MA 02138

VIEW #3

PROPOSED VIEW FROM THE NORTHWEST,
ON ARROW STREET

PAGE: V-3P

DATE: 12/28/2021

DRAWN BY: MR

REVISION: 1

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Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: T-MOBILE LICENSE LLC

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

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

FCC Registration Number (FRN): 0001565449

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

Waivers/Conditions:

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

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

Conditions:

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

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

Licensee Name: T-MOBILE LICENSE LLC

Call Sign: WQIZ578

File Number: 0008577570

Print Date: 05-31-2019

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: T-MOBILE LICENSE LLC

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

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

FCC Registration Number (FRN): 0001565449

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

Waivers/Conditions:

NONE

Conditions:

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

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Licensee Name: T-MOBILE LICENSE LLC

Call Sign: WQZL852

File Number:

Print Date:

700 MHz Relicensed Area Information:

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

RADIO STATION AUTHORIZATION

LICENSEE: T-MOBILE LICENSE LLC

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

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

FCC Registration Number (FRN): 0001565449

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

Waivers/Conditions:

NONE

Conditions:

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

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Licensee Name: T-MOBILE LICENSE LLC

Call Sign: WQZL853

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
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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.

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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.

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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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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 WPOJ753	File Number 0008585870
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 BTA229	Channel Block C	Sub-Market Designator 3	
Market Name Kingsport-Johnston City, TN-Br			
1st Build-out Date 06-30-2004	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.

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Licensee Name: T-MOBILE LICENSE LLC

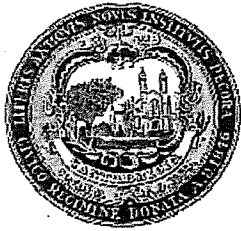
Call Sign: WPOJ753

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

2016 JAN 19 PM 12:07

OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

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

LOCATION: 14 Arrow St
Cambridge, MA 02138

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

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

VIOLATION :

Article 4.000 Section 4.32(G)(1) (Telecommunication Facility).

Article 4.000 Section 4.40 (Footnote 49) (Telecommunication Facility).

Article 10.000 Section 10.40 (Special Permit).

DATE OF PUBLIC NOTICE: August 13 & 20, 2015

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

MEMBERS OF THE BOARD:

CONSTANTINE ALEXANDER - CHAIR

TIMOTHY HUGHES - VICE-CHAIR

BRENDAN SULLIVAN

THOMAS SCOTT

JANET O. GREEN

ASSOCIATE MEMBERS:

DOUGLAS MYERS

SLATER W. ANDERSON

ANDREA A. HICKEY

ALISON HAMMER

JIM MONTEVERDE

GEORGE BEST

LAURA WERNICK

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

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

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

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

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

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

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

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

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

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

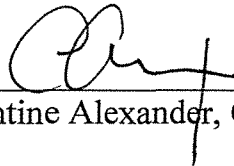
1. that the work proceed in accordance with the plans submitted by the petitioner, as initialed by the Chair,
2. that, upon completion of the work, the physical appearance and impact of the proposed work be consistent with the photo simulations submitted by the petitioner and initialed by the Chair,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

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

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

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

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



Constantine Alexander, Chair

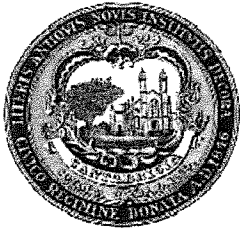
Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 1-19-16 by Maria Jackson, Clerk.

Twenty days have elapsed since the filing of this decision.

No appeal has been filed _____.

Appeal has been filed and dismissed or denied.

Date: _____ City Clerk.



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

June 09, 2017

T-Mobile Northeast LLC - C/O Ricardo M. Sousa, Esq.
One International Place, Suite 3700
Boston MA, 02110

Case No: BZA-012895-2017

Dear Ricardo M. Sousa, Esq.

We enclose the decision of the Board of Zoning Appeal as it pertains to the premises located at
14 Arrow St Cambridge, MA 02138

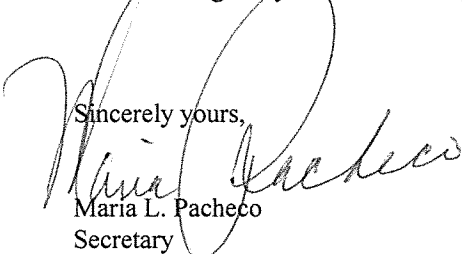
A copy of this decision has been filed with office of the City Clerk, this date. When twenty days have passed you MUST:

1. HAVE THIS DECISION COMPLETED AND SIGNED BY THE CITY CLERK, CITY HALL -
795 Mass Avenue, Cambridge, Ma. (In the space provide on the decision)
 2. FILE THE DECISION WITH THE REGISTRY OF DEEDS
Middlesex County Courthouse, 208 Cambridge Street, Cambridge, MA. (There is usually a
fee, payable to the Registry of Deeds and the book and page number is required by the Registry).
 3. SUPPLY THE BOARD OF ZONING APPEAL WITH DOCUMENTATION OF SUCH
FILING - (with the Registry of Deeds).
- THE DIVISION OF INSPECTIONAL SERVICES WILL NOT ISSUE BUILDING PERMITS
 - UNLESS THE ABOVE ITEMS HAVE BEEN COMPLETED .

