



# CITY OF CAMBRIDGE

## BOARD OF ZONING APPEAL

831 Massachusetts Avenue, Cambridge MA 02139

617-349-6100

2021 JAN 13 PM 2:12  
OFFICE OF THE CITY CLERK  
CAMBRIDGE, MASSACHUSETTS

### BZA Application Form

**BZA Number: 104567**

### General Information

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

Special Permit: X

Variance:       

Appeal:       

**PETITIONER:** ARE-MA REGION NO. 38 LLC C/O TerraSearch

**PETITIONER'S ADDRESS:** 157 Riverside Drive, Norwell, MA 02061

**LOCATION OF PROPERTY:** 215 First St., Cambridge, MA

**TYPE OF OCCUPANCY:** Telecom facility

**ZONING DISTRICT:** PUD-3

### **REASON FOR PETITION:**

/Telecommunication Facility (antenna)/

### **DESCRIPTION OF PETITIONER'S PROPOSAL:**

This application is a Eligible Facilities Request pursuant to Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 or in the alternative, a special permit under the zoning ordinance cited above, if and to the extent necessary, all rights reserved.

AT&T will be replacing 6 antennas currently on site. AT&T will also be replacing the antenna mounts and will be relocating one mount off the roof to a slightly lower elevation on the side of the penthouse. AT&T will also be replacing and upgrading accessory equipment as part of nationwide network upgrades

### **SECTIONS OF ZONING ORDINANCE CITED:**

Article: 4.000	Section: 4.32.G.1 (Telecommunications Facility)
Article: 4.000	Section: 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)

Timothy W. Greene  
(Print Name)

Address:

Tel. No. 6178772950

E-Mail Address: tgreene@terrasearchllc.com

Date: 1/12/21

**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 ARE-MIA Region No. 38 LLC  
c/o Alexandra Real Estate Equities (OWNER)  
Address: 400 Technology Square, Suite 101, Cambridge MA 02139

State that I/We own the property located at 215 First St,  
which is the subject of this zoning application.

The record title of this property is in the name of \_\_\_\_\_  
ARE-MIA Region No. 38 LLC

\*Pursuant to a deed of duly recorded in the date 10/12/2007, Middlesex South  
County Registry of Deeds at Book 50214, Page 164; or  
Middlesex Registry District of Land Court, Certificate No. \_\_\_\_\_  
Book \_\_\_\_\_ Page \_\_\_\_\_.

[Signature]  
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 Jeffrey McConish personally appeared before me,  
this 6th of January, 2021, and made oath that the above statement is true.

My commission expires 7/6/23

(Notary Seal)



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

## **BZA Application Form**

### **SUPPORTING STATEMENT FOR A SPECIAL PERMIT**

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

**Granting the Special Permit requested for 215 First St., Cambridge, MA (location) would not be a detriment to the public interest because:**

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

See Attached Narrative

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

See Attached Narrative

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

See Attached Narrative

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

See Attached Narrative

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

See Attached Narrative

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





January 5, 2021

Donna P. Lopez, City Clerk City of Cambridge City Hall 795 Massachusetts Avenue Cambridge, MA 02139	Constantine Alexander, Chair Board of Zoning Appeal City Hall 795 Massachusetts Avenue Cambridge, MA 02139
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Applicant: New Cingular Wireless PCS, LLC ("AT&T")  
Property Address: 215 First Street.  
Assessor's Map 15, Lot 3 (the "Property")  
Re: Application for:  
(i) Eligible Facilities Request pursuant to Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012, 47 U.S.C. § 1455; or, in the alternative,  
(ii) Special Permit under Cambridge Zoning Ordinance Section 4.32(g)(1) and M.G.L. c. 40A, Section 9; and  
(iii) Any other zoning relief required.  
(All relief if and to the extent necessary, all rights reserved)

Dear Ms. Lopez, Mr. Alexander and Members of the Board of Zoning Appeal:

Pursuant to Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 (a/k/a the "Spectrum Act" or "Section 6409"), 47 U.S.C. § 1455, as further implemented by the Federal Communications Commission's Report and Order *In re Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies*, FCC Docket No. 13-238, Report and Order No. 14-153 (October 17, 2014) (the "FCC Order"), New Cingular Wireless PCS, LLC ("AT&T") hereby submits this Eligible Facilities Request ("Request"); and, in the alternative, applies for a special permit from the City of Cambridge Board of Zoning Appeal (the "Board") under Section 432(g)(1) of the Cambridge Zoning Ordinance (the "Ordinance") to modify its existing "Telephone Exchange including Transmission Facilities to serve a Mobile Communication System" (the "Facility") on and within the existing building located at 215 First Street (the "Special Permit Application").<sup>2</sup>

<sup>2</sup> AT&T submits this Request, Special Permit application and supporting materials subject to a full and complete reservation of AT&T's rights under the Spectrum Act and the FCC Order including without limitation its rights with respect to (i) any submittal requirements or approval criteria that are inconsistent with the prohibitions established by the FCC Order, (ii) any delay beyond the deadlines established in the FCC Order, (iii) the imposition of conditions on any approval that are inconsistent with the FCC Order, and (iv) referral or requirement to a discretionary review process such as a special permit.

Under Section 6409, AT&T's proposed modification of its existing transmission equipment on and within the existing building, previously approved by the Board for use as a wireless communication base station, does "not substantially change the physical dimensions" of the existing building. Therefore, AT&T's Request must be approved administratively, including the issuance of a building permit, to enable AT&T to make the proposed modifications to its transmission equipment.

In the alternative, as demonstrated in this application letter, the AT&T's proposed modifications to its existing Facility on the Property located in the PUD-3 zoning district satisfy the requirements for the grant of a special permit pursuant to Section 10.43 of the Ordinance.

**I. APPLICATION PACKAGE**

Enclosed with this application is a check payable to the City of Cambridge in the amount of \$500.00. In addition to the signed original of this letter are copies of the letter and the following materials:

1. The following completed and signed application forms:
  - a. BZA Application Form – General Information;
  - b. BZA Application Form – Ownership Information;
  - c. BZA Application Form – Dimensional Requirements;
  - d. BZA Application Form – Supporting Statement for a Special Permit; and
  - e. BZA Application Form – Check List;
2. AT&T's relevant FCC License information;
3. Drawings by Hudson Design Group consisting of 19 pages dated 11/20/20;
4. Manufacturer's specification sheets for AT&T's proposed antennas and other featured equipment;
5. Photographs of the existing building and photosimulations of the proposed modifications Facility by Hudson Design Group., dated 1/5/21;
6. Radio Frequency Coverage Report, demonstrating the public need for the proposed modifications to the Facility, radio frequency coverage maps showing (a) existing or predicted coverage from neighboring facilities; and (b) coverage with the proposed Facility;
7. Structural Analysis by Hudson Design Group LLC dated 11/17/20;
8. Maximum Permissible Exposure Study, Theoretical Report, by SAI Communications, dated December 22, 2020;
9. Letter of Authorization from Owner of Subject Property;

10. Deed to subject property

**II. PROPOSED FACILITY DESIGN**

AT&T seeks to modify the existing Facility on and within the building located at the Property. The existing Facility consists of nine (9) panel antennas (Alpha Sector: 3 antennas, Beta Sector: 3 antennas, and Gamma Sector: 3 antennas) that are mounted in three (3) locations. The proposed modifications include the replacement of two (2) antennas per sector. Two antenna mounts will be replaced and One will be relocated off the penthouse roof to the penthouse wall. Three (3) remote radio-head units (RRUs) (One per sector) will be added in close proximity to the antennas. Consistent with the concealment elements of the existing Facility's design, the proposed replacement antennas will be painted to match the color and of the existing antennas and backdrop. The proposed RRUs will match the color of the existing RRUs.

The Facility's design is shown in detail in the Zoning Drawings attached as Exhibit 3 to this application letter and featured equipment is described in the manufacturers' specification sheets attached as Exhibit 4. The photographs and photosimulations (Exhibit 5) show the existing Facility from various locations in the neighborhood around the Property and as simulated with proposed modifications. A structural analysis for the Facility demonstrates that the building is capable of supporting AT&T's proposed equipment at or near the locations shown on the Zoning Drawings (*see* Exhibit 7).

The Facility will continue to bring advanced wireless voice, text and data communications services to the surrounding areas. It will allow residents, professionals, government, businesses and students to communicate locally, nationally and internationally from virtually any location within the coverage area. In the event of an emergency, the improved Facility will allow immediate contact with fire, rescue and other emergency personnel. The improved Facility will thus enhance public health, safety and welfare both in ordinary daily living and in the event of fire, accident, medical emergency, natural disaster or other dangers.

**III. BACKGROUND**

AT&T is licensed by the Federal Communications Commission to construct and operate a wireless telecommunications network in various markets throughout the country, including the Commonwealth of Massachusetts and the City of Cambridge. A copy of the AT&T's FCC license that covers the area of the proposed Facility is included with this application (*see* Exhibit 2). AT&T is in the process of designing and constructing additional wireless facilities to its existing telecommunications system to serve Massachusetts. One of the key design objectives of its systems is to provide adequate and reliable 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 extent of use of AT&T's wireless services within the network, and the existing topography and obstructions. 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. In urban settings, this dynamic requires the antennas to be located on buildings at heights and in locations

where the signal is not obstructed or degraded by other buildings or by topographical features such as hills.

#### **IV. RF COVERAGE DETERMINATION**

AT&T has performed a study of radio frequency coverage for the City of Cambridge and from the Property, the results of which are described in the Radio Frequency Report submitted with this application (*see* Exhibit 6). Without the proposed modifications to its existing Facility, AT&T has a substantial coverage gap in this area of Cambridge. AT&T has determined that the proposed modifications to the existing Facility located on the building at the Property will provide needed coverage to the targeted sections of the City and the immediately surrounding area if AT&T's antennas are located on the building at the height and in the configuration requested. The importance of a facility at this location is underscored by AT&T's interest in enhancing its ability to provide its most up-to-date wireless technology, known as long-term evolution technology ("LTE"), in this area to satisfy its customers' ever-increasing needs for high-speed data services. Radio frequency coverage maps included in the report are provided to pictorially and vividly show the differences in existing and proposed wireless coverage at the various bands authorized for AT&T's service. The maps show dramatic improvements to wireless coverage with the inclusion of the proposed Facility.

#### **V. THE FEDERAL SPECTRUM ACT AND THE FCC ORDER**

As set forth below, the proposed modifications constitute an Eligible Facilities Request pursuant to the federal Spectrum Act,<sup>3</sup> as further implemented by the FCC Order.<sup>4</sup>

Under the Spectrum Act, as further clarified by the FCC Order, the streamlined process for this Eligible Facilities Request is limited to non-discretionary review. Specifically, the FCC Order "adopt[s] an objective standard for determining when a proposed modification will 'substantially change the physical dimensions' of an existing tower or base station." *FCC Order*, ¶ 87. As stated in the FCC Order, Section 6409 "states without equivocation that the reviewing authority 'may not deny, and shall approve' any qualifying application. This directive leaves no room for a lengthy and discretionary approach to reviewing an application that meets the statutory criteria." *FCC Order*, ¶ 116.

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<sup>3</sup> Pursuant to Section 6409(a)(2) an "eligible facilities request" means any request for modification of an existing wireless tower or base station that involves—

- (A) collocation of new transmission equipment;
- (B) removal of transmission equipment; or
- (C) replacement of transmission equipment.

47 U.S.C. § 1455(a)(2).

<sup>4</sup> The Order was effective on February 9, 2015, except for § 1.40001, which became effective on April 8, 2015, except for §§ 1.40001(c)(3)(i), 1.40001(c)(3)(iii), 1.40001(c)(4), and 17.4(c)(1)(vii), which became effective on May 18, 2015, after approval by the Office of Management and Budget. The FCC Order makes clear that under the Spectrum Act discretionary review is not required or permitted for an Eligible Facilities Request.

In issuing the FCC Order and eliminating discretionary review for eligible facilities requests, the FCC's goal was to "adopt a test that is defined by specific, objective factors rather than the contextual and entirely subjective standard advocated by the IAC and municipalities." The FCC intentionally sought to reduce "flexibility" and "open ended context-specific approach" engendered by the discretionary review process:

While we acknowledge that the IAC approach would provide municipalities with maximum flexibility to consider potential effects, we are concerned that it would invite lengthy review processes that conflict with Congress's intent. Indeed, some municipal commenters anticipate their review of covered requests under a subjective, case-by-case approach could take even longer than their review of collocations absent Section 6409(a). We also anticipate that disputes arising from a subjective approach would tend to require longer and more costly litigation to resolve given the more fact-intensive nature of the IAC's open-ended and context-specific approach. We find that an objective definition, by contrast, will provide an appropriate balance between municipal flexibility and the rapid deployment of covered facilities. We find further support for this approach in State statutes that have implemented Section 6409(a), all of which establish objective standards.

*FCC Order*, ¶ 88.

As a result, the FCC Order implementing Section 6409 establishes clear and objective criteria for determining eligibility, limits the types of information that a municipality may require when processing an application for an eligible facilities request, and imposes a "deemed granted" remedy for failure to timely process and eligible facilities request.<sup>5</sup> The FCC Order also establishes significant limits on the information that can be required to be provided with an eligible facilities request and limits it to only that information "reasonably related to determining whether the request meets the requirements of this section. A State or local government may not require an applicant to submit any other documentation". 47 CFR 1.40001(c)(1).

Both before and after the FCC Order was issued, the Massachusetts Attorney General's Office provided clear guidance that an eligible request cannot be subjected to a discretionary special permit process. *See* Attorney General's letters to (i) Town of Mount Washington, dated June 12, 2014, p. 3 (ii) Town of Lynnfield, dated February 10, 2015, p. 3 (the "AG Lynnfield Letter") and (iii) Town of Montague, dated February 23, 2015, p. 2 (all attached hereto). As set forth in each letter [t]he Act's requirement that a local government 'may not deny, and shall approve, any eligible facilities request' means that a request for modification to an existing facility that does not substantially change the physical dimensions of the tower or base station must be approved. ***Such qualifying requests also cannot be subject to a discretionary special permit.***"(Emphasis added). In providing these opinions, the Attorney General's Office specifically opined that provisions in zoning ordinances that specifically required a special permit for modifications to existing facilities could not be applied to eligible facilities requests. While approving the Town of Lynnfield's Zoning Bylaw, the Attorney General stated that "Section 8.7.5.1 requires that PWSF may only be erected upon the grant of a special permit. The Town cannot apply this

<sup>5</sup> *See* 47 CFR §§1.40001(c)(1) - (c)(4).



requirement to eligible facilities requests for modification to existing facilities that qualify for required approval under Section 6409 of the Act.” *AG Lynnfield Letter*, p. 3.

Therefore, as set forth in the FCC Order and Attorney General’s opinion letters, the City cannot impose a requirement that AT&T obtain a special permit, or an amendment to an existing special permit utilizing the same discretionary review process, in connection with its eligible facilities request. To the extent that the City of Cambridge’s Zoning Ordinance and any prior decisions by the Board include provisions seeking to further regulate the modification of wireless communication facilities, federal law overrules those requirements. See Sprint Spectrum L.P. v. Town of Swansea, 574 F.Supp.2d 227, 236 (2008) (Board is obligated to consider whether its actions would violate federal law even if a different outcome would be permitted under state law). The standard of review for an application to modify an existing wireless communication facility on an existing tower or base station is governed by the Spectrum Act and the FCC Order which require eligible facilities requests to be permitted “by right.”

In addition, the FCC Order establishes a 60-day period for approval from the time of AT&T’s submission. 47 CFR §1.40001(c)(2). Within the context of the Spectrum Act and FCC Order, approval means all necessary approvals to permit the proposed modifications, including the issuance of a building permit, if required. The FCC found that this 60-day period is appropriate due to “the more restricted scope of review applicable to applications under section 6409(a).” *FCC Order*, ¶ 108. If the Request is not acted upon within the 60-day period, it is deemed granted. 47 CFR §1.40001(c)(4).

As set forth below, the proposed modifications constitute an eligible facilities request. Therefore, AT&T respectfully requests the Board to find that Section 4.32(g)(1) of the Ordinance does not apply to its Request.

# **VI. THE PROPOSED MODIFICATIONS ARE AN ELIGIBLE FACILITIES REQUEST**

Under Section 6409 and the FCC Order, a “base station” means “[a] structure or equipment at a fixed location that enables Commission-licensed or authorized wireless communications between user equipment and a communications network.” 47 C.F.R §1.40001(b)(1). A Base Station includes “any structure other than a tower” that supports or houses “authorized wireless communications between user equipment and a communications network.” 47 C.F.R §1.40001(b)(1). Therefore, the existing building that is currently used for FCC-licensed transmissions for personal wireless services is a “base station” for purposes of Section 6409.

AT&T proposes to modify its existing Facility as described above and depicted on the Plans submitted herewith.

The proposed modifications will not require the installation of any part of the facility on the ground outside of the building.

As a result, AT&T’s proposed modifications involving the removal and replacement of the existing transmission equipment constitute an “eligible facilities request” under Section 6409. The proposed eligible facilities request is not a “substantial modification” under Section 6409 and the FCC Order because it does not:

- (i) Result in an increase in “the height of the structure by more than 10% or more than ten feet, whichever is greater” because the proposed replacement antennas will be façade mounted and located below the roofline and therefore will not exceed 10 feet above the existing building and the proposed roof mounted RRUs and surge arrestors will also not exceed 10 feet above the existing building;
- (ii) Protrude from the edge of the edge of the building by more than six feet because AT&T’s proposed antennas will not protrude more than six feet from building façade;
- (iii) Involve the installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets because no new radio communications equipment cabinets will be installed;
- (iv) Require any excavation or deployment outside the current site of the tower or base station because all antennas, equipment cabinets and related equipment will be installed entirely on and within the existing building; or
- (v) Otherwise defeat the existing concealment elements of the tower or base station because the proposed replacement antennas will be painted and textured to match the façade of the existing building on which the existing and proposed antennas will be located and will continue to integrate the Facility into the existing architecture of the building. Further, the proposed and surge arrestors will be mounted in a manner and color consistent with the existing RRUs and surge arrestors. Therefore, AT&T’s proposed Facility will remain aesthetically consistent with the exterior finish of the building as well as maintain the concealment elements of the original design.

See FCC Order, §1.40001(b)(7)(i)-(v).

## **VII. COMPLIANCE WITH THE CAMBRIDGE ZONING ORDINANCE**

In the alternative, AT&T respectfully requests the Board to grant a special permit for the proposed modifications to the existing Facility.<sup>6</sup>

### **A. AT&T complies with the Wireless Communications provisions set forth in Section 4.32(g)(1), and Section 4.40, Footnote 49 of the Ordinance.**

AT&T's proposed modifications comply with Section 4.32(g)(1), and Section 4.40, Footnote 49 of the Ordinance as follows:<sup>7</sup>

**Section 4.32(g)(1):** Section 4.32(g)(1) of the Ordinance allows for the use of a “[t]elephone exchange (including switching, relay, and transmission facilities serving mobile communications systems) and any towers or antennas accessory thereto.” Under the Table of Use Regulations beginning at Section 4.30, AT&T's proposed use of the Facility as a transmission facility serving a mobile communications system is permitted by special permit in the C-3 zoning district (see the table at Section 4.32(g)(1)).

**Section 4.40, Footnote 49:** Section 4.32(g)(1) includes a reference to Section 4.40, Footnote 49 which sets out the standards for granting the special permit. AT&T's proposed Facility complies with Footnote 49's standards as noted below:

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

**AT&T's Response:** AT&T's FCC license is included with this application and the license information included shows that AT&T is authorized to provide wireless service in the area served by the Facility (see Exhibit 2).

- 2. The Board of Zoning Appeal shall consider “[t]he 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**

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<sup>6</sup> AT&T's request is made, if and to the extent necessary, all rights reserved. As discussed above, the FCC Order establishes a 60-day period for receipt of all necessary approvals from the time of AT&T's submission, including a building permit, if required. 47 CFR §1.40001(c)(2). If the Request is not acted upon within the 60-day period, it is deemed granted. 47 CFR §1.40001(c)(4). Therefore, AT&T expressly reserves its rights under 47 CFR §1.40001(c)(2) and (4).

<sup>7</sup> To the extent that Section 4.32(g)(1), and Section 4.40, Footnote 49 of the Ordinance purport to require the submission of information that is beyond the scope permitted by the FCC Order or Spectrum Act, AT&T expressly reserves, and does not waive, its right to assert that such information is not required under the Spectrum Act and the submission of such information shall not constitute a waiver of AT&T's rights pursuant thereto.

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.”

**AT&T's Response:** The design of the overall Facility, including the choice and placement of replacement antennas and associated equipment, and the surrounding buildings, minimizes the visual impact of the proposed Facility. The minimal visual impact of the Facility is shown in the photographs of the existing Facility and the photosimulations that superimpose the proposed modifications to the existing Facility (*see*, Exhibit 5).

3. The Board of Zoning Appeal shall consider “[w]here 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 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.

In granting a special permit the Board of Zoning Appeal shall set forth in its decision under which circumstances or procedures, if any, the permittee shall be allowed to replace and upgrade its equipment without the necessity of seeking a new special permit.”

**AT&T's Response:** As demonstrated by the Radio Frequency Report and the associated coverage maps, AT&T has demonstrated an immediate and compelling need for the proposed modifications to its existing Facility located at the Property in order to provide substantially improved indoor coverage to residents, businesses, students and faculty, and the general public in that area.<sup>8</sup> AT&T also seeks to substantially improve its ability to satisfy the ever-increasing need of its customers for data accessibility, navigation and use. This is especially critical in and around the area First Street, Land Boulevard and the surrounding area. AT&T proposes to satisfy its RF coverage needs in the area by adding to the existing Facility the antennas and equipment necessary to provide the latest LTE wireless communications service technology. By modifying its existing Facility, AT&T obviates the need to construct an entirely new facility within this area of Cambridge in order to meet its wireless network coverage needs.

As provided in Footnote 49, AT&T requests that once permission is received from the City to site the Facility at the Property, the Board permit AT&T to replace and upgrade the equipment at this Facility in the future without further zoning proceedings or a new special permit, provided that such equipment shall meet the eligible facilities request criteria set forth in 47 CFR § 1.40001.

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<sup>8</sup> AT&T must generate a signal strength of at least -74 dBm to provide serviceable voice and data coverage on its mobile wireless devices in indoor environments. AT&T also seeks to substantially improve its data navigation service coverage in the area by including antennas and equipment that will provide LTE service.

**B. AT&T complies with the Special Permit Criteria set forth in Section 10.43 of the Ordinance.**

**Section 10.43 of the Ordinance specifies the following criteria for issuance of a special permit:** “Special permits will normally be granted where specific provisions of this Ordinance are met, except when particulars of the location or use, not generally true of the district or of the uses permitted in it, would cause granting of such permit to be to the detriment of the public interest because:

**(a) The requirements of this Ordinance cannot or will not be met, or**

**AT&T’s Response:** As provided above, AT&T’s proposed modifications comply with the requirements set forth in Section 4.32(g), Footnote 49 of the Ordinance, the Spectrum Act and the eligible facilities request criteria set forth in 47 CFR § 1.40001. Granting the special permit would not be a detriment to the public interest and is consistent with the Board’s obligations pursuant to the Spectrum Act and FCC Order.

**(b) Traffic generated or patterns of access or egress would cause congestion, hazard, or substantial change in established neighborhood character for the following reasons, or**

**AT&T’s Response:** The proposed modifications to AT&T’s existing Facility will not result in any change to the existing traffic on or near the Property. The Facility will continue to be unmanned and only require infrequent visits by a technician (typically two times per month for routine diagnostics and/or maintenance, except in cases of emergency), there will be no material increase in traffic or disruption to patterns of access or egress that will cause congestion, hazards or a substantial change in the established neighborhood character. AT&T’s maintenance personnel will make use of the existing access roads and parking at the building. Granting the special permit would not be a detriment to the public interest and is consistent with the Board’s obligations pursuant to the Spectrum Act and FCC Order.

**(c) The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would be adversely affected by the nature of the proposed use, or**

**AT&T’s Response:** As described above and illustrated on the attached photographs and photosimulations (*see* Exhibit 5) the proposed modifications to the existing Facility will result in a *de minimis* change in the appearance of the building because the equipment will be located on building exterior surfaces. As a result, the Facility as a whole either will be hidden from view or will visually blend with existing characteristics of the building and the surrounding neighborhood. Because the proposed installation will not generate any traffic, smoke, dust, heat or glare, discharge noxious substances, nor pollute waterways or groundwater, it will not adversely affect residential uses on neighboring streets. Conversely, the surrounding properties and general public will benefit from the potential to enjoy improved wireless communications services. Granting the special permit



would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

- (d) **Nuisance or hazard would be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the citizens of the City, or**

**AT&T's Response:** Because the proposed modifications to the existing Facility will not cause the Facility to generate any traffic, smoke, dust, heat or glare, discharge noxious substances, nor pollute waterways or groundwater, no nuisance or hazard will be created to the detriment of the health, safety, or welfare of the occupants of the building or the residents of the City of Cambridge. To the contrary, the proposed Facility 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 that 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 Facility, as modified, will continue to comply with all federal, state and local safety requirements including the standards established by the FCC and Federal Aviation Administration (FAA). (See Exhibit 8 Maximum Permissible Exposure Study, Theoretical Report). Granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

- (e) **For other reasons, the proposed installation would impair the integrity of the district or adjoining district or otherwise derogate from the intent or purpose of this Ordinance, or**

**AT&T's Response:** The purpose of the Ordinance is multifaceted, the relevant aspects of which relating to wireless telecommunications facilities include the lessening of congestion in the streets, conserving health, securing safety from fire, flood, panic and other danger, conserving the value of land and buildings and natural resources, preventing blight and pollution, encouraging the most rational use of land throughout the city, including encouraging appropriate economic development, and protecting residential neighborhoods from incompatible activities.

As noted above, the proposed modifications to the existing Facility directly accord with the purposes of the Ordinance because the modifications will not result in any traffic, smoke, dust, heat or glare, discharge noxious substances, nor pollute waterways or groundwater. As the Facility will improve the ability of residents, businesses, travelers and drivers in the area to access state-of-the-art wireless technology, the City's ability to provide emergency services will be improved, as will the economic development of the City as more people will be able to conduct commerce by virtue of a mobile platform. Because the proposed modifications to the existing Facility will be installed on an existing building that includes the Facility, and the proposed modifications are consistent with the existing concealment elements, the proposed modifications to the existing Facility are in consistent with the building's character and will not affect the value of the building or the natural resources of the City. Because the proposed modifications to the existing Facility are designed to be consistent with the existing concealment elements of the Facility and characteristics of the

Property, the visual impact on the underlying and adjacent zoning districts will be *de minimis*. As a result, the proposed modifications to the existing Facility are consistent with the Ordinance's purpose to allow for less intrusive wireless telecommunications facilities in all districts (other than Open Space) including the applicable overlay districts, and the underlying PUD-3 district. Granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

**(f) The new use or building construction is inconsistent with the Urban Design Objectives set forth in Section 19.30**

**AT&T's Response:** As stated in the Section 19.30, the Citywide Urban Design Objectives ("Objectives") "are intended to provide guidance to property owners and the general public as to the city's policies with regard to the form and character desirable for new development in the city. It is understood that application of these principles can vary with the context of specific building proposals in ways that, nevertheless, fully respect the policies' intent. It is intended that proponents of projects, and city staff, the Planning Board and the general public, where public review or approval is required, should be open to creative variations from the detailed provisions presented in this Section as long as the core values expressed are being served. *A project need not meet all the objectives of this Section 19.30 where this Section serves as the basis for issuance of a special permit. Rather the permit granting authority shall find that on balance the objectives of the city are being served.* Nor shall a project subject to special permit review be required to conform to the Required Building and Site Plan Requirements set forth in Section 11.50." [emphasis added]. For the reasons stated in AT&T's response to this Section 10.43(f) of the Zoning Ordinance and in its application generally, "on balance, the objectives of the city are being served" by the installation of the Facility at the Property so that granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

The following are the Objectives' headings as appearing in the Ordinance:

**19.31: New projects should be responsive to the existing or anticipated pattern of development.**

**AT&T's Response:** The existing Facility is located on n the existing building, some of the equipment of which is hidden from view on the existing building, or otherwise obstructed from view, and the remaining equipment blends with the structures and colors of the buildings in the surrounding area. The proposed modifications to the existing Facility are consistent with the previously approved design and concealment elements of the existing Facility. Therefore, the proposed modifications are responsive to the existing pattern of development in the Property's applicable zoning and overlay districts.

**19.32: Development should be pedestrian and bicycle-friendly, with a positive relationship to its surroundings.**

**AT&T's Response:** The existing Facility is located on and within the existing building. The Facility is only accessed by authorized AT&T personnel for routine maintenance one to two times per month and is not accessed by the general public. The proposed modifications to the existing

Facility will not result in any increase in routine visits nor otherwise result in a change in traffic patterns in the vicinity of the Property that would affect pedestrian flow or cyclists' access to the building or surrounding areas within the Property's applicable zoning districts.

**19.33 The building and site design should mitigate adverse environmental impacts of a development upon its neighbors. Indicators include<sup>9</sup>**

**(1) Mechanical equipment that is carefully designed, well organized or visually screened from its surroundings and is acoustically buffered from neighbors. Consideration is given to the size, complexity and appearance of the equipment, its proximity to residential areas, and its impact on the existing streetscape and skyline. The extent to which screening can bring order, lessen negative visual impacts, and enhance the overall appearance of the equipment should be taken into account. More specifically:**

**(a) Reasonable attempts have been made to avoid exposing rooftop mechanical equipment to public view from city streets. Among the techniques that might be considered are the inclusion of screens or a parapet around the roof of the building to shield low ducts and other equipment on the roof from view.**

**(b) Treatment of the mechanical equipment (including design and massing of screening devices as well as exposed mechanical elements) that relates well to the overall design, massing, scale and character of the building.**

**(c) Placement of mechanical equipment at locations on the site other than on the rooftop (such as in the basement), which reduces the bulk of elements located on the roof; however, at-grade locations external to the building should not be viewed as desirable alternatives.**

**(d) Tall elements, such as chimneys and air exhaust stacks, which are typically carried above screening devices for functioning reasons, are carefully designed as features of the building, thus creating interest on the skyline.**

**(e) All aspects of the mechanical equipment have been designed with attention to their visual impact on adjacent areas, particularly with regard to residential neighborhoods and views and vistas.**

**AT&T's Response:** As shown in the photosimulations (*see* Exhibit 5), the existing Facility, as proposed to be modified herein, will continue to be visually consistent with the color and texture of the building and the concealment elements of the design of the Facility. As a result, AT&T's Facility is in keeping with the building's existing features without adversely affecting the building's overall design, massing, scale or character.

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<sup>9</sup> Inasmuch as Section 19.33 is most relevant to the Facility, it is stated here in full.

**(2) Trash that is handled to avoid impacts (noise, odor, and visual quality) on neighbors, e.g. the use of trash compactors or containment of all trash storage and handling within a building is encouraged.**

**AT&T's Response:** The Facility does not generate trash, therefore this design objective is inapplicable.

**(3) Loading docks that are located and designed to minimize impacts (visual and operational) on neighbors.**

**AT&T's Response:** The Facility does not utilize any loading dock, therefore this design objective is inapplicable.

**(4) Stormwater Best Management Practices and other measures to minimize runoff and improve water quality are implemented.**

**AT&T's Response:** The existing Facility, and the proposed modifications, are located entirely on and within the existing Building on the Property and have no effect on stormwater runoff, therefore this design objective is inapplicable.

**(5) Landscaped areas and required Green Area Open Space, in addition to serving as visual amenities, are employed to reduce the rate and volume of stormwater runoff compared to pre-development conditions.**

**AT&T's Response:** The existing Facility and proposed modifications have no effect any landscaped or Green Area Open Space, therefore this design objective is inapplicable.

**(6) The structure is designed and sited to minimize shadow impacts on neighboring lots, especially shadows that would have a significant impact on the use and enjoyment of adjacent open space and shadows that might impact the operation of a Registered Solar Energy System as defined in Section 22.60 of this Zoning Ordinance.**

**AT&T's Response:** The existing Facility and proposed modifications are designed so as not to cause shadows on neighboring lots.

**(7) Changes in grade across the lot are designed in ways that minimize the need for structural retaining walls close to property lines.**

**AT&T's Response:** The existing Facility and proposed modifications are located entirely on the existing building and have no impact on the grade of the Property, therefore this design objective is inapplicable.

**(8) Building scale and wall treatment, including the provision of windows, are sensitive to existing residential uses on adjacent lots.**

**AT&T's Response:** The proposed modifications to the existing Facility will not change the building's scale because antennas and equipment will blend with the color and

textures of the building and surrounding area (*see* Exhibit 3). The existing Facility and proposed modifications are consistent with characteristics of the existing building design, maintain the existing concealment elements of the Facility and therefore minimize any visual impact from the Facility.

**(9) Outdoor lighting is designed to provide minimum lighting and necessary to ensure adequate safety, night vision, and comfort, while minimizing light pollution.**

**AT&T's Response:** The existing Facility does not use any outdoor lighting. The proposed modifications to the Facility do not include any additional lighting of the Facility or building. As a result, this design objective is inapplicable.

**(10) The creation of a Tree Protection Plan that identifies important trees on the site, encourages their protection, or provides for adequate replacement of trees lost to development on the site.**

**AT&T's Response:** The existing Facility and proposed modifications are located entirely on the existing building and have no effect on any trees on the Property, therefore this design objective is inapplicable.

**19.34:** Projects should not overburden the City infrastructure services, including neighborhood roads, city water supply system, and sewer system.

**AT&T's Response:** The existing Facility, including the proposed modifications, is a passive use and will not generate trash, odor, excess noise, or utilize water or wastewater services. As such, it will not burden the City's infrastructure services.

**19.35:** New construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically.

**AT&T's Response:** The proposed modification of the existing Facility located on the existing building, will obviate the need for AT&T to construct an additional Facility to address its wireless network coverage need in this area of Cambridge. The existing Facility and the proposed modifications blend the equipment with the building texture and color, and are consistent with the concealment elements of the Facility's design. As a result, the Facility will reinforce the existing Cambridge landscape as it currently is manifested at the Property.

**19.36:** Expansion of the inventory of housing in the city is encouraged.

**AT&T's Response:** The Facility and proposed modifications provide wireless services and will not adversely impact the City's housing inventory.

**19.37.** Enhancement and expansion of open space amenities in the city should be incorporated into new development in the city.



**AT&T's Response:** The Facility and proposed modifications are located on the existing building. The Facility and proposed modifications will not adversely impact or otherwise reduce open space amenities within the City.

**VIII. SUMMARY**

For the foregoing reasons AT&T respectfully requests that the Board to determine that pursuant to the Spectrum Act and the FCC Order, the Request constitutes an eligible facilities request and therefore AT&T's Request must be approved administratively, including the issuance of a building permit, without the need for further relief from the Board. In the alternative, without waiving its rights, AT&T requests the Board grant the foregoing zoning relief in the form of a Special Permit and such other relief as the Board deems necessary to allow the modification and operation of AT&T's proposed Facility.

Best Regards,

Timothy W. Greene  
Authorized Agent to New Cingular Wireless PCS, LLC ("AT&T")

## **BZA Application Form**

### **DIMENSIONAL INFORMATION**

**Applicant:** ARE-MA REGION NO. 38 LLC

**Present Use/Occupancy:** Telecom facility

**Location:** 157 Riverside Drive

**Zone:** PUD-3

**Phone:** 6178772950

**Requested Use/Occupancy:** Same

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

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.

1. SEE CAMBRIDGE ZONING ORDINANCE ARTICLE 5.000, SECTION 5.30 (DISTRICT OF DIMENSIONAL REGULATIONS).
2. TOTAL GROSS FLOOR AREA (INCLUDING BASEMENT 7'-0" IN HEIGHT AND ATTIC AREAS GREATER THAN 5') DIVIDED BY LOT AREA.

