#### GENERAL INFORMATION

The undersigned hereby petiti	ons the Board of Zoni	ng Appeal for the follow	ing:
Special Permit: and relief pursuant to Section 6409 of t PETITIONER:T-Mobile Northeast	he Middle Class Tax Relief Act	Appeal:	
PETITIONER'S ADDRESS: Prince Lo	bel Tye, LLP, Attn. Adam F. B	raillard Esq., One International Plac	e, Suite 3700, Boston, MA
LOCATION OF PROPERTY: 704	Huron Ave		
TYPE OF OCCUPANCY: Telecom	munications ZONING E	DISTRICT: C-3	
REASON FOR PETITION:			
Additions		New Structur	e
Change in Use/Oc	cupancy	Parking	
Conversion to Ad	di'l Dwelling Unit's	Sign	
Dormer		Subdivision	
X Other: Section 640	)9(a) of the Spectrum Act relie	for Special Permit for the collocatio	n of a Wireless Facility

#### DESCRIPTION OF PETITIONER'S PROPOSAL:

The Applicant proposes to modify its existing Wireless Telecommunications Facility by replacing 6 panel antennas with 6 like kind antenna on the building, together with supporting equipment. The Applicant also proposes to replace 3 remote radio heads (RRU) with 3 new RRHs. All 6 replaced antennas and 3 replaced RRHs, will be facade mounted within the existing enclosures on the building. The Applicant proposes to enlarge the widths of 2 of the 3 existing enclosures by a distance of 1.6-feet to fit the replaced antennas. The 2 enlarged enclosures will be painted to match the facade of the existing building. The Applicant's proposal complies with Section 6409 of the Spectrum Act as the collocation of the antennas is not a substantial change to the existing base station. Moreover, the Applicant's proposal complies with Section 4.32 and 10.4 of the City of Cambridge Zoning Ordinance.

### SECTIONS OF ZONING ORDINANCE CITED:

Article	4.00	Section	4.32 (g)(1) Utilities - Teleph	none Exchange		
Article	10.00	Section	10.4 - Special Permit			
Article	6409	Section	Middle Class Tax Relief Ad	st		
Applicar	its for	a Special	must complete Pages Permit must complete al to the BZA of	Pages 1-4 and		hy the
	onal S	ervices Dep	al Signature(s):			
				(Petitioner	r(s)/Owner)	
				Adam F. Braillard, Es	iq.	
				(Print	Name)	
			Address:	One International Pla	ace, Suite 3700	
				Boston, MA 02110		
			Tel. No.:	617-456-8153		
			E-Mail Address	abraillard@princel	lobel.com	
	January 1	1, 2019				

Date:

# 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 Huron Towers Company The Parkside Place Company
(OWNER)
Address: c/o First Realty Management Corp., 151 Tremont Street, Boston, MA 02111
State that I/We own the property located at704 Huron Avenue,
which is the subject of this zoning application.
The record title of this property is in the name of
*Pursuant to a deed of duly recorded in the date, Middlesex South County Registry of Deeds at Book, Page; or Middlesex Registry District of Land Court, Certificate No
Book Page
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 Suffick
The above-name $William lh kaunan personally appeared before me, this 1000 of January 2019, and made oath that the above statement is true.$
Norm Montery Notary
My commission expires 0/24/25 (Notary Seally Notary Seally
My commission expires 0/24/25 (Notary Seal) (Notary Seal) (Notar

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January 11, 2019

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

Re:	Eligible Facilities Request pursuant to Section 6409 of the Spectrum Act and an Application for Special Permit, in the Alternative
Property Address:	704 Huron Avenue, Cambridge, MA 02139
Applicant:	Assessor's Map 257, lot 60 (the " <b>Property</b> ") T-Mobile Northeast LLC (" <b>T-Mobile</b> or the " <b>Applicant</b> ")

Dear Honorable Members of the Board of Zoning Appeals:

This firm represents T-Mobile in connection with an application for a special permit from the City of Cambridge Board of Zoning Appeals (the "**Board**"), to modify an existing wireless communications facility on the Property. The Property is located in the Residential C-3 zoning district, and to the extent that the Board determines that the requirements of Article 4 Section 4.32G.1 of the City of Cambridge Zoning Ordinance (the "**Ordinance**") apply, the use of the Property for a wireless telecommunications facility is permitted by special permit from the Board<sup>1</sup>. The Applicant's proposal satisfies the requirements for the grant of a special permit pursuant to Section 10-43 of the Ordinance.

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

The Applicant seeks to modify and upgrade its existing wireless communications facility by replacing six (6) existing panel antennas with six (6) new panel antennas. The Applicant also proposed to replace three (3) remote radio heads (**RRH**) with three (3)

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

<sup>&</sup>lt;sup>1</sup> Pursuant to Section 6409(a) of the Spectrum Act, state and local governments "may not deny and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." As such, the Applicant submits that they need not apply for a special permit from the board. To the extent that this Board determines that the Applicants' proposed wireless facility must comply with special permit requirements set forth in Section 10-43 of the Ordinance, the Applicants submit that they have complied with said requirements, without waiving the argument that such relief is not required.



new RRHs. All of the proposed antennas and RRH units will be installed within the existing enclosures which are façade mounted on the existing building located at the Property (the "Building"). The Applicant proposed to increase the widths of two (2) of the three (3) existing enclosures to account for the change in the antennas. The enclosures, which are façade mounted on the Building, will be painted to match the façade of the building (the "**Proposed Facility**"). The Applicant's existing and proposed facilities are shown on the two (2) sets of Plans, drafted by Advanced Engineering Group P.C., and dated October 5, 2018 and January 2, 2019, attached hereto and incorporated herein by reference (the "Plans").

## I. <u>Background</u>

The Applicant is licensed by the Federal Communications Commission (the "FCC") to construct and operate a wireless telecommunications network in various markets throughout the country, including the Commonwealth of Massachusetts and in particular in the City of Cambridge. A copy of the Applicant's FCC license is attached hereto. The Applicant is in the process of designing and constructing a telecommunications system to serve all of the Commonwealth of Massachusetts. One of the key design objectives of its systems is to provide seamless coverage. Such a system requires a grid of radio transmitting and receiving links located approximately .5 to 2 miles apart, depending on the location of existing and proposed installations in the surrounding area, the existing use of the network and the existing topography. The radio transmitting and receiving facilities operate on a line-of-sight basis, requiring a clear path from the facility to the user on the ground. This dynamic requires the antennas to be located in a location where the signal is not obstructed or degraded by other buildings or by topographical features such as hills.

## II. <u>Project Description</u>

As noted above, the Applicant proposes to modify its existing wireless facility currently operating on the façade of the Building by replacing six (6) existing panel antennas with six (6) new panel antennas, and replacing three (3) existing RRHs with three (3) new RRHs, all being installed within the existing enclosures on the façade of the Building. The Applicant proposes to increase the widths of two (2) of the three (3) existing enclosures (the enclosures that house Sector A and Sector C of the antenna array), each by a distance of 1.6-feet to account for the change in antennas. The enclosures will be painted to match the façade of the building. The Applicant's proposal is consistent with the previous Decisions (as defined in Section III.A.3 below) of the Board for this facility. Consequently, the visual change to the Applicant's existing facility will be de minimus.

# III. Legal Arguments

## A. <u>The Applicant complies with the Wireless Communications provisions set</u> forth in Section 4.32(g), footnote 49 of the Ordinance

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

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

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

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

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

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

The Applicant's Proposed Facility will have no additional visual impact on the existing facility and Building. The Proposed Facility will be installed on the façade and of the Building, replacing three (3) of the existing antennas, and in conformity with the Decisions.

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

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

The Proposed Facility is located in the Residential C-3 Zoning District but nonresidential uses predominate in the area. Pursuant to the requirement that the Board shall grant a special permit to erect a Telecommunications Facility only upon a finding that non-residential uses predominate in the vicinity of the proposed facility's location the Applicant hereby states that this is a modification of an existing wireless facility and as such respectfully submits to the Board that it has previously found that nonresidential uses predominate in the vicinity of this Proposed Facility. The Board has reached a decision to grant a special permit for the Applicant's Existing Facility on January 12, 2006 (BZA Case #9227), and again to modify the existing facility on December 19, 2012 (BZA Case #9708) and on June 10, 2015, (BZA Case# 006489-2015) (the "Decisions"). As such, the Applicant respectfully requests that, in keeping with its prior decisions, the Board find that nonresidential uses predominate in the vicinity of the Proposed Facility and that the Proposed Facility is not inconsistent with the character that does prevail in the surrounding neighborhood.

Further, notwithstanding anything contained herein to the contrary, and in agreement with the aforementioned predominately nonresidential use finding, upon an inspection of the vicinity of the Proposed Facility the Applicant respectfully submits that said finding is reasonable as the character of the surrounding neighborhood consists of nonresidential uses such as, the Fresh Pond Cambridge Municipal Golf Course, at 691 Huron Avenue, the West Cambridge Mayor Sheila Doyle Russell Youth and Community Center at 680 Huron Avenue and the Belmont Cemetery.

As noted above, the proposed installation is a modification to the Applicant's facility and as such is the preferred location for additional equipment, pursuant to the Telecommunications Act of 1996 (the "TCA"). Moreover, the intent of the U.S. Congress, when it enacted the TCA was to institute a framework to promote competition and innovation within the telecommunications industry. Under its license from the FCC, T-Mobile is obligated to provide a reliable "product" (i.e. wireless communications service) to the population of the City of Cambridge. Likewise, consumer expectations for increasingly robust and reliable service requires competing service providers

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(including T-Mobile) to identify and remedy existing gaps in reliable network coverage, or gaps that result from increasing subscriber voice and data traffic beyond the limits of existing network infrastructure. A carrier's failure to remedy network gaps in a timely fashion can result in a significant loss of subscribers to competing telecommunications carriers. The Proposed Facility and corresponding relief requested are necessary to remedy a gap in reliable service coverage within T-Mobile's existing network infrastructure.

## B. <u>The Applicant complies with the Special Permit Criteria set forth in Section</u> <u>10-43 of the Ordinance<sup>2</sup></u>:

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

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

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

The proposed installation will not obstruct existing rights-of-way or pedestrian access and will not change the daily conditions of access, egress, traffic, congestion hazard, or character of the neighborhood. The installation will not require the addition of any new parking or loading spaces. The use is passive and will not change the current conditions or appearance surrounding the Building. The facility will not produce any odors, fumes, noise or waste. There will be no need for water, sewer, or other municipal services.

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

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

<sup>&</sup>lt;sup>2</sup> Pursuant to Section 6409(a) of the Spectrum Act, state and local governments "may not deny and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." As such, the Applicant submits that they need not apply for a special permit from the board. To the extent that this Board determines that the Applicants' proposed wireless facility must comply with special permit requirements set forth in Section 10-43 of the Ordinance, the Applicants submit that they have complied with said requirements, without waiving the argument that such relief is not required.

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As described above and illustrated on the attached photograph simulations, the modification of the existing facility will produce a minimal change in the appearance of the Building. The modification of the existing facility will blend with the existing characteristics of the Building and the surrounding neighborhood. Moreover, the proposed installation will not generate any traffic, smoke, dust, heat, glare, discharge of noxious substances, nor will it pollute waterways or groundwater. Conversely, the surrounding properties and general public will benefit from the potential to enjoy improved wireless communication.

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

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

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

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

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

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

As mentioned above, the proposed modifications to the existing installation will not generate any traffic, smoke, dust, heat, glare, discharge or noxious substances, nor will it pollute waterways or groundwater.

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

. **.** 

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

### IV. Summary

The Applicant hereby requests that the Board determine that the City of Cambridge has the right to authorize the construction of the Proposed Facility through the issuance of a Building Permit, pursuant to Section 6409(a) of the Spectrum Act. Or, in the alternative, its proposed modifications to the existing telecommunications facility will not have any adverse effect on the neighborhood within which the Property is located in particular, and the City of Cambridge as a whole. The findings are made in view of the particular characteristics of the Property and of the Applicant's proposed siting and equipment, as detailed above. This Property is the most appropriate location for the installation and operation of the wireless communications facility.

For the foregoing reasons the Applicant respectfully requests that the Board grant the foregoing relief pursuant to Section 6409(a) of the Spectrum Act or, in the alternative, zoning relief in the form of a Special Permit and such other relief as the Board deems necessary to allow the installation and operation of the Applicant's Proposed Facility.

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

#### DIMENSIONAL INFORMATION

APPLICANT: T-Mob	ile Northeast		PRESENT USE/OCCUPANC	Y:Wireless Teleo	communical
LOCATION:	uron Avenue		ZONE :	C-3	
617-456-	8153	_ REQUESTED US	E/OCCUPANCY:Wire	eless Telecommunica	ations
		EXISTING CONDITIONS	REQUESTED CONDITIONS	ORDINANCE REQUIREMENTS	
TOTAL GROSS FLOOR	AREA:	N/A	No Change	N/A	(max.)
LOT AREA:		N/A		N/A	(min.)
RATIO OF GROSS FLO TO LOT AREA:	OOR AREA	N/A	No Change	N/A	(max.)
LOT AREA FOR EACH	DWELLING UNIT:	N/A	No Change	N/A	(min.)
SIZE OF LOT:	WIDTH	N/A	_	N/A	(min.)
	DEPTH				
Setbacks in	FRONT	N/A	No Change	N/A	(min.)
Feet:	REAR	N/A	No Change	N/A	(min.)
	LEFT SIDE	N/A	No Change	N/A	(min.)
	RIGHT SIDE	N/A	No Change	N/A	(min.)
SIZE OF BLDG.:	HEIGHT	N/A	No Change	N/A	(max.)
	LENGTH				
	WIDTH				
RATIO OF USABLE OP TO LOT AREA: ')	EN SPACE	N/A	No Change	N/A	(min.)
NO. OF DWELLING UN	TTS.	N/A	No Change	N/A	(max.)
NO. OF PARKING SPA		N/A	No Change	N/A (min	n./max)
NO. OF LOADING ARE		N/A	No Change	N/A	(min.)
DISTANCE TO NEARES		N/A	No Change	 N/A	(min.)

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

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

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#### more commonly referred to as a "collocation".

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

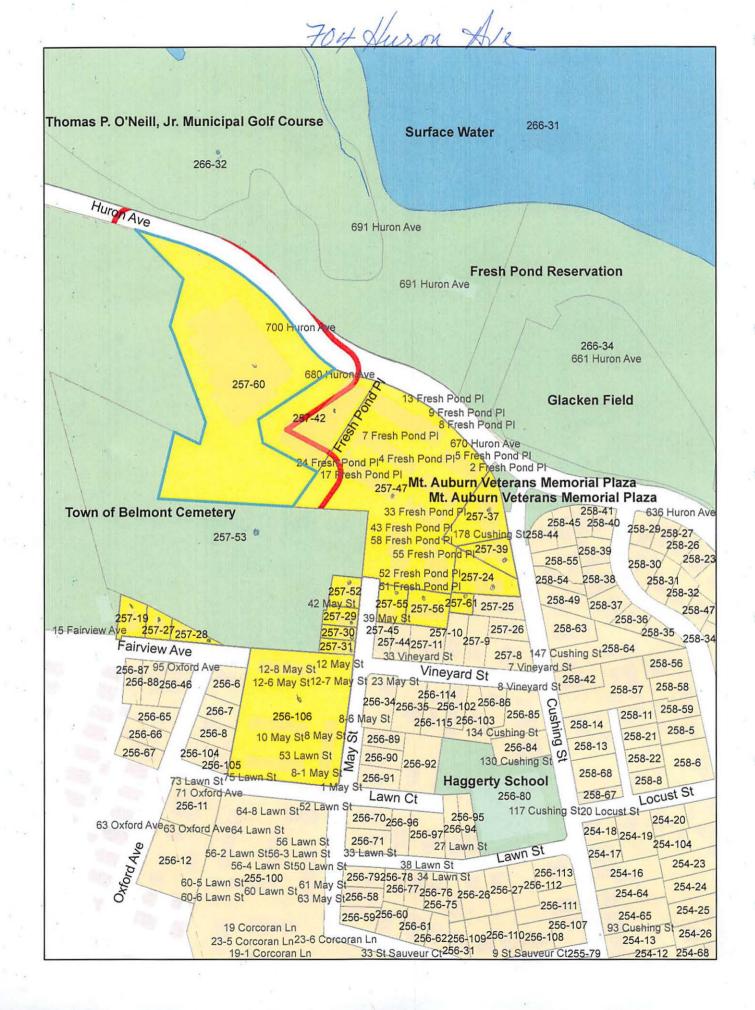
BZA APPLICATION FORM	
GENERAL INFORMATION	
The undersigned hereby petitions the Board of Zoning Appeal	9 JAN 15 AM 11:28 for the following:
Special Permit: X Variance: Appendix and relief pursuant to Section 6409 of the Middle Class Tax Relief Act	LICE OF THE CITY CLERK BRIDGE <del>, MASS</del> ACHUSETTS
PETITIONER: T-Mobile Northeast LLC	
PETITIONER'S ADDRESS: Prince Lobel Tye, LLP, Attn. Adam F. Braillard Esq.,	One International Place, Suite 3700, Boston, MA
LOCATION OF PROPERTY: 704 Huron Ave	
TYPE OF OCCUPANCY: Telecommunications ZONING DISTRICT:	C-3
REASON FOR PETITION:	
Additions	New Structure
Change in Use/Occupancy	Parking
Conversion to Addi'l Dwelling Unit's	Sign
Dormer	Subdivision

#### DESCRIPTION OF PETITIONER'S PROPOSAL:

The Applicant proposes to modify its existing Wireless Telecommunications Facility by replacing 6 panel antennas with 6 like kind antenna on the building, together with supporting equipment. The Applicant also proposes to replace 3 remote radio heads (RRU) with 3 new RRHs. All 6 replaced antennas and 3 replaced RRHs, will be facade mounted within the existing enclosures on the building. The Applicant proposes to enlarge the widths of 2 of the 3 existing enclosures by a distance of 1.6-feet to fit the replaced antennas. The 2 enlarged enclosures will be painted to match the facade of the existing building. The Applicant's proposal complies with Section 6409 of the Spectrum Act as the collocation of the antennas is not a substantial change to the existing base station. Moreover, the Applicant's proposal complies with Section 4.32 and 10.4 of the City of Cambridge Zoning Ordinance. SECTIONS OF ZONING ORDINANCE CITED:

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Article	10.00	Section	10.4 - Special Permit	
Article	6409	Section	Middle Class Tax Relief	Act
Applican	its for	a Special	must complete Page Permit must complete al to the BZA o	
	onal S	ervices Dep		a statement concerning the reaso $W = \frac{1}{2} \frac{1}{2}$
		origin	ar Signature(3).	(Petitioner(s)/Owner)
				Adam F. Braillard, Esq.
				(Print Name)
			Address:	One International Place, Suite 3700
				Boston, MA 02110
			Tel. No.:	617-456-8153
			E-Mail Address	s: abraillard@princelobel.com
	January '	11, 2019		

Date:



257-19 HUNTER, DEIRDRE J. & BETH A. LEVENTHAL 15 FAIRVIEW AVE CAMBRIDGE, MA 02138

257-28 KUTA, CHRISTINE M. 7 FAIRVIEW AVE. CAMBRIDGE, MA 02138

257-31 BARBER, COLLEEN 32 MAY ST. CAMBRIDGE, MA 02138

257-27 OSWANA, GREGORY 11 FAIRVIEW AVE CAMBRIDGE, MA 02138

257-47 CLARK, BENJAMIN B. & CLARISSA R. QUINTANILLA 3 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 VISWANANTHAN, SUBASHREE 7 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 HUMPHREY, JAMES C. & CHRISTINNE C. HUMPHREY 10 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 WALSH, DALE 13 FRESH POND PL CAMBRIDGE, MA 02138

257-47 DANNER, PATRICIA 16 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 KIRSANOV, DANIL

676 HURON AVE. UNIT#19 CAMBRIDGE, MA 02138

# 704 Shuron Ave

257-24 MARCHIO, VINCENT E., MARIO C. MARCHIO & MARIA A. MARCHIO 166 CUSHING ST CAMBRIDGE, MA 02138

257-29 WU, THOMAS JAMES & JAMES WU 36 MAY ST CAMBRIDGE, MA 02138

257-37 SARAO, NATALIE M., TRUSTEE OF CUSHING REALTY TRUST 1 REPUBLIC ROAD BILLERICA, MA 01862

257-47 MARQUEDAUNT, JAYNE TR. OF THE MARQUEDAUNT TRUST OF 2016 676 HURON AVE 1 CAMBRIDGE, MA 02138

257-47 DESIMINI, SABINO N. & CATHERINE A. DESIMINI 4 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 GAMBLE, LINCOLN BRADLEY C/O WOLCOTT LORING & COOLIDGE OFFICE 230 CONGRESS ST BOSTON, MA 02110

257-47 TANG, JIMMY X. & PAMELA G. YANG 11 FRESH POND PLACE,. UNIT 11 CAMBRIDGE, MA 02138

257-47 REINHOLD, ARNOLD G. 14 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 SUDARSHAN, RAGHUNATHAN & PADMAPRIYA SRINIVASAN 17 FRESHPOND PLACE CAMBRIDGE, MA 02138

257-47 SHAPIRO, JAY M. & RICHARD REINKRAUT 20 FRESH POND PLACE CAMBRIDGE, MA 02138

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

1013

257-30 GAINES, LAURIE B 34 MAY ST CAMBRIDGE, MA 02138

257-39 MARCHIO, MARIO C. & MARIA A. MARCHIO 174 CUSHING ST CAMBRIDGE, MA 02138

257-47 GOLOSKIE, STEVEN D. 2 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 BARTON, MELVIN I 5 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 ESTEPAR, RAUL SAN JOSE 9 FRSH POND PL CAMBRIDGE, MA 02138

257-47 PINTUS, PAUL & SUSAN PINTUS 676 HURON AVE., UNIT #12 CAMBRIDGE, MA 02138

257-47 GOBLE, THEODORE N. & SHIRLEY E. MULFORD 15 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 HOUSTON, ERIC & RANKO HOUSTON 18 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 LYUBASHEVSKIY, IGOR B. & LYUDMILA LUBASHEV 21 FRESH POND PL., #21 CAMBRIDGE, MA 02138 257-47 TOLEDO, ERIC & YUKIKO ISHII 22 FRESH POND PLACE. CAMBRIDGE, MA 02138

257-47 STEARNS, ANTONIA R. 25 FRESH POND PL CAMBRIDGE, MA 02138

257-47 KOHLER, VICTORIA G. TRUSTEE OF THE VICTORIA G. KOHLER TRUST P.O BOX 231 BONDVILLE, VT 05340

257-47 ALPERT, GARY D. 31 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 LUEDERS, PENELOPE K. TRUSTEE, 34 FRESH POND PL CAMBRIDGE, MA 02138

257-47 ZHAI, QI 676 HURON AVE., #37 CAMBRIDGE, MA 02138

257-47 BOTCHWEY, KWESI CITY OF CAMBRIDGE TAX TITLE 40 FRESH POND PL CAMBRIDGE, MA 02138

257-47 ROBINSON, TRINA 43 FRESH POND PLACE #43 CAMBRIDGE, MA 02138

257-47 FOX-WARREN, MAURIE & MARGARET FOX-WARREN 46 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 DELANEY, ARLENE 49 FRESH POND PLACE CAMBRIDGE, MA 02138 For Shiron Are

257-47 WEXLER, RUTH M. 23 FRESH POND PL CAMBRIDGE, MA 02138

257-47 WEISSMAN, LARRY 26 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 GILLASPIE, R. CRAIG & MARY L. ARRIGO 29 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 FREDERICK, JOCELYN L. & THOMAS J. FREDERICK 32 FRESH POND PL CAMBRIDGE, MA 02139