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 days of the above date, and a copy thereof shall be filed with the Cambridge City Clerk's office by that same date.

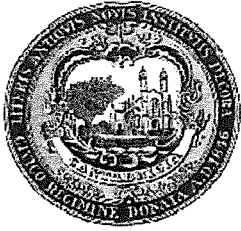
If you have any questions, please phone me at 349-6100.

Sincerely yours,


Maria L. Pacheco
Secretary

Section 10.35 of the Zoning Ordinances:

If the rights authorized by a variance are not exercised within one year of the date of granting of such variance (two years
for a special permit), they shall lapse and may be reestablished only after notice and new hearing pursuant to this Section
10.30.



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

2017 JUN -9 AM 10:39

OFFICE OF THE CLERK
CITY OF CAMBRIDGE, MASSACHUSETTS

CASE NO: BZA-012895-2017 Office 3 Zone

LOCATION: 14 Arrow St
Cambridge, MA 02138

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

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

VIOLATION :

Article 4.000	Section 4.32(G)(1) (Telecommunications Facility).
Article 4.000	Section 4.40 (Footnote 49) (Telecommunications Facility).
Article 6409	Section Middle Class Tax Relief and Job Creation Act
Article 10.000	Section 10.40 (Special Permit).

DATE OF PUBLIC NOTICE: April 27, 2017 and May 04, 2017

DATE OF PUBLIC HEARING: May 11, 2017;

MEMBERS OF THE BOARD:

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

☒
☒
☒
☒
☒

ASSOCIATE MEMBERS:

DOUGLAS MYERS
SLATER W. ANDERSON
ALISON HAMMER
JIM MONTEVERDE
GEORGE BEST
LAURA WERNICK

☒
☐
☐
☒
☐
☐

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

Case No. BZA-012895-2017
Location: 14 Arrow Street
Petitioner: T-Mobile Northeast LLC – c/o Ricardo Sousa, Esq.

On May 11, 2017, Petitioner's attorney Daniel Glissman appeared before the Board of Zoning Appeal requesting a special permit in order to modify its existing wireless telecommunications facility by replacing three existing antennas on the smoke stack, together with supporting equipment. The Petitioner requested relief under Article 4, Section 4.32.G.1 and Article 10, Section 10.40 of the Cambridge Zoning Ordinance ("Ordinance") and Section 6409 of the Middle Class Tax Relief & Job Creation Act. The Petitioner submitted materials in support of their application including information about the project, plans, and photographs.

Mr. Glissman stated that as part of a system wide upgrade the proposal was to replace three existing antennas at the existing specially permitted telecommunications facility. He stated that the new antennas would be slightly longer than the existing antennas. He stated that the new antennas would be painted to match the existing antennas. He stated that the modifications did not constitute a substantial change under Section 6409.

The Chair asked if anyone wished to be heard on the matter, no one indicated such. The Chair read letters from the Planning Board and from Harvard Square Advisory members.

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

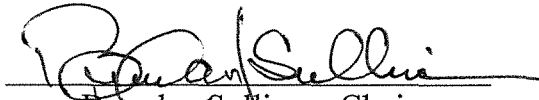
The Chair further moved that based upon all the information presented the Board grant the requested relief as described in the Petitioner's submitted materials and the evidence before the Board on the following conditions:

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

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

The five member Board voted unanimously in favor of granting the special permit with the above conditions (Sullivan, Hickey, Tedesco, Myers, 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.


Brendan Sullivan, Chair

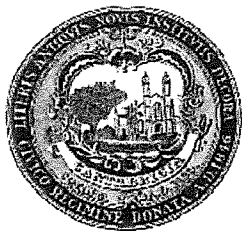
Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 6/9/17 by Maria Pacheco, Clerk.

Twenty days have elapsed since the filing of this decision.

No appeal has been filed _____.

Appeal has been filed and dismissed or denied.

Date: _____ City Clerk.