3. OPEN SPACE SHALL NOT INCLUDE PARKING AREAS, WALKWAYS OR DRIVEWAYS AND SHALL HAVE A MINIMUM DIMENSION OF 15'.

PROJECT INFORMATION		
SCOPE OF WORK:	<b>ITEMS TO BE MOUNTED ON THE EXISTING ROOF TOP:</b>	
	• NEW AT&T ANTENNAS: DMP65R-BU4DA (TYP. OF 2 PER SECTOR, TOTAL OF 6).	
	• NEW AT&T ANTENNAS: OPA65R-BU4BA (TYP. OF 1 PER SECTOR, TOTAL OF 3).	
	• NEW AT&T RRUS: 4449 B5/B12 (850/700) (TYP. OF 1 PER SECTOR, TOTAL OF 3).	
	• NEW AT&T RRUS: 8843 B2/B66A (AWS/PCS) (TYP. OF 1 PER SECTOR, TOTAL OF 3).	
	• NEW AT&T RRUS: RRUS-32 B30 (WCS) (TYP. OF 1 PER SECTOR, TOTAL OF 3).	
	• NEW AT&T DC & FIBER SURGE ARRESTOR (DC6-48-60-18)	
	(TYP. OF 1 PER SECTOR, TOTAL OF 3) WITH (6) DC POWER & (3) FIBER RUN.	
	• PROPOSED 12'X12' NON-PENETRATING BALLAST MOUNT (TOTAL OF 2).	
	• PROPOSED NEW MOUNTING FRAME (TOTAL OF 1 PER BETA SECTOR).	
	• PROPOSED NEW RRH BALLAST (TOTAL OF 1 PER BETA SECTOR).	
	• NEW (2) 1-5/8" COAX CABLES (BETA SECTOR ONLY).	
	<b>ITEMS TO BE MOUNTED AT EQUIPMENT LOCATION:</b>	
	• SWAP DUS WITH 5216.	
	• ADD 2ND XMU.	
	• ADD RBS 6630.	
	• ADD DC-12 (TOTAL OF 1).	
	• ADD FIBER MANAGEMENT BOX (TOTAL OF 2).	
	• INSTALL NEW NETSURE 7100 WITH 3 STR BATT, (TO REPLACE EXISTING).	
	<b>ITEMS TO BE REMOVED:</b>	
	• EXISTING AT&T ANTENNAS: 742-264 (TYP. OF 2 PER SECTOR, TOTAL OF 6).	
	• EXISTING AT&T ANTENNAS: AM-X-CD-14-65-00T-RET	
	(TYP. OF 1 PER SECTOR, TOTAL OF 3).	
	• EXISTING AT&T RRUS: RRUS-11 B12 (TYP. OF 1 PER SECTOR, TOTAL OF 3).	
	• EXISTING AT&T RRUS: RRUS-11 B2 (TYP. OF 1 PER SECTOR, TOTAL OF 3).	
	• EXISTING AT&T DIPLEXER (TYP. OF 4 PER SECTOR, TOTAL OF 12).	
	• EXISTING DC2 SURGE ARRESTOR (TYP. OF 1 PER SECTOR, TOTAL OF 3).	
	• EXISTING (8) 1-5/8" COAX CABLES (ALL OF BETA SECTOR COAX).	
	<b>ITEMS TO REMAIN:</b>	
	• (6) TMA'S, (4) COAX CABLES, & (6) DIPLEXER.	
SITE ADDRESS:	215 FIRST STREET CAMBRIDGE, MA 02142	
LATITUDE:	42.364160° N, 42° 21' 50.97" N	
LONGITUDE:	71.079168° W, 71° 04' 45.00" W	
TYPE OF SITE:	ROOF TOP / OUTDOOR	
STRUCTURE HEIGHT:	81'-0"±	
RAD CENTER:	89'-0"± (ALPHA & GAMMA SECTOR) 87'-0"± (BETA SECTOR)	
CURRENT USE:	TELECOMMUNICATIONS FACILITY	
PROPOSED USE:	TELECOMMUNICATIONS FACILITY	

DRAWING INDEX		
SHEET NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	2
GN-1	GENERAL NOTES	2
A-1	ROOFTOP PLAN	2
A-2	EQUIPMENT PLAN	2
A-3	EXISTING ANTENNA LAYOUT	2
A-4	PROPOSED ANTENNA LAYOUT	2
A-5	ELEVATION	2
A-6	DETAILS	2
A-7	DETAILS	2
A-8	DETAILS	2
SN-1	STRUCTURAL NOTES	2
S-1	BALLAST FRAME DETAILS	2
S-2	BALLAST FRAME DETAILS	2
S-3	PROPOSED CUSTOM MOUNTING DETAILS	2
S-4	PROPOSED CUSTOM MOUNTING DETAILS	2
G-1	GROUNDING DETAILS	2
RF-1	RF PLUMBING DIAGRAM	2
RF-2	RF PLUMBING DIAGRAM	2
RF-3	RF PLUMBING DIAGRAM	2



45 BEECHWOOD DRIVE  
NORTH ANDOVER, MA 01845

TEL: (978) 557-5553  
FAX: (978) 336-5586



12 INDUSTRIAL WAY  
SALEM, NH 03079


**SITE NUMBER: MA2222**  
**SITE NAME: CAMBRIDGE FIRST ST**

215 FIRST STREET  
CAMBRIDGE, MA 02142  
MIDDLESEX COUNTY



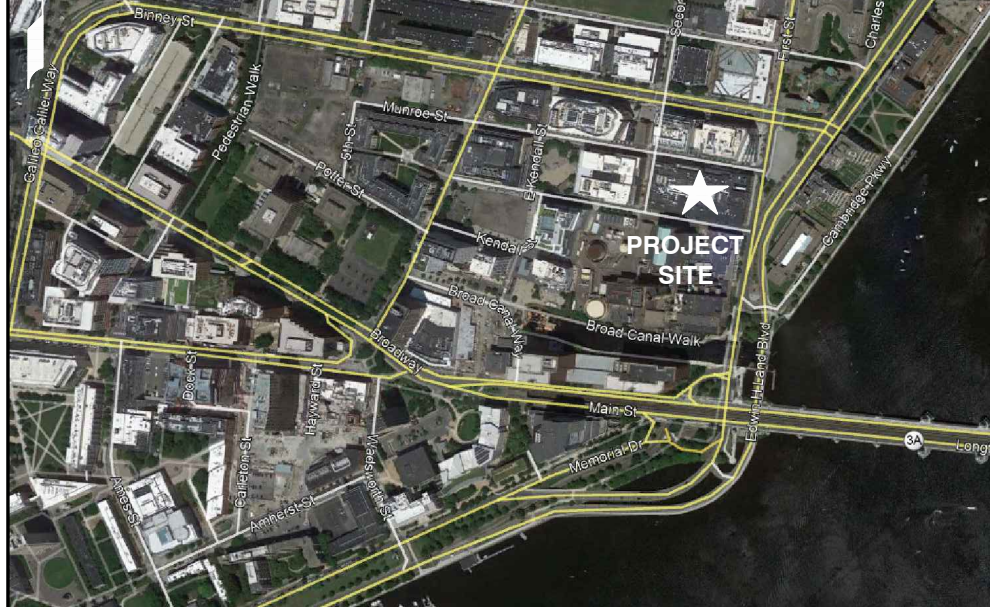
550 COCHITUATE ROAD  
FRAMINGHAM, MA 01701

2	11/20/20	ISSUED FOR CONSTRUCTION	GA	HC	DPH	AT&T TITLE SHEET LTE 3C_4C_5C_4TXRX 2020 UPGRADE		
1	10/28/20	ISSUED FOR REVIEW	GA	HC	DPH			
0	09/08/20	ISSUED FOR REVIEW	GA	HC	DPH			
A	06/25/20	ISSUED FOR REVIEW	GA	HC	DPH			
NO.	DATE	REVISIONS	BY	CHK	APP'D	SITE NUMBER	DRAWING NUMBER	REV
SCALE: AS SHOWN		DESIGNED BY: HC	DRAWN BY: GA		MA2222		T-1	2



**SITE NUMBER: MA2222**  
**SITE NAME: CAMBRIDGE FIRST ST**  
**FA CODE: 10071528**  
**PACE ID: MRCTB033265, MRCTB033300, MRCTB033302, MRCTB033264**  
**PROJECT: LTE 3C\_4C\_5C\_4TXRX 2020 UPGRADE**

VICINITY MAP	GENERAL NOTES
<b>DIRECTIONS TO SITE:</b> START OUT GOING SOUTHWEST ON COCHITUATE RD / MA-30 W TOWARD WHITTIER ST. MAKE A U-TURN ONTO COCHITUATE RD / MA-30 E. MERGE ONTO I-90 E / MASS PIKE / MASSACHUSETTS TURNPIKE TOWARD I-95 / BOSTON (PORTIONS TOLL). TAKE EXIT 18 ON THE LEFT TOWARD CAMBRIDGE / SOMERVILLE. MERGE ONTO CAMBRIDGE ST. CAMBRIDGE ST BECOMES RIVER ST / RIVER ST BRIDGE. TURN RIGHT ONTO MEMORIAL DR / US-3 / MA-2. CONTINUE TO FOLLOW MEMORIAL DR. MEMORIAL DR BECOMES EDWIN H LAND BLVD / COMMERCIAL AVE. TURN LEFT ONTO BINNEY ST. TURN LEFT ONTO 1ST ST. 215 1ST ST IS ON THE RIGHT.	1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED. 2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS. 3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T MOBILITY REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME. 4. CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN.



**UNDERGROUND SERVICE ALERT**



**WWW.DIGSAFE.COM**  
**72 HOURS PRIOR**





GROUNDING NOTES

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

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

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

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

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

BUILDING CODE: IBC 2015 & MA STATE BUILDING CODE 780 CMR 9TH EDITION  
ELECTRICAL CODE: 2020 NATIONAL ELECTRICAL CODE (NFPA 70-2017)

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

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

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION;

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

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.

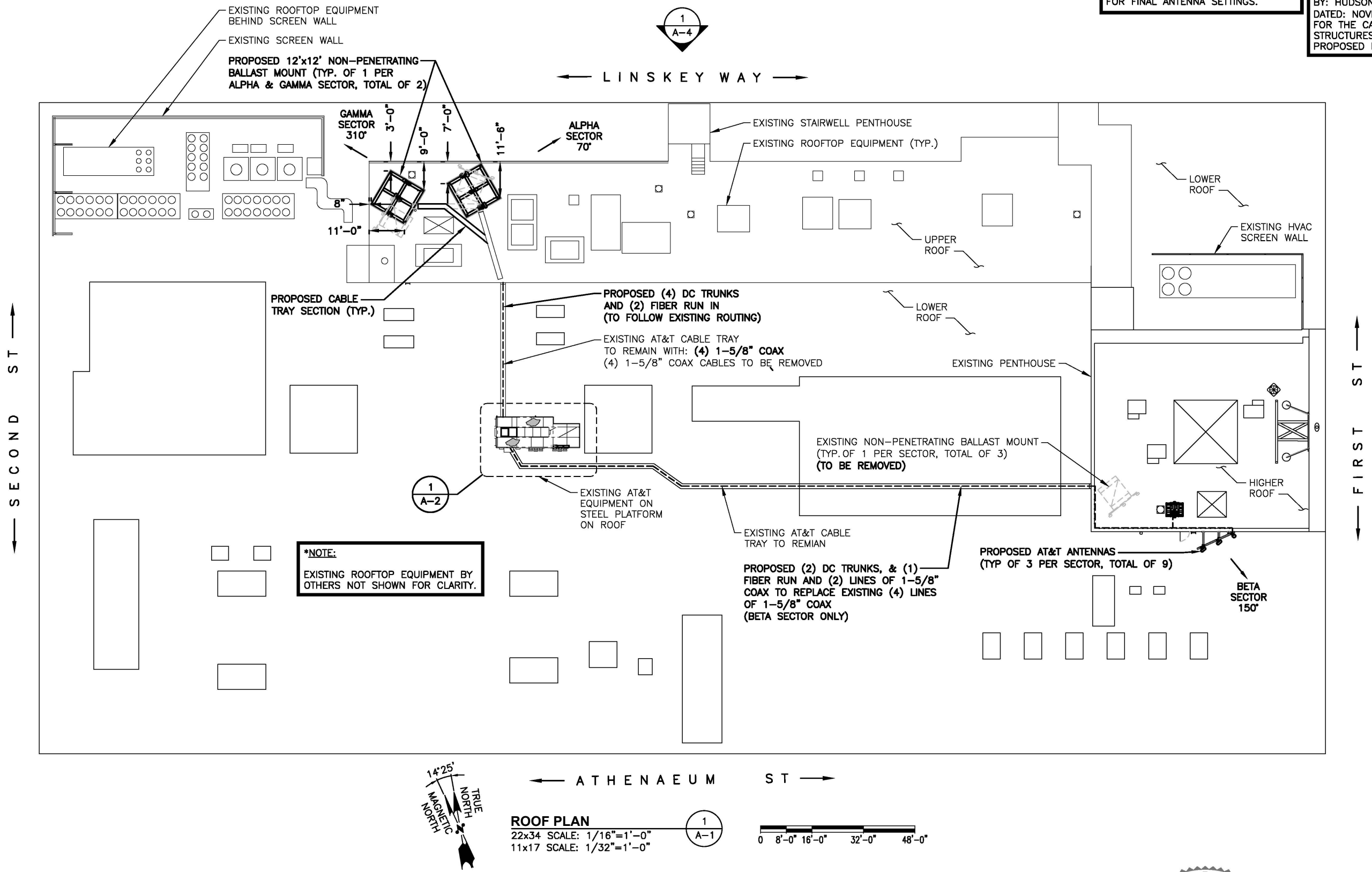
ABBREVIATIONS

AGL	ABOVE GRADE LEVEL	EQ	EQUAL	REQ	REQUIRED
AWG	AMERICAN WIRE GAUGE	GC	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
BBU	BATTERY BACKUP UNIT	GRC	GALVANIZED RIGID CONDUIT	TBD	TO BE DETERMINED
BTCW	BARE TINNED SOLID COPPER WIRE	MGB	MASTER GROUND BAR	TBR	TO BE REMOVED
BGR	BURIED GROUND RING	MIN	MINIMUM	TBRR	TO BE REMOVED AND REPLACED
BTS	BASE TRANSCEIVER STATION	P	PROPOSED	TYP	TYPICAL
E	EXISTING	NTS	NOT TO SCALE	UG	UNDER GROUND
EGB	EQUIPMENT GROUND BAR	RAD	RADIATION CENTER LINE (ANTENNA)	VIF	VERIFY IN FIELD
EGR	EQUIPMENT GROUND RING	REF	REFERENCE		



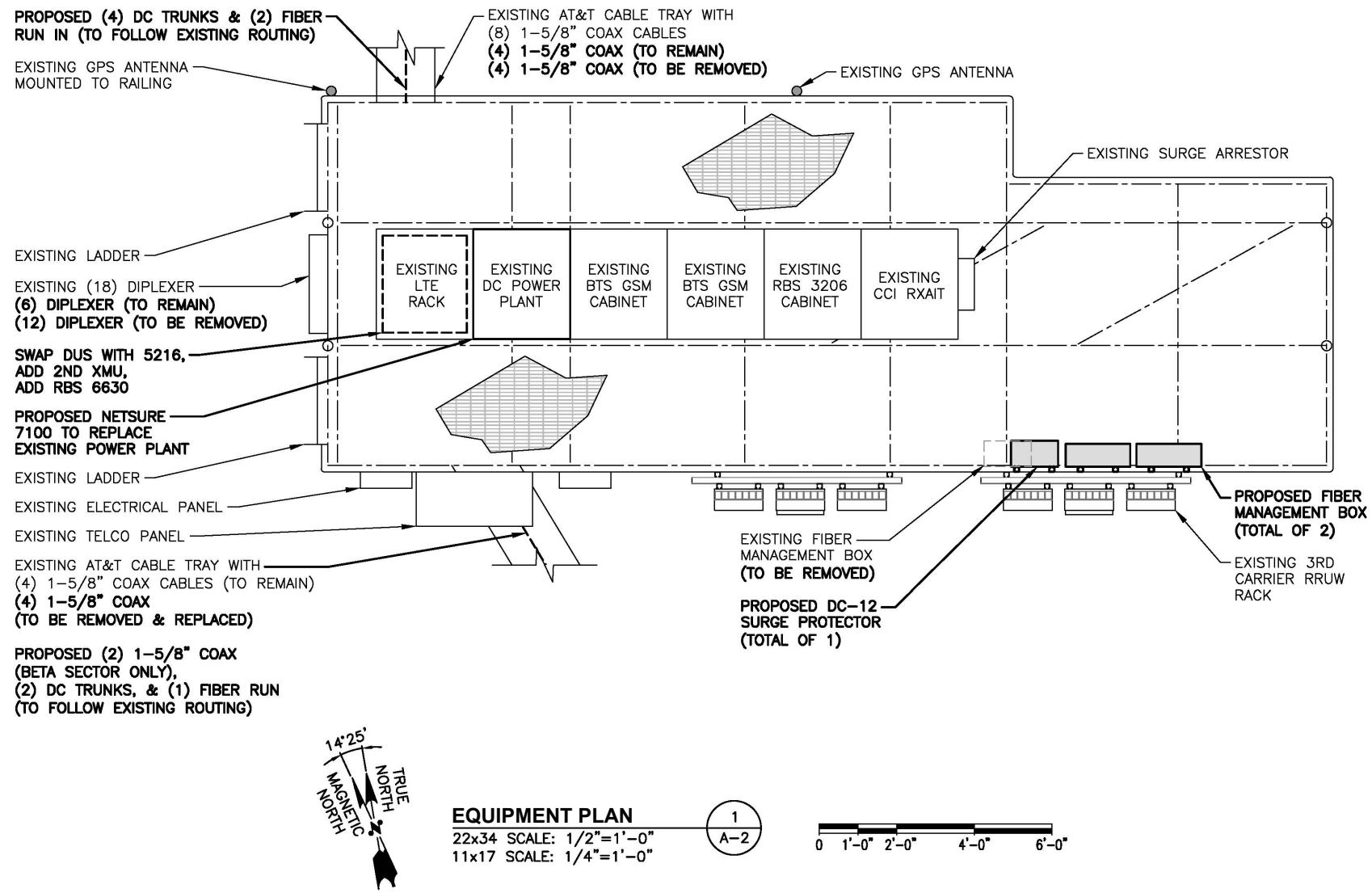
NOTE:  
REFER TO THE FINAL RF DATA SHEET  
FOR FINAL ANTENNA SETTINGS.

NOTE:  
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BY: HUDSON DESIGN GROUP, LLC.  
DATED: NOVEMBER 17, 2020 (Rev.1)  
FOR THE CAPACITY OF THE EXISTING  
STRUCTURES TO SUPPORT THE  
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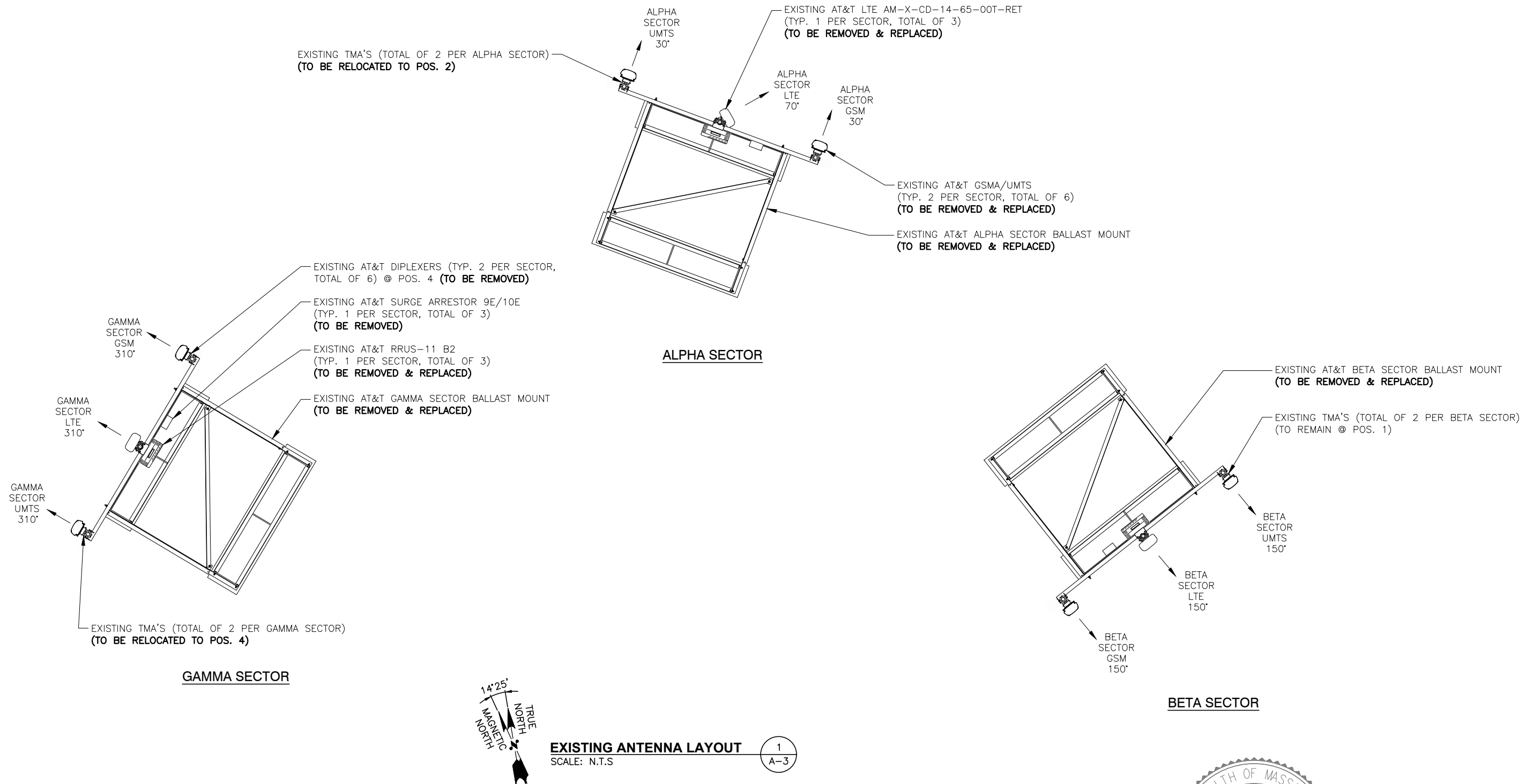


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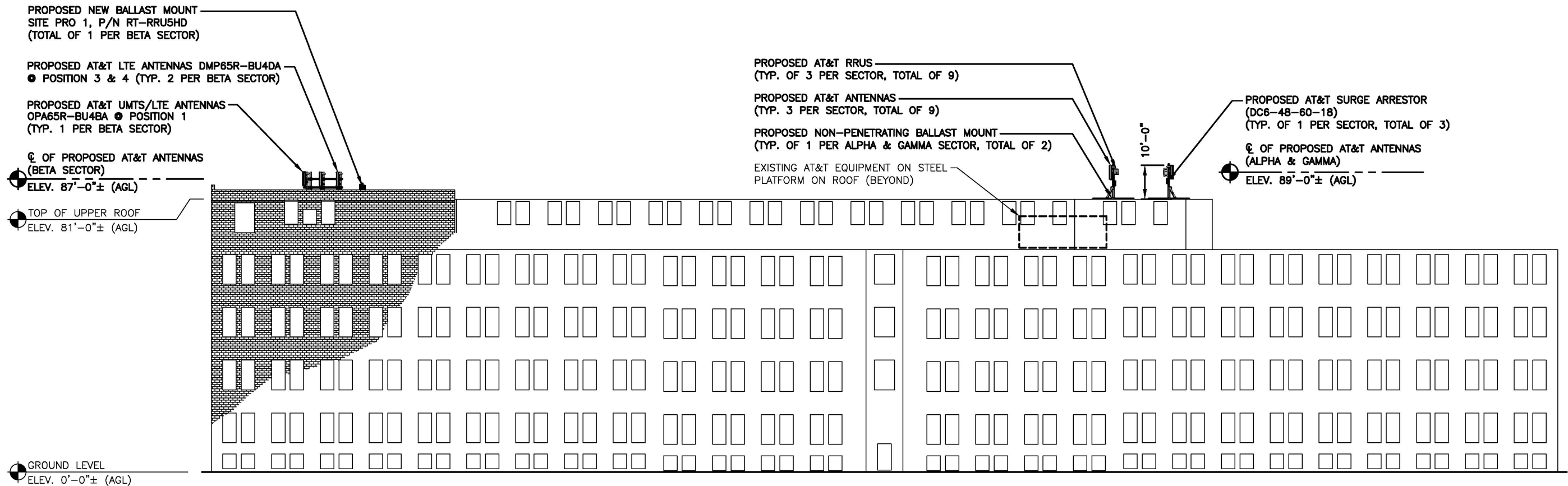


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L I N S K E Y   W A Y

ELEVATION

22x34 SCALE: 1/16"=1'-0"  
11x17 SCALE: 1/32"=1'-0"

1  
A-5

0 8'-0" 16'-0" 32'-0" 48'-0"

**HDG** HUDSON  
Design Group LLC

45 BEECHWOOD DRIVE  
NORTH ANDOVER, MA 01845  
TEL: (978) 557-5553  
FAX: (978) 336-5586

**SAI**

12 INDUSTRIAL WAY  
SALEM, NH 03079

SITE NUMBER: MA2222  
SITE NAME: CAMBRIDGE FIRST ST

215 FIRST STREET  
CAMBRIDGE, MA 02142  
MIDDLESEX COUNTY

**at&t**

550 COCHITUATE ROAD  
FRAMINGHAM, MA 01701

REVISIONS				AT&T			
NO.	DATE	REVISIONS	BY	CHK	APP'D	SITE NUMBER	DRAWING NUMBER
2	11/20/20	ISSUED FOR CONSTRUCTION	GA	HC	DPH	MA2222	A-5
1	10/28/20	ISSUED FOR REVIEW	GA	HC	DPH		
0	09/08/20	ISSUED FOR REVIEW	GA	HC	DPH		
A	06/25/20	ISSUED FOR REVIEW	GA	HC	DPH		
SCALE: AS SHOWN				DESIGNED BY: HC			
DRAWN BY: GA				ELEVATION			
				LTE 3C_4C_5C_4TXRX 2020 UPGRADE			
				REV			
				2			



# ANTENNA SCHEDULE

SECTOR	EXISTING/ PROPOSED	BAND	ANTENNA	SIZE (INCHES) (L x W x D)	ANTENNA CL. HEIGHT	AZIMUTH	TMA/ DIPLEXER	RRU	SIZE (INCHES) (L x W x D)	FEEDER	RAYCAP
A1	PROPOSED	LTE AWS	DMP65R-BU4DA	48.0x20.7x7.7	89'-0"±	70°	-	(P)(1) 8843 B2/B66A (AWS/PCS)	14.9x13.2x10.9	-	(P) (1) RAYCAP DC6-48-60-18
A2	PROPOSED	UMTS 850/LTE WCS	OPA65R-BU4BA	48x11.7x10.1	89'-0"±	70°	(2)(E) LGP21901	(P)(1) RRUS-32 B30 (WCS)	27.2x12.1x7.0	(2)1-5/8 COAX	
A3	-	-	-	-	-	-	-	-	-	(2) DC / (1) FIBER	
A4	PROPOSED	LTE 850/700BC/PCS	DMP65R-BU4DA	48.0x20.7x7.7	89'-0"±	70°	-	(9)(1) 4449 B5/B12 (850/700)	14.9x13.2x10.4	-	
B1	PROPOSED	UMTS 850/LTE WCS	OPA65R-BU4BA	48x11.7x10.1	87'-0"±	150°	(2)(E) LGP21901	(P)(1) RRUS-32 B30 (WCS)	27.2x12.1x7.0	(2)1-5/8 COAX	(P) (1) RAYCAP DC6-48-60-18
B2	-	-	-	-	-	-	-	-	-	(2) DC / (1) FIBER	
B3	PROPOSED	LTE AWS	DMP65R-BU4DA	48.0x20.7x7.7	87'-0"±	150°	-	(P)(1) 8843 B2/B66A (AWS/PCS)	14.9x13.2x10.9	-	
B4	PROPOSED	LTE 850/700BC/PCS	DMP65R-BU4DA	48.0x20.7x7.7	87'-0"±	150°	-	(9)(1) 4449 B5/B12 (850/700)	14.9x13.2x10.4	-	
C1	PROPOSED	LTE 850/700BC/PCS	DMP65R-BU4DA	48.0x20.7x7.7	89'-0"±	310°	-	(9)(1) 4449 B5/B12 (850/700)	14.9x13.2x10.4	-	(P) (1) RAYCAP DC6-48-60-18
C2	PROPOSED	LTE AWS	DMP65R-BU4DA	48.0x20.7x7.7	89'-0"±	310°	-	(P)(1) 8843 B2/B66A (AWS/PCS)	14.9x13.2x10.9	-	
C3	-	-	-	-	-	-	-	-	-	(2) DC / (1) FIBER	
C4	PROPOSED	UMTS 850/LTE WCS	OPA65R-BU4BA	48x11.7x10.1	89'-0"±	310°	(2)(E) LGP21901	(P)(1) RRUS-32 B30 (WCS)	27.2x12.1x7.0	(2)1-5/8 COAX	

## RRU CHART

QUANTITY	MODEL	SIZE (L x W x D)
3(P)	4449 (850/700)	14.9"x13.2"x10.4"
3(P)	8843 (AWS/PCS)	14.9"x13.2"x10.9"
3(P)	RRUS-32 (WCS)	27.2"x12.1"x7.0"

NOTE:  
MOUNT PER MANUFACTURER'S SPECIFICATIONS

NOTE:

SEE RFDS FOR RRH  
FREQUENCY AND  
MODEL NUMBER

PROPOSED RRU REFER TO THE  
FINAL RFDS AND CHART FOR  
QUANTITY, MODEL AND DIMENSIONS

NOTE:  
MOUNT PER MANUFACTURER'S  
SPECIFICATIONS.

## PROPOSED RRUS DETAIL

SCALE: N.T.S

NOTE:

REFER TO THE FINAL RF DATA SHEET  
FOR FINAL ANTENNA SETTINGS.

NOTE:

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DATED: NOVEMBER 17, 2020 (Rev.1)  
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## FINAL ANTENNA SCHEDULE

SCALE: N.T.S

PROPOSED NEW BALLAST MOUNT  
SITE PRO 1, P/N RT-RRU5HD  
(TOTAL OF 1 PER BETA SECTOR)

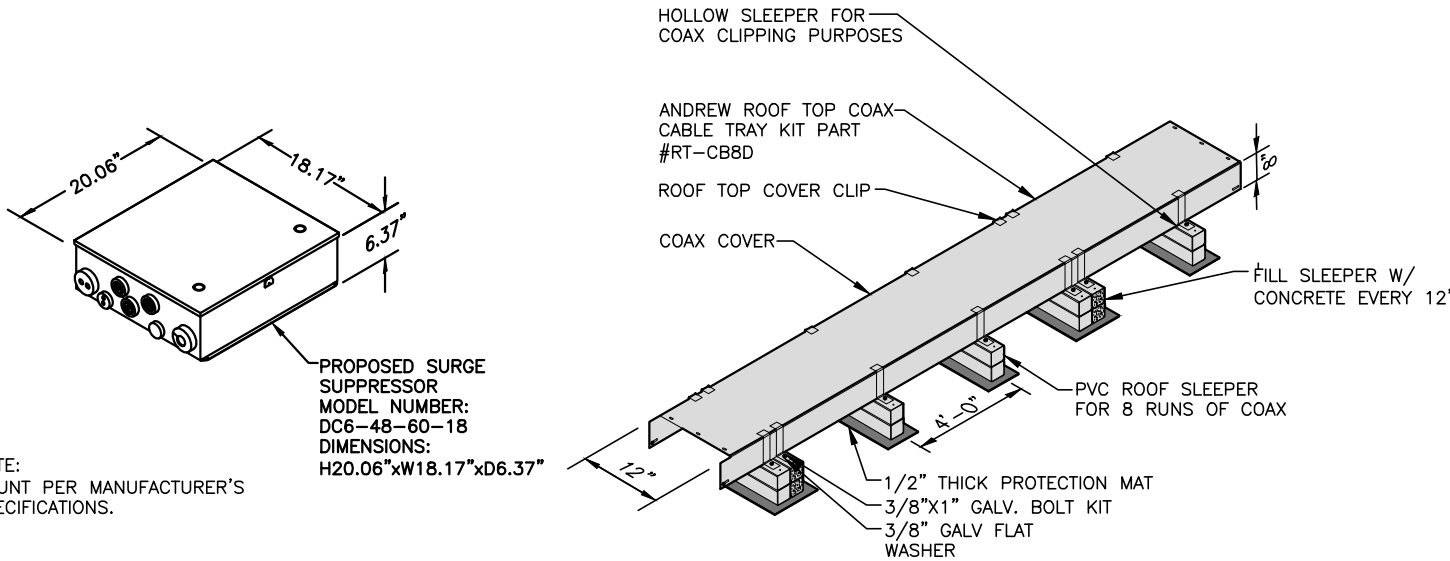
PROPOSED AT&T SURGE  
ARRESTOR (DC6-48-60-18)  
(TYP. OF 1 PER BETA  
SECTOR)

PROPOSED AT&T RRUS 8843  
B2/B66A (PCS/AWS)  
(TYP. OF 1 PER BETA SECTOR)

PROPOSED AT&T RRUS-32 B30 (WCS)  
(TYP. OF 1 PER BETA SECTOR)

PROPOSED AT&T RRUS 4449 B5/B12 (850/700)  
(TYP. OF 1 PER BETA SECTOR)

NOTE:  
MOUNT PROPOSED EQUIPMENT PER  
MANUFACTURER'S SPECIFICATIONS



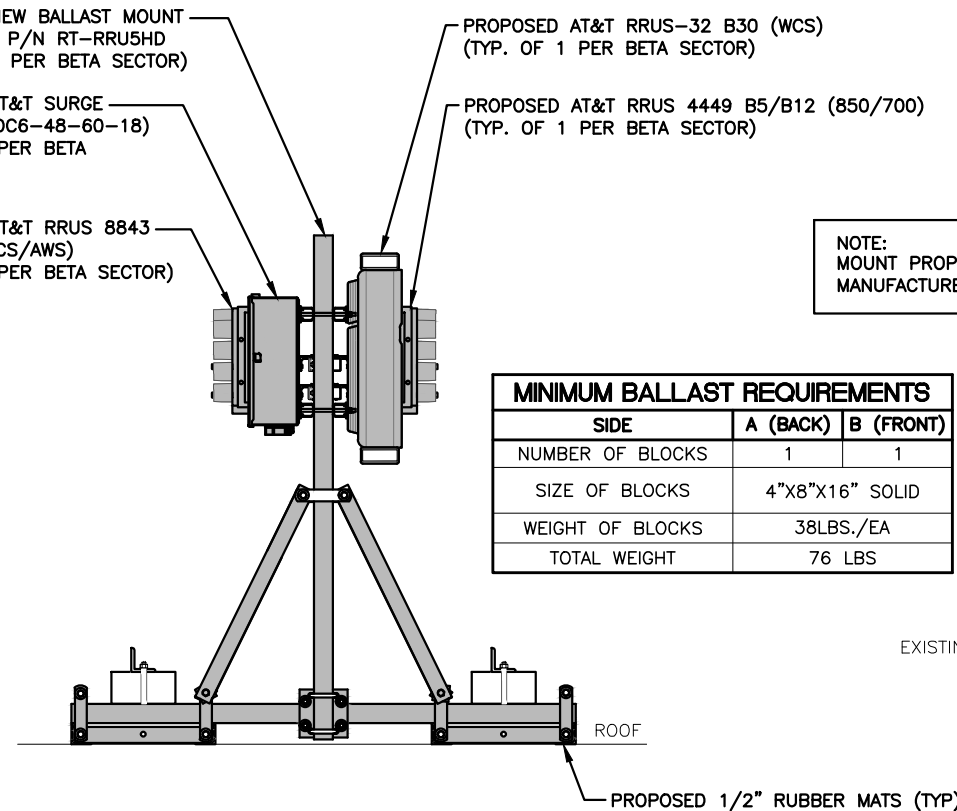
NOTE:  
MOUNT PER MANUFACTURER'S  
SPECIFICATIONS.