257-47 CRUTHIRDS, DANIEL R. 35 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 STONE, DONALD JR. JOHN ONOFREY 38 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 SELVA, MICHEL & DEBORAH JANCOURTZ 41 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 TIPPER, DONALD J. & KAREN S. TIPPER 44 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 LEWONTIN, TIMOTHY A. & AMY LEWONTIN 47 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 YUM, HYUNG-KON 676 HURON AVE., UNIT #50 CAMBRIDGE, MA 02138 257-47 MILLER, ARNOLD R. & SHARON L. HERMAN 24 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 PURVIS, KIRK S. 676 HURON AVE., #27 CAMBRIDGE, MA 02138

257-47 VOGMAN, TATYANA L. 676 HURON AVE. UNIT 30 CAMBRIDGE, MA 02138

257-47 AYOUB, CATHERINE C. & JOHN E. AYOUB 33 FRESH POND PL CAMBRIDGE, MA 02138

257-47 KLAPPER, MIRIAM S. 36 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 HUREL, PIERRE J.R. & NICOLE AGOIS 676 HURON AVE., #39 CAMBRIDGE, MA 02138

257-47 SHAMIM, ANNE 42 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 LINER, ELLEN F. & ERIC M. LISKIN 45 FRESH POND PL. CAMBRIDGE, MA 02138

257-47 FRESH POND PLACE PARTNERSHIP C/O WILLIAM KAPLAN 2 WASHINGTON ST NEWTON, MA 02458

257-47 WANG, YOUBIN & YAN QU 51 FRESH POND PLACE CAMBRIDGE, MA 02138

2 43

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257-47 HARRIS, ANITA M. TRUSTEE OF THE HARRIS FAMILY REALTY TRUST 53 FRESH POND PL #53 CAMBRIDGE, MA 02138

257-47 GOODSON, JO MAX & STEVANKA V. GOODSON TRUSTEES, THE GOODSON LIV TRUST 676 HURON AVE., #56 CAMBRIDGE, MA 02138

257-52 CHALLENNER, AARON 40 MAY ST., #40 CAMBRIDGE, MA 02138

256-106 CAMBRIDGE HOUSING AUTHORITY 675 MASSACHUSETTS AVE CAMBRIDGE, MA 02139

257-60 HURON TOWERS COMPANY C/O FIRST REALTY MANAGEMENT CORP. 151 TREMONT STREET BOSTON, MA 02111

257-42-53 & 266-32 CITY OF CAMBRIDGE C/O LOUIS DEPASQUALE CITY MANAGER

BELMONT CEMETERY C/O BOB GARDNER P.O. BOX 56 BELMONT, MA 02478 257-47 AMENECHI, ONA DIKE 54 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 BELANGER, MONICA L.& MICHAEL RUDOLPH WEST TR THE RUDOLPH AND LINDA WEST IRREV TRUS C/O LINDA WEST 57 FRESH POND PLACE #57 CAMBRIDGE, MA 02138

257-52 RAINOFF, HELEN 42 MAY ST CAMBRIDGE, MA 02138

257-55 PRASAD, RAJIV & SALLY S. PRASAD 39 MAY ST CAMBRIDGE, MA 02138

257-61 BORELLI, THERESA 158 CUSHING ST CAMBRIDGE, MA 02138

257-42-53 & 266-32 CITY OF CAMBRIDGE C/O NANCY GLOWA CITY SOLICITOR

257-47 UEBELHOER, DAMIAN 676 HURON AVE, #52 CAMBRIDGE, MA 02138

257-47 WEINBERGER, GEORGE M. 55 FRESH POND PLACE CAMBRIDGE, MA 02138

257-47 ABBENSETTS, MAXWELL KOFI JOHN 676 HURON AVE., #58 CAMBRIDGE, MA 02138

257-52 VINSON, ROSEMARY J. 44 MAY ST CAMBRIDGE, MA 02138

257-56 MONAGLE, RICHARD PMB #144 1770 MASS AVE CAMBRIDGE, MA 02138

266-32 CAMBRIDGE CITY OF RECREATION DEPT 51 INMAN ST CAMBRIDGE, MA 02139

BELMONT PLANNING BOARD 455 CONCORD AVENUE BELMONT, MA 02478



January 11, 2018

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

Re:

Property Address:

Applicant:

Eligible Facilities Request pursuant to Section 6409 of the Spectrum Act and an Application for Special Permit, in the Alternative 704 Huron Avenue, Cambridge, MA 02139 Assessor's Map 257, Lot 60 (the "Property") T-Mobile Northeast LLC (the "Applicant")

Dear Honorable Members of the Board of Zoning Appeals:

This firm represents the Applicant in connection with an application for a special permit from the City of Cambridge Board of Zoning Appeals, to modify an existing wireless communications facility on the Property.

Enclosed, in connection with this application, please find three (3) application packages along with an application filing fee in the amount of \$500.00 made payable to the City of Cambridge.

Please contact me with any questions or if you need additional information. Thank you for your attention to this matter.

Sincerely.

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

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

### J. LEE ASSOCIATES

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# APPLICATION FOR RELIEF UNDER SECTION 6409(a) OF THE SPECTRUM ACT Or For SPECIAL PERMIT For a Modification to an Existing WIRELESS COMMUNICATION FACILITY

### **T-Mobile Northeast LLC**

c/o Adam F. Braillard, Esq. Prince Lobel Tye LLP One International Place, Suite 3700 Boston, MA 02110

Applicant

Property Location: 704 Huron Avenue Cambridge, MA 02139

Map 257, Lot 60

Prepared by: Adam F. Braillard, Esq. Prince Lobel Tye LLP One International Place, Suite 3700 Boston, MA 02110 Telephone: (617) 456-8153 Facsimile: (617) 456-8100

January 11, 2018

### **TABLE OF CONTENTS**

# APPLICATION TO THE BOARD OF ZONING APPEALS For Relief under Section 6409 of the Spectrum Act Or For a Special Permit for an Existing WIRELESS COMMUNICATION FACILITY

# **Property located at:**

# 704 Huron Avenue Cambridge, MA 02139

# Map 257, Lot 60

Board of Zoning Appeals Special Permit Application	Tab 1
Zoning Supporting Statement	Tab 2
Plans	Tab 3
Structural Analysis	Tab 4
Photograph Simulations	Tab 5
FCC License	Tab 6
Previous Decisions	Tab 7
Eligible Facilities Request	Tab 8

#### CHECK LIST

704 Huron Avenue PROPERTY LOCATION:			DAT	TE:
PETITIONER OR REPRESEN	TATIVE:	Adam F. Braillard, Esq.	for T-Mobile	e Northeast LLC
ADDRESS & PHONE:	ne Internatio	onal Place, Suite 3700, Bo	ston, MA 021	110
BLOCK	257	L	OT:6	0

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

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

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

Proposed Deeds	N/A	N/A
Evidence of Separate Utilities **	N/A	N/A
Proposed Subdivision Plan	N/A	N/A

Petitioners are advised to refer to Attachment A (Procedures for applying to the Board of Zoning Appeal) & consult zoning staff for review. It is advisable for the Petitioner to discuss the petition with the abutters as

listed in the Zoning BZA Case file.

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

 $^{\star\star}$  Can be submitted after subdivision has been approved.

#### GENERAL INFORMATION

Special Permit: X	Variance:		eal:	
18	ion 6409 of the Middle Class Ta ile Northeast LLC			
PETITIONER'S ADDRESS:	Prince Lobel Tye, LLP, Attn.	Adam F. Braillard Esq.,	, One International Place, Suite	3700, Boston, MA
LOCATION OF PROPERTY:	704 Huron Ave			
TYPE OF OCCUPANCY:	Telecommunications	ZONING DISTRICT:	C-3	
REASON FOR PETITION:				
Addition	ns	9 <u></u>	New Structure	
Change i	In Use/Occupancy		Parking	
Conversi	on to Addi'l Dwelling	J Unit's	Sign	
Dormer		57 <u></u>	Subdivision	
X Other:	Section 6409(a) of the Spectre	um Act relief for Special I	Permit for the collocation of a V	Vireless Facility

#### DESCRIPTION OF PETITIONER'S PROPOSAL:

The Applicant proposes to modify its existing Wireless Telecommunications Facility by replacing 6 panel antennas with 6 like kind antenna on the building, together with supporting equipment. The Applicant also proposes to replace 3 remote radio heads (RRU) with 3 new RRHs. All 6 replaced antennas and 3 replaced RRHs, will be facade mounted within the existing enclosures on the building. The Applicant proposes to enlarge the widths of 2 of the 3 existing enclosures by a distance of 1.6-feet to fit the replaced antennas. The 2 enlarged enclosures will be painted to match the facade of the existing building. The Applicant's proposal complies with Section 6409 of the Spectrum Act as the collocation of the antennas is not a substantial change to the existing base station. Moreover, the Applicant's proposal complies with Section 4.32 and 10.4 of the City of Cambridge Zoning Ordinance. **SECTIONS OF ZONING ORDINANCE CITED:** 

Article <u>4.00</u> S	Section 4.32 (g)(1) Utilities -	Telephone Exchange
Article 10.00 S	Section 10.4 - Special Permi	it
Article <u>6409</u> s	Section Middle Class Tax Re	elief Act
Applicants for a Applicants for		
for the appeal	Original Signature(s):	w F. 31
	ine construct 🦉 Produktion – in the new Party Interface apportance (2000) for a	(Petitioner(s)/Owner)
		Adam F. Braillard, Esq. (Print Name)
	Address:	One International Place, Suite 3700
		Boston, MA 02110
	Tel. No.:	617-456-8153
	E-Mail Add	ress:abraillard@princelobel.com
January 11, Date:	, 2019	

# 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 Huron-Towers Company The Parkside Place Company
(OWNER)
Address: c/o First Realty Management Corp., 151 Tremont Street, Boston, MA 02111
State that I/We own the property located at704 Huron Avenue
which is the subject of this zoning application.
Huron Towers Company
The record title of this property is in the name of
4/16/1070
*Pursuant to a deed of duly recorded in the date, Middlesex Sout
County Registry of Deeds at Book, Page, Page; or
Aiddlesex Registry District of Land Court, Certificate No
Book Page
1.2 /
Mm Karama
SIGNATURE BY LAND OWNER OR
AUTHORIZED TRUSTEE, OFFICER OR AGENT*
*Written evidence of Agent's standing to represent petitioner may be requested
a a lu
Commonwealth of Massachusetts, County of Suffic
The above-name $Willawlk kawaa personally appeared before mehis 10\% of Tanuar 20/9, and made oath that the above statement is truA kawaa have before me$
his IDM Tanual 2019 and made bath that the above statement is tru
ints or <u>Succusing</u> 20 1, and more bach that that above statement is the
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18/10 Adv 01/1
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If ownership is not shown in recorded deed, e.g. if by that order, recorded, or inheritance, please include documentation.
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y commission expires 0/24/25 (Notary Seal) (Notary Seal) (

#### DIMENSIONAL INFORMATION

APPLICANT: T-M	obile Northeast	1	PRESENT USE/OCCUPAN	CY:Wireless Tele	communica
LOCATION: 704 Huron Avenue			ZONE: C-3		
PHONE :617-456-8153		REQUESTED USE/OCCUPANCY: Wireless Telecommunications			ations
		EXISTING CONDITIONS	REQUESTED CONDITIONS	ORDINANCE REQUIREMENTS	
TOTAL GROSS FLOO	R AREA:	N/A	No Change	N/A	(max.)
LOT AREA:		N/A		N/A	(min.)
RATIO OF GROSS FLOOR AREA TO LOT AREA:		N/A	No Change	N/A	(max.)
LOT AREA FOR EACH DWELLING UNIT:		N/A	No Change	N/A	(min.)
SIZE OF LOT:	WIDTH	N/A	i	N/A	(min.)
Setbacks in Feet:	DEPTH				
	FRONT	N/A	No Change	N/A	(min.)
	REAR	N/A	No Change	N/A	(min.)
	LEFT SIDE	N/A	No Change	N/A	(min.)
	RIGHT SIDE	N/A	No Change	N/A	(min.)
SIZE OF BLDG.:	HEIGHT	N/A	No Change	N/A	(max.)
	LENGTH				
	WIDTH				
RATIO OF USABLE ( FO LOT AREA: <sup>3</sup> )	DPEN SPACE	N/A	No Change	N/A	(min.)
NO. OF DUPITING UNITES.		N/A	No Change	N/A	(max.)
NO. OF DWELLING UNITS: NO. OF PARKING SPACES:		N/A	No Change		(max.)
NO. OF LOADING AREAS:		N/A	No Change	N/A	(min.)
DISTANCE TO NEAREST BLDG.		N/A	No Change	N/A	(min.)

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

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

more commonly referred to as a "collocation".

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

#### SUPPORTING STATEMENT FOR A VARIANCE

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

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

N/A

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

N/A

#### C) DESIRABLE RELIEF MAY BE GRANTED WITHOUT EITHER:

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

#### N/A

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

N/A

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

(ATTACHMENT B - PAGE 5)

#### 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 704 Huron Avenue (location) would not be a detriment to the public interest because:

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

#### Please see the attached supporting statement.

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

#### Please see the attached supporting statement.

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

#### Please see the attached supporting statement.

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

#### Please see the attached supporting statement.

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

(ATTACHMENT B - PAGE 6)



January 11, 2019

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

Re:	Eligible Facilities Request pursuant to Section 6409 of the
	Spectrum Act and an Application for Special Permit, in the
	Alternative
Property Address:	704 Huron Avenue, Cambridge, MA 02139
	Assessor's Map 257, lot 60 (the "Property")
Applicant:	T-Mobile Northeast LLC ("T-Mobile or the "Applicant")

Dear Honorable Members of the Board of Zoning Appeals:

This firm represents T-Mobile in connection with an application for a special permit from the City of Cambridge Board of Zoning Appeals (the "**Board**"), to modify an existing wireless communications facility on the Property. The Property is located in the Residential C-3 zoning district, and to the extent that the Board determines that the requirements of Article 4 Section 4.32G.1 of the City of Cambridge Zoning Ordinance (the "**Ordinance**") apply, the use of the Property for a wireless telecommunications facility is permitted by special permit from the Board<sup>1</sup>. The Applicant's proposal satisfies the requirements for the grant of a special permit pursuant to Section 10-43 of the Ordinance.

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

The Applicant seeks to modify and upgrade its existing wireless communications facility by replacing six (6) existing panel antennas with six (6) new panel antennas. The Applicant also proposed to replace three (3) remote radio heads (**RRH**) with three (3)

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

<sup>&</sup>lt;sup>1</sup> Pursuant to Section 6409(a) of the Spectrum Act, state and local governments "may not deny and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." As such, the Applicant submits that they need not apply for a special permit from the board. To the extent that this Board determines that the Applicants' proposed wireless facility must comply with special permit requirements set forth in Section 10-43 of the Ordinance, the Applicants submit that they have complied with said requirements, without waiving the argument that such relief is not required.



new RRHs. All of the proposed antennas and RRH units will be installed within the existing enclosures which are façade mounted on the existing building located at the Property (the "Building"). The Applicant proposed to increase the widths of two (2) of the three (3) existing enclosures to account for the change in the antennas. The enclosures, which are façade mounted on the Building, will be painted to match the façade of the building (the "**Proposed Facility**"). The Applicant's existing and proposed facilities are shown on the two (2) sets of Plans, drafted by Advanced Engineering Group P.C., and dated October 5, 2018 and January 2, 2019, attached hereto and incorporated herein by reference (the "Plans").

### I. Background

The Applicant is licensed by the Federal Communications Commission (the "FCC") to construct and operate a wireless telecommunications network in various markets throughout the country, including the Commonwealth of Massachusetts and in particular in the City of Cambridge. A copy of the Applicant's FCC license is attached hereto. The Applicant is in the process of designing and constructing a telecommunications system to serve all of the Commonwealth of Massachusetts. One of the key design objectives of its systems is to provide seamless coverage. Such a system requires a grid of radio transmitting and receiving links located approximately .5 to 2 miles apart, depending on the location of existing and proposed installations in the surrounding area, the existing use of the network and the existing topography. The radio transmitting and receiving facilities operate on a line-of-sight basis, requiring a clear path from the facility to the user on the ground. This dynamic requires the antennas to be located in a location where the signal is not obstructed or degraded by other buildings or by topographical features such as hills.

## II. <u>Project Description</u>

As noted above, the Applicant proposes to modify its existing wireless facility currently operating on the façade of the Building by replacing six (6) existing panel antennas with six (6) new panel antennas, and replacing three (3) existing RRHs with three (3) new RRHs, all being installed within the existing enclosures on the façade of the Building. The Applicant proposes to increase the widths of two (2) of the three (3) existing enclosures (the enclosures that house Sector A and Sector C of the antenna array), each by a distance of 1.6-feet to account for the change in antennas. The enclosures will be painted to match the façade of the building. The Applicant's proposal is consistent with the previous Decisions (as defined in Section III.A.3 below) of the Board for this facility. Consequently, the visual change to the Applicant's existing facility will be de minimus.

## III. Legal Arguments

### A. <u>The Applicant complies with the Wireless Communications provisions set</u> forth in Section 4.32(g), footnote 49 of the Ordinance

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

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

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

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

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

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

The Applicant's Proposed Facility will have no additional visual impact on the existing facility and Building. The Proposed Facility will be installed on the façade and of the Building, replacing three (3) of the existing antennas, and in conformity with the Decisions.

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

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

The Proposed Facility is located in the Residential C-3 Zoning District but nonresidential uses predominate in the area. Pursuant to the requirement that the Board shall grant a special permit to erect a Telecommunications Facility only upon a finding that non-residential uses predominate in the vicinity of the proposed facility's location the Applicant hereby states that this is a modification of an existing wireless facility and as such respectfully submits to the Board that it has previously found that nonresidential uses predominate in the vicinity of this Proposed Facility. The Board has reached a decision to grant a special permit for the Applicant's Existing Facility on January 12, 2006 (BZA Case #9227), and again to modify the existing facility on December 19, 2012 (BZA Case #9708) and on June 10, 2015, (BZA Case# 006489-2015) (the "Decisions"). As such, the Applicant respectfully requests that, in keeping with its prior decisions, the Board find that nonresidential uses predominate in the vicinity and that the Proposed Facility is not inconsistent with the character that does prevail in the surrounding neighborhood.

Further, notwithstanding anything contained herein to the contrary, and in agreement with the aforementioned predominately nonresidential use finding, upon an inspection of the vicinity of the Proposed Facility the Applicant respectfully submits that said finding is reasonable as the character of the surrounding neighborhood consists of nonresidential uses such as, the Fresh Pond Cambridge Municipal Golf Course, at 691 Huron Avenue, the West Cambridge Mayor Sheila Doyle Russell Youth and Community Center at 680 Huron Avenue and the Belmont Cemetery.

As noted above, the proposed installation is a modification to the Applicant's facility and as such is the preferred location for additional equipment, pursuant to the Telecommunications Act of 1996 (the "TCA"). Moreover, the intent of the U.S. Congress, when it enacted the TCA was to institute a framework to promote competition and innovation within the telecommunications industry. Under its license from the FCC, T-Mobile is obligated to provide a reliable "product" (i.e. wireless communications service) to the population of the City of Cambridge. Likewise, consumer expectations for increasingly robust and reliable service requires competing service providers

PRINCE LOBEL

(including T-Mobile) to identify and remedy existing gaps in reliable network coverage, or gaps that result from increasing subscriber voice and data traffic beyond the limits of existing network infrastructure. A carrier's failure to remedy network gaps in a timely fashion can result in a significant loss of subscribers to competing telecommunications carriers. The Proposed Facility and corresponding relief requested are necessary to remedy a gap in reliable service coverage within T-Mobile's existing network infrastructure.

### B. <u>The Applicant complies with the Special Permit Criteria set forth in Section</u> 10-43 of the Ordinance<sup>2</sup>:

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

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

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

The proposed installation will not obstruct existing rights-of-way or pedestrian access and will not change the daily conditions of access, egress, traffic, congestion hazard, or character of the neighborhood. The installation will not require the addition of any new parking or loading spaces. The use is passive and will not change the current conditions or appearance surrounding the Building. The facility will not produce any odors, fumes, noise or waste. There will be no need for water, sewer, or other municipal services.

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

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

 $<sup>^2</sup>$  Pursuant to Section 6409(a) of the Spectrum Act, state and local governments "may not deny and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." As such, the Applicant submits that they need not apply for a special permit from the board. To the extent that this Board determines that the Applicants' proposed wireless facility must comply with special permit requirements set forth in Section 10-43 of the Ordinance, the Applicants submit that they have complied with said requirements, without waiving the argument that such relief is not required.



As described above and illustrated on the attached photograph simulations, the modification of the existing facility will produce a minimal change in the appearance of the Building. The modification of the existing facility will blend with the existing characteristics of the Building and the surrounding neighborhood. Moreover, the proposed installation will not generate any traffic, smoke, dust, heat, glare, discharge of noxious substances, nor will it pollute waterways or groundwater. Conversely, the surrounding properties and general public will benefit from the potential to enjoy improved wireless communication.

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

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

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

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

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

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

As mentioned above, the proposed modifications to the existing installation will not generate any traffic, smoke, dust, heat, glare, discharge or noxious substances, nor will it pollute waterways or groundwater.

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

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

# IV. Summary

The Applicant hereby requests that the Board determine that the City of Cambridge has the right to authorize the construction of the Proposed Facility through the issuance of a Building Permit, pursuant to Section 6409(a) of the Spectrum Act. Or, in the alternative, its proposed modifications to the existing telecommunications facility will not have any adverse effect on the neighborhood within which the Property is located in particular, and the City of Cambridge as a whole. The findings are made in view of the particular characteristics of the Property and of the Applicant's proposed siting and equipment, as detailed above. This Property is the most appropriate location for the installation and operation of the wireless communications facility.

For the foregoing reasons the Applicant respectfully requests that the Board grant the foregoing relief pursuant to Section 6409(a) of the Spectrum Act or, in the alternative, zoning relief in the form of a Special Permit and such other relief as the Board deems necessary to allow the installation and operation of the Applicant's Proposed Facility.

Sincere SHO

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

	PROJECT	INFORMATION			6		
SCOPE OF WORK:	UNMANNED TELE	COMMUNICATIONS FACILITY MODIFICATION	s		SITE NU	MBE	R: 4BN0
SITE ADDRESS:	704 HURON A	AVENUE MA 02138		SITE N	AME: PARK	SID	E PLACE
LATITUDE: LONGITUDE:	42' 22' 52.4" 71' 09' 16.9"						
JURISDICTION:		& LOCAL CODES OR ORDINANCES			704	HUR	ON AVENUE
CURRENT USE:	TELECOMMUNICA	TIONS FACILITY			CAMB	RIDGE	, MA 0213
PROPOSED USE:	TELECOMMUNICA	TIONS FACILITY			MIDE	LESE	X COUNTY
PROJECT TYPE:	L700 4x2						
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zoning / site acq.	DATE	CIVII No. 403		1			
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OPERATIONS	DATE	Inste	T			ŀ	
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				BER: 4BN0111A	T-MOBILE NORTHEAST LLC	NO. DATE 0 01/02/19	REMISIONS ISSUED FOR REMIEW
	CED		704 HURON A		15 COMMERCE WAY, SUITE B NORTON, MA 02766 OFFICE: (508) 286-2700		
il Engineering - Site Development - Surveying - Te	ecommunications (401) 354-2403 (401) 633-6354	J. LEE ASSOCIATES 420 NORTHBORO ROAD CENTRAL MARLBOROUCH, MA 01752	CAMBRIDGE, M	UNTY	OFFICE: (508) 286-2700 FAX: (508) 286-2893		

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# 0111A E APARTMENTS

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## **GENERAL NOTES**

THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF ST, LLC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN LY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ICTIONS IS SPECIFICALLY ALLOWED.

UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND IOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.

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

DIG SAFE SYSTEM, INC.



CALL BEFORE YOU DIG

L FREE: 811 OR 888-DIG-SAFE

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### GENERAL NOTES

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

2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS evertheless cautioned that minor omissions or errors i THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.

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

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

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

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

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

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

9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIED HEREN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, sequences and procedures and for coordinating all portions OF THE WORK UNDER THE CONTRACT.

