



1 Cityplace Dr, Suite 490  
Creve Coeur, MO 63141

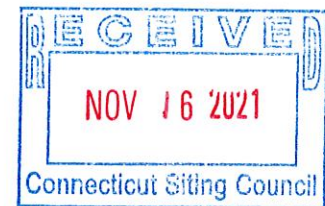
Phone: (314) 513-0147  
www.crowncastle.com

November 11th, 2021

EM-T-MOBILE-049-211116

Melanie A. Bachman  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

RE: **Notice of Exempt Modification for T-Mobile**  
**Crown Site ID# 876348; T-Mobile Site ID# CTHA667A**  
**Bright Meadow Blvd., ENFIELD, Connecticut 06082**  
**Latitude: 42.02080834 / Longitude: -72.58516945**



Ms. Bachman:

T-Mobile currently maintains six (6) antennas at the 147-foot mount on the existing 147.5-foot Monopole Tower located at Bright Meadow Blvd., Enfield, CT. The property is owned by Conn Light + Power Company and the Tower by Crown Castle. T-Mobile now intends to replace six (6) existing antennas. This modification/proposal includes hardware that is both 4G(LTE) and 5G capable through remote software configuration and either or both services may be turned on or off at various times.

**Planned Modifications:**  
**Tower:**

Remove and Replace:

(3) RFS / Celwave APXVSP18-C-A20 Antennas (**REMOVE**) – (3) RFS APXVAALL24\_43-U-NA20 Antennas (**REPLACE**)

(3) RFS / Celwave APXVTM14-ALU-I20 Antennas (**REMOVE**) – (3) Ericsson AIR6449 B41 Antennas (**REPLACE**)

(3) Sprint RRU Radios (**REMOVE**) - (3) Ericsson 4480 B71+B85 RRU Radios (**REPLACE**)

(3) Sprint RRU Radios (**REMOVE**) - (3) Ericsson 4460 B25+B66 RRU Radios (**REPLACE**)

Remove:

(3) Sprint RRU

**Ground:**

Install New:

(4) Hybrid Cables  
(1) 6160 Cabinet

The Foundation for a Wireless World.  
CrownCastle.com



1 Cityplace Dr, Suite 490  
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Phone: (314) 513-0147  
www.crowncastle.com

- (3) BB6648 in 6160 cabinet
- (1) DUG20 in 6160 cabinet
- (1) PSU 4813 in 6160 cabinet
- (1) IXRE V2 Router in 6160 cabinet
- (1) B160 Battery Cabinet

Remove:

- (2) Sprint Cabinets

The facility was approved by Enfield Planning and Zoning Commission by way of a Special Use Permit on July 2, 1998.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16-50j-72(b)(2). In accordance with R.C.S.A. §16-50j-73, a copy of this letter is being sent to Christopher W. Bromson, Town Manager of the Town of Enfield and Jennifer Pachaca, Assistant Town Planne for the Town of Enfield. A copy will also be sent to the property owner.

1. The proposed modifications will not result in an increase in the height of the existing tower.
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modification will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communication Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, T-Mobile respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. §16-50j-72(b)(2).



1 Cityplace Dr, Suite 490  
Creve Coeur, MO 63141

Phone: (314) 513-0147  
[www.crowncastle.com](http://www.crowncastle.com)

Sincerely,

*Colin Robinson*

Colin Robinson  
Project Manager  
NETWORK BUILDING + CONSULTING  
100 Apollo Drive Suite 303  
Chelmsford, MA 01824  
[crobison@nbcllc.com](mailto:crobison@nbcllc.com)  
(360) 561-3311

cc:

Christopher W. Bromson, Town Manager (*Via Federal Express*)  
Town of Enfield Connecticut  
820 Enfield Street  
Enfield, CT 06082  
860-253-6350

Jennifer Pachaca, Assistant Town Planner (*Via Federal Express*)  
Town of Enfield  
820 Enfield Street  
Enfield, CT 06082  
860-253-6368

Connecticut Light & Power Company (Eversource) (*Via Federal Express*)  
300 Caldwell Drive  
Springfield, MA 01104



November 12, 2021

Dear Customer,

The following is the proof-of-delivery for tracking number: 775185065463

---

**Delivery Information:**

<b>Status:</b>	Delivered	<b>Delivered To:</b>	Receptionist/Front Desk
<b>Signed for by:</b>	C.SHERRY	<b>Delivery Location:</b>	820 ENFIELD ST
<b>Service type:</b>	FedEx Priority Overnight		
<b>Special Handling:</b>	Deliver Weekday		ENFIELD, CT, 06082
		<b>Delivery date:</b>	Nov 12, 2021 11:01

---

**Shipping Information:**

<b>Tracking number:</b>	775185065463	<b>Ship Date:</b>	Nov 11, 2021
		<b>Weight:</b>	1.0 LB/0.45 KG

**Recipient:**  
Christopher W. Bromson, Town of Enfield Connecticut  
820 Enfield Street  
ENFIELD, CT, US, 06082

**Shipper:**  
Colin Robinson, NB+C  
100 Apollo Dr.  
Suite 303  
CHELMSFORD, MA, US, 01824

**Reference** 100788 Enfield CT 876348



Thank you for choosing FedEx



Dear Customer,

The following is the proof-of-delivery for tracking number: 775185164426

---

**Delivery Information:**

---

<b>Status:</b>	Delivered	<b>Delivered To:</b>	Receptionist/Front Desk
<b>Signed for by:</b>	C.SHERRY	<b>Delivery Location:</b>	820 ENFIELD ST
<b>Service type:</b>	FedEx Priority Overnight		
<b>Special Handling:</b>	Deliver Weekday		ENFIELD, CT, 06082
		<b>Delivery date:</b>	Nov 12, 2021 11:01

---

**Shipping Information:**

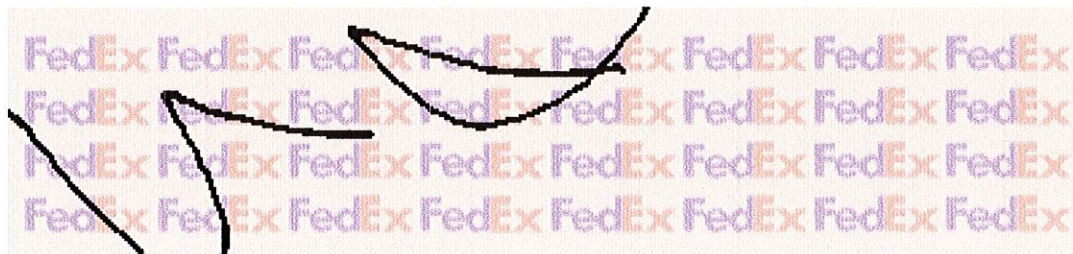
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<b>Tracking number:</b>	775185164426	<b>Ship Date:</b>	Nov 11, 2021
		<b>Weight:</b>	0.5 LB/0.23 KG

**Recipient:**  
Jennifer Pachaca, Town of Enfield  
820 Enfield Street  
ENFIELD, CT, US, 06082

**Shipper:**  
Colin Robinson, NB+C  
100 Apollo Dr.  
Suite 303  
CHELMSFORD, MA, US, 01824

**Reference** 100788 Enfield CT 876348



Thank you for choosing FedEx

Dear Customer,

The following is the proof-of-delivery for tracking number: 775185189202

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**Delivery Information:**

---

<b>Status:</b>	Delivered	<b>Delivered To:</b>	
<b>Signed for by:</b>	Signature release on file	<b>Delivery Location:</b>	300 CADWELL DR
<b>Service type:</b>	FedEx Priority Overnight		
<b>Special Handling:</b>	Deliver Weekday		SPRINGFIELD, MA, 01104
		<b>Delivery date:</b>	Nov 12, 2021 09:57

---

**Shipping Information:**

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<b>Tracking number:</b>	775185189202	<b>Ship Date:</b>	Nov 11, 2021
		<b>Weight:</b>	1.0 LB/0.45 KG

**Recipient:**  
Connecticut Light & Power Company, Eversource  
300 Caldwell Drive  
SPRINGFIELD, MA, US, 01104

**Shipper:**  
Colin Robinson, NB+C  
100 Apollo Dr.  
Suite 303  
CHELMSFORD, MA, US, 01824

**Reference** 100788 Enfield CT 876348

Proof-of-delivery details appear below; however, no signature is available for this FedEx Express shipment because a signature was not required.

Thank you for choosing FedEx

# Exhibit A

## **Original Facility Approval**



May 20, 1998

# TOWN OF ENFIELD

CERTIFIED MAIL Z392 898 405

Karen Johnson  
Sprint PCS  
9 Barnes Industrial Rd South  
Wallingford, CT 06492

Dear Ms. Johnson:

At the May 19, 1998 Regular Meeting of the Enfield Conservation Commission (Inland Wetland and Watercourses Agency), the following action was taken:

IW 273 - Application of Sprint PCS (Telecommunications) requesting a permit or regulated activities associated with the erection of a telecommunications tower accesses from Brightmeadow Boulevard.

The Commission approved the application with the following conditions:

1. The permittee shall notify the Planning Department at 253-6358 immediately upon the commencement of work and upon its completion.
2. If the authorized activity has not been initiated before May 19, 2000, this permit shall be null and void if not previously revoked or specifically extended. The duration of the permit once initiated shall be 5 years from the date of approval.
3. All work and all regulated activities conducted pursuant to this authorization shall be consistent with these terms and conditions of this permit. Any structures, excavation, fill, obstruction, encroachments or regulated activities not specifically identified and authorized herein shall constitute a violation of this permit and may result in its modification, suspension, or revocation. Upon initiation of the activities authorized herein, the permittee thereby accepts and agrees to comply with the terms and conditions of this permit.
4. The authorization is not transferable without the written consent of the Enfield Conservation Commission.
5. In evaluating this application, the Commission has relied on information provided by the applicant and, if such information subsequently proves to be false, deceptive, incomplete and/or inaccurate this permit shall be modified, suspended or revoked.

820 Enfield Street/Enfield, Connecticut 06082/(860) 253-6300



6. This permittee shall employ best management practices, consistent with the terms and conditions of the permit, to control stormwater discharges and to prevent erosion and sedimentation and to otherwise prevent pollution of wetlands or watercourses. For information and technical assistance, contact the Town Planner. The permittee shall immediately inform the Planning Department of any problems involving wetlands or watercourses which have developed in the course of, or which are caused by, the authorized work.
7. No equipment or material including without limitation, fill, construction materials, or debris, shall be deposited, placed, or stored in any wetland or watercourse on or off site unless specifically authorized by this permit.
8. This permit is subject to and does not derogate any present or future property rights or other rights or powers of the Town of Enfield, and conveys no property rights or in real estate of material nor any exclusive privileges, and is further subject to any and all public and private rights and to any activity affected hereby.
9. Timely implementation and maintenance of sediment and erosion control measures are a condition of this permit. (All sediment and erosion control measures must be maintained until all disturbed areas are stabilized.)
10. A pre-construction meeting shall be held prior to the commencement of any construction activities on the site with the applicant, contractor, and Town staff.
11. A landscape/performance bond shall be posted prior to any clearing of the site.

If you have any questions regarding this action, please contact me at (860)253-6358.