## DC SURGE SUPPRESSOR DETAIL

SCALE: N.T.S

## CABLE TRAY DETAIL

22x34 SCALE: N.T.S



## PROPOSED RRUS MOUNTING DETAIL (BETA SECTOR)

22x34 SCALE: 1"=1'-0"  
11x17 SCALE: 1/2"=1'-0"

## MINIMUM BALLAST REQUIREMENTS

SIDE	A (BACK)	B (FRONT)
NUMBER OF BLOCKS	1	1
SIZE OF BLOCKS	4"x8"x16" SOLID	
WEIGHT OF BLOCKS	38LBS./EA	
TOTAL WEIGHT	76 LBS	

## PROPOSED NETSURE 7100 POWER PLANT DETAIL

SCALE: N.T.S

SITE NUMBER: MA2222  
SITE NAME: CAMBRIDGE FIRST ST

215 FIRST STREET  
CAMBRIDGE, MA 02142  
MIDDLESEX COUNTY

at&t  
550 COCHITUATE ROAD  
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
2	11/20/20	ISSUED FOR CONSTRUCTION	GA	HC	DPH
1	10/28/20	ISSUED FOR REVIEW	GA	HC	DPH
0	09/08/20	ISSUED FOR REVIEW	GA	HC	DPH
A	06/25/20	ISSUED FOR REVIEW	GA	HC	DPH

SCALE: AS SHOWN DESIGNED BY: HC DRAWN BY: GA

AT&T

DETAILS

LTE 3C\_4C\_5C\_4TXRX 2020 UPGRADE

SITE NUMBER	DRAWING NUMBER	REV
MA2222	A-6	2

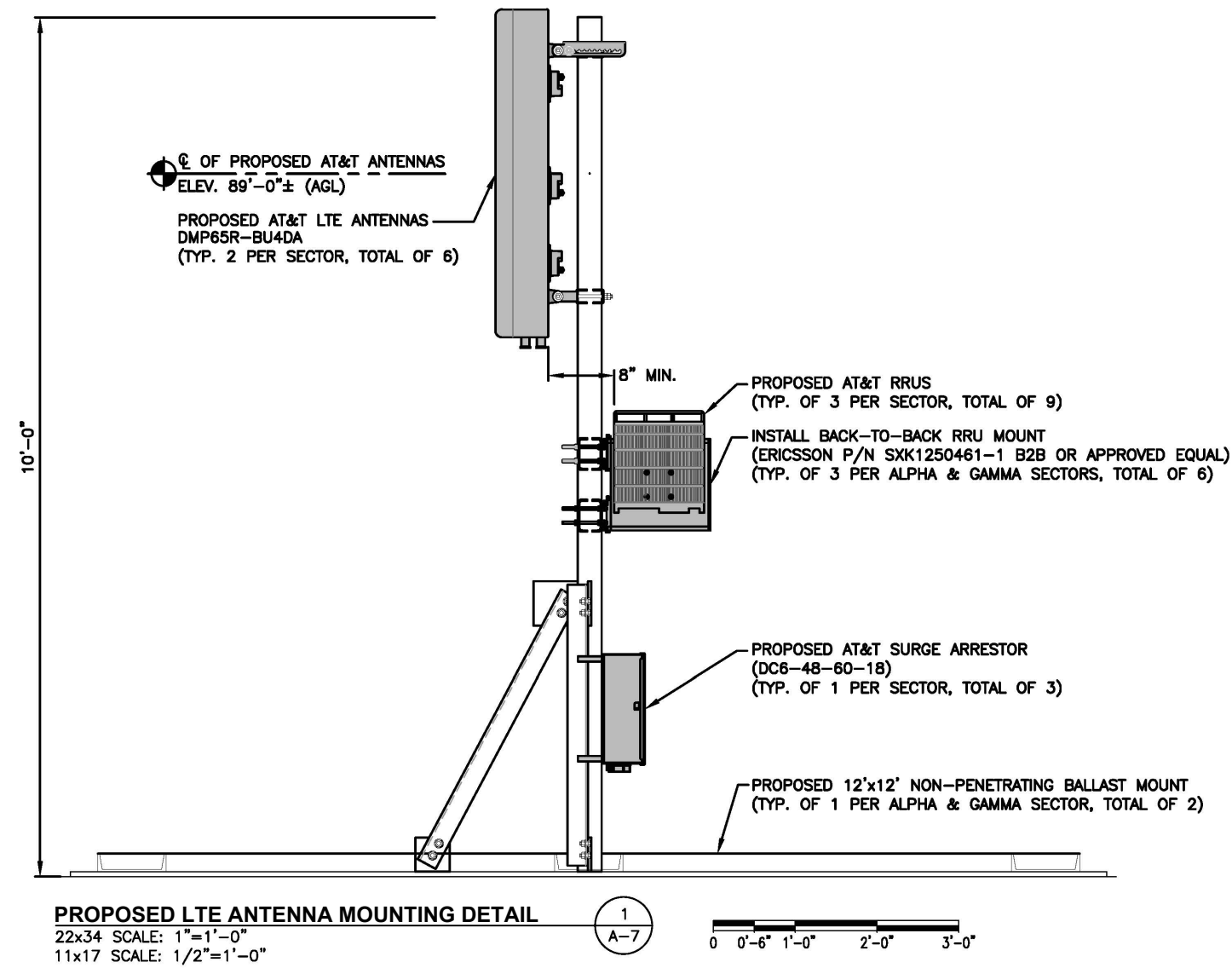
**HUDSON**  
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45 BEECHWOOD DRIVE  
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SALEM, NH 03079

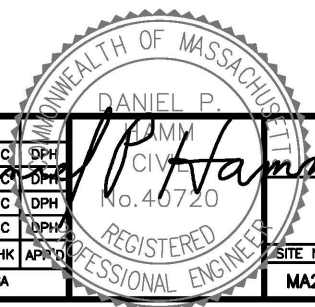
DANIEL P. HAMM  
REGISTERED PROFESSIONAL ENGINEER  
No. 40720

NOTE:  
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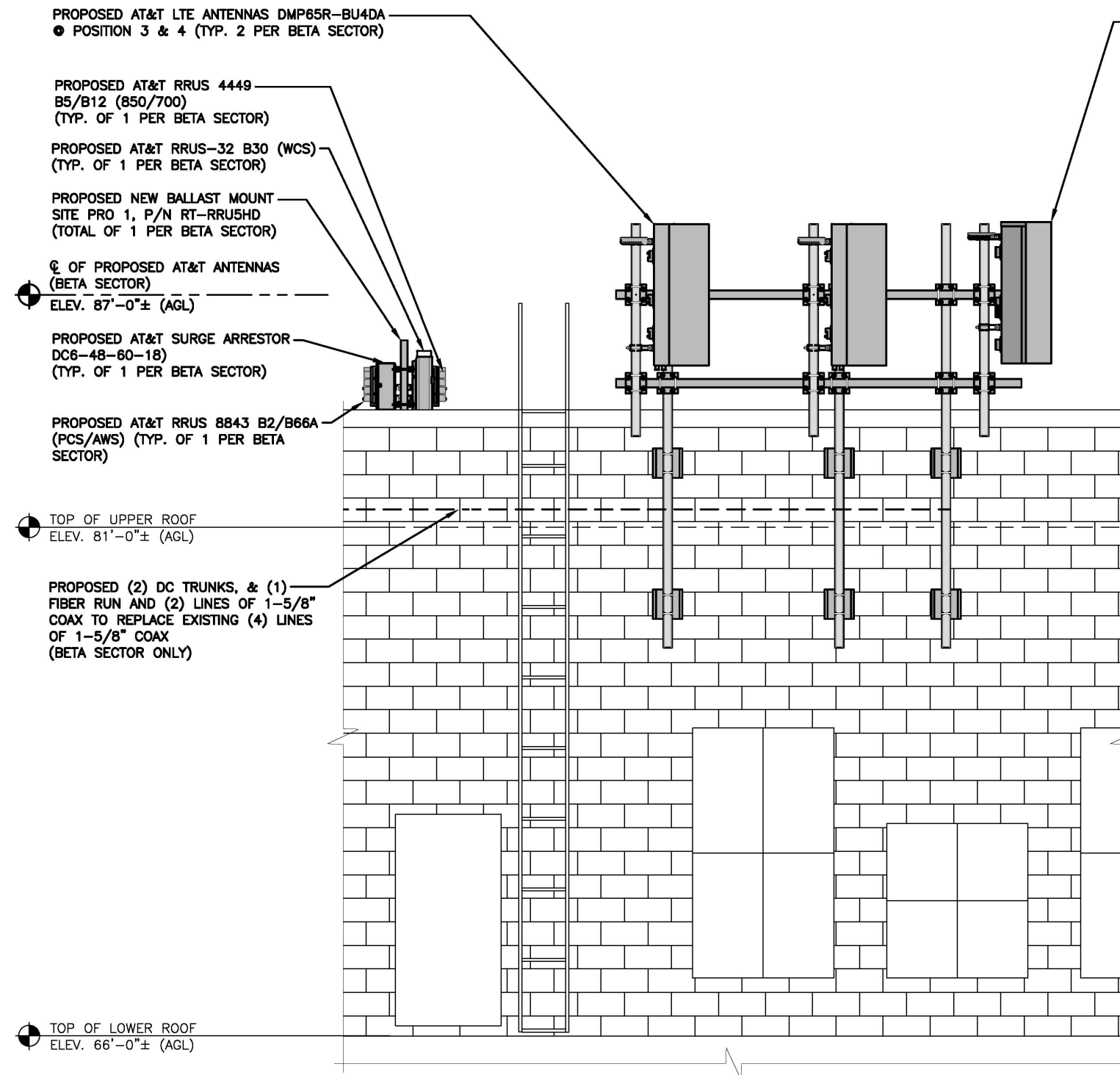
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A	06/25/20	ISSUED FOR REVIEW	GA	HC	DPH
SCALE:	AS SHOWN	DESIGNED BY:	HC	DRAWN BY:	GA



AT&T		
DETAILS		
LTE 3C_4C_5C_4TXRX 2020 UPGRADE		
SITE NUMBER	DRAWING NUMBER	REV
MA2222	A-7	2

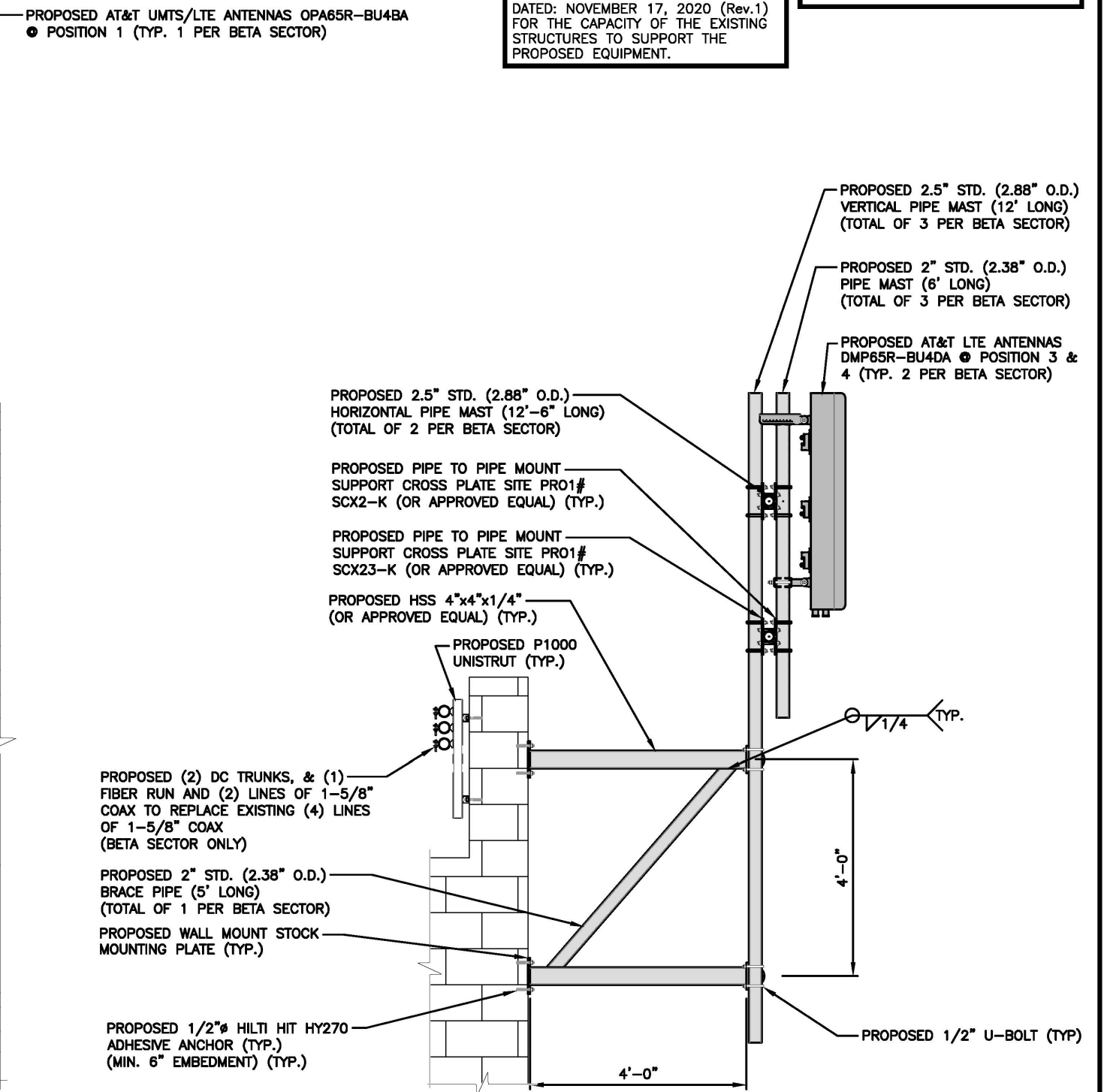
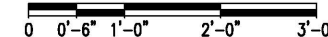
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22x34 SCALE: 1"=1'-0"  
11x17 SCALE: 1/2"=1'-0"

1  
A-8




22x34 SCALE: 3/4"=1'-0"  
11x17 SCALE: 3/8"=1'-0"

2  
AF8



215 FIRST STREET  
CAMBRIDGE, MA 02142  
MIDDLESEX COUNTY



2	11/20/20	ISSUED FOR CONSTRUCTION	GA	HC	DPH		AT&T	
1	10/28/20	ISSUED FOR REVIEW	GA	HC	DPH			
0	09/08/20	ISSUED FOR REVIEW	GA	HC	DPH		DETAILS	
A	06/25/20	ISSUED FOR REVIEW	GA	HC	DPH		LTE 3C_4C_5C_4TXRX 2020 UPGRADE	
NO.	DATE	REVISIONS	BY	CHK	APP'D		SITE NUMBER	DRAWING NUMBER
SCALE:	AS SHOWN	DESIGNED BY: HC	DRAWN BY: CHA			MA2222	A-8	2



STRUCTURAL NOTES:

- DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, INTERNATIONAL BUILDING CODE, EIA/TIA-222-H STRUCTURAL STANDARDS FOR STEEL ANTENNA, TOWERS AND ANTENNA SUPPORTING STRUCTURES.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER OF RECORD.
- DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 (Fy=50 ksi), MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE INDICATED.
- STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING", GRADE B, OR ASTM A53 PIPE STEEL BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL. ACTUAL OUTSIDE DIAMETER IS LARGER.
- STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325 TYPE-X "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 3/4" DIA UON.
- ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS OTHERWISE NOTED.
- ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
- FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZIRP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.
- CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND D.I.I. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "STEEL CONSTRUCTION MANUAL". 14TH EDITION.
- INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
- UNISTRUT SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP., WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1 5/8"x1 5/8"x12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
- EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-270 AND OR HY-200 SYSTEMS (AS SPECIFIED IN DWG.) OR ENGINEERS APPROVED EQUAL.
- EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I, HILTI KWIK BOLT III OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.
- WHERE ROOF PENETRATIONS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT AND COORDINATE RELATED WORK WITH THE BUILDING OWNER AND THE EXISTING ROOF INSTALLER. WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO NOT VOID THE EXISTING ROOF WARRANTY. ROOF SHALL BE WATERTIGHT.
- ALL FIBERGLASS MEMBERS USED ARE AS MANUFACTURED BY STRONGWELL COMPANY OF BRISTOL, VA 24203. ALL DESIGN CRITERIA FOR THESE MEMBERS IS BASED ON INFORMATION PROVIDED IN THE DESIGN MANUAL. ALL REQUIREMENTS PUBLISHED IN SAID MANUAL MUST BE STRICTLY ADHERED TO.
- NO MATERIALS TO BE ORDERED AND NO WORK TO BE COMPLETED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED IN WRITING.
- SUBCONTRACTOR SHALL FIREPROOF ALL STEEL TO PRE-EXISTING CONDITIONS.

MASSACHUSETTS AMENDMENTS TO THE IBC  
(REFERENCE 780 CMR):

**107.6 CONSTRUCTION CONTROL.**  
**107.6.1 GENERAL.** THIS SECTION SHALL APPLY TO THE CONSTRUCTION CONTROLS, PROFESSIONAL SERVICES AND CONTRACTOR SERVICES REQUIRED FOR BUILDINGS AND STRUCTURES NEEDING REGISTERED DESIGN PROFESSIONAL SERVICES.

**107.6.1.1 SPECIALIZED STRUCTURES.** TELECOMMUNICATION TOWERS, WIND TURBINE TOWERS, AND SIMILAR STRUCTURES ARE ENGINEERED STRUCTURES AND SHALL BE SUBJECT TO THE REQUIREMENTS OF SECTION 107.6.

**107.6.2.2 CONSTRUCTION.** THE REGISTERED DESIGN PROFESSIONALS WHO ARE RESPONSIBLE FOR THE DESIGN, PLANS, CALCULATIONS, AND SPECIFICATIONS, THEIR DESIGNEE OR THE REGISTERED DESIGN PROFESSIONALS WHO HAVE BEEN RETAINED FOR CONSTRUCTION PHASE SERVICES, SHALL PERFORM THE FOLLOWING TASKS:

- REVIEW, FOR CONFORMANCE TO 780 CMR AND THE DESIGN CONCEPT, SHOP DRAWINGS, SAMPLES AND OTHER SUBMITTALS BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS.
- PERFORM THE DUTIES FOR REGISTERED DESIGN PROFESSIONALS IN 780 CMR 17.00 SPECIAL INSPECTIONS AND TESTS.
- BE PRESENT AT INTERVALS APPROPRIATE TO THE STAGE OF CONSTRUCTION TO BECOME GENERALLY FAMILIAR WITH THE PROGRESS AND QUALITY OF THE WORK AND TO DETERMINE IF THE WORK IS BEING PERFORMED IN A MANNER CONSISTENT WITH THE CONSTRUCTION DOCUMENTS AND 780 CMR.

THE PERMIT APPLICATION SHALL NOT BE DEEMED COMPLETED UNTIL ALL OF THE CONSTRUCTION DOCUMENTS REQUIRED BY 780 CMR HAVE BEEN SUBMITTED. DOCUMENTATION INDICATING THAT WORK COMPLIES WITH THE PLANS AND SPECIFICATIONS SHALL BE PROVIDED AT THE COMPLETION OF EACH PHASE WHEN REQUIRED BY THE BUILDING OFFICIAL. UPON COMPLETION OF THE WORK, THE REGISTERED DESIGN PROFESSIONAL SHALL FILE A FINAL DOCUMENT TO THE BUILDING OFFICIAL INDICATING THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THW APPROVED PLANS AND 780 CMR. FORMS FOR CONSTRUCTION CONTROL WHEN REQUIRED BY THE BUILDING OFFICIAL SHALL BE THOSE FOUND AT <http://www.mass.gov/ocabr/government/oca-agencies/dpl-ip/ops/>.

**107.6.2.3 SPECIAL INSPECTIONS AND TESTS.** SPECIAL INSPECTIONS AND TESTS SHALL BE PROVIDED IN ACCORDANCE WITH 780 CMR 17.00 SPECIAL INSPECTIONS AND TESTS.

**170.6.2.4 NON STRUCTURAL SYSTEM TEST AND INSPECTION.** TESTS AND INSPECTIONS OF NON-STRUCTURAL SYSTEMS SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE ENGINEERING PRACTICE STANDARDS, REFERENCED STANDARDS LISTED IN 780 CMR 35.00: REFERENCED STANDARDS, OR AS OTHERWISE SPECIFIED IN 780 CMR.

**107.6.3 CONSTRUCTION CONTRACTOR SERVICES.** THE ACTUAL CONSTRUCTION OF THE WORK SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AS IDENTIFIED ON THE APPROVED PERMIT AND SHALL INVOLVE THE FOLLOWING:

- EXECUTION OF ALL WORK IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
- EXECUTION AND CONTROL OF ALL METHODS OF CONSTRUCTION IN A SAFE AND SATISFACTORY MANNER IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL STATUTES AND REGULATIONS.
- UPON COMPLETION OF THE CONSTRUCTION, CERTIFICATION IN WRITING TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE THAT, TO THE BEST OF THE CONTRACTOR'S KNOWLEDGE AND BELIEF, CONSTRUCTION HAS BEEN DONE IN SUBSTANTIAL ACCORD WITH SECTION 107.6 AND WITH ALL PERTINENT DEVIATIONS SPECIFICALLY NOTED. THE BUILDING OFFICIAL MAY REQUIRE A COPY OF THIS CERTIFICATION.

**107.6.4 PROJECT REPRESENTATION.** A PROJECT REPRESENTATIVE MAY BE REQUIRED BY THE BUILDING OFFICIAL. THIS REPRESENTATIVE SHALL KEEP DAILY RECORDS AND SUBMIT REPORTS AS MAY BE REQUIRED BY THE BUILDING OFFICIAL. THIS PROJECT REPRESENTATION REQUIREMENT SHALL BE DETERMINED PRIOR TO THE ISSUANCE OF THE PERMIT AND MAY BE A PREREQUISITE FOR PERMIT ISSUANCE. REFUSAL BY THE APPLICANT TO PROVIDE SUCH SERVICE IF REQUIRED BY THE BUILDING OFFICIAL SHALL RESULT IN THE DENIAL OF THE PERMIT. ALL FEES AND COSTS RELATED TO THE PERFORMANCE OF PROJECT REPRESENTATION SHALL BE BORNE BY THE OWNER. WHEN APPLICATIONS FOR UNUSUAL DESIGNS OR MAGNITUDE OF CONSTRUCTION ARE FILED, OR WHERE REFERENCE STANDARDS REQUIRE SPECIAL ARCHITECTURAL OR ENGINEERING INSPECTIONS, THE BUILDING OFFICIAL MAY REQUIRE THAT THE PROJECT REPRESENTATIVE BE A REGISTERED DESIGN PROFESSIONAL IN ADDITION TO THOSE REGISTERED DESIGN PROFESSIONALS REQUIRED ELSEWHERE IN ACCORDANCE WITH SECTION 107.6.

**107.6.5 BUILDING OFFICIAL RESPONSIBILITY.** NOTHING CONTAINED IN SECTION 107.6 SHALL HAVE THE EFFECT OF WAIVING OR LIMITING THE BUILDING OFFICIAL'S AUTHORITY TO ENFORCE 780 CMR WITH RESPECT TO EXAMINATION OF THE CONTRACT DOCUMENTS, INCLUDING PLANS, COMPUTATIONS AND SPECIFICATIONS, AND FIELD INSPECTIONS.

SPECIAL INSPECTIONS (REFERENCE IBC CHAPTER 17):

**GENERAL:** WHERE APPLICATION IS MADE FOR CONSTRUCTION, THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE INSPECTION CHECKLIST ABOVE.

THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND ENGINEERS OF RECORD INVOLVED IN THE DESIGN OF THE PROJECT ARE PERMITTED TO ACT AS THE APPROVED AGENCY AND THEIR PERSONNEL ARE PERMITTED TO ACT AS THE SPECIAL INSPECTOR FOR THE WORK DESIGNED BY THEM, PROVIDED THOSE PERSONNEL MEET THE QUALIFICATION REQUIREMENTS.

STATEMENT OF SPECIAL INSPECTIONS: THE APPLICANT SHALL SUBMIT A STATEMENT OF SPECIAL INSPECTIONS PREPARED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 107.1 AS A CONDITION FOR ISSUANCE. THIS STATEMENT SHALL BE IN ACCORDANCE WITH SECTION 1705.

REPORT REQUIREMENT: SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS SHALL BE SUBMITTED.

REQUIRED INSPECTIONS AND SITE REVIEW DOCUMENT AS A  
CONDITION OF THE BUILDING PERMIT THE FOLLOWING  
INSPECTIONS AND SITE REVIEWS IDENTIFIED BY THE BUILDING  
OFFICIAL ARE REQUIRED FOR WORK PER THE  
9TH EDITION OF THE MASSACHUSETTS STATE BUILDING CODE,  
780 CMR, SECTION 110 AND CHAPTER 17

REQUIRED SITE REVIEW AND DOCUMENTATION FOR PORTIONS OR PHASES  
CONSTRUCTION<sup>1,6,7</sup>  
(TO BE PERFORMED BY THE APPROPRIATE REGISTERED DESIGN PROFESSIONAL OR HIS/HER DESIGNEE OR M.G.L.C  
112 §81R CONTRACTOR)

SITE REVIEW AND DOCUMENTATION	X	SITE REVIEW AND DOCUMENTATION	X
SOIL CONDITION/ANALYSIS/REPORT		ENERGY EFFICIENCY REQUIREMENTS	
FOOTING AND FOUNDATION (INCLUDING REINFORCEMENT AND FOUNDATION ATTACHMENT)		FIRE ALARM INSTALLATION <sup>2</sup>	
CONCRETE FLOOR AND UNDER FLOOR		FIRE SUPPRESSION INSTALLATION <sup>3</sup>	
LOWEST FLOOR FLOOD ELEVATION		FIELD REPORTS <sup>5</sup>	
STRUCTURAL FRAME – WALL/FLOOR/ROOF	X	CARBON MONOXIDE DETECTION SYSTEM <sup>4</sup>	
LATH AND PLASTER/GYPSUM		SEISMIC REINFORCEMENT	
FIRE RESISTANT WALL/PARTITIONS FRAMING		SMOKE CONTROL SYSTEMS	
FIRE RESISTANT WALL/PARTITIONS FINISH ATTACHMENTS		SMOKE AND HEAT VENTS	
ABOVE CEILING INSPECTION		ACCESSIBILITY (521 CMR)	
FIRE BLOCKING/STOPPING SYSTEM		OTHER:	
EMERGENCY LIGHTING/EXIT SIGNAGE			
MEANS OF EGRESS COMPONENTS		SPECIAL INSPECTIONS (SECTION 1704):	X
ROOFING, COPING/SYSTEM			
VENTING SYSTEMS (KITCHEN, CHEMICAL, FUME)			
MECHANICAL SYSTEMS			

NOTES:

- ALL CONNECTIONS TO BE SHOP WELDED & FIELD BOLTED USING 3/4"ø A325-X BOLTS, UNLESS OTHERWISE NOTIFIED.
- SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED BEFORE ORDERING MATERIAL.
- SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED PRIOR TO STEEL FABRICATION.
- VERIFICATION OF EXISTING ROOF CONSTRUCTION IS REQUIRED PRIOR TO THE INSTALLATION OF THE ROOF PLATFORM. ENGINEER OF RECORD IS TO APPROVE EXISTING CONDITIONS IN ORDER TO MOVE FORWARD.
- CENTERLINE OF PROPOSED STEEL PLATFORM SUPPORT COLUMNS TO BE CENTRALLY LOCATED OVER THE EXISTING BUILDING COLUMNS.
- EXISTING BRICK MASONRY COLUMNS/BEARING TO BE REPAIRED/REPLACED AT ALL PROPOSED PLATFORM SUPPORT POINTS. ENGINEER OF RECORD TO REVIEW AND APPROVE.

NOTES:

- REQUIRED FOR ANY NEW SHOP FABRICATED FRP OR STEEL.
- PROVIDED BY MANUFACTURER, REQUIRED IF HIGH STRENGTH BOLTS OR STEEL.
- PROVIDED BY GENERAL CONTRACTOR; PROOF OF MATERIALS.
- HIGH WIND ZONE INSPECTION CATB 120MPH OR CAT C,D 110MPH INSPECT FRAMING OF WALLS, ANCHORING, FASTENING SCHEDULE.
- ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-11 D.9.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-11 D.8.2.4.
- AS REQUIRED; FOR ANY FIELD CHANGES TO THE ITEMS IN THIS TABLE.

SPECIAL INSPECTION CHECKLIST

BEFORE CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	ENGINEER OF RECORD APPROVED SHOP DRAWINGS <sup>1</sup>
REQUIRED	MATERIAL SPECIFICATIONS REPORT <sup>2</sup>
N/A	FABRICATOR NDE INSPECTION
REQUIRED	PACKING SLIPS <sup>3</sup>

ADDITIONAL TESTING AND INSPECTIONS:

DURING CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	STEEL INSPECTIONS
N/A	HIGH STRENGTH BOLT INSPECTIONS
N/A	HIGH WIND ZONE INSPECTIONS <sup>4</sup>
N/A	FOUNDATION INSPECTIONS
N/A	CONCRETE COMP. STRENGTH, SLUMP TESTS AND PLACEMENT
N/A	POST INSTALLED ANCHOR VERIFICATION <sup>5</sup>
N/A	GROUT VERIFICATION
N/A	CERTIFIED WELD INSPECTION
N/A	EARTHWORK: LIFT AND DENSITY
N/A	ON SITE COLD GALVANIZING VERIFICATION
N/A	GUY WIRE TENSION REPORT

ADDITIONAL TESTING AND INSPECTIONS:

AFTER CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	MODIFICATION INSPECTOR REDLINE OR RECORD DRAWINGS <sup>6</sup>
N/A	POST INSTALLED ANCHOR PULL-OUT TESTING
REQUIRED	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

- IT IS THE RESPONSIBILITY OF THE PERMIT APPLICANT TO NOTIFY THE BUILDING OFFICIAL OF REQUIRED INSPECTIONS (X). INSPECTION OF 780 CMR FIRE PROTECTION SYSTEMS MAY BE WITNESSED BY THE FIRE OFFICIAL AND INSTALLATION PERMITS ARE REQUIRED FROM THE FIRE DEPARTMENT PER 527 CMR.
- INCLUDE NFPA 72 TEST AND ACCEPTANCE DOCUMENTATION
- INCLUDE APPLICABLE NFPA 13, 13R, 13D, 14, 15, 17, 20, 241, ETC. – TEST AND ACCEPTANCE DOCUMENTATION
- INCLUDE NFPA 720 RECORD OF COMPLETION AND INSPECTION AND TEST FORM
- INCLUDE FIELD REPORTS AND RELATED DOCUMENTATION
- WORK SHALL NOT PROCEED, OR BE CONCEALED, UNTIL THE REQUIRED INSPECTION HAS BEEN APPROVED BY THE BUILDING OFFICIAL, AND NOTHING WITHIN CONSTRUCTION CONTROL SHALL HAVE THE EFFECT OF WAIVING OR LIMITING THE BUILDING OFFICIAL'S AUTHORITY TO ENFORCE THIS CODE WITH RESPECT TO EXAMINATION OF THE CONTRACT DOCUMENTS, INCLUDING PLANS, COMPUTATIONS AND SPECIFICATIONS, AND FIELD INSPECTIONS.
- ROUGH AND/OR FINISH INSPECTIONS OF ELECTRICAL, PLUMBING, OR SHEET METAL SHALL BE INSPECTED PRIOR TO ROUGH AND FINISH INSPECTIONS BY THE BUILDING OFFICIAL.



