



Crown Castle
12 Gill Street, Suite 5800
Woburn, MA 01801

November 3, 2017

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

RE: Notice of Exempt Modification for T-Mobile / L700 Crown Site BU: 841288
T-Mobile Site ID: CTFF334A
Located at: 2 Kaechele Place, Bridgeport, CT 06610
Latitude: 41° 13' 24.04" / Longitude: -73° 13' .38"

Dear Ms. Bachman,

T-Mobile/Metro PCS currently maintains equipment on the ground at the monopole located at 2 Kaechele Place, Bridgeport, CT. The tower is owned by Crown Castle. The property is owned by Southern New England Telephone Company. T-Mobile now intends to add one (1) APU propane generator. The propane tank will be on a 3' x 3' pad within the 79 sq. ft. lease area, which represents the 5' safety clearance/spark zone. The generator will be on the equipment pad. The unit only exercises twice per year and noise impact is within the local and state guidelines. Please note this work is in addition to approved filing EM-T-MOBILE-015-170501.

This facility was approved by the Connecticut Siting Council, Docket Number 45 on September 14, 1984. This approval included the condition(s) that:

1. The tower shall be no taller than necessary to provide the proposed service, and in no event shall exceed 167';
2. A fence not lower than eight feet shall surround each tower and its associated equipment
3. The applicant or its successor shall notify the Council if and when directional antennas or any other equipment is added to any of these facilities;

4. The applicant or its successor shall permit, in accordance with representations made by it during the proceeding, public or private entities to share space on the facilities, for due consideration received, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing;
5. Unless necessary to comply with condition number six, below, no lights shall be installed on any of these towers;
6. The facilities shall be constructed in accordance with all applicable federal, state, and municipal laws and regulations;
7. The applicant shall submit a development and management plan (D&M) for the Bridgeport site pursuant to sections 16-50j-85 through 16-50j-87 of the regulations of state agencies, except that irrelevant items in section 16-50j-86 need only be identified as such. The D&M plans shall include appropriate evergreen screening of the sites, erosion control measures, reseeding plans, and tree removal plans. The applicant shall comply with the reporting requirements of section 16-50j-87 for all sites;
8. Construction activities shall take place during daylight working hours;
9. This decision and order shall be void and the towers and associated equipment approved herein shall be dismantled and removed, or reapplication for any new use shall be made to the Connecticut Siting Council before any such new use it made, if the towers do not provide or permanently cease to provide cellular service following completion of construction.
10. This decision and order shall be void if all construction authorized is not completed within three years of the issuance of this decision.

This modification complies with the aforementioned condition(s).

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.S.C.A. § 16-50j-73, a copy of this exempt modification is being sent to the Honorable Joseph P. Ganim, Mayor for the Town of Bridgeport, the Planning & Economic Department for the Town of Bridgeport, the property owner and the tower owner.

1. The proposed modifications will not result in an increase in the height of the existing tower.

2. The proposed modification 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 proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
5. 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-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Please send approval/rejection letter to Attn: Amanda Cornwall.

Sincerely,

Amanda Cornwall
Real Estate Specialist
12 Gill Street, Suite 5800, Woburn, MA 01801
339-205-7017
Amanda.Cornwall@crowncastle.com

Attachments:

Tab 1: Exhibit-1: Compound plan and elevation depicting the planned changes

Tab 2: Exhibit-2: Generator Specifications

cc: Joseph P. Ganim, Mayor
Town of Bridgeport
999 Broad Street
Bridgeport, CT 06604

Melanie A. Bachman

January 24, 2017

Page 4

Thomas F. Gill, Director of OPED
Office of Planning and Economic Development
999 Broad Street
Bridgeport, CT 06604

Crown Castle (Tower Owner)
12 Gill Street, Suite 5800
Woburn, Ma 01801

Southern New England Telephone (Property Owner)
One SBC Center 36-M-01
St. Louis, ME 63101



Shipping

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Printing Services

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Support

Amanda

770654358337

Ship date:

Thu 11/02/2017

Crown Castle
Amanda Goodall
12 Gill Street
Woburn, MA US 01801
339 205-7017

Actual delivery:

Fri 11/03/2017 10:16 am

Delivered

Signed for by: G.RAMABANOVIC



Office of Planning and Economic Dev
Thomas F. Gill
999 Broad Street
BRIDGEPORT, CT US 06604
203 576-7221

Travel History

| Date/Time | Activity | Location |
|------------------------------|------------------------------------|----------------|
| 11/03/2017 - Friday | | |
| 10:16 am | Delivered | BRIDGEPORT, CT |
| 9:17 am | On FedEx vehicle for delivery | STRATFORD, CT |
| 8:33 am | At local FedEx facility | STRATFORD, CT |
| 4:00 am | Departed FedEx location | NEWARK, NJ |
| 11/02/2017 - Thursday | | |
| 11:17 pm | Arrived at FedEx location | NEWARK, NJ |
| 8:20 pm | Left FedEx origin facility | WILMINGTON, MA |
| 6:41 pm | Picked up | WILMINGTON, MA |
| 12:48 pm | Shipment information sent to FedEx | |

Shipment Facts

| | | | |
|-------------------|------------------------|--------------------------|--------------------------|
| Tracking Number | 770654358337 | Service | FedEx Priority Overnight |
| Reference | 1766.6680 | Weight | 0.5 lbs / 0.23 kgs |
| Delivery attempts | 1 | Delivered To | Mailroom |
| Total pieces | 1 | Total shipment weight | 0.5 lbs / 0.23 kgs |
| Terms | Not Available | Shipper reference | 1766.6680 |
| Packaging | FedEx Envelope | Special handling section | Deliver Weekday |
| Standard transit | 11/03/2017 by 10:30 am | | |

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Amanda

770655401495

Ship date:

Thu 11/02/2017

Crown Castle
Amanda Goodall
12 Gill Street
Woburn, MA US 01801
339 205-7017

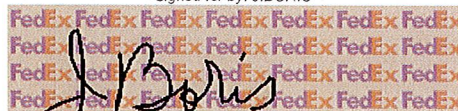
Actual delivery:

Fri 11/03/2017 10:04 am

SOUTHERN NEW ENGLAND TEL
C/O FRONTIER COMMUNICATIONS
401 MERRITT 7
NORWALK, CT US 06851
800 921-8101

Delivered

Signed for by: J.BORIS



Travel History

| Date/Time | Activity | Location |
|-------------------------|------------------------------------|----------------|
| - 11/03/2017 - Friday | | |
| 10:04 am | Delivered | NORWALK, CT |
| 8:23 am | On FedEx vehicle for delivery | STAMFORD, CT |
| 7:29 am | At local FedEx facility | STAMFORD, CT |
| 4:15 am | Departed FedEx location | NEWARK, NJ |
| - 11/02/2017 - Thursday | | |
| 11:17 pm | Arrived at FedEx location | NEWARK, NJ |
| 8:20 pm | Left FedEx origin facility | WILMINGTON, MA |
| 6:41 pm | Picked up | WILMINGTON, MA |
| 1:40 pm | Shipment information sent to FedEx | |

Shipment Facts

| | | | |
|--------------------------|---|-------------------|--------------------------|
| Tracking Number | 770655401495 | Service | FedEx Priority Overnight |
| Reference | 1766 6680 | Weight | 1 lbs / 0.45 kgs |
| Signature services | Adult signature required | Delivery attempts | 1 |
| Delivered To | Receptionist/Front Desk | Total pieces | 1 |
| Total shipment weight | 1 lbs / 0.45 kgs | Terms | Not Available |
| Shipper reference | 1766 6680 | Packaging | FedEx Envelope |
| Special handling section | Deliver Weekday, Adult Signature Required | Standard transit | 11/03/2017 by 10:30 am |

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Amanda

770654454974

Ship date:

Thu 11/02/2017

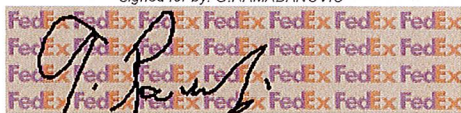
Crown Castle
Amanda Goodall
12 Gill Street
Woburn, MA US 01801
339 205-7017

Actual delivery:

Fri 11/03/2017 10:16 am

Delivered

Signed for by: G.RAMABANOVIC



Town of Bridgeport
The Honorable Joseph Ganim
999 Broad Street
BRIDGEPORT, CT US 06604
203 576-7201

Request Proof of Delivery

**required fields*

To view a signature image and detailed proof of delivery information, enter the 9-digit shipper or payer FedEx account number associated to the shipment. Otherwise, you will receive a summary proof of delivery without an image.

| | | | |
|---------------------------------|--------------------|----------------------|------------------------|
| Tracking No. or Nickname | Destination | Account no. | Signature image |
| 770654454974 | BRIDGEPORT, CT | <input type="text"/> | Yes |

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May 22, 2017

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

Amanda Cornwall
Crown Castle
12 Gill Street, Suite 5800
Woburn, MA 01801

RE: **EM-T-MOBILE-015-170501** – T-Mobile notice of intent to modify an existing telecommunications facility located at 205 Kaechele Place, Bridgeport, Connecticut.

Dear Ms. Cornwall:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

1. Construction activities shall take place during daylight hours in accordance with Order No. 8 of the Council's Decision and Order dated September 14, 1984 in Docket No. 45;
2. The tower shall be reinforced in accordance with the Structural Modification Report prepared by Paul J. Ford & Company and Modification of an Existing 150' Monopole Drawings (Modification Drawings) both date stamped on April 5, 2017 by Justin Kline;
3. Within 45 days following completion of the equipment installation, T-Mobile shall provide documentation certified by a Professional Engineer that its installation complied with the recommendations presented in the Structural Modification Report and Modification Drawings;
4. Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
5. Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
6. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
7. Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by T-Mobile shall be removed within 60 days of the date the antenna ceased to function;
8. The validity of this action shall expire one year from the date of this letter; and
9. The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated April 28, 2017. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site by any dimension, increase noise levels at the tower site boundary by six decibels or more, and increase the total radio frequencies electromagnetic radiation power density measured

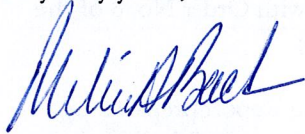


CONNECTICUT SITING COUNCIL
Affirmative Action / Equal Opportunity Employer

at the tower site boundary to or above the standards adopted by the Federal Communications Commission pursuant to Section 704 of the Telecommunications Act of 1996 and by the state Department of Energy and Environmental Protection pursuant to Connecticut General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below state and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,



Melanie A. Bachman
Executive Director

MAB/FOC/bm

- c: The Honorable Joseph P. Ganim, Mayor, City of Bridgeport
John Gomes, Chief Administrative Officer, City of Bridgeport
Thomas F. Gill, Director of Planning & Economic Development, City of Bridgeport
Southern New England Telephone Company, Property Owner

Google Maps 205 Kaechele Pl



Imagery ©2017 Google, Map data ©2017 Google 50 ft

205 KAEHELE PL

Location 205 KAEHELE PL

Mblu 81/ 2602/ 9/ /

Acct# R--0148640

Owner SOUTHERN NEW ENGLAND
TEL

Assessment \$104,120

Appraisal \$148,730

PID 29859

Building Count 1

Current Value

| Appraisal | | | |
|----------------|--------------|----------|-----------|
| Valuation Year | Improvements | Land | Total |
| 2016 | \$51,340 | \$97,390 | \$148,730 |

| Assessment | | | |
|----------------|--------------|----------|-----------|
| Valuation Year | Improvements | Land | Total |
| 2016 | \$35,950 | \$68,170 | \$104,120 |

Owner of Record

Owner SOUTHERN NEW ENGLAND TEL
Co-Owner % SBC COMMUNICATIONS INC
Address ONE SBC CENTER 36-M-01
ST LOUIS, MO 63101

Sale Price \$0
Certificate
Book & Page 0/ 0
Sale Date

Ownership History

| Ownership History | | | | |
|--------------------------|------------|-------------|-------------|-----------|
| Owner | Sale Price | Certificate | Book & Page | Sale Date |
| SOUTHERN NEW ENGLAND TEL | \$0 | | 0/ 0 | |

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 | Vacant Land |
| 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 | |
| Total Full Baths | |
| Total Half Baths | |
| Total Xtra Fixtrs: | |
| Total Rooms | |
| Bath Style: | |
| Kitchen Style: | |
| Fireplaces | |
| Fin Bsmt Area | |
| Fin Bsmt Quality | |
| Bsmt Garages | |
| . | |

Building Photo



(<http://images.vgsi.com/photos/BridgeportCTPhotos//\00\03\05>)

Building Layout

| 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 | 499 |
| Description | Utility Vac Ln |
| Zone | RA |
| Neighborhood | 2080 |

Land Line Valuation

| | |
|-----------------------|----------|
| Size (Acres) | 0.15 |
| Frontage | 0 |
| Depth | 0 |
| Assessed Value | \$68,170 |

Outbuildings

| Outbuildings | | | | | | Legend |
|---------------------|--------------------|-----------------|------------------------|-------------|--------------|---------------|
| Code | Description | Sub Code | Sub Description | Size | Value | Bldg # |
| SHD3 | Shed w/ Lt | CM | Comm | 384 SF | \$6,910 | 1 |
| SHD3 | Shed w/ Lt | CM | Comm | 384 SF | \$6,910 | 1 |
| SHD3 | Shed w/ Lt | CM | Comm | 576 SF | \$10,370 | 1 |
| FN1 | Fence, Chain | 8 | 8 ft | 350 LF | \$3,150 | 1 |
| TWR | Tower | | | 120 LF | \$24,000 | 1 |

Valuation History

| Appraisal | | | |
|-----------------------|---------------------|-------------|--------------|
| Valuation Year | Improvements | Land | Total |
| 2015 | \$51,340 | \$97,390 | \$148,730 |
| 2014 | \$51,340 | \$106,880 | \$158,220 |
| 2013 | \$51,340 | \$106,880 | \$158,220 |

| Assessment | | | |
|-----------------------|---------------------|-------------|--------------|
| Valuation Year | Improvements | Land | Total |
| 2015 | \$35,950 | \$68,170 | \$104,120 |
| 2014 | \$35,950 | \$74,820 | \$110,770 |
| 2013 | \$35,950 | \$74,820 | \$110,770 |

T-Mobile

T-MOBILE SITE NUMBER: CTFF334A

T-MOBILE SITE NAME: ----

SITE TYPE: MONOPOLE

TOWER HEIGHT: 151'-4"

CROWN CASTLE BU #: 841288

SITE ADDRESS: 205 KAEICHELE PLACE BRIDGEPORT, CT 06606

COUNTY: FAIRFIELD

JURISDICTION: CITY OF BRIDGEPORT

T-Mobile
35 GRIFFIN ROAD,
BLOOMFIELD, CT 06002

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

T-MOBILE SITE NUMBER:
CTFF334A

**BU #: 841288
BRIDGEPORT NORTH**

205 KAEICHELE PLACE
BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

T-MOBILE 2017 NSD

SITE INFORMATION

CROWN CASTLE SITE NAME: BRIDGEPORT NORTH
 SITE ADDRESS: 205 KAEICHELE PLACE BRIDGEPORT, CT 06606
 COUNTY: FAIRFIELD
 MAP/PARCEL #: BRID-002602-000009
 AREA OF CONSTRUCTION: EXISTING
 LATITUDE: 41° 13' 24.10"
 LONGITUDE: -73° 13' 00.35"
 LAT/LONG TYPE: NAD83
 GROUND ELEVATION: 241.3 FT.
 CURRENT ZONING: R-A
 JURISDICTION: CITY OF BRIDGEPORT
 OCCUPANCY CLASSIFICATION: U
 TYPE OF CONSTRUCTION: VB
 A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
 PROPERTY OWNER: CCATT LLC
 2000 CORPORATE DRIVE
 CANONSBURG, PA 15317
 TOWER OWNER: CCATT LLC
 2000 CORPORATE DRIVE
 CANONSBURG, PA 15317
 CARRIER/APPLICANT: T-MOBILE
 35 GRIFFIN ROAD,
 BLOOMFIELD, CT 06002
 CROWN CASTLE APPLICATION ID: 374828
 ELECTRIC PROVIDER: N/A
 N/A
 TELCO PROVIDER: AT&T
 (866) 620-6900

DRAWING INDEX

| SHEET # | SHEET DESCRIPTION |
|---------|------------------------------------|
| T-1 | TITLE SHEET |
| T-2 | GENERAL NOTES |
| C-1.1 | EXISTING SITE PLAN |
| C-1.2 | FINAL SITE PLAN |
| C-2 | EXISTING & FINAL EQUIPMENT PLAN |
| C-3 | FINAL ELEVATION AND ANTENNA PLANS |
| C-4 | ANTENNA AND CABLE SCHEDULE |
| C-5 | EQUIPMENT SPECIFICATIONS |
| C-6 | EQUIPMENT SPECIFICATIONS |
| C-7 | EQUIPMENT SPECIFICATIONS |
| E-1 | ELECTRICAL SITE PLAN |
| E-2 | ONE-LINE DIAGRAMS & PANEL SCHEDULE |
| E-3 | ELECTRICAL SIGN REQUIREMENTS |
| G-1 | EQUIPMENT & ANTENNA GROUNDING PLAN |
| G-2 | GROUNDING DETAILS |
| G-3 | GROUNDING DETAILS |

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11X17. 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.

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 | 2016 CT STATE BUILDING CODE/2012 IBC W/ CT AMENDMENTS |
| MECHANICAL | 2016 CT STATE BUILDING CODE/2012 IMC W/ CT AMENDMENTS |
| ELECTRICAL | 2016 CT STATE BUILDING CODE/2014 NEC W/ CT AMENDMENTS |

INSTALLER NOTE:

TOWER DOES NOT HAVE CLIMBING FACILITIES - MANLIFT REQUIRED FOR ELEVATED WORK.

REFERENCE DOCUMENTS:

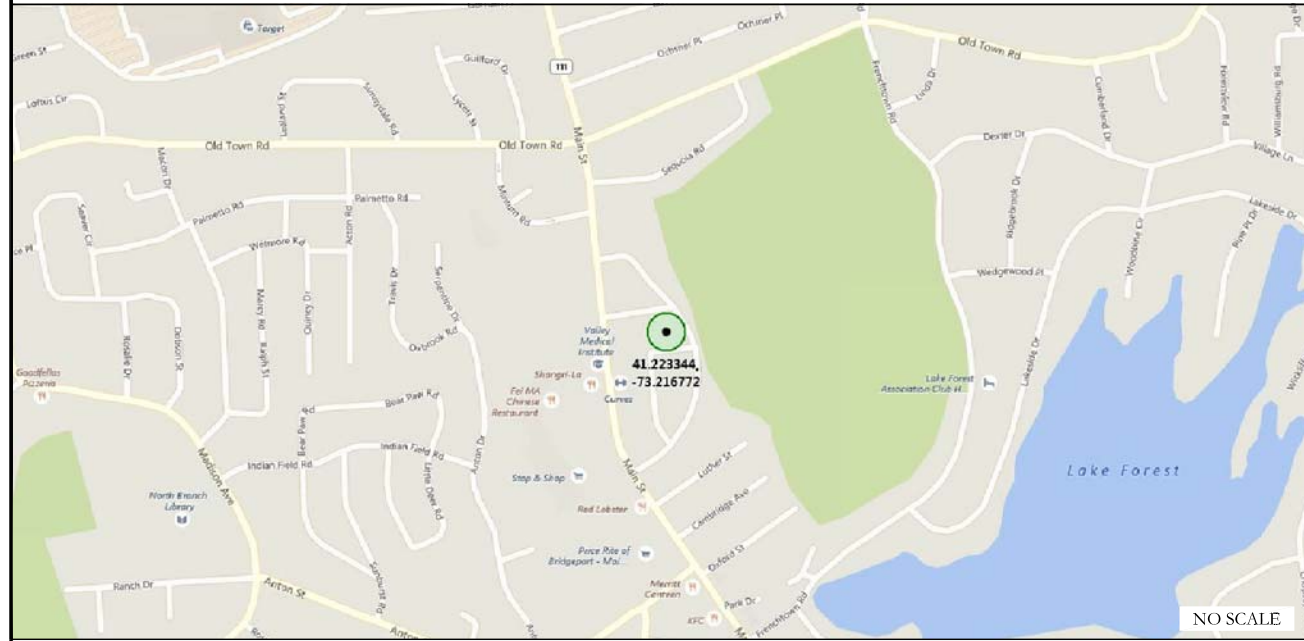
STRUCTURAL ANALYSIS: BY OTHERS

STRUCTURAL ANALYSIS: BY OTHERS

MOUNT ANALYSIS: BY OTHERS

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

LOCATION MAP



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.