Very truly yours,



Laurie P. Whitten  
Assistant Town Planner

LPW/vch



# TOWN OF ENFIELD

CERTIFIED MAIL Z205 375 469



July 7, 1998

Karen Johnson  
Vanasse Hangen Brustlin Inc.  
54 Tuttle Place  
Middletown, CT 06457

Dear Ms. Johnson:

At the July 2, 1998 Regular Meeting of the Enfield Planning & Zoning Commission the following action was taken:

PH 2053 – Special Use Permit for a Commercial Wireless Telecommunication Service including site plan review of a wireless telecommunication facility consisting of a 150-foot Monopole and associated equipment surrounded by a chain link fence located east of Bright Meadow Blvd. adjacent to the Harley Hotel (Assessor's Map 35, Lot 219 - Old Enfield St) BR zone – The Connecticut Light and Power Company, owner / Sprint Spectrum L.P. (Sprint PCS) aplct.

The Commission approved the application with the following conditions:

1. An engineering bond for removal of the wireless telecommunications facility including the tower and base components in an amount to be determined by the town engineer shall be submitted to the town prior to the start of construction and prior to the issuance of any building permits. Any need to use the bond by the town shall be binding on the site regardless of name of the bond obligee.

2. An erosion and sedimentation control passbook, pledged to the town, in an amount to be determined by the town engineer, shall be submitted to the town prior to the start of construction.
3. A preconstruction meeting between the applicant, site contractors, project engineer and town staff shall be held prior to the beginning of any site work.
4. The tower shall accommodate both the applicant's Antennas and comparable Antennas for at least two additional users.
5. The tower shall allow for future rearrangement of Antennas upon the tower and shall accommodate Antennas mounted at varying heights.
6. The wireless communication facility shall not interfere with existing or proposed public safety communications, commercial television and radio signals or other forms of communication transmissions. Penalty for subsequent interference shall void the approval of the facility.
7. The wireless communication facility shall comply with the standards promulgated by the Federal Communication Commission (FCC).
8. All generators installed in conjunction with the wireless communications facility shall comply with all State and local noise regulators.
9. On or before August 31 every year, the applicant or wireless telecommunications service provider shall submit information to the Planning Zoning Commission file in support of the provision of Section 14-8.6 of the Zoning Ordinance.
10. If the wireless communications facility is not in use for 12 consecutive months, it shall be removed within 90 days from the end of such 12 month period, including any towers and base components by the last service provider using the site or owner, whichever has a contractual obligation to perform the removal. The site shall be restored to an appearance that is compatible with the surrounding neighborhood and where appropriate, re-vegetated to blend with surrounding area.
11. The special use permit for a commercial wireless telecommunication service shall be valid for a maximum period of 10 years with a right of reapplication under regulations in effect at that time.



12. The approval of an application for special use permit shall be void and of no effect unless construction of the project commences within one year from the date of the approval granted by the commission in accordance with Section 14-10.2 of the Zoning Ordinance.
13. Arrangements shall be made with the fire department regarding emergency access to the compound.
14. The plans shall be modified to show a paved apron at the driveway entrance that conforms to town paving specifications.
15. The plans shall be modified to include standard notes as recommended by the town engineer.
16. Monopole shall be maintained if becomes rusty or eye sore.

If you have any questions regarding this action, please contact me at (860)253-6358.

Very truly yours,

A handwritten signature in cursive script, reading "Laurie P. Whitten".

Laurie P. Whitten  
Acting Town Planner

LPW/vch



# Exhibit B

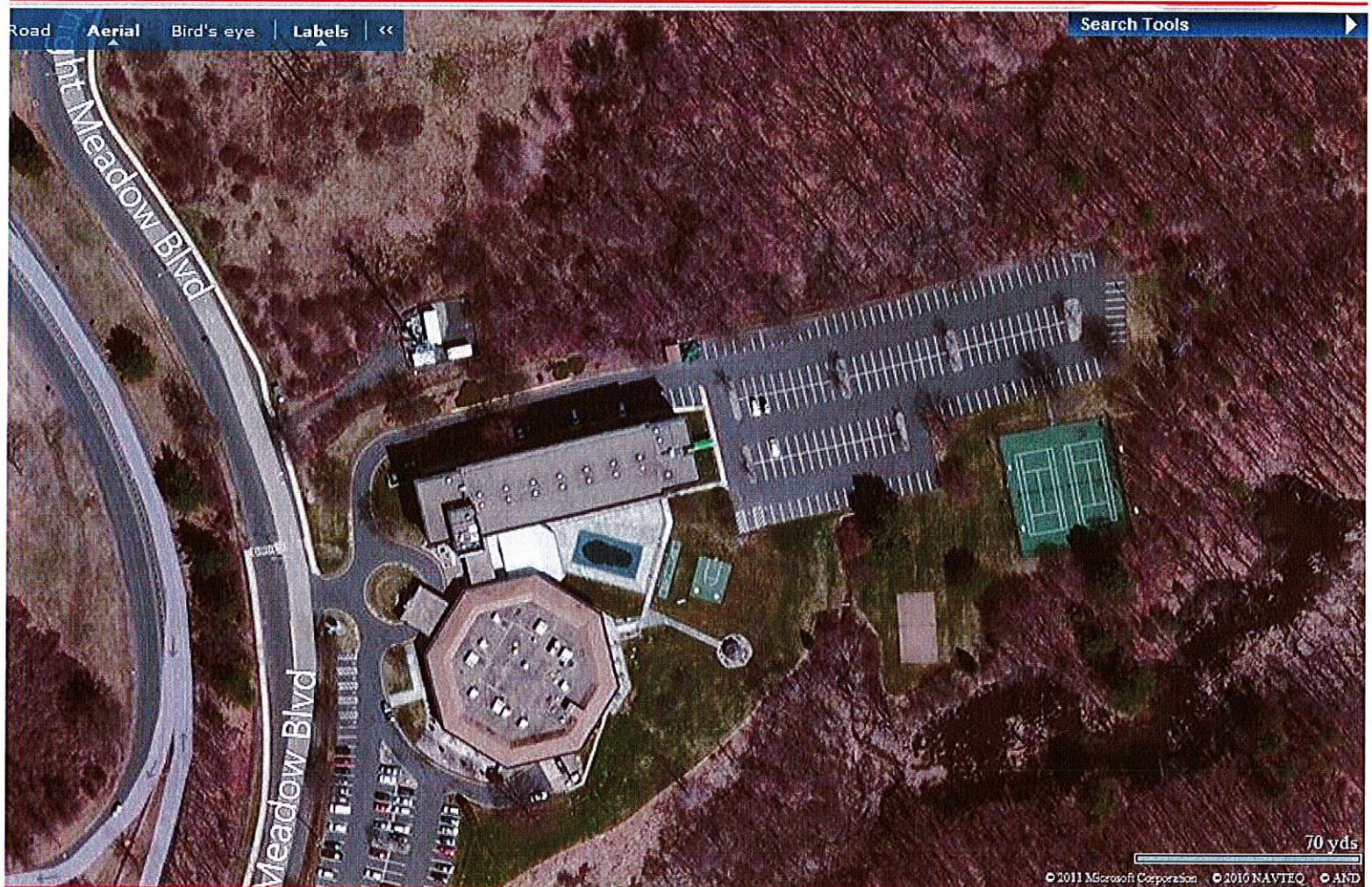
## Property Card

BU #: 876348

Tax Parcel ID # (Real Property):

ENFI-000487-000001-000005

Aerial Photo of Parcel from County GIS Database:





### 3 BRIGHT MEADOW BLVD

**Location** 3 BRIGHT MEADOW BLVD

**Mblu** 035/ / 0219/ /

**Acct#** 048700010005

**Owner** CONN LIGHT + POWER  
COMPANY

**Assessment** \$485,710

**Appraisal** \$693,860

**PID** 11009

**Building Count** 1

**Fire District** 4

#### Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2020	\$419,280	\$274,580	\$693,860
Assessment			
Valuation Year	Improvements	Land	Total
2020	\$293,500	\$192,210	\$485,710

#### Owner of Record

**Owner** CONN LIGHT + POWER COMPANY  
**Co-Owner**  
**Address** PO BOX 270  
HARTFORD, CT 06140-0270

**Sale Price** \$0  
**Certificate** 1  
**Book & Page** 0237/0455  
**Sale Date**  
**Instrument**

#### Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
CONN LIGHT + POWER COMPANY	\$0	1	0237/0455		

#### Building Information

##### Building 1 : Section 1

**Year Built:**  
**Living Area:** 0  
**Replacement Cost:** \$0

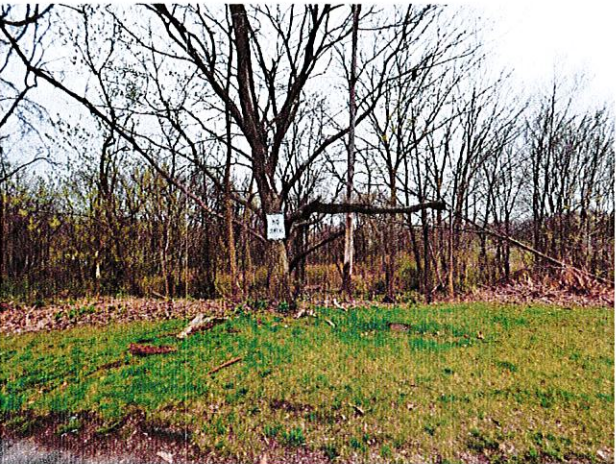
Building Percent Good:

Replacement Cost

Less Depreciation: \$0

Building Attributes	
Field	Description
Style	Outbuildings
Model	
Grade:	
Stories	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Full Bthrms:	
Half Baths:	
Extra Fixtures	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Extra Kitchens	
Fireplace(s)	
Extra Opening(s)	
Gas Fireplace(s)	
Blocked FPL(s)	
Bsmt Garage(s)	
Fin Bsmt	
FBM Quality	
Whirlpool(s)	
Sauna	
Walk Out	
Solar	
Fndtn Cndtn	
Basement	

Building Photo



(http://images.vgsl.com/photos2/EnfieldCTPhotos/\00\02\72\14.JPG)

Building Layout

 Building Layout (ParcelSketch.ashx?pid=11009&bid=11009)

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	



## Extra Features

Extra Features	Legend
No Data for Extra Features	

## Land

### Land Use

**Use Code** 300  
**Description** Ind Land  
**Zone** BR  
**Neighborhood**  
**Alt Land Appr** No  
**Category**

### Land Line Valuation

**Size (Acres)** 12.61  
**Frontage**  
**Depth**  
**Assessed Value** \$192,210  
**Appraised Value** \$274,580

## Outbuildings

Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
FN2	FENCE-6' CHAIN			400.00 L.F.	\$3,400	1
MSC1	CMEQ			360.00 UNIT	\$13,500	1
MSC1	CMEQ			240.00 UNIT	\$9,000	1
MSC1	CMEQ			240.00 UNIT	\$9,000	1
TWR3	Cell Twr3 Carriers			1.00 UNITS	\$384,380	1

## Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2019	\$419,280	\$274,580	\$693,860
2018	\$419,280	\$274,580	\$693,860
2017	\$419,280	\$274,580	\$693,860

Assessment			
Valuation Year	Improvements	Land	Total
2019	\$293,500	\$192,210	\$485,710
2018	\$293,500	\$192,210	\$485,710
2017	\$293,500	\$192,210	\$485,710



# T-Mobile

**T-MOBILE SITE NUMBER:** CTHA667A  
**T-MOBILE SITE NAME:** CTHA667A  
**SITE TYPE:** MONOPOLE  
**TOWER HEIGHT:** 147'-6"

