

July 5, 2022

Attorney Melanie Bachman Acting Executive Director Connecticut Siting Council Ten Franklin Square New Britain, CT 06501

### EM-T-MOBILE-076-210409

T-Mobile Site ID CTNH494A 1749 Durham Road, Madison CT Notice of Compliance with Conditions and Construction Completion

# Dear Attorney Bachman:

The T-Mobile site referenced above was approved by The Connecticut Siting Council (Council) on May 3, 2021 as an Exempt Modification. T-Mobile is now requesting the close out of the approval and hereby acknowledges the following conditions were met:

- 1. Prior to T-Mobile's antenna installation, the antenna mount modifications shall be installed in accordance with the Mount Analysis prepared by GDP Engineering, dated February 3, 2021 and stamped and signed by Christopher J. Scheks;
- 2. Within 45 days following completion of equipment installation, T-Mobile shall provide documentation certified by a Professional Engineer that its installation complied with the recommendations of the Mount Analysis;
- 3. Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
- 4. Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- 5. The Council shall be notified in writing at least two weeks prior to the commencement of site construction activities;



- 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 attached PE Closeout Letter dated June 7, 2022 provides evidence of compliance with the conditions outlined by the Council. In addition, T-Mobile hereby notifies the Council that construction of the acknowledged modifications was completed as of November 19, 2021.

Sincerely,

Victoria Masse

Victoria Masse

Zoning and Permitting

Northeast Site Solutions

## June 7, 2022

Victoria Masse Northeast Site Solutions 420 Main Street Unit 1 Box 2 Sturbridge, MA 01566 (231) 409-5439



Tower Engineering Professionals 326 Tryon Road Raleigh, NC 27603 (919) 661-6351

**Subject:** Post Construction Inspection Report

**T-Mobile Designation:** Site Number: CTNH494A Site Name: CTNH494A

NE Site Solutions Designation: Site Name: CTNH494A

Engineering Firm Designation: TEP Project Number: 217566.700737

Site Data: 1749 Durham Road, Madison, New Haven County, CT 06443

Latitude 41° 23′ 22.33″, Longitude -72° 38′ 55.97″

119 Foot – Monopole Tower

Dear Victoria Masse,

Tower Engineering Professionals, Inc. (TEP) is pleased to submit this "Post Construction Inspection Report" (PCI Report) to Northeast Site Solutions for the equipment upgrades to the subject structure. The purpose of this PCI report is to confirm that T-Mobile's proposed upgrades were installed in conformance with the approved construction drawings by Tower Engineering Professionals, dated March 17, 2021 (Appendix A) and the workmanship conforms with industry standards.

All observations were performed after the construction was complete. TEP was not present during the construction phase. The onsite PCI was performed on May 17, 2022 by Ryan Trackenberg, EI and Marco Chamba of TEP.

We at TEP appreciate the opportunity to provide our professional services to you and Northeast Site Solutions If you have any questions or need further assistance on this or any other projects, please give us a call.

Sincerely,

Kevin R. Arnett, PE, CWI

**Tower Engineering Professionals, Inc.** 

# **EXECUTIVE SUMMARY**

	PROPOSED LOADING SUMMARY										
Alpha Sec	ctor										
Antenna Position	Antenna (Qty.) Make/Model	Surge Protector (Qty.) Make/Model	Coax								
A1	(1) RFS APX16DWV-16DWV-S-E- A20	(1) Ericsson RRU 4415 B66A									
A2	(1) RFS APXVAALL24_43-U-NA20	(1) Ericsson RRU 4449 B71+B85 (1) Ericsson RRU 4424 B25	-	(1) 6x24 Hybrid							
А3	(1) Ericsson AIR6449 B41	-	-								
Beta Sect	or										
B1	(1) RFS APX16DWV-16DWV-S-E- A20	(1) Ericsson RRU 4460 B25+B66									
B2	(1) RFS APXVAALL24_43-U-NA20										
В3	(1) Ericsson AIR6449 B41	-									
Gamma S	ector										
G1	(1) RFS APX16DWV-16DWV-S-E- A20	(1) Ericsson RRU 4460 B25+B66									
G2	(1) RFS APXVAALL24_43-U-NA20	(1) Ericsson RRU 4449 B71+B85 (1) Ericsson RRU 4424 B25	-	(1) 6x24 Hybrid							
G3	(1) Ericsson AIR6449 B41	-									

	INSTALLED LOADING SUMMARY										
Alpha Sec	ctor										
Antenna Position	Antenna (Qty.) Make/Model	RRU (Qty.) Make/Model	Surge Protector (Qty.) Make/Model	Coax							
A1	(1) RFS APX16DWV-16DWV-S-E- A20	(1) Ericsson RRU 4415 B66A									
A2	(1) RFS APXVAALL24_43-U-NA20	(1) Ericsson RRU 4449 B71+B85 (2) Ericsson RRU 2212 B2 B25	-	(1) 6x24 Hybrid							
А3	(1) Ericsson AIR6449 B41	-									
Beta Sect	or										
B1	(1) RFS APX16DWV-16DWV-S-E- A20	(1) Ericsson RRU 4415 B66A									
B2	(1) RFS APXVAALL24_43-U-NA20										
В3	(1) Ericsson AIR6449 B41	-									
Gamma S											
G1	(1) RFS APX16DWV-16DWV-S-E- A20	(1) Ericsson RRU 4415 B66A									
G2	(1) RFS APXVAALL24_43-U-NA20	(1) Ericsson RRU 4449 B71+B85 (2) Ericsson RRU 2212 B2 B25	-	(1) 6x24 Hybrid							
G3	(1) Ericsson AIR6449 B41	-									

Loading discrepancies are highlighted

## **EXECUTIVE SUMMARY**

# **Photograph**







## **Observations and Recommendations**

# Item 1:

## **Observation:**

As-built radio configuration does not match the layout as shown in the construction drawings. One of the radios installed behind position two (Ericsson 2212 B2 B25) does not match what is shown in the construction drawings (Ericsson 4424 B25) on all sectors.

# Recommendation:

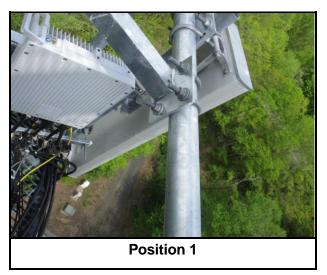
No action required. Two Ericsson 2212 B2 B25's were installed behind position two on all sectors which is equivalent to one Ericsson 4412 B25. See appendix B.

# **EXECUTIVE SUMMARY**

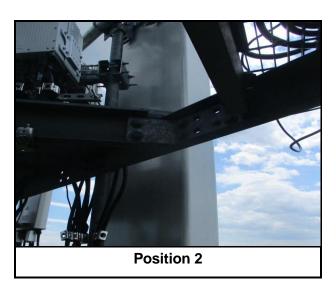
# **Photograph Observations and Recommendations** Item 2: Observation: Proposed upgrades were installed properly and the workmanship is in accordance with T-Mobile and industry standards. Recommendation: No action required.



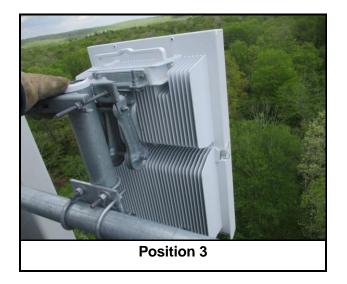


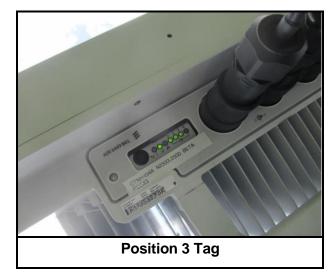


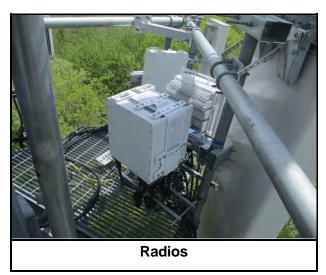


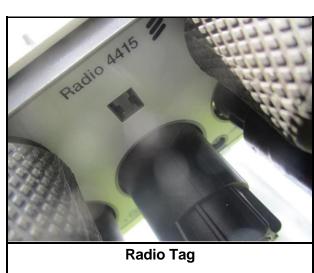


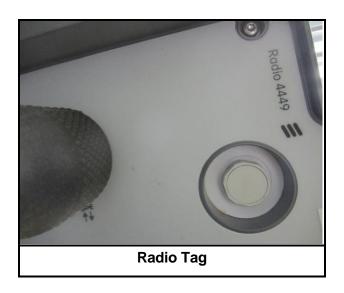


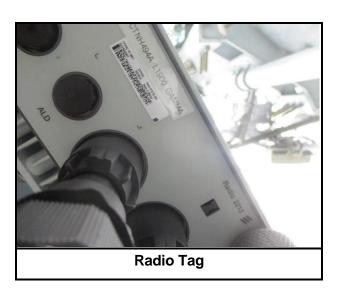












# APPENDIX A CONSTRUCTION DRAWINGS

# T - Mobile -



T··Mobile·· BLOOMFIELD CT 06002

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



### T-MOBILE SITE NUMBER: CTNH494A

BU #: 846176 MADISON DURHAM ROAD

1749 DURHAM ROAD MADISON, CT 06443 (NEW HAVEN COUNTY)

> EXISTING 119'-0" MONOPOLE ISSUED FOR

	SCRIPTION DES./Q/
A 03/01/21 CLR PRE	LIMINARY BSE
0 03/17/21 CLR CONS	TRUCTION BSE

DATE

TO ALTER THIS DOCUM

T-MOBILE SITE NUMBER: CTNH494A T-MOBILE SITE NAME: CTNH494A SITE TYPE: **MONOPOLE** 

119'-0" **TOWER HEIGHT:** 

**BUSINESS UNIT #:846176** 

1749 DURHAM ROAD SITE ADDRESS: MADISON, CT 06443

**COUNTY: NEW HAVEN** 

**TOWN OF MADISON JURISDICTION:** 

LOCATION MAP

NO SCALE

T-MOBILE SPRINT-RETAIN SITE CONFIGURATION: 67D5998C\_1xAIR+1QP+1OP (GSM ONLY)

# SITE INFORMATION

MADISON CT 06443

41° 23' 22.33" (41.389536)

TOWN OF MADISON

-72° 38' 55.97" (-72.648881)