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

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

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

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

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

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

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

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

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

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

20. NORTH ARROW SHOWN ON PLANS REFERS TO APPROXIMATE TRUE NORTH. PRIOR TO THE START OF CONSTRUCTION, ORDERING OR FABRICATING OF ANTENNA MOUNTS, CONTRACTOR SHALL CONSULT with project owner's RF engineer and field verify all ANTENNA SECTOR LOCATIONS AND ANTENNA AZIMUTHS.

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

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

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

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

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

26. ALL UTILITY WORK SHALL BE IN COMPANY REQUIREMENTS AND SPECI

27. ALL (E)ACTIVE SEWER, WATER, G UTILITIES WHERE ENCOUNTERED IN T AT ALL TIMES, AND WHERE REQUIRE OF THE WORK, SHALL BE RELOCATED EXTREME CAUTION SHOULD BE USED EXCAVATING OR PIER DRILLING AROU CONTRACTOR SHALL PROVIDE SAFETY

28. ALL (E) MACTIVE SEMER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, 1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF WHICH INTERPERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF UTILITY COMPANY ENGINEERING, THE AREAS OF THE PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT, DRIVEWAY OR

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

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

31. FOR WIRELESS COMMUNICATIONS SYSTEMS. PROJECT OWNER'S IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GENERALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CAMPACTURES. PROJECT OWNER RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO ED11 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS

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

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

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION;

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

witenna tower and antenna supporting structures; refer TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

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

#### APPLICABLE BUILDING CODES:

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

RUEDING CODE:

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

# ELECTRICAL AND GROUNDING NOTES

THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.

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

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

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

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

6. BURED CONDUIT SHALL BE SCHEDLIFE 40 PVC.

7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHIW, THWN, OR THEM INSULATION

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

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

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

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

12. PPC SUPPLIED BY PROJECT OWNER.

13. GROUNDING SHALL COMPLY WITH NEC ART, 250.

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

Additional note: Grounding, Bonding and Lightning Protection SHALL BE DONE IN ACCORDANCE WITH "T-MOBILE BTS SITE GROUNDING STANDARDS".

Accordance with local utility Fications.		AB	BBR		
AS, ELECTRIC, AND OTHER HE WORK, SHALL BE PROTECTED D FOR THE PROPER EXECUTION D AS DIRECTED BY ENGINEERS. BY THE CONTRACTOR WHEN ND OR NEAR UTILITIES. TRAINING FOR THE WORKING			AGL AWG BCW BTS (E) EG EGR (F)	ABOVE GRADE LEVEL AMERICAN WIRE GAUGE BARE COPPER WIRE BASE TRANSCEIVER STATION EXISTING EQUIPMENT GROUND EQUIPMENT GROUND RING FUTURE	G. Mi (F N. Ri
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	T-MOBILE NORTHEAST LLC		01/02/19	ISSUED FOR REMEW	
SITE NAME: PARKSIDE PLACE APARTMENTS	15 COMMERCE WAY, SUITE B NORTON, MA 02766				
704 HURON AVENUE CAMBRIDGE, MA 02138 MIDDLESEX COUNTY	OFFICE: (508) 286-2700 FAX: (508) 286-2893	Ξ			_







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

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

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

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

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

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

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

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

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

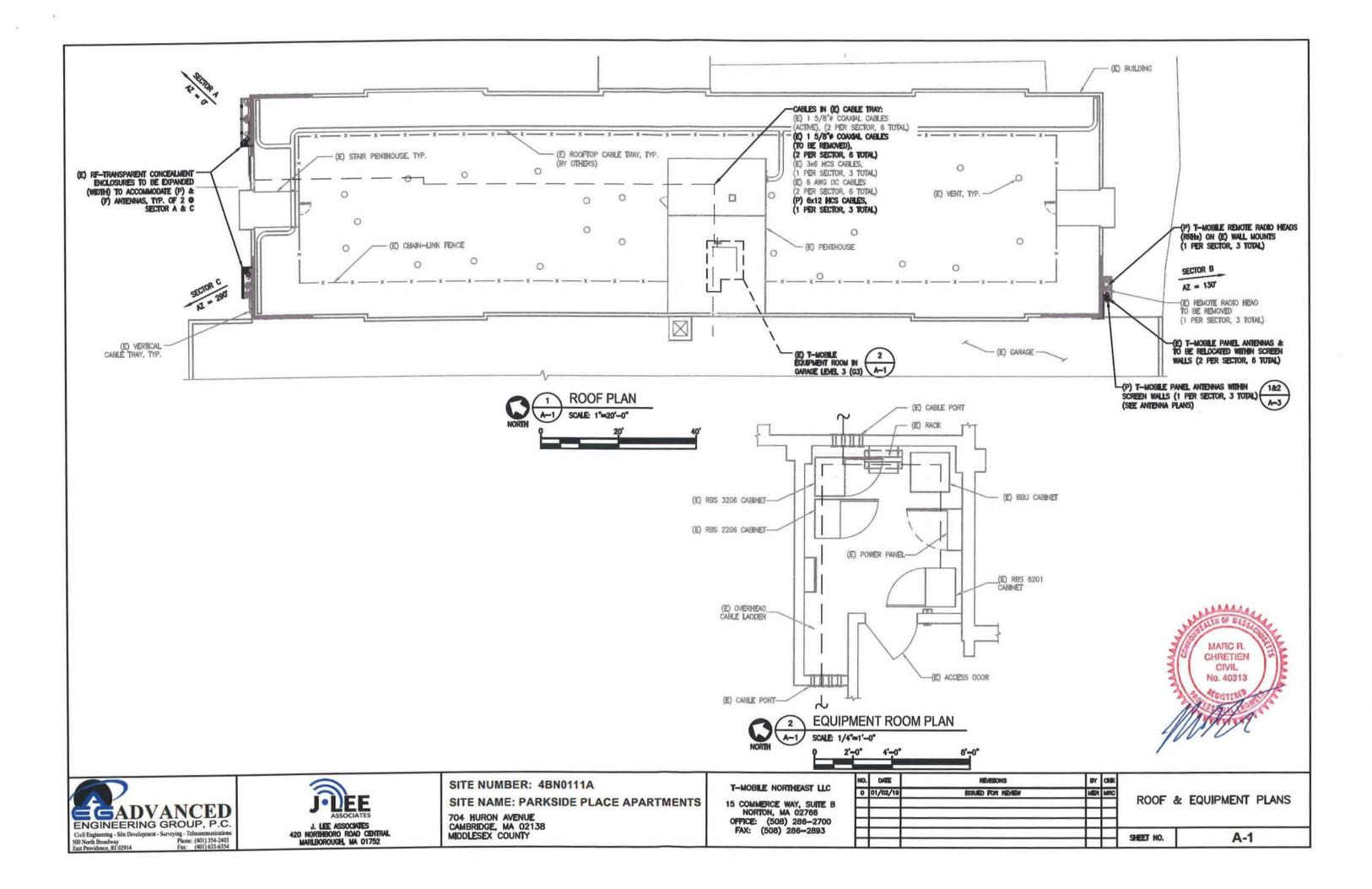


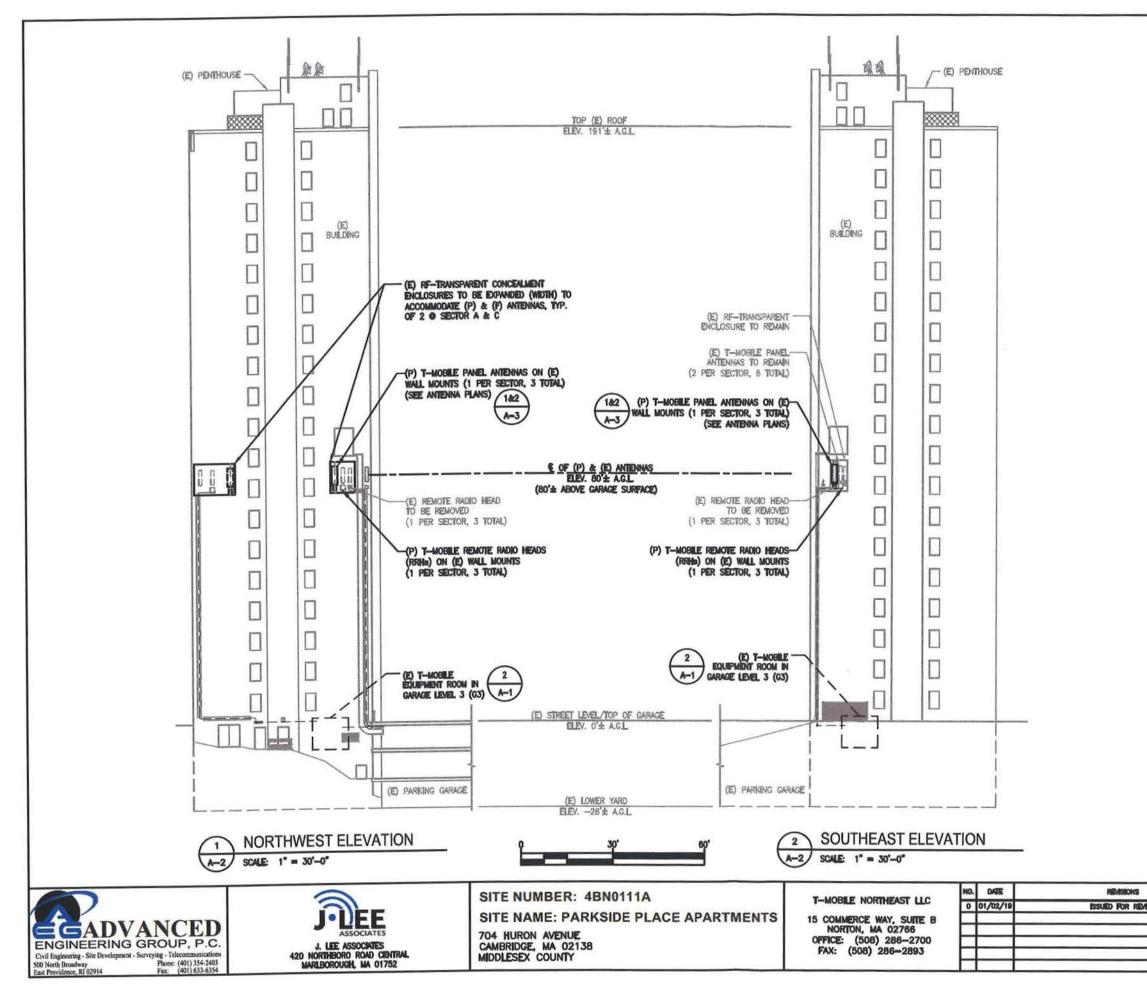
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# REVIATIONS

	-	MRC	GENERAL	NOTES
	BY	CHIK		
REQ		QUIRED	TYP	TYPICAL
REF		FERENCE	(DAX	AND REPLACED
NTC	NOT	T TO COME	TRRR	TO BE REMOVED
(P)	PR	OPOSED/NEW	TBR	TO BE REMOVED
MIN	MIN	MUM	TBD	TO BE DETERMINED
MGB	MAS	STER GROUND	BUS	
G.C.	GE	NERAL CONTRA	ACTOR RF	RADIO FREQUENCY
	MGB MIN	MGB MAX MIN MIN (P) PR N.T.S. NO	MGB MASTER GROUND MIN MINIMUM (P) PROPOSED/NEW N.T.S. NOT TO SCALE	MGB MASTER GROUND BUS MIN MINIMUM TBD (P) PROPOSED/NEW TBR N.T.S. NOT TO SCALE TBRR

SHEET NO.





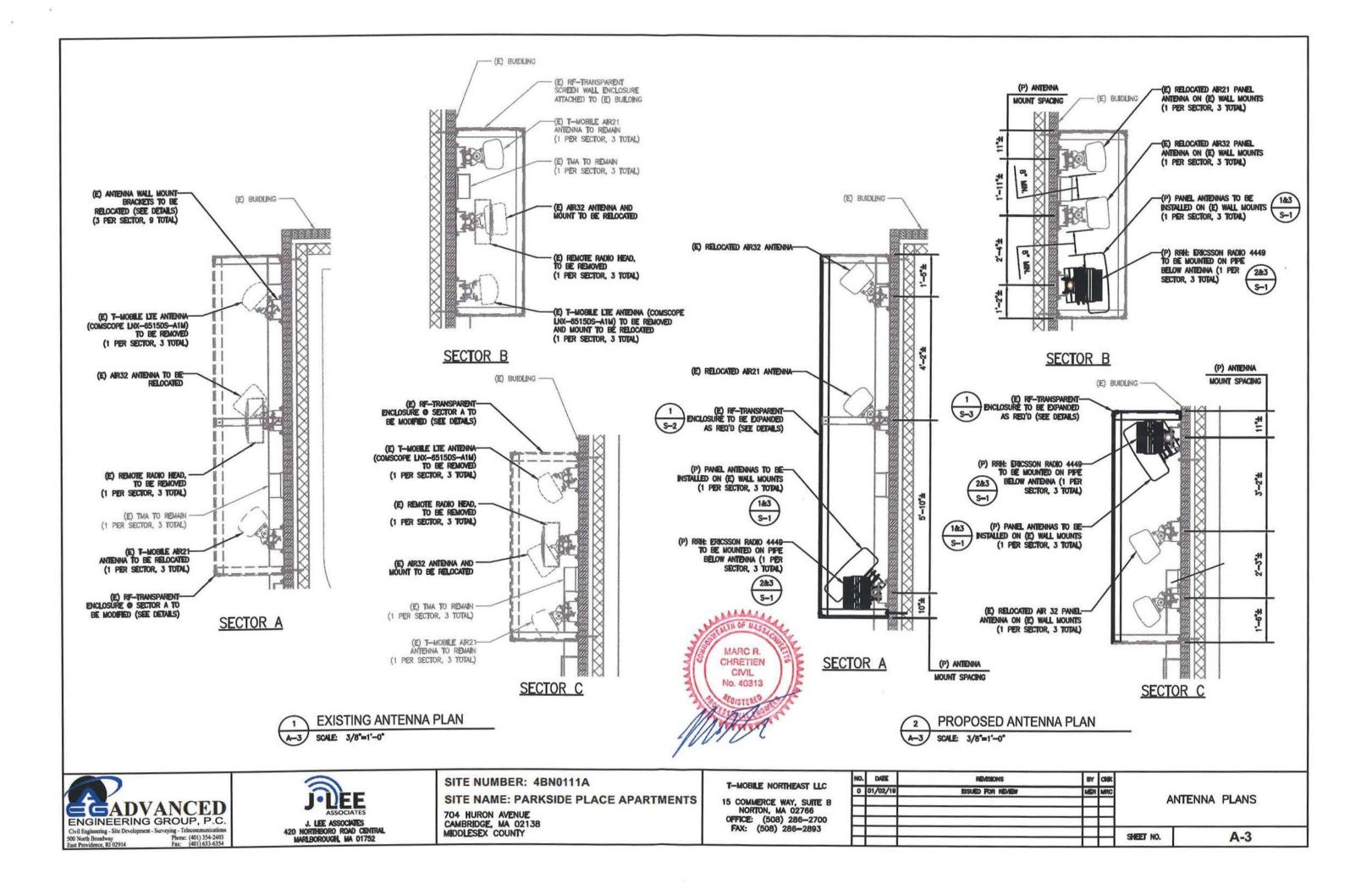
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E	QUIPMENT SCHEDULE
OLIANTITY 3 3 3 3 3 3 3 12 3 6	EQUIPMENT DESCRIPTION ERICSSON AIR21 B2A/B4P PANEL ANTENNAS ERICSSON AIR32 B4A/B2P PANEL ANTENNAS COMMSCOPE LNN-651505-A1M ERICSSON RRUS32-B2 ERICSSON RRUS32-B2 GENERIC STYLE 1B TWIN AWS TMA 1 5/8"# COAVAL CABLES 3x6 HCS DC/RIBER CABLES DC/FIBER CABLES
EOUIPMEI 3 3 6	NT TO BE REMOVED COMMSCOPE LNK-6515DS-A1M ERICCSON RRUS-11-B12 1 5/8*# COAVAAL CABLES
EOUIPMED 3 3 3 3	RT TO BE ADDED RFS APXXAARR18_43-U-NA20 PANEL ANTENNAS ERICSSON RADIO 4449 6x12 HCS DC/FIBER CABLES
FINAL FO 3 3 3 3 3 3 5 6 6 6 3 3 3	UPMENT CONFIGURATION ERICSSON AIR21 B2A/B4P PANEL ANTENNAS ERICSSON AIR32 B4A/B2P PANEL ANTENNAS RFS APXVAARR18_43-U-NA20 PANEL ANTENNAS ERICSSON RADIO 4449 GENERIC STYLE 18 TWIN AINS TMA® 1 5/8"¢ CONVAL CABLES DC/FIBER CABLES 3x6 HCS DC/FIBER CABLES 6x12 HCS DC/FIBER CABLES
	EQUIPMENT CABINETS WILL NOT CHANGE
RFC	CONFIGURATION 67D92DB
1. REM 2. REM 3. REM 4. EXP/ 5. REL 6. INST 7. INST	E. DF. WORK. E. DF. WORK. ONE (3) PANEL ANTENNAS, (1) PER SECTOR ONE (3) REMOTE RADIO HEADS, (1) PER SECTOR NOD (E) RF-TRANSPARENT ENCLOSURES (2 TOTAL) DCATE ANTENNA MOUNTS (SEE ANTENNA PLANS) ALL (3) NEW PANEL ANTENNAS, (1) PER SECTOR ALL (3) NEW REMOTE RADIO HEADS, (1) PER SECTOR ALL (3) NEW HCS CABLES, (1) PER SECTOR

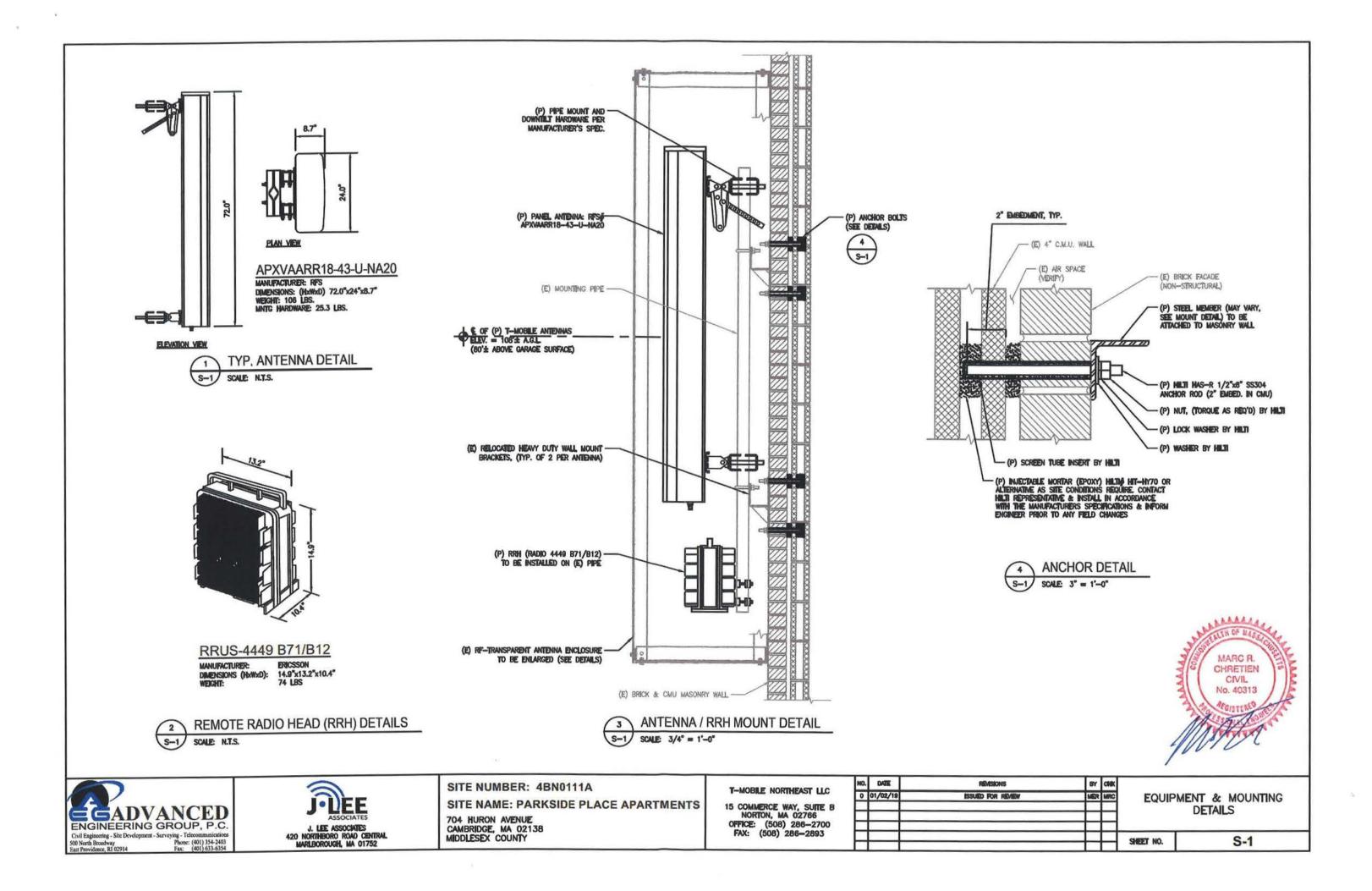
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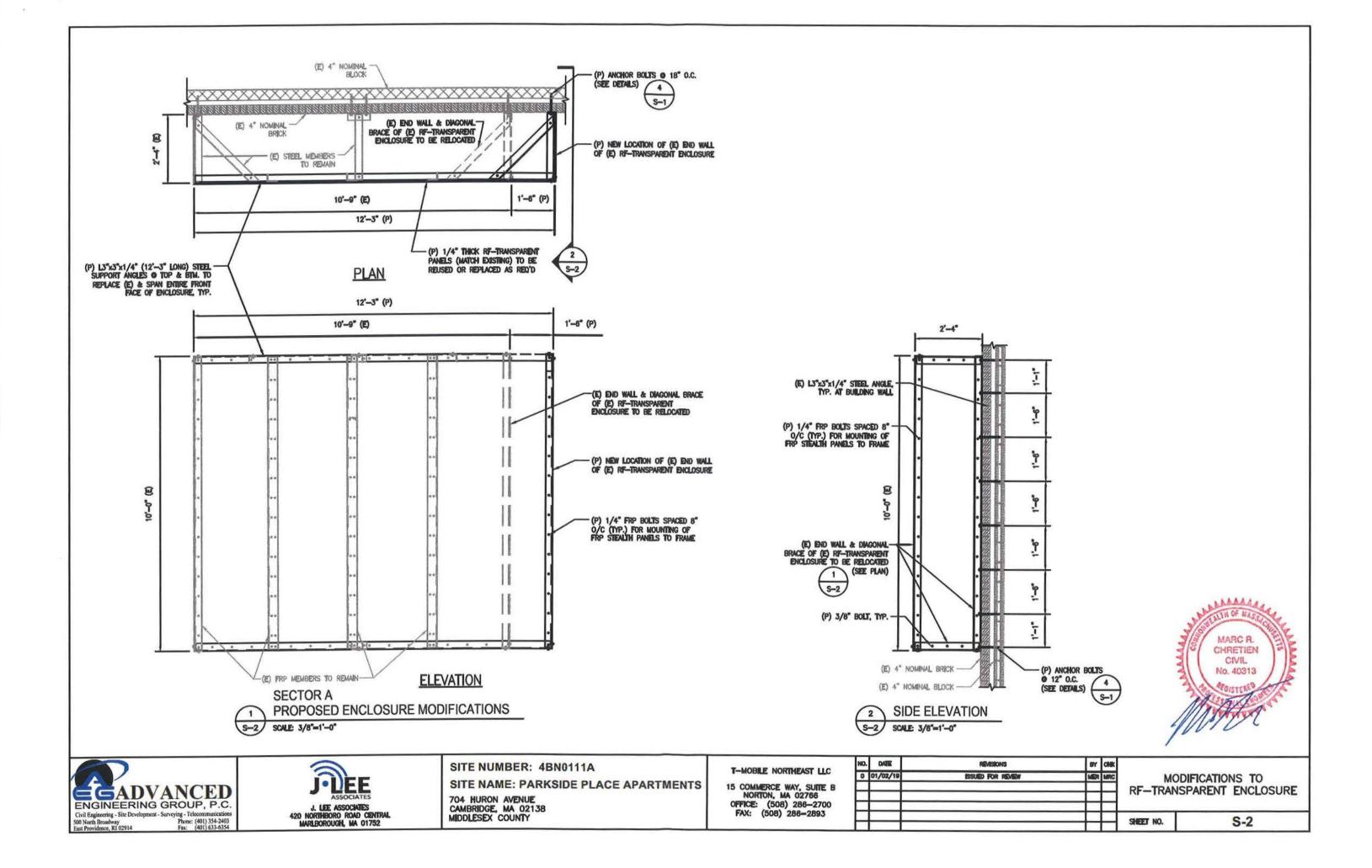
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MARC R. CHRETIEN CIVIL No. 40313