**BUSINESS UNIT #:** 876348  
**SITE ADDRESS:** BRIGHT MEADOW BLVD.  
ENFIELD, CT 06082  
**COUNTY:** HARTFORD  
**JURISDICTION:** HARTFORD COUNTY

**T-MOBILE SPRINT RETAIN SITE CONFIGURATION:** 67E5998E\_1XAIR+1OP

T-Mobile

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

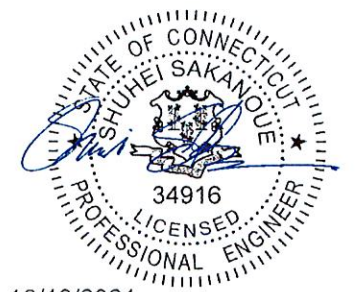
**CROWN CASTLE**  
1500 CORPORATE DRIVE  
CANONSBURG, PA 15317

**INFINIGY**  
FROM ZERO TO INFINIGY  
the solutions are endless  
1033 Watervliet Shaker Rd | Albany, NY 12205  
Phone: 518-690-0790 | Fax: 518-690-0793  
www.infinigy.com

**T-MOBILE SITE NUMBER:**  
CTHA667A  
  
**BU #:** 876348  
**ENFIELD**  
  
**BRIGHT MEADOW BLVD.**  
ENFIELD, CT 06082  
  
**EXISTING 147'-6" MONOPOLE**

#### ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
0	06/09/2021	PEG	FINAL	SS
1	10/12/2021	TJ	SA REFERENCE	SS



10/13/2021

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

**SHEET NUMBER:**

T-1

**REVISION:**

1

#### SITE INFORMATION

**CROWN CASTLE USA INC.** ENFIELD  
**SITE NAME:**  
**SITE ADDRESS:** BRIGHT MEADOW BLVD.  
ENFIELD, CT 06082  
**COUNTY:** HARTFORD  
**MAP/PARCEL #:** 35-219  
**AREA OF CONSTRUCTION:** EXISTING  
**LATITUDE:** 42.02080834° (42° 1' 14.91")  
**LONGITUDE:** -72.58516945° (-72° 35' 6.59")  
**LAT/LONG TYPE:** NAD83  
**GROUND ELEVATION:** 108.27 FT  
**CURRENT ZONING:** BR  
**JURISDICTION:** HARTFORD COUNTY  
**OCCUPANCY CLASSIFICATION:** U  
**TYPE OF CONSTRUCTION:** IIB  
**A.D.A. COMPLIANCE:** FACILITY IS UNMANNED AND NOT FOR  
HUMAN HABITATION  
**PROPERTY OWNER:** CONN LIGHT + POWER COMPANY  
PO BOX 270  
HARTFORD, CT 06140-0270  
**TOWER OWNER:** CROWN CASTLE  
2000 CORPORATE DRIVE  
CANONSBURG, PA 15317  
**CARRIER/APPLICANT:** T-MOBILE  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002  
**ELECTRIC PROVIDER:** TBD  
**TELCO PROVIDER:** TBD

#### PROJECT TEAM

**A&E FIRM:** INFINIGY  
1033 WATERVLIET SHAKER RD.  
ALBANY, NY 12205  
  
**CROWN CASTLE USA INC. DISTRICT CONTACTS:** 1500 CORPORATE DRIVE  
CANONSBURG, PA 15317  
  
TRICIA PELON - PROJECT MANAGER  
(518) 373-3507  
  
JASON D'AMICO - CONSTRUCTION MANAGER  
(860) 209-0104

#### DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1	SITE PLAN & ENLARGED SITE PLAN
C-2	FINAL ELEVATION & ANTENNA PLANS
C-3	ANTENNA & CABLE SCHEDULE
C-4	PLUMBING DIAGRAM
C-5	EQUIPMENT SPECS
C-6	EQUIPMENT SPECS
E-1	AC PANEL SCHEDULES & ONE LINE DIAGRAM
G-1	ANTENNA GROUNDING DIAGRAM
G-2	GROUNDING DETAILS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR  
CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING  
DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL  
IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY  
DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR  
BE RESPONSIBLE FOR SAME.

#### PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO ENHANCE  
BROADBAND CONNECTIVITY AND CAPACITY TO THE  
EXISTING ELIGIBLE WIRELESS FACILITY.

##### TOWER SCOPE OF WORK:

- REMOVE (6) ANTENNAS
- REMOVE (9) RRHs
- REMOVE (1) RRH MOUNT
- REMOVE (3) HYBRID CABLES
- INSTALL (6) ANTENNAS
- INSTALL (6) RRHs
- INSTALL (4) HYBRID CABLES

##### GROUND SCOPE OF WORK:

- REMOVE (1) MMBS EQUIPMENT CABINET
- REMOVE (1) BBU EQUIPMENT CABINET
- INSTALL (1) 6160 & (1) B160 BATTERY CABINETS
- INSTALL (3) BB 6648
- INSTALL (1) DUG20
- INSTALL (1) PSU 4813
- INSTALL (1) CSR INRe V2 (GEN2)
- UPGRADE SERVICE TO 200AMP.

**NOTE:**  
PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST  
CONTACT THE CROWN NOC AT (800) 788-7011 & CROWN  
CONSTRUCTION MANAGER.

#### LOCATION MAP



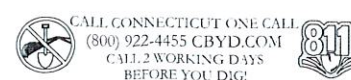
#### APPLICABLE CODES/REFERENCE DOCUMENTS

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE  
WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY  
THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE  
CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

CODE TYPE	CODE
BUILDING	2018 CT STATE BUILDING CODE
MECHANICAL	2015 IMC
ELECTRICAL	2017 NEC

##### REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS:	MORRISON HERSHFIELD
DATED:	09/28/2021
MOUNT ANALYSIS:	B+T GROUP
DATED:	09/08/2021
RFDS REVISION:	1
DATED:	08/03/2021
ORDER ID:	557903
REVISION:	2



#### APPROVALS

APPROVAL	SIGNATURE	DATE
PROPERTY OWNER OR REP.	_____	_____
LAND USE PLANNER	_____	_____
T-MOBILE	_____	_____
OPERATIONS	_____	_____
RF	_____	_____
NETWORK	_____	_____
BACKHAUL	_____	_____
CONSTRUCTION MANAGER	_____	_____

THE PARTIES ABOVE HEREBY APPROVE AND ACCEPT THESE DOCUMENTS  
AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE  
CONSTRUCTION DESCRIBED HEREIN. ALL CONSTRUCTION DOCUMENTS  
ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND  
ANY CHANGES AND MODIFICATIONS THEY MAY IMPOSE.



CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

- NOTICE TO PROCEED-- NO WORK SHALL COMMENCE PRIOR TO CROWN CASTLE USA INC. WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN CASTLE USA INC. NOC AT 800-788-7011 & THE CROWN CASTLE USA INC. CONSTRUCTION MANAGER.
- "LOOK UP" -- CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:  
THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
- PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
- ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN CASTLE USA INC. STANDARD CED--STD--10253, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA--322 (LATEST EDITION).
- ALL SITE WORK TO COMPLY WITH QAS--STD--1006B "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE," CED--STD--10294 "STANDARD FOR INSTALLATION OF MOUNTS AND APPURTENANCES," AND LATEST VERSION OF ANSI/TIA--1019--A--2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
- IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING 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 CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
- ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
- CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- ALL EXISTING 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 CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES.
- THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GREENFIELD GROUNDING NOTES:

- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
- THE CONTRACTOR SHALL PERFORM IEEE FALL--OF--POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
- METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
- CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
- ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
- COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
- ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
- APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- BOND ALL METALLIC OBJECTS WITHIN 6 FT. OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
- GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
- ALL BUILDINGS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD--WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
- BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY).

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:  
CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION  
CARRIER: T-MOBILE  
TOWER OWNER: CROWN CASTLE USA INC.
- THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
- THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
- NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
- SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CROWN CASTLE.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND CROWN CASTLE PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- CONTRACTOR IS TO PERFORM A SITE INVESTIGATION AND IS TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF CROWN CASTLE USA INC.
- CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90° AT TIME OF PLACEMENT.
- CONCRETE EXPOSED TO FREEZE--THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER--TO--CEMENT RATIO (W/C) OF 0.45.
- ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:  
#4 BARS AND SMALLER.....40 ksi  
#5 BARS AND LARGER.....60 ksi
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:  
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3"  
CONCRETE EXPOSED TO EARTH OR WEATHER:  
#6 BARS AND LARGER.....2"  
#5 BARS AND SMALLER.....1-1/2"  
CONCRETE NOT EXPOSED TO EARTH OR WEATHER:  
SLAB AND WALLS.....3/4"  
BEAMS AND COLUMNS.....1-1/2"
- A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

ELECTRICAL INSTALLATION NOTES:

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
- CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
- WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
- ALL CONDUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
  - ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
  - ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
- EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
- PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
- ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP--STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
- ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
- LIQUID--TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID--TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION--TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.
- WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).
- SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
- CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON--PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER--ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE, AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY--COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3R (OR BETTER) FOR EXTERIOR LOCATIONS.
- METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY--COATED OR NON--CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
- NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
- THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
- INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "T-MOBILE".
- ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

CONDUCTOR COLOR CODE		
SYSTEM	CONDUCTOR	COLOR
120/240V, 1Ø	A PHASE	BLACK
	B PHASE	RED
	NEUTRAL	WHITE
	GROUND	GREEN
120/208V, 3Ø	A PHASE	BLACK
	B PHASE	RED
	C PHASE	BLUE
	NEUTRAL	WHITE
277/480V, 3Ø	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
	C PHASE	YELLOW
	NEUTRAL	GREY
DC VOLTAGE	GROUND	GREEN
	POS (+)	RED**
	NEG (-)	BLACK**

- \*\* SEE NEC 210.5(C)(1) AND (2)  
\*\* POLARITY MARKED AT TERMINATION

ABBREVIATIONS:

ANT	ANTENNA
(E)	EXISTING
FIF	FACILITY INTERFACE FRAME
GEN	GENERATOR
GPS	GLOBAL POSITIONING SYSTEM
GSN	GLOBAL SYSTEM FOR MOBILE
LTE	LONG TERM EVOLUTION
MGB	MASTER GROUND BAR
MW	MICROWAVE
(N)	NEW
NEC	NATIONAL ELECTRIC CODE
(P)	PROPOSED
PP	POWER PLANT
QTY	QUANTITY
RECT	RECTIFIER
RBS	RADIO BASE STATION
RET	REMOTE ELECTRIC TILT
RFDS	RADIO FREQUENCY DATA SHEET
RRH	REMOTE RADIO HEAD
RRU	REMOTE RADIO UNIT
SIAD	SMART INTEGRATED DEVICE
TMA	TOWER MOUNTED AMPLIFIER
TYP	TYPICAL
UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
W.P.	WORK POINT

APWA UNIFORM COLOR CODE:

WHITE	PROPOSED EXCAVATION
PINK	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC POWER LINES, CABLES, CONDUIT, AND LIGHTING CABLES
YELLOW	GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
ORANGE	COMMUNICATION, ALARM OR SIGNAL LINES, CABLES, OR CONDUIT AND TRAFFIC LOOPS
BLUE	POTABLE WATER
PURPLE	RECLAIMED WATER, IRRIGATION, AND SLURRY LINES
GREEN	SEWERS AND DRAIN LINES