NEW HAVEN

104174

NAD83

361 FT

RU-1

EXISTING

CROWN CASTLE USA INC. MADISON DURHAM ROAD SITE ADDRESS 1749 DURHAM ROAD

COUNTY: MAP/PARCEL#: AREA OF CONSTRUCTION:

LATITUDE: LONGITUDE LAT/LONG TYPE: GROUND ELEVATION: CURRENT ZONING:

IURISDICTION: TYPE OF CONSTRUCTION:

A.D.A. COMPLIANCE:

HUMAN HABITATION PROPERTY OWNER АТ&Т 1749 DURHAM ROAD MADISON, CT 06443

TOWER OWNER:

MAHWAH, NJ 07430

CARRIER/APPLICANT:

A&E FIRM:

ELECTRIC PROVIDER: (800) 286-2000 TELCO PROVIDER

CROWN CASTLE USA INC 1200 MACARTHUR BLVD, SUITE 200 T-MOBILE 35 GRIFFIN ROAD NORTHEAST UTILITIES AT&T

FACILITY IS UNMANNED AND NOT FOR

### DRAWING INDEX SHEET# SHEET DESCRIPTION TITLE SHEET GENERAL NOTES T-2 FINAL SITE PLAN EXISTING & FINAL EQUIPMENT PLAN FINAL ELEVATION & ANTENNA PLANS C-2 ANTENNA & CABLE SCHEDULE C-4 EOUIPMENT SPECS ICE BRIDGE DETAIL CABINET SPECS AC PANEL SCHEDULES & ONE LINE DIAGRAM G-1 ANTENNA GROUNDING DIAGRAM GROUNDING DETAILS GROUNDING DETAILS G-3

ALL DR.WINGS CONTAINED HEREIN ARE FORMATTED FOR 2254-CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTIN IMMEDIATELY NOTIFY THE ENGINEER R WRITING OF AN DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OI BE RESPONSIBLE FOR SAN

- REUSE (1) PLATFORM MOUNT
   INSTALL (1) SITEPRO1 SUPPORT RAIL
- INSTALL (6) BACK-TO-BACK RADIO MOUNTS

- INSTALL ICE BRIDGE
- ROUTER (1) PSU 4813 BOOSTER
- REUSE EXISTING SPRINT PLATFORM/PAD, ICE BRIDGE

### & UTILITY EOUIPMENT

# 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:

APPLICABLE CODES/REFERENCE

MECHANICAL 2018 CONNECTICUT STATE MECHANICAL CODE

STRUCTURAL ANALYSIS: TOWER ENGINEERING PROFESSIONALS

MOUNT ANALYSIS: GPD ENGINEERING AND ARCHITECTURE PROFESSIONAL CORPORATION

DATED: 01/12/2021 REVISION: 0

APPLICABLE CODES: TIA-222-H / ASCE 7-16
WIND SPEED: V = 130 MPH (ULTIMATE 3 SECOND GUST)
EXPOSURE CATEGORY: B

SEISMIC Ss: 0.176 SEISMIC S1: 0.061

**APPROVALS** APPROVAL SIGNATURE

CONST. OPS

SR DEV MGR REG DIR

RE

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.

# PROIECT TEAM

TOWER ENGINEERING PROFESSIONALS 326 TRYON ROAD RALEIGH, NC 27603

> IOSEPH T. CRESS - PROIECT MANAGER (919) 661-6351

GRAHAM M. ANDRES - CIVIL ENGINEER

GRAHAM M. ANDRES - ELECTRICAL ENGINEER (919) 661-6351

4511 N. HIMES AVE, SUITE 210 TAMPA, FL 33614

NITSA CRENSHAW - A&E SPECIALIST

CROWN CASTLE USA INC. DISTRICT

CONTACTS

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

# PROIECT 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) EXISTING SPRINT ANTENNAS
 REMOVE (9) EXISTING SPRINT RRHs w/ (3) FILTERS

• INSTALL (9) ANTENNAS • INSTALL (9) RRHs

INSTALL (4) 6/24 HCS 4AWG 100m CABLES

GROUND SCOPE OF WORK:

REMOVE LEGACY SPRINT CABINET(S) AS NEEDED
 INSTALL (2) CABINETS

• INSTALL (3) BB 6630, (1) BB 6648, (1) DUG20, (1) IXRE

**DOCUMENTS** 

CODE 2018 CONNECTICUT STATE BUILDING CODE

REFERENCE DOCUMENTS:

DATED: 02/17/2021

DATED: 02/03/2021

RISK CATEGORY: II FOPOGRAPHIC CATEGORY: 1

SERVICE WIND SPEED: 60 MPH

### CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

- NOTICE TO PROCEED NO WORK SHALL COMMENCE PRICE TO CROWN CASTLE USA, INC. WRITEN MOTICE TO PROCEED (INT) AND THE ISSUMMED OF A PURCHASE CORDER PROPOR TO ACCESSING/ENTERNO THE SITE YOU MUST CONTACT THE CROWN CASTLE USA INC. NOC AT 800-788-7011 & THE CROWN CASTLE USA INC. ONSTRUCTION MANAGED THE CROWN CASTLE USA INC. ON THE CROWN CASTLE USA INC.
- "LOOK LIP" CROWN CASTLE LISA INC. SAFETY CLIMB REQUIREMENT: "LOOK UP" — CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:
  THE INTERRITY OF THE SAFETY LOUND AND ALL DOMRONITS OF THE CLIMBING FACILITY SHALL BE
  CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT
  REPROPRICEMENT, AND/OR EQUIPMENT INSTALLATIONS SHALL INTO COMPONISE THE INTERRITY OR
  FUNCTIONE. LOUS SHALL DESIGN OF THE MODIFICATION OF THE WIFE ROPE WHICH IN THE WIFE ROPE WHICH OF THE WIFE ROPE WHICH IN THE WIFE ROPE WHICH OF THE WIFE ROPE WHICH OF THE WIFE ROPE WHICH ANY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS
  INTERDED USE. ANY COMPROMISES SHETY CLUMB, INCLIDING EXISTING CONDITIONS MUST BE TAGGED OUT
  AND REPORTED TO VICENTIA CONTROLLED AND FOR COMPONING THE ANGED TO GENERALE A SAFETY CLUMB
  MANIFEMENCE AND CONTROLLED ROCKET SHE TAGED OUT.
- PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. HIS INCLUDES, BUT IS NOT LIMITED TO BUILDING ELECTRICAL, MICHANICAL, FIRE, FLOOZ DONE ENVIRONMENTAL, AND ZONNIC, AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPETED, ALL REQUIRED PERMITS SHALL BE SATISFED AND LOSSED 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 EXCEUTION OF THE WORK CONTAINED HERBIN. AND SHALL MEET (LATEST EDITION).
- ALL SITE WORK TO COMPLY WITH QAS-STD-10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE" AND LATEST VERSION OF ANSI/TIA-1019-A-2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.
- ARTENNIS."
  IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSED. IN ALTERNATIVE SECURITY OF THE PROPOSED AND ALTERNATIVE SECURITY OF THE PROPOSED AND ALTERNATIVE SECURITY OF THE PROPOSED AND ALTERNATIVE SHALL BE SHALL BE IN STRICT ACCOMING WITH ALL APPLICABLE COOKS, REQULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND AUTHORITY RECORDING THE PROPOSED AND ALTERNATIVE SHALL APPROPRIATE NOTICES AND AUTHORITY RECORDING THE PERFORMANCE OF THE WORK ALL WORK RORRED DUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL COOKS.
- ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REQUILITIONS.

  THE ORDINANCES AND APPLICABLE REQUILITIONS.

  THE ORDINATION OF THE ORDINARY ORDINARY OF THE ORDINARY ORDINARY OF THE ORDINARY OR

- OF CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC. AND/OR LOCAL UTLITIES.

  THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE, IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF COURIEMENT, ROOMS, AND SHELTERS.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.

- AND TOWER AFEAS.
  THE SUB GROBE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
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  SURFACE APPLICATION.
  BY THE TOWER SHAPE APPLICATION.
  BY THE SHAPE APPLICATION.
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- FULL BUSINES AND SEMENT CONTROL.

  THE CONTROL SHALL PROFECT DESTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- OF OWNER.

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  OF OWNERS AND A CONTROL OF THE CONTROL ON THE CONTROL OF THE CONTROL ON THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF TH
- 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.

### GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
  CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION
  TOWER COMMER: CROWN CASTLE USA INC.
  THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY
  DEPROISED UNDER SMILLAR CRICIALISTANCES BY REPUTABLE ENGINEERS IN THIS OR SMILLAR LOCALITIES, IT IS
  ASSIMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKHEOPLE
  WHO MAYE A WORKING KOMEDICE OF THE APPLICABLE COOKS TRACHORDS AND RECORDERANTS AND OF MOUSTRY
- ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OF DELIMENT IS GOOD PRACTICE FOR MANAGEMENT AND ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OF DELIMENT IS GOOD PRACTICE FOR MANAGEMENT ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OF DELIMENT IS GOOD PRACTICE FOR MANAGEMENT ACCEPTED STANDARD GOOD PRACTICE FOR CONTRICTION MANAGEMENT ACCEPTED STANDARD GOOD PRACTICE FOR CONTRICTION MANAGEMENT ACCEPTED STANDARD GOOD PRACTICE FOR MANAGEMENT ACCEPTED STANDARD GOOD PRACTICE FOR MANAGEMENT ACCEPTED ACCEPTED TO MANAGEMENT ACCEPTED ACCEPTED TO MANAGEMENT ACCEPTED TO
- SUBSTANTIAL EFFORM HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MESUREMENTS ON THE DRAWNINGS TO ASSIST IN THE PROBACIATION AND CONSTRUCTION ELEMENTS BUT IT IS THE SCUE RESPONSIONAL TO ASSIST IN THE APPROXIMATION OF CONSTRUCTION ELEMENTS. THE TO THE SCUE RESPONSIONAL TO ASSIST IN THE PROCESSOR OF THE SCHOOL TO THE CONSTRUCTION ELEMENTS. THE TO THE SCHOOL TO THE CONSTRUCTION ELEMENTS. THE DEADERST OF RECORD STO BE INSTRUCTED ASSISTANCES AND/OR CONFLICTS WITH THE CONSTRUCTION ELEMENTS. THE DEADERST OF RECORD STO BE INSTRUCTED ASSISTANCES. THE SCHOOL THE SCHOOL THE TO FAMILIARIZE WITH THE ENGINEER OF RECORD STORM HAVE THE SCHOOL THE TOP THE SCHOOL THE S

- DRAWINGS.

  THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LAUDSCAPING AND STRUCTURES, AN DAMAGED PART SHALL BE REPARED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF CROWN CASTLE USA INC. CONTRACTOR SHALL LEGALLY AND PROPERTY DISPOSE OF ALL SCAPA MATERIALS SHALL AS COANAL CASILES AND OTHER TIEMS REMOVED FROM THE EXISTING FACILITY, ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- DESIGNATED LOCATION.
  CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DALLY BASIS.

### CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

- ALL COLORETE MOOK SHALL BE IN ACCORDANCE MITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONNECTION. DESCRIPTION OF CONNECTION OF THE DESIGN AND CONNECTION OF THE PRINCE, SOL BLARRIC PRESSURE USED FOR DESIGN OF SLASS AND FOUNDATIONS IS ASSUMED TO BE 1000 per. TO BE 1000 per
- PLACEMEN
- LACEMENT. ONCRETE 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 AXMINUM WATER—TO—CEMENT RATIO (W/C) OF 0.45.

  ALL STEEL REINFORDING SHALL CONFORM TO ASTM AGES. ALL WELDED WINE 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.

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  SERVICI ON DRAWINGS: CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH CONCRETE EXPOSED TO EARTH OR WEATHER:

1-1/2"

- #6 BARS AND LARGER FO BMS AND DANGER
  FOR BMS AND DANGER
  MORETE NOT DEPOSED TO EARTH, OR WEATHER:

  SLAR AND WALLS
  SLAR AND WALLS
  TOOLED EDGE OR A 3/4" CHAMPER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED
  THERWISE, IN ACCORDANCE WITH ACI JOST SECTION 4.2.4.

### 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. ACCORDANCE WITH THE INC.

  THE CONTINCES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 CHAIN OF NO. THE CONTINUE AND INSTALL, SUPPLEMENTA, GROUND ELECTRODE SYSTEMS. THE CONTINUETY IN THE GROUNDING SYSTEM OF 5 CHAIN OF SYSTEM OF 5 CHAIN OF SYSTEM OF 5 CHAIN OF SYSTEM OF SYS

- CLAMPS.
  METAL RACEMAY 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 BITS EQUIPMENT. MEAN, MACENNE SHALL NOT BE USED AGE, THE REC REQUIRED EQUIRMENT GROUND CONDUCTOR. SHALDE COPPER ON DEAD RES.

  AREA MACENNE SHALD BY THANK SHALD NOT BE USED AGE.

  CAPITE FARME SHALL BE USED CAPITY CONNECTED TO THE MASTER GROUND BAY WITH GREEN INSULATED SUPPLEMENTAL EQUIRMENT GROUND GROUND CONNECTED AND THE GROUND SHALL BE CAPITY CONNECTED.

  ALL EXTENSION GROUND CONNECTED SET MEET EQUIRMENT/GROUND BASE AND THE GROUND RING SHALL BE \$2.5 OLD THANKED COPPER ONLESS OTHERWISE INDICATED.

  ALL EXTENSION GROUND CONNECTED SET MEET EQUIRMENT/GROUND BASE AND THE GROUND RING SHALL BE \$2.5 OLD THANKED COPPER ONLESS OTHERWISE INDICATED.

  BE OF THE SHALL BE USED TO ALL GROUNDING CONNECTIONS BELOW GRADE.

  ALL EXCENSION CONNECTIONS ABOVE GRADE (INTERNATION AND EXTENCE) SHALL BE AVAIDED WHEN 45' BEINGS CAN BE ADEQUATELY SUPPORTED.

  EXCHIEFMING WELDS SHALL BE USED TOR ALL GROUNDING CONNECTIONS BELOW GRADE.

  ALL EXCENSION CONNECTIONS ABOVE GRADE (INTERNATION AND EXTENCE) SHALL BE AVAIDED WHEN 45' BEINGS CONNECTION BELOW GRADE.

  ALL EXCENSION CONNECTIONS ASSOCIATED AND EXTENCED SHALL BE AVAIDED WHEN 45' BEINGS CONNECTION BEAD.

  REPROVED ANTIFORM ORDER OF GRADE (INTERNATION AND EXTENCE) SHALL BE AVAIDED WHEN ADDITIONS SHALL BE AVAIDED WHEN A CONNECTION AND BOLTED ORDER ORDER OF SHALL BE EXCITEMENTAL BOUNDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAS.

  APPROVED ANTIFORM ORDER ORDER

- MISCELAREOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND ROUND, IN A COCORDANCE WITH THE NC.

  BOND ALL METALLIC CONCESTS THAT FORM A GROUND RING AND HIT (1) 1/2 BAMES COLD TIMED COPPER GROUND CONDUCTORS.

  METAL SUPPORT CLIPS OR SLEENES THROUGH WALLS OR FLOORS, WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO METEL CORDIT OR SLEENES THROUGH WALLS OR FLOORS, WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO METEL CORDIT OR FLOOR RECORDER/SINCE AND HEALT CONDUIT ROUND TO METAL CONDUIT OR METAL SUPPORT CLIPS OR SLEENES THROUGH WALLS OR FLOORS, WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO METEL CORDIT OR RECORDER/SINCE AND HEALT CONDUIT TO METEL CORDIT OR RECORDER OR THE MAD RECORDED TO SHALL BE BONDED TO EACH FLOOR FOR THE MAD RECORDED TO A GROUND THE METAL SUCH AS PVC CORDUIT SHALL BE BONDED TO EACH FLOOR FLOOR FOR THE MAD RECORDED TO A GROUND THE METAL SUCH AS PVC CORDUIT SHALL BE BONDED TO EACH FLOOR FOR THE MAD RECORDED TO A GROUND TO BE ROUTED TO BE ROUTED TO GROUND FROM THE METAL SUCH AS THE TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, THE BUILDING STEEL COLUMNS, THE BUILDING STEEL COLUMNS, THE BUILDING STEEL COLUMNS FROM THE TOWERS. AND WATER TOWERS GROUNDING STEEM, THE BUILDING STEEL COLUMNS, TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, TO THE CONTROL OF THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, TO MENT TOWERS CROUNDING STEEM, THE BUILDING STEEL COLUMNS, TO THE CONTROL ON THE TOWERS CROUNDING STEEM, THE BUILDING STEEL COLUMNS, TO EACH THE TOWERS CROUNDING STEEM, THE BUILDING STEEL COLUMNS, TO THE CONTROL ON THE TOWERS CROUNDING STEEM, THE BUILDING STEEL COLUMNS, TO THE CONTROL ON THE TOWERS CROUNDING STEEM, THE BUILDING STEEL COLUMNS, TO THE CONTROL ON THE TOWERS CROUNDING STEEM, THE BUILDING STEEL COLUMNS, TO THE CONTROL ON THE TOWERS CROUNDING STEEM, THE BUILDING STEEM STEEM STEEMS TO THE TOWERS CROUNDING STEEMS.

### ELECTRICAL INSTALLATION NOTES:

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE
- ALL ELECTRICAL MUNICIPAL SE PERFORMENT IN ACCOUNTER MIT THE FRANCE OF THE MEDICAL SECTION O
- WRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREDWISTS OF THE NEC.

  ALL CIRCUITS SHALL BE SEGREGATE AND MANTAN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.

  ALL CIRCUITS SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO

  REQUIREMENT OF THE MINIMOR LECTRICAL COURSUITHS CURRENT RATING THAT SHALL BE GREATE THAN THE SHORT

  CREATER OF THE CONFORM SHALL CONFORM THE SHALL SHORT CREATE THAN THE SHORT CREATER THAT THE MOST CURRENT DOES

  AND FERCED THE RATING OF ELECTRICAL COURSEIN CRONDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE

  LABELED WITH COLOR-COORD INSULATION OR ELECTRICAL THATE (3M BRAND, 1/2" PLASTIC ELECTRICAL THATE WITH THE

  LABELED WITH COLOR-COORD INSULATION OR ELECTRICAL THATE (3M BRAND, 1/2" PLASTIC ELECTRICAL THATE WITH THE

  LECTRICAL COMPORTIONS SHALL BE CLEEKEY, DABLE DIVINE MINIMALION TAKES SHAWING THER RATE OUTLAGE, PHASE

  COMPORATION, WIRE CONTIQUATION, POWER OR AMPACTLY RATING AND BRANCH CIRCUIT ID NUMBERS (1.6. PANEL BOARD AND

  CRICKIUT ID'S). 4.2.

- PANEL BOARDS (IO NUMBERS) SHALL BE CLEARLY LABELD WITH PANEL BOARD AND ENGINE THROUGH TO NUMBERS (IA: PANEL BOARD AND ENGINE BOARDS (IO NUMBERS) SHALL BE CLEARLY LABELD WITH PANEL BOARDS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
  ALL THE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
  ALL POWER AND EQUIPMENT GROUND WIRNON LOTHING OR COMDUIT SHALL BE SHALLE COPPER CONDUCTOR (#) 4 OR LARGER) WITH THE THHW, THINN, THINN-2, XHHW, XHHW-2, THIN, TOR SHALL BE SHALLE COPPER CONDUCTOR (#) OR LARGER) WITH POWER AND CONTROL WIRNG IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE TO CABLE (#) 4 OR LARGER) WITH POWER AND CONTROL WIRNG IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE TO CABLE (#) 4 OR LARGER, WITH THE HIMM, THINN-2, XHHW, XHHW-2, THIN, TOW-2, RHW, OR RIW-2, RIGULATION LIVLESS OTHERWISE SPECIFIED.

  BETTS (OR EDULA), LIJOS AND WIRE INITS SHALL BE RATED FOR PERRATION OF LINES THAN 75° C (90° C IF AVAILABLE).

  BETTS (OR EDULA), LIJOS AND WIRE INITS SHALL BE RATED FOR PERRATION OF LISS 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/IÉÉE
- AND NC.

  ELECTRICAL METALLIC TUBING (ENT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR
  EXPOSED INDOOR LOCATIONS.

  ELECTRICAL METALLIC TUBING (ENT) 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/90% AND ALL APPROVED ABOVE
  GRADE PVC CONDUIT.

- GRADE PIC CONDUIT.

  UNUID—TIGHT FEXIBLE METALLIC CONDUIT (UQUID—TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR RESMIRLIT IS INEEDED.

  CONDUIT AND TURNING MITTINGS SHALL BE THREADED OR COMPRESSION—TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.