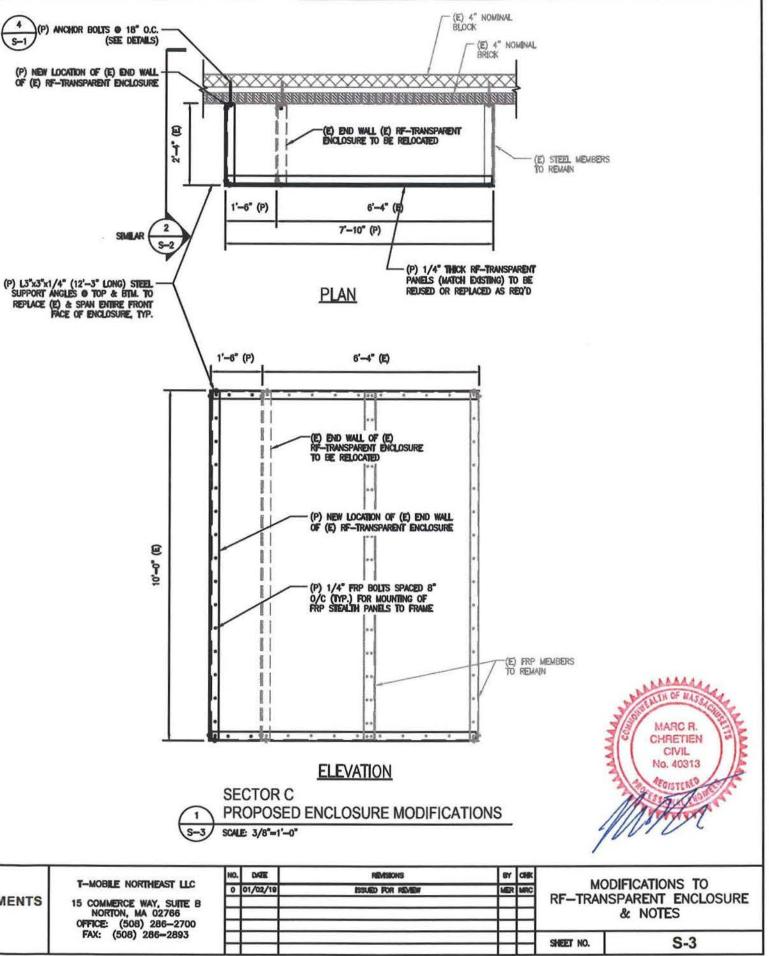


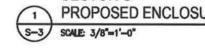


- RE-TRANSPARENT STRUCTURAL NOTES OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) AND ALL APPLICABLE BUILDING CODES.
- ATRUCTURAL STIELL ANGLES TO BE ASTIN A36 STEEL. ALL BOLTS SHALL BE ASTIN GRADE A325, HOT-DIP GALVANIZED PER ASTM 3. D153. ALL BOLTS SHALL BE 1/2" DIAMETER UNLESS OTHERWISE MOTED
- ALL BOLTS SHALL HAVE GALVANIZED LOCK WASHER OR PAL NUT TIGHTEN BOLTS USING THE "TURN OF THE NUT" METHOD AS SPECIFIED BY 5.
- HOT-DIP GALVANIZE ANGLES PER ASTM D123 AFTER FABRICATION. APPLY A MINIMUM OF TWO COATS OF COLD GALVANIZING TO ANY FIELD 7.
- CUT OR DRILLED SURFACES. STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS 8. (BEARING TYPE) AND CONFORM TO ASTM A325 THICH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS".
- 9. ALL BOLTS ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZE IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
- 10. STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & 10. STEEL PIPE SHALL CONFORM TO ASTM ASUS COLLIP-PORTMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUEING", GRADE A, OR ASTM ASJ 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. 11. EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION 11. EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION
- EXPROVED EQUAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM EMBEDMENT SHALL BE THREE AND ONE HALF (3 1/2) INCHES.
- 12. EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF 1/2" DIAMETER STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS, AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND AN EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-20 AND OR HY-150 SYSTEMS (AS SPECIFIED IN DWG.) OR ENGINEERS APPROVED EQUAL WITH 4-1/4" MIN. BEDMENT DEPTH
- EMBEDMENT DEPTH. 13. FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPARED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREDMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 86 PERCENT ZINC BY WEIGHT, ZIRP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OR EQUAL THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE
- 14. 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 WEDDING SHALL BE DONE USING E70XX ELECTRODES AND WEDDING SHALL CONFORM TO AISC AND D1.1. WHERE FILL WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION.

FRP NOTES

- ALL STRUCTURAL SHAPES ARE TO BE MANUFACTURED BY THE PULTRUSION PROCESS WITH A GLASS CONTENT MINIMUM OF 45%, PULTRUSION PROCESS WITH A GLASS CONTENT INVINUM OF 40%, MAXIMUM OF 55% BY WEIGHT. THE STRUCTURAL SHAPES SHALL BE COMPOSED OF FIBERGLASS REDURINGROEMENT AND RESIN IN QUALITIES, QUANTITIES, PROPERTIES, ARRANGEMENTS AND DIMENSIONS AS NECESSARY TO MEET THE DESIGN REQUIREMENTS AND DIMENSIONS AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- FIBERGLASS REINFORCEMENT SHALL BE A COMBINATION OF 2. CONTINUOUS ROVING, CONTINUOUS STRAND MAT, AND SURFACING VEIL IN SUFFICIENT QUANTITIES AS NEEDED BY THE APPLICATION
- AND/OR PHYSICAL PROPERTIES REQUIRED. RESINS SHALL BE NON-FIRE RETARDANT ISOPHTHALIC POLYESTER OR 3 NESHS SHALL DE NON-FIRE RELACIONAT ISOFHIMALE POLYESIE ISO, NON-FIRE RETARDANT ISOFHIMALE POLYESIER USED TO PRODUCE NSF STANDARD 61 CERTIFIED SHAPES; ISOFR, FIRE RETARDANT ISOFHIMALE POLYESTER; VE, NON-FIRE RETARDANT VINYL ESTER USED TO PRODUCE NSF STANDARD 61 CERTIFIED SHAPES OR VER, FIRE RETARDANT VINYL ESTER, (CHOOSE ONE)) WITH CHEMICAL FORMULATION NECESSARY TO PROVIDE THE CORROSION RESISTANCE, STRENGTH AND OTHER PHYSICAL PROPERTIES AS REQUIRED.
- PROPERTIES AS REQUIRED. ALL FINISHED SURFACES OF FRP TIEMS AND FARRICATIONS SHALL BE SMOOTH, RESIN-AICH, FREE OF VOIDS AND WITHOUT DRY SPOTS, CRACKS, CRAZES OR UNREINFORCED AREAS, ALL GLASS FIBERS SHALL BE WELL COVERED WITH RESIN TO PROTECT AGAINST THER EXPOSURE DUE TO WEAR OR WEATHERING. ALL PULTRUDED STRUCTURAL SHAPES SHALL BE FURTHER
- 5. PROTECTED FROM ULTRAMOLET (UV) ATTACK WITH 1) INTEGRAL UV INHIBITORS IN THE RESIN AND 2) A SYNTHETIC SURFACING VEIL TO PRODUCE A RESIN RICH SURFACE.
- TENSILE STRENGTH SHALL BE A MINIMUM OF 30KSI FLEXURAL STRENGTH SHALL BE A MINIMUM OF 30KSI
- FRP FIBER BOLTS SHALL BE TIGHTEMED TO 1/2 TURN PAST SNUG 8 AND LOCKED WITH EPOXY. AFTER ORIGINAL INSTALLATION, ANY FIBER BOLT THAT IS REMOVED 9. MUST BE DISCARDED AND REPLACED.







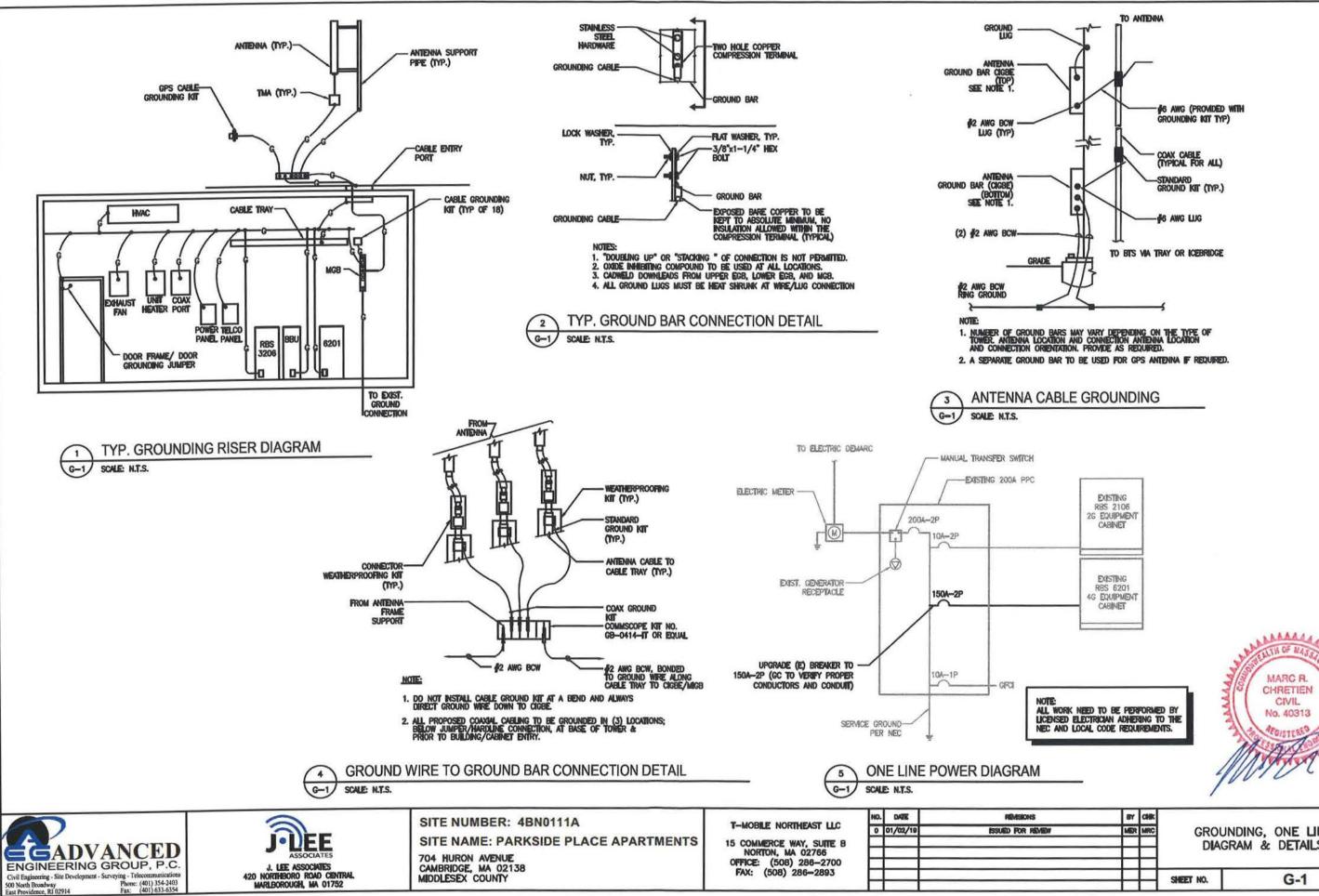


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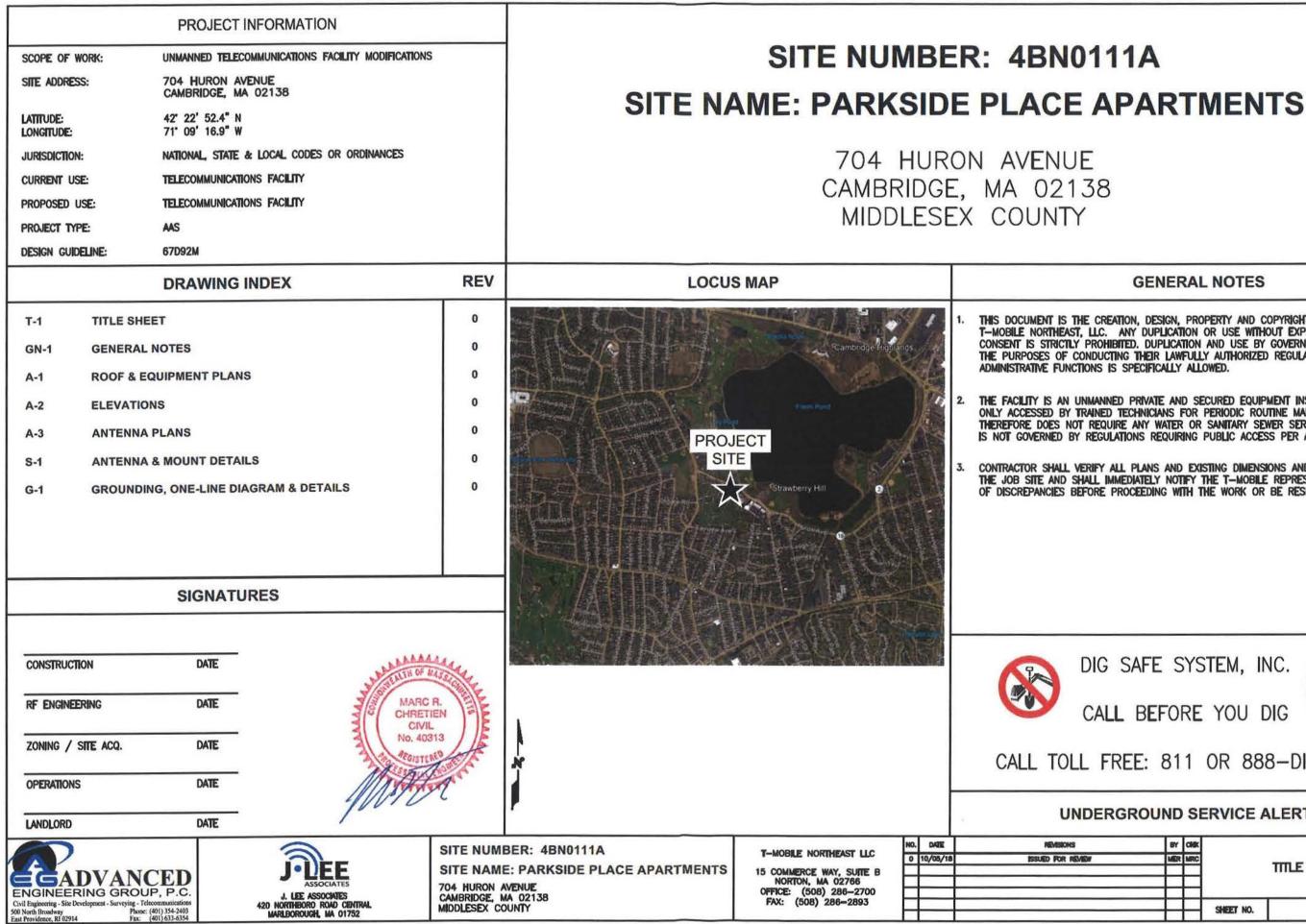
SITE NAME: PARKSIDE PLACE APARTMENTS

704 HURON AVENUE CAMBRIDGE, MA 02138 MIDDLESEX COUNTY

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## **GENERAL NOTES**

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF T-MOBILE NORTHEAST, LLC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.

THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.

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

DIG SAFE SYSTEM, INC.



CALL BEFORE YOU DIG

CALL TOLL FREE: 811 OR 888-DIG-SAFE

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#### GENERAL NOTES

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

2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS evertheless cautioned that minor omissions or errors in THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

19. All dimensions shown thus & are approximate. The contractor shall verify all dimensions and elevations which effect the contractors work. Contractor to verify all DIMENSIONS WITH PROJECT OWNER PRIOR TO CONSTRUCTION.

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

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

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

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

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

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

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

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

28. ALL (E)INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, which interfere with the execution of the work, shall be REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF UTILITY COMPANY ENGINEERING. THE AREAS OF THE PROPERTY DISTURGED BY THE WORK AND NOT COVERED BY THE EQUIPMENT, DRIVEWAY OR

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

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

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

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

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

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

MANUAL OF STEEL CONSTRUCTION, ASD, NEXTH EDITION;

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

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

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

#### APPLICABLE BUILDING CODES:

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

T-MOBILE NORTHEAST LLC

15 COMMERCE WAY, SUITE B

NORTON, MA 02766

OFFICE: (508) 286-2700

FAX: (508) 286-2893

#### BUILDING CODE:

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

## ELECTRICAL AND GROUNDING NOTES

15. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND \$2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING. AND LOCAL CODES. 16. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL 17. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRUCHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. 4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS ALWAYS MAKE AT LEAST 12" RADIUS BIENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING. 18. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS. 19. BOND ANTENNA MOUNTING BRACKETS, COAXIAL CABLE GROUND THIN INSULATION. KITS, AND ALNA TO EGB PLACED NEAR THE ANTENNA LOCATION. 20. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS. INSTALLATION WITH UTILITY COMPANY 21. CONTRACTOR SHALL PROVIDE AND INSTALL OWNI DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXISTING TOWER/ (E) MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING. 22. CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMS MAXIMUM RESISTANCE REQUIRED. 23.CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE- TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT. NAMAAAAA ALTH OF MASS MARC R. ADDITIONAL NOTE: GROUNDING, BONDING AND LIGHTNING PROTECTION CHRETIEN SHALL BE DONE IN ACCORDANCE WITH "T-MOBILE CIVIL BTS SITE GROUNDING STANDARDS". No. 40313 AFOISTERED hAA

THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM. RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF THE GROUND PORTION OF THESE CONDUITS SHALL BE PVC CONDUIT.

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF 2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS. 3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAMINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO 5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUCTS. 6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC. 7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR 8. RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE 9. RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING, PROVIDE FULL LENGTH PULL ROPE AND GREENLEE CONDUIT MEASURING TAPE IN EACH INSTALLED TELCO CONDUIT. 10. WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BITS AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND USE PVC, SCHEDULE 40 CONDUIT. ABOVE 11. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEWA 3R ENCLOSURE. 12. PPC SUPPLIED BY PROJECT OWNER. 13. GROUNDING SHALL COMPLY WITH NEC ART. 250. 14. GROUND COAXIAL CABLE SHIFLDS MINIMUM AT BOTH FINDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER

		A
	AGL	ABOVE GRADE LEVEL
	AWG	AMERICAN WIRE GAUGE
	BCW	BARE COPPER WIRE
	BTS	BASE TRANSCEIVER STATION
	(E)	EXISTING
	EG	EQUIPMENT GROUND
	EGR	EQUIPMENT GROUND RING
	(F)	FUTURE
NO.	DATE	REMISIONS
0	10/05/18	Issued for Neme