45 BEECHWOOD DRIVE  
NORTH ANDOVER, MA 01845

TEL: (978) 557-5553  
FAX: (978) 336-5586



12 INDUSTRIAL WAY  
SALEM, NH 03079

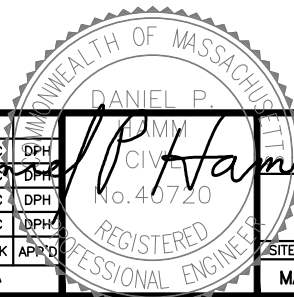
SITE NUMBER: MA2222  
SITE NAME: CAMBRIDGE FIRST ST

215 FIRST STREET  
CAMBRIDGE, MA 02142  
MIDDLESEX COUNTY



550 COCHITUATE ROAD  
FRAMINGHAM, MA 01701

2	11/20/20	ISSUED FOR CONSTRUCTION	BY	HC	DPH	
1	10/28/20	ISSUED FOR REVIEW	BY	HC	DPH	
0	09/08/20	ISSUED FOR REVIEW	GA	HC	DPH	
A	06/25/20	ISSUED FOR REVIEW	GA	HC	DPH	
NO.	DATE	REVISIONS	BY	CHK	APPR	
SCALE:		AS SHOWN	DESIGNED BY:	HC	DRAWN BY:	GA

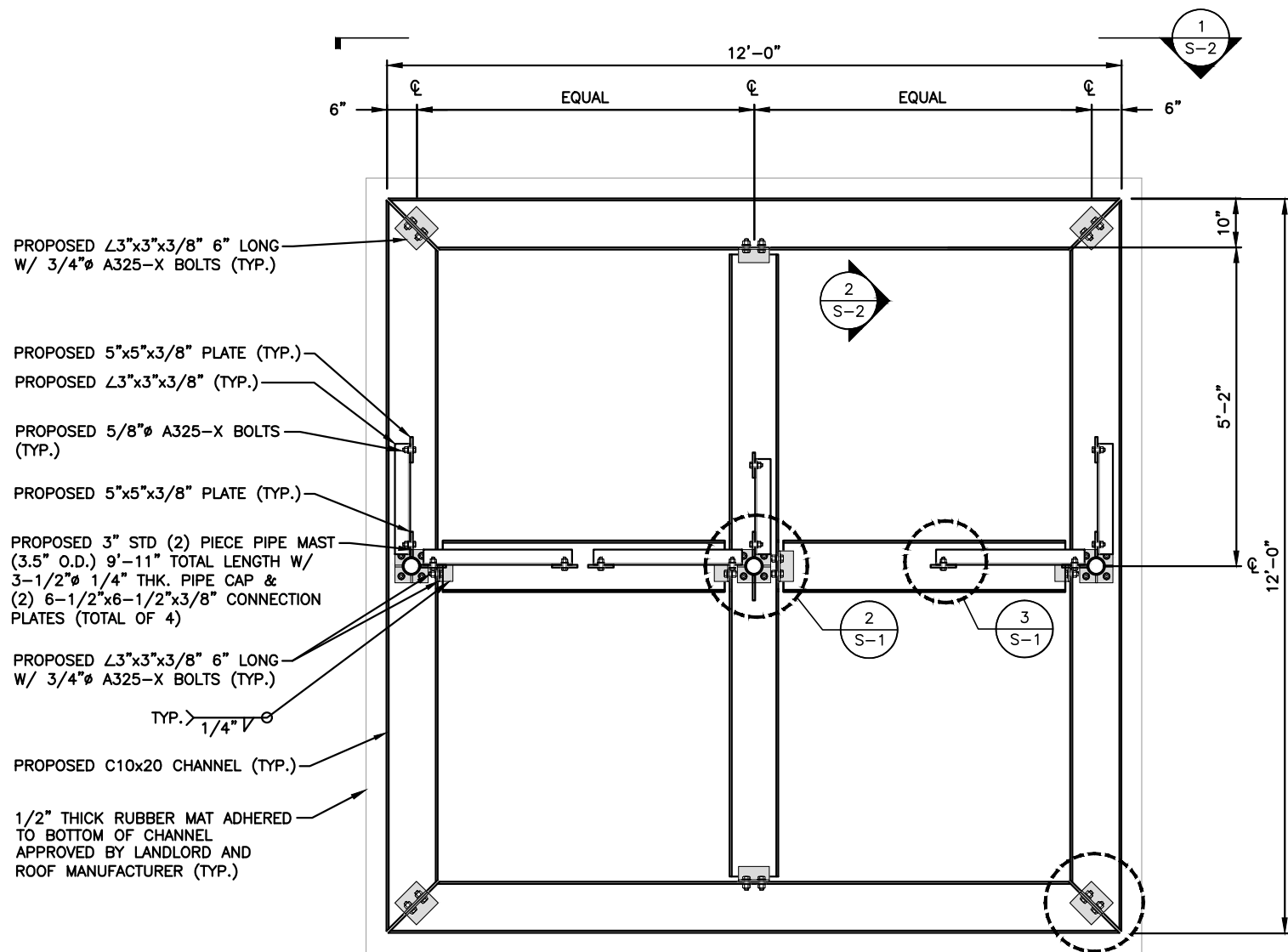


AT&T

STRUCTURAL NOTES

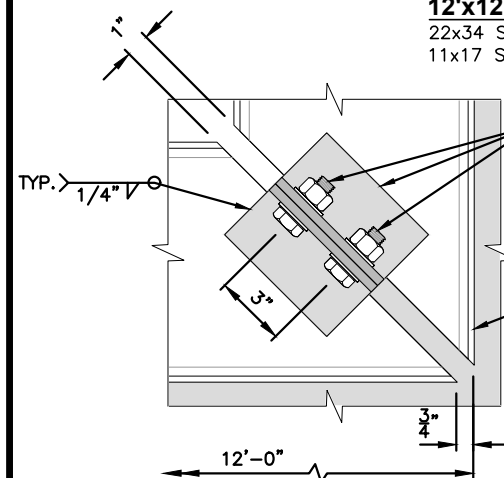
LTE 3C\_4C\_5C\_4TXRX 2020 UPGRADE

SITE NUMBER	DRAWING NUMBER	REV
MA2222	SN-1	2



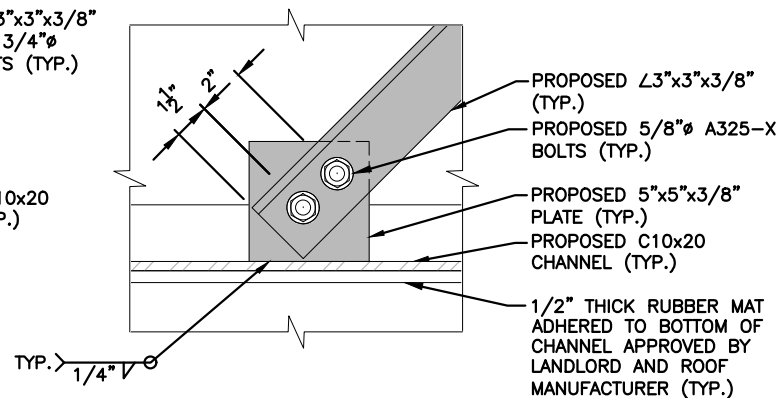
**12'x12' BALLAST MOUNT - PLAN**

22x34 SCALE:  $3/4"=1'-0"$   
11x17 SCALE:  $3/8"=1'-0"$



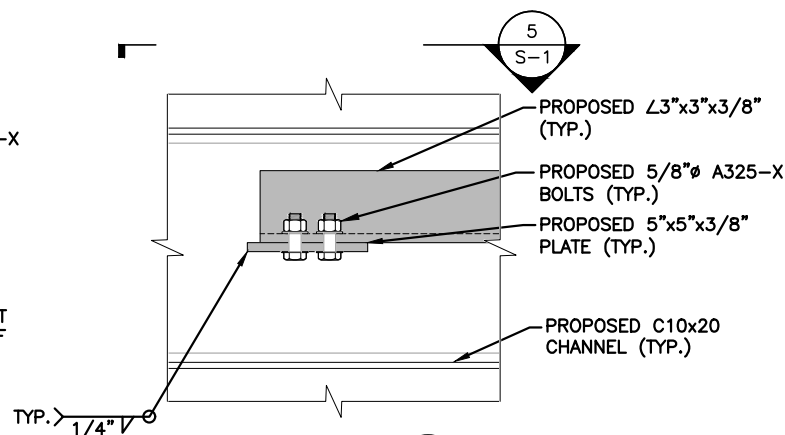
**CONNECTION DETAIL 4**

22x34 SCALE:  $3"=1'-0"$   
11x17 SCALE:  $1-1/2"=1'-0"$



**CONNECTION DETAIL 5**

22x34 SCALE:  $3"=1'-0"$   
11x17 SCALE:  $1-1/2"=1'-0"$



**CONNECTION DETAIL 3**

22x34 SCALE:  $3"=1'-0"$   
11x17 SCALE:  $1-1/2"=1'-0"$

PROPOSED NEW BALLAST MOUNT  
SITE PRO 1, P/N RT-RRU5HD  
(TOTAL OF 1 PER BETA SECTOR)

PROPOSED AT&T SURGE  
ARRESTOR (DC6-48-60-18)  
(TYP. OF 1 PER BETA  
SECTOR)

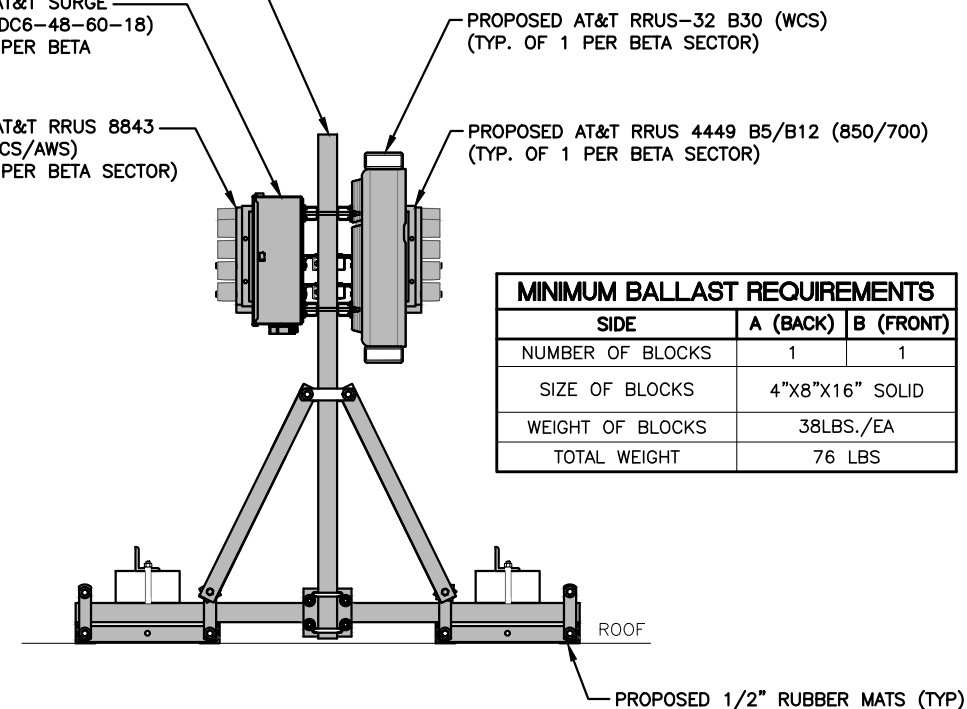
PROPOSED AT&T RRUS 8843  
B2/B66A (PCS/AWS)  
(TYP. OF 1 PER BETA SECTOR)

**NOTE:**

REFER TO **STRUCTURAL ANALYSIS**  
BY: HUDSON DESIGN GROUP, LLC.  
DATED: NOVEMBER 17, 2020 (Rev.1)  
FOR THE CAPACITY OF THE EXISTING  
STRUCTURES TO SUPPORT THE  
PROPOSED EQUIPMENT.

**NOTE:**

REFER TO THE FINAL RF DATA SHEET  
FOR FINAL ANTENNA SETTINGS.



**PROPOSED RRUS MOUNTING DETAIL (BETA SECTOR)**

22x34 SCALE:  $1"=1'-0"$   
11x17 SCALE:  $1/2"=1'-0"$

**MINIMUM BALLAST REQUIREMENTS**

SIDE	A (BACK)	B (FRONT)
NUMBER OF BLOCKS	1	1
SIZE OF BLOCKS	4"X8"X16" SOLID	
WEIGHT OF BLOCKS	38LBS./EA	
TOTAL WEIGHT	76 LBS	

PROPOSED  $\angle 3" \times 3" \times 3/8"$  (TYP.)

PROPOSED C10x20 CHANNEL (TYP.)

PROPOSED  $5" \times 5" \times 3/8"$  PLATE (TYP.)

PROPOSED  $5/8"$  A325-X BOLTS (TYP.)

PROPOSED  $5" \times 5" \times 3/8"$  PLATE (TYP.)

PROPOSED  $\angle 3" \times 3" \times 3/8"$  (TYP.)

PROPOSED 3" STD (2) PIECE PIPE MAST (3.5" O.D.) 9'-11" TOTAL LENGTH W/ 3-1/2"  $\times$  1/4" THK. PIPE CAP & (2) 6-1/2"  $\times$  6-1/2"  $\times$  3/8" CONNECTION PLATES (TOTAL OF 4)

PROPOSED 6-1/2"  $\times$  6-1/2"  $\times$  3/8" CONNECTION PLATE (TYP. OF 2 PER PIPE MAST)

PROPOSED 1-1/2"  $\times$  1-1/2"  $\times$  3/8" GUSSET PLATE (TYP. OF 12 PER PIPE MAST)

PROPOSED  $\angle 3" \times 3" \times 3/8"$  6" LONG W/  $3/4"$  A325-X BOLTS (TYP.)

TYP.  $1/4"$

PROPOSED 6-1/2"  $\times$  6-1/2"  $\times$  3/8" CONNECTION PLATE (TYP. OF 2 PER PIPE MAST)

PROPOSED 1-1/2"  $\times$  1-1/2"  $\times$  3/8" GUSSET PLATE (TYP. OF 12 PER PIPE MAST)

PROPOSED  $\angle 3" \times 3" \times 3/8"$  6" LONG W/  $3/4"$  A325-X BOLTS (TYP.)

TYP.  $1/4"$

PROPOSED 6-1/2"  $\times$  6-1/2"  $\times$  3/8" CONNECTION PLATE (TYP. OF 2 PER PIPE MAST)

PROPOSED 1-1/2"  $\times$  1-1/2"  $\times$  3/8" GUSSET PLATE (TYP. OF 12 PER PIPE MAST)

PROPOSED  $\angle 3" \times 3" \times 3/8"$  6" LONG W/  $3/4"$  A325-X BOLTS (TYP.)

TYP.  $1/4"$

PROPOSED 6-1/2"  $\times$  6-1/2"  $\times$  3/8" CONNECTION PLATE (TYP. OF 2 PER PIPE MAST)

PROPOSED 1-1/2"  $\times$  1-1/2"  $\times$  3/8" GUSSET PLATE (TYP. OF 12 PER PIPE MAST)

PROPOSED  $\angle 3" \times 3" \times 3/8"$  6" LONG W/  $3/4"$  A325-X BOLTS (TYP.)

TYP.  $1/4"$

PROPOSED 6-1/2"  $\times$  6-1/2"  $\times$  3/8" CONNECTION PLATE (TYP. OF 2 PER PIPE MAST)

PROPOSED 1-1/2"  $\times$  1-1/2"  $\times$  3/8" GUSSET PLATE (TYP. OF 12 PER PIPE MAST)

PROPOSED  $\angle 3" \times 3" \times 3/8"$  6" LONG W/  $3/4"$  A325-X BOLTS (TYP.)

TYP.  $1/4"$

**CONNECTION DETAIL 2**

22x34 SCALE:  $3"=1'-0"$   
11x17 SCALE:  $1-1/2"=1'-0"$



PROPOSED 3" STD (2) PIECE PIPE MAST  
(3.5" O.D.) 9'-11" TOTAL LENGTH W/  
3-1/2" 1/4" THK. PIPE CAP &  
(2) 6-1/2"x6-1/2"x3/8" CONNECTION PLATES  
(TOTAL OF 4)

PROPOSED 5"x5"x3/8" PLATE (TYP.)

PROPOSED 5/8" A325-X BOLTS (TYP.)

PROPOSED L3"x3"x3/8" (TYP.)

PROPOSED 5"x5"x3/8" PLATE (TYP.)

PROPOSED C10x20 CHANNEL (TYP.)

1/2" THICK RUBBER MAT ADHERED TO  
BOTTOM OF CHANNEL APPROVED BY  
LANDLORD AND ROOF MANUFACTURER (TYP.)

### 12'x12' BALLAST MOUNT - FRONT SECTION

22x34 SCALE: 1/2"=1'-0"  
11x17 SCALE: 1/4"=1'-0"

1  
S-2

0 1'-0" 2'-0" 4'-0" 6'-0"

PROPOSED 3" STD (2) PIECE PIPE MAST  
(3.5" O.D.) 9'-11" TOTAL LENGTH W/  
3-1/2" 1/4" THK. PIPE CAP &  
(2) 6-1/2"x6-1/2"x3/8" CONNECTION  
PLATES (TOTAL OF 4)

PROPOSED 5"x5"x3/8" PLATE  
(TYP.)

PROPOSED L3"x3"x3/8" (TYP.)

PROPOSED 5"x5"x3/8" PLATE  
(TYP.)

PROPOSED C10x20  
CHANNEL (TYP.)

1/2" THICK RUBBER MAT  
ADHERED TO BOTTOM OF  
CHANNEL APPROVED BY  
LANDLORD AND ROOF  
MANUFACTURER (TYP.)

### 12'x12' BALLAST MOUNT - SIDE ELEVATION

22x34 SCALE: 1/2"=1'-0"  
11x17 SCALE: 1/4"=1'-0"

2  
S-2

0 1'-0" 2'-0" 4'-0" 6'-0"

PROPOSED 1-1/2"x1-1/2"x3/8"  
GUSSET PLATE  
(TYP. OF 12 PER PIPE MAST)

PROPOSED 6-1/2"x6-1/2"x3/8"  
CONNECTION PLATE  
(TYP. OF 2 PER PIPE MAST)

PROPOSED 5/8" A325-X  
BOLTS (TYP.)

### PIPE MAST CONNECTION POINT DETAIL

22x34 SCALE: 3"=1'-0"  
11x17 SCALE: 1-1/2"=1'-0"

5  
S-2

0 0'-2" 0'-4" 0'-8" 1'-0"

PROPOSED C10x20  
CHANNEL (TYP.)

PROPOSED 1-1/2"x1-1/2"x3/8"  
GUSSET PLATE  
(TYP. OF 12 PER PIPE MAST)

PROPOSED 3" STD PIPE  
(3.5" O.D.) 9'-5/8" LONG  
(TOTAL OF 4)

### PIPE MAST CONNECTION @ BASE CHANNEL

22x34 SCALE: 3"=1'-0"  
11x17 SCALE: 1-1/2"=1'-0"

4  
S-2

PROPOSED 6-1/2"x6-1/2"x3/8"  
CONNECTION PLATE  
(TYP. OF 2 PER PIPE MAST)

PROPOSED 1-1/2"x1-1/2"x3/8"  
GUSSET PLATE  
(TYP. OF 12 PER PIPE MAST)

### PIPE MAST CONNECTION - ELEVATION

22x34 SCALE: 3"=1'-0"  
11x17 SCALE: 1-1/2"=1'-0"

3  
S-2

0 0'-2" 0'-4" 0'-8" 1'-0"

#### NOTE:

REFER TO THE FINAL RF DATA SHEET  
FOR FINAL ANTENNA SETTINGS.

#### NOTE:

REFER TO **STRUCTURAL ANALYSIS**  
BY: HUDSON DESIGN GROUP, LLC.  
DATED: NOVEMBER 17, 2020 (Rev.1)  
FOR THE CAPACITY OF THE EXISTING  
STRUCTURES TO SUPPORT THE  
PROPOSED EQUIPMENT.

SITE NUMBER: MA2222  
SITE NAME: CAMBRIDGE FIRST ST

215 FIRST STREET  
CAMBRIDGE, MA 02142  
MIDDLESEX COUNTY

at&t  
550 COCHITUATE ROAD  
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
2	11/20/20	ISSUED FOR CONSTRUCTION	GA	HC	DPH
1	10/28/20	ISSUED FOR REVIEW	GA	HC	DPH
0	09/08/20	ISSUED FOR REVIEW	GA	HC	DPH
A	06/25/20	ISSUED FOR REVIEW	GA	HC	DPH

DANIEL P. HAMM  
REGISTERED PROFESSIONAL ENGINEER  
No. 40720

AT&T

BALLAST FRAME DETAILS

LTE 3C\_4C\_5C\_4TXRX 2020 UPGRADE

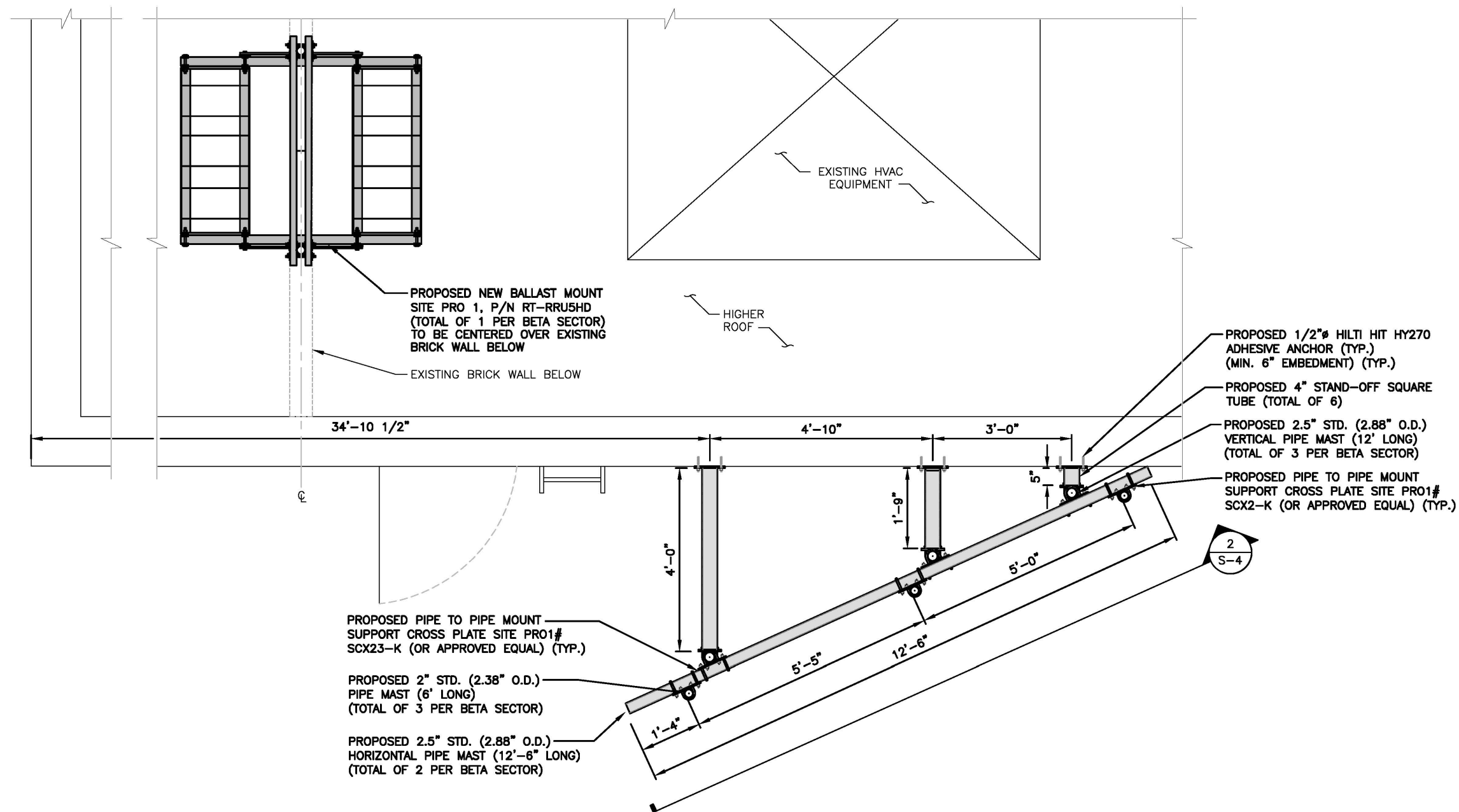
SITE NUMBER	DRAWING NUMBER	REV
MA2222	S-2	2

NOTE:

REFER TO THE FINAL RF DATA SHEET  
FOR FINAL ANTENNA SETTINGS.

NOTE:

REFER TO **STRUCTURAL ANALYSIS**  
BY: HUDSON DESIGN GROUP, LLC.  
DATED: NOVEMBER 17, 2020 (Rev.1)  
FOR THE CAPACITY OF THE EXISTING  
STRUCTURES TO SUPPORT THE  
PROPOSED EQUIPMENT.



PROPOSED MOUNTING PLAN DETAIL (BETA SECTOR)

22x34 SCALE: 3/4"=1'-0"  
11x17 SCALE: 3/8"=1'-0"

1  
S-3

0 8" 1'-4" 2'-8" 4'-0"

**HDG** HUDSON  
Design Group LLC

45 BEECHWOOD DRIVE  
NORTH ANDOVER, MA 01845  
TEL: (978) 557-5553  
FAX: (978) 336-5586

**SAI**

12 INDUSTRIAL WAY  
SALEM, NH 03079

SITE NUMBER: MA2222  
SITE NAME: CAMBRIDGE FIRST ST

215 FIRST STREET  
CAMBRIDGE, MA 02142  
MIDDLESEX COUNTY

**at&t**

550 COCHITUATE ROAD  
FRAMINGHAM, MA 01701

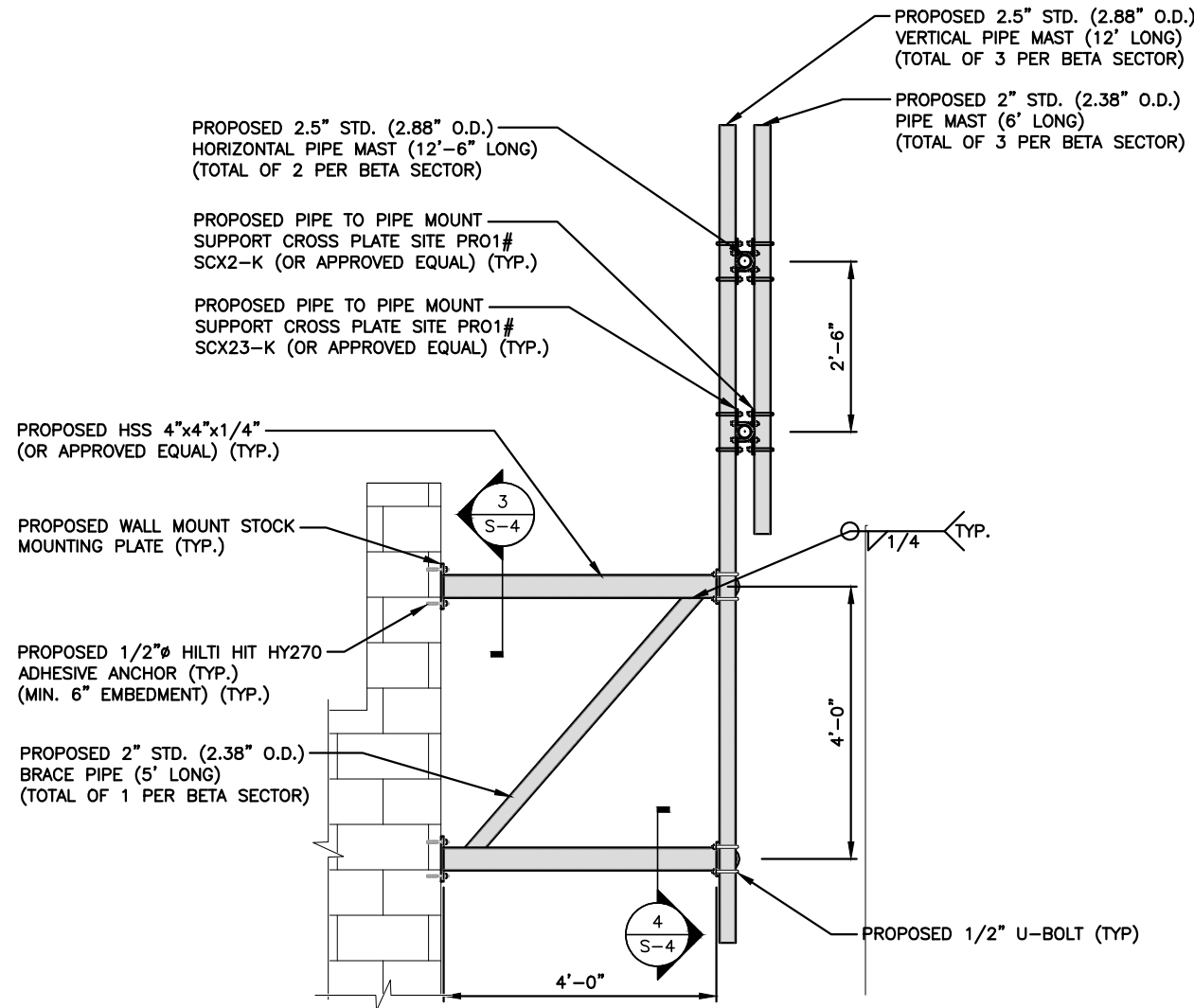
REVISIONS				APPROVALS				PROJECT INFORMATION		
NO.	DATE	REVISIONS	BY	CHK	APP'D	DESIGNED BY	DRAWN BY	SITE NUMBER	DRAWING NUMBER	REV
2	11/20/20	ISSUED FOR CONSTRUCTION	GA	HC	DPH			MA2222	S-3	2
1	10/28/20	ISSUED FOR REVIEW	GA	HC	DPH					
0	09/08/20	ISSUED FOR REVIEW	GA	HC	DPH					
A	06/25/20	ISSUED FOR REVIEW	GA	HC	DPH					

NOTE:

REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

NOTE:

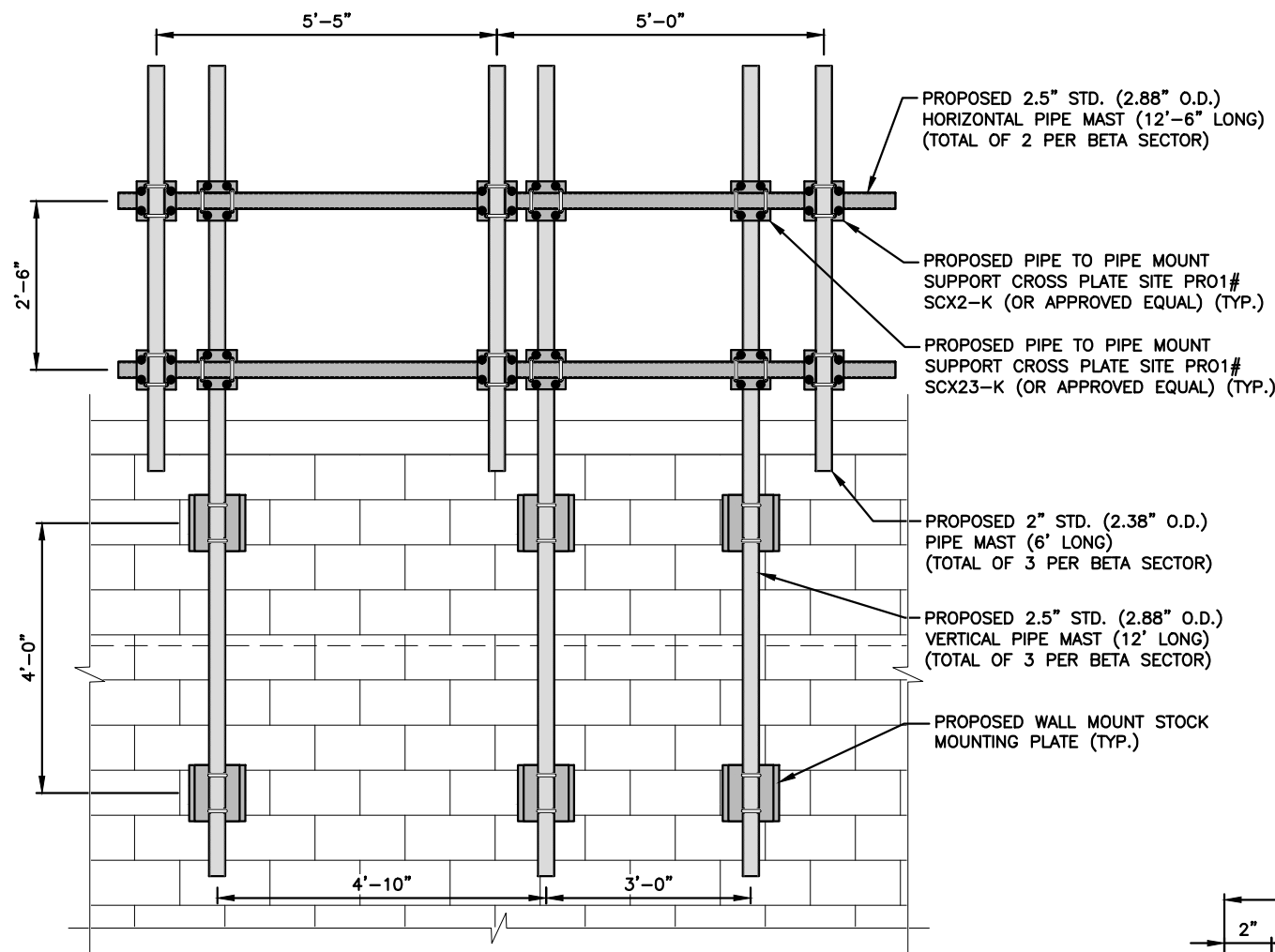
REFER TO **STRUCTURAL ANALYSIS** BY: HUDSON DESIGN GROUP, LLC. DATED: NOVEMBER 17, 2020 (Rev.1) FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT.



**PROPOSED MOUNTING DETAIL  
(BETA SECTOR)**

22x34 SCALE: 3/4"=1'-0"  
11x17 SCALE: 3/8"=1'-0"

1  
S-4



**PROPOSED MOUNTING ELEVATION DETAIL  
(BETA SECTOR)**

22x34 SCALE: 3/4"=1'-0"  
11x17 SCALE: 3/8"=1'-0"

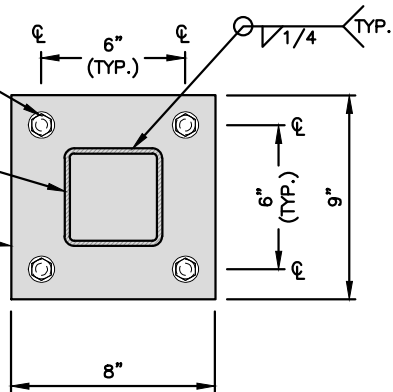
2  
S-4



PROPOSED 1/2"Ø HILTI HIT HY270  
ADHESIVE ANCHOR (TYP.)  
(MIN. 6" EMBEDMENT) (TYP.)

PROPOSED HSS  
4"x4"x1/4" (SEE 1/S-1  
FOR LENGTHS) (OR  
APPROVED EQUAL) (TYP.)

PROPOSED 8"x9"x1/2" PLATE  
(TYP.)



**CONNECTION DETAIL 3**

22x34 SCALE: 3"=1'-0"  
11x17 SCALE: 1-1/2"=1'-0"

3  
S-4

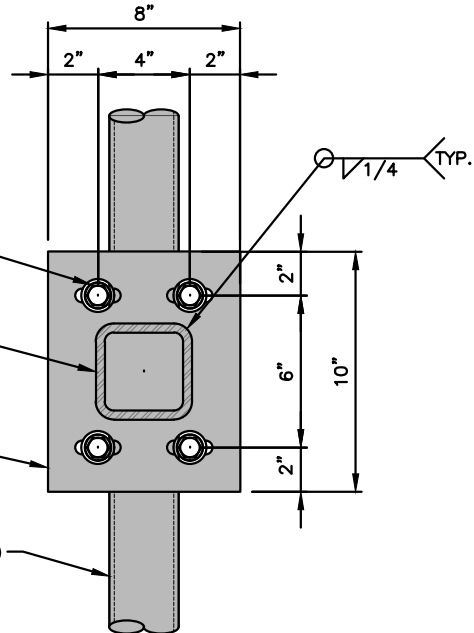


PROPOSED 1/2" U-BOLT  
(TYP.)

PROPOSED HSS  
4"x4"x1/4" (SEE 1/S-1  
FOR LENGTHS) (OR  
APPROVED EQUAL) (TYP.)

PROPOSED 8"x10"x1/2"  
PLATE (TYP.)

PROPOSED 2.5" STD. (2.88" O.D.)  
VERTICAL PIPE MAST (12' LONG)  
(TOTAL OF 3 PER BETA SECTOR)

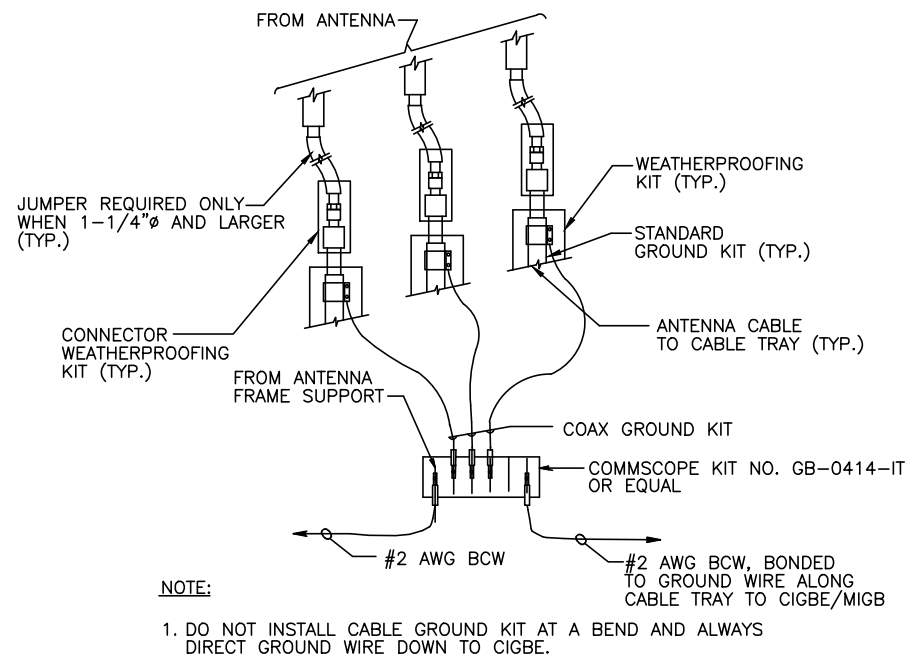


**CONNECTION DETAIL 4**

22x34 SCALE: 3"=1'-0"  
11x17 SCALE: 1-1/2"=1'-0"

4  
S-4

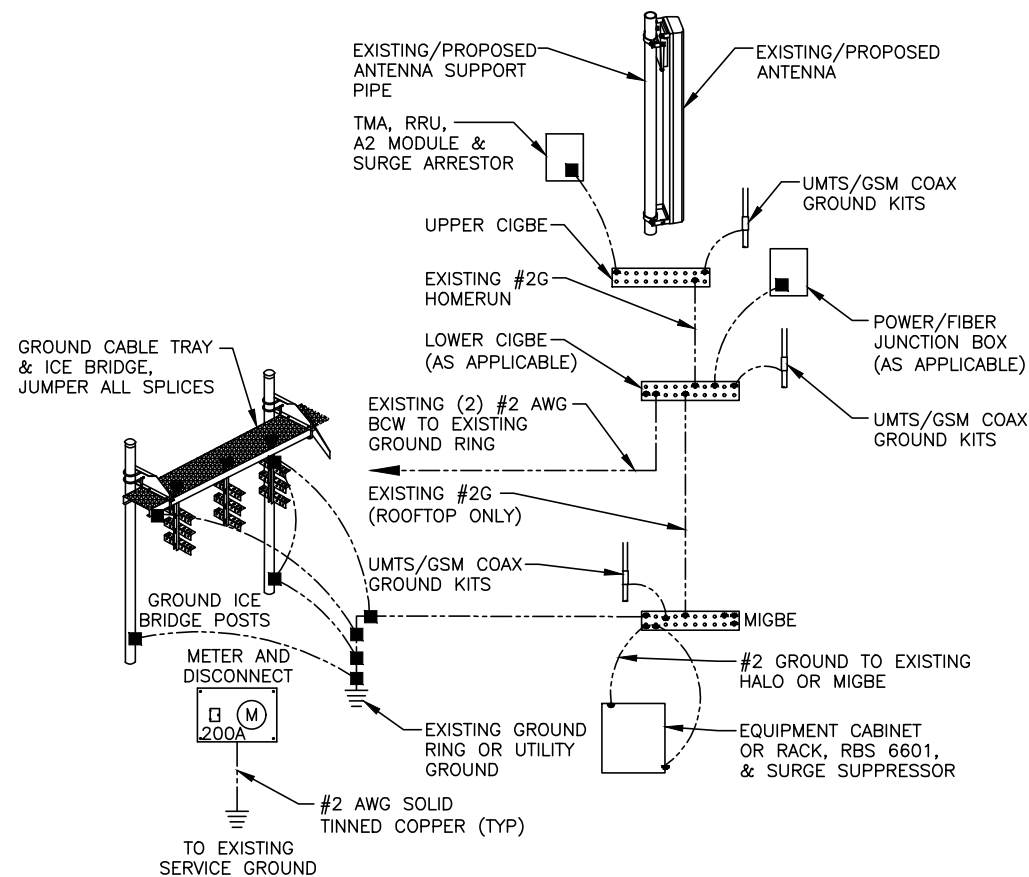




**GROUND WIRE TO GROUND BAR CONNECTION DETAIL**

SCALE: N.T.S

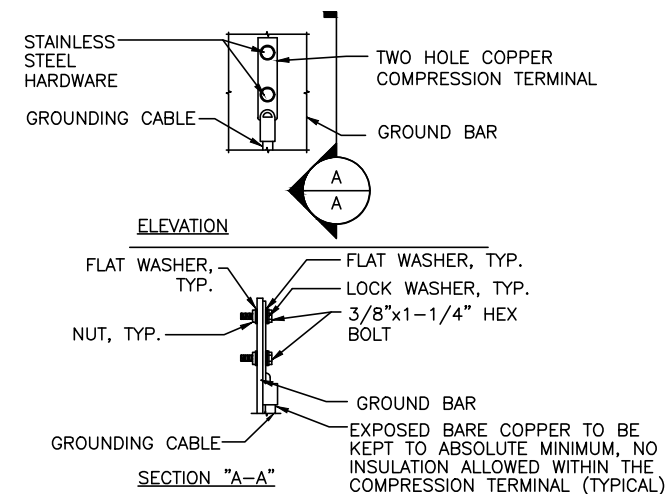
1  
G-1



**GROUNDING RISER DIAGRAM**

SCALE: N.T.S

2  
G-1



**NOTES:**

1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATION.
3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB

**TYPICAL GROUND BAR CONNECTION DETAIL**

SCALE: N.T.S

3  
G-1

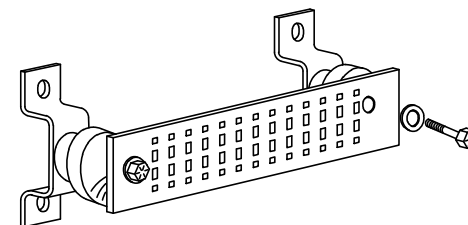
EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

**SECTION "P" - SURGE PRODUCERS**

CABLE ENTRY PORTS (HATCH PLATES) (#2 AWG)  
GENERATOR FRAMEWORK (IF AVAILABLE) (#2 AWG)  
TELCO GROUND BAR  
COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2 AWG)  
+24V POWER SUPPLY RETURN BAR (#2 AWG)  
-48V POWER SUPPLY RETURN BAR (#2 AWG)  
RECTIFIER FRAMES.