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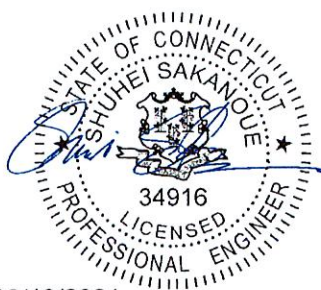
BU #: 876348  
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BRIGHT MEADOW BLVD.  
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EXISTING 147'-6" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	06/09/2021	PEG	FINAL	SS
1	10/12/2021	TJ	SA REFERENCE	SS



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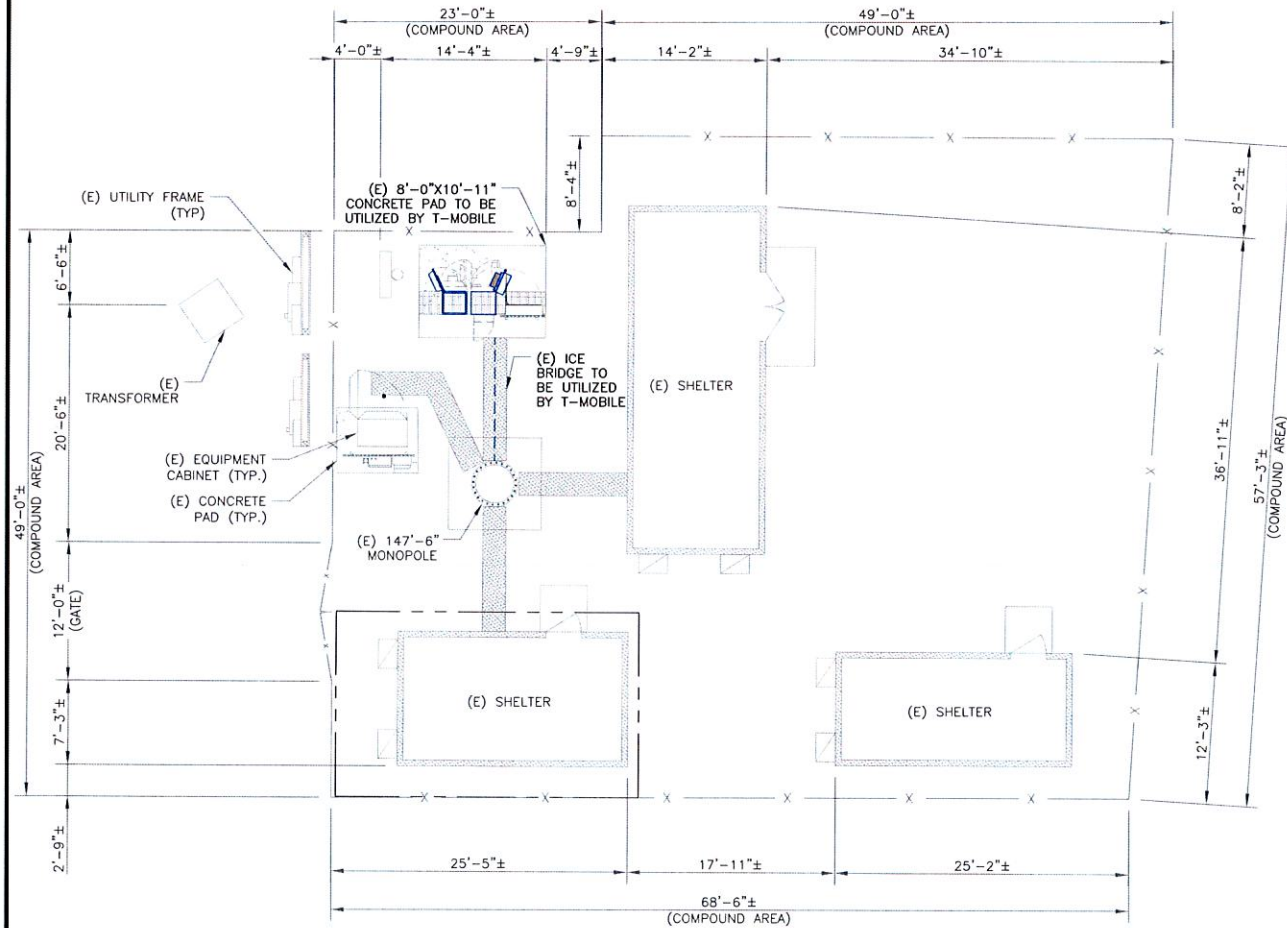
REVISION:

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NOTE:

1. PLANS BASED ON SITE PLAN PROVIDED BY TOWER OWNER AND SITE VISIT PERFORMED BY INFINIGY. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND LOCATION/ORIENTATION OF EXISTING T-MOBILE EQUIPMENT.

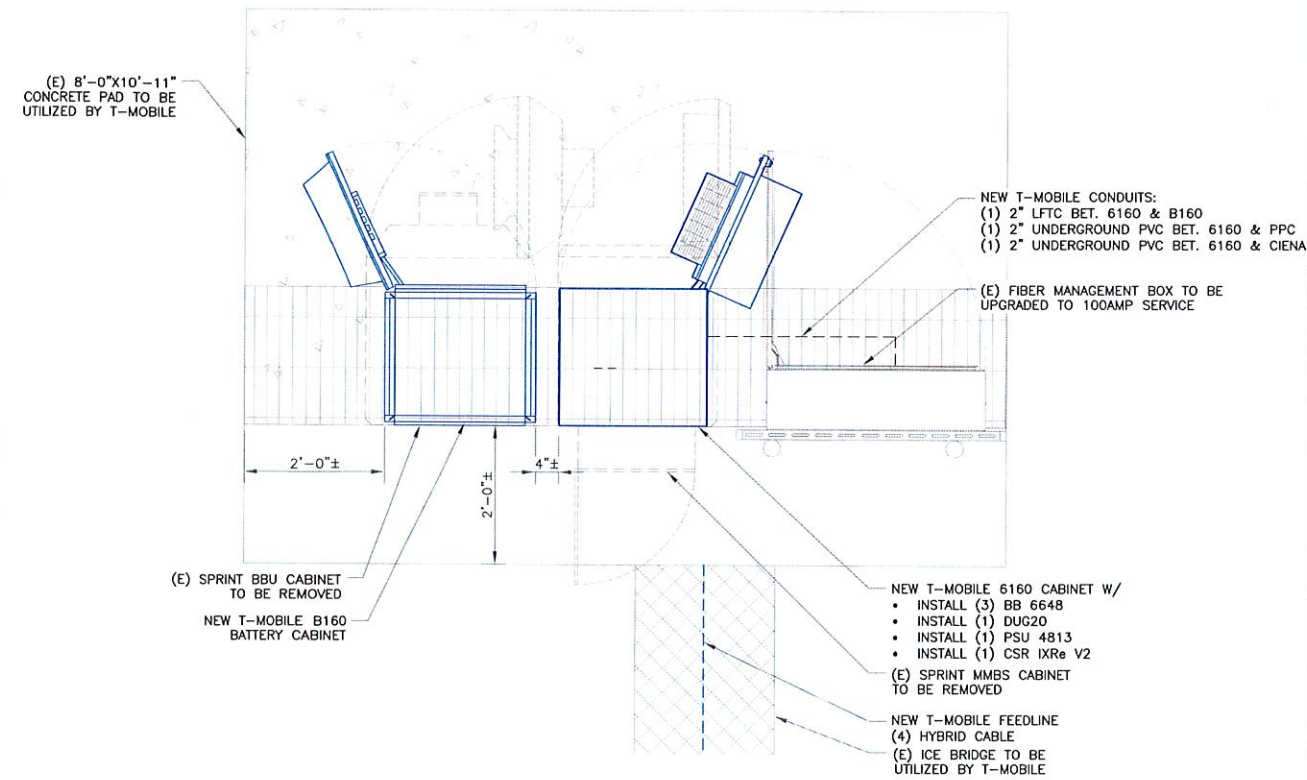


1 SITE PLAN  
SCALE: 1/8"=1'-0" (FULL SIZE)  
1/16"=1'-0" (11x17)



NOTES:

THE POWER DESIGN FOR ANY AC ELECTRICAL POWER CHANGES IS TO BE PERFORMED BY OTHERS AND IS SHOWN HERE FOR REFERENCE PURPOSES ONLY. T-MOBILE IS SOLELY RESPONSIBLE FOR THE ELECTRICAL POWER DESIGN.



2 ENLARGED SITE PLAN  
SCALE: 3/4"=1'-0" (FULL SIZE)  
3/8"=1'-0" (11x17)



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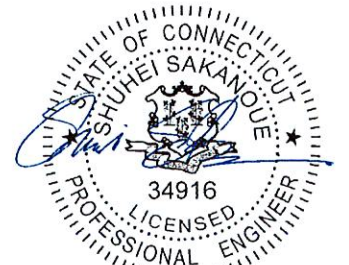
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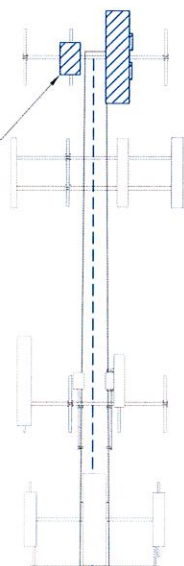
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NOTES:

- ELEVATION BASED ON DRAWING PROVIDED BY TOWER OWNER. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND LOCATION/ORIENTATION OF EXISTING EQUIPMENT.
- INFINIGY HAS NOT EVALUATED THE TOWER OR MOUNT STRUCTURE AND ASSUMES NO RESPONSIBILITY FOR THEIR STRUCTURAL INTEGRITY REGARDING PROPOSED LOADINGS. FINAL INSTALLATION SHALL COMPLY WITH RESULTS OF PASSING STRUCTURAL ANALYSES PERFORMED BY OTHERS.