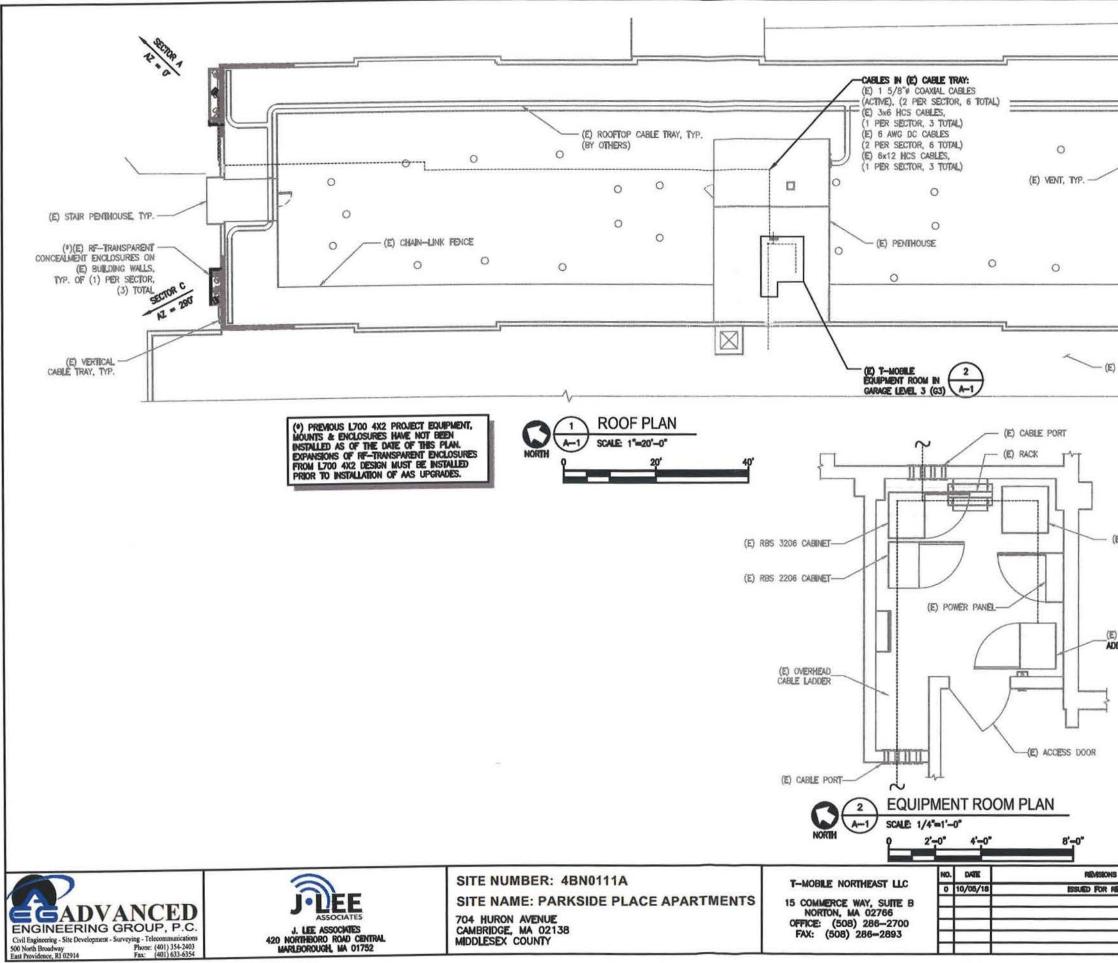
SITE NUMBER: 4BN0111A

SITE NAME: PARKSIDE PLACE APARTMENTS

704 HURON AVENUE CAMBRIDGE, MA 02138 MIDDLESEX COUNTY

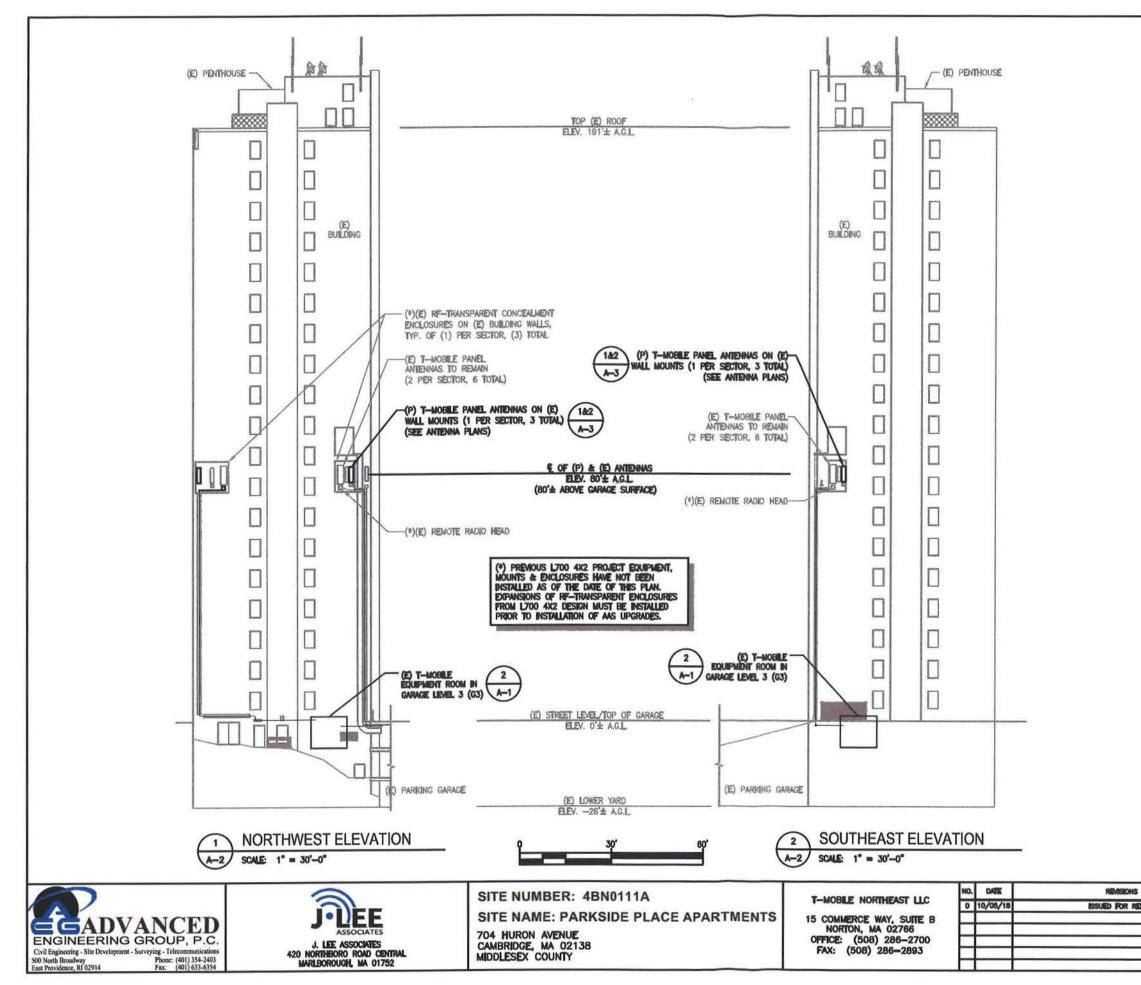
# ABBREVIATIONS

	G.C.		ERAL CONTRAC		RADIO FREQUENCY	
	MGB	MAS	TER GROUND E	<b>BUS</b>		
	MIN	MIN	MUM	TBD	TO BE DETERMINED	
TION	(P)	PRO	POSED/NEW	TBR	TO BE REMOVED	
	n.t.s. Ref		TO SCALE	TBRR	TO BE REMOVED AND REPLACED	
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		/ ON (	-MOBILE PANEL ANTENNAS E) WALL MOUNTS E) WALL MOUNTS EN SECTOR, 3 TOTAL) ANTENNA PLANS) 142 A-3 SECTOR B $AZ = 130^{\circ}$ -(E) REMOTE RADIO HEAD (1 PER SECTOR, 3 TOTAL) -(E) T-MOBILE PANEL ANTENNAS TO REMAIN (2 PER SECTOR, 6 TOTAL)
		11	
(E) BBU CABINET			
(E) RBS 6201 CABINET ADD (P) BB6630			
			MARC R. CHRETIEN
		AAA.	CIVIL No. 40313
		4	MA
NS	BY CHBK		
REMEN	MER MRC	ROOF	& EQUIPMENT PLANS
		SHEET NO.	A-1

/---- (E) BUILDING



1095	NT EQUIPMENT
	TY DESCRIPTION
1	ERICSSON AIR21 B2A/B4P PANEL ANTENNAS
5	ERICSSON AIR32 B4A/B2P PANEL ANTENNAS
2	RES APXVAARR18_43-U-NA20 PANEL ANTENNAS
ś	ERICSSON RRUS32-B2
3 3 3 3	ERICSSON RADIO 4449
3	GENERIC STYLE 1B TWIN AWS TMAG
3	1 5/8"# COAXIAL CABLES
5	DC/FIBER CABLES
3	3x8 MCS DC/HBER CABLES
3	6x12 NCS DC/FIBER CABLES
OUIPN	ENT TO BE REMOVED
5	ERICSSON AIR21 B2A/B4P PANEL ANTENNAS
OUP	ENT TO BE ADDED
	ERICSSON AIR3246 B66 PANEL ANTENNAS
INAL I	EQUIPMENT CONFIGURATION
5	ERICSSON AIR3246 B66 PANEL ANTENNAS
3	ERICSSON AIR32 B4A/B2P PANEL ANTENNAS
5	RFS APXVAARR18_43-U-NA20 PANEL ANTENNAS
5 5 5 5 5	ERICSSON RRUS32-B2
2	ERICSSON RADIO 4449
5	GENERIC STYLE 18 TWIN AWS TMAN
	1 5/8"# COAXIAL CABLES DC/FIBER CABLES
5 5	
5	3x6 HCS DC/FIBER CABLES 6x12 HCS DC/FIBER CABLES
DOISTIN	g Equipment Cabinets will not change
RF	CONFIGURATION 67D92M
SCO	PE OF WORK
De	MOVE (3) PANEL ANTENNAS, (1) PER SECTOR
2. INS	STALL (3) NEW PANEL ANTENNAS, (1) PER SECTOR

	SY	ONK				
MEW	MER	MRC	ELEVATIONS			
				A-2		
			SHEET NO.	A-2		

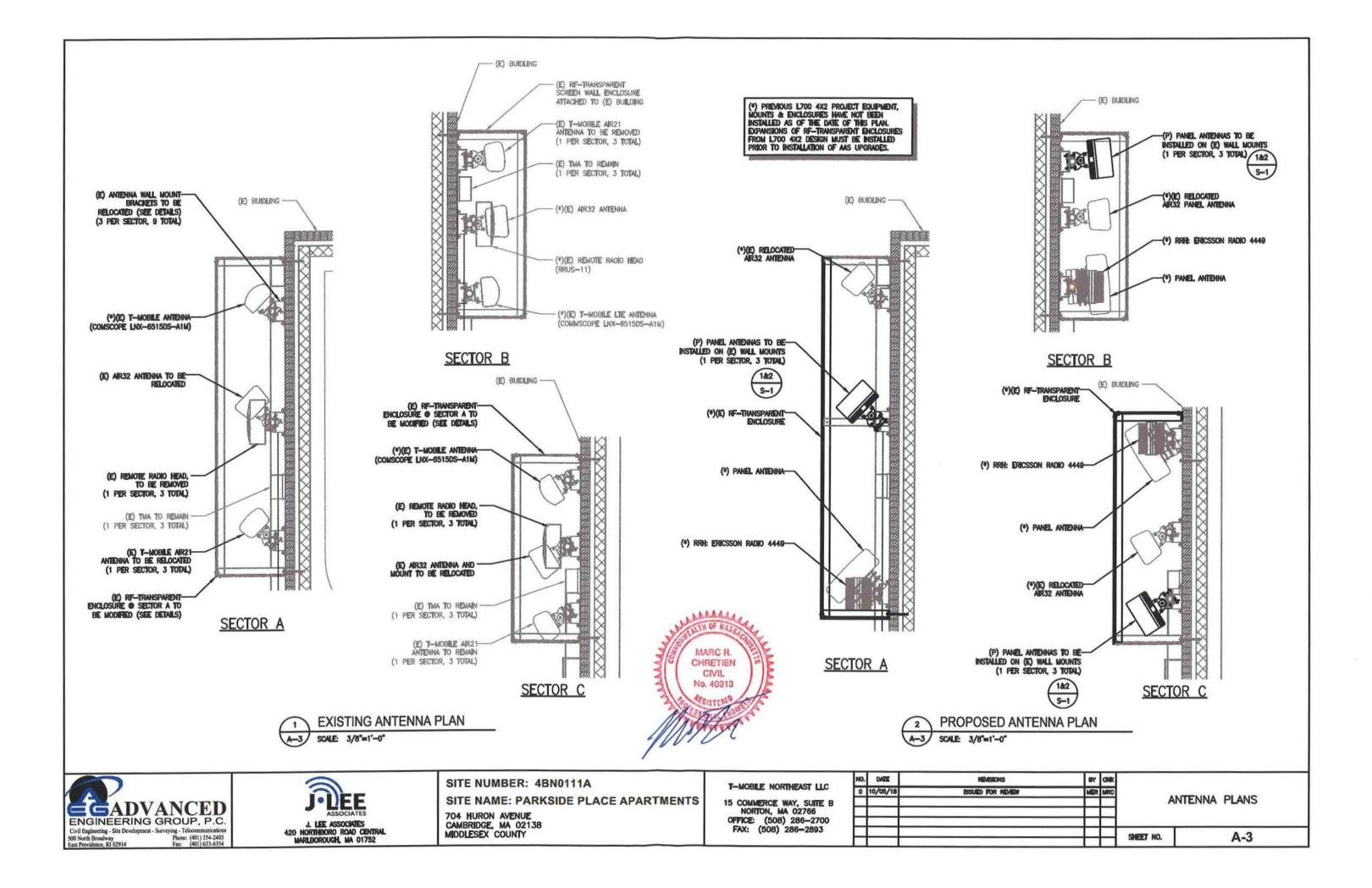
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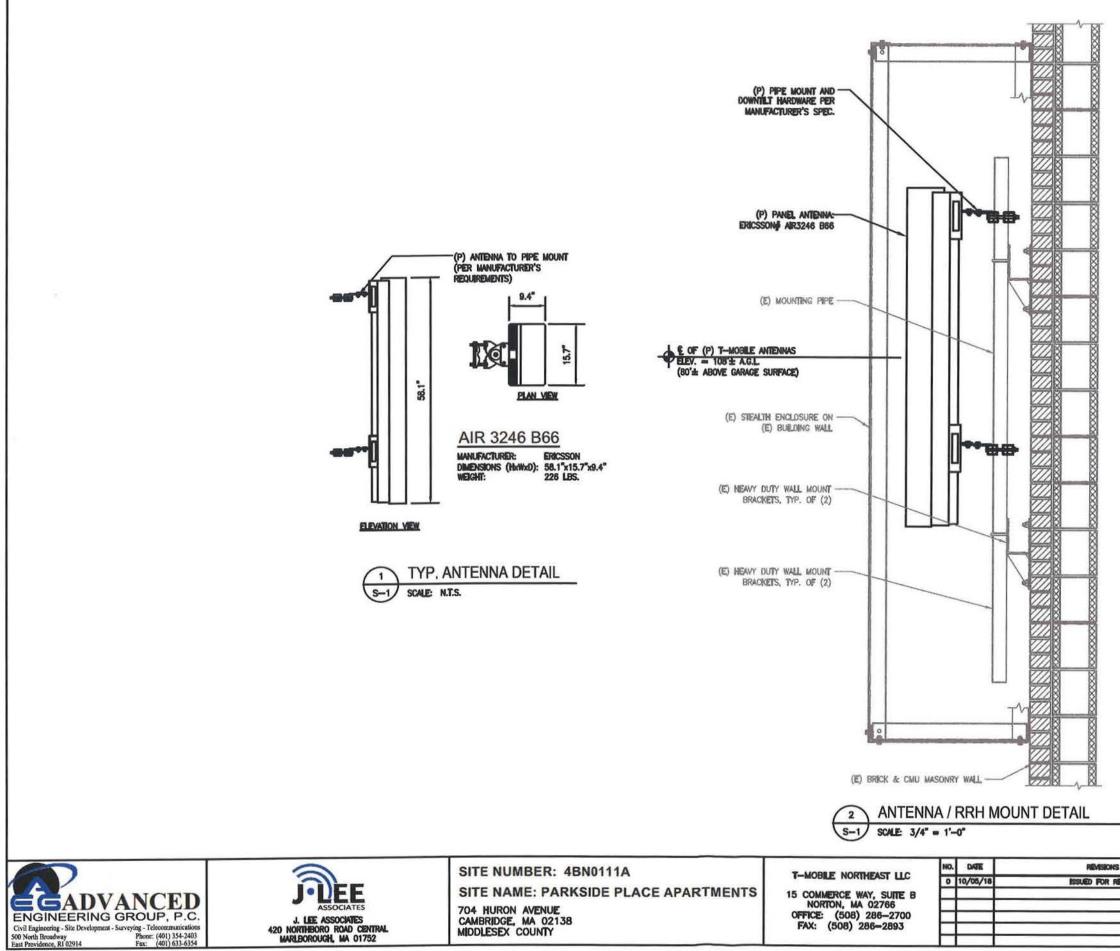
UTH OF MAS

MARC R. CHRETIEN CIVIL

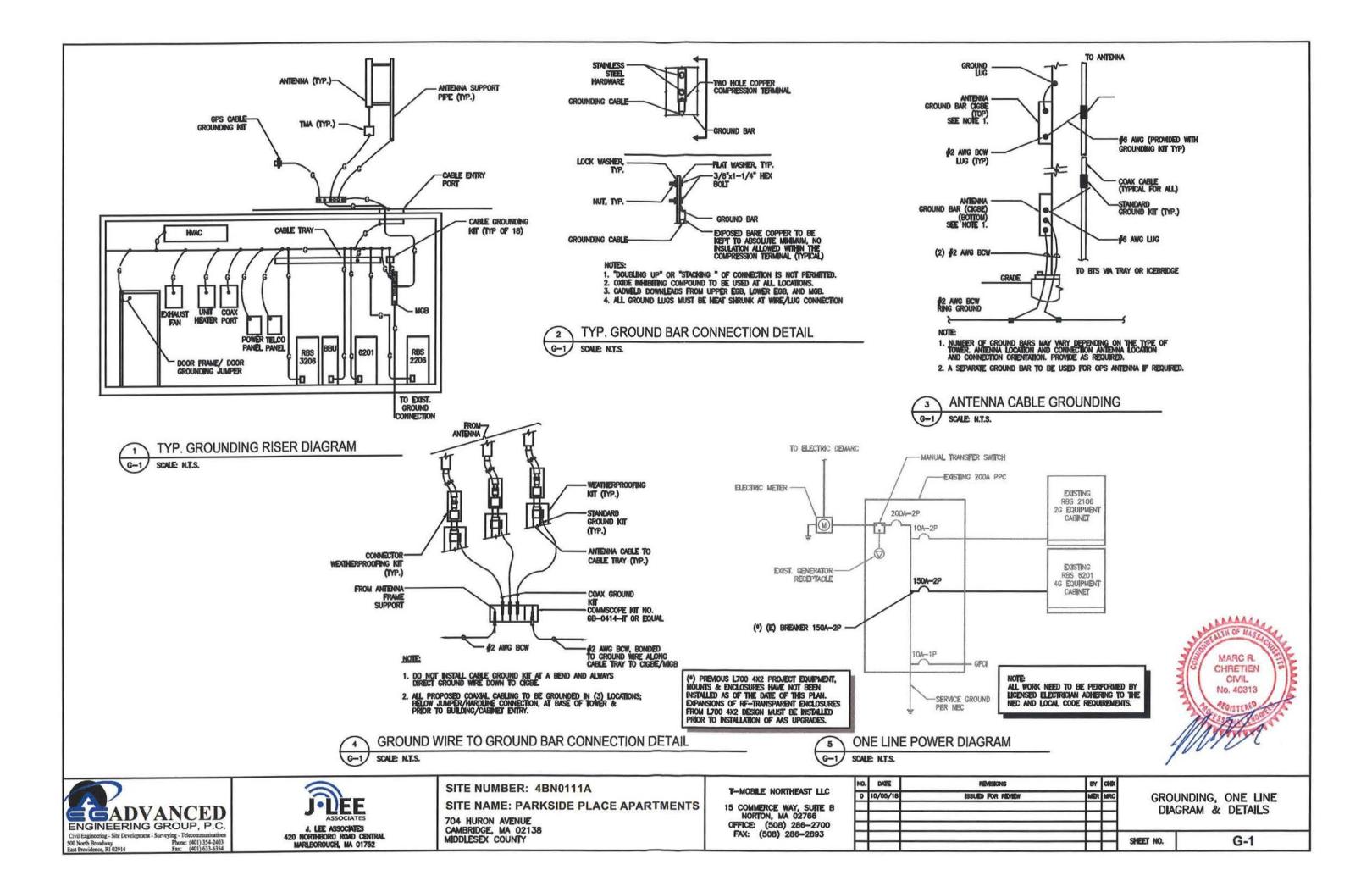
No. 40313

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			AND DETENDED OF WASSINGLE
		1	MARC R. CHRETIEN CIVIL No. 40313
DMEDW	BY CHAK MER MIRC	ANTENN	A & MOUNT DETAILS
		SHEET NO.	S-1



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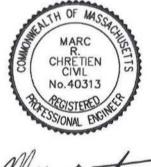
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500 North Broadway East Providence, RI 02914 Ph: 401-354-2403 Fax: 401-354-2397

# Structural Design Calculations



Monkton

Site No.:4BN0111A - Parkside Place ApartmentsProject:L700 4x2 & AASClient:J Lee AssociatesDate:January 4, 2019

Advanced Engineering Group 500 North Broadway East Providence, RI 02914 Ph: 401-354-2403 Sheet: 1 Date: 1/4/19 Calculated by: MRC

#### Synopsis:

The proposed T-Mobile equipment installation consists of:

- Three (3) RFS APXVAARR18 antennas (1 per sector) to replace three (3) Commscope DBXNH-6515 antennas (1 per sector)
- Three (3) Ericsson RRUS-4449 remote radio heads (RRHs)(1 per sector) to replace three (3) existing RRUS-11 RRHs (1 per sector)
- Three (3) Ericsson AIR3246 antennas (1 per sector) to replace three (3) Ericsson AIR21 antennas (1 per sector)

#### **Material Properties:**

Structural steel yield stress (shapes),	F <sub>vs</sub> := 36 · ksi
Modulus of elasticity of steel,	E <sub>s</sub> := 29 · 10 <sup>6</sup> · psi
Structural steel yield stress (pipe),	F <sub>yp</sub> := 35 · ksi
Steel unit weight,	$\gamma_s := 490 \cdot pcf$

#### Loads:

Environmental Loads:

#### Wind Load:

Exposure category,	в 🗸	(ASCE 7-10 Sec 26.7.3)
Risk Category,	Category II	(ASCE 7-10 Table 1.5-1)
Basic Wind Velocity,	V <sub>w</sub> := 128 mph	(MSBC Table 1604.11)
Antenna Height,	Height := 108ft	
Exposure coefficient,	$K_{z} = 1.01$	(ASCE 7-10 Table 29.3-1)
Wind Directionality F	actor, K <sub>d</sub> := 0.9	(ASCE 7-10 Table 26.6-1)
Velocity wind pressur	re, $q_z := .00256 \cdot V_w^2 \cdot K_z \cdot K_d \cdot psf = 38.17 \cdot psf$	(ASCE 7-10 Sec. 27.3.2)
Gust response factor	G <sub>r</sub> := 0.85	(ASCE 7-10 Sec. 26.9.1)
Force coeff: Flat	t, C <sub>f</sub> := 1.4	(ASCE 7-10 Fig. 29.5-1)
Wind Load factor,	LF := .6	(ASCE 7-10 Sect 2.4)
Wind load pressure,	$WL_f := q_z \cdot G_r \cdot C_f = 45.42 \cdot psf$	(ASCE 7-10 C26.5-1)
Radial ice thickness,	t <sub>ice</sub> := .75 · in	
Density of ice,	$\gamma_{ice} := 56 \cdot pcf$	

#### Equipment Loads:

#### Antennas

Position 1:		Position 2		Position 3		Position 4	:
Width,	$w_{a1} := 0 \cdot in$	Width,	$w_{a2} := 24 \cdot in$	Width,	$w_{a3} \coloneqq 15.7 \cdot in$	Width,	$w_{a4} := 12.87 \cdot in$
Depth,	$t_{a1} \coloneqq 0 \cdot in$	Depth,	t <sub>a2</sub> := 8.7 · in	Depth,	t <sub>a3</sub> := 9.4 · in	Depth,	t <sub>a4</sub> := 8.6∙in
Length,	$I_{a1} := 0 \cdot in$	Length,	I <sub>a2</sub> := 72 · in	Length,	$I_{a3} := 58.1 \cdot in$	Length,	l <sub>a4</sub> := 59.3 · in
Weight,	$W_{a1} := 0 \cdot Ib$	Weight,	$W_{a2} := 131 \cdot lb$	Weight,	W <sub>a3</sub> := 225 · lb	Weight,	$W_{a4} := 132 \cdot lb$

#### RRHs

Position 1:		Position 2:		Position 3:		Position 4:	
Width,	$w_{r1} := 0 \cdot in$	Width,	$w_{r2} \coloneqq 13.2 \cdot in$	Width,	$w_{r3} := 0 \cdot in$	Width,	w <sub>r4</sub> := 0 · in
Depth,	$t_{r1} := 0 \cdot in$	Depth,	$t_{r2} \coloneqq 10.4 \cdot in$	Depth,	$t_{r3} \coloneqq 0 \cdot in$	Depth,	t <sub>r4</sub> := 0 ⋅ in
Length,	$I_{r1} := 0 \cdot in$	Length,	l <sub>r2</sub> := 14.90 ⋅ in	Length,	$I_{r3} := 0 \cdot in$	Length,	$I_{r4} := 0 \cdot in$
Weight,	$W_{r1} := 0 \cdot lb$	Weight,	W <sub>r2</sub> := 74 · 1b	Weight,	W <sub>r3</sub> := 0.1b	Weight,	W <sub>r4</sub> := 0 · lb

#### Total weight of antennas/RRHs:

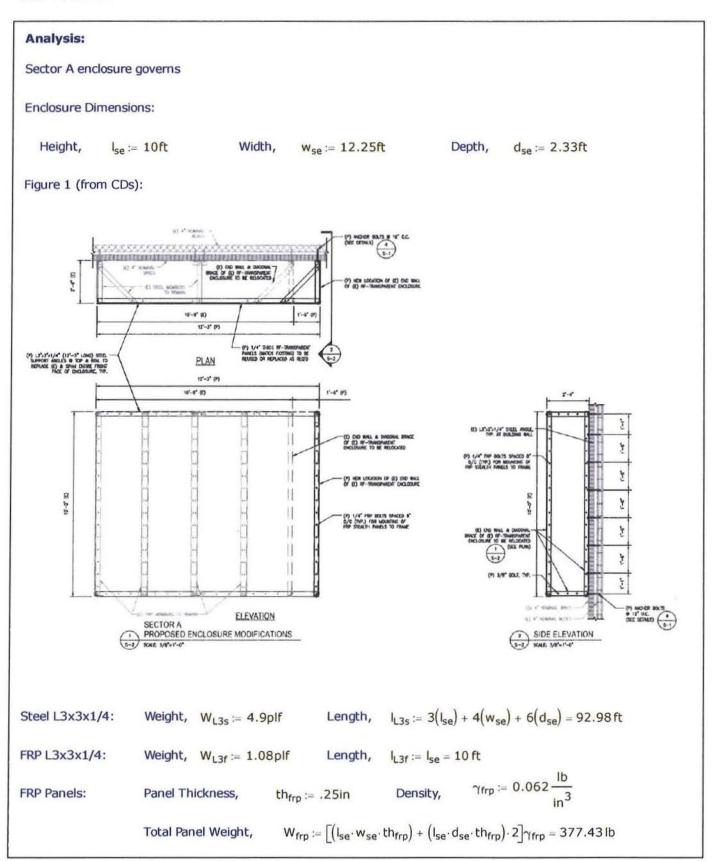
 $W_1 := W_{a1} + W_{r1} = 0$ 

 $W_2 := W_{a2} + W_{r2} = 205 lb$ 

 $W_3 := W_{a3} + W_{r3} = 225 \, lb$ 

 $W_4 := W_{a4} + W_{r4} = 132 \, lb$ 

Advanced Engineering Group 500 North Broadway East Providence, RI 02914 Ph: 401-354-2403 Sheet: 3 Date: 1/4/19 Calculated by: MRC