**SECTION "A" - SURGE ABSORBERS**

INTERIOR GROUND RING (#2 AWG)  
EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2 AWG)  
METALLIC COLD WATER PIPE (IF AVAILABLE) (#2 AWG)  
BUILDING STEEL (IF AVAILABLE) (#2 AWG)



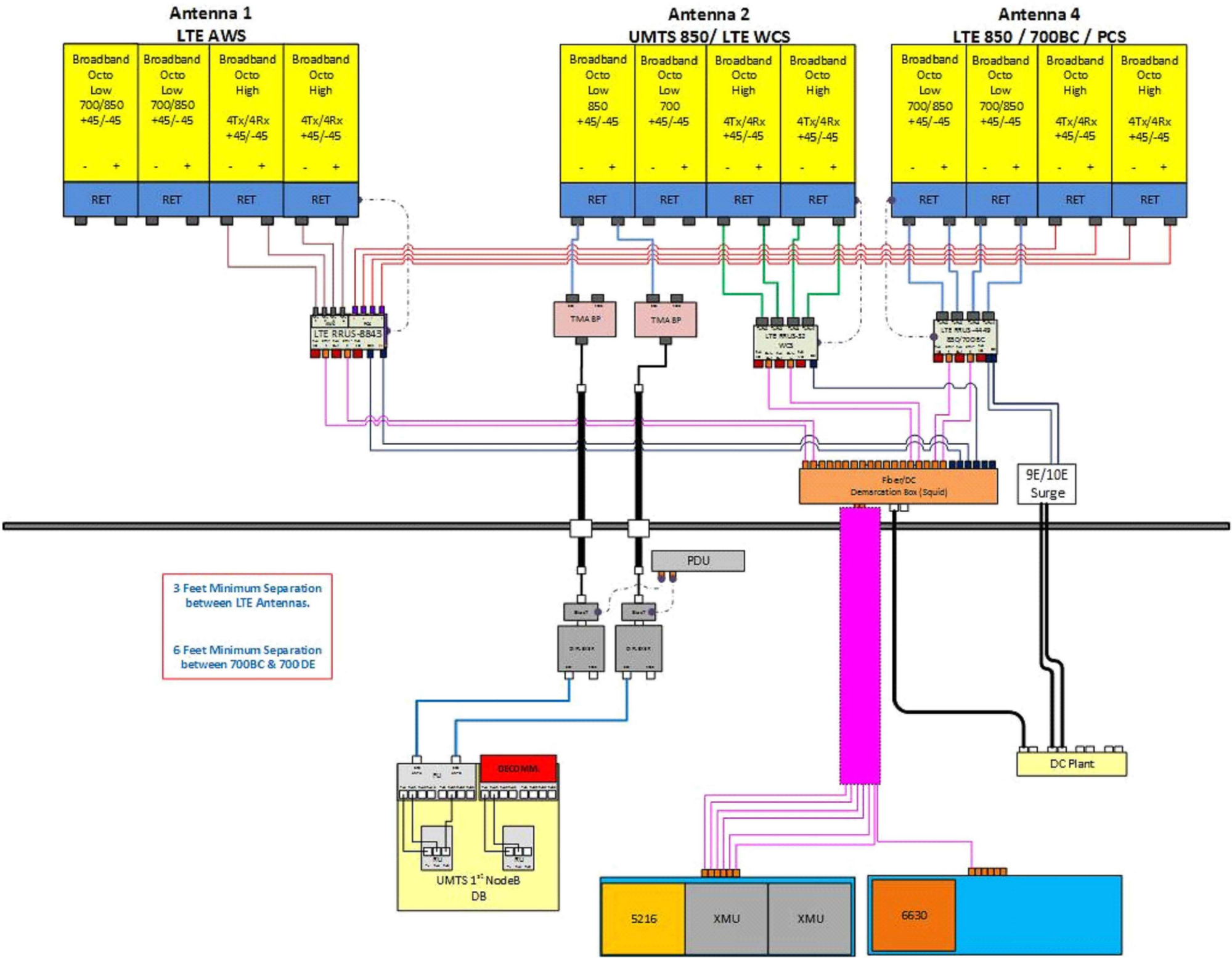
**GROUND BAR - DETAIL (AS REQUIRED)**

SCALE: N.T.S

4  
G-1



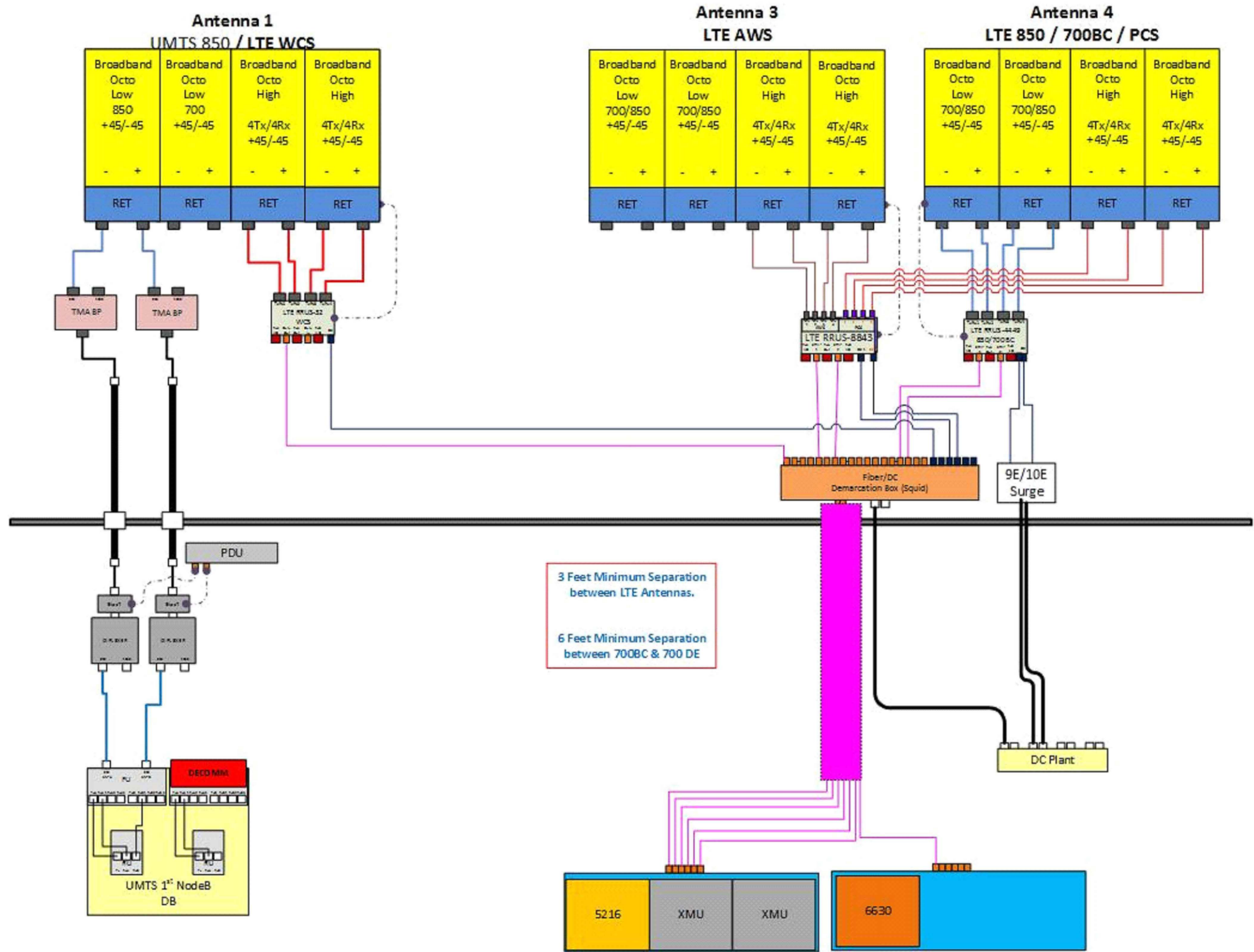
ALPHA SECTOR



NOTE:  
1. CONTRACTOR TO CONFIRM ALL PARTS.  
2. INSTALL ALL EQUIPMENT TO  
MANUFACTURER'S RECOMMENDATIONS

NOTE:  
REFER TO THE FINAL RF DATA SHEET  
FOR FINAL ANTENNA SETTINGS.

BETA SECTOR



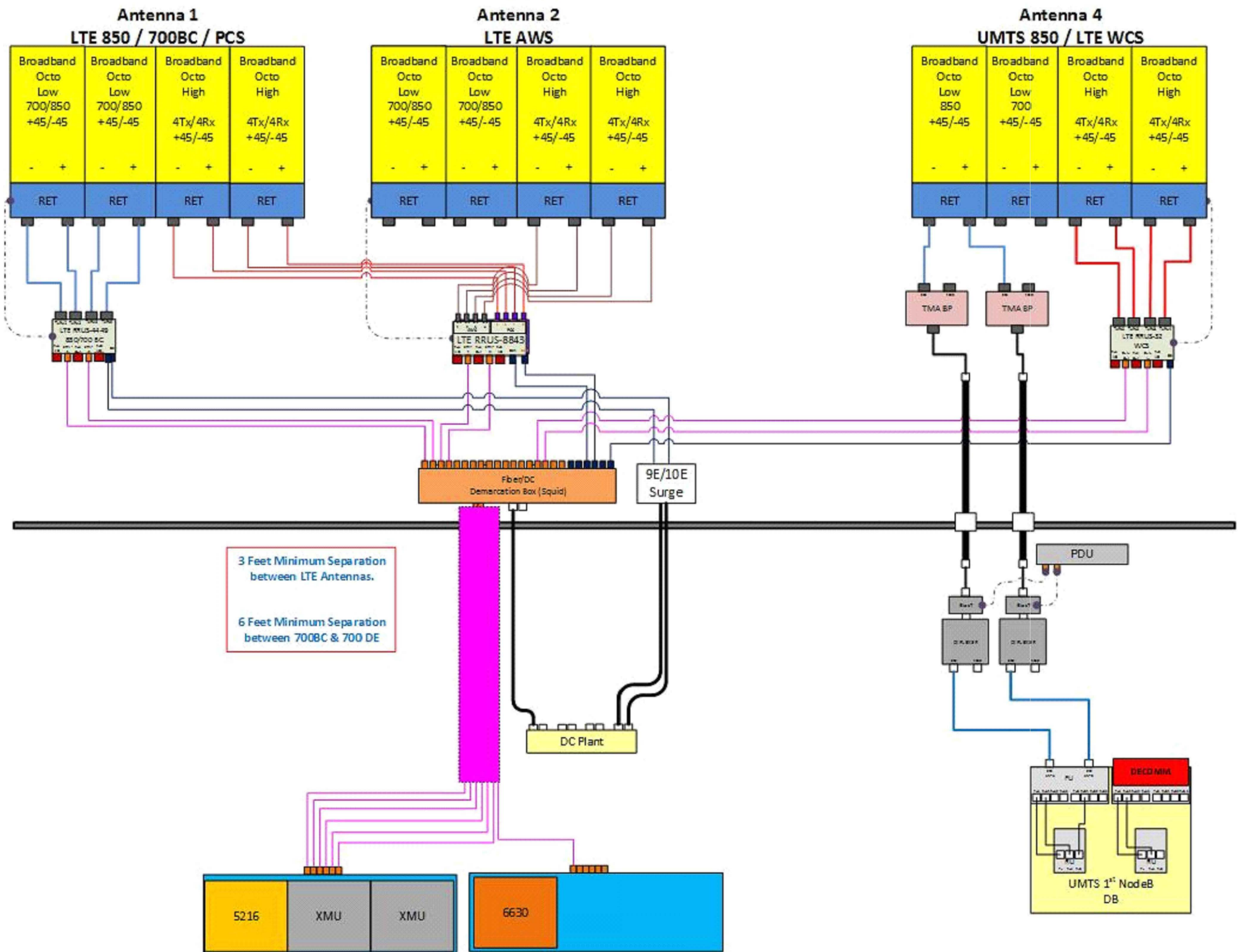
RF PLUMBING DIAGRAM 1  
SCALE: N.T.S. RF-2

NOTE:  
1. CONTRACTOR TO CONFIRM ALL PARTS.  
2. INSTALL ALL EQUIPMENT TO MANUFACTURER'S RECOMMENDATIONS

NOTE:  
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.



GAMMA SECTOR



RF PLUMBING DIAGRAM 1  
SCALE: N.T.S. RF-3

NOTE:  
1. CONTRACTOR TO CONFIRM ALL PARTS.  
2. INSTALL ALL EQUIPMENT TO MANUFACTURER'S RECOMMENDATIONS

NOTE:  
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.



January 5, 2021

Donna P. Lopez, City Clerk City of Cambridge City Hall 795 Massachusetts Avenue Cambridge, MA 02139	Constantine Alexander, Chair Board of Zoning Appeal City Hall 795 Massachusetts Avenue Cambridge, MA 02139
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Applicant: New Cingular Wireless PCS, LLC ("AT&T")  
Property Address: 215 First Street.  
Assessor's Map 15, Lot 3 (the "Property")  
Re: Application for:  
(i) Eligible Facilities Request pursuant to Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012, 47 U.S.C. § 1455; or, in the alternative,  
(ii) Special Permit under Cambridge Zoning Ordinance Section 4.32(g)(1) and M.G.L. c. 40A, Section 9; and  
(iii) Any other zoning relief required.  
(All relief if and to the extent necessary, all rights reserved)

Dear Ms. Lopez, Mr. Alexander and Members of the Board of Zoning Appeal:

Pursuant to Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 (a/k/a the "Spectrum Act" or "Section 6409"), 47 U.S.C. § 1455, as further implemented by the Federal Communications Commission's Report and Order *In re Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies*, FCC Docket No. 13-238, Report and Order No. 14-153 (October 17, 2014) (the "FCC Order"), New Cingular Wireless PCS, LLC ("AT&T") hereby submits this Eligible Facilities Request ("Request"); and, in the alternative, applies for a special permit from the City of Cambridge Board of Zoning Appeal (the "Board") under Section 432(g)(1) of the Cambridge Zoning Ordinance (the "Ordinance") to modify its existing "Telephone Exchange including Transmission Facilities to serve a Mobile Communication System" (the "Facility") on and within the existing building located at 215 First Street (the "Special Permit Application").<sup>2</sup>

<sup>2</sup> AT&T submits this Request, Special Permit application and supporting materials subject to a full and complete reservation of AT&T's rights under the Spectrum Act and the FCC Order including without limitation its rights with respect to (i) any submittal requirements or approval criteria that are inconsistent with the prohibitions established by the FCC Order, (ii) any delay beyond the deadlines established in the FCC Order, (iii) the imposition of conditions on any approval that are inconsistent with the FCC Order, and (iv) referral or requirement to a discretionary review process such as a special permit.

Under Section 6409, AT&T's proposed modification of its existing transmission equipment on and within the existing building, previously approved by the Board for use as a wireless communication base station, does "not substantially change the physical dimensions" of the existing building. Therefore, AT&T's Request must be approved administratively, including the issuance of a building permit, to enable AT&T to make the proposed modifications to its transmission equipment.

In the alternative, as demonstrated in this application letter, the AT&T's proposed modifications to its existing Facility on the Property located in the PUD-3 zoning district satisfy the requirements for the grant of a special permit pursuant to Section 10.43 of the Ordinance.

## **I. APPLICATION PACKAGE**

Enclosed with this application is a check payable to the City of Cambridge in the amount of \$500.00. In addition to the signed original of this letter are copies of the letter and the following materials:

1. The following completed and signed application forms:
  - a. BZA Application Form – General Information;
  - b. BZA Application Form – Ownership Information;
  - c. BZA Application Form – Dimensional Requirements;
  - d. BZA Application Form – Supporting Statement for a Special Permit; and
  - e. BZA Application Form – Check List;
2. AT&T's relevant FCC License information;
3. Drawings by Hudson Design Group consisting of 19 pages dated 11/20/20;
4. Manufacturer's specification sheets for AT&T's proposed antennas and other featured equipment;
5. Photographs of the existing building and photosimulations of the proposed modifications Facility by Hudson Design Group., dated 1/5/21;
6. Radio Frequency Coverage Report, demonstrating the public need for the proposed modifications to the Facility, radio frequency coverage maps showing (a) existing or predicted coverage from neighboring facilities; and (b) coverage with the proposed Facility;
7. Structural Analysis by Hudson Design Group LLC dated 11/17/20;
8. Maximum Permissible Exposure Study, Theoretical Report, by SAI Communications, dated December 22, 2020;
9. Letter of Authorization from Owner of Subject Property;

## 10. Deed to subject property

**II. PROPOSED FACILITY DESIGN**

AT&T seeks to modify the existing Facility on and within the building located at the Property. The existing Facility consists of nine (9) panel antennas (Alpha Sector: 3 antennas, Beta Sector: 3 antennas, and Gamma Sector: 3 antennas) that are mounted in three (3) locations. The proposed modifications include the replacement of two (2) antennas per sector. Two antenna mounts will be replaced and One will be relocated off the penthouse roof to the penthouse wall. Three (3) remote radio-head units (RRUs) (One per sector) will be added in close proximity to the antennas. Consistent with the concealment elements of the existing Facility's design, the proposed replacement antennas will be painted to match the color and of the existing antennas and backdrop. The proposed RRUs will match the color of the existing RRUs.

The Facility's design is shown in detail in the Zoning Drawings attached as Exhibit 3 to this application letter and featured equipment is described in the manufacturers' specification sheets attached as Exhibit 4. The photographs and photosimulations (Exhibit 5) show the existing Facility from various locations in the neighborhood around the Property and as simulated with proposed modifications. A structural analysis for the Facility demonstrates that the building is capable of supporting AT&T's proposed equipment at or near the locations shown on the Zoning Drawings (*see* Exhibit 7).

The Facility will continue to bring advanced wireless voice, text and data communications services to the surrounding areas. It will allow residents, professionals, government, businesses and students to communicate locally, nationally and internationally from virtually any location within the coverage area. In the event of an emergency, the improved Facility will allow immediate contact with fire, rescue and other emergency personnel. The improved Facility will thus enhance public health, safety and welfare both in ordinary daily living and in the event of fire, accident, medical emergency, natural disaster or other dangers.

**III. BACKGROUND**

AT&T is licensed by the Federal Communications Commission to construct and operate a wireless telecommunications network in various markets throughout the country, including the Commonwealth of Massachusetts and the City of Cambridge. A copy of the AT&T's FCC license that covers the area of the proposed Facility is included with this application (*see* Exhibit 2). AT&T is in the process of designing and constructing additional wireless facilities to its existing telecommunications system to serve Massachusetts. One of the key design objectives of its systems is to provide adequate and reliable 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 extent of use of AT&T's wireless services within the network, and the existing topography and obstructions. 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. In urban settings, this dynamic requires the antennas to be located on buildings at heights and in locations

where the signal is not obstructed or degraded by other buildings or by topographical features such as hills.

#### **IV. RF COVERAGE DETERMINATION**

AT&T has performed a study of radio frequency coverage for the City of Cambridge and from the Property, the results of which are described in the Radio Frequency Report submitted with this application (*see* Exhibit 6). Without the proposed modifications to its existing Facility, AT&T has a substantial coverage gap in this area of Cambridge. AT&T has determined that the proposed modifications to the existing Facility located on the building at the Property will provide needed coverage to the targeted sections of the City and the immediately surrounding area if AT&T's antennas are located on the building at the height and in the configuration requested. The importance of a facility at this location is underscored by AT&T's interest in enhancing its ability to provide its most up-to-date wireless technology, known as long-term evolution technology ("LTE"), in this area to satisfy its customers' ever-increasing needs for high-speed data services. Radio frequency coverage maps included in the report are provided to pictorially and vividly show the differences in existing and proposed wireless coverage at the various bands authorized for AT&T's service. The maps show dramatic improvements to wireless coverage with the inclusion of the proposed Facility.

#### **V. THE FEDERAL SPECTRUM ACT AND THE FCC ORDER**

As set forth below, the proposed modifications constitute an Eligible Facilities Request pursuant to the federal Spectrum Act,<sup>3</sup> as further implemented by the FCC Order.<sup>4</sup>

Under the Spectrum Act, as further clarified by the FCC Order, the streamlined process for this Eligible Facilities Request is limited to non-discretionary review. Specifically, the FCC Order "adopt[s] an objective standard for determining when a proposed modification will 'substantially change the physical dimensions' of an existing tower or base station." *FCC Order*, ¶ 87. As stated in the FCC Order, Section 6409 "states without equivocation that the reviewing authority 'may not deny, and shall approve' any qualifying application. This directive leaves no room for a lengthy and discretionary approach to reviewing an application that meets the statutory criteria." *FCC Order*, ¶ 116.

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<sup>3</sup> Pursuant to Section 6409(a)(2) an "eligible facilities request" means any request for modification of an existing wireless tower or base station that involves—

- (A) collocation of new transmission equipment;
- (B) removal of transmission equipment; or
- (C) replacement of transmission equipment.

47 U.S.C. § 1455(a)(2).

<sup>4</sup> The Order was effective on February 9, 2015, except for § 1.40001, which became effective on April 8, 2015, except for §§ 1.40001(c)(3)(i), 1.40001(c)(3)(iii), 1.140001(c)(4), and 17.4(c)(1)(vii), which became effective on May 18, 2015, after approval by the Office of Management and Budget. The FCC Order makes clear that under the Spectrum Act discretionary review is not required or permitted for an Eligible Facilities Request.

In issuing the FCC Order and eliminating discretionary review for eligible facilities requests, the FCC's goal was to "adopt a test that is defined by specific, objective factors rather than the contextual and entirely subjective standard advocated by the IAC and municipalities." The FCC intentionally sought to reduce "flexibility" and "open ended context-specific approach" engendered by the discretionary review process:

While we acknowledge that the IAC approach would provide municipalities with maximum flexibility to consider potential effects, we are concerned that it would invite lengthy review processes that conflict with Congress's intent. Indeed, some municipal commenters anticipate their review of covered requests under a subjective, case-by-case approach could take even longer than their review of collocations absent Section 6409(a). We also anticipate that disputes arising from a subjective approach would tend to require longer and more costly litigation to resolve given the more fact-intensive nature of the IAC's open-ended and context-specific approach. We find that an objective definition, by contrast, will provide an appropriate balance between municipal flexibility and the rapid deployment of covered facilities. We find further support for this approach in State statutes that have implemented Section 6409(a), all of which establish objective standards.

*FCC Order*, ¶ 88.

As a result, the FCC Order implementing Section 6409 establishes clear and objective criteria for determining eligibility, limits the types of information that a municipality may require when processing an application for an eligible facilities request, and imposes a "deemed granted" remedy for failure to timely process and eligible facilities request.<sup>5</sup> The FCC Order also establishes significant limits on the information that can be required to be provided with an eligible facilities request and limits it to only that information "reasonably related to determining whether the request meets the requirements of this section. A State or local government may not require an applicant to submit any other documentation". 47 CFR 1.40001(c)(1).

Both before and after the FCC Order was issued, the Massachusetts Attorney General's Office provided clear guidance that an eligible request cannot be subjected to a discretionary special permit process. *See* Attorney General's letters to (i) Town of Mount Washington, dated June 12, 2014, p. 3 (ii) Town of Lynnfield, dated February 10, 2015, p. 3 (the "AG Lynnfield Letter") and (iii) Town of Montague, dated February 23, 2015, p. 2 (all attached hereto). As set forth in each letter [t]he Act's requirement that a local government 'may not deny, and shall approve, any eligible facilities request' means that a request for modification to an existing facility that does not substantially change the physical dimensions of the tower or base station must be approved. ***Such qualifying requests also cannot be subject to a discretionary special permit.***")(Emphasis added). In providing these opinions, the Attorney General's Office specifically opined that provisions in zoning ordinances that specifically required a special permit for modifications to existing facilities could not be applied to eligible facilities requests. While approving the Town of Lynnfield's Zoning Bylaw, the Attorney General stated that "Section 8.7.5.1 requires that PWSF may only be erected upon the grant of a special permit. The Town cannot apply this

<sup>5</sup> *See* 47 CFR §§1.40001(c)(1) - (c)(4).

requirement to eligible facilities requests for modification to existing facilities that qualify for required approval under Section 6409 of the Act.” *AG Lynnfield Letter*, p. 3.

Therefore, as set forth in the FCC Order and Attorney General’s opinion letters, the City cannot impose a requirement that AT&T obtain a special permit, or an amendment to an existing special permit utilizing the same discretionary review process, in connection with its eligible facilities request. To the extent that the City of Cambridge’s Zoning Ordinance and any prior decisions by the Board include provisions seeking to further regulate the modification of wireless communication facilities, federal law overrules those requirements. *See Sprint Spectrum L.P. v. Town of Swansea*, 574 F.Supp.2d 227, 236 (2008) (Board is obligated to consider whether its actions would violate federal law even if a different outcome would be permitted under state law). The standard of review for an application to modify an existing wireless communication facility on an existing tower or base station is governed by the Spectrum Act and the FCC Order which require eligible facilities requests to be permitted “by right.”

In addition, the FCC Order establishes a 60-day period for approval from the time of AT&T’s submission. 47 CFR §1.40001(c)(2). Within the context of the Spectrum Act and FCC Order, approval means all necessary approvals to permit the proposed modifications, including the issuance of a building permit, if required. The FCC found that this 60-day period is appropriate due to “the more restricted scope of review applicable to applications under section 6409(a).” *FCC Order*, ¶ 108. If the Request is not acted upon within the 60-day period, it is deemed granted. 47 CFR §1.40001(c)(4).

As set forth below, the proposed modifications constitute an eligible facilities request. Therefore, AT&T respectfully requests the Board to find that Section 4.32(g)(1) of the Ordinance does not apply to its Request.

## **VI. THE PROPOSED MODIFICATIONS ARE AN ELIGIBLE FACILITIES REQUEST**

Under Section 6409 and the FCC Order, a “base station” means “[a] structure or equipment at a fixed location that enables Commission-licensed or authorized wireless communications between user equipment and a communications network.” 47 C.F.R §1.40001(b)(1). A Base Station includes “any structure other than a tower” that supports or houses “authorized wireless communications between user equipment and a communications network.” 47 C.F.R §1.40001(b)(1). Therefore, the existing building that is currently used for FCC-licensed transmissions for personal wireless services is a “base station” for purposes of Section 6409.

AT&T proposes to modify its existing Facility as described above and depicted on the Plans submitted herewith.

The proposed modifications will not require the installation of any part of the facility on the ground outside of the building.

As a result, AT&T’s proposed modifications involving the removal and replacement of the existing transmission equipment constitute an “eligible facilities request” under Section 6409. The proposed eligible facilities request is not a “substantial modification” under Section 6409 and the FCC Order because it does not:

- (i) Result in an increase in “the height of the structure by more than 10% or more than ten feet, whichever is greater” because the proposed replacement antennas will be façade mounted and located below the roofline and therefore will not exceed 10 feet above the existing building and the proposed roof mounted RRUs and surge arrestors will also not exceed 10 feet above the existing building;
- (ii) Protrude from the edge of the edge of the building by more than six feet because AT&T’s proposed antennas will not protrude more than six feet from building façade;
- (iii) Involve the installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets because no new radio communications equipment cabinets will be installed;
- (iv) Require any excavation or deployment outside the current site of the tower or base station because all antennas, equipment cabinets and related equipment will be installed entirely on and within the existing building; or
- (v) Otherwise defeat the existing concealment elements of the tower or base station because the proposed replacement antennas will be painted and textured to match the façade of the existing building on which the existing and proposed antennas will be located and will continue to integrate the Facility into the existing architecture of the building. Further, the proposed and surge arrestors will be mounted in a manner and color consistent with the existing RRUs and surge arrestors. Therefore, AT&T’s proposed Facility will remain aesthetically consistent with the exterior finish of the building as well as maintain the concealment elements of the original design.



See FCC Order, §1.40001(b)(7)(i)-(v).

## **VII. COMPLIANCE WITH THE CAMBRIDGE ZONING ORDINANCE**

In the alternative, AT&T respectfully requests the Board to grant a special permit for the proposed modifications to the existing Facility.<sup>6</sup>

### **A. AT&T complies with the Wireless Communications provisions set forth in Section 4.32(g)(1), and Section 4.40, Footnote 49 of the Ordinance.**

AT&T's proposed modifications comply with Section 4.32(g)(1), and Section 4.40, Footnote 49 of the Ordinance as follows:<sup>7</sup>

**Section 4.32(g)(1):** Section 4.32(g)(1) of the Ordinance allows for the use of a “[t]elephone exchange (including switching, relay, and transmission facilities serving mobile communications systems) and any towers or antennas accessory thereto.” Under the Table of Use Regulations beginning at Section 4.30, AT&T's proposed use of the Facility as a transmission facility serving a mobile communications system is permitted by special permit in the C-3 zoning district (see the table at Section 4.32(g)(1)).

**Section 4.40, Footnote 49:** Section 4.32(g)(1) includes a reference to Section 4.40, Footnote 49 which sets out the standards for granting the special permit. AT&T's proposed Facility complies with Footnote 49's standards as noted below:

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

**AT&T's Response:** AT&T's FCC license is included with this application and the license information included shows that AT&T is authorized to provide wireless service in the area served by the Facility (see Exhibit 2).

- 2. The Board of Zoning Appeal shall consider “[t]he 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**

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<sup>6</sup> AT&T's request is made, if and to the extent necessary, all rights reserved. As discussed above, the FCC Order establishes a 60-day period for receipt of all necessary approvals from the time of AT&T's submission, including a building permit, if required. 47 CFR §1.40001(c)(2). If the Request is not acted upon within the 60-day period, it is deemed granted. 47 CFR §1.40001(c)(4). Therefore, AT&T expressly reserves its rights under 47 CFR §1.40001(c)(2) and (4).

<sup>7</sup> To the extent that Section 4.32(g)(1), and Section 4.40, Footnote 49 of the Ordinance purport to require the submission of information that is beyond the scope permitted by the FCC Order or Spectrum Act, AT&T expressly reserves, and does not waive, its right to assert that such information is not required under the Spectrum Act and the submission of such information shall not constitute a waiver of AT&T's rights pursuant thereto.

**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.”**

**AT&T’s Response:** The design of the overall Facility, including the choice and placement of replacement antennas and associated equipment, and the surrounding buildings, minimizes the visual impact of the proposed Facility. The minimal visual impact of the Facility is shown in the photographs of the existing Facility and the photosimulations that superimpose the proposed modifications to the existing Facility (*see*, Exhibit 5).

- 3. The Board of Zoning Appeal shall consider “[w]here 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 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.**

**In granting a special permit the Board of Zoning Appeal shall set forth in its decision under which circumstances or procedures, if any, the permittee shall be allowed to replace and upgrade its equipment without the necessity of seeking a new special permit.”**

**AT&T’s Response:** As demonstrated by the Radio Frequency Report and the associated coverage maps, AT&T has demonstrated an immediate and compelling need for the proposed modifications to its existing Facility located at the Property in order to provide substantially improved indoor coverage to residents, businesses, students and faculty, and the general public in that area.<sup>8</sup> AT&T also seeks to substantially improve its ability to satisfy the ever-increasing need of its customers for data accessibility, navigation and use. This is especially critical in and around the area First Street, Land Boulevard and the surrounding area. AT&T proposes to satisfy its RF coverage needs in the area by adding to the existing Facility the antennas and equipment necessary to provide the latest LTE wireless communications service technology. By modifying its existing Facility, AT&T obviates the need to construct an entirely new facility within this area of Cambridge in order to meet its wireless network coverage needs.

As provided in Footnote 49, AT&T requests that once permission is received from the City to site the Facility at the Property, the Board permit AT&T to replace and upgrade the equipment at this Facility in the future without further zoning proceedings or a new special permit, provided that such equipment shall meet the eligible facilities request criteria set forth in 47 CFR § 1.40001.

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<sup>8</sup> AT&T must generate a signal strength of at least -74 dBm to provide serviceable voice and data coverage on its mobile wireless devices in indoor environments. AT&T also seeks to substantially improve its data navigation service coverage in the area by including antennas and equipment that will provide LTE service.

**B. AT&T complies with the Special Permit Criteria set forth in Section 10.43 of the Ordinance.**

**Section 10.43 of the Ordinance specifies the following criteria for issuance of a special permit:** “Special permits will normally be granted where specific provisions of this Ordinance are met, except when particulars of the location or use, not generally true of the district or of the uses permitted in it, would cause granting of such permit to be to the detriment of the public interest because:

**(a) The requirements of this Ordinance cannot or will not be met, or**

**AT&T’s Response:** As provided above, AT&T’s proposed modifications comply with the requirements set forth in Section 4.32(g), Footnote 49 of the Ordinance, the Spectrum Act and the eligible facilities request criteria set forth in 47 CFR § 1.40001. Granting the special permit would not be a detriment to the public interest and is consistent with the Board’s obligations pursuant to the Spectrum Act and FCC Order.