NEW T-MOBILE EQUIPMENT  
(6) ANTENNAS  
(6) RRHs



TIP OF ANTENNA  
ELEV. = 151'-0"  
TIP OF MONOPOLE  
ELEV. = 147'-6"  
RAD CENTER OF ANTENNA  
ELEV. = 147'-0"  
RAD CENTER OF ANTENNA MOUNT  
ELEV. = 147'-0"  
RAD CENTER OF ANTENNA  
ELEV. = 139'-0"

RAD CENTER OF ANTENNA  
ELEV. = 119'-0"

RAD CENTER OF ANTENNA  
ELEV. = 107'-0"

T-MOBILE EQUIPMENT

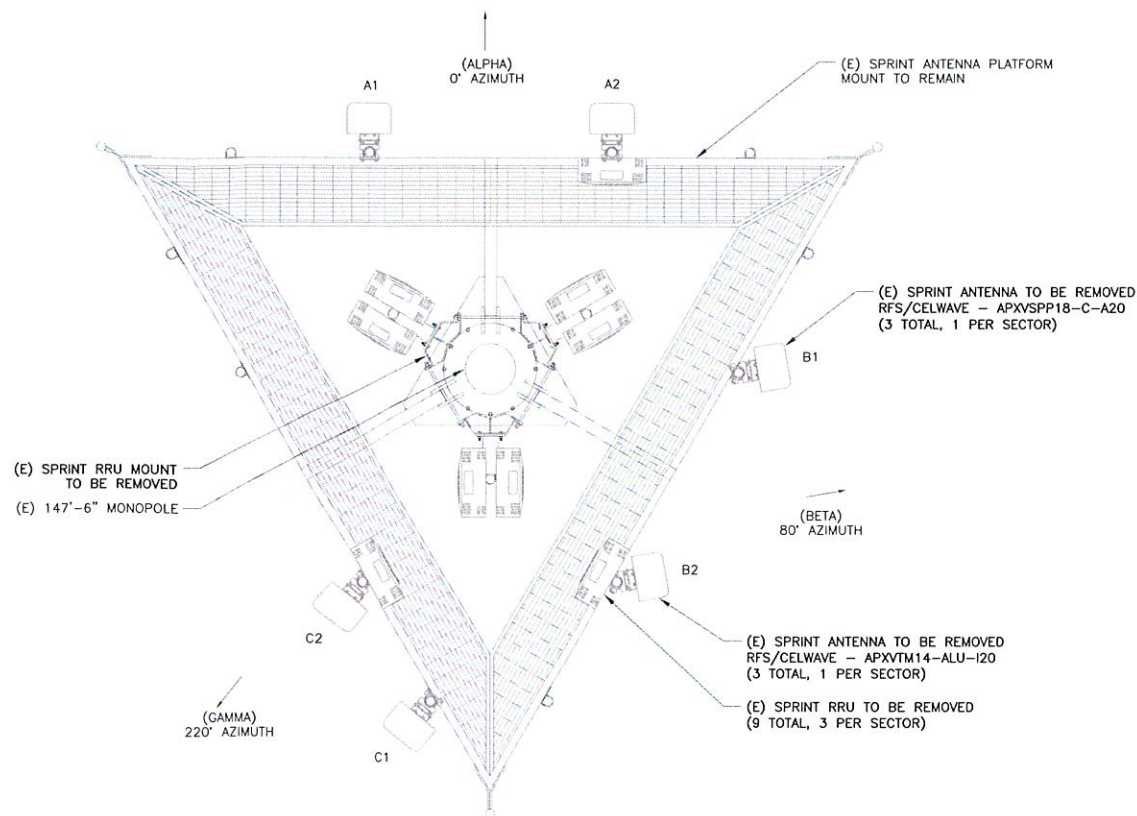
ANTENNA CL: 147'-0"  
MOUNT CL: 147'-0"

ANY AND ALL TOWER MOUNTED EQUIPMENT MUST NOT TRAP OR INTERFERE W/ EXISTING SAFETY CLIMB

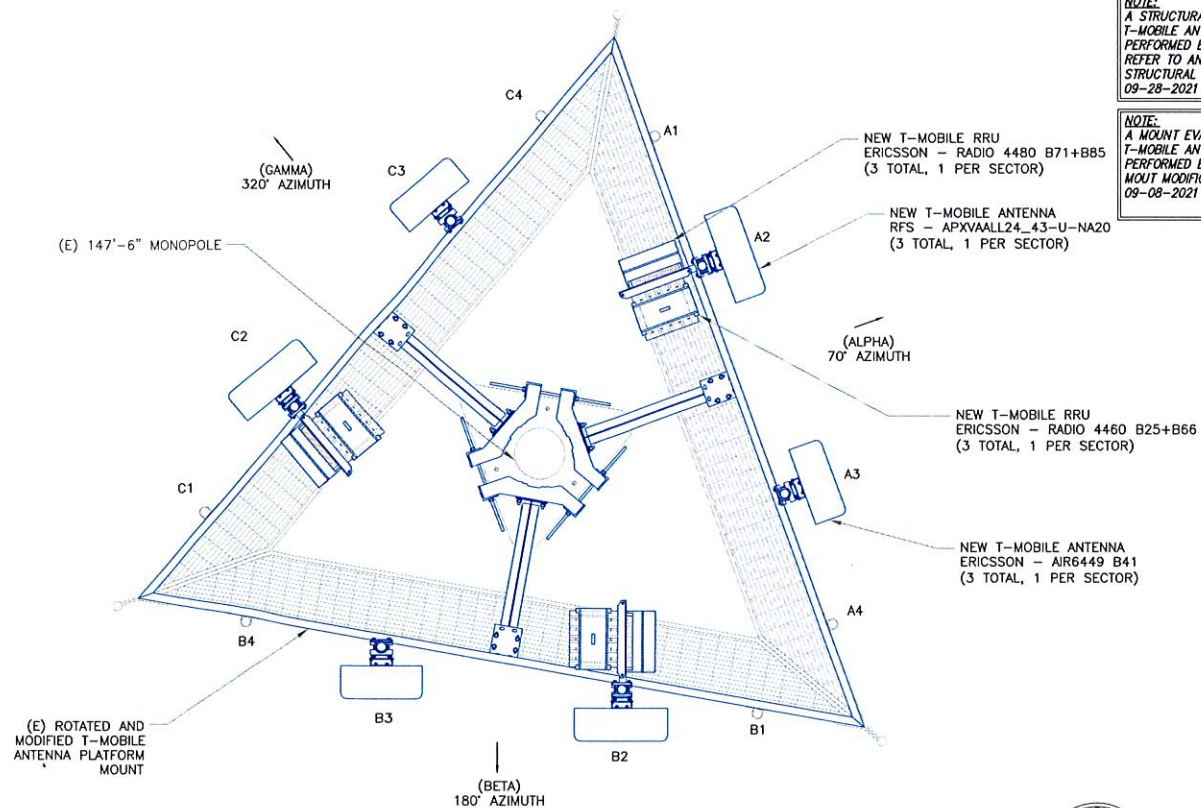
(E) 147'-6" MONOPOLE  
NEW T-MOBILE FEEDLINE  
(4) HYBRID CABLES

RAD CENTER OF GPS ANTENNA  
ELEV. = 50'-0"

1 FINAL ELEVATION  
SCALE: NOT TO SCALE



2 EXISTING ANTENNA LAYOUT  
SCALE: NOT TO SCALE



3 FINAL ANTENNA LAYOUT  
SCALE: NOT TO SCALE

NOTE:  
A STRUCTURAL EVALUATION OF THE T-MOBILE ANTENNA MOUNTS HAS BEEN PERFORMED BY MORRISON HERSHFIELD. REFER TO ANTENNA MOUNT STRUCTURAL ANALYSIS DATED 09-28-2021 PRIOR TO CONSTRUCTION.

NOTE:  
A MOUNT EVALUATION OF THE T-MOBILE ANTENNA MOUNTS HAS BEEN PERFORMED BY B+T GROUP. REFER TO MOUNT MODIFICATION REPORT DATED 09-08-2021 PRIOR TO CONSTRUCTION.

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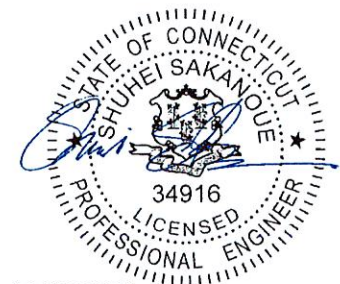
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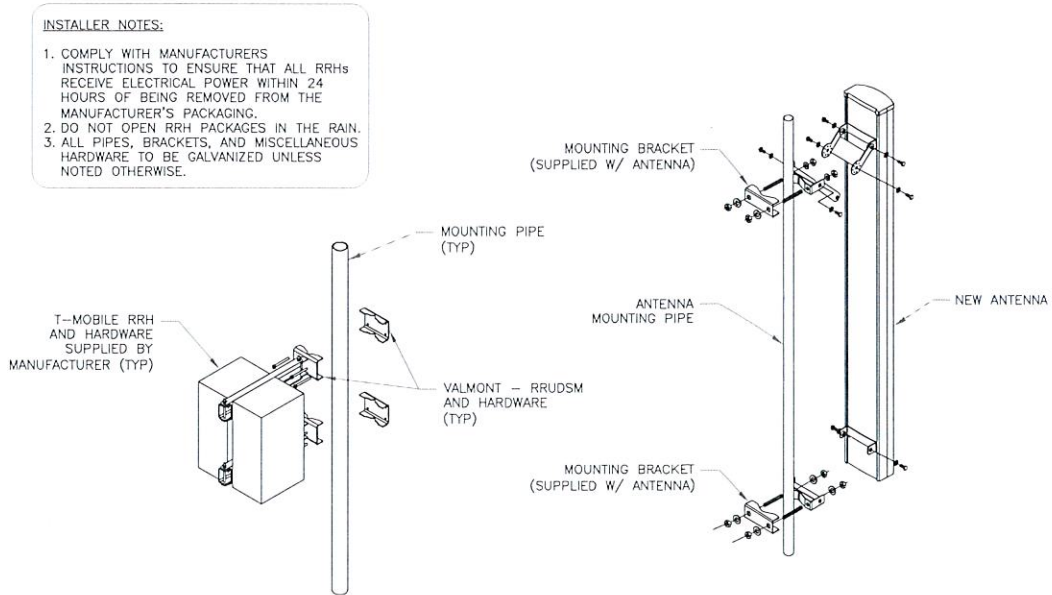
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ANTENNA SCHEDULE										
SECTOR	POS.	TECHNOLOGY	RAD CENTER	AZIMUTH	ANTENNA MANUFACTURER	ANTENNA MODEL	MECH. TILT	ELECT. TILT	TOWER MOUNTED EQUIPMENT	FEEDLINE TYPE
ALPHA	A1	--	--	--	--	--	--	--	--	(4) 6X24 HCS HYBRID (SHARED)
ALPHA	A2	L700, L600, N600, L1900, G1900, L2100	147'-0"	70°	RFS	APXVAALL24_43-U-NA20	--	--	(1) ERICSSON -- RRUS 4480 B71+B85 (1) ERICSSON -- RRUS 4460 B25+B66	
ALPHA	A3	L2500, N2500	147'-0"	70°	ERICSSON	AIR6449 B41	--	--	--	
ALPHA	A4	--	--	--	--	--	--	--	--	
BETA	B1	--	--	--	--	--	--	--	--	(4) 6X24 HCS HYBRID (SHARED)
BETA	B2	L700, L600, N600, L1900, G1900, L2100	147'-0"	180°	RFS	APXVAALL24_43-U-NA20	--	--	(1) ERICSSON -- RRUS 4480 B71+B85 (1) ERICSSON -- RRUS 4460 B25+B66	
BETA	B3	L2500, N2500	147'-0"	180°	ERICSSON	AIR6449 B41	--	--	--	
BETA	B4	--	--	--	--	--	--	--	--	
GAMMA	C1	--	--	--	--	--	--	--	--	(4) 6X24 HCS HYBRID (SHARED)
GAMMA	C2	L700, L600, N600, L1900, G1900, L2100	147'-0"	320°	RFS	APXVAALL24_43-U-NA20	--	--	(1) ERICSSON -- RRUS 4480 B71+B85 (1) ERICSSON -- RRUS 4460 B25+B66	
GAMMA	C3	L2500, N2500	147'-0"	320°	ERICSSON	AIR6449 B41	--	--	--	
GAMMA	C4	--	--	--	--	--	--	--	--	

1 ANTENNA AND CABLE SCHEDULE  
SCALE: NOT TO SCALE



NOTE:

1. CONTRACTOR SHALL INSTALL 3RD DUAL RRH MOUNT TO ACCOMMODATE ALL RRH BRACKETS HOLES IF NECESSARY.

2 ANTENNA WITH RRHs MOUNTING DETAIL  
SCALE: NOT TO SCALE

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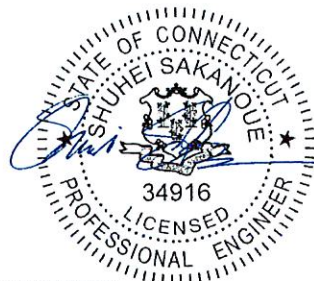
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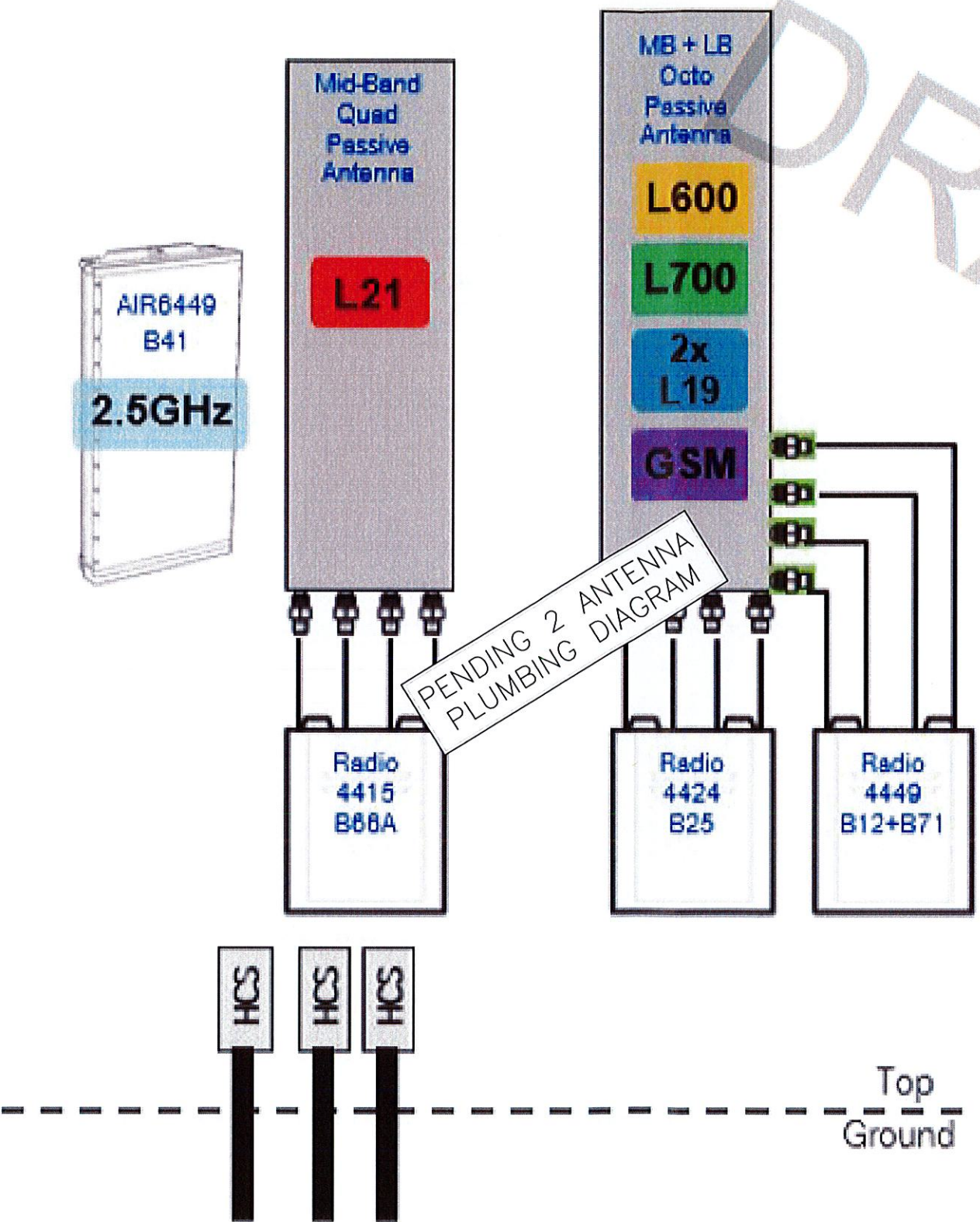
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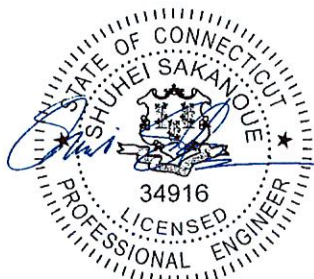
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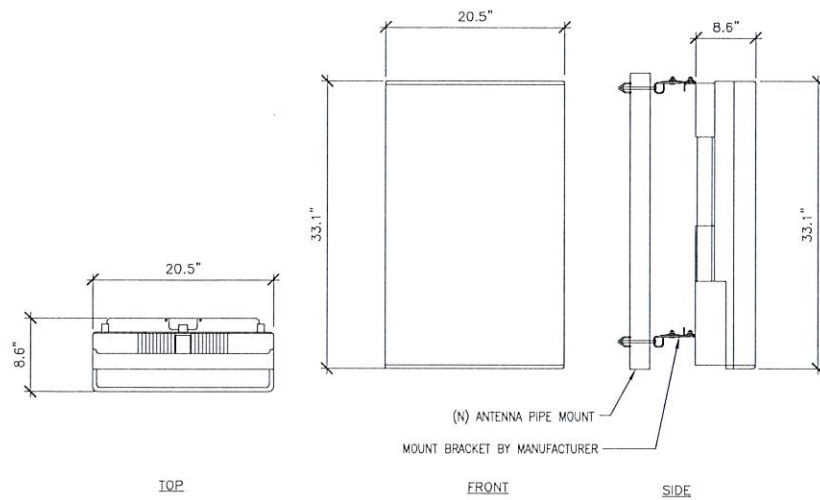
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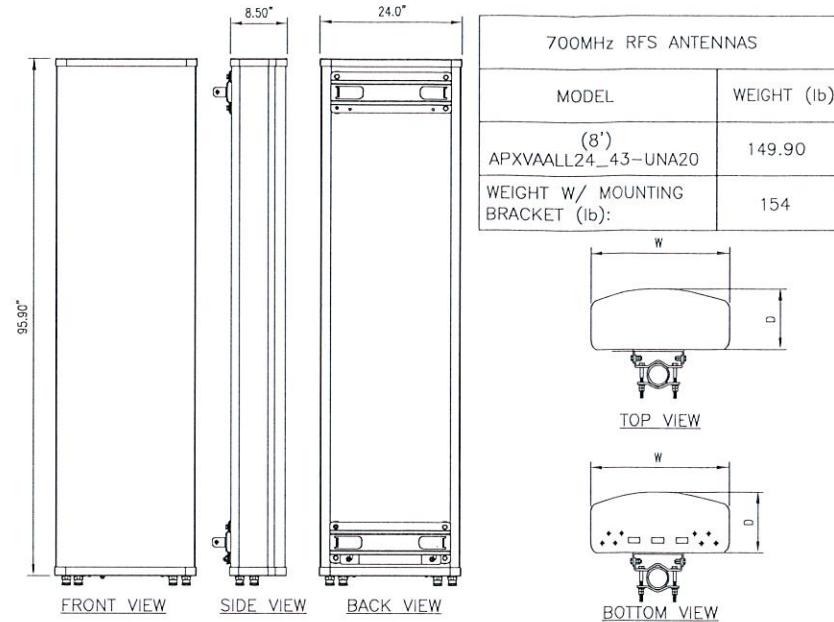
1



MANUFACTURER: ERICSSON  
MODEL: AIR6449 B41  
WEIGHT: 104 LBS (W/ MOUNT BRACKET 113)  
DIMENSIONS: 33.1"H. X 20.5"W. X 8.6"D.  
FREQUENCY: REFER TO RF DATA SHEET



1 (N) AIR6449 B41 ANTENNA SPEC  
SCALE: NOT TO SCALE

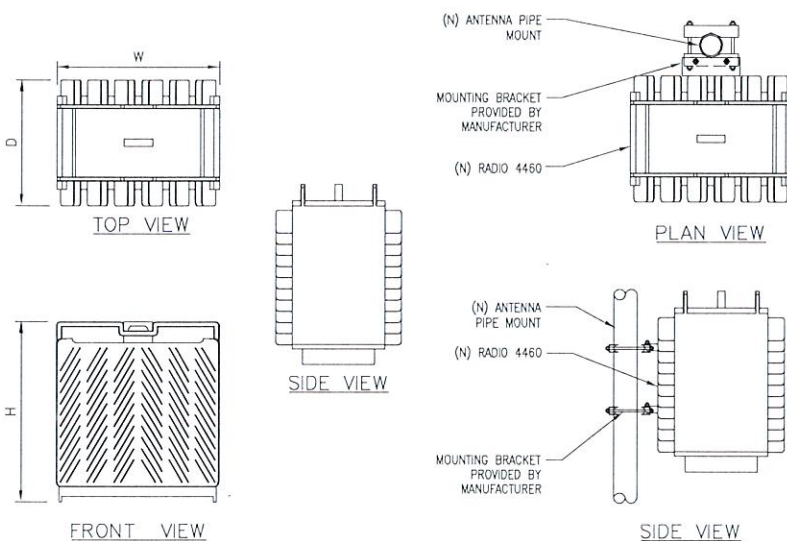
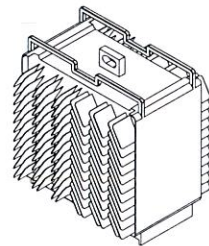


2 (N) APXVAALL24\_43-UNA20 ANTENNA SPEC  
SCALE: NOT TO SCALE

3 NOT USED  
SCALE: NOT TO SCALE

#### ERICSSON RADIO-4460 B25 B66

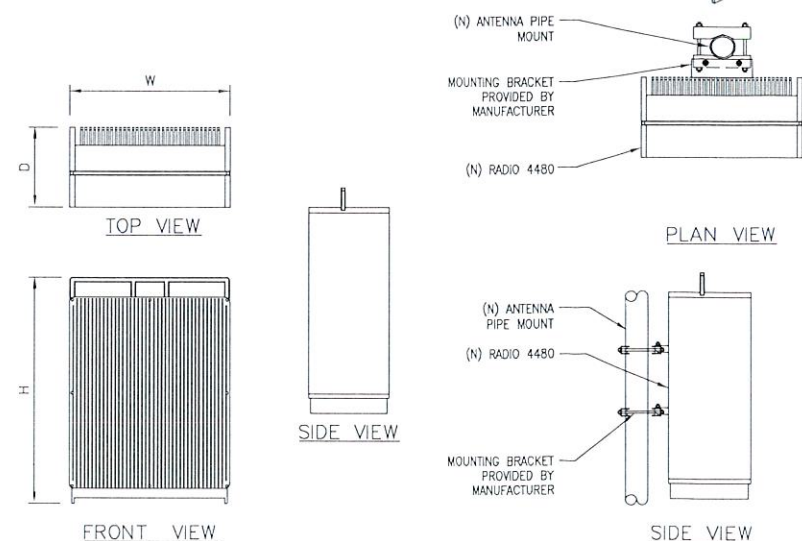
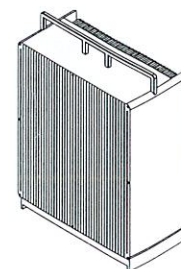
DIMENSIONS, WxDxH: 17.0"x15.1"x11.9"  
MAX OUTPUT POWER: 4x80W (2x(2x80W))  
TOTAL WEIGHT: 109 lbs  
TEMPERATURE: -40° TO 55° C