  CARNETS, BOSEA SHOW DIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEWA, UL, ANSI/EEE AND HIE WASCASS AND WIRE WAYS SHALL BE HEADED.

  WHERMAN SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS WIREPACK SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS
- WIREMOUS PROLIE E METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOUS DEFOUNTE WIREMOUS). SECULATE WIREMOUS, DEVOCATIES WIREMOUS DEVOCATIONS AND INSIDE AND CALVANIZED MALEMENTS. TRIBMOUS BOXES, JUNIOTION BOXES AND PULL BOXES SHALL BE RODIVED CALVANIZED ON FORCE AND STATE OF CALVANIZED ON FORCE WIREMOUS DEVOCATIONS AND INSIDE WIREMOUS DEVOCATIONS AND INSIDE WIREMOUS DEVOCATIONS WIREMOUS W

- (WP OR BELIER) FOR EXTERIOR LOCATIONS. NONMETALIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED
- NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES STALL MEET ON EXCEED NEAM OS 2 (NEWSEST REVISION) AND BE RATED NEAM 1 (OR BETTER) FOR METERIOR LOCATIONS AND WARHER PROFICEDED (WP OR BETTER) FOR METERIOR LOCATIONS. THE CONTRACTOR SHALL NOTIFY AND DETAIN NECESSARY LITHORIZATION FROM THE CAPRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENDEN WORK OF THE ACT POWER DISTRIBUTION PANELS.

  WITH THE APPLICABLE CORES AND STANDARDS TO SUFFICIANCE LIFE AND PROPERTY.

  WITH THE APPLICABLE CORES AND STANDARDS TO SUFFICIANCE LIFE AND PROPERTY.

  ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

COND	UCTOR COL	OR CODE			
SYSTEM	CONDUCTOR	COLOR			
	A PHASE	BLACK			
120/240V. 1Ø	B PHASE	RED			
120/2404, 12	NEUTRAL	WHITE			
	GROUND	GREEN			
	A PHASE	BLACK			
	B PHASE	RED			
120/208V, 3Ø	C PHASE	BLUE			
	NEUTRAL	WHITE			
	GROUND	GREEN			
	A PHASE	BROWN			
	B PHASE	ORANGE OR PURPLE			
277/480V, 3Ø	C PHASE	YELLOW			
	NEUTRAL	GREY			
	GROUND	GREEN			
DC VOLTAGE	P0S (+)	RED**			
DC VOLINGE	NEG (-)	BLACK**			

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

ANTENNA
EXISTING
FACILITY INTERFACE FRAME
GENERATOR
GLOBAL POSITIONING SYSTEM
GLOBAL SYSTEM FOR MOBILE
LONG TERM EVOLUTION
MASTER GROUND BAR
MICROWAYE

NEW NATIONAL\_ELECTRIC CODE PROPOSED POWER PLANT QUANTITY RECTIFIER RADIO BASE STATION

RADIO BASE STATION
RADIO FREQUENCY DATA SHEET
REMOTE RADIO HEAD
REMOTE RADIO UNIT

TYPICAL
UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
WORK POINT

SMART INTEGRATED DEVICE TOWER MOUNTED AMPLIFIER

ABBREVIATIONS:

RED ELECTRIC POWER LINES, CABLES, CONDUIT, AND LIGHTING CABLES

BLUE POTABLE WATER

PURPLE RECLAIMED WATER, IRRIGATION, AND SLURRY LINES GREEN SEWERS AND DRAIN LINES

APWA UNIFORM COLOR CODE:

PINK TEMPORARY SURVEY MARKINGS

ORANGE COMMUNICATION, ALARM OR SIGNAL LINES, CABLES, OR CONDUIT AND TRAFFIC LOOPS

WHITE PROPOSED EXCAVATION

YELLOW GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS

T··Mobile·· BLOOMFIELD CT 06002





T-MOBILE SITE NUMBER: CTNH494A

BU #: 846176 MADISON DURHAM ROAD

1749 DURHAM ROAD MADISON, CT 06443 (NEW HAVEN COUNTY)

> EXISTING 119'-0" MONOPOLE

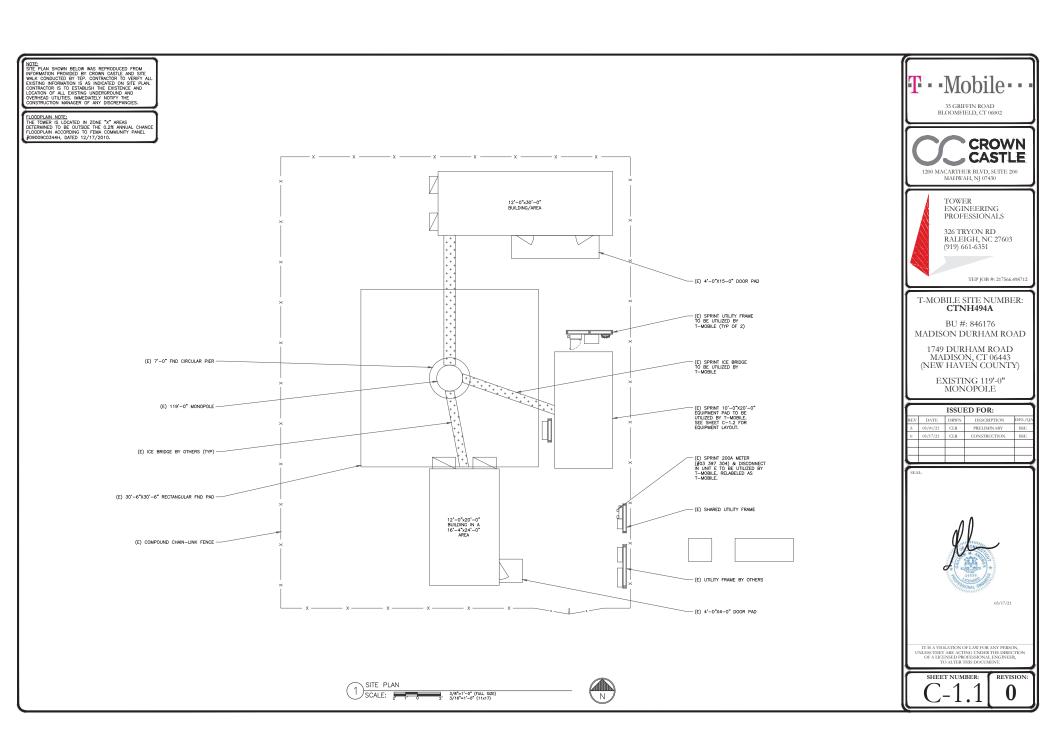
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DATE	DRWN	DESCRIPTION
3/01/21	CLR	PRELIMINARY

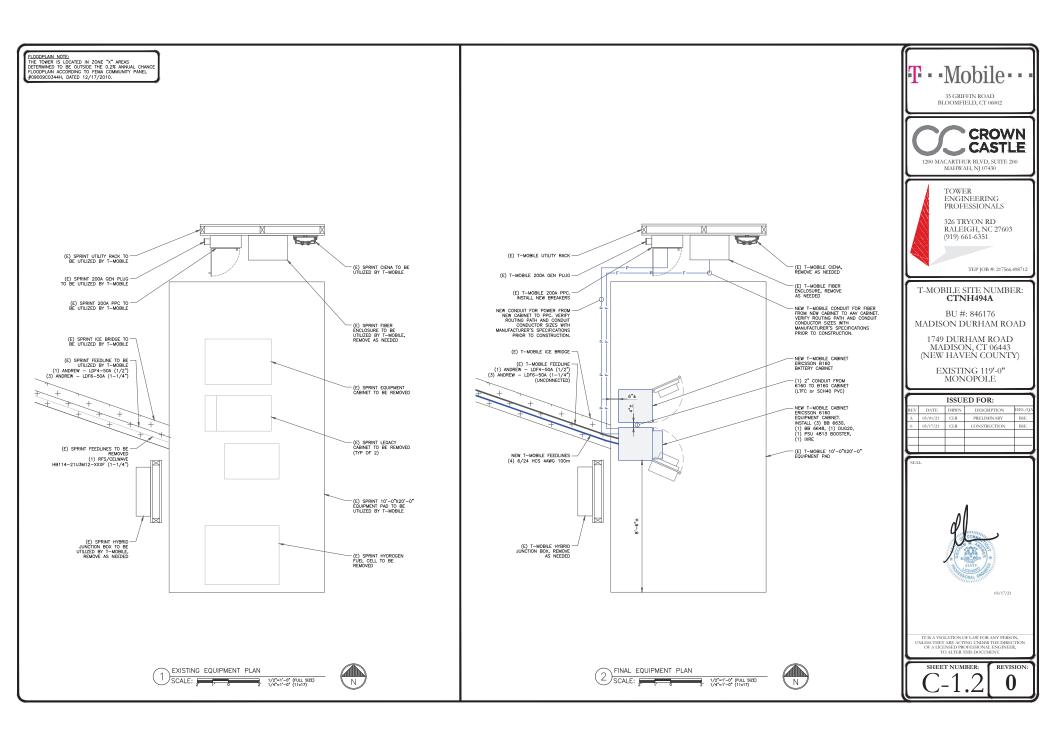
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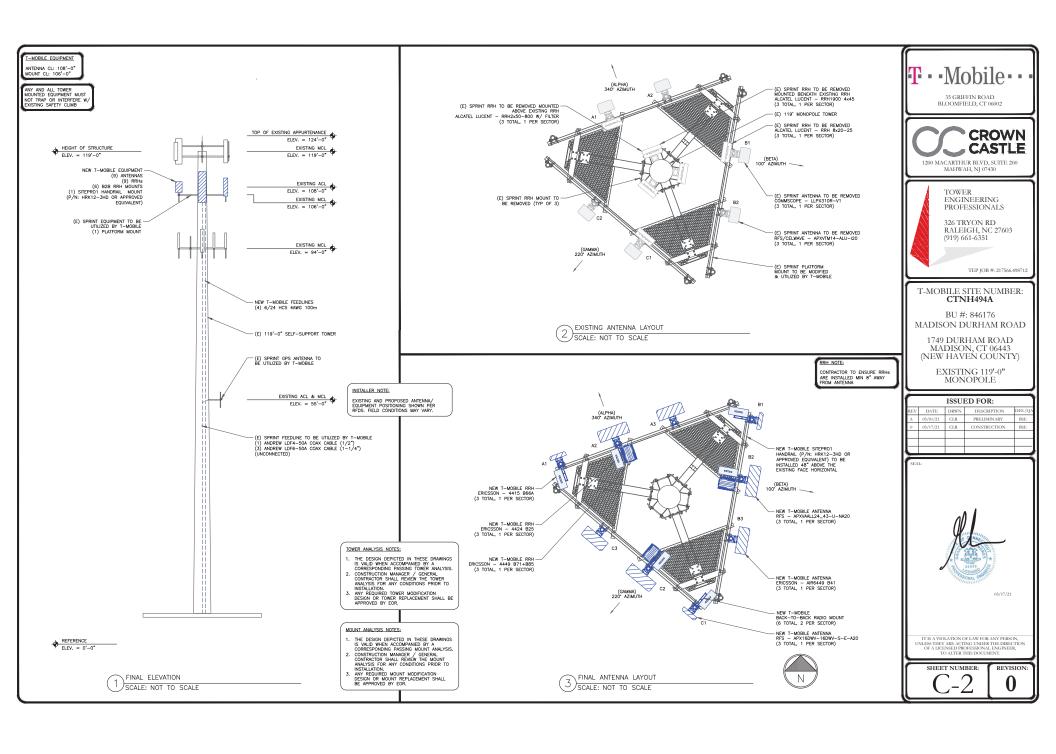