**(b) Traffic generated or patterns of access or egress would cause congestion, hazard, or substantial change in established neighborhood character for the following reasons, or**

**AT&T’s Response:** The proposed modifications to AT&T’s existing Facility will not result in any change to the existing traffic on or near the Property. The Facility will continue to be unmanned and only require infrequent visits by a technician (typically two times per month for routine diagnostics and/or maintenance, except in cases of emergency), there will be no material increase in traffic or disruption to patterns of access or egress that will cause congestion, hazards or a substantial change in the established neighborhood character. AT&T’s maintenance personnel will make use of the existing access roads and parking at the building. Granting the special permit would not be a detriment to the public interest and is consistent with the Board’s obligations pursuant to the Spectrum Act and FCC Order.

**(c) The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would be adversely affected by the nature of the proposed use, or**

**AT&T’s Response:** As described above and illustrated on the attached photographs and photosimulations (*see* Exhibit 5) the proposed modifications to the existing Facility will result in a *de minimis* change in the appearance of the building because the equipment will be located on building exterior surfaces. As a result, the Facility as a whole either will be hidden from view or will visually blend with existing characteristics of the building and the surrounding neighborhood. Because the proposed installation will not generate any traffic, smoke, dust, heat or glare, discharge noxious substances, nor pollute waterways or groundwater, it will not adversely affect residential uses on neighboring streets. Conversely, the surrounding properties and general public will benefit from the potential to enjoy improved wireless communications services. Granting the special permit

would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

**(d) Nuisance or hazard would be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the citizens of the City, or**

**AT&T's Response:** Because the proposed modifications to the existing Facility will not cause the Facility to generate any traffic, smoke, dust, heat or glare, discharge noxious substances, nor pollute waterways or groundwater, no nuisance or hazard will be created to the detriment of the health, safety, or welfare of the occupants of the building or the residents of the City of Cambridge. To the contrary, the proposed Facility 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 that 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 Facility, as modified, will continue to comply with all federal, state and local safety requirements including the standards established by the FCC and Federal Aviation Administration (FAA). (See Exhibit 8 Maximum Permissible Exposure Study, Theoretical Report). Granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

**(e) For other reasons, the proposed installation would impair the integrity of the district or adjoining district or otherwise derogate from the intent or purpose of this Ordinance, or**

**AT&T's Response:** The purpose of the Ordinance is multifaceted, the relevant aspects of which relating to wireless telecommunications facilities include the lessening of congestion in the streets, conserving health, securing safety from fire, flood, panic and other danger, conserving the value of land and buildings and natural resources, preventing blight and pollution, encouraging the most rational use of land throughout the city, including encouraging appropriate economic development, and protecting residential neighborhoods from incompatible activities.

As noted above, the proposed modifications to the existing Facility directly accord with the purposes of the Ordinance because the modifications will not result in any traffic, smoke, dust, heat or glare, discharge noxious substances, nor pollute waterways or groundwater. As the Facility will improve the ability of residents, businesses, travelers and drivers in the area to access state-of-the-art wireless technology, the City's ability to provide emergency services will be improved, as will the economic development of the City as more people will be able to conduct commerce by virtue of a mobile platform. Because the proposed modifications to the existing Facility will be installed on an existing building that includes the Facility, and the proposed modifications are consistent with the existing concealment elements, the proposed modifications to the existing Facility are in consistent with the building's character and will not affect the value of the building or the natural resources of the City. Because the proposed modifications to the existing Facility are designed to be consistent with the existing concealment elements of the Facility and characteristics of the

Property, the visual impact on the underlying and adjacent zoning districts will be *de minimis*. As a result, the proposed modifications to the existing Facility are consistent with the Ordinance's purpose to allow for less intrusive wireless telecommunications facilities in all districts (other than Open Space) including the applicable overlay districts, and the underlying PUD-3 district. Granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

**(f) The new use or building construction is inconsistent with the Urban Design Objectives set forth in Section 19.30**

**AT&T's Response:** As stated in the Section 19.30, the Citywide Urban Design Objectives ("Objectives") "are intended to provide guidance to property owners and the general public as to the city's policies with regard to the form and character desirable for new development in the city. It is understood that application of these principles can vary with the context of specific building proposals in ways that, nevertheless, fully respect the policies' intent. It is intended that proponents of projects, and city staff, the Planning Board and the general public, where public review or approval is required, should be open to creative variations from the detailed provisions presented in this Section as long as the core values expressed are being served. *A project need not meet all the objectives of this Section 19.30 where this Section serves as the basis for issuance of a special permit. Rather the permit granting authority shall find that on balance the objectives of the city are being served.* Nor shall a project subject to special permit review be required to conform to the Required Building and Site Plan Requirements set forth in Section 11.50." [emphasis added]. For the reasons stated in AT&T's response to this Section 10.43(f) of the Zoning Ordinance and in its application generally, "on balance, the objectives of the city are being served" by the installation of the Facility at the Property so that granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

The following are the Objectives' headings as appearing in the Ordinance:

**19.31: New projects should be responsive to the existing or anticipated pattern of development.**

**AT&T's Response:** The existing Facility is located on n the existing building, some of the equipment of which is hidden from view on the existing building, or otherwise obstructed from view, and the remaining equipment blends with the structures and colors of the buildings in the surrounding area. The proposed modifications to the existing Facility are consistent with the previously approved design and concealment elements of the existing Facility. Therefore, the proposed modifications are responsive to the existing pattern of development in the Property's applicable zoning and overlay districts.

**19.32: Development should be pedestrian and bicycle-friendly, with a positive relationship to its surroundings.**

**AT&T's Response:** The existing Facility is located on and within the existing building. The Facility is only accessed by authorized AT&T personnel for routine maintenance one to two times per month and is not accessed by the general public. The proposed modifications to the existing

Facility will not result in any increase in routine visits nor otherwise result in a change in traffic patterns in the vicinity of the Property that would affect pedestrian flow or cyclists' access to the building or surrounding areas within the Property's applicable zoning districts.

**19.33 The building and site design should mitigate adverse environmental impacts of a development upon its neighbors. Indicators include<sup>9</sup>**

**(1) Mechanical equipment that is carefully designed, well organized or visually screened from its surroundings and is acoustically buffered from neighbors. Consideration is given to the size, complexity and appearance of the equipment, its proximity to residential areas, and its impact on the existing streetscape and skyline. The extent to which screening can bring order, lessen negative visual impacts, and enhance the overall appearance of the equipment should be taken into account. More specifically:**

**(a) Reasonable attempts have been made to avoid exposing rooftop mechanical equipment to public view from city streets. Among the techniques that might be considered are the inclusion of screens or a parapet around the roof of the building to shield low ducts and other equipment on the roof from view.**

**(b) Treatment of the mechanical equipment (including design and massing of screening devices as well as exposed mechanical elements) that relates well to the overall design, massing, scale and character of the building.**

**(c) Placement of mechanical equipment at locations on the site other than on the rooftop (such as in the basement), which reduces the bulk of elements located on the roof; however, at-grade locations external to the building should not be viewed as desirable alternatives.**

**(d) Tall elements, such as chimneys and air exhaust stacks, which are typically carried above screening devices for functioning reasons, are carefully designed as features of the building, thus creating interest on the skyline.**

**(e) All aspects of the mechanical equipment have been designed with attention to their visual impact on adjacent areas, particularly with regard to residential neighborhoods and views and vistas.**

**AT&T's Response:** As shown in the photosimulations (*see* Exhibit 5), the existing Facility, as proposed to be modified herein, will continue to be visually consistent with the color and texture of the building and the concealment elements of the design of the Facility. As a result, AT&T's Facility is in keeping with the building's existing features without adversely affecting the building's overall design, massing, scale or character.

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<sup>9</sup> Inasmuch as Section 19.33 is most relevant to the Facility, it is stated here in full.



**(2) Trash that is handled to avoid impacts (noise, odor, and visual quality) on neighbors, e.g. the use of trash compactors or containment of all trash storage and handling within a building is encouraged.**

**AT&T's Response:** The Facility does not generate trash, therefore this design objective is inapplicable.

**(3) Loading docks that are located and designed to minimize impacts (visual and operational) on neighbors.**

**AT&T's Response:** The Facility does not utilize any loading dock, therefore this design objective is inapplicable.

**(4) Stormwater Best Management Practices and other measures to minimize runoff and improve water quality are implemented.**

**AT&T's Response:** The existing Facility, and the proposed modifications, are located entirely on and within the existing Building on the Property and have no effect on stormwater runoff, therefore this design objective is inapplicable.

**(5) Landscaped areas and required Green Area Open Space, in addition to serving as visual amenities, are employed to reduce the rate and volume of stormwater runoff compared to pre-development conditions.**

**AT&T's Response:** The existing Facility and proposed modifications have no effect any landscaped or Green Area Open Space, therefore this design objective is inapplicable.

**(6) The structure is designed and sited to minimize shadow impacts on neighboring lots, especially shadows that would have a significant impact on the use and enjoyment of adjacent open space and shadows that might impact the operation of a Registered Solar Energy System as defined in Section 22.60 of this Zoning Ordinance.**

**AT&T's Response:** The existing Facility and proposed modifications are designed so as not to cause shadows on neighboring lots.

**(7) Changes in grade across the lot are designed in ways that minimize the need for structural retaining walls close to property lines.**

**AT&T's Response:** The existing Facility and proposed modifications are located entirely on the existing building and have no impact on the grade of the Property, therefore this design objective is inapplicable.

**(8) Building scale and wall treatment, including the provision of windows, are sensitive to existing residential uses on adjacent lots.**

**AT&T's Response:** The proposed modifications to the existing Facility will not change the building's scale because antennas and equipment will blend with the color and

textures of the building and surrounding area (*see* Exhibit 3). The existing Facility and proposed modifications are consistent with characteristics of the existing building design, maintain the existing concealment elements of the Facility and therefore minimize any visual impact from the Facility.

**(9) Outdoor lighting is designed to provide minimum lighting and necessary to ensure adequate safety, night vision, and comfort, while minimizing light pollution.**

**AT&T's Response:** The existing Facility does not use any outdoor lighting. The proposed modifications to the Facility do not include any additional lighting of the Facility or building. As a result, this design objective is inapplicable.

**(10) The creation of a Tree Protection Plan that identifies important trees on the site, encourages their protection, or provides for adequate replacement of trees lost to development on the site.**

**AT&T's Response:** The existing Facility and proposed modifications are located entirely on the existing building and have no effect on any trees on the Property, therefore this design objective is inapplicable.

**19.34: Projects should not overburden the City infrastructure services, including neighborhood roads, city water supply system, and sewer system.**

**AT&T's Response:** The existing Facility, including the proposed modifications, is a passive use and will not generate trash, odor, excess noise, or utilize water or wastewater services. As such, it will not burden the City's infrastructure services.

**19.35: New construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically.**

**AT&T's Response:** The proposed modification of the existing Facility located on the existing building, will obviate the need for AT&T to construct an additional Facility to address its wireless network coverage need in this area of Cambridge. The existing Facility and the proposed modifications blend the equipment with the building texture and color, and are consistent with the concealment elements of the Facility's design. As a result, the Facility will reinforce the existing Cambridge landscape as it currently is manifested at the Property.

**19.36: Expansion of the inventory of housing in the city is encouraged.**

**AT&T's Response:** The Facility and proposed modifications provide wireless services and will not adversely impact the City's housing inventory.

**19.37: Enhancement and expansion of open space amenities in the city should be incorporated into new development in the city.**

**AT&T's Response:** The Facility and proposed modifications are located on the existing building. The Facility and proposed modifications will not adversely impact or otherwise reduce open space amenities within the City.

## **VIII. SUMMARY**

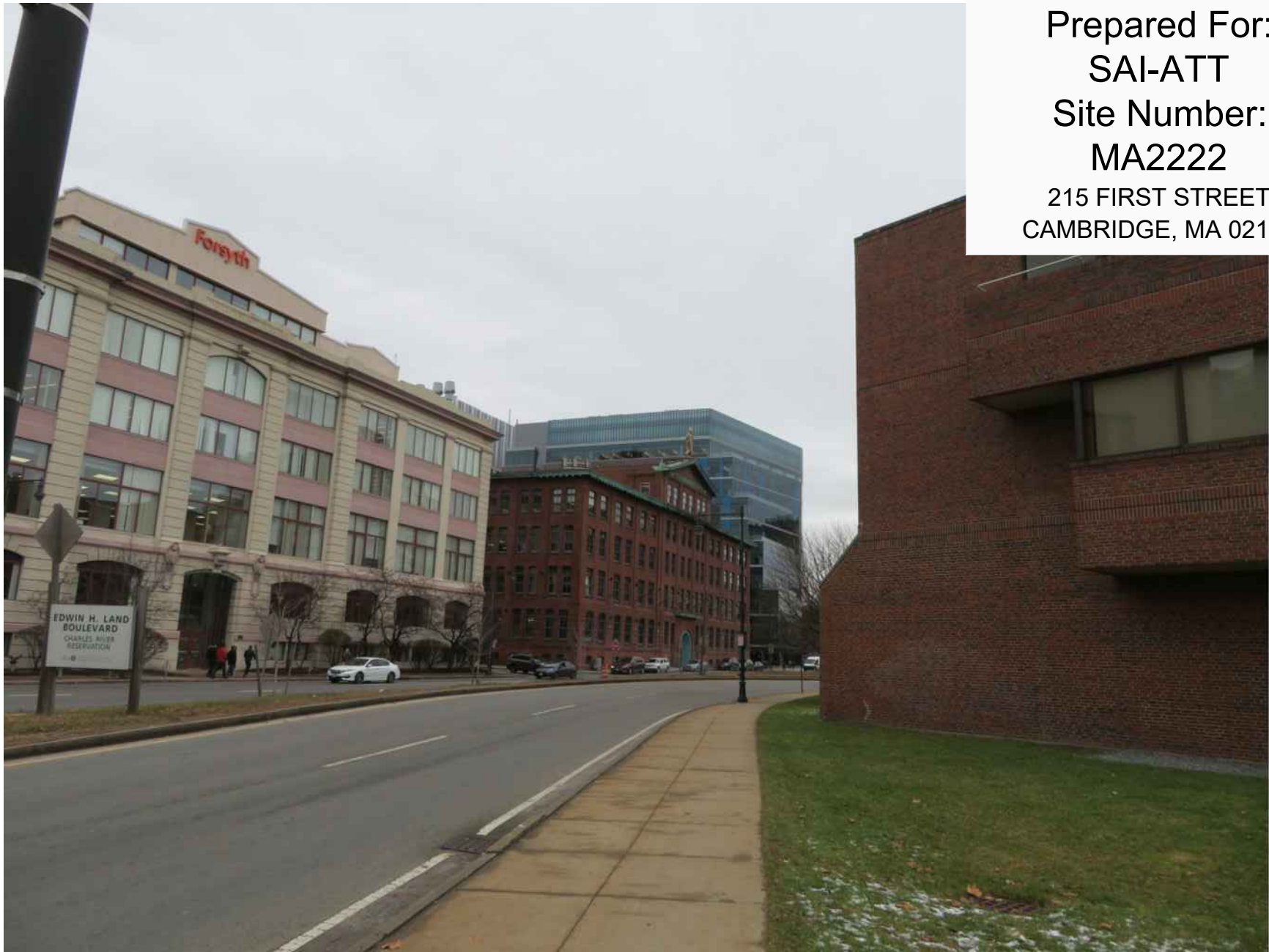
For the foregoing reasons AT&T respectfully requests that the Board to determine that pursuant to the Spectrum Act and the FCC Order, the Request constitutes and eligible facilities request and therefore AT&T's Request must be approved administratively, including the issuance of a building permit, without the need for further relief from the Board. In the alternative, without waiving its rights, AT&T requests the Board grant the foregoing zoning relief in the form of a Special Permit and such other relief as the Board deems necessary to allow the modification and operation of AT&T's proposed Facility.

Best Regards,

Timothy W. Greene

Authorized Agent to New Cingular Wireless PCS, LLC ("AT&T")

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Prepared For:  
**SAI-ATT**  
 Site Number:  
**MA2222**  
 215 FIRST STREET  
 CAMBRIDGE, MA 02142

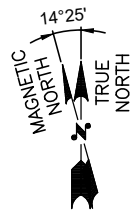
**SITE NO:** MA2222  
**SITE NAME:** CAMBRIDGE FIRST ST  
**ADDRESS:** 215 FIRST STREET  
 CAMBRIDGE, MA 02142



SITE TYPE: ROOFTOP	
DATE: 01/05/2021	REV: 1
DRAWN BY: VP	
SCALE: N.T.S.	

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.





# PHOTO LOCATION

**SITE NO:** MA2222  
**SITE NAME:** CAMBRIDGE FIRST ST  
**ADDRESS:** 215 FIRST STREET  
 CAMBRIDGE, MA 02142



**SITE TYPE:** ROOFTOP  
**DATE:** 01/05/2021 **REV:** 1  
**DRAWN BY:** VP  
**SCALE:** N.T.S.

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.



EXISTING/PROPOSED CONDITIONS

LOCATION # 1

DATE OF PHOTO: 12/30/2020



VIEW SOUTHWEST FROM EDWIN H. LAND BLVD  
(ANTENNAS NOT VISIBLE)

**SITE NO:** MA2222  
**SITE NAME:** CAMBRIDGE FIRST ST  
**ADDRESS:** 215 FIRST STREET  
CAMBRIDGE, MA 02142



<b>SITE TYPE:</b> ROOFTOP	
<b>DATE:</b> 01/05/2021	<b>REV:</b> 1
<b>DRAWN BY:</b> VP	
<b>SCALE:</b> N.T.S.	

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.



# EXISTING CONDITIONS

# LOCATION # 2

DATE OF PHOTO: 12/30/2020



VIEW NORTHWEST FROM EDWIN H. LAND BLVD

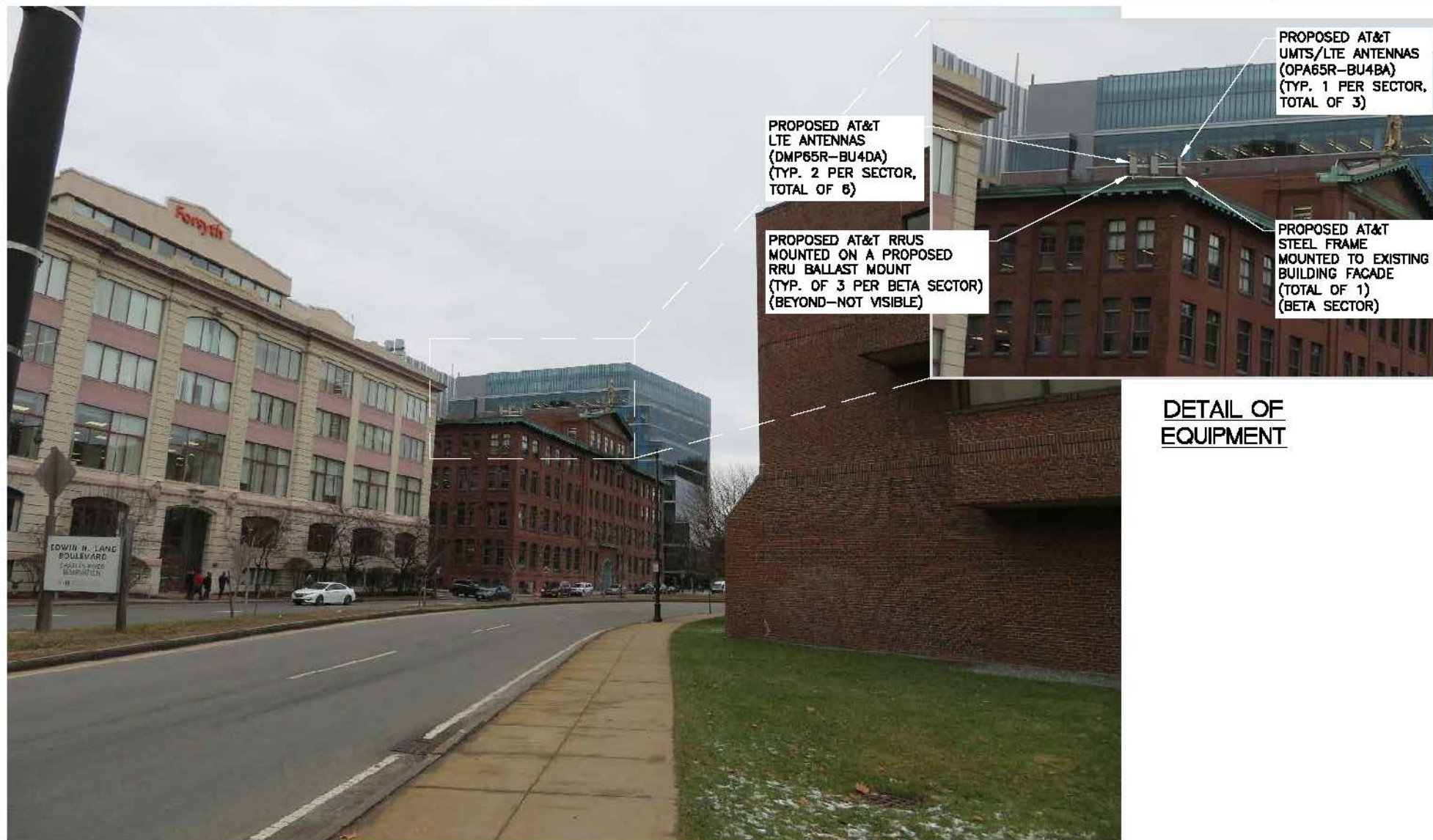
**SITE NO:** MA2222  
**SITE NAME:** CAMBRIDGE FIRST ST  
**ADDRESS:** 215 FIRST STREET  
CAMBRIDGE, MA 02142



**SITE TYPE:** ROOFTOP  
**DATE:** 01/05/2021 **REV:** 1  
**DRAWN BY:** VP  
**SCALE:** N.T.S.

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.





VIEW NORTHWEST FROM EDWIN H. LAND BLVD

SITE NO: MA2222  
 SITE NAME: CAMBRIDGE FIRST ST

ADDRESS: 215 FIRST STREET  
 CAMBRIDGE, MA 02142



550 COCHITUATE ROAD  
 FRAMINGHAM, MA 01701



12 INDUSTRIAL WAY  
 SALEM, NH 03079



45 BEECHWOOD DRIVE  
 N. ANDOVER, MA 01845  
 TEL: (978) 557-5553  
 FAX: (978) 336-5586

SITE TYPE: ROOFTOP

DATE: 01/05/2021 REV: 1

DRAWN BY: VP

SCALE: N.T.S.

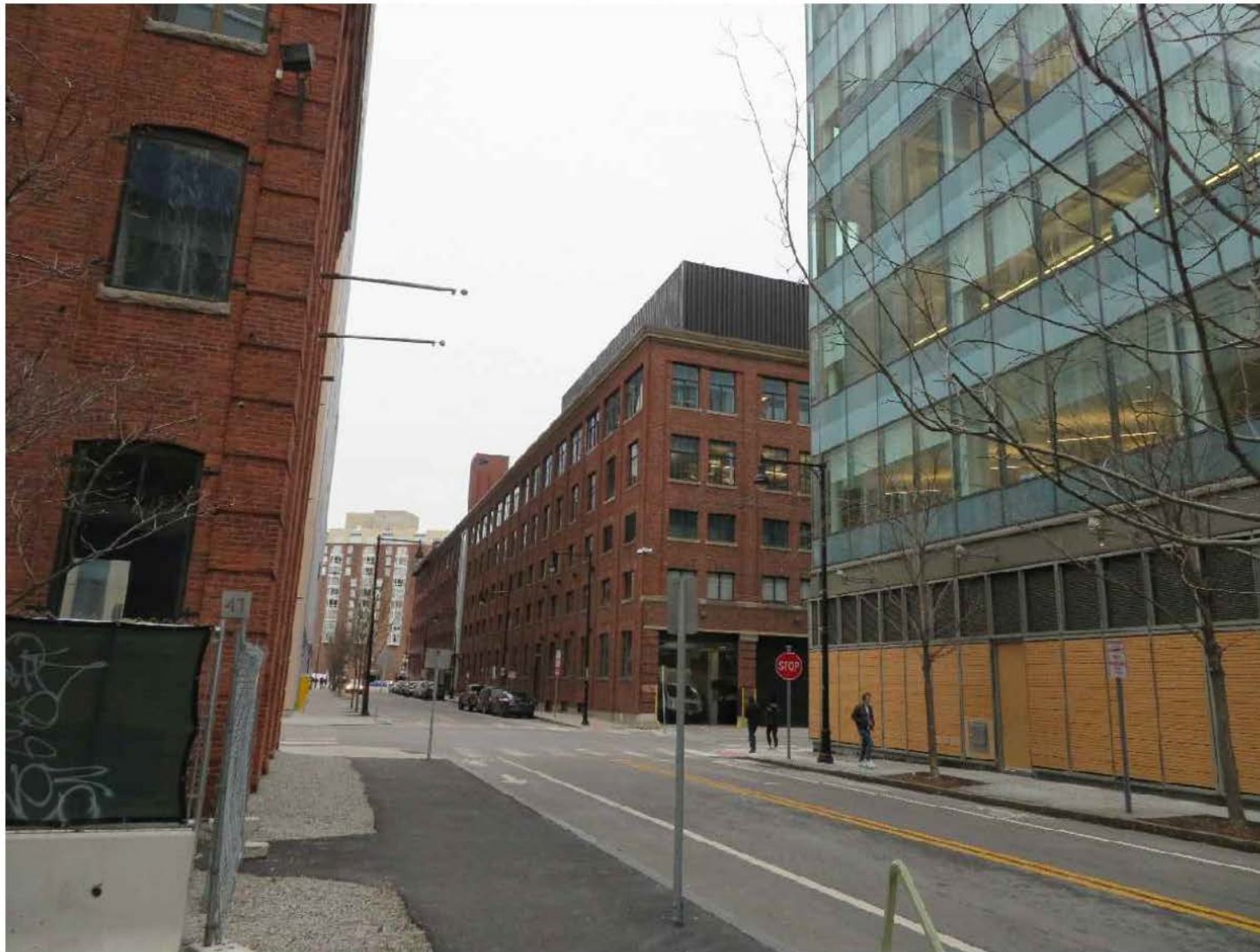
THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.



EXISTING/PROPOSED CONDITIONS

LOCATION # 3

DATE OF PHOTO: 12/30/2020



VIEW EAST FROM LINSKEY WAY (ANTENNAS NOT VISIBLE)

**SITE NO:** MA2222  
**SITE NAME:** CAMBRIDGE FIRST ST  
**ADDRESS:** 215 FIRST STREET  
CAMBRIDGE, MA 02142



SITE TYPE: ROOFTOP	
DATE: 01/05/2021	REV: 1
DRAWN BY: VP	
SCALE: N.T.S.	

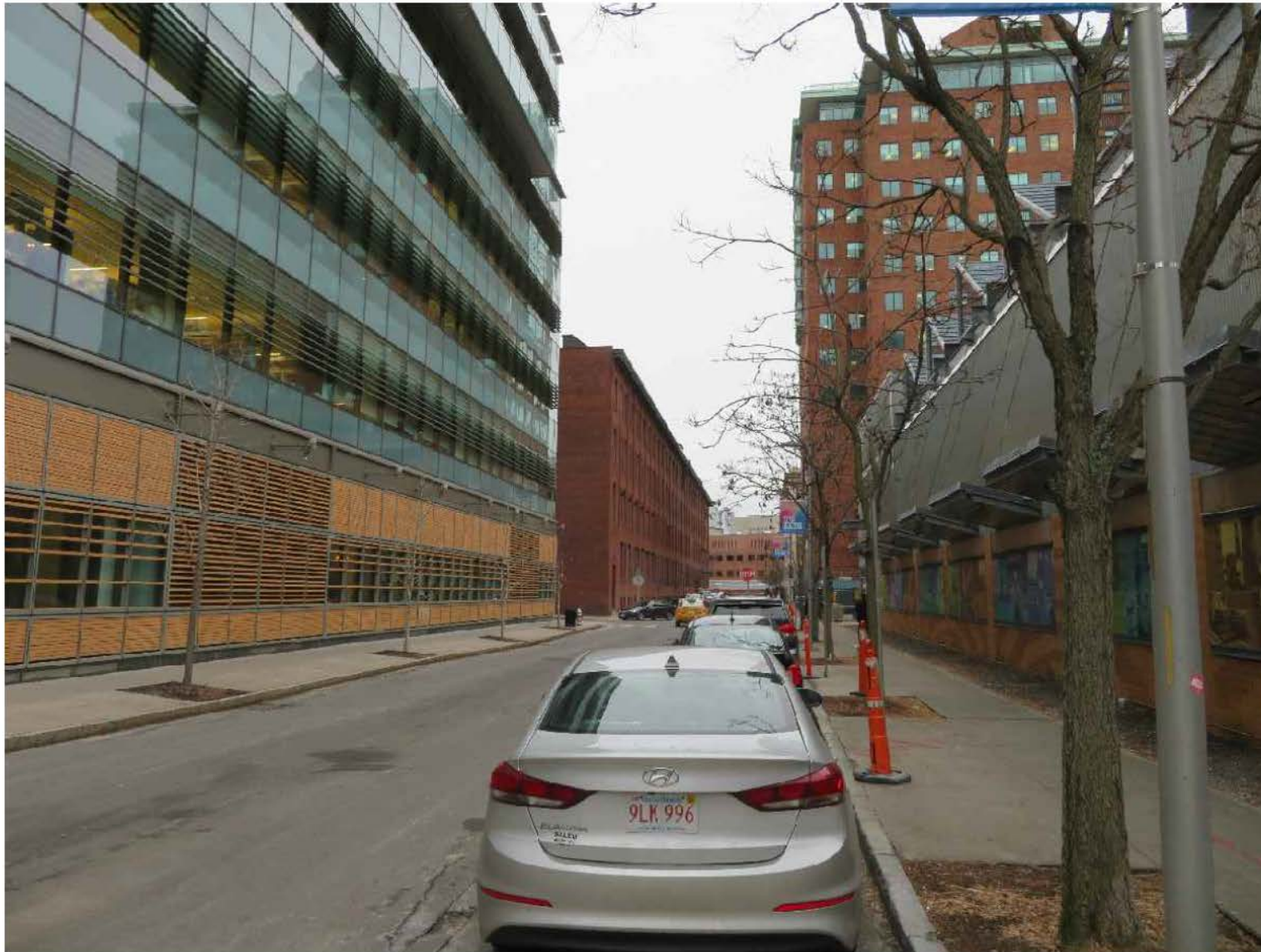
THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.



EXISTING/PROPOSED CONDITIONS

LOCATION # 4

DATE OF PHOTO: 12/30/2020



VIEW EAST FROM ATHENAEUM STREET (ANTENNAS NOT VISIBLE)

**SITE NO:** MA2222  
**SITE NAME:** CAMBRIDGE FIRST ST  
**ADDRESS:** 215 FIRST STREET  
CAMBRIDGE, MA 02142



SITE TYPE: ROOFTOP	
DATE: 01/05/2021	REV: 1
DRAWN BY: VP	
SCALE: N.T.S.	

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.



# MAXIMUM PERMISSIBLE EXPOSURE STUDY

## THEORETICAL REPORT



**Site Number:** MA2222  
**Site Name:** CAMBRIDGE FIRST ST  
**Latitude:** 42.36415833  
**Longitude:** -71.07916667  
**Address:** 215 FIRST STREET  
CAMBRIDGE, MA 02142

---

**Conclusion:** *AT&T's proposed antenna installation is calculated to be within the FCC Standard for Uncontrolled/General Public and Controlled/Occupational Maximum Permissible Exposure (MPE).*

**Prepared by:** **SAI Group**  
12 Industrial Way  
Salem, NH 03079  
(603) 421-0470

**Date of Report:** December 22, 2020

## Table of Contents

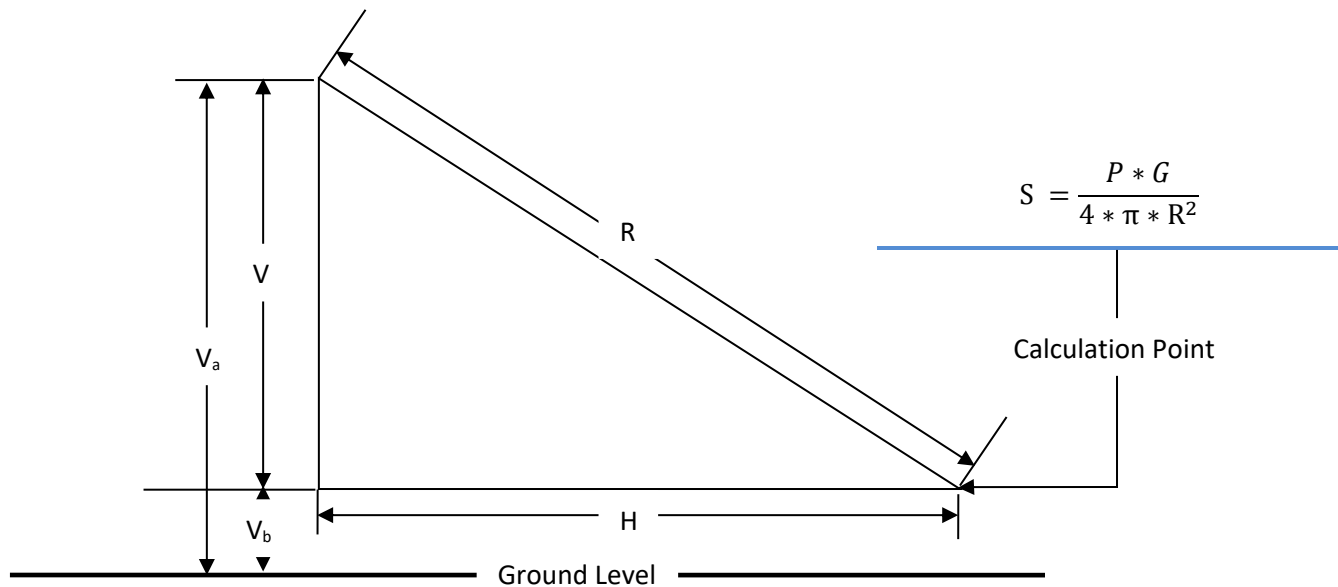
Introduction.....	3
RF Exposure Prediction Method.....	3
Case Summary .....	4
RF Design Specifications.....	4
FCC Guidelines .....	5
FCC RF Exposure Limits .....	6
Calculation Results (6ft AGL) .....	7
Statement of Certification.....	8
APPENDIX A – REFERENCES.....	9

## Introduction

SAI Group has conducted this theoretical analysis for AT&T, to ensure that the proposed radio facility complies with Federal Communications Commission (FCC) regulations. This report will show that, through the use of FCC suggested prediction methods, the radio facility in question will be in compliance with all appropriate Federal regulations in regards to Radio Frequency (RF) Exposure.