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

NOTICE OF DECISION

DECISION FILED WITH THE OFFICE OF THE CITY CLERK ON **June 09, 2017**

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: 14 Arrow St
Cambridge, MA 02138

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

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

DECISION: **Approved**

CASE NO: BZA-012895-2017

January 4, 2022

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

Re: Eligible Facilities Request to Modify Transmission Equipment at an Existing Base Station located at **14 Arrow Street, Cambridge, MA 02139.**

Dear Mr. Singanayagam:

A. T-Mobile is Filing an Eligible Facilities Request

Prince Lobel Tye LLP, on behalf of T-Mobile Northeast LLC is submitting the attached Eligible Facilities Request application to add, remove, modify, or replace Transmission Equipment at an Existing Base Station located at 14 Arrow Street, Cambridge, MA 02139.

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

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

B. Why this Eligible Facilities Request Must Be Granted

This Eligible Facilities Request involves an effort to collocate, remove, modify, or replace Transmission Equipment at an existing Base Station operated by an FCC licensed wireless carrier. The FCC has defined Base Station as “the equipment and non-tower supporting structure at a fixed location that enable Commission-licensed or authorized wireless communications between user equipment and a communications network . . . the term includes equipment associated with wireless communications service including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supply, and comparable

equipment.” The term existing base station also includes a structure that currently houses or supports an antenna, transceiver or other associated equipment that constitutes part of a Base Station at the time the application is filed even if the structure was not built solely or primarily to provide such support. The existing Base Station in this application is approximately eighty six feet (86’) high and presently contains wireless facilities. The existing Base Station meets the Federal Communications Commission (“FCC”) definition of a Base Station.

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

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

1. *The modifications to the Transmission Equipment do not increase the height of the Base Station by more than 10 percent (10%) or ten (10) feet, whichever is greater.*
 - a. The height of the Base Station is approximately eighty six feet (86’) high. The proposed replacement of six (6) panel antennas and three (3) RRUs 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 replacement of six (6) panel antennas and the addition of three (3) RRUs will not protrude from the edge of the building and therefore will not exceed the six (6) foot limitation. All of the proposed antennas will be façade mounted and together with the mounting equipment will extend no more than one (1) foot from the existing smoke stack. As such, the proposed modification will not protrude from the edge of the building by more than six (6) feet.
3. *The modifications to the Transmission Equipment do not involve the installation of more than the standard number of equipment cabinets for the technology involved, not to exceed four.*

- a. There is currently one (1) equipment cabinet existing at the Base Station. The Applicant does not propose to install any additional equipment cabinets.
- 4. *The modifications to the Transmission Equipment do not entail any excavation or deployment outside of the Base Station site.*
 - a. The Applicant is proposing to replace six (6) panel antennas with like kind panel antennas and add three (3) RRUs with like kind RRUs. 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 decisions dated January 19, 2016 (Case No. BZA-007664-2015), and dated June 9, 2017 (Case No. BZA-012895-2017) (collectively, the “**Decisions**”), attached hereto, the existing antennas are located in the preferred location on the smoke stack and comply with the required conditions for the design. The replacement of the antennas with like kind antennas will not defeat the existing design as all antennas will be painted to match the existing smoke stack. As such, the proposed modification will not defeat any existing concealed or stealth design.
- 6. *The modifications to the Transmission Equipment comply with prior conditions of approval of the Base Station, unless the non-compliance is due to an increase in height, increase in width, addition of equipment cabinets, or new excavation that does not exceed the corresponding “substantial change” thresholds in numbers 1-4.*
 - a. Based on the foregoing, the proposed modifications to the Base Station fully conform to Section 6409(a) of the Spectrum Act and comply with the prior conditions of approval of the Base Station.

There is a certification attached to the accompanying Eligible Facilities Request that identifies how each of the six review criteria identified by the FCC is met. The modifications to the Transmission Equipment at the Base Station located at 14 Arrow, Cambridge, MA 02139 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.

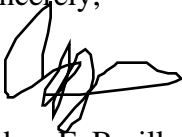
C. Notice of Federal Law Expedited Permit Processing and Deemed Granted

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 'Adam F. Braillard', with a stylized, overlapping loop at the end.

Adam F. Braillard

Direct: 617-456-8153

Email: abraillard@princetonobel.com

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

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

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

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

Site Address: 14 Arrow Street

Existing Facilities

The Existing Facility is comprised of six (6) panel antennas all mounted to the façade of the existing smoke stack, together with supporting equipment.

Height of Base Station

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

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

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

☐ Yes ☒ No

Width of Base Station

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

☐ Yes ☒ No

Excavation or Equipment Placement

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

☐ Yes ☒ No

Equipment Cabinets

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

☐ Yes ☒ No

Concealed or Stealth-Designed Wireless Facilities

5)

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

☐ Yes ☒ No

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

☐ Yes ☒ No

Compliance with Preexisting Conditions of Approval for the Base Station

6)

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

Explanatory Comments:

N/A

This certification is dated this 4th day of January, 2022.