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 ALL EQUIPMENT & FEEDLINES @ LEVEL 120'-0"
- INSTALL (9) ANTENNAS
- INSTALL (3) RRUS
- INSTALL (3) TMSs
- INSTALL (12) 1-5/8" COAX CABLES
- INSTALL (1) 1-5/8" HYBRID CABLE
- INSTALL (1) 1-1/2" HYBRID CABLE

GROUND SCOPE OF WORK:

- REMOVE ALL EQUIPMENT ON CONCRETE PAD
 - INSTALL (1) AAV CABINET
 - INSTALL (1) 6102 CABINET
 - INSTALL (1) RAC24 CABINET
 - POWER & TELCO TO BE RECOMMISSIONED
 - INSTALL GENERATOR AND PROPANE TANK
- DESIGN PACKAGE BASED ON THE APPLICATION ID: 374828
REVISION: 2



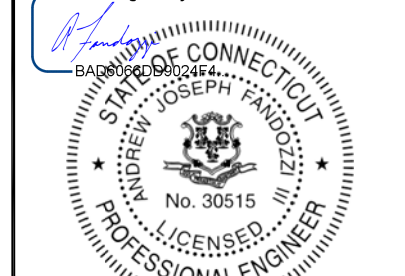
CALL CONNECTICUT ONE CALL
(800) 922-4455
CALL 3 WORKING DAYS
BEFORE YOU DIG!



ISSUED FOR:

| REV | DATE | DRWN | DESCRIPTION | DES./QA |
|-----|----------|------|--------------|---------|
| A | 2/27/17 | ZTK | PRELIMINARY | LR |
| 0 | 3/7/17 | ZTK | CONSTRUCTION | AFJ |
| 1 | 4/4/17 | ZTK | CONSTRUCTION | AFJ |
| 2 | 4/7/17 | ZTK | CONSTRUCTION | AFJ |
| 3 | 4/19/17 | ZTK | CONSTRUCTION | AFJ |
| 4 | 4/21/17 | ZTK | CONSTRUCTION | AFJ |
| 5 | 10/19/17 | ZTK | CONSTRUCTION | AFJ |
| 6 | 11/1/17 | ZTK | CONSTRUCTION | AFJ |

DocuSigned by:



11/1/2017 3:53:00 PM EDT

Andrew Joseph Fandozzi III, P.E.
Professional Engineer License: #30515
Crown Castle USA, Inc. Certificate of Registration #PEC.0001101

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: **6**

SITE WORK GENERAL NOTES:

- 1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. 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.
3. ALL SITE WORK TO COMPLY WITH QAS-STD-10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE TOWER SITE" AND LATEST VERSION OF TIA 1019 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."

STRUCTURAL STEEL NOTES:

- 1. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.
2. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4") CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
3. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" ASTM A307 BOLTS UNLESS NOTED OTHERWISE.

CONCRETE AND REINFORCING STEEL NOTES:

- 1. 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.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. SLAB FOUNDATION DESIGN ASSUMING ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.

MASONRY NOTES:

- 1. HOLLOW CONCRETE MASONRY UNITS SHALL MEET A.S.T.M. SPECIFICATION C90, GRADE N. TYPE 1. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY (F'm) SHALL BE 1500 PSI.
2. MORTAR SHALL MEET THE PROPERTY SPECIFICATION OF A.S.T.M. C270 TYP. "S" MORTAR AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.
3. GROUT SHALL MEET A.S.T.M. SPECIFICATION C475 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI.

GENERAL NOTES:

- 1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR- GENERAL CONTRACTOR (CONSTRUCTION)
SUBCONTRACTOR- T-MOBILE
CARRIER- T-MOBILE
TOWER OWNER- CROWN CASTLE
OEM- ORIGINAL EQUIPMENT MANUFACTURER
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES.

ABBREVIATIONS AND SYMBOLS:

ABBREVIATIONS:

- AGL ABOVE GRADE LEVEL
BTS BASE TRANSCIEVER STATION
(E) EXISTING
MIN. MINIMUM
REF REFERENCE
RF RADIO FREQUENCY
T.B.D. TO BE DETERMINED
T.B.R. TO BE RESOLVED
TYP TYPICAL
REQ REQUIRED
EGR EQUIPMENT GROUND RING
AWG AMERICAN WIRE GAUGE
MGB MASTER GROUND BAR
EG EQUIPMENT GROUND
BCW BARE COPPER WIRE
SIAD SMART INTEGRATED ACCESS DEVICE
GEN GENERATOR
IGR INTERIOR GROUND RING (HALO)
RBS RADIO BASE STATION

SYMBOLS:

- S/G- SOLID GROUND BUS BAR
-S/N- SOLID NEUTRAL BUS BAR
SUPPLEMENTAL GROUND CONDUCTOR
2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
CHEMICAL GROUND ROD
TEST WELL
DISCONNECT SWITCH
METER
EXOTHERMIC WELD (CADWELD) (UNLESS OTHERWISE NOTED)
MECHANICAL CONNECTION
GROUNDING WIRE

ELECTRICAL INSTALLATION NOTES:

- 1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC. HILTI EPOXY ANCHORS ARE REQUIRED BY CROWN CASTLE.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
5. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
6. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING AND T1 CONDUCTOR AND 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.

GREENFIELD GROUNDING NOTES:

- 1. 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.
2. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OFF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE SUBCONTRACTOR 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.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDING AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

NEC INSULATOR COLOR CODE

Table with 3 columns: DESCRIPTION, PHASE/CODE LETTER, WIRE COLOR. Rows include 240/120 1Ø (LEG 1 BLACK, LEG 2 RED), AC NEUTRAL (N WHITE), GROUND (EGC) (G GREEN), VDC POS (+ *RED-POLARITY MARK AT TERMINATION), VDC NEG (- *BLACK-POLARITY MARK AT TERMINATION), 240V OR 208V, 3Ø (PHASE A BLACK, PHASE B RED(ORG. IF HI LEG), PHASE C BLUE), 480V, 3Ø (PHASE A BROWN, PHASE B ORANGE, PHASE C YELLOW).

* SEE NEC 210.5(C)(1) AND (2)

T-Mobile logo and address: 35 GRIFFIN ROAD, BLOOMFIELD, CT 06002

Crown Castle logo and address: 1200 MACARTHUR BLVD, SUITE 200 MAHWAH, NJ 07430

T-MOBILE SITE NUMBER: CTFF334A
BU #: 841288
BRIDGEPORT NORTH
205 KAECHHELE PLACE
BRIDGEPORT, CT 06606
EXISTING 151'-4" MONOPOLE

ISSUED FOR table with columns: REV, DATE, DRWN, DESCRIPTION, DES./QA. Rows include preliminary, construction, and construction stages.

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SHEET NUMBER: T-2 REVISION: 6



T-MOBILE SITE NUMBER:
CTFF334A

BU #: 841288
BRIDGEPORT NORTH

205 KAEICHELE PLACE
BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

ISSUED FOR:

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| 0 | 3/7/17 | ZTK | CONSTRUCTION | AFJ |
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| 5 | 10/19/17 | ZTK | CONSTRUCTION | AFJ |
| 6 | 11/1/17 | ZTK | CONSTRUCTION | AFJ |

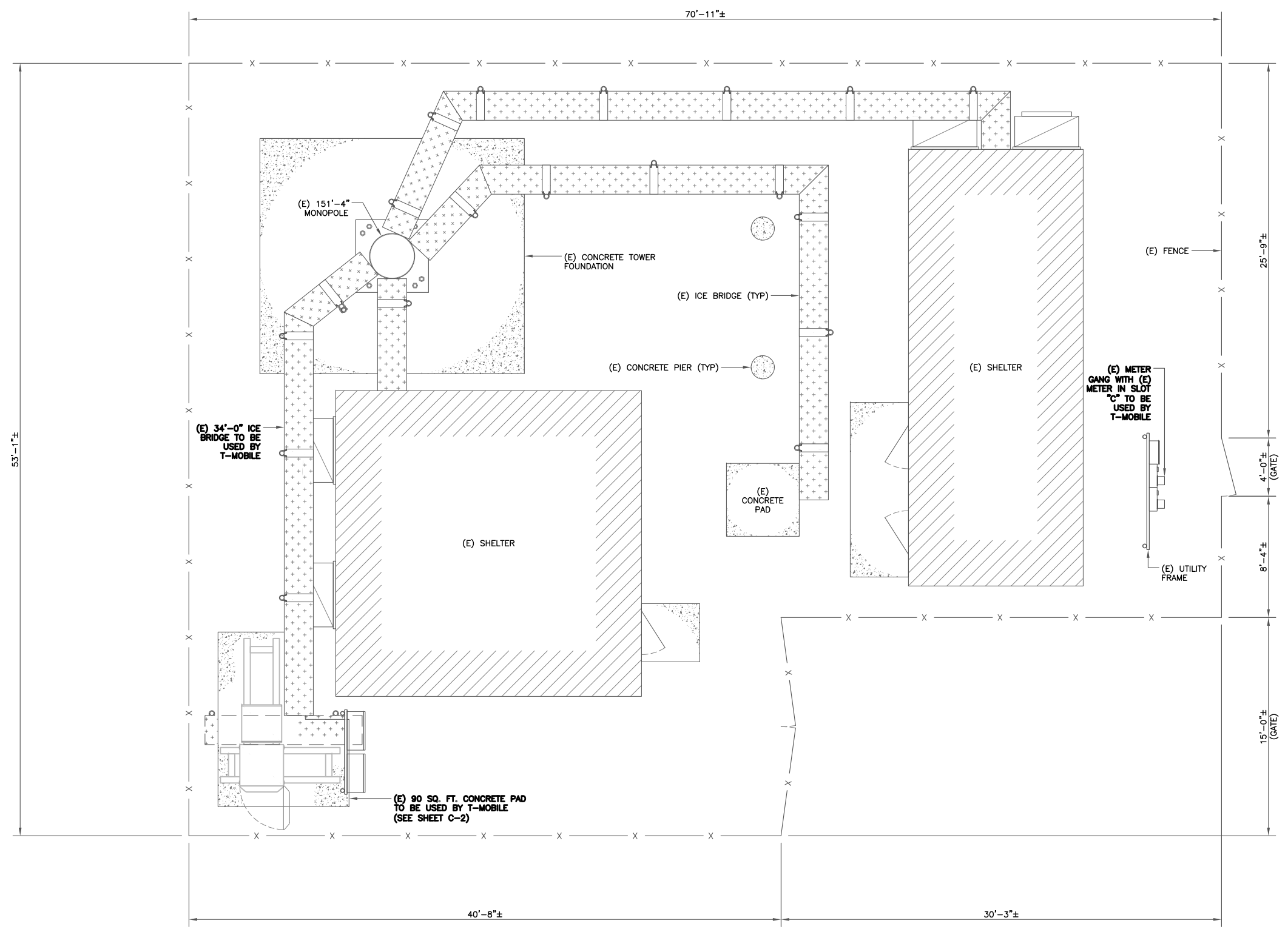
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Professional Engineer License: #30515
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1 EXISTING SITE PLAN
SCALE: 1/4"=1'-0" (FULL SIZE)
1/8"=1'-0" (11x17)





T-MOBILE SITE NUMBER:
CTFF334A

BU #: 841288
BRIDGEPORT NORTH

205 KAEICHELE PLACE
BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

ISSUED FOR:

| REV | DATE | DRWN | DESCRIPTION | DES./QA |
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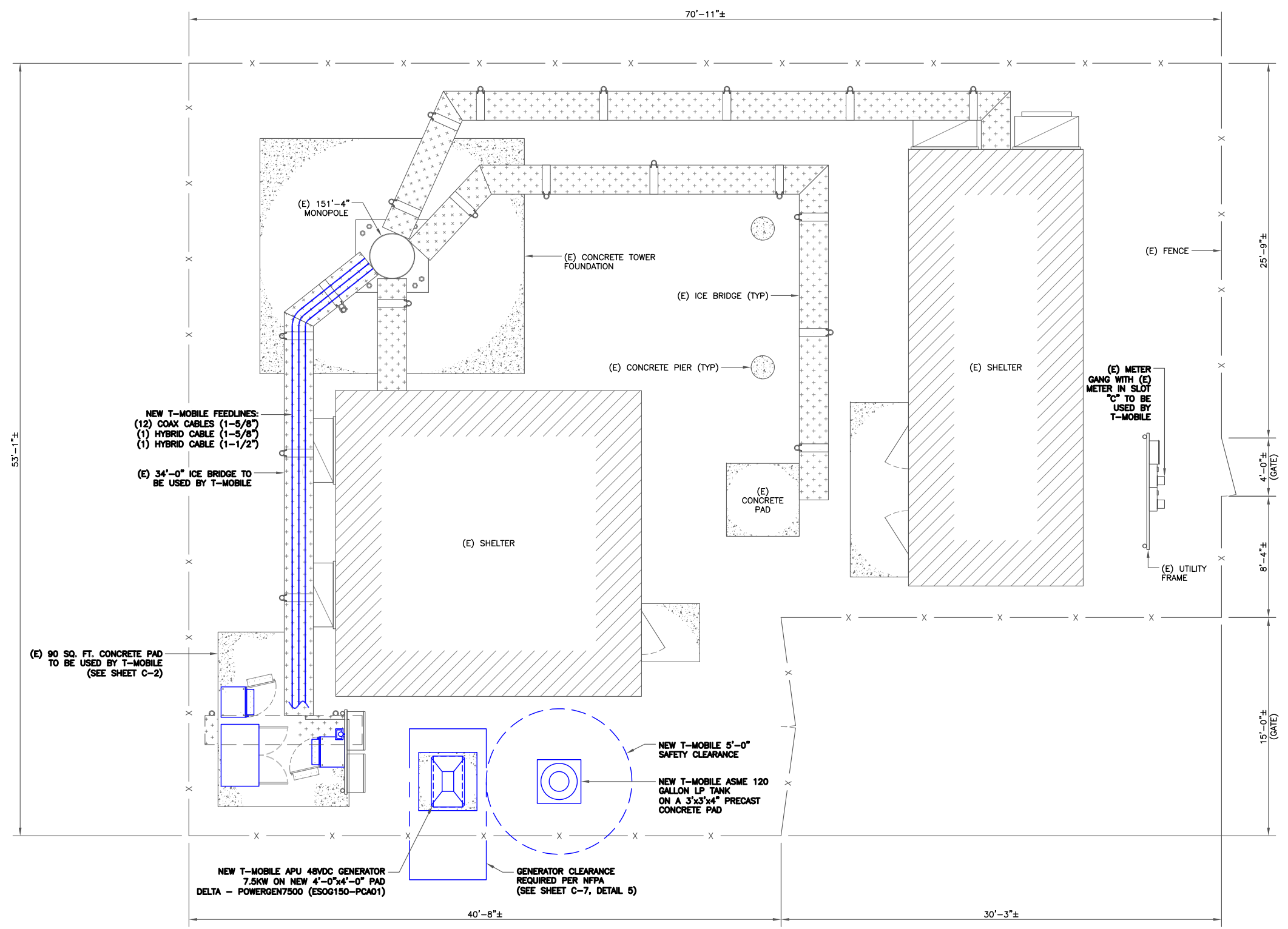
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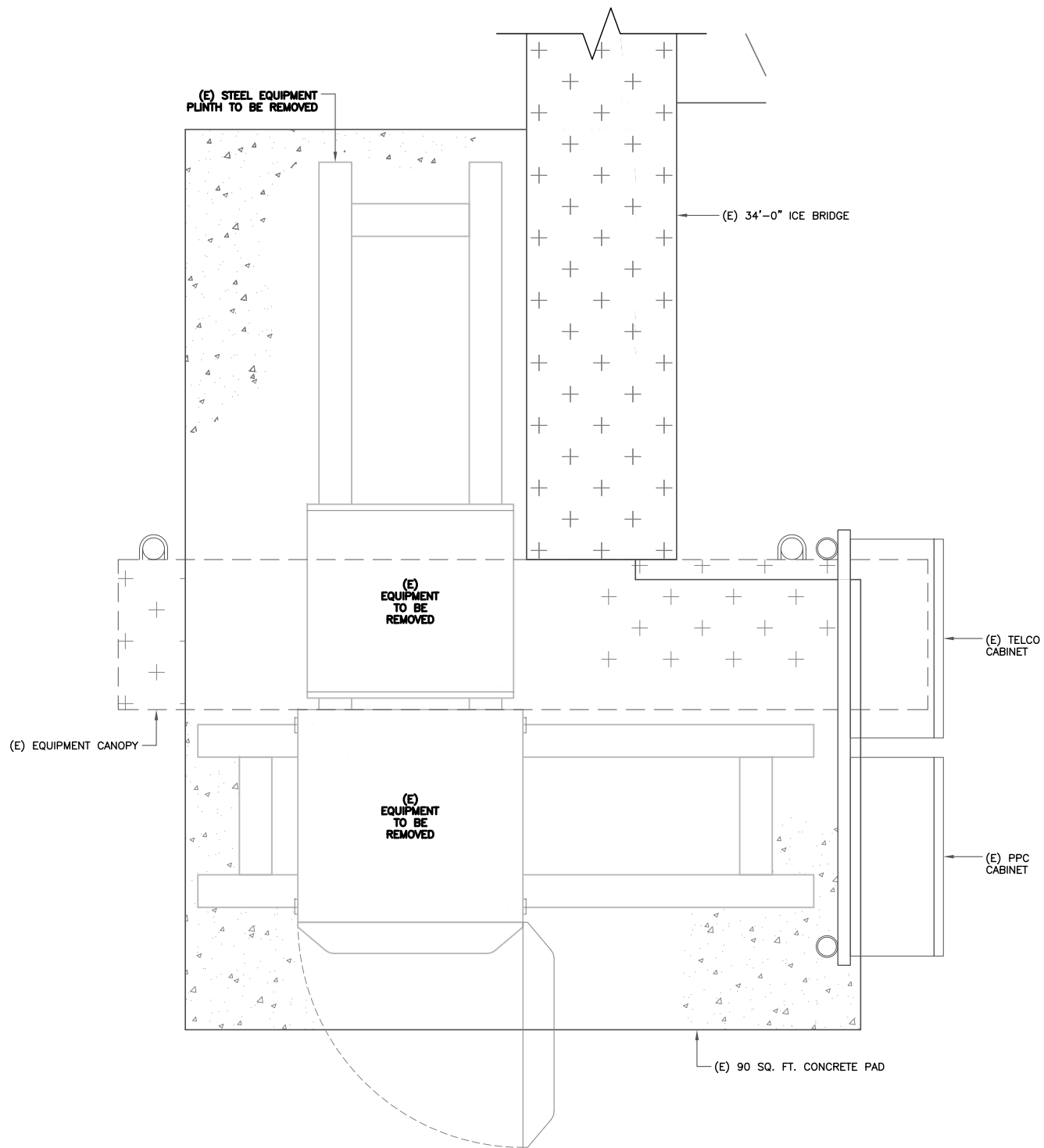
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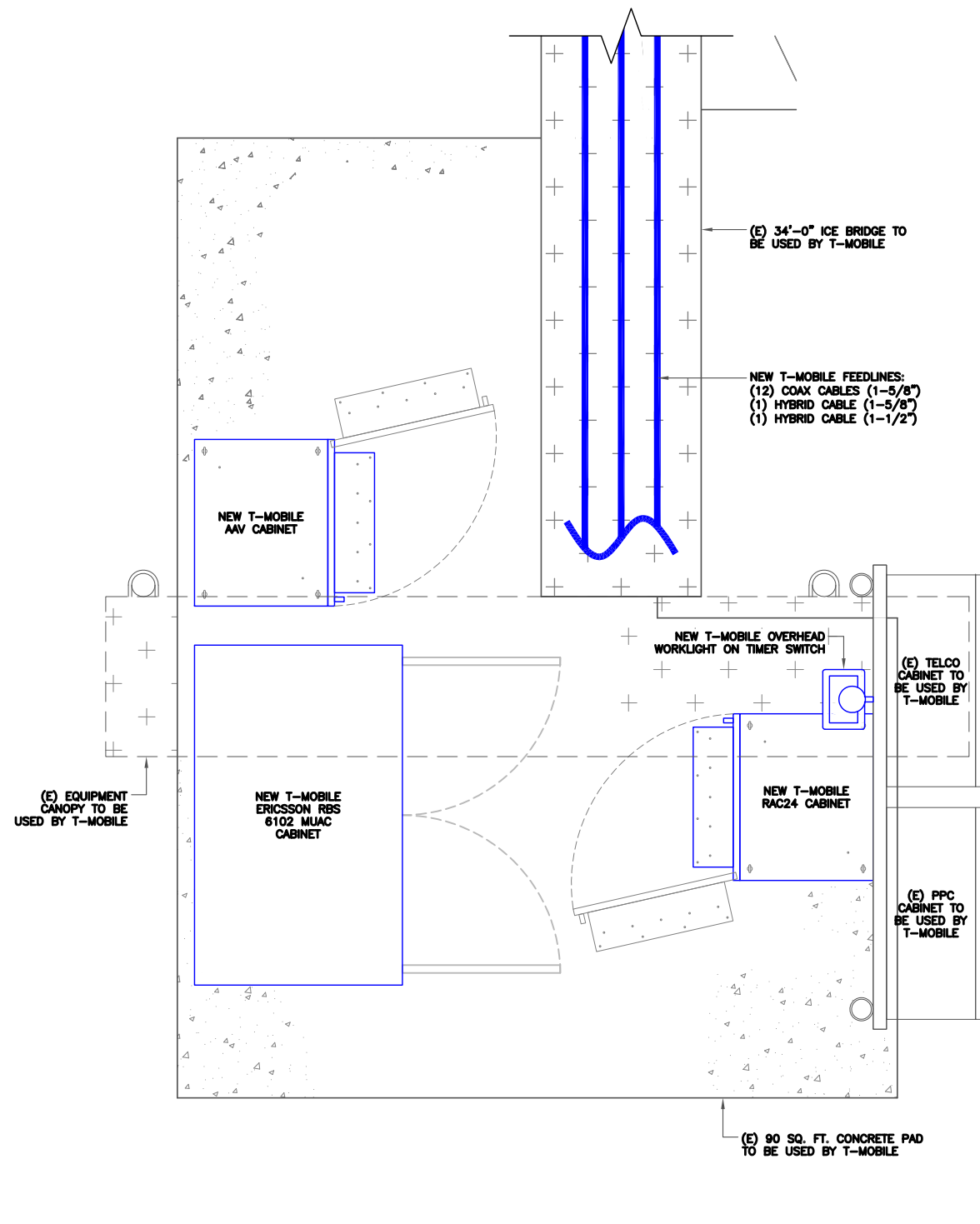
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1 EXISTING EQUIPMENT PLAN
SCALE: 1"=1'-0" (FULL SIZE)
1/2"=1'-0" (11x17)