## RF Exposure Prediction Method

Power Density is calculated in accordance with FCC OET Bulletin 65 formula (3):



Where:

$S$  = Power Density

$P$  = Power input to the antenna

$G$  = Gain of an antenna

$R$  = Radial distance  $= \sqrt{H^2 + V^2}$

$H$  = Horizontal distance from antenna

$V$  = Vertical distance from antenna  $= V_a - V_b$

$V_a$  = Antenna height above ground

$V_b$  = Calculation height above ground = 6ft



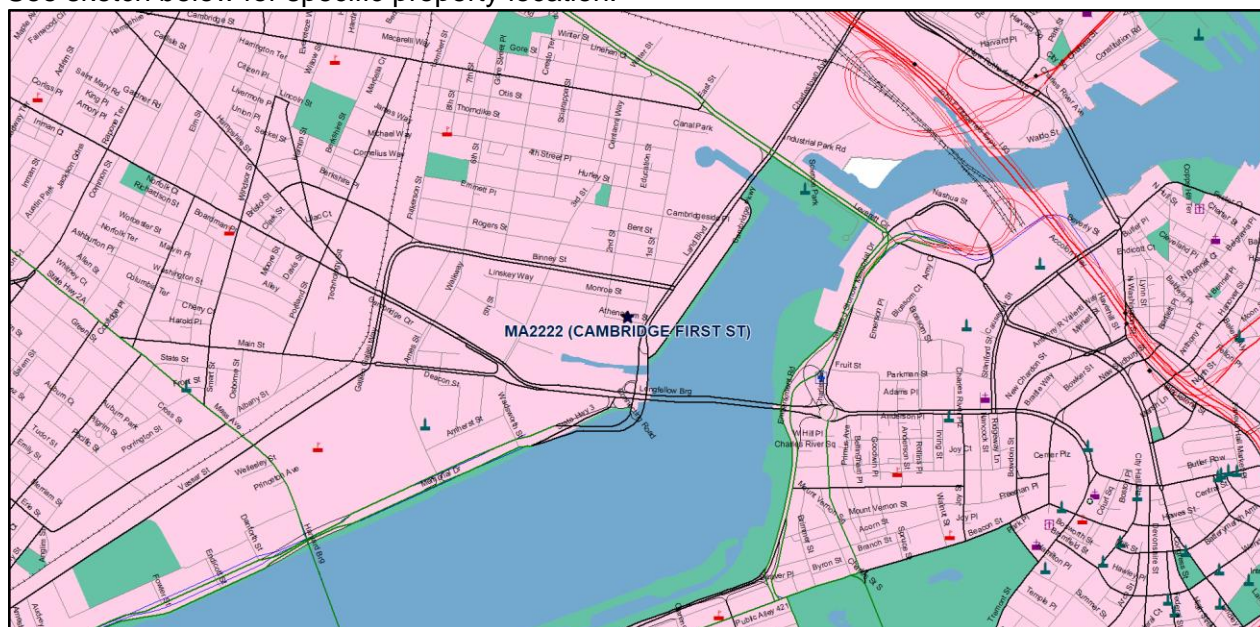
## Case Summary

The proposed radio facility will have radiation centers of 89ft for Alpha & Gamma sectors and 87ft for Beta sector located at the following geographic coordinates:

**Latitude:** 42.36415833

**Longitude:** -71.07916667

See sketch below for specific property location.



## RF Design Specifications

AT&T's proposed facility will have a total of 9 panel antennas, 3 per sector for UMTS, LTE and 5G Technologies with azimuths of 70-150-310 for alpha-beta-gamma sectors. Table below shows the technical data used for the calculation.

	UMTS850	LTE700DE	LTE850	LTE1900	LTEAWS	LTEWCS	5G 850
Antenna Type:	CCI OPA65R-BU4BA	CCI DMP65R-BU4D				CCI OPA65R-BU4BA	CCI DMP65R-BU4D
Antenna Gain (dBd)	10.05	9.25	10.25	14.15	14.45	14.55	10.25
Rad Center, AGL (ft)	87	87	87	87	87	87	87
ERP (dBm)	57.83	58.25	60.00	64.93	65.23	64.55	60.00
No of Radios	1	1	1	1	1	1	1



## FCC Guidelines

<b>Table 1. MPE Limits for General Population/ Uncontrolled Exposure</b>				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Averaging Time for  E  <sup>2</sup> ,  H  <sup>2</sup> , or S (Minutes)
0.3 – 1.34	614	1.63	(100)*	30
1.34 -30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30 – 300	27.5	0.073	0.2	30
300 – 1500	--	--	f/1500	30
1500– 100,000	--	--	1.0	30
f = frequency in MHz		* = Plane wave equivalent power density		

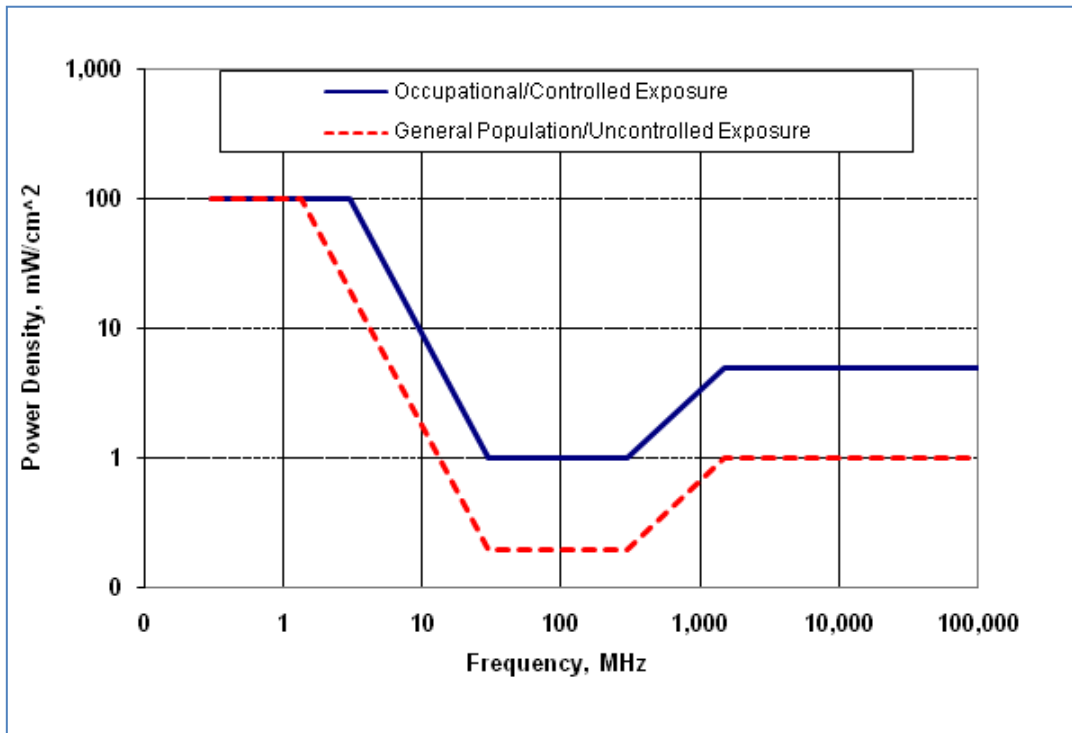
*General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can't exercise control over their exposure.*

<b>Table 2. MPE Limits for Occupational/Controlled Exposure</b>				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Averaging Time for  E  <sup>2</sup> ,  H  <sup>2</sup> , or S (Minutes)
0.3 – 3.0	614	1.63	(100)*	6
3.0 – 30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30 – 300	61.4	0.163	1.0	6
300 – 1500	--	--	f/300	6
1500– 100,000	--	--	5.0	6
f = frequency in MHz		* = Plane wave equivalent power density		

*Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where such occupational/controlled limits apply provided he or she is made aware of the potential for exposure.*

## FCC RF Exposure Limits

FCC MPE LIMITS (mW/cm <sup>2</sup> )		
EXPOSURE ENVIRONMENT	AT&T FREQUENCY BANDS	
	Cellular	PCS
General Public (Uncontrolled)	0.59	1.0
Occupational (Controlled)	2.93	5.0

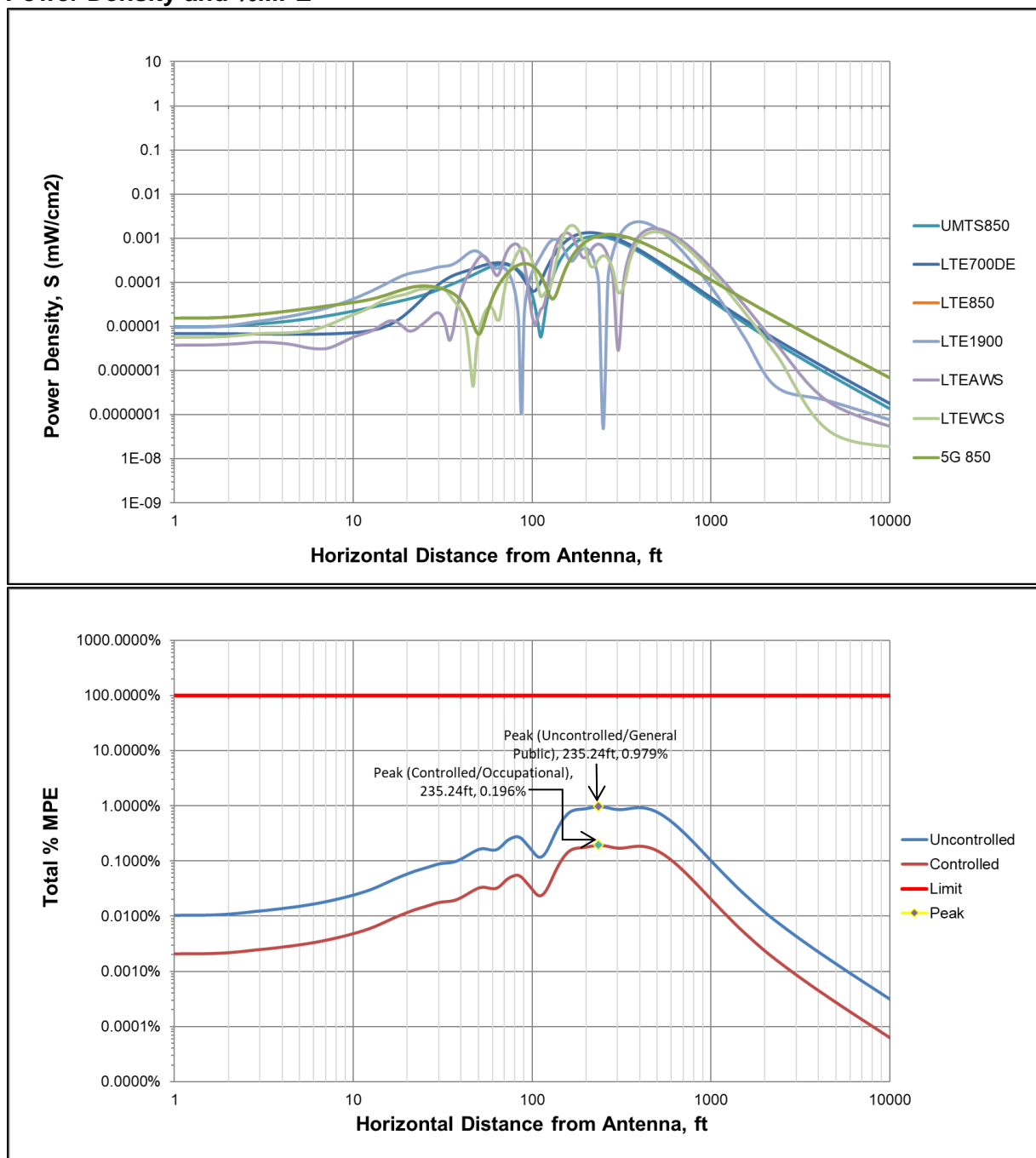


*Maximum Permissible Exposures. Occupational/Controlled and General Population/Uncontrolled MPE's are functions of frequency.*

## Calculation Results (6ft AGL)

The following charts show the graphical representation of the calculated AT&T contribution on power density levels and % MPE at 6ft above ground, as horizontal distance from antenna increases. The calculations take into account the vertical pattern of the antennas and represent the immediate direction of each sector azimuth within the antenna horizontal beamwidth. The calculations also assume line of site to the antennas and the result will be lower if measured indoor due to in-building penetration loss.

### Power Density and %MPE



### Statement of Certification

I certify to the best of my knowledge that the statements contained in this report are true and accurate. The theoretical computations contained are based on FCC recommended methods, with industry standard assumptions & formulas, and complies with FCC mandated Maximum Permissible RF Exposure requirements.

A comprehensive field survey was not performed prior to the generation of this report. If questions arise regarding the calculations herein, SAI Group recommends that a comprehensive field survey be performed to resolve any disputes.



---

Sanket Joshi  
RF Engineer  
SAI Group

December 22, 2020  
Date

## **APPENDIX A – REFERENCES**

FCC Radio Frequency Safety

<http://www.fcc.gov/encyclopedia/radio-frequency-safety>

FCC OET Bulletin 56

[https://transition.fcc.gov/Bureaus/Engineering\\_Technology/Documents/bulletins/oet56/oet56e4.pdf](https://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf)

FCC OET Bulletin 65

[https://transition.fcc.gov/Bureaus/Engineering\\_Technology/Documents/bulletins/oet65/oet65.pdf](https://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet65/oet65.pdf)

National Council on Radiation Protection and Measurements (NCRP)

<http://www.ncrponline.org>

American National Standards Institute (ANSI)

<http://www.ansi.org>

Environmental Protection Agency (EPA)

<https://www3.epa.gov/radtown/wireless-technology.html>

National Institutes of Health (NIH)

<http://www.niehs.nih.gov/health/topics/agents/emf/>

Occupational Safety and Health Agency (OSHA)

<http://www.osha.gov/SLTC/radiofrequencyradiation/>

International Commission on Non-Ionizing Radiation Protection (ICNIRP)

<http://www.icnirp.org/>



*Rethink Possible*

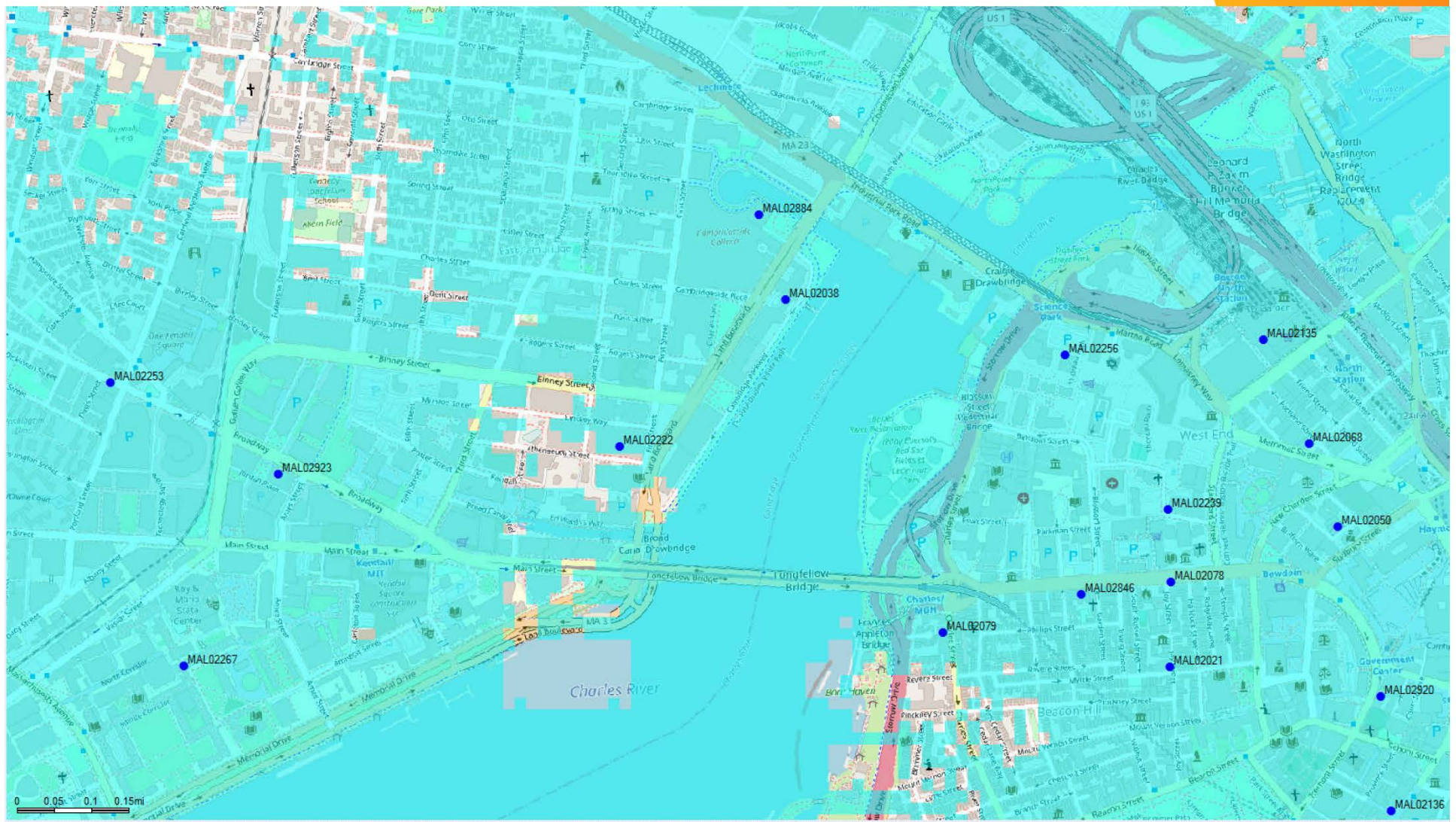


# MAL02222 LTE CoveragePlots

- Zoning LTE WCS,850 & AWS Band Plots

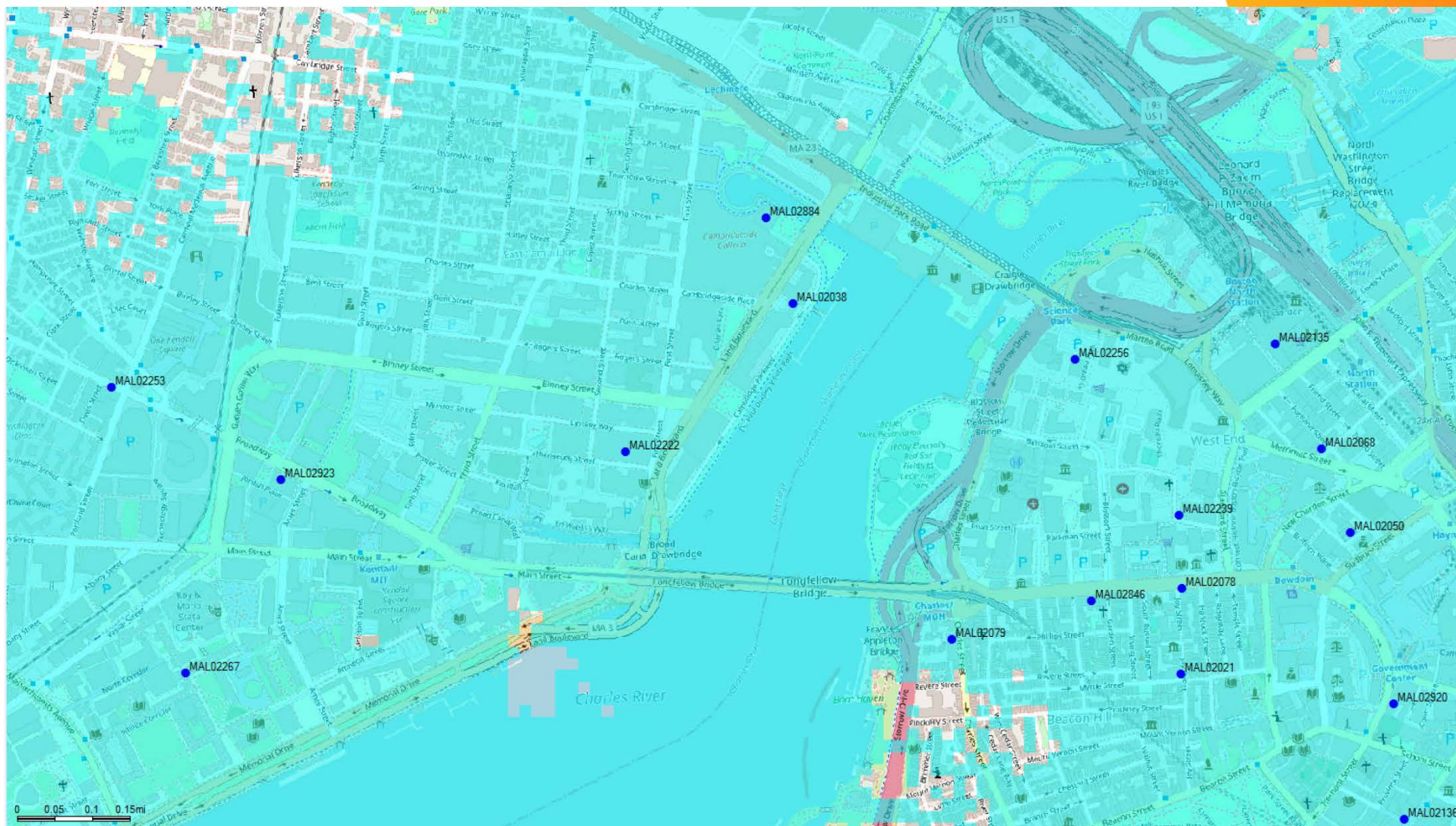


# Current LTE WCS Band Coverage



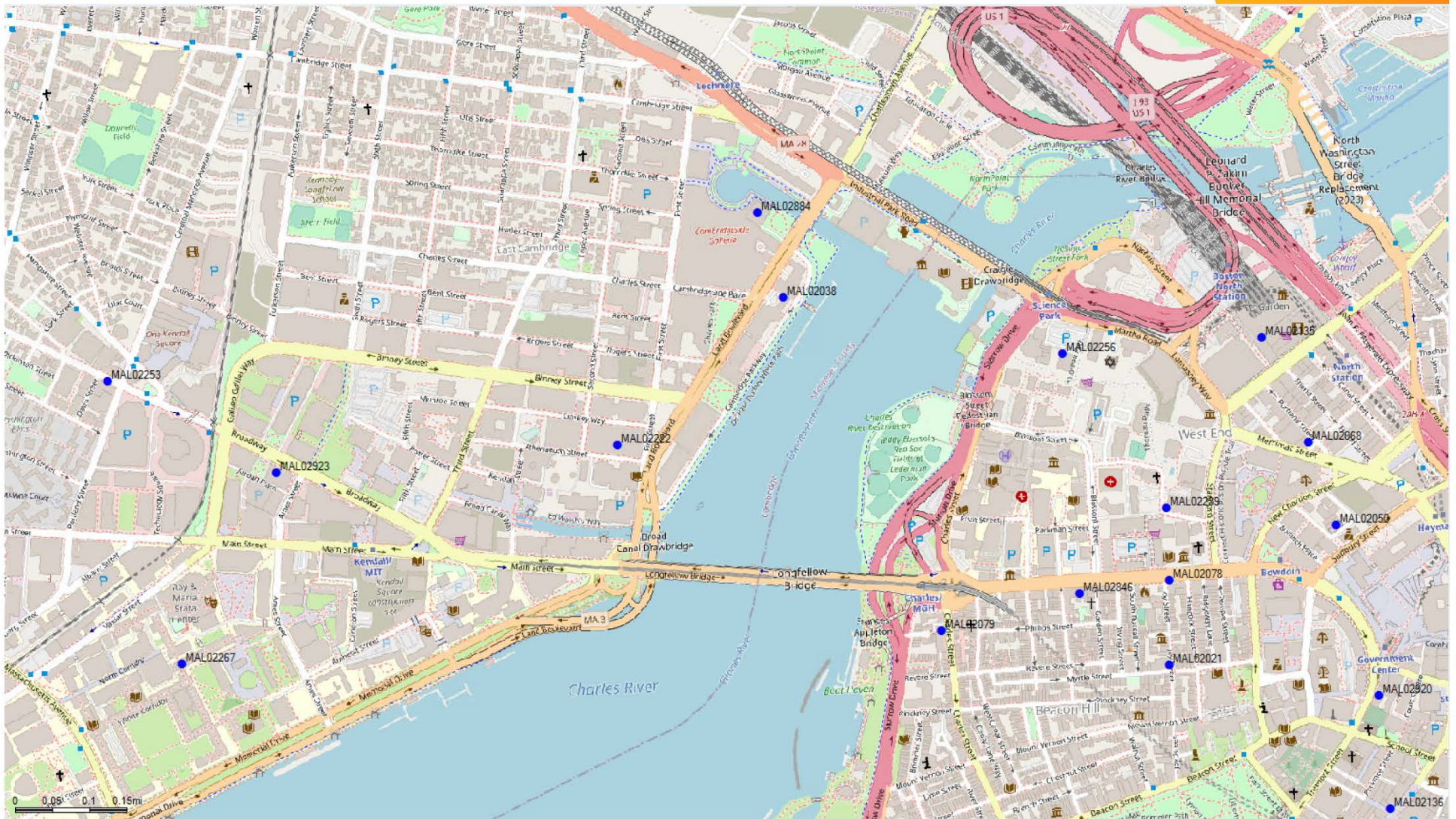


# With Proposed MAL02222 WCS Band Coverage





# Current LTE 850 Band Coverage



AT&T Proprietary (Internal Use Only). Not for use or disclosure outside the AT&T companies except under written agreement





# With Proposed MAL02222 850 Band Coverage

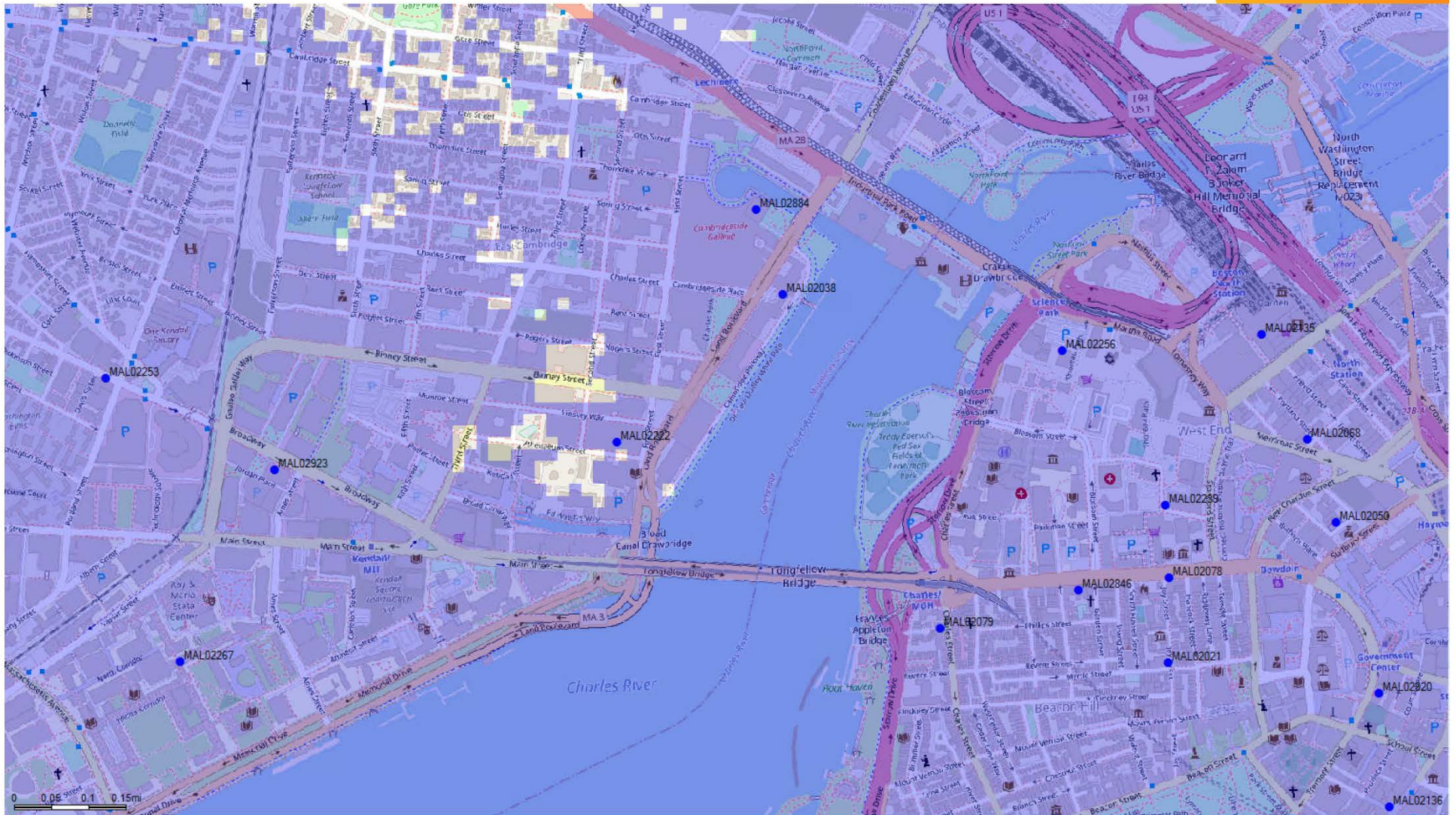


AT&T Proprietary (Internal Use Only). Not for use or disclosure outside the AT&T companies except under written agreement



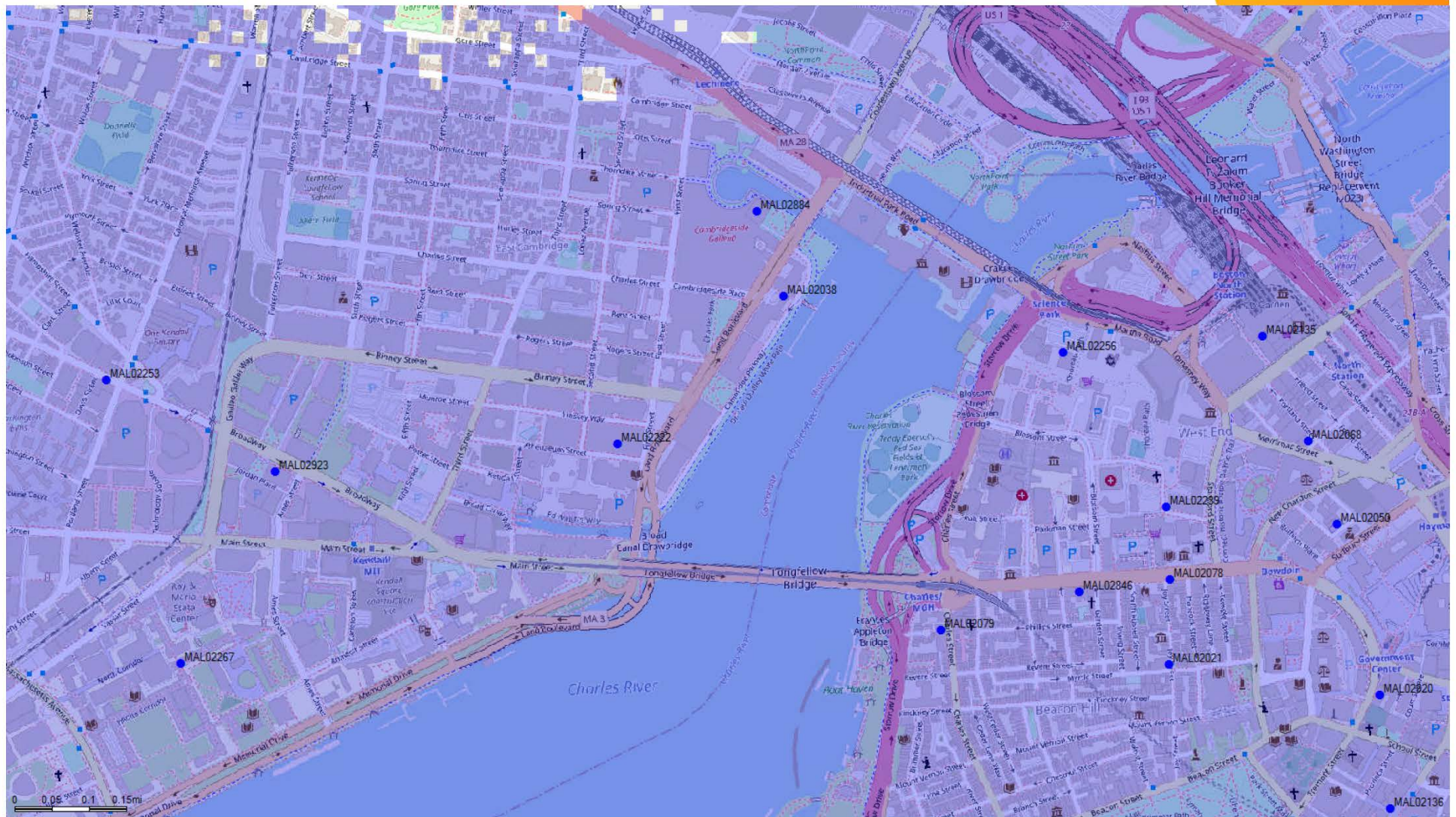


# Current AWS Band LTE Coverage



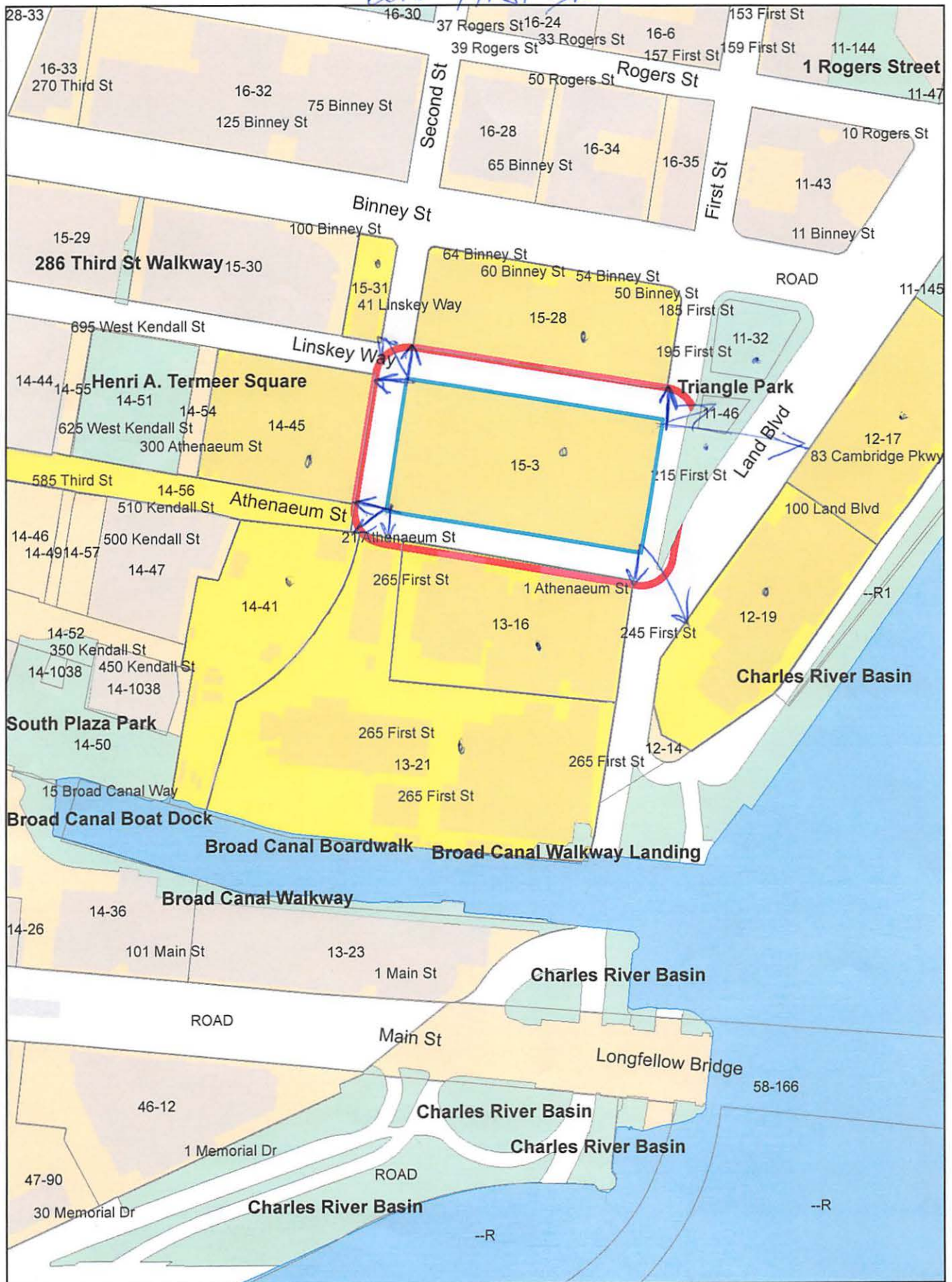


# With Proposed MAL02222 LTE AWS Band Coverage





215 First St.



215 First St

Petitioner 198  
TERRA SEARCH  
C/O TIMOTHY GREENE, AGENT  
157 RIVERSIDE DRIVE  
NORWELL, MA 02061

12-17  
SMITHSON, JAMES L. & LOIS G. SMITHSON  
TRUSTEES OF 1106 ESPLANADE REALTY TRUST.  
77 SUMMER STREET  
BOSTON, MA 02110