Signature

Adam F. Braillard, Esq., Attorney for T-Mobile Northeast LLC.

Name & Title

Eligible Facilities Request (EFR) Application Form

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

Date of Submittal: _____

Submitted by:

Name: _____

Title: _____

Contact information: _____

Name of Jurisdiction: _____

Address of Jurisdiction: _____

Contact Name for Jurisdiction: _____

Name of Local Government Permit Application: _____

Local Government File #: _____

Street Address of Site: _____

Tax Parcel # of Site: _____

Latitude/Longitude of Site: _____

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

List Each Piece of Transmission Equipment that will be Removed:

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

List Cabinets that will be Removed at the Site:

The map displays the Quincy Square area in Boston, Massachusetts. A red line outlines the 'Arrow Street Walkway' project area, which runs along the eastern side of the map. A blue line highlights a specific block within the project area. The map shows a grid of streets including Bow St, Arrow St, Mt Auburn St, Athens St, and Banks St. Various lot numbers and street names are labeled throughout the map.

14 Arrow St.

Petitioner 1 of 2

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

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

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

133-41
GISABELLA, BARBARA
201 COVENANT CROSSING
FLOWOOD, MS 39232

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

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

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

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

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

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

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

132-18
RICE, ROBERT J. & JESSICA C. RICE
56 NICHOLS RD
NEEDHAM, MA 02492

132-18
SHEU, SHU-HSIEN
21420 ALUM CREEK COURT
ASHBURN, VA 20147

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

133-23
DOWSE, GRANTON H., JR., IRENE A. M. DOWSE
& LEONARD H. DOWSE, TRS. OF BBC TR
14 ARROW ST. SUITE 21
CAMBRIDGE, MA 02138-5106

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

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

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

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

132-19
CHEN, YILING & XIAOGANG JIN
18 MT AUBURN ST
CAMBRIDGE, MA 02138-3595

132-19
REDDIEN, PETER W. & CARICE P. REDDIEN
46 BELMONT ST
CAMBRIDGE, MA 02138

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

133-26
1134 MASS LLC,
C/O JINNY NATHANS
99 MAPLE STREET
NEW BEDFORD, MA 02740

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

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

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

133-41
STEINBERGH, ALEX M. GENERAL PARTNER THE 1168
MASSACHUSETTS AVENUE LIMITED PART.
C/O GEORGE & FIDA SARKIS
4 WOODLOCK RD
CANTON, MA 02021

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

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

14 Arrow St.

292

133-41
GRECO ANDREA & VERONICA MOSCONI
1168 MASSACHUSSETTS AVE UNIT 68-2
CAMBRIDGE, MA 02138

133-41
1168-1174 MASS AVE LLC
9 SHERBURNE RD
LEXINGTON, MA 02421

132-146
FARMER BRENT H.
BRENT H. FARMER 2021 TRUST
16A MT AUBURN STREET
CAMBRIDGE, MA 02138

133-28
1130 MASS AVE LLC
328 HURON AVE
CAMBRIDGE, MA 02141

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



CAMBRIDGE HISTORICAL COMMISSION

831 Massachusetts Avenue, 2nd Fl., Cambridge, Massachusetts 02139

Telephone: 617 349 4683 Fax: 617 349 3116 TTY: 617 349 6112

E-mail: histcomm@cambridgema.gov URL: <http://www.cambridgema.gov/Historic>

Bruce A. Irving, *Chair*, Susannah Barton Tobin, Vice Chair; Charles M. Sullivan, *Executive Director*

Joseph V. Ferrara, Chandra Harrington, Elizabeth Lyster; Caroline Shannon, Jo M. Solet, *Members*

Gavin W. Kleespies, Paula A. Paris, Kyle Sheffield, *Alternates*

CERTIFICATE OF NONAPPLICABILITY

Property: 14 Arrow Street

Applicant: BBC Trust, owner
T Mobile Northeast, LLC, tenant

Attention: Adam Braillard, Prince Lobel Tye LLP

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

Modify the existing T Mobile wireless facility by replacing six (6) panel antennas, with six (6) like kind panel antennas, and by replacing three (3) remote radio units (RRUs) with six (6) like kind RRUs. All antennas and supporting equipment will be painted to match the Smoke Stack.

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

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

Case Number: 4728

Date of Certificate: January 13, 2022

Attest: A true and correct copy of decision filed with the office of the City Clerk and the Cambridge Historical Commission on January 13, 2022.

By Charles M. Sullivan/slb, Executive Director.

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