Sheet: 4 Date: 1/4/19 Calculated by: MRC

2" Dia. Pipes: Weight, $W_{2p} := 3.4plf$ Quantity, $n_{2p} := 3$ Length, $l_{2p} := 7ft$
Miscellaneous Dead Load, W <sub>misc</sub> := 100lb
Front Wind Load on Enclosure: $P_{wl.f} := WL_f \cdot I_{se} \cdot w_{se} = 5564.02 \text{ lb}$
Side Wind Load on Enclosure: $P_{wl,s} := WL_f \cdot l_{se} \cdot d_{se} = 1058.3 lb$
Total Gravity Load of Enclosure: $P_{g,se} := W_{frp} + W_{L3f} \cdot I_{L3f} + W_{L3s} \cdot I_{L3s} = 843.83 \text{ lb}$
Front Steel Angle Bending Check (L3x3x1/4):
Distributed Wind Load on angle, $P_{dL3} := WL_f \cdot \frac{l_{se}}{2} = 227.1 \cdot plf$
Actual Moment, $M_{a_L3f} := .546 \text{kip} \cdot \text{ft}$ (See Attached EnerCalc Output)
Allowable Moment, M <sub>allow_L3f</sub> := 1.21kip-ft (See Attached EnerCalc Output)
FrL3BendingCheck := $"OK"$ if $M_{a_L3f} \le M_{allow_L3f}$ "NG" otherwise Frl 3BendingCheck = "OK"
"NG" otherwise FrL3BendingCheck = "OK"
Anchor Bolt Pullout Check (1/2" Hilti HIT-HY 70, 6" Embedment):
Number of bolts fastening assembly to facade, $n_{bolt} := 3 \cdot (8) = 24$
Bolt Spacing, $s_{bs} := 1.33 \text{ ft}$
Total tensile force acting on assembly, $T := P_{wl,f} \cdot LF + \frac{P_{g.se} \cdot \frac{1}{2}}{\frac{l_{se}}{2}} = 3535.03 \text{ lb}$
Approximate tensile force per bolt, $T_{bolt} := \frac{T}{n_{bolt}} = 147.29  \text{lb}$
Hilti Factors:
Spacing factor, $f_{AN} := 1.0$ (Refer to Hilti Specs)
Edge factor, $f_{RN} := 1.0$
Design strength in tension, $\phi N := 390 \cdot lb$

Advanced Engineering Group 500 North Broadway East Providence, RI 02914 Ph: 401-354-2403 Sheet: 5 Date: 1/4/19 Calculated by: MRC

Factor of Safety,	FS := 2		
Allowable tensile o	apacity of 1/2" Hilti HIT-HY 70,	$T_{allow} := \frac{\phi N \cdot f_{AN} \cdot f_{RN}}{FS} = 195  lb$	
TensileCheck :=	"OK" if $T_{allow} \ge T_{bolt}$ "NG" otherwise		
	"NG" otherwise	TensileCheck = "OK"	

#### **Conclusion:**

Based on the results of the analysis, the proposed T-Mobile L700 and AAS installation is structurally sound, as designed and depicted on plans by this office. The analysis was conducted in accordance with the Masachusetts State Building Code, 9th Edition, and ASCE 7-10.

References:

1. American Society of Civil Engineers (2010), Minimum Design Loads for Buildings and Other Structures (7-10), American Society of Civil Engineers, New York, NY

2. Massachusetts State Building Code, 9th Edition.



500 North Broadway East Providence, RI 02914 (401) 354-2403

Printed: 4 JAN 2019, 1:12PM File = \\Mac\Home\DROP~IL7\ENER~P21\4BN0111A L700 AAS Facade Concealment.ec6 . **Steel Beam** Software copyright ENERCALC, INC. 1983-2018, Build:10.18.11.30 Lic. # : KW-06008463 Licensee : ADVANCED ENGINEERING GROUP, PC Description : Front 12'-3" Angle **CODE REFERENCES** Calculations per AISC 360-10, IBC 2015, CBC 2016, ASCE 7-10 Load Combination Set : IBC 2015 **Material Properties** Analysis MethorAllowable Strength Design Fy : Steel Yield 36.0 ksi Beam Bracing Completely Unbraced E: Modulus : 29,000.0 ksi Bending Axis : Major Axis Bending Vertical Leg Up W(0.1448) W(0.227) L3x3x1/4 L3x3x1/4 Span = 6.125 ft Span = 6.125 ft **Applied Loads** Service loads entered. Load Factors will be applied for calculations.

#### Beam self weight calculated and added to loading Load for Span Number 1 Uniform Load : W = 0.1448 k/ft, Tributary Width = 1.0 ft, (Wind Load)

Load for Span Number 2 Uniform Load : W = 0.2270 k/ft, Tributary Width = 1.0 ft, (Wind Load)

DESIGN SUMMARY			Design OK
Maximum Bending Stress Ratio =	0.452:1 N	laximum Shear Stress Ratio =	0.054 : 1
Section used for this span	L3x3x1/4	Section used for this span	L3x3x1/4
Ma : Applied	0.546 k-ft	Va : Applied	0.5213 k
Mn / Omega : Allowable	1.208 k-ft	Vn/Omega : Allowable	9.701 k
Load Combination Location of maximum on span	+D+0.60W+H 6.125ft	Load Combination Location of maximum on span	+D+0.60W+H 6.125 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
Maximum Deflection			
Max Downward Transient Deflection	0.105 in Ratio =	702 >= 360	
Max Upward Transient Deflection	-0.005 in Ratio =	16,126 >= 360	
Max Downward Total Deflection	0.065 in Ratio =	1138 >=180	
Max Upward Total Deflection	-0.003 in Ratio =	27812 >=180	

#### Maximum Forces & Stresses for Load Combinations

Load Combination Segment Length			Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
		Span #	M	V	Mmax +	Mmax -	Ma Max	Mnx Mnx	/Omega	Cb	Rm	Va Max	VnxVnx/Omeg	mega
+D+H											ALC: NO. OF		B 6.000 - 600 6 500 B	
Dsgn. L =	6.13 ft	1	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
Dsgn. L =	6.13 ft	2	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
+D+L+H														
Dsgn. L =	6.13 ft	1	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
Dsgn. L =	6.13 ft	2	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
+D+Lr+H											CA-079745	15,5,59,67	NOCESCENTS.	202020
Dsgn, L =	6.13 ft	1	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
Dsgn. L =	6.13 ft	2	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
+D+S+H												101210172	LT ADDITES TO	0.5325.62
Dsgn. L =	6.13 ft	1	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
Dsgn. L =	6.13 ft	2	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
+D+0.750Lr+0	.750L+H													
Dsgn. L =	6.13 ft	1	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
Dsgn. L =	6.13 ft	2	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
+D+0.750L+0.	750S+H													
Dsgn. L =	6.13 ft	1	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
Dsgn. L =	6.13 ft	2	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
+D+0.60W+H														



500 North Broadway East Providence, RI 02914 (401) 354-2403 Project Title: Parkside Place Apartments Engineer: MRC Project ID: 4BN0111A Project Descr:T-Mobile L700 4x2 and AAS

Printed: 4 JAN 2019, 1:12PM File = \\Mac\Home\DROP~IL7\ENER~P21\4BN0111A L700 AAS Facade Concealment.ec6 Software copyright ENERCALC, INC. 1983-2018, Build:10.18.11.30 Licensee : ADVANCED ENGINEERING GROUP, PC

# Steel Beam

Description : Front 12'-3" Angle

Load Combination Segment Length			Max Stres	s Ratios	Summary of Moment Values							Summary of Shear Values		
		Span #	M	V	Mmax +	Mmax -	Ma Max	Mnx Mnx/Omega		Cb	Rm	Va Max	VnxVnx/Omega	
Dsgn. L =	6.13 ft	1	0.452	0.054	0.20	-0.55	0.55	2.02	1.21	2.42	1.00	0.52	16.20	9.70
Dsgn. L =	6.13 ft	2	0.452	0.054	0.42	-0.55	0.55	2.02	1.21	1.61	1.00	0.52	16.20	9.70
+D+0.70E+H														
Dsgn. L =	6.13 ft	1	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
Dsgn. L =	6.13 ft	2	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
+D+0.750Lr+0	.750L+0.	450W+H												
Dsgn. L =	6.13 ft	1	0.344	0.041	0.15	-0.42	0.42	2.02	1.21	2.42	1.00	0.40	16.20	9.70
Dsgn. L =	6.13 ft	2	0.344	0.041	0.32	-0.42	0.42	2.02	1.21	1.61	1.00	0.40	16.20	9.70
+D+0.750L+0.	7505+0.4	150W+H												
Dsgn. L =	6.13 ft	1	0.344	0.041	0.15	-0.42	0.42	2.02	1.21	2.42	1.00	0.40	16.20	9.70
Dsgn. L =	6.13 ft	2	0.344	0.041	0.32	-0.42	0.42	2.02	1.21	1.61	1.00	0.40	16.20	9.70
+D+0.750L+0.	7505+0.5	5250E+H												
Dsgn. L =	6.13 ft	1	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
Dsgn. L =	6.13 ft	2	0.019	0.002	0.01	-0.02	0.02	2.02	1.21	2.08	1.00	0.02	16.20	9.70
+0.60D+0.60V	V+0.60H													
Dsgn. L =	6.13 ft	1	0.445	0.053	0.20	-0.54	0.54	2.02	1.21	2.43	1.00	0.51	16.20	9.70
Dsgn. L =	6.13 ft	2	0.445	0.053	0.41	-0.54	0.54	2.02	1.21	1.60	1.00	0.51	16.20	9.70
+0.60D+0.70E	+0.60H													
Dsgn. L =	6.13 ft	1	0.011	0.001	0.01	-0.01	0.01	2.02	1.21	2.08	1.00	0.01	16.20	9.70
Dsgn. L =	6.13 ft	2	0.011	0.001	0.01	-0.01	0.01	2.02	1.21	2.08	1.00	0.01	16.20	9.70
Ovorall M	avimum		lana											

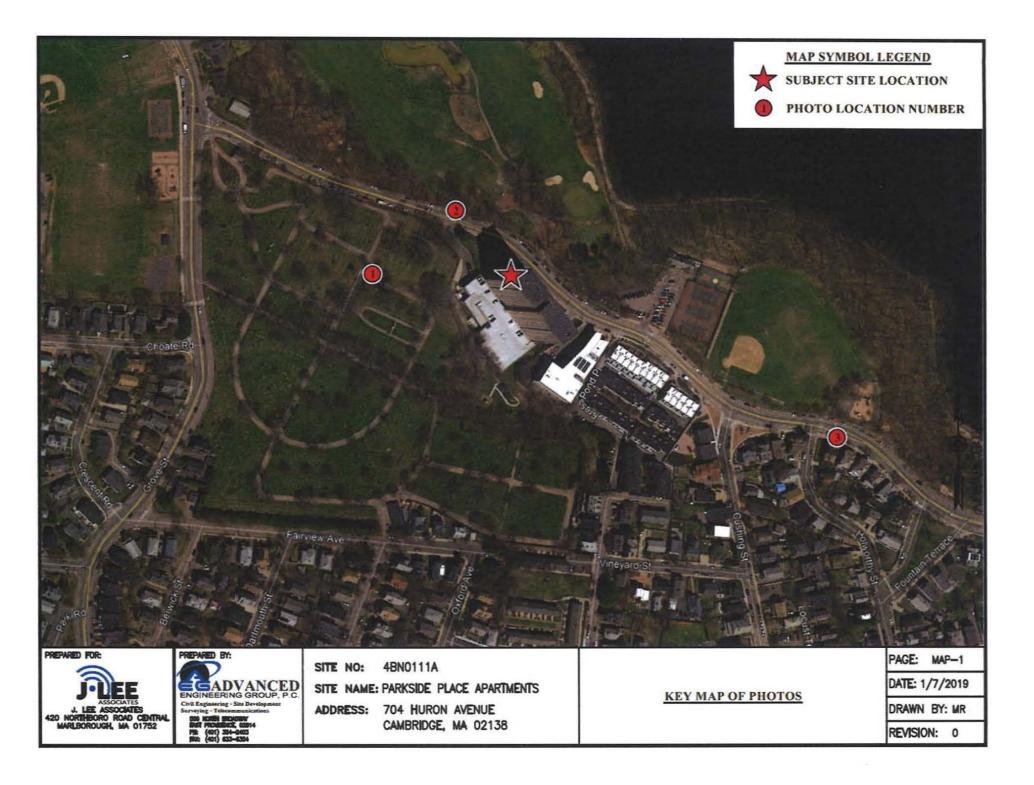
#### **Overall Maximum Deflections**

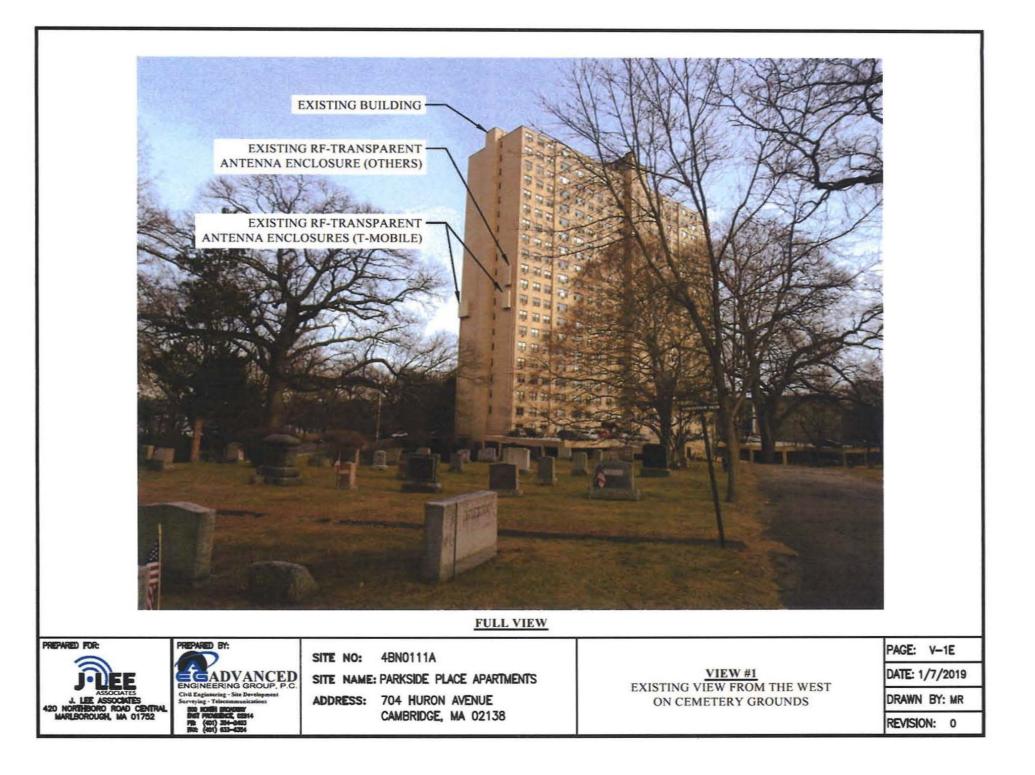
Load Combination	Span	Max. "-" Defl L	ocation in Span	Load Combination	Max. "+" Defl	Location in Span
W Only	1	0.0342	2.303	W Only	-0.0046	5.586
W Only	2	0.1046	3.430		0.0000	5.586

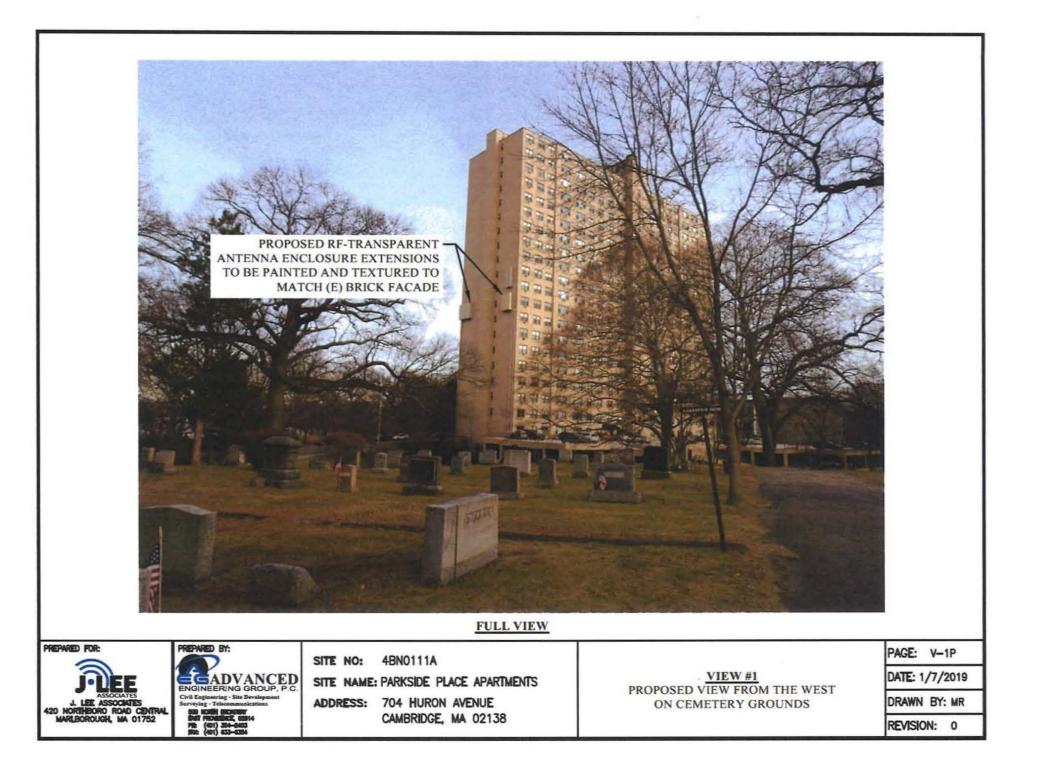
	-	0.1010	0.400		0.0000	0.000
Vertical Reactions			Sup	port notation : Far left is #	Values in KIPS	
Load Combination	Support 1	Support 2	Support 3			
Overall MAXimum	0.301	1.423	0.553			
Overall MINimum	0.007	0.023	0.007			
+D+H	0.011	0.038	0.011			
+D+L+H	0.011	0.038	0.011			
+D+Lr+H	0.011	0.038	0.011			
+D+S+H	0.011	0.038	0.011			
+D+0.750Lr+0.750L+H	0.011	0.038	0.011			
+D+0.750L+0.750S+H	0.011	0.038	0.011			
+D+0.60W+H	0.192	0.891	0.343			
+D+0.70E+H	0.011	0.038	0.011			
+D+0.750Lr+0.750L+0.450W+I	H 0.147	0.678	0.260			
+D+0.750L+0.750S+0.450W+H	0.147	0.678	0.260			
+D+0.750L+0.750S+0.5250E+1	H 0.011	0.038	0.011			
+0.60D+0.60W+0.60H	0.187	0.876	0.338			
+0.60D+0.70E+0.60H	0.007	0.023	0.007			
D Only	0.011	0.038	0.011			
Lr Only						
L Only						
S Only						
W Only	0.301	1.423	0.553			
E Only						
H Only						

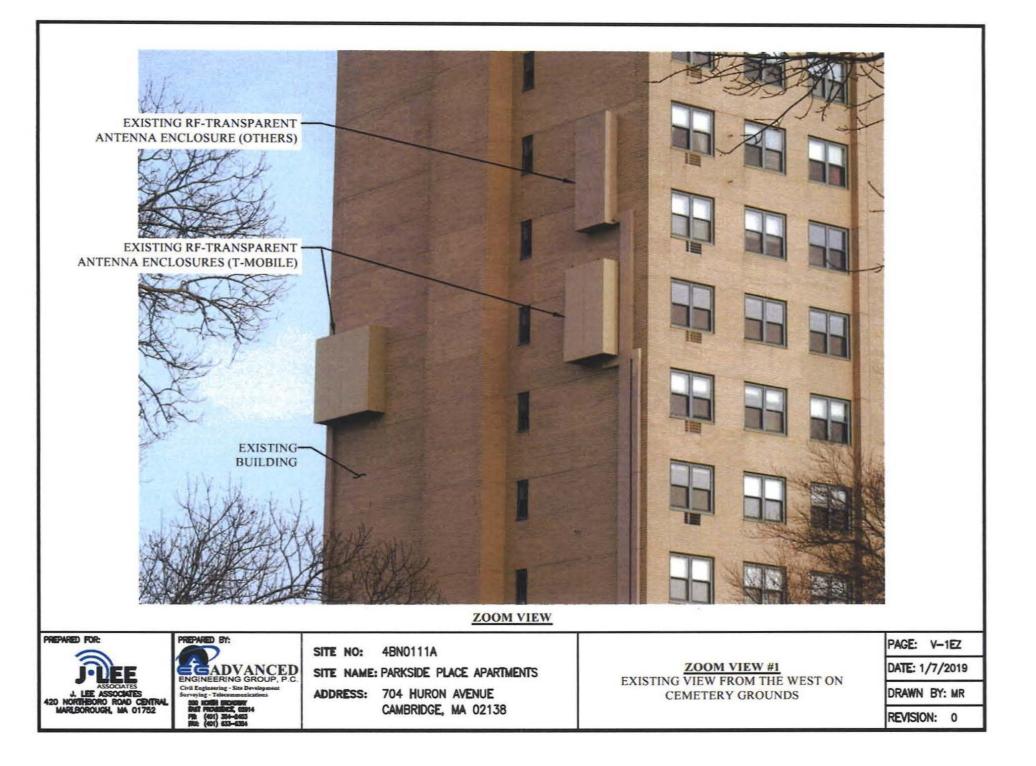
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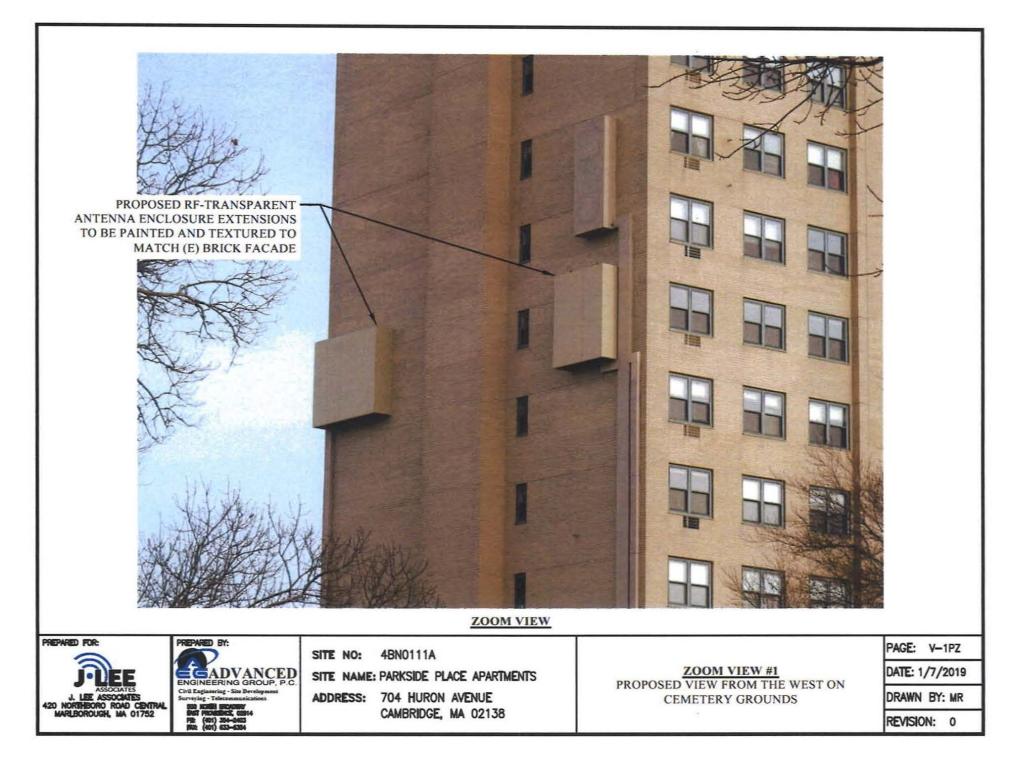
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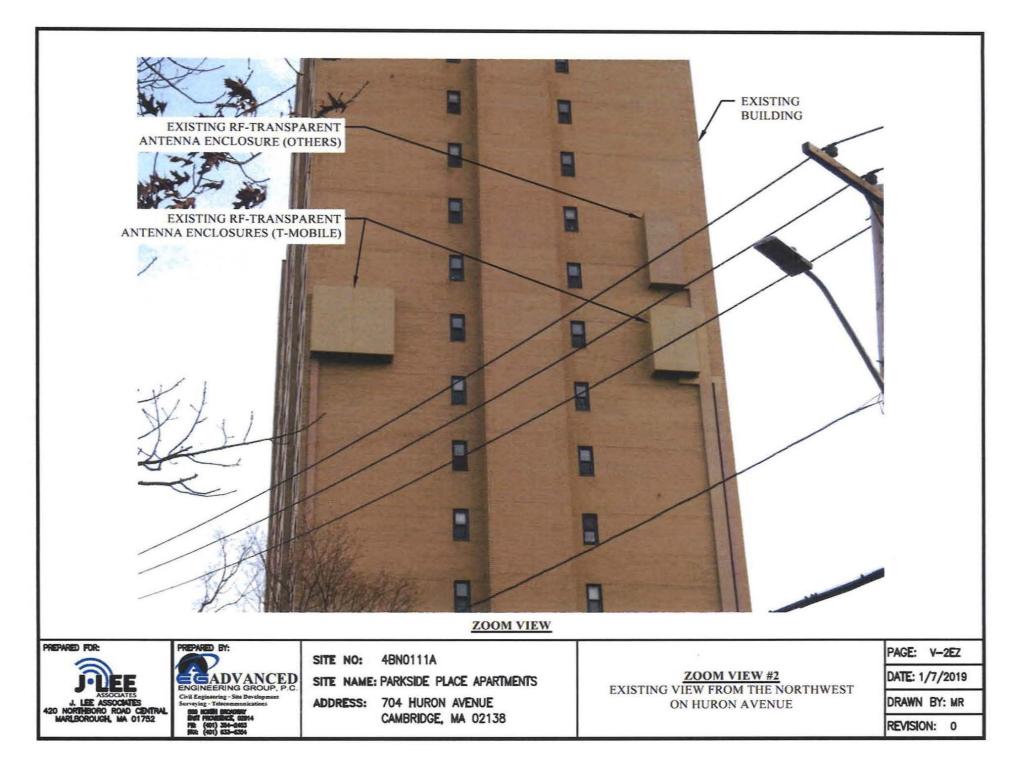