2 FINAL EQUIPMENT PLAN
SCALE: 1"=1'-0" (FULL SIZE)
1/2"=1'-0" (11x17)



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BLOOMFIELD, CT 06002

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

T-MOBILE SITE NUMBER:
CTFF334A

BU #: 841288
BRIDGEPORT NORTH

205 KAEICHELE PLACE
BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

ISSUED FOR:

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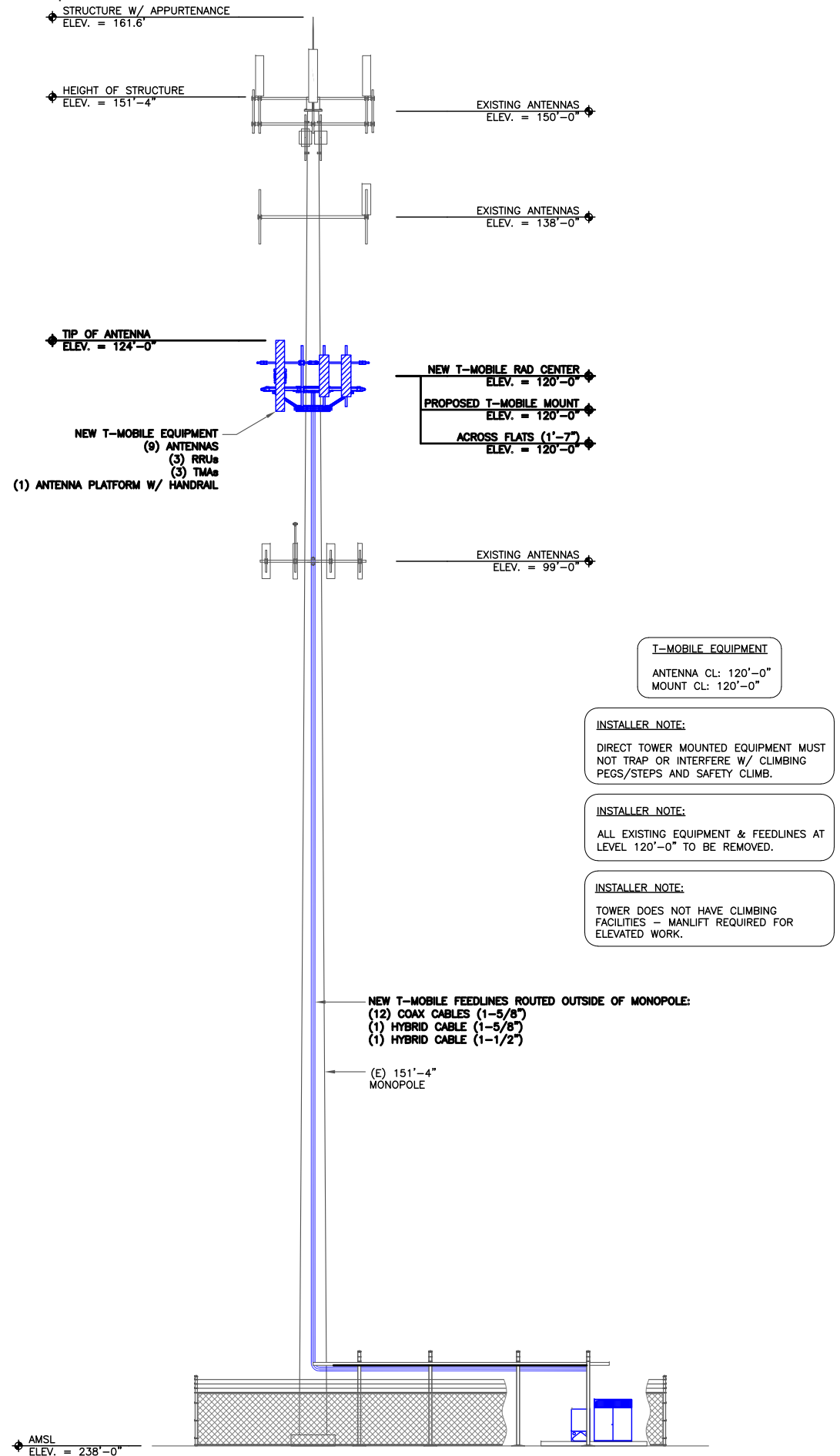
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T-MOBILE EQUIPMENT
ANTENNA CL: 120'-0"
MOUNT CL: 120'-0"

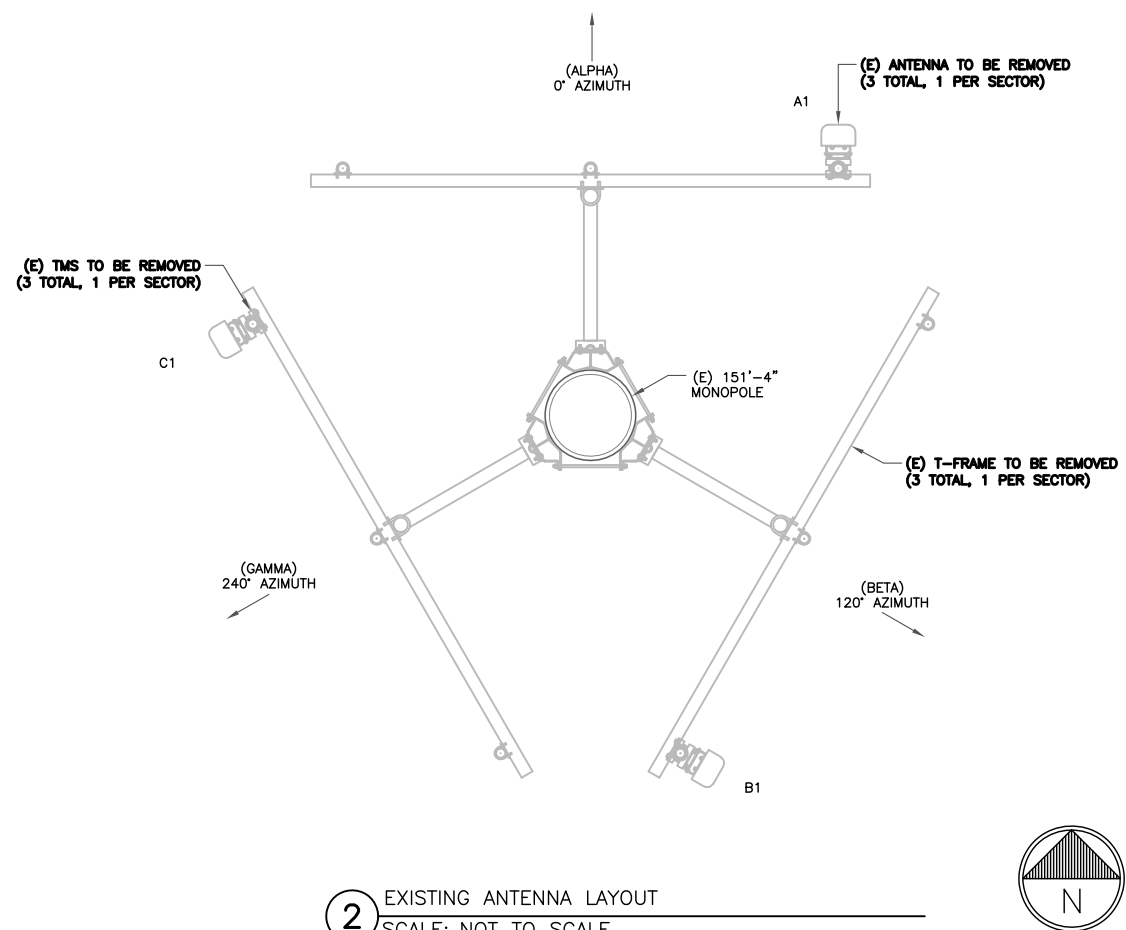
INSTALLER NOTE:
DIRECT TOWER MOUNTED EQUIPMENT MUST NOT TRAP OR INTERFERE W/ CLIMBING PEGS/STEPS AND SAFETY CLIMB.

INSTALLER NOTE:
ALL EXISTING EQUIPMENT & FEEDLINES AT LEVEL 120'-0" TO BE REMOVED.

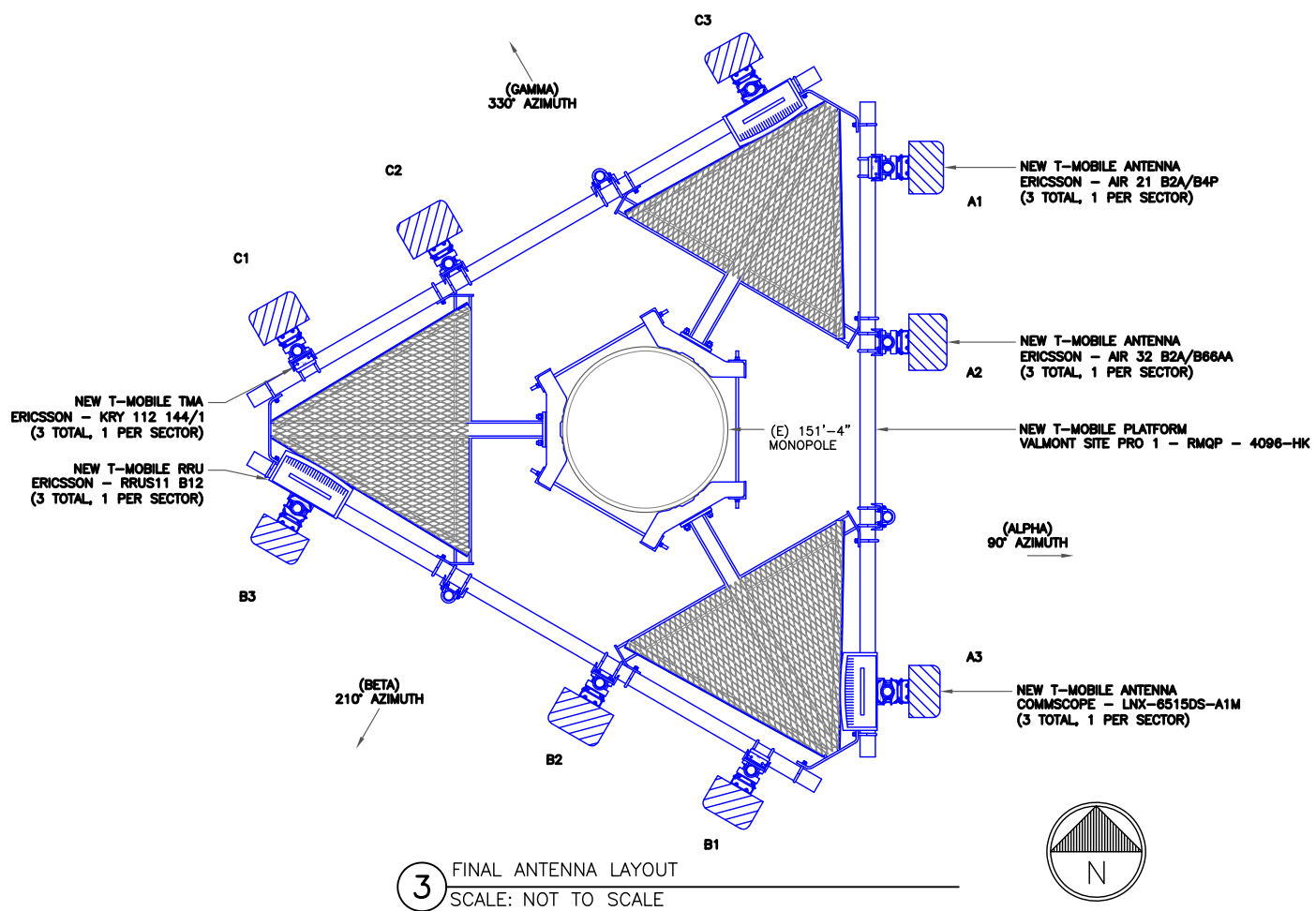
INSTALLER NOTE:
TOWER DOES NOT HAVE CLIMBING FACILITIES - MANLIFT REQUIRED FOR ELEVATED WORK.

NEW T-MOBILE FEEDLINES ROUTED OUTSIDE OF MONOPOLE:
(12) COAX CABLES (1-5/8")
(1) HYBRID CABLE (1-5/8")
(1) HYBRID CABLE (1-1/2")

1 FINAL ELEVATION
SCALE: NOT TO SCALE



2 EXISTING ANTENNA LAYOUT
SCALE: NOT TO SCALE



3 FINAL ANTENNA LAYOUT
SCALE: NOT TO SCALE

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35 GRIFFIN ROAD,
BLOOMFIELD, CT 06002

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

T-MOBILE SITE NUMBER:
CTFF334A

BU #: 841288
BRIDGEPORT NORTH

205 KAEICHELE PLACE
BRIDGEPORT, CT 06606

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| 6 | 11/1/17 | ZTK | CONSTRUCTION | AFJ |

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Andrew Joseph Fandozzi III
BAD806D99024F4

STATE OF CONNECTICUT
ANDREW JOSEPH FANDOZZI
No. 30515
PROFESSIONAL ENGINEER

11/1/2017 9:53:00 PM EDT

Andrew Joseph Fandozzi III, P.E.
Professional Engineer License: #30515
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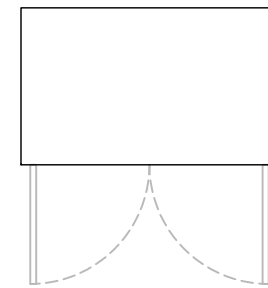
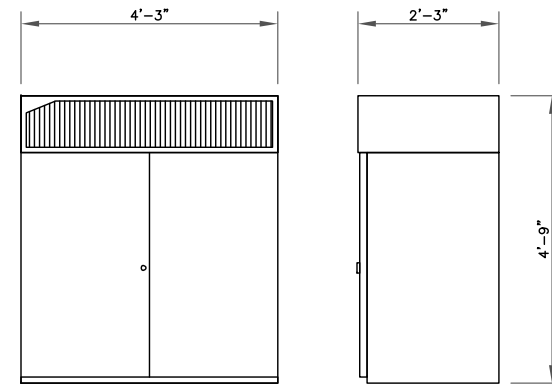
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| ANTENNA SCHEDULE | | | | | | | | | | |
|------------------|------|------------|------------|---------|----------------------|------------------|------------|-------------|------------------------------|---------------|
| SECTOR | POS. | TECHNOLOGY | RAD CENTER | AZIMUTH | ANTENNA MANUFACTURER | ANTENNA MODEL | MECH. TILT | ELECT. TILT | TOWER MOUNTED EQUIPMENT | FEEDLINE TYPE |
| ALPHA | A1 | LTE | 120'-0" | 90° | ERICSSON | AIR 21 B2A/B4P | - | - | (1) ERICSSON - KRY 112 144/1 | COAX |
| ALPHA | A2 | LTE | 120'-0" | 90° | ERICSSON | AIR 32 B2A/B66AA | - | - | - | (2) HYBRID |
| ALPHA | A3 | LTE 700 | 120'-0" | 90° | COMMSCOPE | LNX-6515DS-A1M | - | - | (1) ERICSSON - RRUS11 B12 | COAX |
| BETA | B1 | LTE | 120'-0" | 210° | ERICSSON | AIR 21 B2A/B4P | - | - | (1) ERICSSON - KRY 112 144/1 | COAX |
| BETA | B2 | LTE | 120'-0" | 210° | ERICSSON | AIR 32 B2A/B66AA | - | - | - | (2) HYBRID |
| BETA | B3 | LTE 700 | 120'-0" | 210° | COMMSCOPE | LNX-6515DS-A1M | - | - | (1) ERICSSON - RRUS11 B12 | COAX |
| GAMMA | C1 | LTE | 120'-0" | 330° | ERICSSON | AIR 21 B2A/B4P | - | - | (1) ERICSSON - KRY 112 144/1 | COAX |
| GAMMA | C2 | LTE | 120'-0" | 330° | ERICSSON | AIR 32 B2A/B66AA | - | - | - | (2) HYBRID |
| GAMMA | C3 | LTE 700 | 120'-0" | 330° | COMMSCOPE | LNX-6515DS-A1M | - | - | (1) ERICSSON - RRUS11 B12 | COAX |

| CABLE SCHEDULE | | | |
|----------------------|------------|--------|----------|
| STATUS | CABLE TYPE | SIZE | QUANTITY |
| NEW | COAX | 1-5/8" | 12 |
| NEW | HYBRID | 1-5/8" | 1 |
| NEW | HYBRID | 1-1/2" | 1 |
| - | - | - | - |
| FINAL CABLE QUANTITY | | | 14 |

1 ANTENNA AND CABLE SCHEDULE
SCALE: NOT TO SCALE



EQUIPMENT NOTES:
 HEIGHTxWIDTHxDEPTH: 57.08" x 51.00" x 27.55"
 (1450.0mm x 1300.0mm x 700.0mm)
 APPROX. MAX. WEIGHT: 859 LBS (390 kg)

2 ERICSSON - RBS 6102
SCALE: NOT TO SCALE

T-Mobile
 35 GRIFFIN ROAD,
 BLOOMFIELD, CT 06002

CROWN CASTLE
 1200 MACARTHUR BLVD, SUITE 200
 MAHWAH, NJ 07430

T-MOBILE SITE NUMBER:
CTFF334A

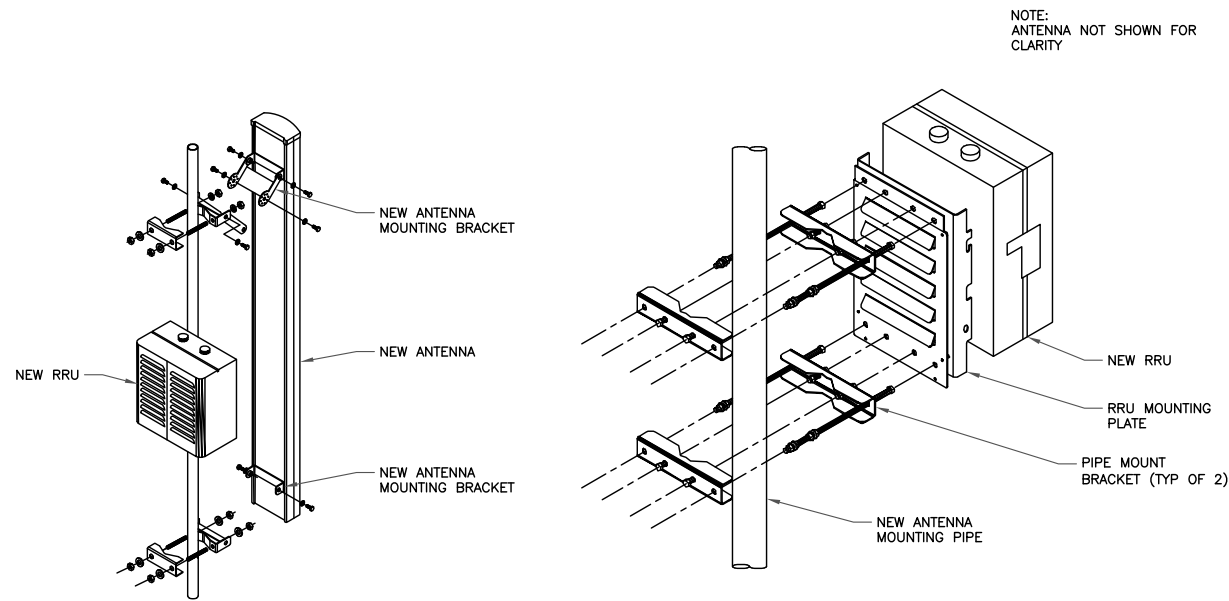
BU #: 841288
BRIDGEPORT NORTH

205 KAEICHELE PLACE
 BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

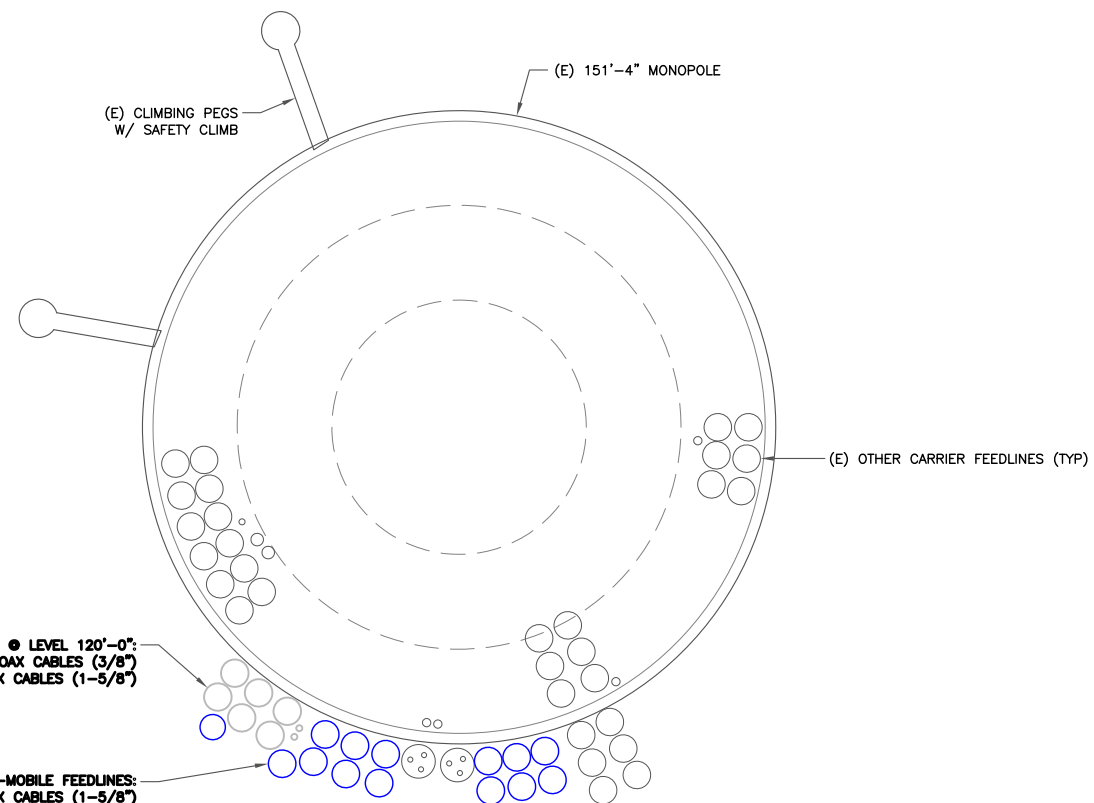
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| 6 | 11/1/17 | ZTK | CONSTRUCTION | AFJ |