12-17  
EVANS, LAWRENCE B. & BEVERLY A. EVANS  
116 COOLIDGE HILL  
CAMBRIDGE, MA 02138

12-17  
BAGGEROER, CAROL A.  
83 CAMBRIDGE PKWY. W1003  
CAMBRIDGE, MA 02142

12-17  
OHRI, ANIL K. & MEERA OHRI  
94 BIGELOW DR  
SUDBURY, MA 01776

12-17  
GROMMERS, SU-CHIN  
C/O EMMA SUE BROWN  
75 CAMBRIDGE PARKWAY #W1104  
CAMBRIDGE, MA 02142

12-17  
SUBRAMANIAM, SUNDAR  
75-83 CAMBRIDGE PKWY., #W1108  
CAMBRIDGE, MA 02142

15-28  
ARE-MA REGION NO. 40 LLC,  
C/O THOMSON REUTERS PTS  
PO BOX 847  
CARLSBAD, CA 92108

12-17  
MANCINI, LAURA  
75-83 CAMBRIDGE PKWY. -UNIT #W1203  
CAMBRIDGE, MA 02139

11-46 & 11-32  
CITY OF CAMBRIDGE  
C/O LOUIS DEPASQUALE  
CITY MANAGER

11-46 & 11-32  
CITY OF CAMBRIDGE  
C/O NANCY GLOWA  
CITY SOLICITOR

12-17  
GOGAN, JANIS L. & ASHOK RAO  
75-83 CAMBRIDGE PKWY. UNIT#105  
CAMBRIDGE, MA 02139

12-17  
CEYER, SYLVIA T.  
75-83 CAMBRIDGE PKWY. UNIT#107  
CAMBRIDGE, MA 02142

12-17  
SHIANG, ELAINE LI,  
TRUSTEE THE ELAINE LI SHIANG TRUST  
342 CLARK RD  
BROOKLINE, MA 02445

12-17  
GLASSMAN, MITCHELL J.  
TRUSTEE OF THE GLASSMAN TRUST  
75-83 CAMBRIDGE PKWY UNIT# E210  
CAMBRIDGE, MA 02142

12-17  
BRENNAN, JOHN A.. JR. &  
PATRICIA M. BRENNAN, TRUSTEES  
75-83 CAMBRIDGE PKWY, #301  
CAMBRIDGE, MA 02142

12-17  
LAU, DAVID K. & ARYONG MOON  
75-83 CAMBRIDGE PKWY., #303  
CAMBRIDGE, MA 02142

12-17  
GROVE, ARTHUR S., JR.  
75-83 CAMBRIDGE PKWY. UNIT#306  
CAMBRIDGE, MA 02142

12-17  
MAGEE, CHRISTOPHER L., TRUSTEE & JO ANNE  
HUNTLEY & CHRISTOPHER L. MAGEE  
751 EAST RD  
RICHMOND, MA 01254

12-17  
HTNEK, DANIEL & JOANNE HYNEK  
75-83 CAMBRIDGE PKWY., #E401  
CAMBRIDGE, MA 02142

12-17  
ROVEE, DAVID & JOANNE ROVEE  
75 CAMBRIDGE PKWY., UNIT# E402  
CAMBRIDGE, MA 02142

12-17  
ELHALWAGY, MOSTAFA E. NAGLA R. &  
SHERIF ELHALWAGY  
75-83 CAMBRIDGE PKWY, E505  
CAMBRIDGE, MA 02142

12-17  
SIEGEL, SEA KWON  
75-83 CAMBRIDGE PKWY., #E507  
CAMBRIDGE, MA 02142

12-17  
MINEAR, RALPH E., JR.  
75 CAMBRIDGE PKWY. -UNIT# E403  
CAMBRIDGE, MA 02142

12-17  
WANG, TERESA & WADE CHIEN  
75-83 CAMBRIDGE PKWY. -UNIT #W503  
CAMBRIDGE, MA 02142

12-17  
ANG, NING & SI PING YU  
22 WAVERLEY AVE  
NEWTON, MA 02458

12-17  
PATEL, RAJI R.,  
TRUSTEE THE RAJI R. PATEL REV TRUST  
83 CAMBRIDGE PKWY, # W508  
CAMBRIDGE, MA 02142

12-17  
KUAN, SENG  
75-83 CAMBRIDGE PKWY, #W510  
CAMBRIDGE, MA 02142

12-17  
BASIN VIEW, INC.  
P.O. BOX 11715  
COLUMBIA, SC 29211-1715

12-17  
TAGHIZADEH, ROUZBEH R.  
75-83 CAMBRIDGE PKWY #W601  
CAMBRIDGE, MA 02142

215 first st

298

12-17  
BEAL, ENID,  
TR. THE UNIT W 610 NOMINEE TRUST  
75-83 CAMBRIDGE PKWY. -UNIT #W610  
CAMBRIDGE, MA 02142

12-17  
HO, SING-JU C/O MRS. MOI-SHIEN LIEN  
26 BERKSHIRE DR  
WINCHESTER, MA 01890

12-17  
CHUN, JOHNG H. & THERESA J. CHUN  
55 TOLLAND RD.  
NO. ANDOVER, MA 01845

12-17  
SARAB, INC.  
C/O EXIT REALTY ASSOCIATES  
1114 COMMONWEALTH AVE #6  
ALLSTON, MA 02134

12-17  
DAVIS, G. AHSLEY  
75-83 CAMBRIDGE PKWY UNIT E1005  
CAMBRIDGE, MA 02142

12-17  
MILLARD, ROBERT B. & BETHANY MILLARD  
9 EAST 88TH ST  
NEW YORK, NY 10128

12-17  
ALTHANI, J.H. JASSIM ABDUL AZZIZ TR E-AL &  
CITY OF CAMBRIDGE TAX TITLE  
C/O ESPLANADE PK MANAGEMENT  
P.O. BOX 381900  
CAMBRIDGE, MA 02238

12-17  
HASAN, AL-AMOUDI  
75-83 CAMBRIDGE PKWY, UNIT E1203  
CAMBRIDGE, MA 02139

12-17  
AL TAMIMI, FAHAD & ANUD AL SHISHAKLY,  
TR OF TAMIMI FAMILY TRUST  
75-83 CAMBRIDGE PKWY #W1002  
CAMBRIDGE, MA 02142

12-17  
YUNG, FRANKLIN C.C. & LUCIA Y.Z. YUNG  
75-83 CAMBRIDGE PKWY., #W509  
CAMBRIDGE, MA 02142

12-17  
HYMAN, BRADLEY T. &  
CYNTHIA L. GROSSKREUTZ  
75-83 CAMBRIDGE PKWY., #W602  
CAMBRIDGE, MA 02142

12-17  
AL-NOWAIS, MOHAMMED &  
CITY OF CAMBRIDGE TAX TITLE  
75-83 CAMBRIDGE PKWY., UNIT E804  
CAMBRIDGE, MA 02142

12-17  
DAVIS, FRED G. & JANE HILBURT-DAVIS  
75-83 CAMBRIDGE PKWY -UNIT #E808  
CAMBRIDGE, MA 02142

12-17  
KISHI, TOKIKO & YOSHITO KISHI  
75-83 CAMBRIDGE PKWY. UNIT# E902  
CAMBRIDGE, MA 02141

12-17  
TERMINUS RM LLC  
1209 ORANGE ST  
WILMINGTON, DE 19801

12-17  
COLQUHOUN, HELEN  
75-83 CAMBRIDGE PKWY. UNIT#W505  
CAMBRIDGE, MA 02142

12-17  
ANTUPIT, FRANCES V.  
75-83 CAMBRIDGE PKWY, UNIT 604  
CAMBRIDGE, MA 02142

12-17  
WONG-HO IVY & LEE, WING-HO  
75-83 CAMBRIDGE PKWY W605  
CAMBRIDGE, MA 02139

12-17  
MYERS, JAMES R. & GWENDOLYN A. MYERS  
75-83 CAMBRIDGE PKWY. -UNIT #W702  
CAMBRIDGE, MA 02142

12-17  
SINHA, BIKASH K. & ASHA SINHA  
75-83 CAMBRIDGE PKWY. #W603  
CAMBRIDGE, MA 02142

12-17  
YEE, RITA  
75-83 CAMBRIDGE PKWY., #W804  
CAMBRIDGE, MA 02142

12-17  
TYE, EILEEN A LIFE ESTATE  
75-83 CAMBRIDGE PKWY., #103  
CAMBRIDGE, MA 02142

12-17  
GRAYZEL, FRIEDA T.M  
TRUSTEE THE FRIEDA T. GRAYZEL  
75-83 CAMBRIDGE PKWY., #201  
CAMBRIDGE, MA 02141

12-17  
EPHRAIM, DAVID M.  
TRUSTEE THE ALBA REALTY TRUST  
75-83 CAMBRIDGE PKWY., #206  
CAMBRIDGE, MA 02142

12-17  
SPENCER-GREEN, GEORGE T.,  
TRS THE GTSG KIA ORA TRUST  
75-83 CAMBRIDGE PKWY UNIT #208  
CAMBRIDGE, MA 02142

12-17  
SKIFFINGTON, SERENA  
75 CAMBRIDGE PKWY., #209  
CAMBRIDGE, MA 02142

12-17  
ALNOWAIS, ALI  
75-83 CAMBRIDGE PKWY., 304  
CAMBRIDGE, MA 02142

12-17  
TWAALFHOVEN, SANDRA JEAN HANEY  
75-83 CAMBRIDGE PKWY., #305  
CAMBRIDGE, MA 02142

12-17  
SAINI, VIRENDER K. & MANORAMA SAINI TRS.  
OF THE MANORAMA SAINI FAMILY TRUST  
75-83 CAMBRIDGE PKWY, UNIT #PH7  
CAMBRIDGE, MA 02141

12-17  
YEYINMEN, CIGDEM  
75-83 CAMBRIDGE PKWY., #101  
CAMBRIDGE, MA 02142



215 First St.

348

12-17  
SARAGAS, SAVVAS JOHN  
75-83 CAMBRIDGE PKWY., #202  
CAMBRIDGE, MA 02142

12-17  
CHU, YANG HUA & WEI-NI CHEN  
TRUSTEES OF THE CHU TRUST  
1025 WINDSOR DR.  
MENLO PARK, CA 94025

12-17  
ASERKOFF, BERNARD & JANET ASERKOFF  
75-83 CAMBRIDGE PKWY. -UNIT #308  
CAMBRIDGE, MA 02142

12-17  
CROSBY, LEO E. & JANICE E. CROSBY  
75-83 CAMBRIDGE PKWY., #309  
CAMBRIDGE, MA 02142

12-17  
LIN, MEI  
75-83 CAMBRIDGE PKWY., #310  
CAMBRIDGE, MA 02142

12-17  
LOHNES, PAUL F.,  
TRUSTEE OF MUDDY WATER REALTY TRUST.  
C/O LAVERTY/ LOHNES PROPERTY.  
75 CAMBRIDGE PKWY, SUITE #100  
CAMBRIDGE, MA 02142-1229

12-17  
CROWLEY, WILLIAM F., JR.  
75-83 CAMBRIDGE PKWY. -UNIT#PH4  
CAMBRIDGE, MA 02142

12-17  
CHUN, CHU S. & KATY C. CHUN  
75-83 CAMBRIDGE PKWY - #PH5  
CAMBRIDGE, MA 02142

12-17  
KAGAN, ROBERT A., TRUSTEE THE ROBERT A.  
KAGAN FAMILY TRUST  
75-83 CAMBRIDGE PKWY., #E405  
CAMBRIDGE, MA 02142

12-17  
VARSHNEY, ASHUTOSH & VIBHA PINGLE  
75-83 CAMBRIDGE PKWY. E407  
CAMBRIDGE, MA 02139

12-17  
ROSE E. DON & NINA F. SIMONDS  
75-83 CAMBRIDGE PKWY E409  
CAMBRIDGE, MA 02142

12-17  
HAMPTON, JUDITH D., TRUSTEE THE JUDI  
HAMPTON 2014 REALTY TRUST  
75-83 CAMBRIDGE PKWY., #E411  
CAMBRIDGE, MA 02142

12-17  
GREENE, JANET F.  
75-83 CAMBRIDGE PKWY. UNIT#E508  
CAMBRIDGE, MA 02142

12-17  
STARK, MARTHA C.  
83 CAMBRIDGE PKWY #909  
CAMBRIDGE, MA 02142

12-17  
YAP, LIANG  
75-83 CAMBRIDGE PKWY., #E1004  
CAMBRIDGE, MA 02142

12-17  
ASAD, YOUSEF AHMAD, TRS.OF THE ESPLANADE  
CONDOMINIUM UNIT E1006 REALTY TR.  
75-83 CAMBRIDGE PKWY., UNIT E1006  
CAMBRIDGE, MA 02142

12-17  
WINSTON, KENNETH I. & MARY JO BANE  
75-83 CAMBRIDGE PKWY, #E1101  
CAMBRIDGE, MA 02142

12-17  
PUTNOI, DONALD W. & FRANCIS S. PUTNOI  
75-83 CAMBRIDGE PKWY - UNIT E1206  
CAMBRIDGE, MA 02142

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LEE, SUN KYUNG  
75-83 CAMBRIDGE PKWY., UNIT W1005  
CAMBRIDGE, MA 02141

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PARK, BYUNG WON  
75-83 CAMBRIDGE PKWY - UNIT W1008  
CAMBRIDGE, MA 02142

12-17  
ZARIE CAMBRIDGE LLC C/O BRETT DEROCKER  
301 SHAWMUT AVE. UNIT 22  
BOSTON, MA 02118

12-17  
PARK, BYUNG WON  
75-83 CAMBRIDGE PKWY. - UNIT #W1008  
CAMBRIDGE, MA 02142

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SHERIDAN, ROSEMARIE  
75-83 CAMBRIDGE PKWY, #E404  
CAMBRIDGE, MA 02142

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WILSON, WILLIAM JULIUS  
75-83 CAMBRIDGE PKWY., #E406  
CAMBRIDGE, MA 02142

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RASMUSSEN, JAMES & PAMELA MILLER  
75-83 CAMBRIDGE PKWY., #410  
CAMBRIDGE, MA 02142

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LI, XIAO-LI & XIAO-GANG WEN  
75-83 CAMBRIDGE PKWY., #E503  
CAMBRIDGE, MA 02142

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SAWYER, JEFFREY A. & MATTHEW SAWYER  
75-83 CAMBRIDGE PKWY. - UNIT E506  
CAMBRIDGE, MA 02142

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ULLIAN, THOMAS  
75-83 CAMBRIDGE PKWY. -UNIT #E601  
CAMBRIDGE, MA 02142

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RICHMOND, MIRIAM W.,  
TRUSTEE THE MIRIAM W. RICHMOND REV TR  
75 CAMBRIDGE PKWY., #E602  
CAMBRIDGE, MA 02142

12-17  
STONE, DAVID W. & HEATHER L. HOHENTHAL  
75-83 CAMBRIDGE PKWY. E603  
CAMBRIDGE, MA 02142

215 First St

498

12-17  
SHULMAN, FAYE O.  
75-83 CAMBRIDGE PKWY UNIT E605  
CAMBRIDGE, MA 02142

12-17  
YOUSIF AL MOWAIS, MOHAMMED  
CITY OF CAMBRIDGE TAX TITLE  
75-83 CAMBRIDGE PKWY., UNIT # E606  
CAMBRIDGE, MA 02142

12-17  
YUNG, FRANKLIN CHU CHING &  
LUCIA YUK ZAI YUNG  
75-83 CAMBRIDGE PKWY. -UNIT E607  
CAMBRIDGE, MA 02142

12-17  
BOK, DEREK C. & SISSELA ANN BOK  
75-83 CAMBRIDGE PKWY. - UNIT E608  
CAMBRIDGE, MA 02142

12-17  
FRUSZTAJER, ELISABETH  
75-83 CAMBRIDGE PKWY, # W606  
CAMBRIDGE, MA 02142

12-17  
BUKER, WILLIAM L.  
75-83 CAMBRIDGE PKWY #W701  
CAMBRIDGE, MA 02142

12-17  
PAI, SACHIN MANGALORE & KARIN ROESCH  
75-83 CAMBRIDGE PKWY, #W703  
CAMBRIDGE, MA 02142

12-17  
BORRAS, M. CRISTINA & PEDRO ELOSEGUI  
C/O CRISTINA BORRAS  
75-83 CAMBRIDGE PKWY., UNIT #W704  
CAMBRIDGE, MA 02142

12-17  
WANG, DAVID DER-WEI  
75-83 CAMBRIDGE PKWY. UNIT#W803  
CAMBRIDGE, MA 02142

12-17  
TAGHIZADEH, NAZBEH  
75-83 CAMBRIDGE PKWY., #W805  
CAMBRIDGE, MA 02142

12-17  
FARSHEED, MARCO M.  
83 CAMBRIDGE PKWY. UNIT#W806  
CAMBRIDGE, MA 02142

12-17  
MENHALL, NASSER  
83 CAMBRIDGE PKWY #W808  
CAMBRIDGE, MA 02142

12-17  
EYUBOGLU, CENK & MERT O. EYUBOGLU  
75-83 CAMBRIDGE PKWY UNIT#W906  
CAMBRIDGE, MA 02142

12-17  
STARK, MARTHA  
83 CAMBRIDGE PKWY UNIT W909  
CAMBRIDGE, MA 02142

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RHEE, DAVID Y. & YOON-HEE RHEE  
45 GREEN LANE  
CANTON, MA 02021

12-17  
SALISBURY, RUSS J. & MARGOT S. SALISBURY  
75-83 CAMBRIDGE PKWY -PH4  
CAMBRIDGE, MA 02142

12-17  
YEE, JOHN F.,  
TRUSTEE THE JOHN F. YEE 2004 REV TRUST  
75-83 CAMBRIDGE PKWY., #W802  
CAMBRIDGE, MA 02142

12-17  
MENHALL, NASSER  
83 CAMBRIDGE PKWY #W808  
CAMBRIDGE, MA 02142

12-17  
KATIS, NICHOLAS H.  
75-83 CAMBRIDGE PKWY. - UNIT W905  
CAMBRIDGE, MA 02142

12-17  
KUBAR HOLDING INC.  
176 FEDERAL ST  
BOSTON, MA 02110

12-17  
GIBBONS, ROSE  
75-83 CAMBRIDGE PKWY UNIT W1103  
CAMBRIDGE, MA 02142

12-17  
NEGAHBAN, AZITA  
75-83 CAMBRIDGE PKWY. UNIT#W1204  
CAMBRIDGE, MA 02142

13-16  
CLPF-CAMBRIDGE SCIENCE CENTER, LLC,  
C/O LINCOLN PROPERTY COMPANY  
245 FIRST ST  
CAMBRIDGE, MA 02142

14-41  
SOUTHERN ENERGY KENDALL  
C/O BRIAN KRAMSCHUSTER  
13155 NOEL RD., SUITE 100  
DALLAS, TX 75240

15-3  
ARE-MA REGION NO. 38 LLC,  
PO BOX 847  
CARLSBAD, CA 92018

12-17  
MERTON, ROBERT C.  
75-83 CAMBRIDGE PKWY. UNIT E1108  
CAMBRIDGE, MA 02142

12-17  
SKOWRONSKI, STANLEY &  
CHRISTINE H. SKOWRONSKI  
75-83 CAMBRIDGE PKWY. UNIT#E1205  
CAMBRIDGE, MA 02142

12-17  
BERNSTEIN, AMY J.  
75-83 CAMBRIDGE PKWY W1001  
CAMBRIDGE, MA 02142

12-17  
ZHOU, JIANYING  
TRUSTEE OF ZHOUSHI REALTY TRUST  
11191 BRITTANY LN  
DUBLIN, CA 94568

12-17  
JOHNSTON, ANNE E.  
75-83 CAMBRIDGE PKWY., #W1009  
CAMBRIDGE, MA 02142

215 first st.

598

12-17  
ESBAH-TABATABAIE, FARIBA  
75-83 CAMBRIDGE PKWY., #W1102  
CAMBRIDGE, MA 02142

12-17  
LIEBERMAN, LAWRENCE & GLORIA LIEBERMAN  
TRUSTEE OF 1105-W REALTY TRUST  
83 CAMBRIDGE PKWY. UNIT#W1105  
CAMBRIDGE, MA 02142

12-17  
STEINER, LISA  
75-83 CAMBRIDGE PKWY. - UNIT#W1205  
CAMBRIDGE, MA 02142

12-17  
FILIOTIS, DIONYSIOS  
C/O THE LAW OFFICE OF MICHAEL G. GATLIN  
61 NICHOLAS RD. #B5  
FRAMINGHAM, MA 01701

12-19  
PRESIDENT & FELLOWS OF HARVARD COLLEGE C/O  
HARVARD REAL ESTATE, INC.  
HOLYOKE CENTER, ROOM 1000  
1350 MASSACHUSETTS AVE  
CAMBRIDGE, MA 02138-3895

13-21  
SOUTHERN ENERGY KENDALL  
C/O BRIAN KRAMSCHUSTER  
13155 NOEL RD., SUITE 100  
DALLAS, TX 75240

15-31  
ARE-MA REGION NO.47, LLC  
C/O THOMSON REUTERS(PROPERTY TAX SERV)  
P.O. BOX #847  
CARLSBAD, CA 92018

12-17  
GARGANO, PAUL A. & SHEILA K. GARGANO  
22 WIANNO AVE  
OSTERVILLE, MA 02655

12-17  
BARRON, SUSAN B.,  
TRS THE SUSAN BARRON 2009 TRT  
83 CAMBRIDGE PARKWAY W203  
CAMBRIDGE, MA 02142

12-17  
SALDANHA, ROSEMARIE  
75-83 CAMBRIDGE PKWY., #204  
CAMBRIDGE, MA 02142

12-17  
BIBI (US) CORPORATION,  
176 FEDERAL ST.  
BOSTON, MA 02110

12-17  
EPHRAIM, DAVID M.  
TRUSTEE THE ALBA REALTY TRUST  
75-83 CAMBRIDGE PKWY., #207  
CAMBRIDGE, MA 02142

12-17  
CASSERES, JANE GOMES,  
TRUSTEE JANE GOMES CASSERES REV TRUST  
CAS CORAWEG 53  
WILLEMSTAD, -- ----

12-17  
CHIRATHIVAT, SUDITHAM &  
SANHAJUTHA CHIRATHIVAT  
9/9 SATORN SOI 1  
BANKKOK, -- 10120

12-17  
MAHMUD, NABILA  
75-83 CAMBRIDGE PKWY., #311  
CAMBRIDGE, MA 02142

12-17  
HIROSE, TATSUO & TAKAKO HIROSE  
75-83 CAMBRIDGE PKWY, PH1  
CAMBRIDGE, MA 02142

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CHUN, AILEEN S. & KATY C. CHUN  
75-83 CAMBRIDGE PKWY #PH3  
CAMBRIDGE, MA 02142

12-17  
CAMBRIDGE PARKWAY, LLC,  
75-83 CAMBRIDGE PKWY. PH6  
CAMBRIDGE, MA 02142

12-17  
ESBAH-TABATABAIE, FARIBA  
75-83 CAMBRIDGE PKWY E501  
CAMBRIDGE, MA 02142

12-17  
REDEVCO C/O BANU ATKINSON  
75 CAMBRIDGE PKWY SUITE #E502  
CAMBRIDGE, MA 02142

12-17  
LI, XIAO-LI,  
TRUSTEE THE XIAO-LI LI TRUST-2015  
75-83 CAMBRIDGE PKWY., #E504  
CAMBRIDGE, MA 02142

12-17  
ALI YATEEM, TRUSTEE OF THE YATEEM REAL  
ESTATE TRUST  
P.O. BOX 60, MANAMA  
ARABIAN GULF, \_ \_

12-17  
AL-AMOUDI, HASAN O. &  
75-83 CAMBRIDGE PKWY - UNIT #E703  
CAMBRIDGE, MA 02142

12-17  
HWACHII LIEN,  
TRUSTEE E708 ESPLANDADE REALTY TRUST  
51 VIA LOS ALTOS  
TIBURON, CA 94920

12-17  
LEE, NAE-KUN, & HONG JA LEE  
153W 12TH STREET  
NEW YORK, NY 10011

12-17  
CHENG, CLIFF  
75-83 CAMBRIDGE PKWY. - UNIT# E701  
CAMBRIDGE, MA 02142

12-17  
NAHUM, JEREMY P. & KATHERINE H. NAHUM  
83 CAMBRIDGE PARKWAY #W908  
CAMBRIDGE, MA 02142

12-17  
HO, ALEXANDER J. & PAULINE Y. HO,  
TRUSTEES OF APLEX REALTY TRUST  
69 GRANDNER COURT  
BRIDGEWATER, NJ 08807

12-17  
KUNG, LINDA,  
TRUSTEE THE LINDA KUNG REV TRUST  
ATTN: SCOT PANNEPACKER  
791 ALEXANDER RD  
PRINCETON, NJ 08540

12-17  
COHEN, CLIFFORD R. & WILLIAM V. SOPP  
TRS. OF ESPLANADE E1102 NOMINEE TR.  
75-83 CAMBRIDGE PKWY., #E1102  
CAMBRIDGE, MA 02142

215 First st -

6 of 8

12-17  
GARFIELD, JOSEPH M. & FRANCES B GARFIELD  
75-83 CAMBRIDGE PKWY. UNIT #E1103  
CAMBRIDGE, MA 02142

12-17  
SPENCER, AARON D.  
51 GREY STONE PATH  
DEDHAM, MA 02026

12-17  
KUO, SHUNWA  
75-83 CAMBRIDGE PKWY., #E707  
CAMBRIDGE, MA 02141

12-17  
EISEN, HERMAN N., NATALIE A. EISEN TR &  
CITY OF CAMBRIDGE TAX TITLE  
75-83 CAMBRIDGE PKWY - UNIT #E806  
CAMBRIDGE, MA 02142

12-17  
FELTER, JOHN KENNETH  
75-83 CAMBRIDGE PKWY - UNIT E909  
CAMBRIDGE, MA 02142

12-17  
AL NOWAIS, ALI HUSSAIN  
75-83 CAMBRIDGE PKWY., #W402  
CAMBRIDGE, MA 02142

12-17  
DAME, CORINNE & SAMUEL DAME,  
TR. OF 75-83 CAMB PKWY E807 REALTY TR.  
75-83 CAMBRIDGE PKWY. - UNIT #E807  
CAMBRIDGE, MA 02142

12-17  
TAGHIZADEH, ROUZBEH R.  
75-83 CAMBRIDGE PKWY - UNIT #W404  
CAMBRIDGE, MA 02142

12-17  
YUE, EVA W.  
5 STILLMEADOW RD.  
WESTON, MA 02493

12-17  
VON HIPPEL, ERIC & JESSIE VON HIPPEL  
TRUSTEES OF THE VON HIPPEL NOMINEE TRUST  
75-83 CAMBRIDGE PKWY UNIT #E709  
CAMBRIDGE, MA 02142

12-17  
ALTHANI, JASSIM ABDUL AZIZ J.H., TR ET-AL &  
CITY OF CAMBRIDGE TAX TITLE  
C/O ESPLANADE PK MANAGEMENT  
P.O. BOX 381900  
CAMBRIDGE, MA 02238

12-17  
MOREAU, SYLVIANE &  
JACQUES-PIERRE M. MOREAU  
159 WESTBORO RD  
UPTON, MA 01568

12-17  
KHOLI, HAMZA AL & TODD D. SHELTON,  
TRS. C/O DALY CAVANAUGH LLP  
27 MICA LANE  
WELLESLEY, MA 02481

12-17  
GOLDSTEIN, CLAIRE L.  
75-83 CAMBRIDGE PKWY., #E901  
CAMBRIDGE, MA 02142

12-17  
SHISHAKLY, ANUD AL & FAHAD AL TAMIMI  
75 CAMBRIDGE PKWY - #PH10  
CAMBRIDGE, MA 02142

12-17  
MOKHTARI, SASAN & MARY E. BROWN  
9991 DELL ROAD  
EDEN PRARIE, MN 55347

12-17  
BLALOCK, JANE B.,  
TRUSTEE JANE B. BLALOCK TRUST  
75-83 CAMBRIDGE PKWY  
CAMBRIDGE, MA 02142

12-17  
HORNER, MATINA S. & TIA A. HONER TRUS OF  
THE MATINA S. HORNER REV TR-2008  
75-83 CAMBRIDGE PKWY. W406  
CAMBRIDGE, MA 02142

12-17  
SANES, JOSHUA & SUSAN CORCORAN  
75-83 CAMBRIDGE PKWY. - UNIT #E702  
CAMBRIDGE, MA 02142

12-17  
STIENING, RAE & NANCY STIENING  
75-83 CAMBRIDGE PKWY. - UNIT #E903  
CAMBRIDGE, MA 02142

12-17  
MALCOLM, OSCAR F. & SANDRA D. STRATFORD  
75-83 CAMBRIDGE PKWY. - UNIT #E1106  
CAMBRIDGE, MA 02142

12-17  
PEPIN, PAULINE F.  
75 CAMBRIDGE PARKWAY, UNIT E705  
CAMBRIDGE, MA 02142

12-17  
NANGIA, CHIRAG & ASHOK NANGIA  
75-83 CAMBRIDGE PKWY. #E805  
CAMBRIDGE, MA 02142

12-17  
CHEN, THEODORE C. & BERNICE K. CHEN  
75-83 CAMBRIDGE PKWY - # E908  
CAMBRIDGE, MA 02142

12-17  
BERTELLI, MARY KATHRYN  
75 CAMBRIDGE PKWY. UNIT #PH12  
CAMBRIDGE, MA 02142

12-17  
TOROUS, WALTER N. & JANE G. TOROUS,  
TRS THE TOROUS REV TRUST  
75-83 CAMBRIDGE PKWY., #E801  
CAMBRIDGE, MA 02142

12-17  
PARK, BYUNG WON  
75-83 CAMBRIDGE PKWY #W1008  
CAMBRIDGE, MA 02142

12-17  
GAJEWSKI, JERZY, TRUSTEE OF THE  
75-83 CAMBRIDGE PARKWAY  
UNIT #408  
CAMBRIDGE, MA 02142

12-17  
MCMAHON, NURHAJAH H.  
3 FLATLEY AVE  
MANCHESTER, MA 01944

12-17  
MADHAVRAO, LAKSHMINARASIMHA &  
LALITHA SURYANARAYANA  
1083 MCGREGOR WAY  
PALO ALTO, CA 93406

215 First st.

708

12-17  
MAYER, DEBORA J. & SAMUEL S. DYER TRS, THE  
DYER FAMILY INVESTMENT TRUST  
3939 LEGATION ST. NW  
WASHINGTON, DC 20015-2915

12-17  
MERLION LLC  
PO BOX 1507  
WAKEFIELD, MA 01880

12-17  
BUCKBEE, EDWARD J. & SUSAN L. LINDQUIST  
75-83 CAMBRIDGE PKWY - UNIT# PH11  
CAMBRIDGE, MA 02142

12-17  
REDMOND, PHILIP R. AND FONG CHU  
75-83 CAMBRIDGE PKWY - #W401  
CAMBRIDGE, MA 02142

12-17  
NATARAJAN, CHANDRASEKHAR  
75-83 CAMBRIDGE PKWY, #W403  
CAMBRIDGE, MA 02142

12-17  
HORNER, MATINA S. & TIA A. HORNER  
TR. OF MATINA S. HORNER REVOCABLE TR  
75-83 CAMBRIDGE PKWY. W405  
CAMBRIDGE, MA 02142

12-17  
TERMINUS RM, LLC  
1209 ORANGE ST.  
WILMINGTON, DE 19801

12-17  
NEGAHBAN, KAMBIZ  
75-83 CAMBRIDGE PKWY., UNIT #E1202  
CAMBRIDGE, MA 02141

12-17  
STONE, PETER H. & PAOLA MALANOTTE STONE  
75-83 CAMBRIDGE PKWY - # W502  
CAMBRIDGE, MA 02142

12-17  
LEE, YU-CHIN MICHELLE  
311 SOUTH THIRD AVE.  
ARCADIA, CA 91006

12-17  
TYE, EILEEN A LIFE ESTATE  
75-83 CAMBRIDGE PKWY., #102  
CAMBRIDGE, MA 02142

12-17  
TAGHIZADEH, KOLI  
75-83 CAMBRIDGE PKWY #E511  
CAMBRIDGE, MA 02142

12-17  
BOK, DEREK C. & SISSELA ANN BOK  
75-83 CAMBRIDGE PKWY - # E610  
CAMBRIDGE, MA 02142

12-17  
ROBERTS, MARTIN  
75-83 CAMBRIDGE PKWY. UNIT #E706  
CAMBRIDGE, MA 02142

14-45  
BMR KENDALL DEVELOPMENT, LLC  
C/O RYAN LLC  
P.O. BOX 847  
CARLSBAD, CA 92018

12-17  
MCDERMOTT H. DIANE TRUSTEE OF THE  
MCDERMOTT DECLARATION OF TRT  
83 CAMBRIDGE PARKWAY UNIT #W706  
CAMBRIDGE, MA 02142

12-17  
JIANG, OWEN XIAOHE JING JING WANG  
75-83 CAMBRIDGE PKWY UNIT E1003  
CAMBRIDGE, MA 02142

12-17  
RAO V. MOOTHA VASANTHA L. MOOTHA  
TRUSTEES  
7303 PARK LAKE DR  
DALLAS, TX 75230

12-17  
GARGANO, SHEILA K. PAUL A. GARGANO  
P.O. BX 444  
WEST HYANNISPORT, MA 02672

12-17  
GUAN, GUOLIANG & YURONG WANG  
75-83 CAMBRIDGE PKWY. UNIT E803  
CAMBRIDGE, MA 02142

12-17  
COVO, SUSAN P. & HERMINE ADAMIAN, TRS  
65 GROVE ST APT 141  
WELLESLEY, MA 02482

12-17  
KWEI, THOMAS AMY S. KWEI  
75-83 CAMBRIDGE PKWY UNIT #PH8  
CAMBRIDGE, MA 02141

12-17  
DODYK, DELIGHT W.,  
TRUSTEE THE DELIGHT W. DODYK REV TRUST  
75-83 CAMBRIDGE PKWY #W709  
CAMBRIDGE, MA 02142

12-17  
GROSSMAN, BETTY,  
TRS THE UNIT W609 CONDO TRUST  
75-83 CAMBRIDGE PKWY UNIT W609  
CAMBRIDGE, MA 02142

12-17  
THE 30 FRANCIS LLC  
PO BOX 335  
TOWNSEND, VT 05353

12-17  
TOROUS, WALTER JANE TOROUS, TRS  
75-83 CAMBRIDGE PKWY UNIT E510  
CAMBRIDGE, MA

12-17  
MILLER, ALFRED E. MARIA G. MILLER, TRS  
75-83 CAMBRIDGE PKWY #W708  
CAMBRIDGE, MA 02142

12-17  
RESERVITZ, GEORGE B.,  
TRUSTEE PHYLLIS E. RESERVITZ TRUSTEE  
75-83 CAMBRIDGE PKWY PH2  
CAMBRIDGE, MA 02142

12-17  
LEE, MARK SHARON LOUISE JOHNSTON-LEE  
75-83 CAMBRIDGE PARKWAY UNIT #W807  
CAMBRIDGE, MA 02142



218 First St.

898

12-17  
THREE NINETY CW LLC  
1960 SILAS DEANE HWY - STE 201  
ROCKY HILL, CT 06067

12-17  
PLUKAS HANS RUSSELL BOLANOS CASSANDRA  
75-83 CAMBRIDGE ST - UNIT W901  
CAMBRIDGE, MA 02142

12-17  
LIPSITT, DON R.,  
TRS THE DON R. LIPSITT 1982 TRUST  
75-83 CAMBRIDGE PKWY #W1202  
CAMBRIDGE, MA 02142

12-17  
MOHAMED, SHAIDA L.  
ALYKHAN I. MOHAMED, TRS  
83 CAMBRIDGE PKWY UNIT W407  
CAMBRIDGE, MA 02142

12-17  
ROSE DON E NINA F SIMONDS  
75-83 Cambridge Pkwy - Unit E-408  
CAMBRIDGE, MA 02142

12-17  
DEYKIN DANIEL TRS DANIEL DEYKIN  
TR 75-83 CAMBRIDGE PKWY - UNIT W1107  
CAMBRIDGE, MA 02142