TO ALTER THIS DOCUME

SHEET NUMBER:







						FINAL ANTENNA SCHEDULE				
SECTOR	POS.	TECHNOLOGY	RAD CENTER	AZIMUTH	ANTENNA MANUFACTURER	ANTENNA MODEL	MECH. TILT	ELECT. TILT	TOWER MOUNTED EQUIPMENT	FEEDLINE TYPE
ALPHA	A1	L2100	108"-0"	340°	RFS	APX16DWV-16DWV-S-E-A20 (QUAD)	0.	2*	(1) ERICSSON - 4415 B66A	HYBRID (SHARED)
ALPHA	A2	L700, L600, N600, L1900, G1900	108'-0"	340°	RFS	APXVAALL24_43-U-NA20 (OCTO)	0,	2'/5'	(1) ERICSSON - 4449 B71+B85 (1) ERICSSON - 4424 B25	(1) 6/24 HCS 4AWG 100m
ALPHA	A3	L2500, N2500	108'-0"	340°	ERICSSON	(ACTIVE ANTENNA - MASSIVE MIMO)	0,	2*	=	(1) 6/24 HCS 4AWG 100m
BETA	B1	L2100	108'-0"	100°	RFS	APX16DWV-16DWV-S-E-A20 (QUAD)	0.	2*	(1) ERICSSON - 4415 B66A	HYBRID (SHARED)
BETA	B2	L700, L600, N600, L1900, G1900	108'-0"	100°	RFS	APXVAALL24_43-U-NA20 (OCTO)	o,	2'/5'	(1) ERICSSON - 4449 B71+B85 (1) ERICSSON - 4424 B25	(1) 6/24 HCS 4AWG 100m
BETA	B3	L2500, N2500	108'-0"	100°	ERICSSON	(ACTIVE ANTENNA - MASSIVE MIMO)	0.	2*	-	HYBRID (SHARED)
GAMMA	C1	L2100	108'-0"	220*	RFS	APX16DWV-16DWV-S-E-A20 (QUAD)	0,	2*	(1) ERICSSON - 4415 B66A	HYBRID (SHARED)
GAMMA	C2	L700, L600, N600, L1900, G1900	108'-0"	220"	RFS	APXVAALL24_43-U-NA20 (OCTO)	0.	2'/5'	(1) ERICSSON - 4449 B71+B85 (1) ERICSSON - 4424 B25	(1) 6/24 HCS 4AWG 100m
GAMMA	C3	L2500, N2500	108"-0"	220°	ERICSSON	(ACTIVE ANTENNA - MASSIVE MIMO)	0.	2*	-	HYBRID (SHARED)
ROPOSED	ANTENNA	A/EQUIPMENT SHOWN IN	BOLD							

FINAL CABLE SCHEDULE										
STATUS	STATUS CABLE TYPE SIZE									
NEW	HCS	6/24 4AWG 100m	3							
(	CABLE QUANTITY									

NOTE: (3) HYBRID SHARED BETWEEN APX/4415/4449/4424 PER SECTOR (1) HYBRID SHARED BETWEEN 6449 ANTENNAS PER SECTOR

> TOWER ENGINEERING PROFESSIONALS 326 TRYON RD RALEIGH, NC 27603

1200 MACARTHUR BLVD, SUITE 200 MAHWAH, NJ 07430

T • Mobile • •

35 GRIFFIN ROAD
BLOOMFIELD, CT 06002

326 TRYON RD RALEIGH, NC 27603 (919) 661-6351

TEP IOB #: 217566.498712

CROWN CASTLE

# T-MOBILE SITE NUMBER: CTNH494A

BU #: 846176 MADISON DURHAM ROAD

1749 DURHAM ROAD MADISON, CT 06443 (NEW HAVEN COUNTY)

> EXISTING 119'-0" MONOPOLE

ISSUED FOR:										
REV	DATE	DRWN	DESCRIPTION	DES./QA						
Α	03/01/21	CLR	PRELIMINARY	BSE						
0	03/17/21	CLR	CONSTRUCTION	BSE						

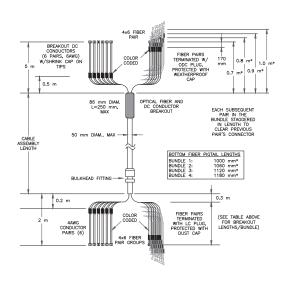
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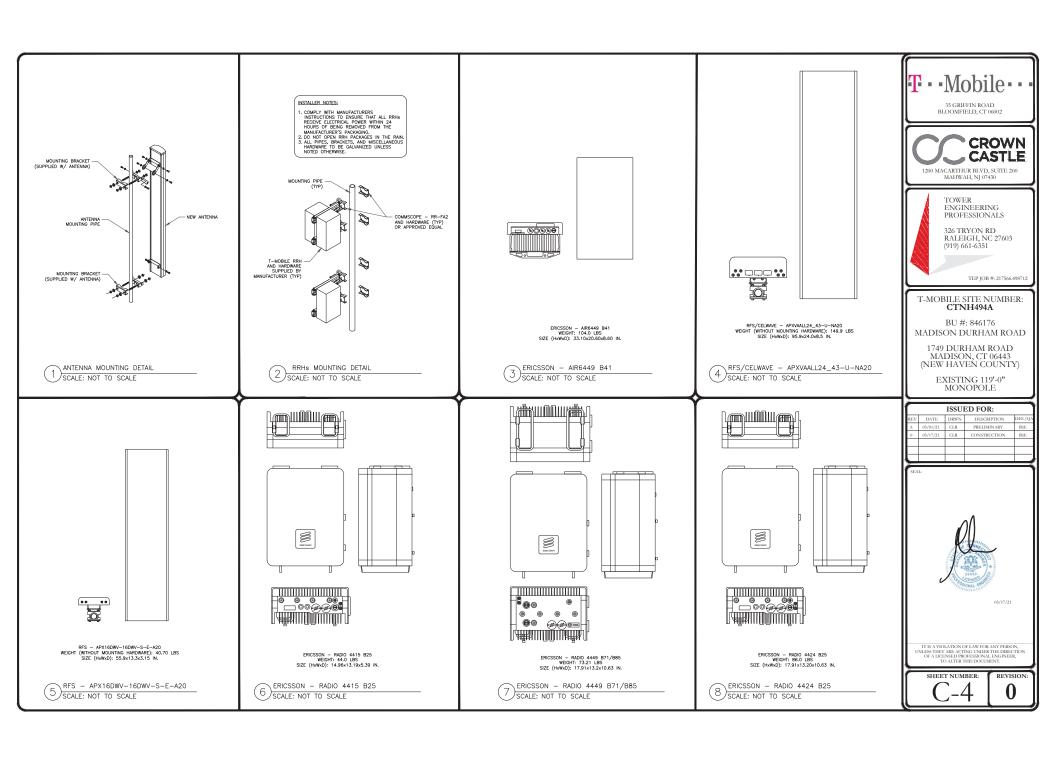
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

C-3

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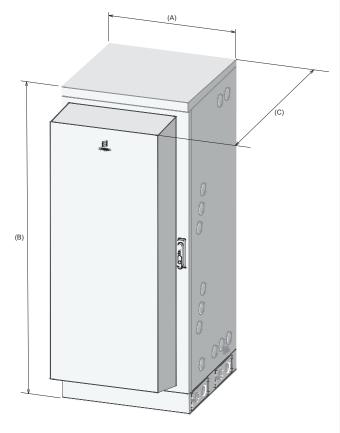


2 HCS DETAIL SCALE: NOT TO SCALE



### INSTALLER NOTES

- INFORMATION SHOWN PROVIDED BY T-MOBILE. CONTRACTOR TO REFERENCE CABINET MANUFACTURER'S SPECIFICATIONS FOR FURTHER DETAILS.
- CONTRACTOR TO FOLLOW THE LATEST VERSION OF T-MOBILE REGION
  CONSTRUCTION STANDARDS CONTACT T-MOBILE FOR DETAILS



Dimensions	
Width (A)	650 mm / 25.5906 in
Height (B)	1450 mm / 57.08661 in (without base frame) 1600 mm / 62.99213 in (with base frame)
Depth (C)	850 mm / 33.4646 in
Weight	
Empty enclosure	176 kg / 388.014 lb

ERICSSON 6160 CABINET DETAILS
SCALE: NOT TO SCALE







TOWER ENGINEERING PROFESSIONALS 326 TRYON RD RALEIGH, NC 27603 (919) 661-6351

TEP JOB #: 217566.498712

# T-MOBILE SITE NUMBER: **CTNH494A**

BU #: 846176 MADISON DURHAM ROAD

1749 DURHAM ROAD MADISON, CT 06443 (NEW HAVEN COUNTY)

> EXISTING 119'-0" MONOPOLE

ſ	ISSUED FOR:											
REV	DATE	DRWN	DESCRIPTION	DES./QA								
Α	03/01/21	CLR	PRELIMINARY	BSE								
0	03/17/21	CLR	CONSTRUCTION	BSE								

SEAL:



03/17/21

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.

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REVISION

ERICSSON B160 CABINET DETAILS SCALE: NOT TO SCALE

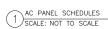
NOTE: LOAD CALCULATIONS TAKEN FROM INFORMATION PROVIDED BY CROWN CASTLE & POWER ANALYSIS TOOL BASED ON THE RFDS DATED DASED ON THE RFDS DATED 01/12/2021 V1.0. CONTRACTOR TO VERIFY LOADS WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO CONSTRUCTION.