NOTE:
 ALL PIPES BRACKETS
 AND MISCELLANEOUS
 HARDWARE TO BE
 GALVANIZED UNLESS
 NOTED OTHERWISE

3 ANTENNA & RRU MOUNTING DETAIL
SCALE: NOT TO SCALE



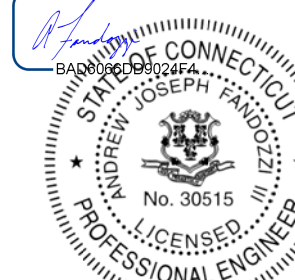
(E) FEEDLINES TO BE REMOVED @ LEVEL 120'-0":
 (2) COAX CABLES (3/8")
 (6) COAX CABLES (1-5/8")

NEW T-MOBILE FEEDLINES:
 (12) COAX CABLES (1-5/8")
 (1) HYBRID CABLE (1-5/8")
 (1) HYBRID CABLE (1-1/2")

4 CABLE ROUTING DETAIL
SCALE: NOT TO SCALE

DocuSigned by:

Andrew Joseph Fandozzi III
 BAD006D9024FA



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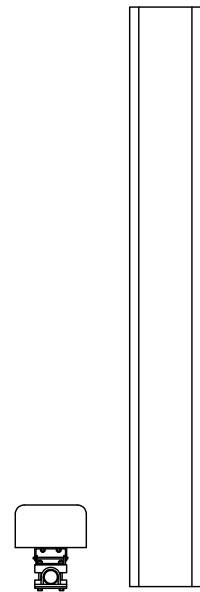
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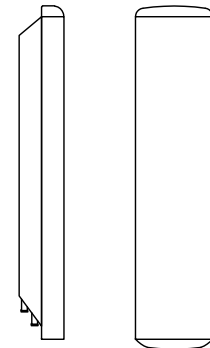
REVISION:

6



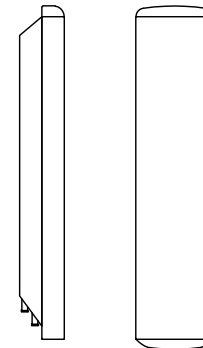
COMMSCOPE – LNX-6515DS-A1M
 WEIGHT (WITHOUT MOUNTING HARDWARE): 43.7 LBS
 SIZE (HxWxD): 96.60x11.90x7.10 IN.
 MOUNTING HARDWARE P/N: DB380-3 & DB5083D
 RATED WIND VELOCITY: 149.8 MPH

1 COMMSCOPE – LNX-6515DS-A1M
 SCALE: NOT TO SCALE



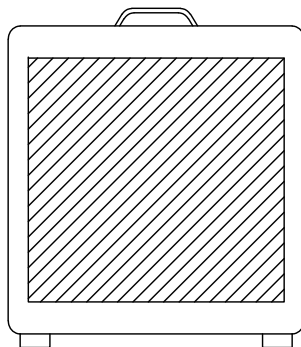
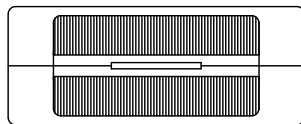
ERICSSON – AIR 21 B2A/B4P
 WEIGHT (WITHOUT MOUNTING HARDWARE): 91.5 LBS
 SIZE (HxWxD): 56.0x12.1x7.87 IN.

2 ERICSSON – AIR 21 B2A/B4P
 SCALE: NOT TO SCALE



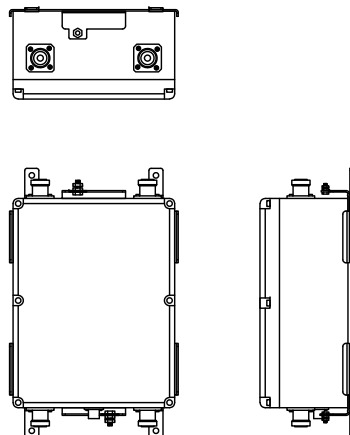
ERICSSON – AIR 32 B2A/B66AA
 WEIGHT (WITHOUT MOUNTING HARDWARE): 132.2 LBS
 SIZE (HxWxD): 56.6x12.9x8.7 IN.
 RATED WIND VELOCITY: 150.0 MPH

3 ERICSSON – AIR 32 B2A/B66AA
 SCALE: NOT TO SCALE



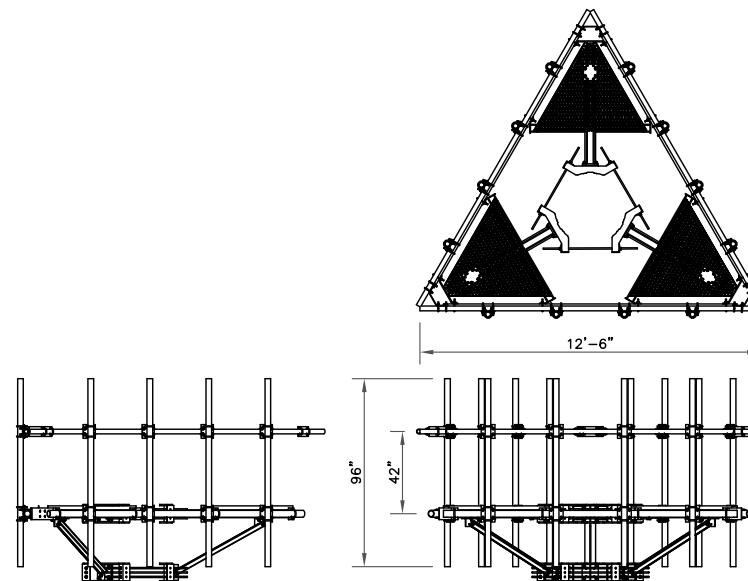
ERICSSON – RRUS 11 B12
 WEIGHT (FULLY EQUIPPED): 50.7 LBS
 SIZE (HxWxD): 19.7x17x7.2 IN.
 OUTPUT POWER: 2x30W
 TYPICAL POWER CONSUMPTION: 0.22kW
 HIGH LOAD POWER CONSUMPTION: 0.38kW

4 ERICSSON – RRUS 11 B12
 SCALE: NOT TO SCALE



ERICSSON – KRY 112 144/1
 WEIGHT: 11.0 LBS
 SIZE (HxWxD): 7.0x6.0x3.0 IN.

5 ERICSSON – KRY 112 144/1
 SCALE: NOT TO SCALE



6 VALMONT SITE PRO 1 – RMQP – 4096-HK
 SCALE: NOT TO SCALE

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 35 GRIFFIN ROAD,
 BLOOMFIELD, CT 06002

CROWN CASTLE
 1200 MACARTHUR BLVD, SUITE 200
 MAHWAH, NJ 07430

T-MOBILE SITE NUMBER:
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BU #: 841288
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EXISTING 151'-4" MONOPOLE

ISSUED FOR:

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| 1 | 4/4/17 | ZTK | CONSTRUCTION | AFJ |
| 2 | 4/7/17 | ZTK | CONSTRUCTION | AFJ |
| 3 | 4/19/17 | ZTK | CONSTRUCTION | AFJ |
| 4 | 4/21/17 | ZTK | CONSTRUCTION | AFJ |
| 5 | 10/19/17 | ZTK | CONSTRUCTION | AFJ |
| 6 | 11/1/17 | ZTK | CONSTRUCTION | AFJ |

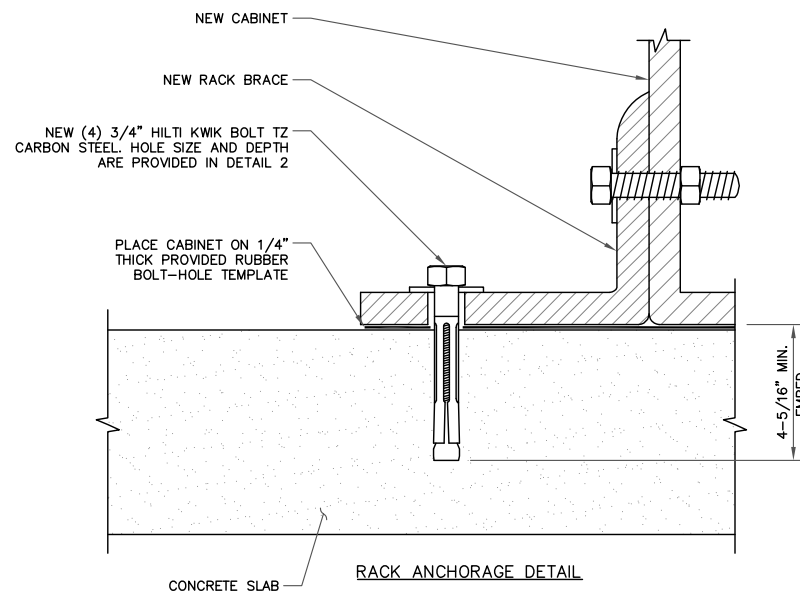
DocuSigned by:

 BAD006D9024F4
 STATE OF CONNECTICUT
 ANDREW JOSEPH FANDOZZI
 No. 30515
 LICENSED PROFESSIONAL ENGINEER
 11/1/2017 9:53:00 PM EDT

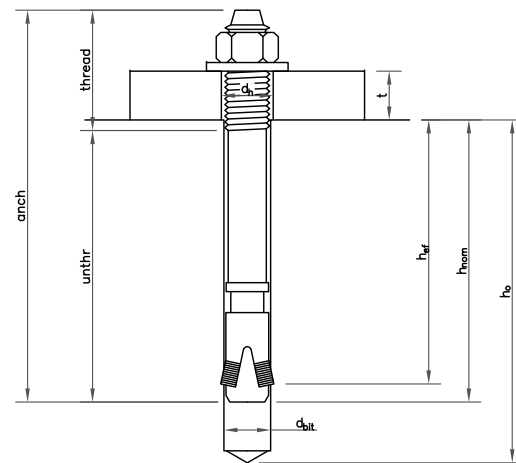
Andrew Joseph Fandozzi III, P.E.
 Professional Engineer License: #30515
 Crown Castle USA, Inc. Certificate of Registration
 #PEC.0001101

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 TO ALTER THIS DOCUMENT.

SHEET NUMBER: **C-5** REVISION: **6**



1 CABINET ANCHOR DETAIL
SCALE: NOT TO SCALE



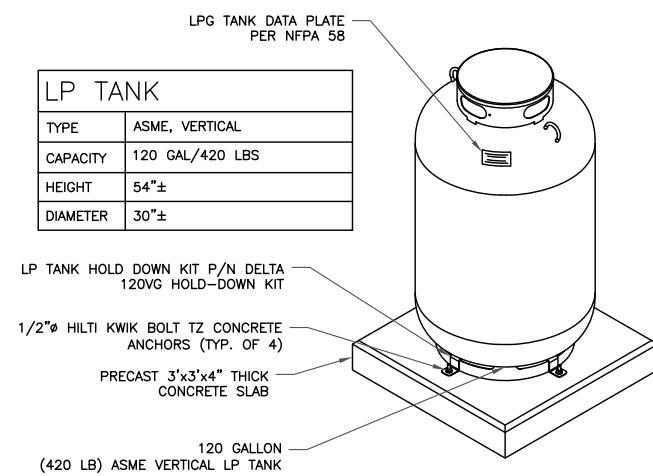
2 HILTI KWIK BOLT SPECIFICATIONS
SCALE: NOT TO SCALE

Mechanical Anchoring Systems
KWIK Bolt TZ Expansion Anchor 3.3.5

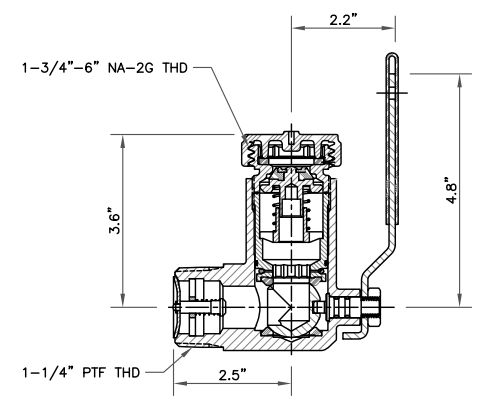
Table 1 - KWIK Bolt TZ specifications

| Setting information | Symbol | Units | Nominal anchor diameter d_a | | | | | | | | | | | | | |
|--|-------------|---------------|-------------------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|----------------|------------|-------------|
| | | | 3/8 | 1/2 | 5/8 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | | | | | | |
| Nominal bit diameter | d_{bit} | in. | 3/8 | 1/2 | 5/8 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | | | | | |
| Minimum nominal embedment | h_{nom} | in. (mm) | 2-5/16 (59) | 2-3/8 (60) | 3-5/8 (91) | 3-9/16 (91) | 4-7/16 (113) | 4-5/16 (110) | 5-9/16 (142) | | | | | | | |
| Effective minimum embedment | h_{ef} | in. (mm) | 2 (51) | 2 (51) | 3-1/4 (83) | 3-1/8 (79) | 4 (102) | 3-3/4 (95) | 4-3/4 (121) | 4-3/4 (121) | 4-3/4 (121) | | | | | |
| Min. hole depth | h_d | in. (mm) | 2-5/8 (67) | 2-5/8 (67) | 4 (102) | 3-3/4 (95) | 4-3/4 (121) | 4-5/8 (117) | 5-3/4 (146) | | | | | | | |
| Min. thickness of fixture ¹ | t_{min} | in. (mm) | 1/8 (3) | 1/8 (3) | n/a | 1/8 (3) | n/a | 1/8 (3) | n/a | | | | | | | |
| Max. thickness of fixture | t_{max} | in. (mm) | 2-1/4 (57) | 4 (101) | 2-3/4 (70) | 5-5/8 (143) | 4-3/4 (121) | 4-5/8 (117) | 3-5/8 (92) | | | | | | | |
| Installation torque | T_{inst} | ft-lb (Nm) | 25 (34) | 40 (54) | 60 (81) | 110 (149) | | | | | | | | | | |
| Minimum fixture hole diameter | d_h | in. (mm) | 7/16 (11.1) | 9/16 (14.3) | 11/16 (17.5) | 13/16 (20.6) | | | | | | | | | | |
| Available anchor lengths | l_{act} | in. (mm) | 3 (76) | 3-3/4 (95) | 5 (127) | 3-3/4 (95) | 4-1/2 (114) | 5-1/2 (140) | 7 (178) | 4-3/4 (121) | 6 (152) | 8-1/2 (216) | 10 (254) | 5-1/2 (140) | 8 (203) | 10 (254) |
| Threaded length including dog point | l_{thead} | in. (mm) | 7/8 (22) | 1-5/8 (41) | 2-7/8 (73) | 1-5/8 (41) | 2-3/8 (60) | 3-3/8 (86) | 4-7/8 (125) | 1-1/2 (38) | 2-3/4 (70) | 5-1/4 (133) | 6-3/4 (171) | 1-1/2 (38) | 4 (102) | 6 (152) |
| Unthreaded length | l_{unth} | in. (mm) | 2-1/8 (54) | 2-1/8 (54) | 2-1/8 (54) | 3-1/4 (83) | 4 (102) | 4 (102) | 4 (102) | | | | | | | |

¹ Minimum thickness of fixture is a concern only when the anchor is installed at the minimum nominal embedment. When KWIK Bolt TZ anchors are installed at this embedment, the anchor threading ends near the surface of the concrete. If the fixture is sufficiently thin, it could be possible to run the nut to the bottom of the threading during application of the installation torque. If fixtures are thin, it is recommended that embedment be increased accordingly.

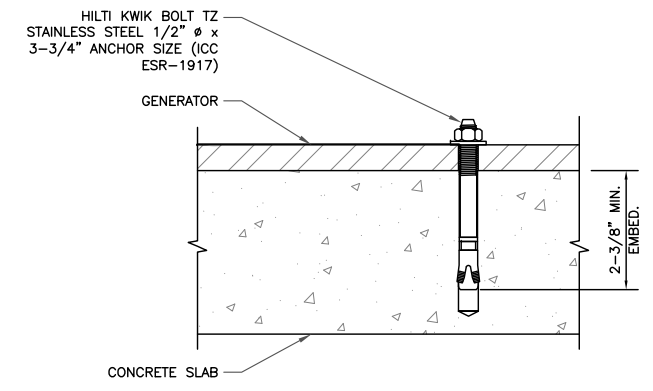


3 LP TANK DETAILS
SCALE: NOT TO SCALE



- REGO - 7502 1-1/4" M-NPT FILLER VALVE W/ MANUAL SHUTOFF
- MATERIALS:
 SHUTOFF LEVER.....STEEL
 SHUTOFF BALL.....STAINLESS STEEL
 SHUTOFF PACKING.....TEFLON
 UPPER BODY.....BRASS
 LOWER BODY.....BRASS
 SPRINGS.....STAINLESS STEEL
 WASHER AND SEAT DISC.....SYNTHETIC RUBBER
 CAP.....MOLDED PLASTIC

4 REGO - 7502 1-1/4" M-NPT FILLER VALVE W/ MANUAL SHUTOFF
SCALE: NOT TO SCALE



5 ANCHORAGE DETAIL
SCALE: NOT TO SCALE



T-MOBILE SITE NUMBER:
CTFF334A

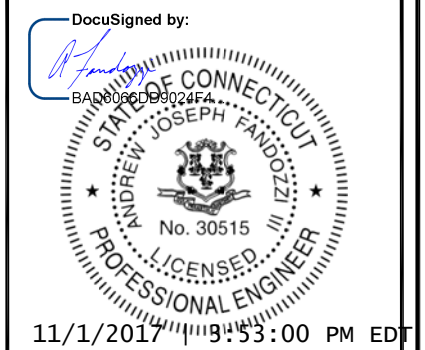
BU #: 841288
BRIDGEPORT NORTH

205 KAEICHELE PLACE
BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

ISSUED FOR:

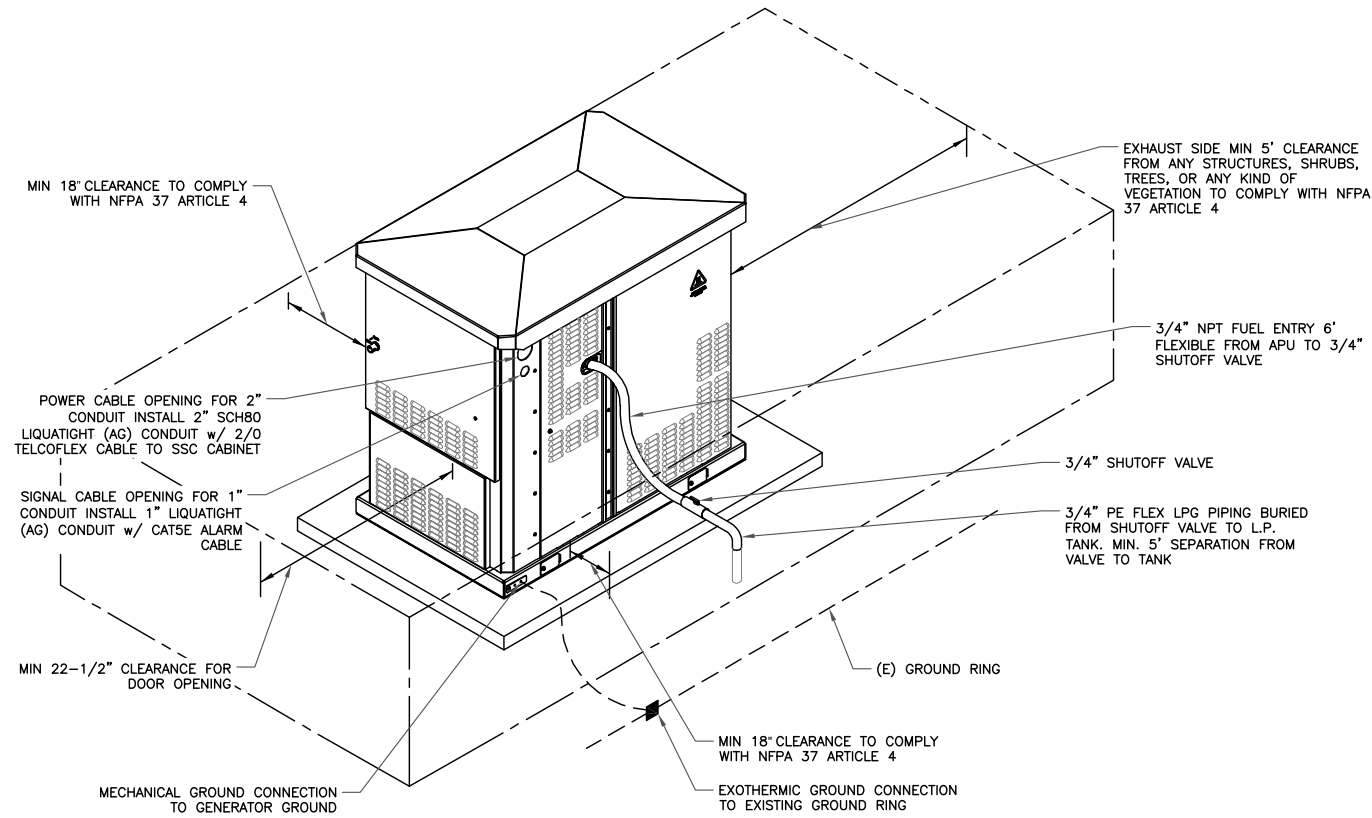
| REV | DATE | DRWN | DESCRIPTION | DES./QA |
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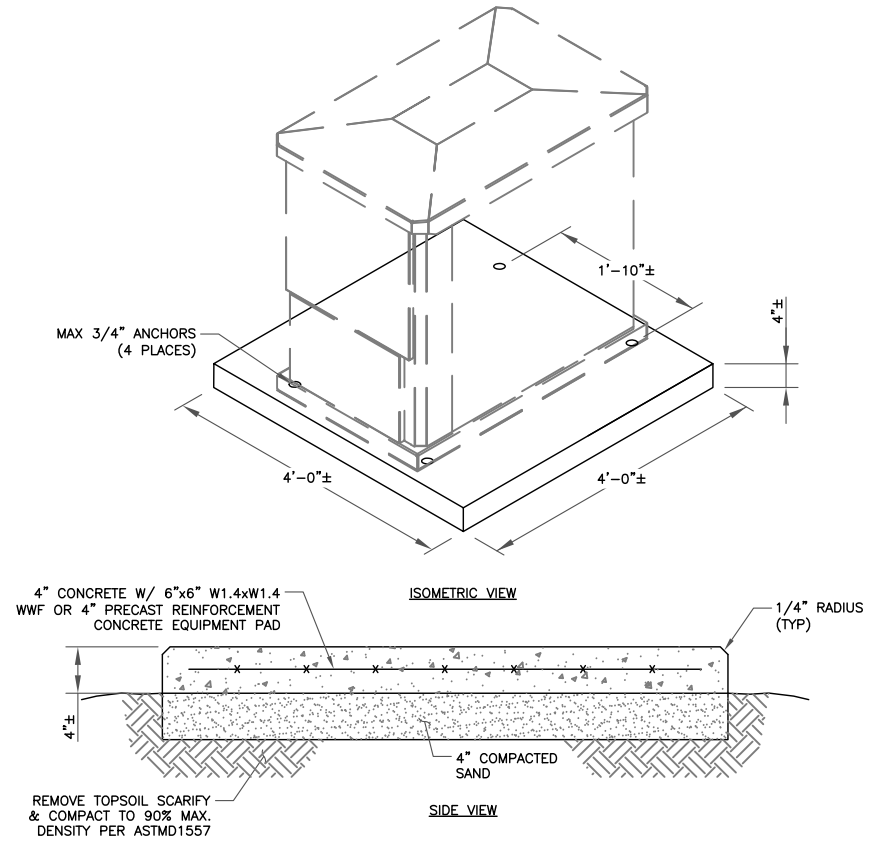
Andrew Joseph Fandozzi III, P.E.
 Professional Engineer License: #30515
 Crown Castle USA, Inc. Certificate of Registration #PEC.0001101

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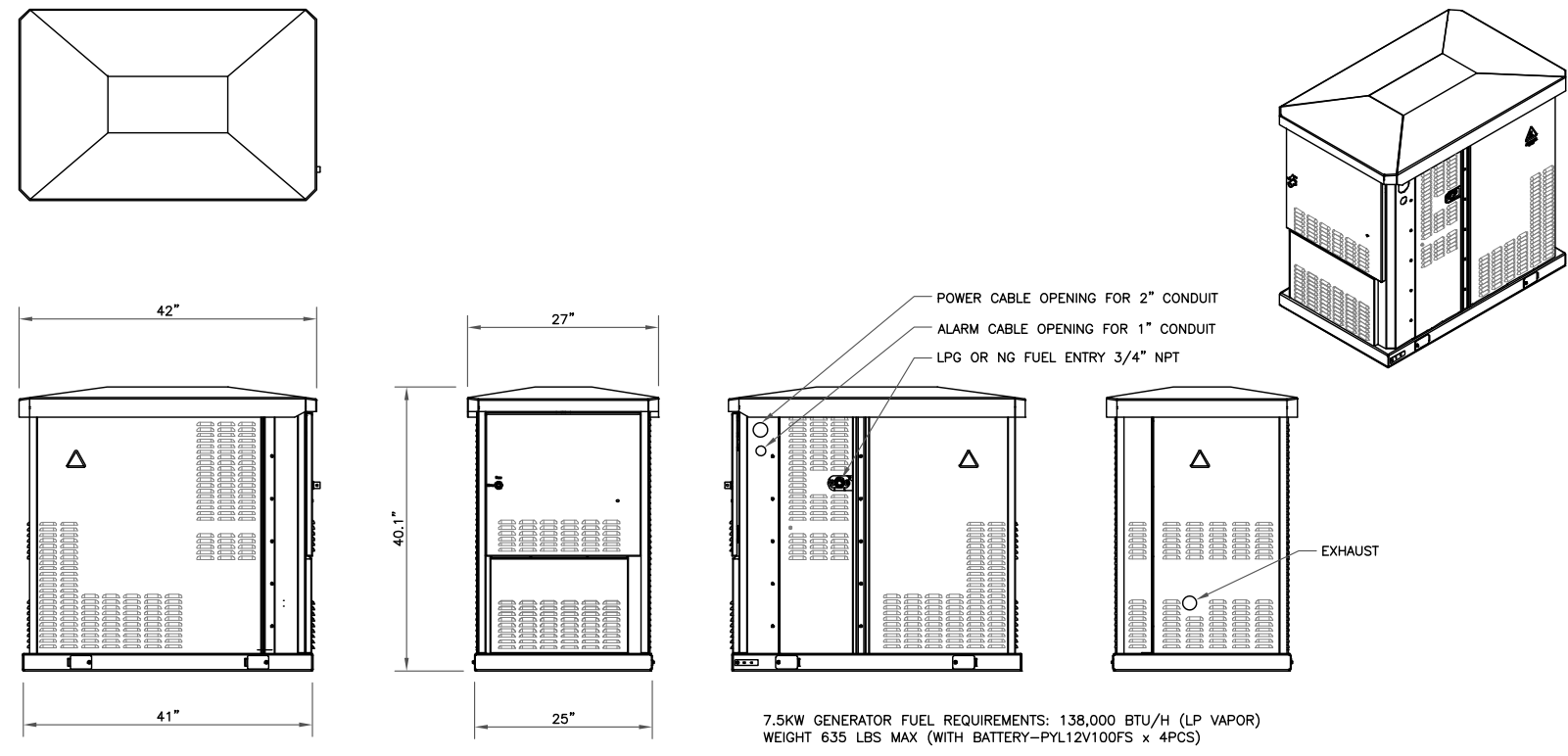
SHEET NUMBER: **C-6** REVISION: **6**



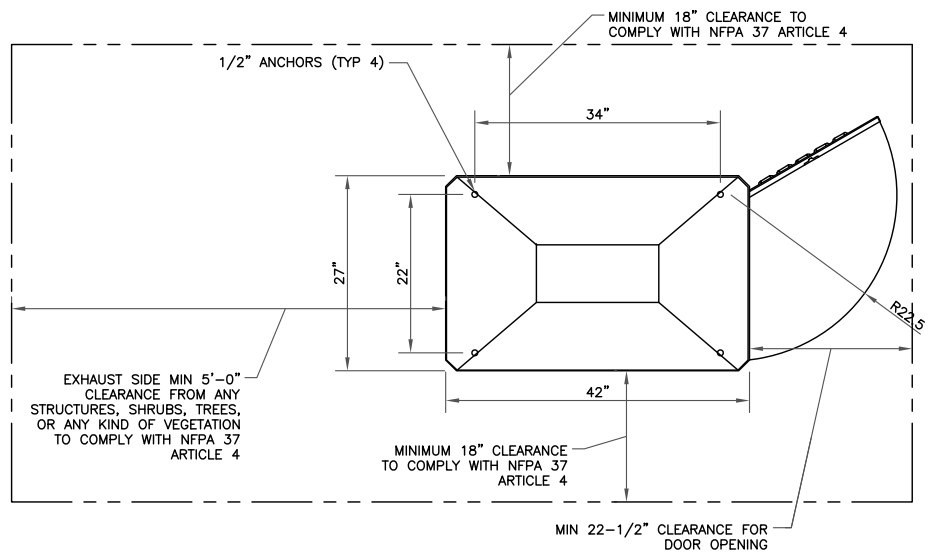
1 UTILITY ENTRY DETAIL
SCALE: NOT TO SCALE



2 PRECAST GENERATOR SLAB DETAIL
SCALE: NOT TO SCALE



3 APU DC GENSET 7.5 KW (ESOG150-PCAXX)
SCALE: NOT TO SCALE



T-Mobile
35 GRIFFIN ROAD,
BLOOMFIELD, CT 06002

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

T-MOBILE SITE NUMBER:
CTFF334A

BU #: 841288
BRIDGEPORT NORTH

205 KAECHLE PLACE
BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

ISSUED FOR:

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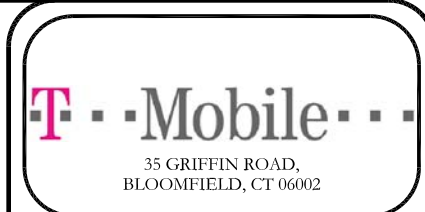
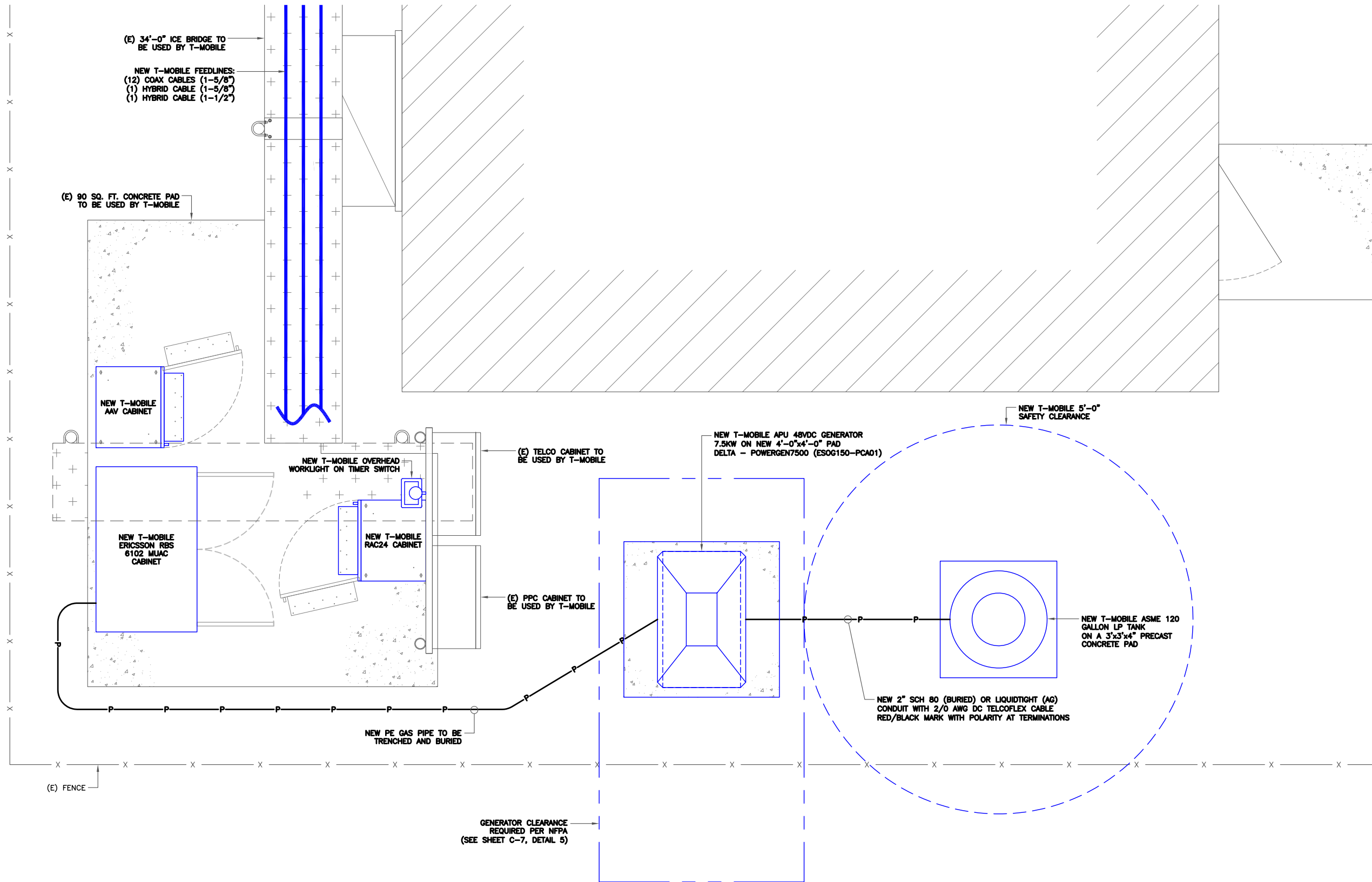
DocuSigned by:
Andrew Joseph Fandozzi
BAD0665D9024F4

11/1/2017 3:53:00 PM EDT

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Professional Engineer License: #30515
Crown Castle USA, Inc. Certificate of Registration
#PEC.0001101

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SHEET NUMBER: **C-7** REVISION: **6**



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CTFF334A

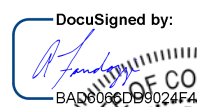
BU #: 841288
BRIDGEPORT NORTH

205 KAEICHELE PLACE
 BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

ISSUED FOR:

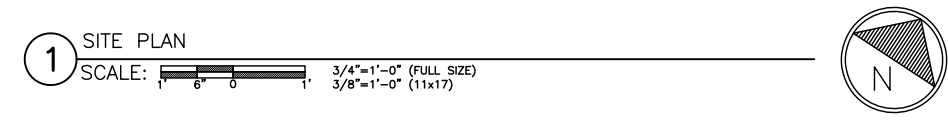
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DocuSigned by:

 ANDREW JOSEPH FANDOZZI III
 No. 30515
 PROFESSIONAL ENGINEER

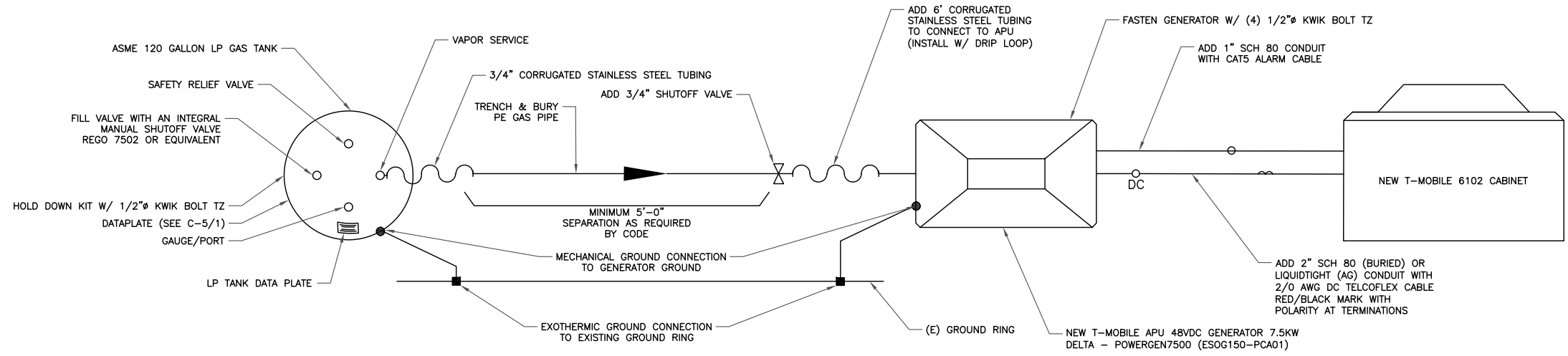
11/1/2017 9:53:00 PM EDT

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 Professional Engineer License: #30515
 Crown Castle USA, Inc. Certificate of Registration #PEC.0001101

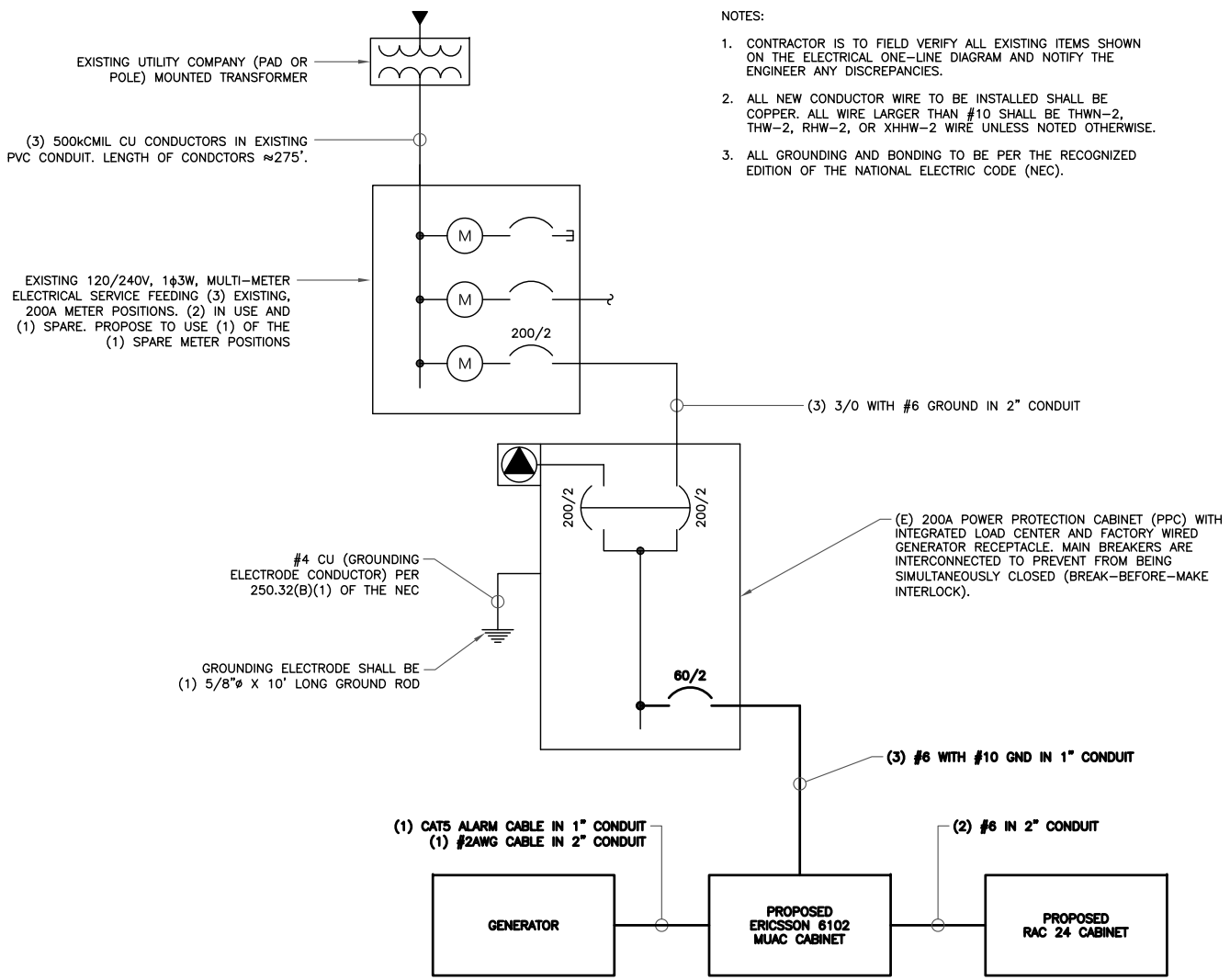
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SHEET NUMBER: **E-1** REVISION: **6**