4 (N) RADIO 4460 SPEC  
SCALE: NOT TO SCALE

#### ERICSSON RADIO-4480 B71 B85

DIMENSIONS, WxDxH: 21.8"x15.7"x7.5"  
MAX OUTPUT POWER: 4x80W (2x(2x80W))  
TOTAL WEIGHT: 93 lbs  
TEMPERATURE: -40° TO 55° C



5 (N) RADIO 4480 SPEC  
SCALE: NOT TO SCALE

6 NOT USED  
SCALE: NOT TO SCALE

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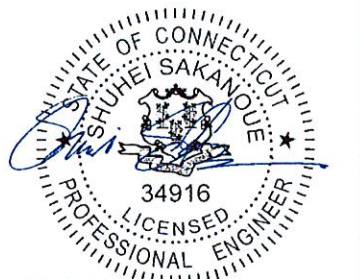
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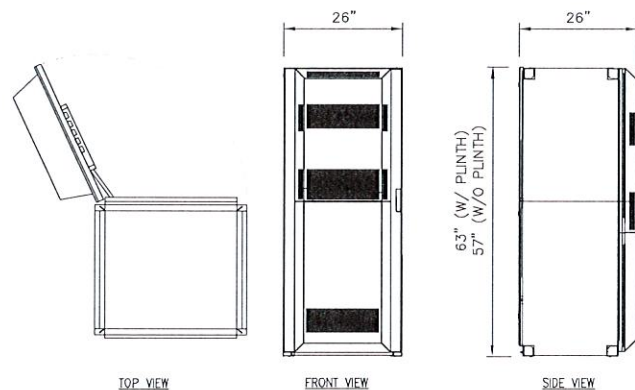
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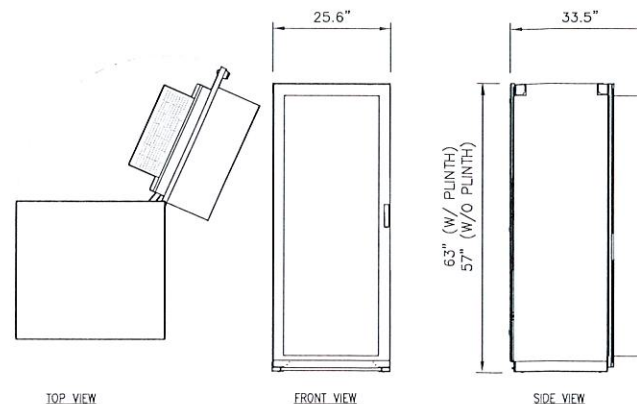
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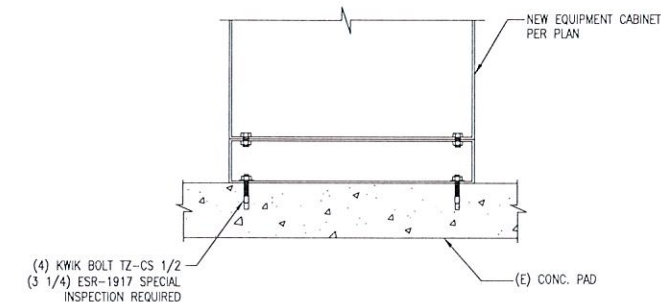
ERICSSON MODEL NO.:	B160
RACK SPACE:	19U
DIMENSIONS, HxWxD:	63"x26"x26" (W/ 6" PLINTH)
CABINET WEIGHT, EMPTY:	485 LBS
MAXIMUM WEIGHT:	2100± LBS

1 (N) B160 CABINET DETAIL  
SCALE: NOT TO SCALE

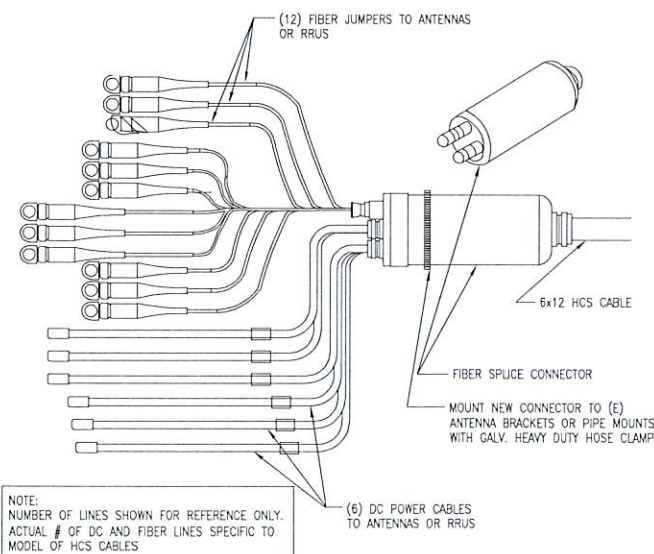


ERICSSON MODEL NO.:	6160
RACK SPACE:	19U
DIMENSIONS, HxWxD:	63"x25.6"x25.6" (W/ 6" PLINTH)
CABINET WEIGHT, EMPTY:	410 LBS
MAXIMUM WEIGHT:	770± LBS

2 (N) 6160 CABINET DETAIL  
SCALE: NOT TO SCALE

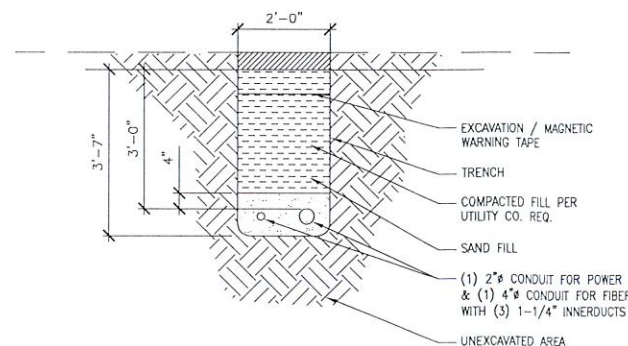


3 (N) EQUIPMENT CABINET MOUNTING DETAIL  
SCALE: NOT TO SCALE



NOTE:  
NUMBER OF LINES SHOWN FOR REFERENCE ONLY.  
ACTUAL # OF DC AND FIBER LINES SPECIFIC TO  
MODEL OF HCS CABLES

4 (N) 6X24 HCS CABLE DETAIL  
SCALE: NOT TO SCALE



5 (N) CONDUIT TRENCH DETAIL  
SCALE: NOT TO SCALE

6 NOT USED  
SCALE: NOT TO SCALE

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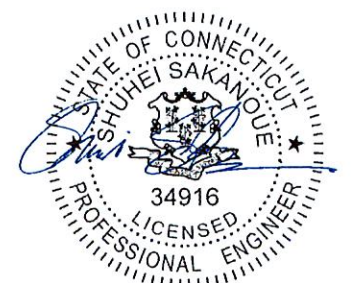
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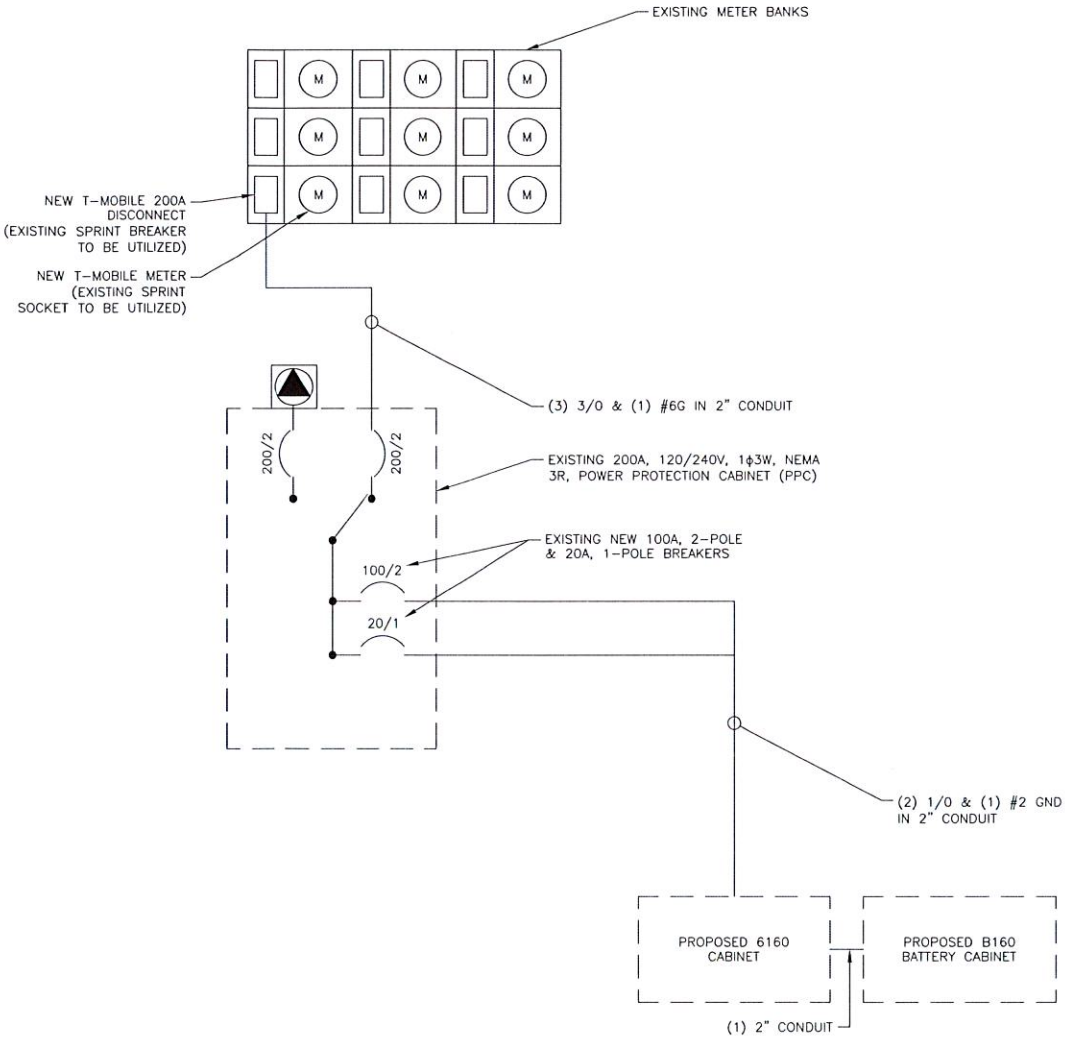
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T-MOBILE PANEL SCHEDULE												
MAIN: 200A MAIN BREAKER			VOTAGE/PHASE: 120/240V, 1-PHASE, 3-WIRE						SHORT CIRCUIT CURRENT RATING: --			
MOUNTING: INSIDE PPC ENCLOSURE			ENCLOSURE: NEMA 3R						SURGE PROTECTION DEVICE: YES			
DESCRIPTION	LOAD (VA)	C or NC	C/B	CIR No.	PHASE LOADS (VA)		CIR No.	C/B	C or NC	LOAD (VA)	DESCRIPTION	
					A	B						
RBS 6601	1000	C	100	1	1000		2	30	NC	0	GENERATOR	
	1000	C		3		1000	4		NC	0		
6160	7000	C	100	5	7200		6	20	NC	200	TOWER LIGHTS	
	7000	C		7		7200	8		NC	200		
6160 GFI	180	NC	20	9	360		10	20	NC	180	TELCO GFCI	
BLANK				11		0	12				BLANK	
				13	0		14					
				15		0	16					
				17	0		18					
				19		0	20					
				21	0		22					
				23		0	24					
BASE LOAD (VA) =					8560	8200	*INDICATES NEW LOAD. ALL OTHER LOADS ARE EXISTING. NEW BREAKER TO BE SAME TYPE AND HAVE SAME AIC RATING AS EXISTING. CUSTOMER HAS NOT PROVIDED LOADS FOR EQUIPMENT CABINETS THEREFORE THE CABINET LOADS SHOWN ARE ESTIMATED VALUES.					
25% OF CONTINUOUS LOAD (VA) =					2050	2050						
TOTAL LOAD (VA) =					11610	10250						
TOTAL LOAD (A) =					89	86						

NOTES:

1. ALL NEW CONDUCTORS TO BE INSTALLED SHALL BE COPPER. ALL CONDUCTORS SHALL BE THHW, THWN-2, XHHW, OR XHHW-2 UNLESS NOTED OTHERWISE.
2. CONTRACTOR IS TO FIELD VERIFY ALL EXISTING ITEMS SHOWN ON THE ELECTRICAL ONE-LINE DIAGRAM AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
3. ALL GROUNDING AND BONDING PER THE NEC.