EXISTIN	G 200	A M.C	.B, 24	0/12	20 V	AC,	1ø, .	3W PP	C PAN	EL SC	HEDULE				
LOAD SERVED	VOLT AMPERES (WATTS)		VOLT AMPERES (WATTS)		VOLT AMPERES (WATTS)		TRIP	СКТ	PH	ASE	CKT	TRIP	VOLT A	MPERES TTS)	LOAD SERVED
	L1	L2		#			#		L1	L2					
SURGE	100	700	60	1	$\mathbb{A}$	<u> </u>	2	10	340	170	FAN				
SURGE	The same	100	80	3	Щ	В	4	15	775	180	RECEPTACLE				
NID OUTLET	180	700	15	5	M	4	6	10	500	77.7	LIGHT				
**BTS 1		9600	**100	7	$\mathbb{A}$	╝	8	20		0	*UNKNOWN (OFF)				
**BIS I	9600	700	**100	9	Ж	<u> </u>	10	15	0	70	*UNKNOWN (OFF)				
SPARE	700	-	-	11	]4	B	12	80	1000	0	*BTS 2 (OFF)				
SPARE	-	The same	-	13	M		14	80	0	200	-BIS 2 (OFF)				
SPARE		-	-	15	$\mathbb{A}$	╚	16	15	74.	1440	GENERATOR HEATER				
SPARE	-	The same	-	17	$\mathbb{A}$	4	18	-	-	***************************************	SPARE				
SPARE	100	-	-	19	]	╚	20	-	1000	-	SPARE				
SPARE	-	775	-	21	$\mathbb{A}$	4	22	-	-	100	SPARE				
SPARE	The same	-	-	23		В∕	24	-	***************************************	-	SPARE				
VOLT AMPS	9880	9700							840	1620	VOLT AMPS				
L1 VOLT AMPERES				10	720	11	320	L2 VOL	T AMPER	S					
						320		MAX VO	LT AMPER	RES					
							94.4			MAX AMPS					
					11	17.9		MAX AM	MAX AMPS x 125%						

\*NOTE - EXISTING BREAKER TO BE REMOVED. NOTIFY TEP IF BREAKER IS TO REMAIN.
\*\*NOTE - REUSE BREAKER FOR NEW CABINET INSTALL

PROPOSED 200A M.C.B, 240/120 VAC, 10, 3W PPC PANEL SCHEDULE												
LOAD SERVED	(WA	MPERES TTS)	TRIP			PHASE		СКТ	TRIP	(WA	MPERES TTS)	LOAD SERVED
	L1	L2		#				#		L1	L2	
SURGE	100	Transport of the second	60	-1	-	Α	$\downarrow \sim$	2	10	340	The same	FAN
SORGE		100	- 00	3	Ж	В	$ \downarrow $	4	15		180	RECEPTACLE
NID OUTLET	180	100	15	5	h	Α		6	10	500	77.	LIGHT
6160 ENCLOSURE	775	7405	**100	7	$\mathbb{L}$	В	$ \downarrow $	8	-	1996	-	SPARE
6160 ENCLUSURE	7405	***************************************	**100	9	Ц	Α		10	-	-	300	SPARE
GFCI INTERNAL IN 6160	The same of the sa	180	20	11	h	В		12	-	7000	-	SPARE
SPARE	-	The same	-	13	h	Α		14	-	-	3000	SPARE
SPARE	The same	-	-	15	h	В		16	15	200	1440	GENERATOR HEATER
SPARE	-	700	-	17	h	Α		18	-	-	300	SPARE
SPARE	1990	-	-	19	h	В		20	-	199	-	SPARE
SPARE	-	1000	-	21	h	Α		22	-	-	300	SPARE
SPARE	The same of	-	-	23	h	В	L	24	-	***************************************	-	SPARE
VOLT AMPS	7685	7685				Т				840	1620	VOLT AMPS
	L	1 VOLT A	MPERES	85	25		93	505	L2 VOL	T AMPER	S	
									MAX VO	LT AMPER	RES	
				77.5	5		MAX AMPS					
	96.9					MAX AMPS x 125%						
1									-			

NOTE - PROPOSED BREAKER IN BOLD



### GENERAL NOTES:

- ALL NEW CONDUCTORS TO BE INSTALLED SHALL BE COPPER, ALL CONDUCTORS SHALL BE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 UNLESS NOTED OTHERWISE.
- 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.

ONE-LINE DIAGRAM NOTES: 1. ELECTRICAL SERVICE IS 200A, 120/240V, 1ø, 3W.

FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT, REFER TO VENDOR PRINTS PROVIDED BY EQUIPMENT MANUFACTURER.

# UTILITY NOTES: 1. CONTRACTOR SHALL VERIFY AVAILABLE FAULT CURRENT WITH POWER COMPANY AND ENSURE ALL ELECTRICAL EQUIPMENT IS SUITABLE FOR AVAILABLE FAULT CURRENT.

- CONTRACTOR SHALL COORDINATE UTILITY SERVICES WITH LOCAL UTILITY COMPANIES. VERIFY ALL REQUIREMENTS WITH UTILITY COMPANY STANDARDS.
- ONE—LINE DIAGRAM IS FOR SCHEMATIC PURPOSES ONLY AND IS NOT INDICATIVE OF THE ACTUAL EQUIPMENT LAYOUT.
- 4. ALL EQUIPMENT WILL HAVE A MINIMUM AIC OF 10 KA. CONTRACTOR TO DETERMINE AVAILABLE FAULT CURRENT BEFORE ENERGIZING EQUIPMENT. THE AMOUNT OF AVAILABLE FAULT CURRENT SHALL BE MARKED ON THE SERVICE EQUIPMENT PER NEC 110.24.
- CONTRACTOR SHALL NOTIFY UTILITY COMPANY OF CHANGES IN ELECTRICAL LOAD.
- CONTRACTOR TO VERIFY EXISTING CONDUIT(S) SIZE(S) PRIOR TO CONSTRUCTION AND MAY REUSE EXISTING CONDUIT(S) IF THEY MEET THE MINIMUM REQUIREMENTS PER NEC CODE.
- GROUNDING ELECTRODE CONDUCTOR IS SIZED FOR SINGLE 200A SERVICE ONLY. IF METER BANK SHARES A COMMON NEUTRAL/GROUND POINT, CONTRACTOR WILL INSTALL (1) 3/0 COPPER GEC INSTEAD.

# UL NOTE: ELECTRICAL MATERIALS, DEVICES, CONDUCTORS, APPLIANCES AND EQUIPMENT SHALL BE LABELED/LISTED BY UL OR ACCEPTED BY JURISDICTION (LE: LOCAL COUNTY OR STATE) APPROVED THIRD PARTY TESTING AGENCY

- EXISTING 200A, 120/240V, 1¢, 3W, NEMA 3R, POWER PROTECTION CABINET (PPC) WITH INTEGRATED MANUAL TRANSFER SWITCH, LOAD CENTER, AND FACTORY WIRED GENERATOR INTERFACE FOR PORTABLE GENERATOR CONNECTION - RE-USE EXISTING 100A, 2-POLE BREAKER FOR POWER TO NEW 6160 CABINET - NEW 20A BREAKER FOR GFCI INTERNAL TO 6160 (ROUTE CONDUCTORS IN SAME CONDUIT AS 100A CONDUCTORS)

- EXISTING METER & 200A, 2-POLE BREAKER FOR SERVICE ENTRANCE DISCONNECT IN UNIT E

EXISTING WIRE AND CONDUIT

EXISTING UTILITY COMPANY 120/240V, 1¢3W TRANSFORMER

EXISTING 120/240V, 163W, MULTI-METER ELECTRICAL SERVICE LOCATION OF MAIN BONDING JUMPER

- EXISTING WIRE AND CONDUIT

20/1

- VERIFY EXISTING CONDUCTORS AND CONDUIT ARE SUFFICIENTLY SIZED, UPGRADE, AS NEEDED: (2) 1/0 WITH #2 GROUND IN 2" CONDUIT - 100A (2) #12 WITH #12 GROUND IN SAME CONDUIT - 20A CONDUITS SHALL BE SCHAO PVC

PROPOSED ERICSSON 6160 CABINET PROPOSED ERICSSON B160 BATTERY CABINET -(1) 2" CONDUIT FROM 6160 TO B160 CABINET (LTFC or SCH40 PVC)

ONE LINE DIAGRAM (2) SCALE: NOT TO SCALE T··Mobile··



BLOOMFIELD, CT 06002



TEP IOB #: 217566.498712

# T-MOBILE SITE NUMBER: CTNH494A

BU #: 846176 MADISON DURHAM ROAD

1749 DURHAM ROAD MADISON, CT 06443 (NEW HAVEN COUNTY)

> EXISTING 119'-0" MONOPOLE

ISSUED FOR:				
REV	DATE	DRWN	DESCRIPTION	DES./QA
Α	03/01/21	CLR	PRELIMINARY	BSE
0	03/17/21	CLR	CONSTRUCTION	BSE
_				-



SHEET NUMBER:

### T-MOBILE GROUNDING NOTES:

ALL GROUNDS MUST ROUTE DOWNHILL FOR ENTIRE DURATION OF ROUTE

 PROVIDE LABOR, MATERIALS, INSPECTION, AND TESTING TO PROVIDE CODE COMPLIANCE FOR ELECTRIC, TELEPHONE, AND GROUNDING/LIGHTNING SYSTEMS.

### ICE BRIDGE/ EQUIPMENT POST:

#2 SOLID COPPER TINNED, EXOTHERMICALLY WELDED TO GROUND RING (BOTH ENDS), FINAL WELD COLD GALVANIZED, IN  $\frac{1}{N}$  "NON-METALLIC SEAL TIGHT CONDUIT, SEALED WITH SILICONE, ANCHORED TO PAD/PLATFORM TO AVIOID TRIPH PAZARD USING HAMMER SET ANCHORS.

### PEDESTALS, PLINTHS, SSC CABINET, FCOA CABINETS:

- . #2 SOLID COPPER TINNED, 2 HOLE LUG WITH FLAT AND LOCK WASHER AT EQUIPMENT; EXOTHERMICALLY WELDED TO GROUND RING, FINAL WELD COLD GALVANZED, IN XF. WON-WETALLO SEAL TIGHT CONDUIT, SEALED WITH SLICOKE, ANGHOED TO PAD TO AVOID TRIP HAZARD USING HAMMER SET ANCHORS. EACH PART REQUIRES A SEPARATE DOWNLEAD, NO DASY CHAINS.
- 2. ALL COMPONENTS INSIDE FCOA CABINETS REQUIRE A DEDICATED GROUND.