1 ONE-LINE DIAGRAM
SCALE: NOT TO SCALE



2 ONE-LINE DIAGRAM
SCALE: NOT TO SCALE

PANEL A

VOLTAGE/PHASE: 120/240V, 1-PHASE, 3-WIRE
MAIN: 200 AMP MAIN BREAKER

| DESCRIPTION | LOAD (VA) | C or NC | C/B | C/R No. | LOAD (VA) | | C/R No. | C/B | C or NC | LOAD (VA) | DESCRIPTION |
|---------------------------------------|-----------|---------|-------|---------|-----------|---------|---------|------|---------|-----------|----------------------------|
| | | | | | A-PHASE | B-PHASE | | | | | |
| SURGE ARRESTOR | 0 | NC | 60/2 | 1 | 435 | | 2 | 20 | NC | 435 | GFI RECEPTACLE/FLOOD LIGHT |
| | 0 | NC | | 3 | 0 | 4 | | | | | SPACE |
| T-MOBILE EQUIPMENT CABINET (RBS 6102) | 9600 | C | 100/2 | 5 | 9600 | | 6 | | | | SPACE |
| | 9600 | C | | 7 | 9600 | 8 | | | | | SPACE |
| SPACE | | | | 9 | 0 | | 10 | | | | SPACE |
| SPACE | | | | 11 | 0 | | 12 | | | | SPACE |
| SPACE | | | | 13 | 0 | | 14 | | | | SPACE |
| SPACE | | | | 15 | 0 | | 16 | | | | SPACE |
| SPACE | | | | 17 | 0 | | 18 | | | | SPACE |
| SPACE | | | | 19 | 0 | | 20 | | | | SPACE |
| SPACE | | | | 21 | 0 | | 22 | | | | SPACE |
| SPACE | | | | 23 | 0 | | 24 | 30/2 | C | | AAV |
| BASE LOAD (VA) = | | | | | 10035 | 9600 | | | | | |
| 25% OF CONTINUOUS LOAD (VA) = | | | | | 2400 | 2400 | | | | | |
| TOTAL LOAD (VA) = | | | | | 12435 | 12000 | | | | | |
| TOTAL LOAD (A) = | | | | | 104 | 100 | | | | | |

C DESIGNATION IDENTIFIES CONTINUOUS LOADS AND MOTOR LOADS AS REQUIRED BY SECTIONS 230.42 AND 430.24 OF THE NEC

3 ELECTRICAL PANEL
SCALE: NOT TO SCALE

T-Mobile
35 GRIFFIN ROAD,
BLOOMFIELD, CT 06002

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

T-MOBILE SITE NUMBER:
CTFF334A

BU #: 841288
BRIDGEPORT NORTH

205 KAEICHELE PLACE
BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

ISSUED FOR:

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| 6 | 11/1/17 | ZTK | CONSTRUCTION | AFJ |

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Andrew Joseph Fandozzi III
ANDREW JOSEPH FANDOZZI III
No. 30515
PROFESSIONAL ENGINEER

11/1/2017 9:53:00 PM EDT

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Professional Engineer License: #30515
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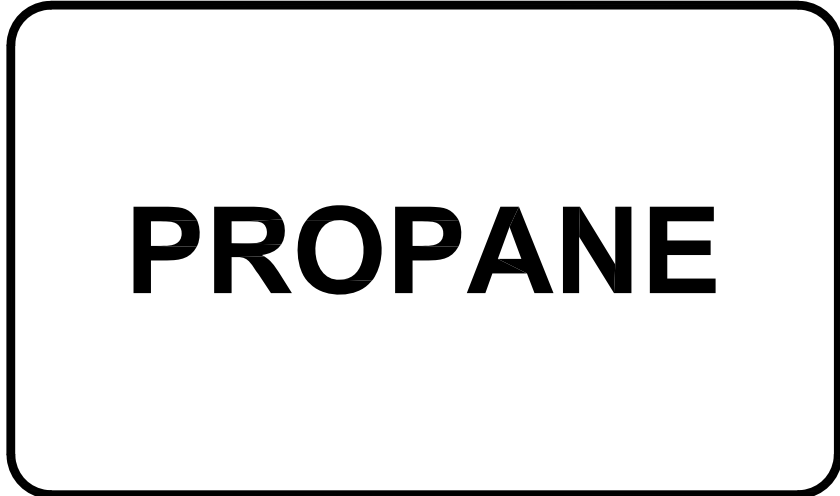
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SHEET NUMBER: **E-2** REVISION: **6**

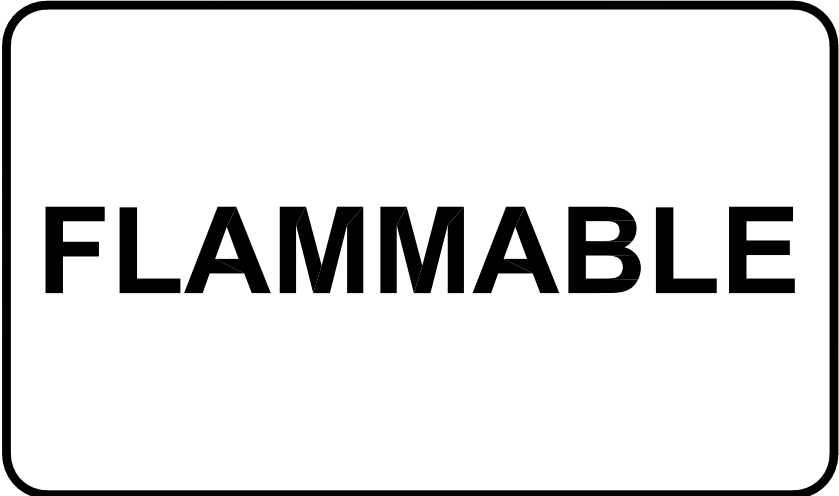
SIGNAGE REQUIREMENTS:

1. STORAGE CONTAINER MUST HAVE A DATAPLATE. (PROVIDED BY TANK MANUFACTURER DURING TANK FABRICATION)
NFPA 58:5.2.8.3
2. STORAGE CONTAINER MUST BE MARKED DESCRIBING THE CONTENTS (PROPANE OR LIQUEFIED PETROLEUM GAS) AND A STATEMENT OF THE HAZARD (FLAMMABLE).
NFPA 1:60.1.13 & IFC:2703.5
3. STORAGE CONTAINER MUST BE MARKED WITH HAZMAT ID. (CERTAIN ENTRANCES TO STORAGE OR DISPENSING AREAS MAY ALSO REQUIRE HAZMAT ID MARKING)
NFPA 1:60.1.13, NFPA 704:1.3 & IFC:2703.5
4. NO SMOKING SIGNS MUST BE POSTED IN AREAS OR SITES WHERE FLAMMABLE GASES ARE USED OR STORED. NO SMOKING OR OPEN FLAMES WITHIN 25 FT. OF POINT OF TRANSFER.
NFPA 1:60.1.13, IFC:3807.2, IFC:2703.7, & NFPA 58:7.2.3.2(B)
5. THE MAXIMUM PERMITTED PERCENTAGE (%) OF TANK CAPACITY MUST BE MARKED EITHER ON THE DATAPLATE OR ADJACENT TO THE FIXED MAXIMUM LIQUID LEVEL GAUGE.
NFPA 58:5.7.5.4

1 SIGNAGE REQUIREMENTS
SCALE: NOT TO SCALE



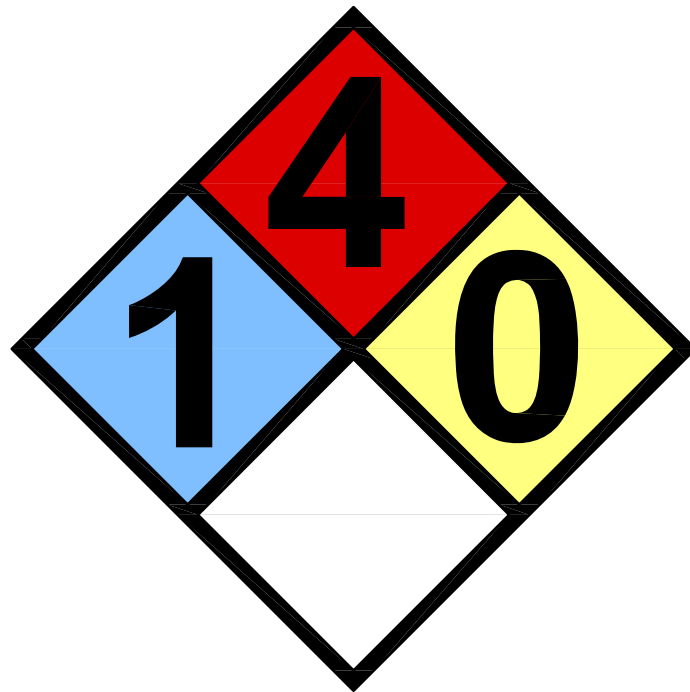
2 PROPANE SIGN
SCALE: NOT TO SCALE



3 FLAMMABLE SIGN
SCALE: NOT TO SCALE



4 LIQUID PETROLEUM GAS
SCALE: NOT TO SCALE



5 HAZARD LEVEL INDICATOR SIGN
SCALE: NOT TO SCALE



6 NO SMOKING SIGN
SCALE: NOT TO SCALE

T-Mobile
35 GRIFFIN ROAD,
BLOOMFIELD, CT 06002

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

T-MOBILE SITE NUMBER:
CTFF334A

BU #: **841288**
BRIDGEPORT NORTH

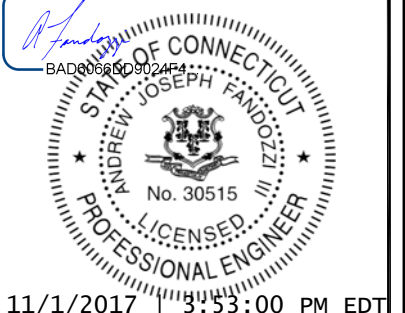
205 KAECHLE PLACE
BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

ISSUED FOR:

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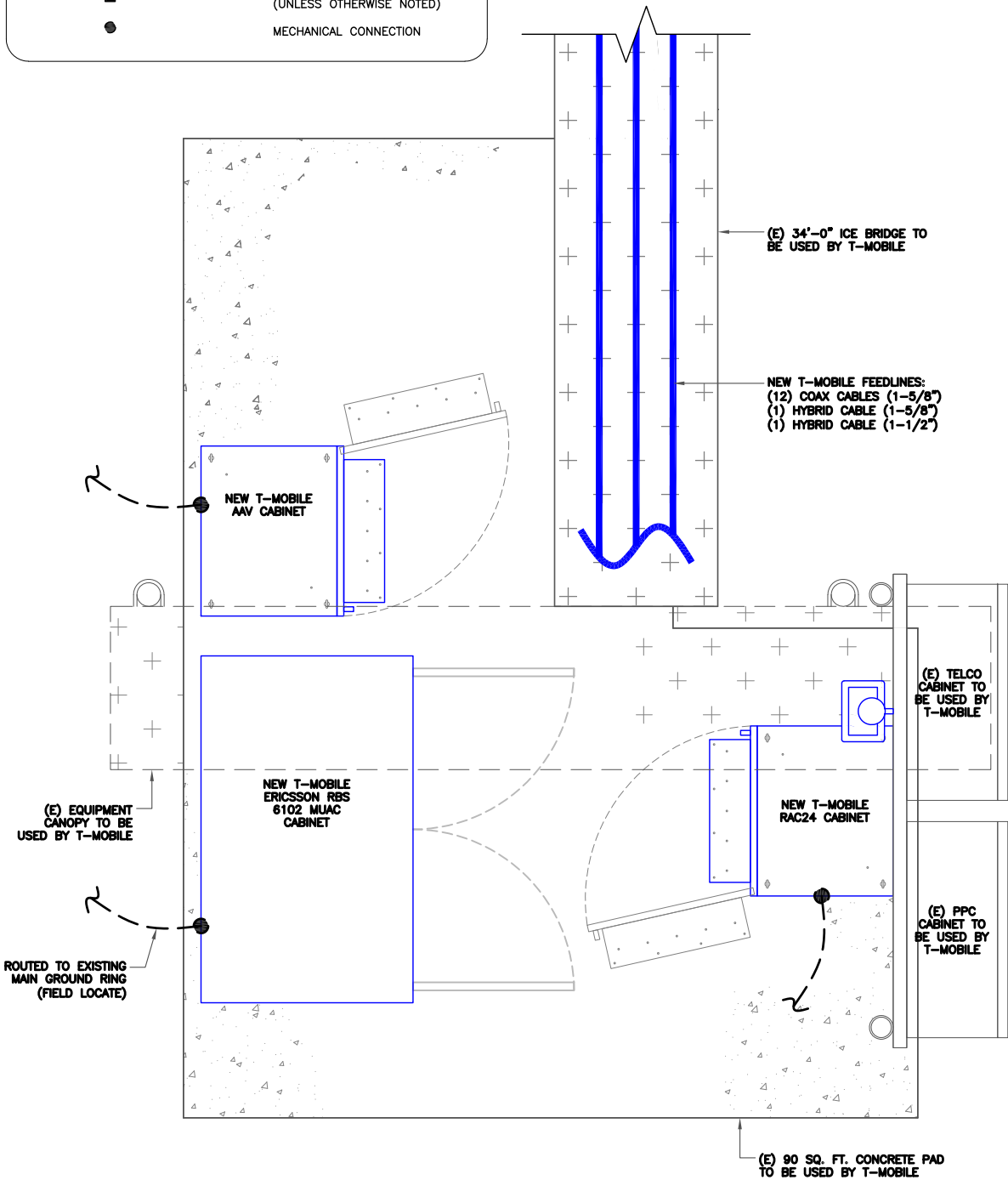
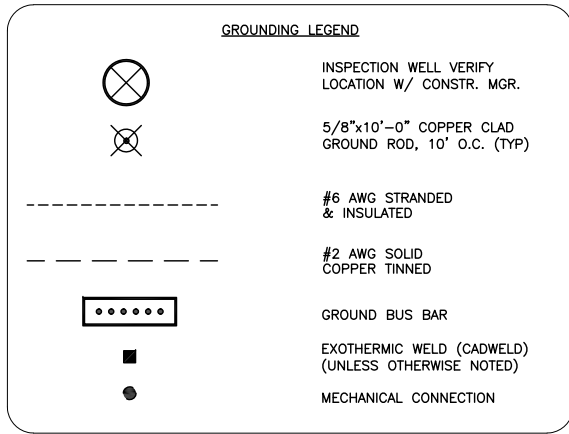
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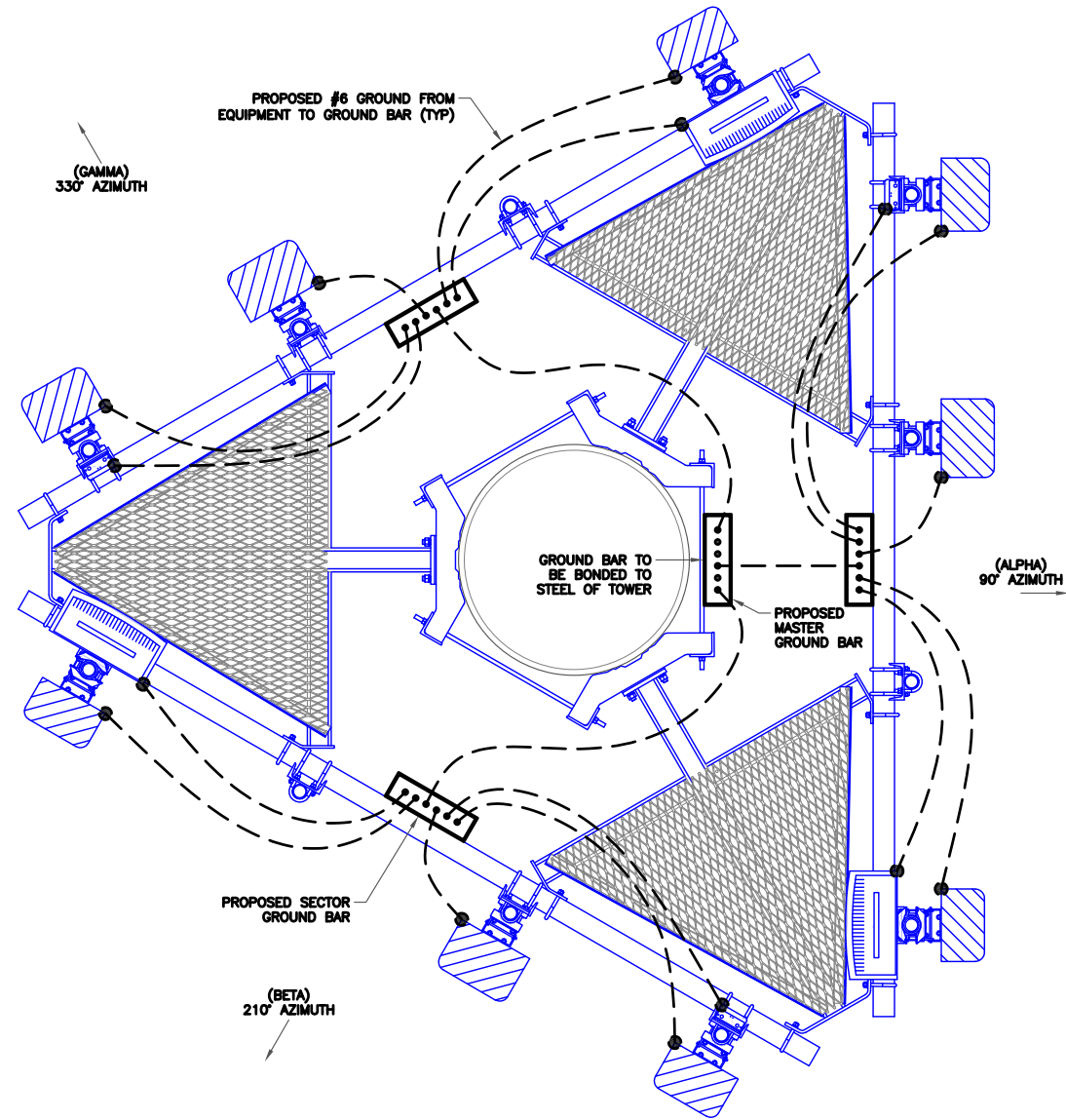
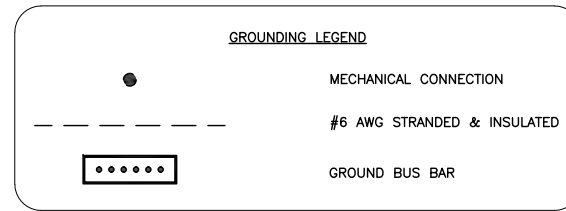
Andrew Joseph Fandozzi III, P.E.
Professional Engineer License: #30515
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SHEET NUMBER: **E-3** REVISION: **6**



1 EQUIPMENT GROUNDING PLAN
 SCALE: 1"=1'-0" (FULL SIZE)
 1/2"=1'-0" (11x17)



2 ANTENNA GROUNDING PLAN
 SCALE: NOT TO SCALE



T-Mobile
 35 GRIFFIN ROAD,
 BLOOMFIELD, CT 06002

CROWN CASTLE
 1200 MACARTHUR BLVD, SUITE 200
 MAHWAH, NJ 07430

T-MOBILE SITE NUMBER:
CTFF334A

BU #: 841288
BRIDGEPORT NORTH

205 KAECEHELE PLACE
 BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

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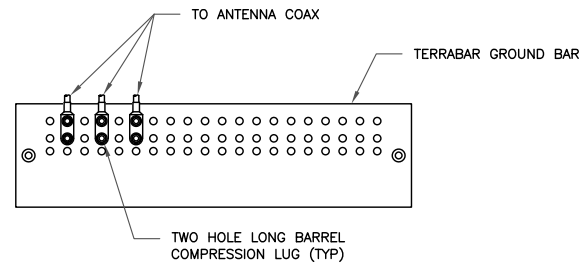


11/1/2017 9:53:00 PM EDT

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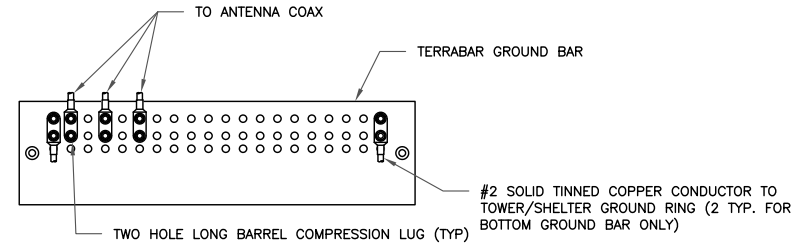
SHEET NUMBER: **G-1** REVISION: **6**



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 TOWER STEEL.