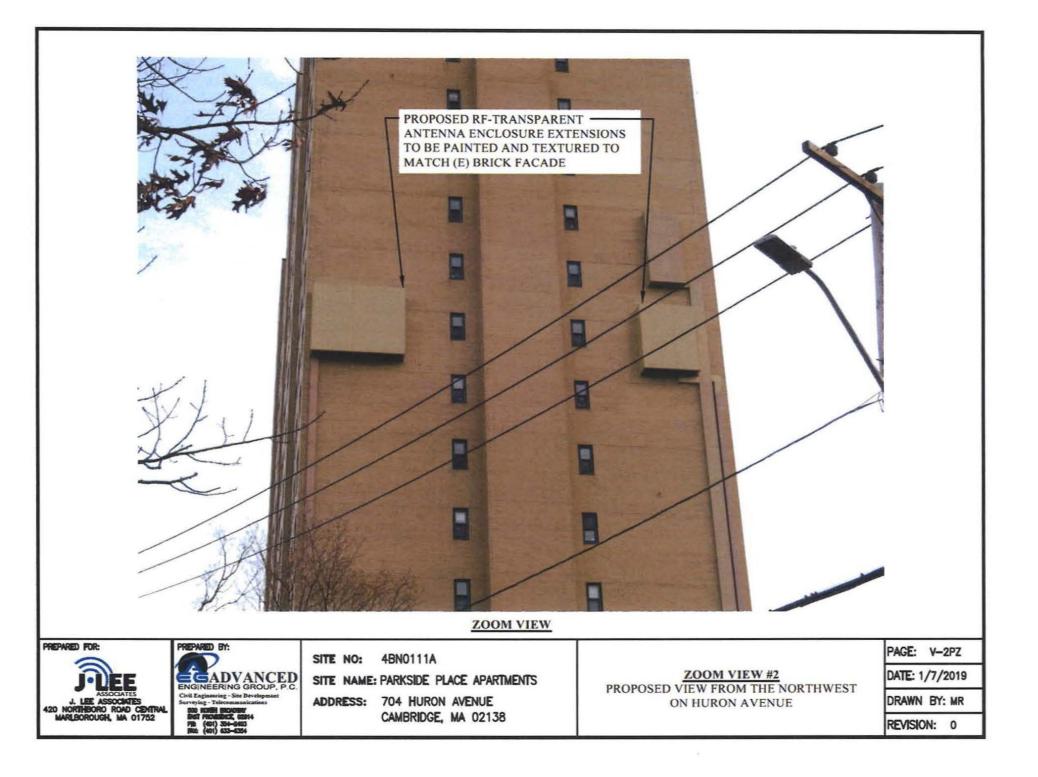
















Last on the

# Universal Licensing System

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ULS License

# AWS (1710-1755 MHz and 2110-2155 MHz) License - WQPG202 In HELP - T-Mobile License LLC

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MAIN	ADMIN MARKET MAI	P				
Call Sign	WQPG202	Radio Service	AW - AWS (1710-1755 MHz and 2110-2155 MHz)			
Status	Active	Auth Type	Regular			
Market						
Market	BEA003 - Boston-Worcester- Lawrence-Lowell-Brockton, MA-NH- RI-VT	Channel Block	C			
Submarket	4	Associated Frequencies (MHz)	001730.0000000- 001735.00000000 002130.0000000- 002135.00000000			
Dates						
Grant	04/18/2012	Expiration	11/29/2021			
Effective	04/18/2012	Cancellation				
Buildout Dea	dlines					
1st		2nd				
Notification I	Dates					
1st		2nd				
1						
FRN	0001565449 ( <u>Vlew Ownership Filina</u> )	Туре	Limited Liability Company			
Licensee						
T-Mobile Licens 12920 SE 38ti Bellevue, WA 9 ATTN Dan Men	h Street 98006	P:(425)383-4000 F:(425)383-4840 E:fccregulatorycompliancecontact@t-mobile.com				
Contact						
Wiley Rein LLP		P:(202)719-7344				
1776 K Street, Washington, D ATTN Nancy J.	C 20006	F:(202)719-7049 E:nvictory@wileyrein.com				

FCC Site Map

Radio Service Type Mobile **Regulatory Status** Common Carrier Interconnected Yes Alien Ownership Is the applicant a foreign government or the representative of any No foreign government? Is the applicant an alien or the representative of an alien? No Is the applicant a corporation organized under the laws of any No foreign government? Is the applicant a corporation of which more than one-fifth of the No capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? Is the applicant directly or indirectly controlled by any other Yes corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? The Alien Ruling question is not answered. **Basic Qualifications** The Applicant answered "No" to each of the Basic Qualification questions. **Tribal Land Bidding Credits** 

This license did not have tribal land bidding credits.

1.1.1 1 378 - 1 20

Race Ethnicity

Gender

ULS Help	ULS Glossary - FAQ - Online Help - Technical Support - Licensing Support
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6/9/2017

Help | Tech Support

2/2

ULS License

# Local Multipoint Distribution Service License - WQPD278 - T-Mobile License LLC

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Status	Active	Auth Type	Regular		
Market					
Market	BTA051 - Boston, MA	Channel Block	А		
Submarket	2	Associated Frequencies (MHz)	027500.00000000- 028350.00000000- 029100.00000000- 029250.00000000 031075.00000000- 031225.00000000		
Dates					
Grant	02/15/2012	Expiration	10/06/2018		
Effective	12/30/2013	Cancellation			
Buildout Deadlin					
1st		2nd			
Notification Date					
1st		2nd			
		2.110			
FRN	0001565449	Туре	Limited Liability Company		
Licensee					
T-Mobile License LL 12920 SE 38th St Bellevue, WA 9800 ATTN FCC Regulato	reet 16	P:(425)383-8401 F:(425)383-4840 E:FCCregulatorycompliancecontact@t-mobile.com			
Contact					
T-Mobile License LL	C	P:(425)383-5178			
1-PIODITE LICENSE EL		F:(425)383-4840			
12920 SE 38th Street E:shannon.reilly@t-mobile.com Bellevue, WA 98006 ATTN Shannon Kraus					
and the second second	and the second				
Radio Service Type	Fixed				
Regulatory Status	Common Carrier, Interconne Non-Common Carrier	ected No			
Alien Ownership					
	reign government or the representativ	eofany No			
Is the applicant an alien or the representative of an alien? No					
5) 	O				

http://wireless2.fcc.gov/UIsApp/UIsSearch/license.jsp?licKey=3368273&printable

#### ULS License - Local Multipoint Distribution Service License - WQPD278 - T-Mobile License LLC

Is the applicant a corporation organized under the laws of any foreign government?

Is the applicant a corporation of which more than one-fifth of the Yes capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

Is the applicant directly or indirectly controlled by any other Yes corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

If the answer to the above question is 'Yes', has the applicant Yes received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?

#### **Basic Qualifications**

The Applicant answered "No" to each of the Basic Qualification questions.

#### **Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

Race Ethnicity

Gender

6/9/2017

No

#### **ULS** License

# 700 MHz Lower Band (Blocks A, B & E) License - WQIZ578 - T-Mobile License LLC

Call Sign	WQIZ578	Radio S	ervice	WY - 700 MHz Lower Band (Blocks A, B & E)
Status	Active	Auth Ty	pe	Regular
Market				
Market	BEA003 - Boston-Worcest Lawrence-Lowell-Brockton RI-VT		el Block	A
Submarket	0	Associat Frequer (MHz)		000698.0000000- 000704.00000000 000728.00000000- 000734.00000000
Dates				
Grant	06/26/2008	Expirati	on	06/13/2019
Effective	12/02/2013	Cancella	ation	
Buildout Deadlin	les			
1st		2nd		06/13/2019
Notification Date	25			
1st		2nd		
1.55 - 111				
FRN	0001565449	Туре		Limited Liability Company
Licensee				
T-Mobile License Ll 12920 SE 38th St Bellevue, WA 9800 ATTN FCC Regulato	reet 06	F:(425)	383-8401 383-4840 gulatoryc	
Contact				
T-Mobile License LLC Shannon Kraus 12920 SE 38th Street Bellevue, WA 98006 ATTN Shannon Kraus			383-5178 383-4840 10n.reilly@	
1. 2727 - 6. 272	taa Mariatoo S			
Radio Service Type	Fixed, Mobile			
Regulatory Status	Common Carrier I	nterconnected	Yes	
Alien Ownership				
Is the applicant a for foreign government	preign government or the rep t?	presentative of any	No	
Is the applicant an	alien or the representative o	f an alien?	No	
Is the applicant a conformed for the second se	orporation organized under t ?	the laws of any	No	

http://wireless2.fcc.gov/UIsApp/UIsSearch/license.jsp?licKey=30251408printable

#### ULS License - 700 MHz Lower Band (Blocks A, B & E) License - WQIZ578 - T-Mobile License LLC

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

Is the applicant directly or indirectly controlled by any other Yes corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

If the answer to the above question is 'Yes', has the applicant Yes received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?

#### **Basic Qualifications**

The Applicant answered "No" to each of the Basic Qualification questions.

#### **Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

3 0.0. 90 0.3

Race

Ethnicity

Gender

#### **ULS** License

# AWS (1710-1755 MHz and 2110-2155 MHz) License - WQGB373 - T-Mobile License LLC

	Call Sign	WQGB373		Radio Serv	vice	AW - AWS (1710-1755 MHz and 2110-2155 MHz)
	Status	Active		Auth Type	1	Regular
	Market					
	Market	REA001 - Northeast		Channel B	lock	E
	Submarket	1		Associated Frequenci (MHz)		001740.0000000- 001745.00000000 002140.00000000- 002145.00000000
	Dates					
	Grant	11/29/2006		Expiration		11/29/2021
	Effective	06/26/2012		Cancellatio		
	Buildout Deadlin					
	1st			2nd		
	Notification Date	25				
	1st			2nd		
	Sec. 7 Sec.					
	FRN	0001565440		Time		Limited Liability Company
		0001565449		Туре		Littled Liability Company
	Licensee					
	T-Mobile License LLC 12920 SE 38th St. Bellevue, WA 98006 ATTN Dan Menser			P:(425)383-4000 F:(425)378-4040 E:FCCRegulatoryComplianceContact@t-mobile.com		
	Contact					
	T-Mobile License Li Kathleen O Ham 12920 SE 38th St Bellevue, WA 9800 ATTN Dan Menser	 06		P:(425)38 F:(202)65 E:FCCReg	4-5963	
	i inggran giyani	a pi sumunu				
	Radio Service Type	Mobile				
	Regulatory Status		Interconne	cted	Yes	
	Alien Ownership					
Is the applicant a foreign government or the representative of any No foreign government?						
		alien or the representative	e of an alien?		No	
	Is the applicant a c foreign governmen	orporation organized unde t?	er the laws of	any	No	
	Is the applicant a corporation of which more than one-fifth of capital stock is owned of record or voted by aliens or their				No	

http://wireless2.fcc.gov/UIsApp/UIsSearch/license.jsp?licKey=2863084&printable

representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by allens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

The Alien Ruling question is not answered.

#### **Basic Qualifications**

The Applicant answered "No" to each of the Basic Qualification questions.

### **Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

Race

Ethnicity

Gender

#### **ULS** License

# AWS (1710-1755 MHz and 2110-2155 MHz) License - WQGA731 - T-Mobile License LLC

			1. A			
	Call Sign	WQGA731		Radio Se	rvice	AW - AWS (1710-1755 MHz and 2110-2155 MHz)
	Status	Active		Auth Typ	)e	Regular
	Market					
	Market	REA001 - Northeast		Channel	Block	D
	Submarket	1		Associate Frequenc (MHz)	- 17 - 1	001735.00000000- 001740.00000000 002135.00000000- 002140.00000000
	Dates					
	Grant	11/29/2006		Expiratio	n	11/29/2021
	Effective	12/10/2015		Cancellat		
	Buildout Deadlin					
	1st			2nd		
	Notification Date	es				
	1st			2nd		
	. 'n a .					
	FRN	0001565449		Туре		Limited Liability Company
	Licensee					
	T-Mobile License Li			P:(425)3		
	12920 SE 38th Street Bellevue, WA 98006 ATTN FCC Regulatory Compliance			F:(425)383-4840 E:FCCregulatorycompliancecontact@t-mobile.com		
15						
	Contact					
	T-Mobile License LL	LC		P:(425)3		
	12920 SE 38th St	reat		F:(425)383-4840 E:FCCregulatorycompliancecontact@t-mobile.com		
	Bellevue, WA 9800			E.FCCreg	Juiatorycu	mplanceconcact@c-mobile.com
	ATTN FCC Regulato	ory Compliance				
	- No. J. ins. (N. 1997) -	$(\mathcal{J}_{1}^{1},\mathcal{I}_{2}^{2}^{2})^{*}\mathcal{O}_{1}^{2}$ , 2.1				
	Radio Service Type	Mobile				
	Regulatory Status	Common Carrier	Interconne	ected	Yes	
	Alien Ownership					
	Is the applicant a for foreign government	preign government or the t?	representativ	e of any	No	
	Is the applicant an	alien or the representativ	ve of an alien?		No	
	Is the applicant a conforming government	orporation organized und ?	er the laws of	any	No	
	Is the applicant a corporation of which more than one-fifth of the				Voc	

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their Yes

http://wireless2.fcc.gov/UIsApp/UIsSearch/license.jsp?licKey=28626428printable

representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

Is the applicant directly or indirectly controlled by any other Yes corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

If the answer to the above question is 'Yes', has the applicant Yes received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?

#### **Basic Qualifications**

The Applicant answered "No" to each of the Basic Qualification questions.

### **Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

Race

692017

Ethnicity

21. 25

Gender

#### ULS License

# PCS Broadband License - WPZY689 - T-Mobile License LLC

	Call Sign	WPZY689		Radio Ser	vice	CW - PCS Broadband
	Status	atus Active			2	Regular
	Market					
	Market	BTA051 - Boston, MA		Channel I	Block	С
	Submarket	2		Associate Frequenc (MHz)		001895.00000000- 001910.00000000 001975.00000000- 001990.00000000
	Dates					
	Grant	12/06/2016		Expiration		01/03/2027
	Effective	12/06/2016		Cancellati	on	
	<b>Buildout Deadlin</b>	ies				
	1st	12/07/2003		2nd		01/03/2007
	Notification Date	25				
	1st	01/30/2002		2nd		12/22/2006
	$1+\epsilon_{10}+\epsilon_{10}+m$					
	FRN	0001565449		Туре		Limited Liability Company
	Licensee					
	T-Mobile License Li 12920 SE 38th St Bellevue, WA 9800 ATTN FCC Regulato	rreet 06		P:(425)38 F:(425)38 E:FCCrego	3-4840	
	Contact					
	T-Mobile License Ll	LC		P:(425)38 F:(703)58		
	12920 SE 38th ST Bellevue, WA 9800 ATTN FCC Regulato	06				npliancecontact@t-mobile.com
	$\omega = (e^{i\omega t} 2^{i\omega} 2^{i\omega} 2^{i\omega}),  e^{-i\omega})$	1. H 1944 1				
	Radio Service Type	Mobile				
	Regulatory Status	Common Carrier	Interconne	cted	Yes	
	Alien Ownership					
Is the applicant a foreign government or the representative of any No foreign government?						
Is the applicant an alien or the representative of an alien?				No		
	foreign government				No	
	capital stock is own representatives or l	orporation of which more t ed of record or voted by a by a foreign government o orporation organized unde	liens or their or representa	tive	No	
	1	O LE DE LE DE LE DE LE DE LE				

http://wireless2.fcc.gov/UIsApp/UIsSearch/license.jsp?licKey=26100948printable

#### ULS License - PCS Broadband License - WPZY689 - T-Mobile License LLC

Is the applicant directly or indirectly controlled by any other Yes corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

The Applicant has received a declaratory ruling(s) approving its foreign ownership, and the application involves only the acquisition of additional spectrum for the provision of a wireless service in a geographic coverage area for which the Applicant has been previously authorized.

#### **Basic Qualifications**

The Applicant answered "No" to each of the Basic Qualification questions.

#### **Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

Race

Ethnicity

Gender

**ULS** License

# PCS Broadband License - KNLH310 - T-Mobile License LLC

Call Sign	KNLH310		Radio Ser	vice	CW - PCS Broadband
Status	Active	Auth Type	e	Regular	
Market					
Market	BTA051 - Boston, MA		Channel	Block	E
Submarket	0		Associate Frequenc (MHz)	-	001885.00000000- 001890.00000000 001965.00000000- 001970.00000000
Dates					
Grant	06/08/2017		Expiration	n	06/27/2027
Effective	06/08/2017		Cancellati	ion	
Buildout Deadlin	nes				
1st	06/27/2002		2nd		
Notification Dat	es				
1st	04/01/1999		2nd		
1 22 242					
FRN	0001565449		Туре		Limited Liability Company
Licensee					
T-Mobile License L 12920 S.E. 38th Bellevue, WA 980 ATTN FCC Regulat	Street 06		P:(425)38 E:FCCReg		ComplianceContact@t-mobile.com
Contact					
T-Mobile License L FCC REGULATORY 12920 S.E. 38th Bellevue, WA 980 ATTN FCC Regulat	COMPLIANCE Street 06		P:(425)38 E:FCCReg		complilanceContact@t-mobile.com
$(e^{\frac{1}{2}}e^{\frac{1}{2}})t_{2}e^{-\frac{1}{2}}e^{\frac{1}{2}}e^{-\frac{1}{2}}$	$[a_1, \ldots, a_{n-1}]_{n-1} = 1$				
Radio Service Type	Fixed, Mobile				
Regulatory Status	Common Carrier	Interconne	ected	Yes	
Alien Ownership	<b>b</b>				
Is the applicant a f foreign governmen	oreign government or the It?	representativ	e of any	No	
Is the applicant an alien or the representative of an alien?				No	
Is the applicant a c foreign governmen	orporation organized under t?	er the laws of	any	No	
Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?				No	

http://wireless2.fcc.gov/UIsApp/UIsSearch/license.jsp?licKey=10479&printable

Is the applicant directly or indirectly controlled by any other Yes corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

If the answer to the above question is 'Yes', has the applicant Yes received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?

#### **Basic Qualifications**

The Applicant answered "No" to each of the Basic Qualification questions.

#### Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Race

Ethnicity

Gender

#### **ULS** License

# Local Multipoint Distribution Service License - WQPD278 - T-Mobile License LLC

Call Sign	WQPD278	Radio S	ervice	LD - Local Multipoint Distribution Service
Status	Active	Auth Ty	pe	Regular
Market				
Market	BTA051 - Boston, MA	Channe	Block	A
Submarket	2	Associal Frequer (MHz)		027500.00000000- 028350.00000000 029100.00000000- 029250.00000000 031075.00000000- 031225.00000000
Dates				
Grant	02/15/2012	Expirati	on	10/06/2018
Effective	12/30/2013	Cancella	ation	
Buildout Deadlin	es			
1st		2nd		
Notification Date	s			
1st		2nd		
5. TX " 7 X's				
FRN	0001565449	Туре		Limited Liability Company
Licensee				
T-Mobile License LL 12920 SE 38th St Bellevue, WA 9800 ATTN FCC Regulato	reet 16	F:(425)	383-8401 383-4840 egulatoryco	
Contact				
T-Mobile License LI	-C		383-5178 383-4840	
12920 SE 38th Street Bellevue, WA 98006 ATTN Shannon Kraus				ot-mobile.com
$\mathcal{I}^{i} = \mathcal{I}^{i} $	$g^{\mu}_{\mu\nu}\dot{g} = 0$ (2.775 $^{++}$ S			
Radio Service Type	Fixed			
Regulatory Status	Common Carrier, Non-Common Carrier	Interconnected	No	
Alien Ownership				
Is the applicant a for foreign government	reign government or the re	epresentative of any	No	
Is the applicant an alien or the representative of an alien?			No	

6/9/2017	ULS License - Local Multipoint Distribution Service License	e - WQPD278 - T-Mobile License LLC
	Is the applicant a corporation organized under the laws of any foreign government?	No
	Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	Yes

Is the applicant directly or indirectly controlled by any other Yes corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?

If the answer to the above question is 'Yes', has the applicant Yes received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?

#### **Basic Qualifications**

The Applicant answered "No" to each of the Basic Qualification questions.

#### **Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

Race Ethnicity

Gender



Bk: 47056 Pg: 467

City of Cambridge

#### MASSACHUSETTS

Bk: 47056 Pg: 467 Doc: DECIS Page: 1 of 4 03/03/2006 10:19 AM Page: 1 of 4

BOARD OF ZONING APPEAL

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

2006 FEB 10 A 10: 29

THE STREET STREET AMERICA MASSACHUSELIS

Owerer: Huron Towers Corpany Clo First Realty Management

CASE NO:

704 Huron Avenue Cambridge, MA

9227

Residence C-3 Zone

PETITIONER:

LOCATION:

Omnipoint Holdings, Inc. C/o Adam Braillard, Esq.