### COVP's:

#6 THHN STRANDED (GREEN JACKET), CONNECTED AT EQUIPMENT SIDE USING OVP TERMINAL BLOCK CONNECTION; MECHANICALLY CONNECTED TO GROUND REFERENCE AT MASTER BUSS BAR USING 2 HOLE LUG WITH FLAT AND LOCK WASHER, IN \$" NON-METALLIC SEAL TIGHT CONDUIT, SEALED WITH SILICONE, AND ANCHORED TO PAD/PLATFORM TO AVOID TRIP HAZARD.

### ANTENNA/ COVP/ RRU MAST PIPES:

- ALL VERTICAL MAST PIPES: #2 SOLID COPPER TINNED, EXOTHERMICALLY WELDED TO TOP OF PIPE (PIPE, DOWN MOLD), FIRM WELD COLD GALVANIZED, BONDED TO TOP BUSS BAR WITH 2 HOLE COPPER COMPRESSION LUG, FLAT AND LOCK WASHER.
- EXISTING/REUSED PIPES: #2 SOLID COPPER TINNED, BONDED WITH COLD WATER CLAMP TO TOP OF PIPE, BONDED TO TOP BUSS WITH 2 HOLE COPPER COMPRESSION LUG, FLAT AND LOCK WASHER

### AIR TERMINALS:

TO BE INSTALLED, ONLY IF REQUIRED

### TMA's, DIPLEXERS AND TRIPLEXERS:

- 1. #6 THHN, WITH PROPER COPPER COMPRESSION LUG, FLATS AND LOCK WASHERS
- 2. ALL GROUND LUGS ON TMA MUST BE GROUNDED WITH SEPARATE DOWNLEAD TO BUSS BAR (NO DAISY CHAINS)

### ELEVATED STEEL PLATFORMS WITH LUNAR FEET:

#2 SOLID COPPER TINNED, EXOTHERMICALLY WELDED (FLAT PLATE MOLD) TO OUTSIDE PERIMETER BEAMS IN FOUR (4) PLACES, FINAL WELD COLD GALVANIZED, BONDED DIRECTLY TO SUBGRADE GROUND RING.

### STEEL CANOPY (STEEL PLATFORM OR CONCRETE PAD):

- #2 SOLID COPPER TINNED, EXCITHERMICALLY WELDED (PIPE, DOWN MOLD) TO BOTTOM OF ALL WERTCAL SUPPORT POSTS, TYPICALLY FOUR (4) PIPES, FINAL WELD COLD GALVANIZED, BONED DIRECTLY TO SUBGRADE GROUND RING.
- #2 SOUD COPPER TINNED, EXOTHERMICALLY WELDED (PIPE, UP MOLD) TO TOP OF ALL
  WERECAL SUPPORT POSTS, TYPICALLY FOUR (4) PIPES, FINAL WELD COLD GALVANIZED,
  BONDED UP TO CANOPY GRIP—STRUT USING 2 HOLE COPPER COMPRESSION LUG, FLAT AND
  LOCK WASHER.

### RRU:

#6 THHN, WITH PROPER COPPER COMPRESSION LUG, ANTI-OXIDANT TO SECTOR BUSS BAR

### FSBE ALARM BOX:

#6 THHN WITH ONE HOLE LUG BONDED TO PREVIOUSLY GROUNDED FCOA, PLINTH OR BUSS BAR. SURGE SUPPRESSORS:

### #6 THHN TO PREVIOUSLY GROUNDED BUSS BAR USING PROPER LUGS

- FYGA/FYGB BRACKET:

  1. #6 THHN TO PREVIOUSLY GROUNDED BUSS BAR USING PROPER LUGS
- 2. THROUGH BOLTS WITH FLAT, LOCK ON BRACKET

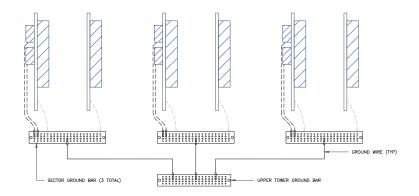
### BUSS BARS:

- PLATFORM / PAD BUSS BAR SHOULD BE MINIMUM 12\* TINNED COPPER WITH INSULATORS, AND SHOULD HAVE TWO (2) EXOTHERMICALLY WELDED DOWN LEADS DIRECTLY TO GROUND RING USING WZ SOULD COPPER TINNED WIRE.
- SECTOR BUSS BAR SHOULD BE PROPERLY SIZED TO ACCOMMODATE NECESSARY GROUNDING FOR EQUIPMENT ON EACH MOUNT, AND MAY BE SOLID COPPER (TINNED NOT REQUIRED). DO NOT USE INSULATORS ON SECTOR BUSS BARS ATTACH DIRECTLY TO TOWER MOUNT STEEL.

### GENERAL:

- NO GROUND KITS ON HYBRID TRUNKS (TOP OR BOTTOM)
- . NO GROUND KITS ON MICROWAVE IF CABLES (TOP OR BOTTOM)
- MICROWAVE SURGE SUPPRESSORS ARE NOT TO BE INSTALLED UPSTAIRS ON TOWER, DOWNSTAIRS ONLY (BULKHEAD PREFERRED)
- MICROWAVE ODU MUST BE GROUNDED TO TOWER TOP SECTOR OR COLLECTOR BUSS BAR
- ALL TMA'S AND DIPLEXERS MUST BE GROUNDED TO BUSS BAR. NO DAISY CHAIN ON TWIN/DUAL TMA
- ALL LUGS SHOULD BE PROPERLY SIZED FOR CONDUCTOR, BURNDY TINNED COPPER COMPRESSION STYLE
   I. NIDOOR (OR INSIDE CABINET) SHOULD HAVE WINDOW
- 2. OUTDOOR SHOULD NOT HAVE WINDOW
- . CONTRACTOR TO VERIFY EXISTENCE AND LOCATION OF EXISTING SITE GROUND SYSTEM.
- Contractor shall verify that grounding electrodes shall be connected in a ring using  $\frac{1}{2}$  awg gare tinned copper wise. The top of the ground roos and the ring conductor shall be 30° electrodes that be the configuration of the fost open than the convertigation of the convertigat
- GROUNDING CONDUCTORS SHALL BE OF EQUAL LENGTH, MATERIAL, AND BONDING TECHNIQUE.
- CONTRACTOR SHALL ENSURE GROUND RING IS WITHIN 12 TO 36 INCHES OF THE EQUIPMENT PAD. PROVIDE AND INSTALL GROUNDING CONNECTIONS SHOWN BELOW AS NEEDED PER EXISTING SITE GROUNDING SYSTEM. CONTRACTOR SHALL VERIFY ALL EXISTING SITE GROUNDING CONDITIONS BEFORE STARTING WORK OR PURCHASING EQUIPMENT.
- · ALL DOWN CONDUCTORS MUST GO DOWN.

ALPHA BETA GAMMA

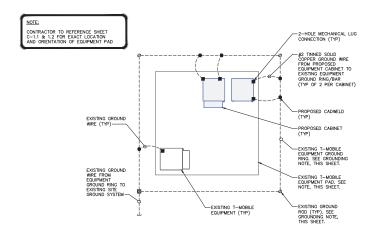


NOTE:

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

GROUNDING SHOWN TYPICAL PER SECTOR.

TYPICAL ANTENNA GROUNDING DIAGRAM



TYPICAL CABINET GROUNDING DIAGRAM SCALE: NOT TO SCALE







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1749 DURHAM ROAD MADISON, CT 06443 (NEW HAVEN COUNTY)

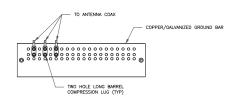
> EXISTING 119'-0" MONOPOLE

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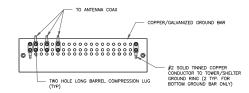
SHEET NUMBER:

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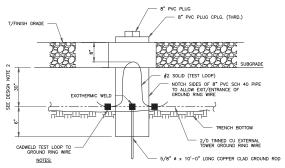
### NOTES:

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

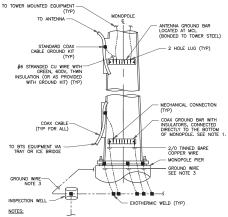


- 1. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
- 2. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
- 3 CROLIND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER

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

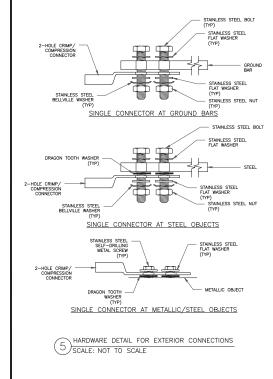


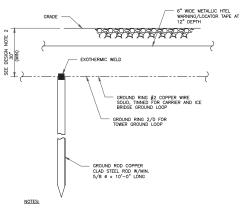
- GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
   GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250—50(D)
- INSPECTION WELL DETAIL 3) SCALE: NOT TO SCALE



- NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATIONS AND CONNECTION ORIENTATION. COAXIAL CABLES EXCEEDING 200 FEET ON THE TOWER SHALL HAVE GROUND KITS AT THE MIDPOINT. PROVIDE AS REQUIRED.
- 2. ONLY MECHANICAL CONNECTIONS ARE ALLOWED TO BE MADE TO CROWN CASTLE USA INC. TOWERS. ALL MECHANICAL CONNECTIONS SHALL BE TREATED WITH AN ANTI-OXIDANT COATING.
- ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF THE RECOGNIZED EDITION OF ANSI/TIA 222 AND NFPA 780.

TYPICAL ANTENNA CABLE GROUNDING (4) SCALE: NOT TO SCALE





- GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
   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)

GROUND ROD DETAIL (6) SCALE: NOT TO SCALE







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1749 DURHAM ROAD MADISON, CT 06443 (NEW HAVEN COUNTY)

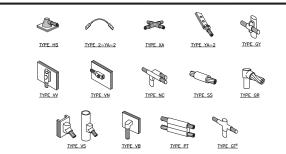
> EXISTING 119'-0" MONOPOLE

		15501	ED FOR:	
REV	DATE	DRWN	DESCRIPTION	DES./Q/
Α	03/01/21	CLR	PRELIMINARY	BSE
0	03/17/21	CLR	CONSTRUCTION	BSE

03/17/21

TO ALTER THIS DOCUM

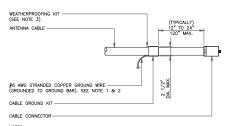
SHEET NUMBER:



### NOTE:

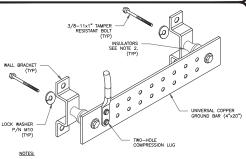
- ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.
   MOLD TYPE ONLY TO BE USED BELOW GRADE WHEN CONNECTING GROUND RING TO GROUND ROD.