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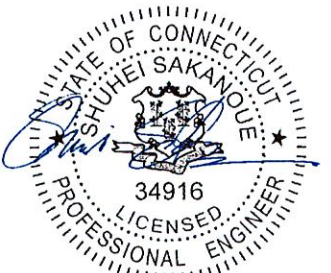
BU #: 876348  
ENFIELD

BRIGHT MEADOW BLVD.  
ENFIELD, CT 06082

EXISTING 147'-6" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	06/09/2021	PEG	FINAL	SS
1	10/12/2021	TJ	SA REFERENCE	SS



10/13/2021

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

SHEET NUMBER: E-1  
REVISION: 1



**T-Mobile**

35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002

**CROWN  
CASTLE**

1500 CORPORATE DRIVE  
CANONSBURG, PA 15317

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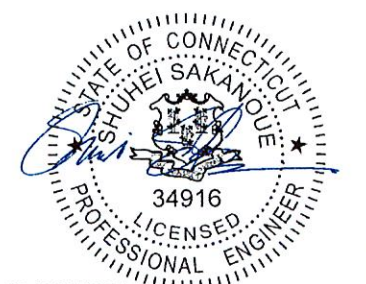
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**ENFIELD**

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ENFIELD, CT 06082

EXISTING 147'-6" MONOPOLE

**ISSUED FOR:**

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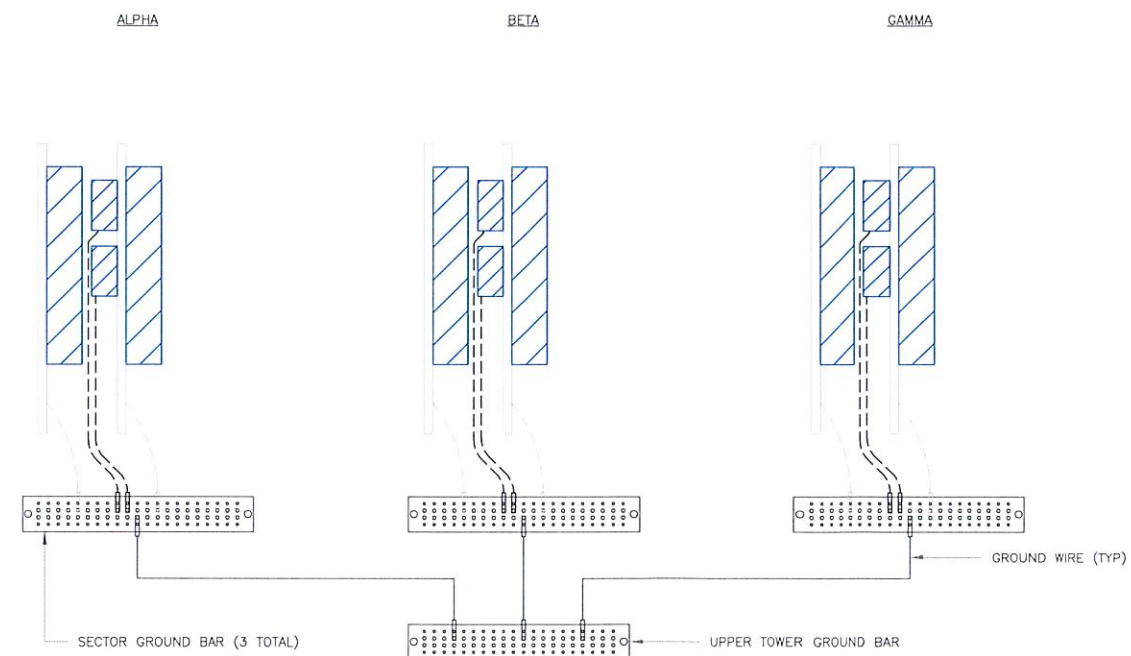
10/13/2021

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SHEET NUMBER: REVISION:

**G-1**

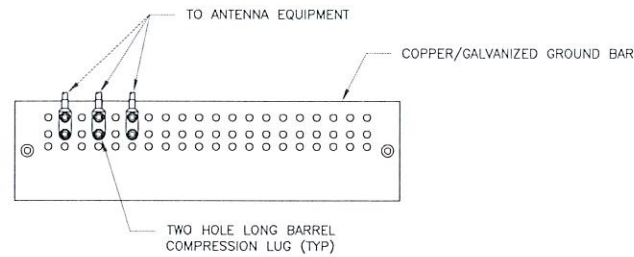
**1**



**NOTE:**

ALL NEW GROUNDS TO BE #6 STRANDED  
COPPER WITH GREEN INSULATION UNLESS  
NOTED OTHERWISE.

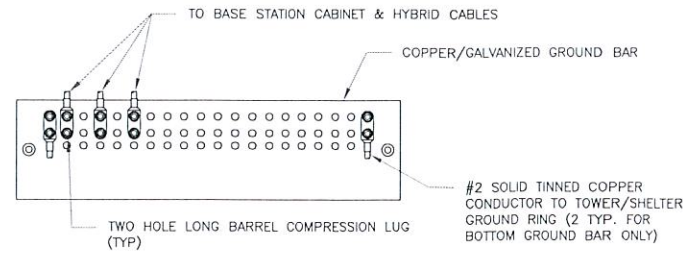
1 ANTENNA GROUNDING DIAGRAM  
SCALE: NOT TO SCALE



NOTES:

1. DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
3. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO ANTENNA MOUNT STEEL.

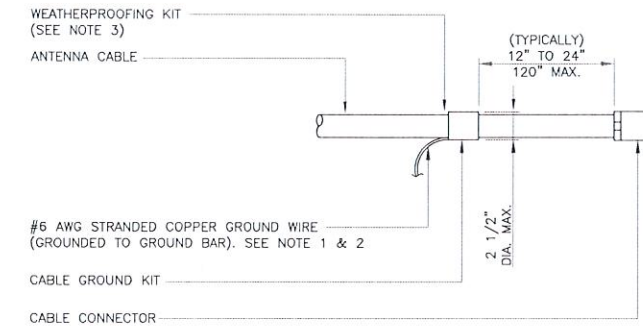
1 ANTENNA SECTOR GROUND BAR DETAIL  
SCALE: NOT TO SCALE



NOTES:

1. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
2. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
3. GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

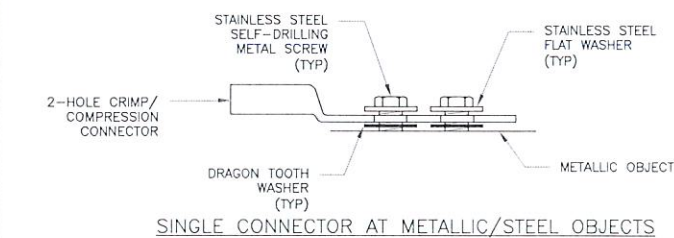
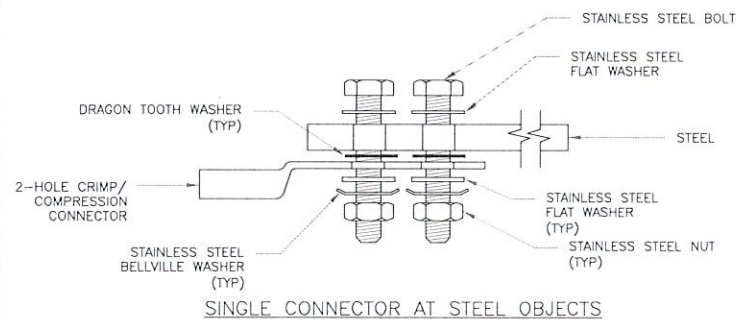
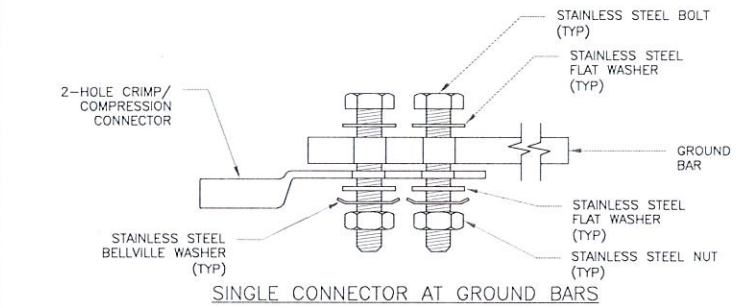
2 TOWER/SHELTER GROUND BAR DETAIL  
SCALE: NOT TO SCALE



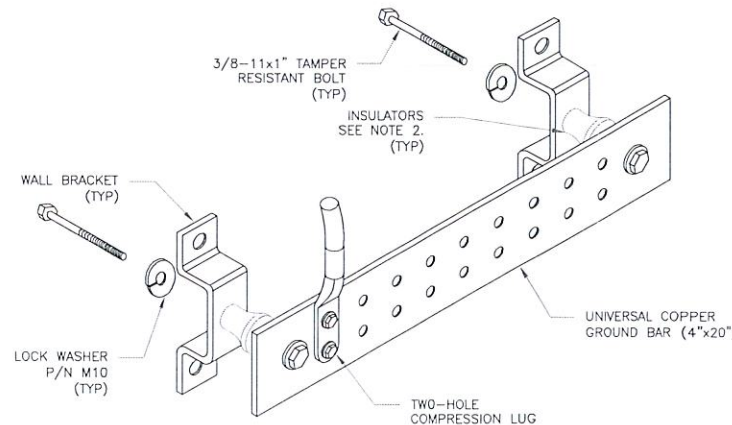
NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

3 CABLE GROUND KIT CONNECTION  
SCALE: NOT TO SCALE



4 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS  
SCALE: NOT TO SCALE



NOTES:

1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.
2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL. USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

5 GROUND BAR DETAIL  
SCALE: NOT TO SCALE

6 NOT USED  
SCALE: NOT TO SCALE

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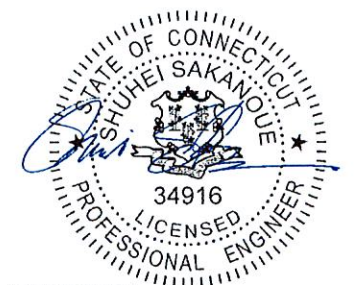
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SHEET NUMBER: **G-2** REVISION: **1**