Book 11821 / Pg 356

Boston, MA 02109

PETITION: Special Permit: To install and operate a Wireless Communication Facility.

VIOLATIONS: Art. 4,000, Sec. 4.32.G.1 (Telecommunication Facility). Adam Braillard Prince Lubel, Glusky + Tye 585 commercial St. Art. 10.000, Sec. 10.40 (Special Permit).

DATE OF PUBLIC NOTICE: December 23 & 30, 2005

DATE OF PUBLIC HEARING: January 12, 2006

MEMBERS OF THE BOARD: THOMAS SIENIEWICZ - CHAIR JENNIFER PINCK - VICE CHAIR SUSAN SPURLOCK **KEEFE B. CLEMONS** CONSTANTINE ALEXANDER ASSOCIATE MEMBERS: **BRENDAN SULLIVAN** CHRISTOPHER CHAN PAUL D. GRIFFIN EDWARD W. WAYLAND **TIMOTHY HUGHES** 

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

Case No.9227Location:704 Huron AvenuePetitioner:Omnipoint Holdings, Inc. c/o Adam Braillard, Esq.

On January 12, 2006, Petitioner's attorney Adam Braillard and engineer Rakesh Goel appeared before the Board of Zoning Appeal requesting a special permit to install and operate a Wireless Communication facility. The Petitioner submitted plans and photographs.

Board member Clemons disclosed his employment with Verizon, a competitor of the petitioner, and offered to recuse himself. The petitioner chose to have him remain.

Mr. Braillard stated that the installation would be in a residential district. He produced an aerial photo and a zoning map and reviewed the uses in the vicinity, stating that residential uses did not predominate. He stated that the antennas would be flush mounted at over 100' high and that the design had been adjusted to accommodate the Planning Board's request regarding camouflage. He stated that the revised design was shown on the photo simulations, but not the plans. He stated that the FCC license was in place and that traffic would be limited to two maintenance visits per moth. He stated that there were no other tall buildings in the area on which to mount the antenna. Mr. Goel stated that the installation would fill a gap in coverage.

Christine Kuta of 7 Fairview Avenue and Philip Long of 17 Fresh Pond Place spoke in favor of the proposal. Ann Howe of 42 Fresh Pond Place, Patricia Barger of 652 Huron Avenue, Maria Marchil Sr. and Maria Marchil Jr. of 172 Cushing Street, and Jeff Loiter of 159 Cushing Street spoke in opposition to the proposal based mostly on health concerns.

After discussion, the Chair moved that the Board find that the antenna is in a residential district and that, based on the supplied air photo and marked city zoning map, residential uses do not predominate in the vicinity. The Chair moved that the Board find that a valid license has been submitted in support of the application, that, based on input from the Planning Board and adjustments made to the design, the visual impact has been minimized at the location, that traffic generated and patterns of access and egress at the site will not cause congestion, hazard, or substantial change in the established neighborhood character because there will be only two visits per month made in a domestic sized vehicle to the property, that the continued operation or development of adjacent uses as permitted in the zoning ordinance will not be adversely affected by the nature of this proposal, based on the fact the antennas are 108' above the ground on a large slab of a building, and that they have been camouflaged, and that no nuisance or

hazard will be created to the detriment of the health, safety, or welfare of the occupants of the proposed building or citizens of the City of Cambridge, based again on the assurance of the federal government's licensing process. The Chair moved that, based on those findings, the Board grant the special permit to install and operate a wireless communications facility at 704 Huron Avenue on the following conditions:

- 1. that the work be consistent with submitted photo simulations,
- that revised construction documents be submitted to the file, which conform to the requirements imposed by the Planning Board,
- that, should the technology become obsolete or the lease expire at the premises, the antennae be removed and the building be restored to its current and existing condition.

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

The Board based its decision upon the above findings and upon the following:

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

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

Thomas Sieniewicz, Chair

Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on <u>9/10/06</u> by <u>10/06</u>, Clerk.

Twenty days have elapsed since the filing of this decision.

No appeal has been filed

Appeal has been filed and dismissed or denied.

Date: Millih 3, 2006 D. mergen ty Clerk.



C. Bross



# City of Cambridge

MASSACHUSETTS

2012 : OU 16 AM 10 27

Page: 1 of 4

BOARD OF ZONING APPEAL OFFICE OF THE CITY CLERK CAMBRIDGE, MASSACHUSETTS 831 Mass Avenue, Cambridge, MA.

(617) 349-6100



Doc: DECIS

12/19/2012 02:34 PM

CASE NO:

704 Huron Avenue Cambridge, MA

10326

Residence C-3 Zone

) Uner? PETITIONER:

LOCATION:

6- Huren Towere Co. 151 Tremont St. Beston, MA 02111 T-Mobile Northeast, LLC C/o Jackie Slaga, Agent

PETITION:

Special Permit: In-kind replacement of existing 3 antennas with new antennas; in-kind replacement of 1 existing cabinet inside interior equipment room. All antennas will be mounted in the same location and painted to match façade of building.

VIOLATION:

Art. 4.000, Sec. 4.32.G.1 & 4.10 (Footnote 49) (Telecommunication Facility). Art. 10.000, Sec. 10.40 (Special Permit).

DATE OF PUBLIC NOTICE:

September 13 & 20, 2012

11821-356

DATE OF PUBLIC HEARING:

September 27, 2012

MEMBERS OF THE BOARD:

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

ASSOCIATE MEMBERS:

MAHMOOD R. FIROUZBAKHT DOUGLAS MYERS SLATER W. ANDERSON TAD HEUER JANET GREEN ANDREA A. HICKEY **KEVIN C. McAVEY** 

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

Case No. 10326 Location: 704 Huron Avenue Petitioner: T-Mobile NE, LLC c/o Jackie Slaga

On September 27, 2012, Petitioner's attorney Ricardo Sousa appeared before the Board of Zoning Appeal requesting a special permit in order to replace three existing antennas with new antennas mounted in the same location and painted to match the façade and to replace one existing cabinet inside the building. The Petitioner requested relief from Article 4, Section 4.32.G.1 of the Cambridge Zoning Ordinance ("Ordinance"). The Petitioner submitted application materials including information about the project, plans, and photographs.

Mr. Sousa stated that the Petitioner wished to upgrade its existing specially permitted wireless facility as part of a system wide upgrade. He stated that new antennae would simply replace existing ones and that everything would be painted so as to reduce visual impacts. He also agreed to replace the pole mounts with low profile mounts. He stated that there was no other viable site in the area without putting up a communications tower. He stated that there was an increasing need for more coverage.

The Chair noted that the Petitioner was duly licensed, and that the presentation indicated that the facilities would be painted to match the background as much as possible. The Chair asked if anyone wished to be heard on the matter, no one indicated such.

After discussion, the Chair moved that the Board grant the special permit for relief in order to replace three existing antennas with new antennas mounted in the same location and painted to match the facade and to replace one existing cabinet inside the interior equipment room based on the finding that the requirements of the Ordinance were met. The Chair moved that the Board find that traffic generated or patterns of access or egress would not cause congestion, hazard or substantial change in the established neighborhood character. The Chair moved that the Board find that the existing facilities on the building had not had any detrimental effect on the established neighborhood character. The Chair moved that the Board find that continued operation of or development of adjacent uses as permitted under the Ordinance would be not adversely affected by the nature of the proposed use, but would enhance it through upgraded equipment. The Chair moved that the Board find that there would be no nuisance or hazard created to the detriment of the health, safety and/or welfare of the occupants of the proposed use or to the citizens of the city, and that the proposed use would not impair the integrity of the district or adjoining districts or otherwise derogate from the intent and purpose of the Ordinance. The Chair moved that the Board grant the special permit on the following conditions:

- 1. that the work proceed as per the application, photo simulations, and plans as initialed by the Chair, and
- 2. that should the facility become unused, it be removed in a timely fashion and the background be restored to its condition prior to installation.

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

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

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

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

Brendan Sullivan, Chair

Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 1/-1/2 by Maria (Radieco, Clerk.

Twenty days have elapsed since the filing of this decision.

No appeal has been filed

Appeal has been filed and dismissed or denied.

Date: 12/19/12 Ronna P. Kopz INterim



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

June 10, 2015

T-Mobile Northeast LLC - C/O Ricardo M. Sousa, Esq. 100 Cambridge Street - Suite 2200 Boston MA, 02114

Case No: BZA-006489-2015

Dear Ricardo M. Sousa, Esq.

We enclose the decision of the Board of Zoning Appeal as it pertains to the premises located at 704 Huron Ave Cambridge, MA

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

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

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

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

Sincerely yours. Vacheco Maria L. Pacheco Secretary

Section 10.35 of the Zoning Ordinances:

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



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

2015 JUN 10 PFI 12 22

CASE NO:	BZA-006489-2015
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Residence 3 (CS3) Zone ETTS

LOCATION: 704 Huron Ave Cambridge, MA

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

PETITION: <u>Special Permit:</u> To modify it's existing wireless telecommunication facility by adding six (6) new panel antennas together with three (3) remote radio head (RRH) units and supporting equipment. The proposed equipment will be facade mounted and painted to match the facade of the building.

VIOLATION :

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

DATE OF PUBLIC NOTICE:	April 16, 2015 and April 23, 2015

DATE OF PUBLIC HEARING: April 30, 2015;

MEMBERS OF THE BOARD:

	<b>CONSTANTINE ALEXANDER - CHAIR</b>	V
	TIMOTHY HUGHES - VICE-CHAIR	×
	BRENDAN SULLIVAN	$\checkmark$
	THOMAS SCOTT	
	JANET O. GREEN	V
ASSOCIATE MEMBERS:		
	DOUGLAS MYERS	$\checkmark$
	SLATER W. ANDERSON	
	ANDREA A. HICKEY	
	ALISON HAMMER	
	JIM MONTEVERDE	
	GEORGE BEST	
	LAURA WERNICK	
		the second se

Members of the Board of Zoning Appeal heard testimony and viewed materials submitted regarding the above request for relief from the requirements of the Cambridge Zoning Ordinance. The Board is familiar with the location of the petitioner's property, the layout and other characteristics as well as the surrounding district. Case No.BZA-006489-2015Location:704 Huron AvenuePetitioner:T-Mobile Northeast LLC c/o Ricardo Sousa, Esq.

On April 30, 2015, Petitioner's attorney Anne Reynolds appeared before the Board of Zoning Appeal requesting a special permit in order to modify an existing wireless telecommunication facility by adding six new panel antennas and three remote radio head units with supporting equipment. The Petitioner requested relief under Article 4, Section 4.32.G.1 of the Cambridge Zoning Ordinance ("Ordinance"). The Petitioner submitted application materials including information about the project, plans, and photographs.

Ms. Reynolds stated that as a part of a system wide upgrade, the petitioner wished to install additional antennas and equipment at the existing facility. She stated that the antennas would be façade mounted and boxed in order to reduce their visual impact. She stated that the design had the support of the Planning Board. She stated that the petitioner was FCC licensed. She stated that the site was in a residential district, but that the vicinity was not predominantly residential because institutional uses prevailed.

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

After discussion, the Chair moved that the Board grant the special permit for relief in order to modify an existing wireless telecommunication facility by adding six new panel antennas and three remote radio head units with supporting equipment based on the finding that the petitioner was a licensed FCC carrier in good standing. The Chair moved that the Board find that the proposed facility was in a residentially zoned district, that there was a demonstrated need for the facility to provide improved carrier service and that there were no alternative functionally suitable sites in non-residential locations. The Chair moved that the Board find that the character of the prevailing uses in the area would not be affected by what was proposed. The Chair moved that the Board find that nonresidential uses predominated in the vicinity of the proposed facility and that the facility would not be inconsistent with the character that prevailed in the surrounding neighborhood. The Chair moved that the Board find that it had made this finding in two earlier special permit cases and the neighborhood had not changed. The Chair moved that the Board find that in the immediate vicinity of the facility there was a golf course, a community center, and a cemetery, making it an area with a multitude of uses. The Chair moved that the Board find that a special permit was required for the proposed use. The Chair moved that the Board find that traffic generated or patterns of access or egress would not cause congestion, hazard, or substantial change in established neighborhood character. The Chair moved that the Board

find that maintenance trips to the site were only required once or twice a month and so there would not be a constant flow of traffic to the site. The Chair moved that the Board find that the continued operation of adjacent uses would not be adversely affected by what was proposed. The Chair moved that the Board find that there had been no adverse impacts on adjacent uses to date. The Chair moved that the Board find that no nuisance or hazard would be created to the detriment of the health, safety, and welfare of the occupant of the proposed use or the citizens of the city. The Chair moved that the Board find that the proposed use would not impair the integrity of the district or adjoining district or otherwise derogate from the intent and purpose of the Ordinance. The Chair moved that the Board grant the special permit on the following conditions:

- that the work proceed accordance with photo simulations and plans attached to a letter from the petitioner's counsel dated April 24, 2015, as initialed by the Chair.
- that to the extent the equipment is no longer put to use for a period of six months or more, it be removed and the property be restored to its prior state to the extent reasonably possible,
- 3. that the installation be maintained in accordance with the provided photo simulations and should it deteriorate, it be restored to its prior condition.
- 4. Inasmuch as the health effects of the transmission of electromagnetic waves is a matter of ongoing societal concern and scientific study, the special permit is also subject to the following conditions:
  - A. that the petitioner shall file with the Inspectional Services Department each report it files with the federal authorities regarding electromagnetic energy waves emissions emanating from all of the petitioner's equipment on the site. Each such report shall be filed with the Inspectional Services Department no later than ten business days after the report has been filed with the federal authorities. Failure to timely file any such report with the Inspectional Services Department shall ipso facto terminate the special permit.
  - B. that in the event that at any time federal authorities notify the petitioner that its equipment on the site, including but not limited the equipment granted here fails to comply with the requirements of law or governmental regulation, whether with regard to the emissions of electromagnetic energy waves or otherwise, the petitioner, within ten business days of receipt of such notification of such failure, shall file with the Inspectional Services Department a report disclosing in reasonable detail that such failure has occurred, and the basis for such claimed failure. The special permit granted here shall ipso facto terminate if any of the petitioner's federal licenses is or are suspended, revoked, or terminated.
  - C. that to the extent that a special permit has terminated pursuant to the foregoing paragraphs A and B, the petitioner may apply to this Board

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

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

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

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

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

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

Constantine Alexander, Chair

Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 6/10/15 by Junia Galler, Clerk.

Twenty days have elapsed since the filing of this decision.

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

Appeal has been filed and dismissed or denied.

Date: \_\_\_\_\_

City Clerk.

# ▶ PRI∩CE LOBEL

January 11, 2019

### VIA HAND DELIVERY

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

Re: Eligible Facilities Request to Modify Transmission Equipment at an Existing Base Station located at 704 Huron Avenue, Cambridge, MA 02139.

Dear Mr. Singanayagam:

A. T-Mobile is Filing an Eligible Facilities Request

Prince Lobel Tye LLP, on behalf of T-Mobile Northeast LLC is submitting the attached Eligible Facilities Request application to add, remove, modify, or replace Transmission Equipment at an Existing Base Station located at 704 Huron Avenue, Cambridge, MA 02139.

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

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

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

www.princelobel.com

# PRINCE LOBEL

B. Why this Eligible Facilities Request Must Be Granted

This Eligible Facilities Request involves an effort to collocate, remove, modify, or replace Transmission Equipment at an existing Base Station operated by an FCC licensed wireless carrier. The FCC has defined Base Station as "the equipment and non-tower supporting structure at a fixed location that enable Commission-licensed or authorized wireless communications between user equipment and a communications network . . . the term includes equipment associated with wireless communications service including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supply, and comparable equipment." The term existing base station also includes a structure that currently houses or supports an antenna, transceiver or other associated equipment that constitutes part of a Base Station at the time the application is filed even if the structure was not built solely or primarily to provide such support. The existing Base Station in this application is approximately one hundred and sixteen (191') feet high and presently contains wireless facilities. The existing Base Station meets the Federal Communications Commission ("FCC") definition of a Base Station.

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

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

- 1. The modifications to the Transmission Equipment do not increase the height of the Base Station by more than 10 percent (10%) or ten (10) feet, whichever is greater.
  - a. The height of the Base Station is approximately one hundred and sixteen (191') feet high. The proposed replacement of six (6) of the existing nine (9) panel antennas and three (3) of the existing remote radio heads (RRH) will not affect the height of the Base Station, because they will be installed at their current height of 80'.
- 2. The modifications to the Transmission Equipment do not protrude from the edge of the support structure by more than six (6) feet.

# PRINCE LOBEL

- a. The replacement of six (6) of the existing panel antennas and three (3) RRHs will result in the increase of the widths of two (2) of the three (3) existing enclosures by a distance of 1.6-feet. Therefore, the modifications of the facility will not protrude from the edge of the building by more than the six (6) foot limitation. Further, the replacement antennas will be installed at the same distance from the building's facade. As such, the proposed modification will not protrude from the edge of the building by more than six (6) feet.
- 3. The modifications to the Transmission Equipment do not involve the installation of more than the standard number of equipment cabinets for the technology involved, not to exceed four.
  - a. There are currently three (3) equipment cabinets existing at the Base Station. The Applicant does not propose to install any additional equipment cabinets.
- 4. The modifications to the Transmission Equipment do not entail any excavation or deployment outside of the Base Station site.
  - a. The Applicant is proposing to replace six (6) panel antennas and three (3) RRHs consistent with the existing antennas. There will be no excavation or deployment outside of the Base Station site.
- 5. The modifications to the Transmission Equipment do not defeat any existing concealed or stealth-design.
  - a. Pursuant to the original decision by the Board of Zoning Appeals for the City of Cambridge (the "Board") for this Facility, dated January 12, 2006 (BZA Case #9227), and subsequent decisions on December 19, 2012 (BZA Case #9708) and on June 10, 2015, (BZA Case# 006489-2015) (together, the "Decisions"), attached hereto, the existing antennas are located in the preferred location on the building and comply with the required conditions for a stealth design. The Applicant proposes to upgrade the facility by replacing six (6) existing panel antennas with six (6) new panel antennas, and replace three (3) RRHs with three (3) new RRHs. The widths of two (2) enclosures housing Sector A and Sector C antenna arrays will be increased by 1.6-feet to account for the antenna changes. The antennas enclosures mounted to the façade of the building will be painted to match the façade of the building. All proposed antennas and equipment will be integrated into the existing building to the extent possible. As such, the proposed modification will not defeat any existing stealth design.
- 6. The modifications to the Transmission Equipment comply with prior conditions of approval of the Base Station, unless the non-compliance is due to an increase in height, increase in width, addition of equipment cabinets, or new excavation that does not exceed the corresponding "substantial change" thresholds in numbers 1-4.

# PRINCE LOBEL

a. Based on the foregoing, the proposed modifications to the Base Station fully conform to Section 6409(a) of the Spectrum Act and comply with the prior conditions of approval of the Base Station.

There is a certification attached to the accompanying Eligible Facilities Request that identifies how each of the six review criteria identified by the FCC is met. The modifications to the Transmission Equipment at the Base Station located at 704 Huron Avenue, Cambridge, MA 02139 contained in this Eligible Facilities Request fully conform to Section 6409(a) as enacted by Congress and as interpreted by the FCC. Accordingly, this Eligible Facilities Request must be approved within 60 days, as required by federal law and FCC implementing regulations.

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

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

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

1th F. BM/

Adam F. Braillard

Direct: 617-456-8153 Email: <u>abraillard@princelobel.com</u>

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

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

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

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

Site Address: 704 Huron Avenue

## **Existing Facilities**

The Existing Facility is comprised of nine (9) panel antennas mounted within three (3) enclosures on the façade of the existing building, together with supporting equipment.

## **Height of Base Station**

Height above ground level of the tallest point on the existing base station: 191'(feet)

Height above ground level of the tallest point of the existing base station after the installation of the *proposed* equipment: 191'(feet), no change.

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

🗌 Yes 🖾 No

# Width of Base Station

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

🗌 Yes 🖾 No

# **Excavation or Equipment Placement**

Will the proposed changes in Transmission Equipment involve excavation or placement of new equipment outside the existing Base Station site or outside any access or utility easements currently related to the site?
 ☐ Yes ∑ No

# **Equipment Cabinets**

4) Will the proposed modification in Transmission Equipment involve installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four?
 □ Yes ⊠ No

## **Concealed or Stealth-Designed Wireless Facilities**

5)

- a) Is the existing wireless facility concealed or stealth- designed?
   ☑ Yes □ No

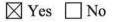
# Compliance with Preexisting Conditions of Approval for the Base Station

6)

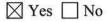
a) Were there any conditions of approval stated in the original government approval of the Base Station?



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



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



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

**Explanatory Comments:** 

Question No.5 (b)

Comment: a. Pursuant to the original decision by the Zoning Board of Appeal for the City of Cambridge (the "Board") for this Facility, dated January 12, 2006 (BZA Case #9227), and subsequent decisions on December 19, 2012 (BZA Case #9708) and on June 10, 2015, (BZA Case# 006489-2015) (together, the "Decisions"), attached hereto, the existing antennas are located in the preferred location on the building and comply with the required conditions for a stealth design. The Applicant proposes to upgrade the facility by replacing six (6) existing panel antennas with three (3) new panel antennas, and replace three (3) remote radio heads ("RRH") with three (3) new RRHs. The widths of two (2) enclosures housing Sector A and Sector C antenna arrays will be increased by 1.6-feet to account for the antenna changes. The antennas enclosures mounted to the façade of the building will be painted to match the façade of the building. All proposed antennas and equipment will be integrated into the existing building to the extent possible. As such, the proposed modification will not defeat any existing stealth design.

Question No.6 (c)

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

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

This certification is dated this 8<sup>th</sup> of January 2019.

Signature Adam F. Braillard, Esq., Attorney for Applicant Name & Title

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

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

Date of Submittal: January 8, 2019

#### Submitted by:

Name: Adam F. Braillard, Esq.

Title: Attorney for the T-Mobile Northeast LLC (the "Applicant")

Contact information: 617-456-8153, abraillard@princelobel.com

Name of Jurisdiction: City of Cambridge

Address of Jurisdiction: 831 Massachusetts Avenue, Cambridge MA 02139

Contact Name for Jurisdiction: Ranjit Singanayagam

Name of Local Government Permit Application: Building Permit

Local Government File #:

Street Address of Site: 704 Huron Avenue

Tax Parcel # of Site: Map 257, Lot 60

Latitude/Longitude of Site:

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

The Applicant proposes to replace six (6) existing panel antennas and three (3) existing remote radio heads (RRH), and to increase the width of two (2) of the three existing antenna enclosures to account for the antenna changes. All antennas enclosures mounted to the building will be painted to match the facade of the building.

List Each Piece of Transmission Equipment that will be Removed:

Six (6) panel antennas and three (3) RRHs will be removed and replaced.

**Eligible Facilities Request Application** 

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

There are 3 equipment cabinets currently located on site and no cabinets will be added.

List Cabinets that will be Removed at the Site:

None

Permit Application Deposit Amount:

Municipal Consultant Review Fee Deposit (if applicable):

# ▶ PRI∩CE LOBEL

January 11, 2018

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

Re:	Eligible Facilities Request pursuant to Section 6409 of the
	Spectrum Act and an Application for Special Permit, in the
	Alternative
Property Address:	704 Huron Avenue, Cambridge, MA 02139
	Assessor's Map 257, Lot 60 (the "Property")
Applicant:	T-Mobile Northeast LLC (the "Applicant")

Dear Honorable Members of the Board of Zoning Appeals:

This firm represents the Applicant in connection with an application for a special permit from the City of Cambridge Board of Zoning Appeals, to modify an existing wireless communications facility on the Property.

Enclosed, in connection with this application, please find three (3) application packages along with an application filing fee in the amount of \$500.00 made payable to the City of Cambridge.

Please contact me with any questions or if you need additional information. Thank you for your attention to this matter.

Sincerely,

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

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