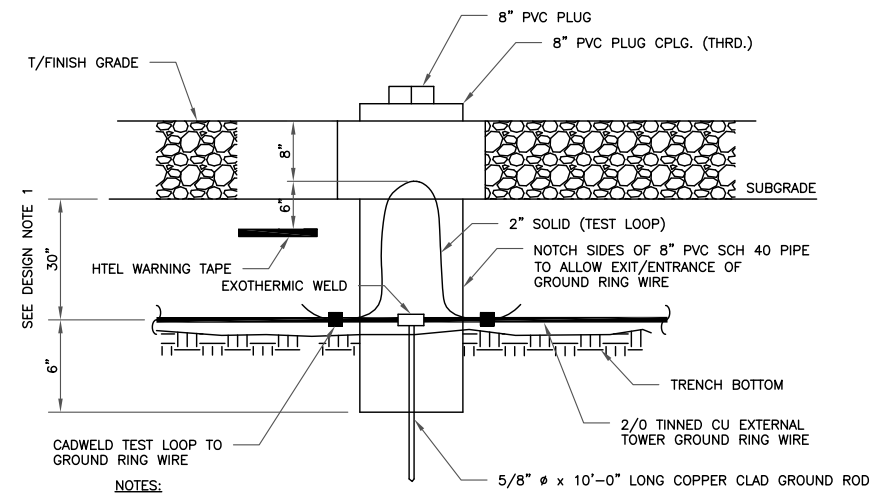
1 ANTENNA GROUND BAR DETAIL
SCALE: NOT TO SCALE



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. INSTALL GROUND BARS AT 75 FT. INTERVAL MAXIMUM.
4. GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

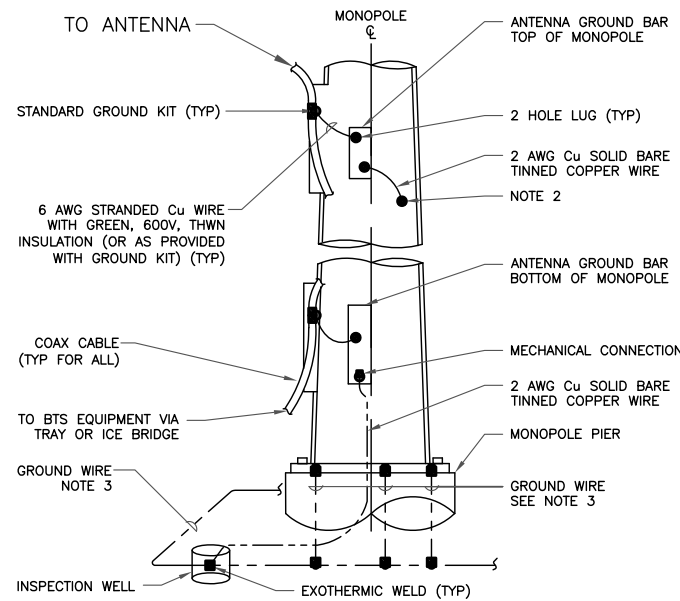
2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.
2. GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

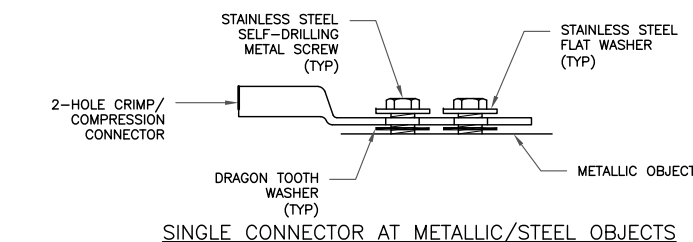
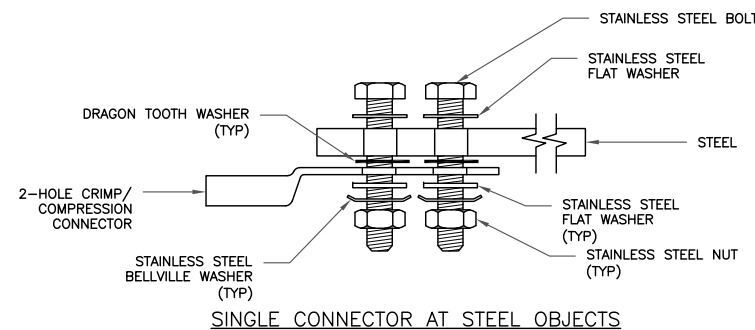
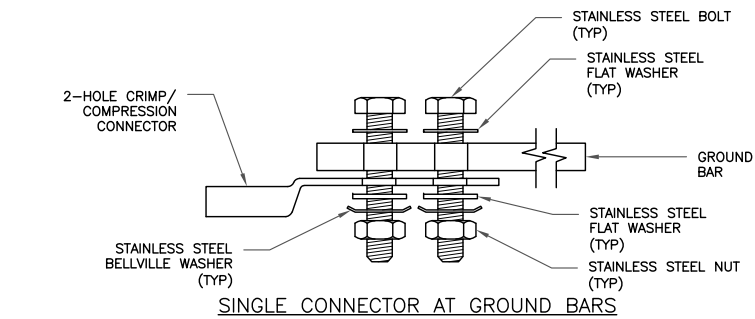
3 INSPECTION PORT DETAIL
SCALE: NOT TO SCALE



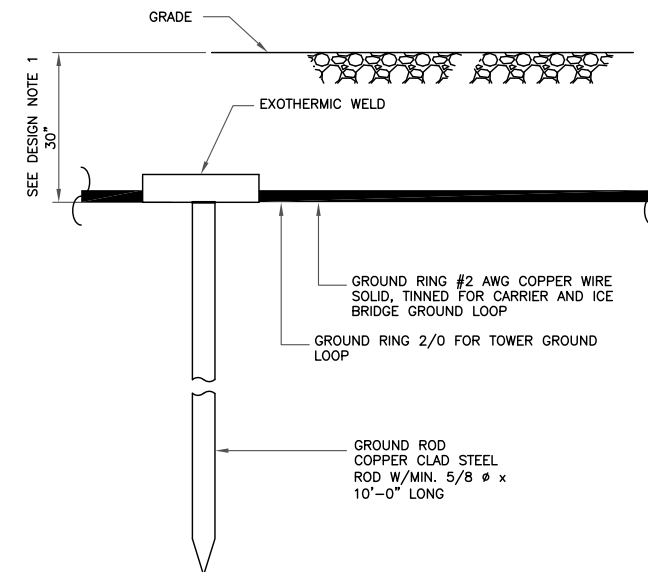
NOTES:

1. NUMBER OF GROUND BARS MAY VARY DEPENDING ON THE TYPE OF MONOPOLE, ANTENNA LOCATION AND CONNECTION ORIENTATION. COAXIAL CABLES EXCEEDING 200 FEET IN/ON THE POLE SHALL HAVE GROUND KITS AT THE MIDPOINT. PROVIDE AS REQUIRED.
2. ONLY MECHANICAL CONNECTIONS ARE ALLOWED TO BE MADE TO CROWN CASTLE TOWERS. ALL MECHANICAL CONNECTIONS SHALL BE TREATED WITH AN ANTI-OXIDANT COATING.
3. ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF ANSI/TIA 222. FOR TOWERS BEING BUILT TO REV G OF THE STANDARD, THE WIRE SIZE OF THE BURIED GROUND RING AND CONNECTIONS BETWEEN THE TOWER AND THE BURIED GROUND RING SHALL BE 2/0 AWG. STRANDED IN ADDITION, THE MINIMUM LENGTH OF THE GROUND RODS SHALL BE INCREASED FROM 8 FEET TO 10 FEET.

4 TYPICAL ANTENNA CABLE GROUNDING
SCALE: NOT TO SCALE



5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.
2. GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

6 GROUND ROD DETAIL
SCALE: NOT TO SCALE



T-MOBILE SITE NUMBER:
CTFF334A

BU #: 841288
BRIDGEPORT NORTH

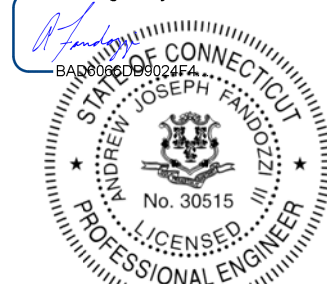
205 KAEICHELE PLACE
BRIDGEPORT, CT 06606

EXISTING 151'-4" MONOPOLE

ISSUED FOR:

| REV | DATE | DRWN | DESCRIPTION | DES./QA |
|-----|----------|------|--------------|---------|
| A | 2/27/17 | ZTK | PRELIMINARY | LR |
| 0 | 3/7/17 | ZTK | CONSTRUCTION | AFJ |
| 1 | 4/4/17 | ZTK | CONSTRUCTION | AFJ |
| 2 | 4/7/17 | ZTK | CONSTRUCTION | AFJ |
| 3 | 4/19/17 | ZTK | CONSTRUCTION | AFJ |
| 4 | 4/21/17 | ZTK | CONSTRUCTION | AFJ |
| 5 | 10/19/17 | ZTK | CONSTRUCTION | AFJ |
| 6 | 11/1/17 | ZTK | CONSTRUCTION | AFJ |

DocuSigned by:

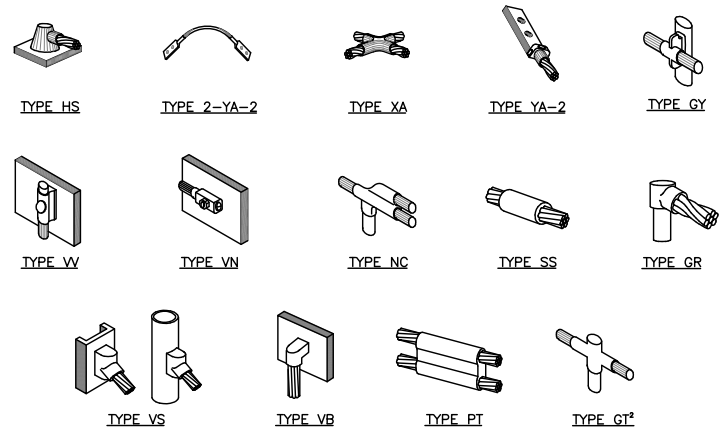


11/1/2017 9:53:00 PM EDT

Andrew Joseph Fandozzi III, P.E.
Professional Engineer License: #30515
Crown Castle USA, Inc. Certificate of Registration
#PEC.0001101

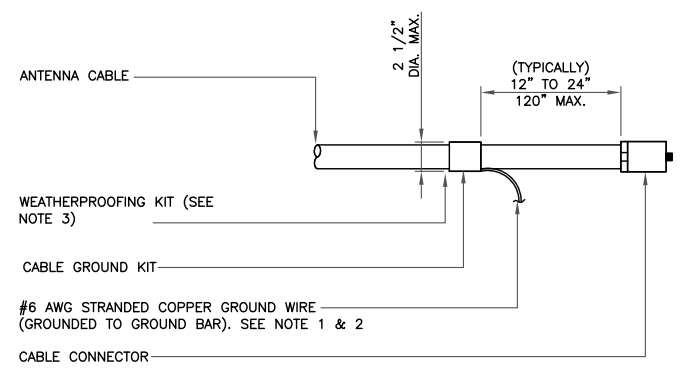
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: **G-2** REVISION: **6**



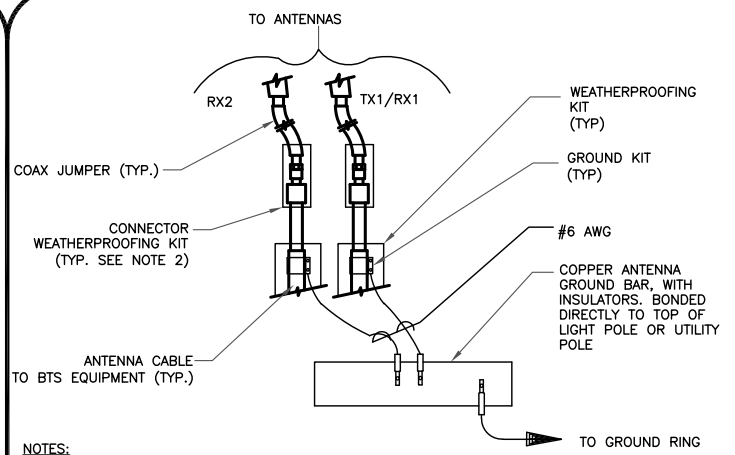
NOTE:
 1. ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.
 2. MOLD TYPE ONLY TO BE USED BELOW GRADE WHEN CONNECTING GROUND RING TO GROUND ROD.

1 CADWELD GROUNDING CONNECTIONS
 SCALE: NOT TO SCALE



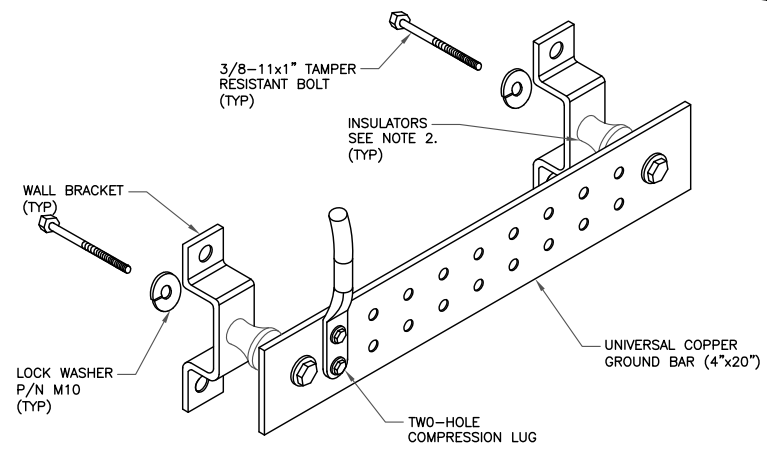
NOTES:
 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
 2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
 3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

3 CABLE GROUND KIT CONNECTION
 SCALE: NOT TO SCALE



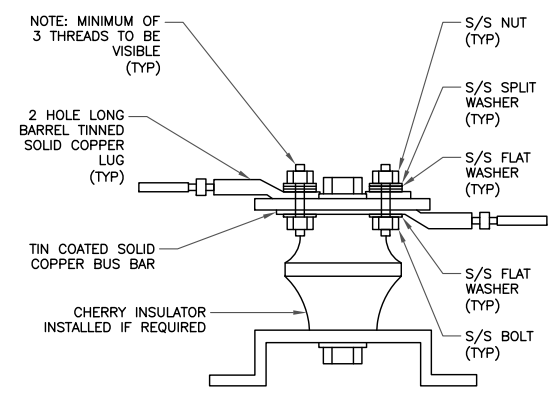
NOTES:
 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
 2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

4 GROUND CABLE CONNECTION
 SCALE: NOT TO SCALE



NOTES:
 1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE 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.

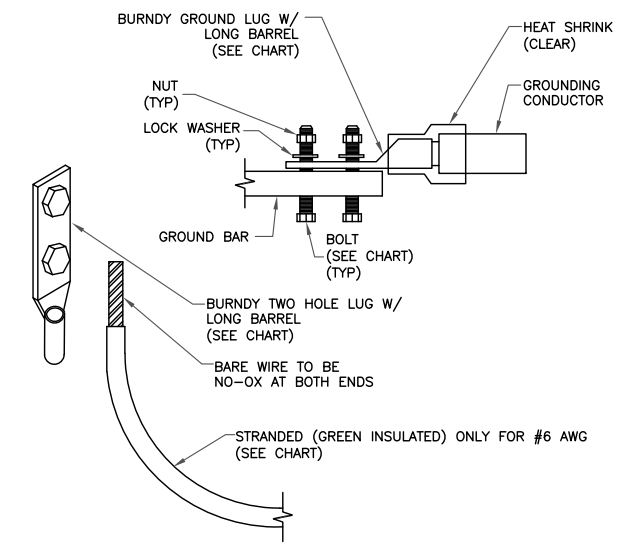
6 GROUND BAR DETAIL
 SCALE: NOT TO SCALE



NOTE: MINIMUM OF 3 THREADS TO BE VISIBLE (TYP)
 S/S NUT (TYP)
 S/S SPLIT WASHER (TYP)
 S/S FLAT WASHER (TYP)
 S/S FLAT WASHER (TYP)
 S/S FLAT WASHER (TYP)
 S/S BOLT (TYP)
 2 HOLE LONG BARREL TINNED SOLID COPPER LUG (TYP)
 TIN COATED SOLID COPPER BUS BAR
 CHERRY INSULATOR INSTALLED IF REQUIRED

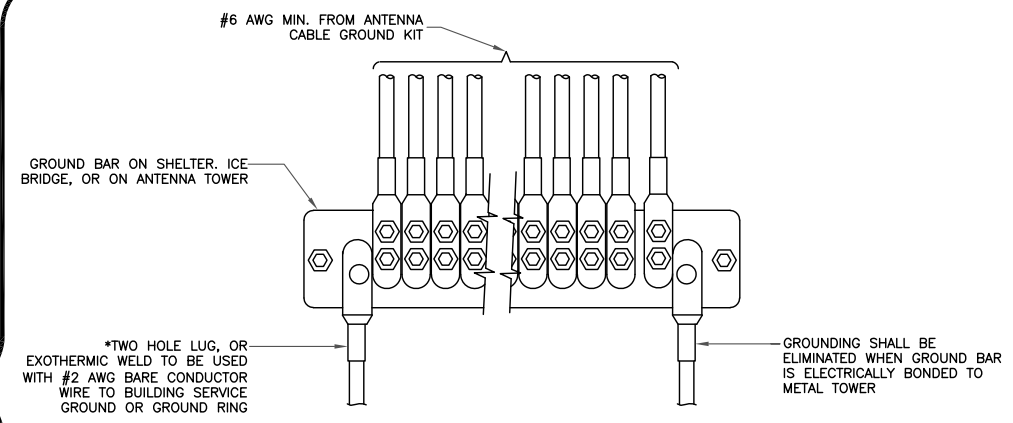
7 LUG DETAIL
 SCALE: NOT TO SCALE

| WIRE SIZE | BURNDY LUG | BOLT SIZE |
|------------------------|------------|-----------------------|
| #6 AWG GREEN INSULATED | YA6C-2TC38 | 3/8" - 16 NC S 2 BOLT |
| #2 AWG SOLID TINNED | YA3C-2TC38 | 3/8" - 16 NC S 2 BOLT |
| #2 AWG STRANDED | YA2C-2TC38 | 3/8" - 16 NC S 2 BOLT |
| #2/0 AWG STRANDED | YA26-2TC38 | 3/8" - 16 NC S 2 BOLT |
| #4/0 AWG STRANDED | YA28-2N | 1/2" - 16 NC S 2 BOLT |



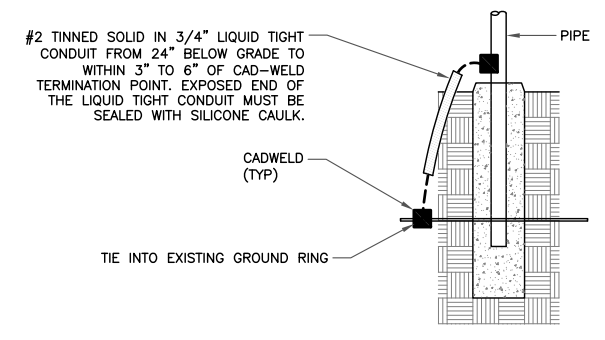
NOTES:
 1. ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.
 BURNDY TWO HOLE LUG W/ LONG BARREL (SEE CHART)
 BARE WIRE TO BE NO-OX AT BOTH ENDS
 STRANDED (GREEN INSULATED) ONLY FOR #6 AWG (SEE CHART)

2 MECHANICAL LUG CONNECTION
 SCALE: NOT TO SCALE



*TWO HOLE LUG, OR EXOTHERMIC WELD TO BE USED WITH #2 AWG BARE CONDUCTOR WIRE TO BUILDING SERVICE GROUND OR GROUND RING
 GROUNDING SHALL BE ELIMINATED WHEN GROUND BAR IS ELECTRICALLY BONDED TO METAL TOWER

5 GROUNDWIRE INSTALLATION
 SCALE: NOT TO SCALE



#2 TINNED SOLID IN 3/4" LIQUID TIGHT CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. EXPOSED END OF THE LIQUID TIGHT CONDUIT MUST BE SEALED WITH SILICONE CAULK.
 CADWELD (TYP)
 TIE INTO EXISTING GROUND RING

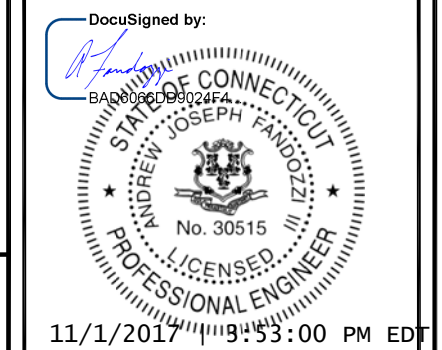
8 TRANSITIONING GROUND DETAIL
 SCALE: NOT TO SCALE