CADWELD GROUNDING CONNECTIONS 1) SCALE: NOT TO SCALE



### NOTES:

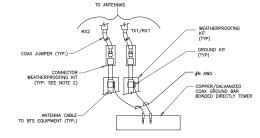
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
- WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.
- CABLE GROUND KIT CONNECTION SCALE: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



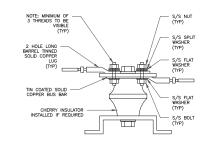
DOWN LEAD (HOME RUN) CONDUCTORS ARE <u>NOT</u> TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS—STD—10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD—WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.

2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

GROUND BAR DETAIL (6) SCALE: NOT TO SCALE

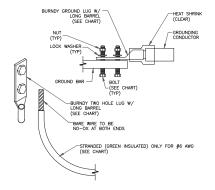


- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
- WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.
- GROUND CABLE CONNECTION 4) SCALE: NOT TO SCALE

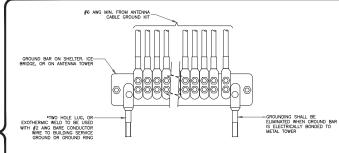


LUG DETAIL SCALE: NOT TO SCALE

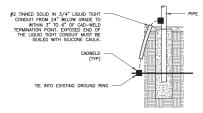
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT



- 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.
- MECHANICAL LUG CONNECTION (2) SCALE: NOT TO SCALE



GROUNDWIRE INSTALLATION (5) SCALE: NOT TO SCALE



TRANSITIONING GROUND DETAIL (8) SCALE: NOT TO SCALE

**T**··Mobile·· BLOOMFIELD, CT 06002





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0	03/17/21	CLR	CONSTRUCTION	BSE



TO ALTER THIS DOCUM

# APPENDIX B CORRESPONDENCE

# **Timothy Vicisko**

Victoria Masse <victoria@northeastsitesolutions.com> on behalf of Victoria Masse From: Sent: Thursday, May 26, 2022 3:07 PM To: David Allen; Timothy Vicisko; Chris Thompson Cc: Dave deraleau; Amanda Warner **Subject:** Fwd: FW: CTNH494A-Sprint Keep-Request for PE Letter **Attachments:** Alpha Overall sector from behind (2).jpeg; Beta Overall sector from behind (1).jpeg **Follow Up Flag:** Follow up Flag Status: Flagged David/Tim, Please see attached photos and emails below, let us know if you need anything else. Thank you ----- Forwarded message ------From: Dave deraleau < dderaleau@northeastsitesolutions.com > Date: Mon, May 23, 2022 at 4:17 PM Subject: FW: CTNH494A-Sprint Keep-Request for PE Letter To: Amanda Warner <amanda@northeastsitesolutions.com> Cc: Victoria Masse < victoria@northeastsitesolutions.com> From: Edward Clark <eclark@d-a-construction.com> **Sent:** Monday, May 23, 2022 4:13 PM To: Brian Saczynski < brian@d-a-construction.com >; Dave deraleau@northeastsitesolutions.com > Subject: RE: CTNH494A-Sprint Keep-Request for PE Letter The 2212s are in one housing- essentially naming it 4424- each 2212 dose different technology. One is doing L19 other G19 Dave Deraleau

413-858-5009

**Construction Manager** 

dderaleau@northeastsitesolutions.com



From: Brian Saczynski < <a href="mailto:brian@d-a-construction.com">brian@d-a-construction.com</a>>

**Sent:** Monday, May 23, 2022 4:06 PM

To: Edward Clark <eclark@d-a-construction.com>; Dave deraleau <dderaleau@northeastsitesolutions.com>

Subject: FW: CTNH494A-Sprint Keep-Request for PE Letter

Dave looking at the photos below you can see that there is two 2212's in one housing.

EC can you confirm-

# **Brian Saczynski**

**Special Projects** 

**D&A Construction Management Inc.** 

40 Flax Mill Rd - Branford, CT 06405

P: 203-641-2771

From: Dave deraleau < <a href="mailto:dderaleau@northeastsitesolutions.com">dderaleau@northeastsitesolutions.com</a>>

Sent: Monday, May 23, 2022 3:39 PM

To: Brian Saczynski <bri>hrian@d-a-construction.com>

Subject: FW: CTNH494A-Sprint Keep-Request for PE Letter

Did we double up on the 2212's here?

Dave Deraleau

**Construction Manager** 

413-858-5009

## dderaleau@northeastsitesolutions.com



**From:** Amanda Warner <a href="mailto:amanda@northeastsitesolutions.com">amanda@northeastsitesolutions.com</a>>

Sent: Monday, May 23, 2022 3:35 PM

To: Dave deraleau <a href="mailto:dderaleau@northeastsitesolutions.com">dderaleau@northeastsitesolutions.com</a> <a href="mailto:ccm">Cc: Victoria Masse < victoria@northeastsitesolutions.com</a> > Subject: FW: CTNH494A-Sprint Keep-Request for PE Letter

Dave,

Can you confirm with D&A what they actually installed for RRUs? The pictures look like they installed a single 2212 instead of the 4424 which apparently has two of the 2212 within in.

From: Rana, Hansraj < Hansraj.Rana4@T-Mobile.com>

**Sent:** Monday, May 23, 2022 12:42 PM

To: Amanda Warner <a href="mailto:amanda@northeastsitesolutions.com">"> Victoria Masse < wictoria@northeastsitesolutions.com">"> victoria@northeastsitesolutions.com"> victoria@northeastsitesolutions.com"> victoria@northeastsitesolutions.com > victoria@northeas

Cc: Patil, Pratik < Pratik.Patil30@T-Mobile.com >; Lucey, Michael < Michael.Lucey@T-Mobile.com >

Subject: RE: CTNH494A-Sprint Keep-Request for PE Letter

HI Amanda,

Actually, Radio 4424 has 2x 2212 Radios in one radio unit. FYI below picture.

# Radio 4424(2x2212) Specifications

Radio 4424(2x2212) B25		
Picture	-	
Technology	GWL on B25	
Max Output Power	4x80W (2x(2x80W))	
Radio	4T4R	
Spectrum Bands	B25 (G Block capable)	
Bandwidth	65 MHz	
Dimensions (HxWxD in) Weight (lbs)	16.5" x 13.5" x ~9.6" ~88	
RF Connector	4.3-10	
Fuse Rating	20A	
Data Ports	4 x 10.1Gbps CPRI	
Minimum SW needed/availability	LTE: L18.Q1 IP1 WCDMA: W16B IP36 GSM: G16.11	

Thanks,

# HansRaj Rana

**RF** Engineer

Mobile: (973) 452-5910

HansRaj.Rana4@T-Mobile.com

From: Amanda Warner < amanda@northeastsitesolutions.com >

Sent: Monday, May 23, 2022 10:01 AM

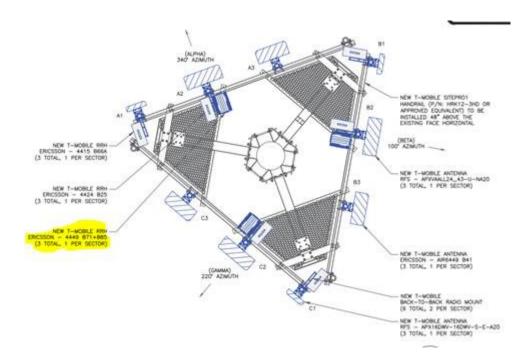
To: Rana, Hansraj < <a href="mailto:Hansraj.Rana4@t-mobile.com">Hansraj.Rana4@t-mobile.com</a>>

[External] Hi Hansraj, It looks like the 4424 wasn't installed here but rather a 2212. Our PE is asking us to give them an updated RFDS to reflect this in order to give us a letter needed to close out the permits. Please let us know. Thank you, Amanda From: Timothy Vicisko <tvicisko@tepgroup.net> Sent: Monday, May 23, 2022 9:47 AM To: Amanda Warner <a href="mailto:amanda@northeastsitesolutions.com">amanda@northeastsitesolutions.com</a>; David Allen <a href="mailto:dallen@tepgroup.net">dallen@tepgroup.net</a>; Victoria Masse <victoria@northeastsitesolutions.com> **Cc:** Chris Thompson < <a href="mailto:cthompson@tepgroup.net">cthompson@tepgroup.net</a>; Dave deraleau < <a href="mailto:dderaleau@northeastsitesolutions.com">dderaleau@northeastsitesolutions.com</a> Subject: RE: CTNH494A-Sprint Keep-Request for PE Letter Good Morning Victoria, Can you please send over the updated RFDS sheet for this site? Everything with the T-mo install looked good, except they installed a different radio behind position 2 on all sectors. CD's specify Ericsson 4424 B25, Ericsson 2212 B2 B25 was installed instead, see below.

**Cc:** Victoria Masse < <u>victoria@northeastsitesolutions.com</u>> **Subject:** FW: CTNH494A-Sprint Keep-Request for PE Letter







Thanks,

Tim

Tim Vicisko

# Division Manager - NJ Inspections | Tower Engineering Professionals, Inc. (www.tepgroup.net)

53 Stickle Ave, Suite 1, Rockaway, NJ 07866 | Office: (919) 661-6351 | Fax: (919) 661-6350 | Mobile: (732) 770-2100

From: Amanda Warner <a href="mailto:amanda@northeastsitesolutions.com">amanda@northeastsitesolutions.com</a>

Sent: Wednesday, May 11, 2022 12:39 PM

To: David Allen <dallen@tepgroup.net>; Victoria Masse <victoria@northeastsitesolutions.com>

**Cc:** Timothy Vicisko <<u>tvicisko@tepgroup.net</u>>; Chris Thompson <<u>cthompson@tepgroup.net</u>>; Dave deraleau

<dderaleau@northeastsitesolutions.com>

Subject: RE: CTNH494A-Sprint Keep-Request for PE Letter

Hello David,

PO attached. Please advise if you require any other information from us in order to proceed with this.