T-MOBILE SITE NUMBER:
CTFF334A
 BU #: 841288
BRIDGEPORT NORTH
 205 KAEICHELE PLACE
 BRIDGEPORT, CT 06606
 EXISTING 151'-4" MONOPOLE

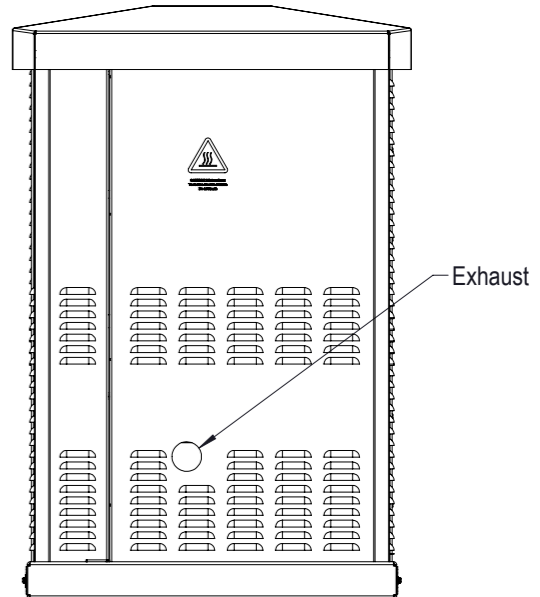
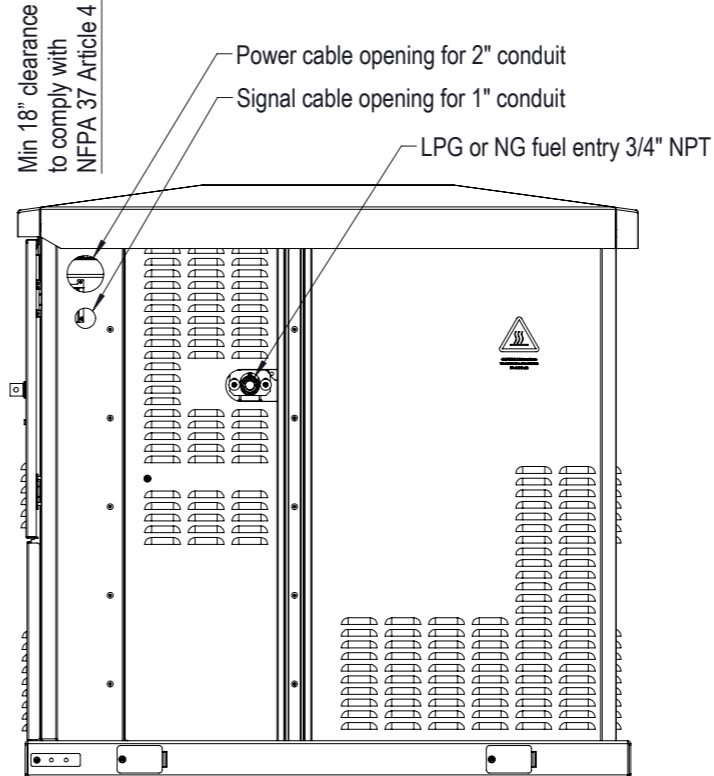
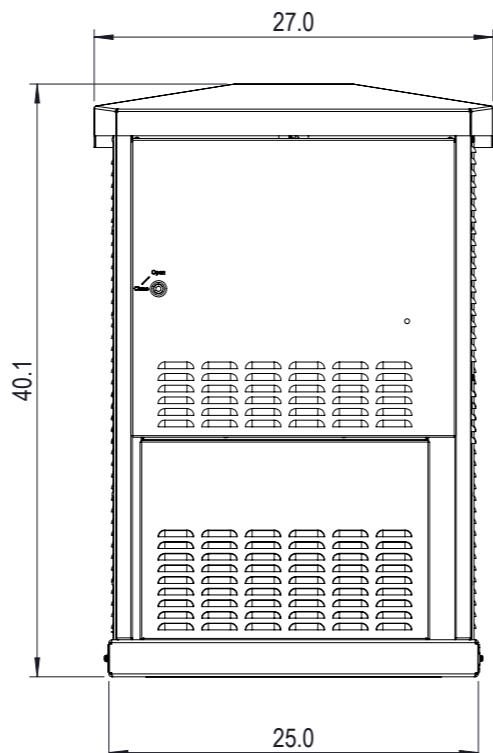
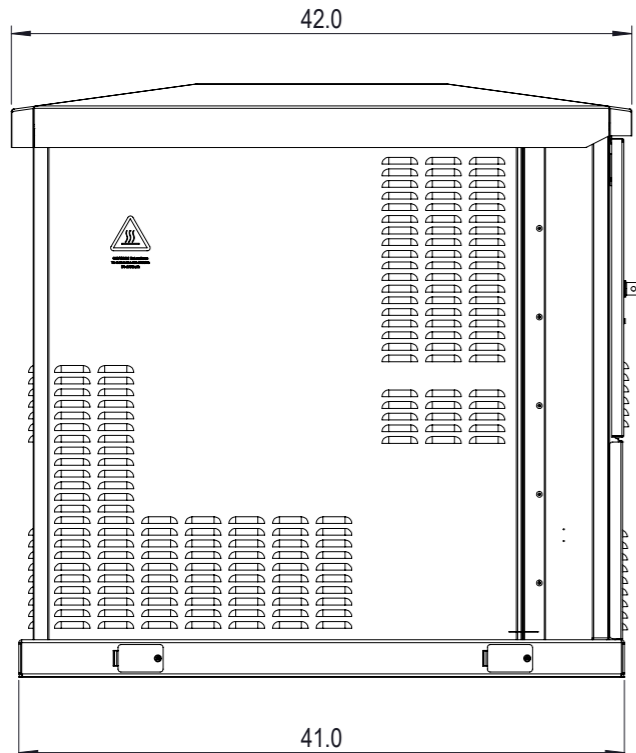
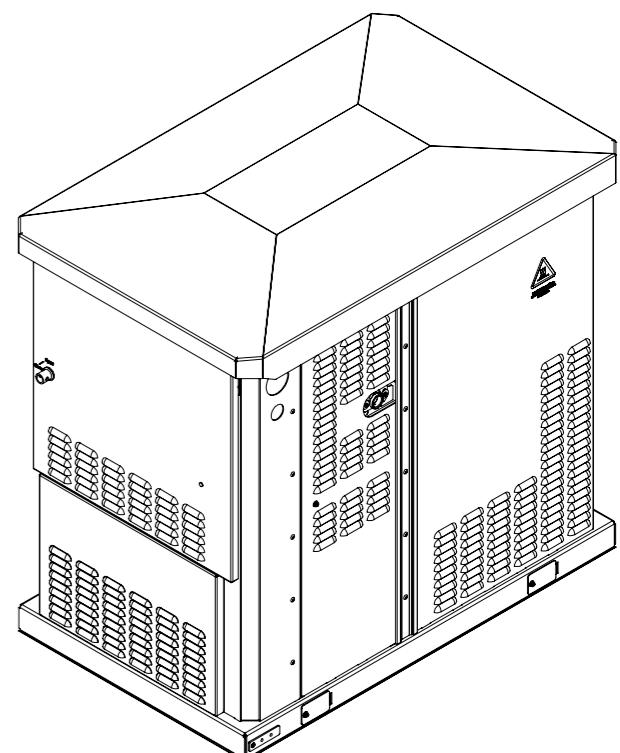
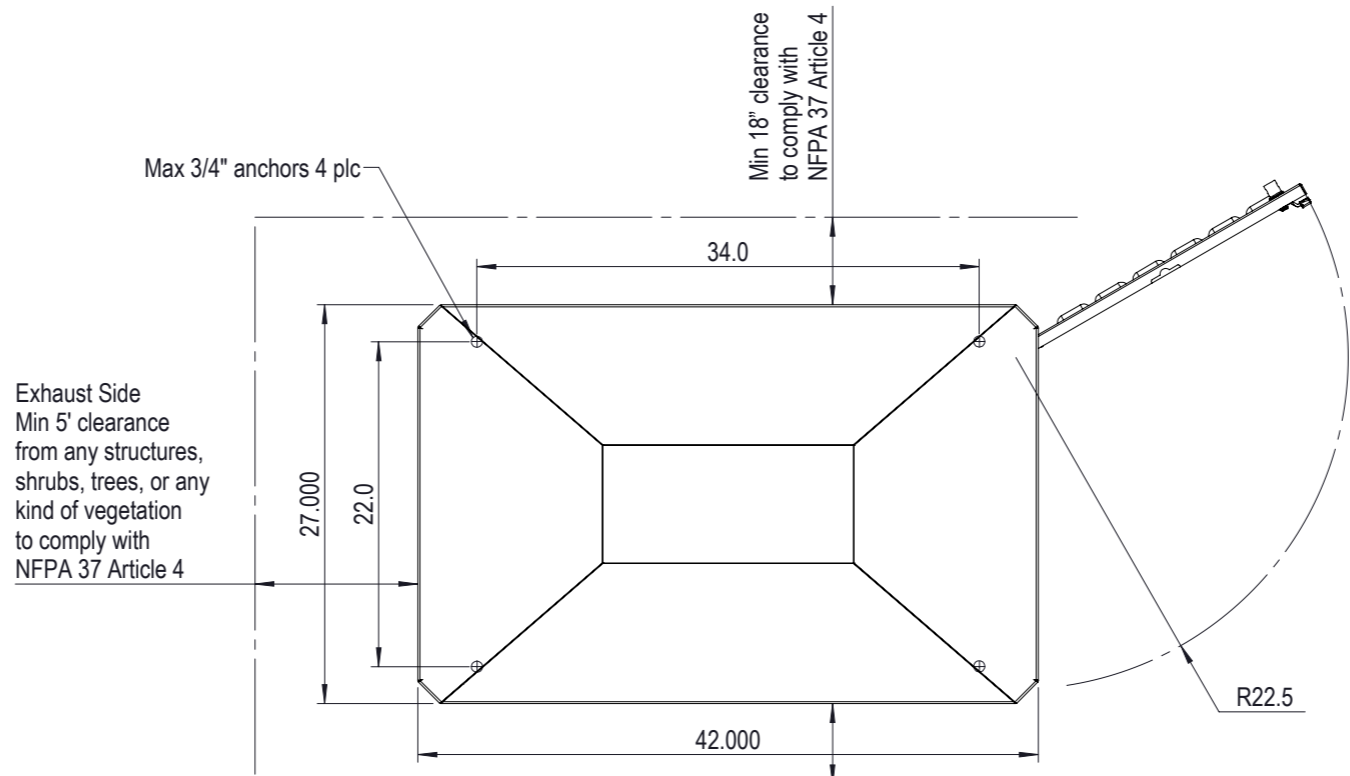
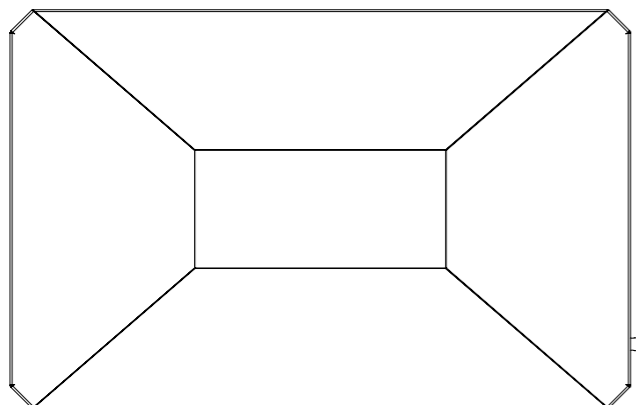
ISSUED FOR:

| REV | DATE | DRWN | DESCRIPTION | DES./QA |
|-----|----------|------|--------------|---------|
| A | 2/27/17 | ZTK | PRELIMINARY | LR |
| 0 | 3/7/17 | ZTK | CONSTRUCTION | AFJ |
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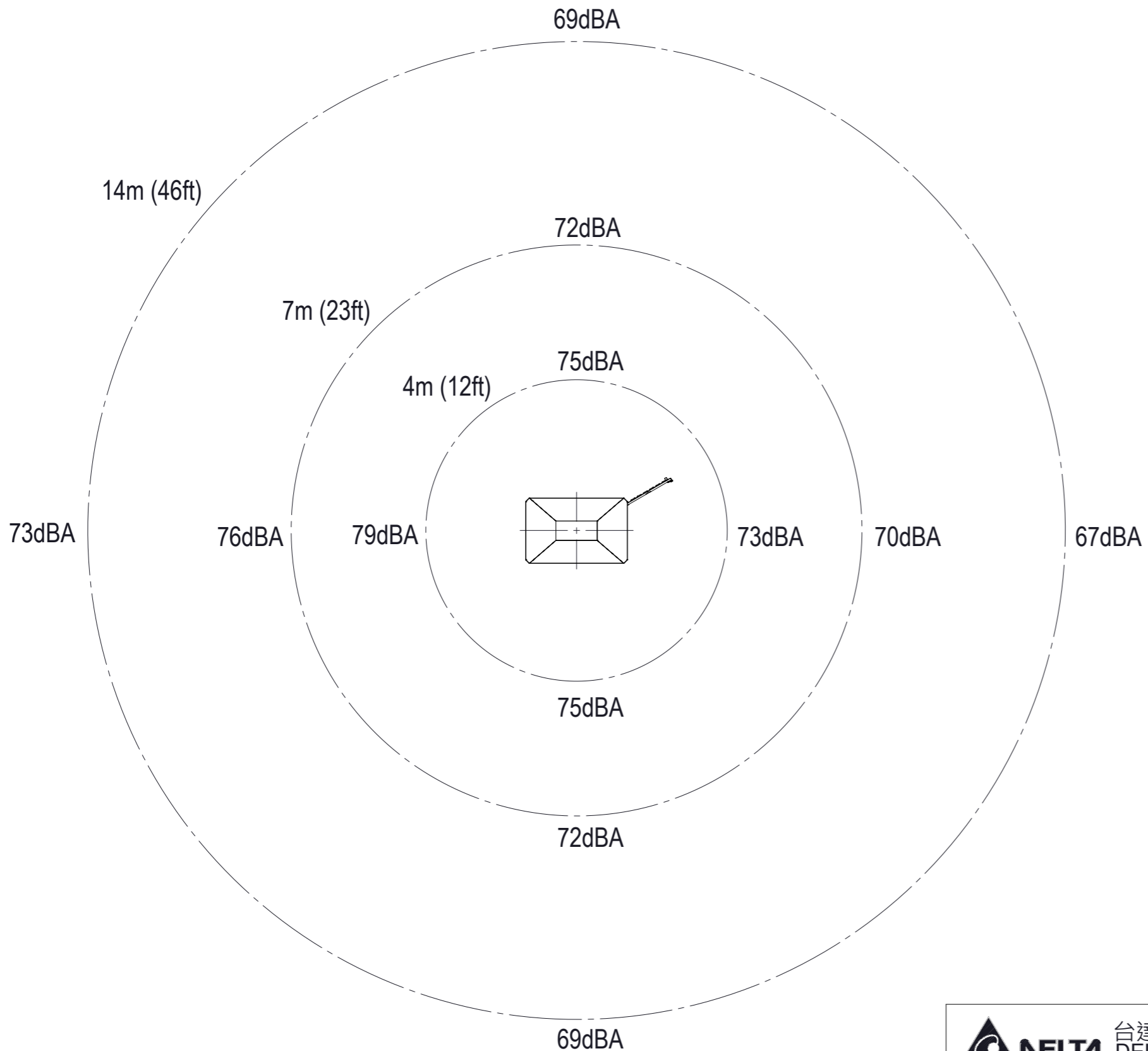


DocuSigned by:
 Andrew Joseph Fandozzi III, P.E.
 Professional Engineer License: #30515
 Crown Castle USA, Inc. Certificate of Registration #PEC.0001101
 11/1/2017 9:53:00 PM EDT

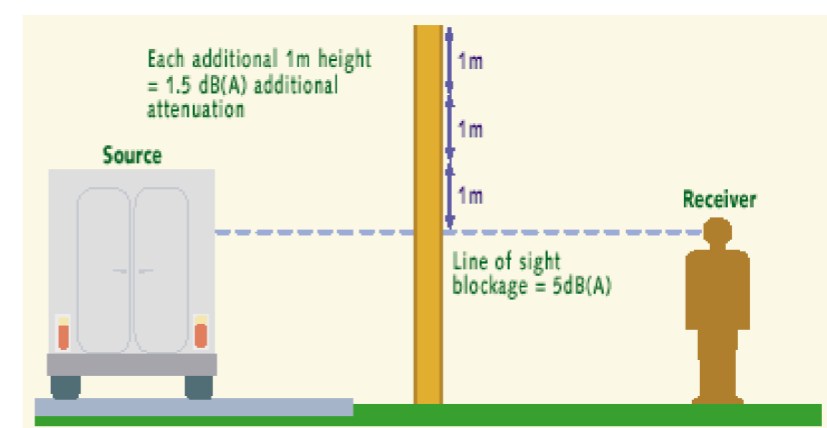
SHEET NUMBER: **G-3** REVISION: **6**



| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|-----------------------------------|--------|---------|----------|---------|--------|----------|------|--------|------|---------|-------|---|------|---------|-------|---------|-------|---------|------|----------|------|-----|------|---------|------|---------|------|----------|------|-----------|------|------|------|---------|-------|--|--|--|
| 台達電子工業股份有限公司 DELTA ELECTRONICS, INC. | Drawn: 05/12/2015 Vince Byrne | Design: 05/12/2015 Vince Byrne | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Description: APU DC GENSET 7.5KW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Part No. ESOG150-PCAxX | REV. 01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SHEET 1 OF 2 ISSUE DATE: 05/12/2015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| DIMENSIONAL TOLERANCES HOLES : ±0.05 ANGLES : ±0.5° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td><30</td> <td>±0.25</td> <td>DECIMALS</td> <td>UP-100</td> <td>±0.2</td> <td>250-300</td> <td>±0.4</td> <td>UP-600</td> <td>±1.5</td> </tr> <tr> <td>>30-100</td> <td>±0.35</td> <td>X</td> <td>±0.3</td> <td>100-150</td> <td>±0.25</td> <td>300-350</td> <td>±0.45</td> <td>600-900</td> <td>±2.4</td> </tr> <tr> <td>>100-300</td> <td>±0.5</td> <td>X.X</td> <td>±0.2</td> <td>150-200</td> <td>±0.3</td> <td>350-400</td> <td>±0.5</td> <td>900-OVER</td> <td>±3.1</td> </tr> <tr> <td>ABOVE 300</td> <td>±0.6</td> <td>X.XX</td> <td>±0.1</td> <td>200-250</td> <td>±0.35</td> <td></td> <td></td> <td></td> </tr> </table> | | | <30 | ±0.25 | DECIMALS | UP-100 | ±0.2 | 250-300 | ±0.4 | UP-600 | ±1.5 | >30-100 | ±0.35 | X | ±0.3 | 100-150 | ±0.25 | 300-350 | ±0.45 | 600-900 | ±2.4 | >100-300 | ±0.5 | X.X | ±0.2 | 150-200 | ±0.3 | 350-400 | ±0.5 | 900-OVER | ±3.1 | ABOVE 300 | ±0.6 | X.XX | ±0.1 | 200-250 | ±0.35 | | | |
| <30 | ±0.25 | DECIMALS | UP-100 | ±0.2 | 250-300 | ±0.4 | UP-600 | ±1.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| >30-100 | ±0.35 | X | ±0.3 | 100-150 | ±0.25 | 300-350 | ±0.45 | 600-900 | ±2.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| >100-300 | ±0.5 | X.X | ±0.2 | 150-200 | ±0.3 | 350-400 | ±0.5 | 900-OVER | ±3.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ABOVE 300 | ±0.6 | X.XX | ±0.1 | 200-250 | ±0.35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SCALE 1:3 | UNIT in | USED ON - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Note: US DOT guideline for sound barrier walls:
 - Line-of-site blockage = 5dBA attenuation
 - Each additional 1m height = 1.5 dBA additional attenuation



Open-Field (Half-space) Acoustic Noise

| | | |
|---|---|--|
| 台達電子工業股份有限公司 DELTA ELECTRONICS, INC. | Drawn: 05/12/2015 Vince Byrne | Design: 05/12/2015 Vince Byrne |
| | Description: APU DC GENSET 7.5KW | |
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| DIMENSIONAL TOLERANCES () () () <30 ±0.25 DECIMALS UP-100 ±0.2 250-300 ±0.4 UP-600 ±1.5 >30-100 ±0.35 X ±0.3 100-150 ±0.25 300-350 ±0.45 600-900 ±2.4 >100-300 ±0.5 X.X ±0.2 150-200 ±0.3 350-400 ±0.5 900-OVER ±3.1 ABOVE 300 ±0.6 X.XX ±0.1 200-250 ±0.35 | HOLES : ±0.05 ANGLES : ±0.5° A3 SIZE | REV. 01 SHEET 2 OF 2 ISSUE DATE: 05/12/2015 |
| SCALE 1:3 UNIT in USED ON - | | |