



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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E-Mail: siting.council@ct.gov

www.ct.gov/csc

VIA ELECTRONIC MAIL

March 14, 2019

Nora Oliver
Empire Telecom USA
16 Esquire Road
Billerica, MA 01862

RE: **EM-AT&T-062-190204** – AT&T Mobility notice of intent to modify an existing telecommunications facility located at 975 Mix Avenue, Hamden, Connecticut.

Dear Ms. Oliver:

The Connecticut Siting Council (Council) is in receipt of your correspondence of March 1, 2019 and March 6, 2019, submitted in response to the Council's February 27, 2019 and March 4, 2019 notifications of an incomplete request for exempt modification with regard to the above-referenced matter.

The submission renders the request for exempt modification complete and the Council will process the request in accordance with the Federal Communications Commission 60-day timeframe.

Thank you for your attention and cooperation.

Sincerely,

Melanie A. Bachman
Executive Director

MAB/IN/emr

Robidoux, Evan

From: Nora Oliver <noliver@empiretelecomm.com>
Sent: Wednesday, March 06, 2019 2:49 PM
To: Robidoux, Evan
Cc: CSC-DL Siting Council
Subject: RE: Council 2nd Incomplete Letter for EM-AT&T-062-190204-MixAvenue-Hamden
Attachments: 18000.36 CT2035 Hamden LTE 6C_7C_5G 850 - Rev1 CDs 19.03.06 (S&S).pdf

Hello,

Per the 2nd Incomplete Notice Letter please find attached the revised Plans.

I apologize for not including these on the previous email.

Please let me know if you have any questions.

Thank you
Nora

Nora Oliver
Empire Telecom USA
16 Esquire Road
Billerica, MA 01862
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Office: 978-608-8424
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From: Robidoux, Evan [mailto:Evan.Robidoux@ct.gov]
Sent: Wednesday, March 6, 2019 9:29 AM
To: Nora Oliver <noliver@empiretelecomm.com>
Cc: CSC-DL Siting Council <Siting.Council@ct.gov>
Subject: Council 2nd Incomplete Letter for EM-AT&T-062-190204-MixAvenue-Hamden

Please see the attached correspondence.

NOTES AND SPECIFICATIONS

DESIGN BASIS:

GOVERNING CODE: 2015 INTERNATIONAL BUILDING (IBC) AS MODIFIED BY THE 2018 CT STATE BUILDING CODE AND AMENDMENTS.

- DESIGN CRITERIA:
 - RISK CATEGORY: II (BASED ON IBC APPENDIX N)
 - ULTIMATE DESIGN SPEED (BUILDING): 125 MPH (Vasd) (EXPOSURE C/IMPORTANCE FACTOR 1.0 BASED ON ASCE 7-10) PER 2015 INTERNATIONAL BUILDING CODE (IBC) AS MODIFIED BY THE 2018 CONNECTICUT STATE BUILDING CODE.
 - SEISMIC LOAD (DOES NOT CONTROL): PER ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES.

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE GOVERNING BUILDING CODE.
- DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
- BEFORE BEGINNING THE WORK, THE CONTRACTOR IS RESPONSIBLE FOR MAKING SUCH INVESTIGATIONS CONCERNING PHYSICAL CONDITIONS (SURFACE AND SUBSURFACE) AT OR CONTIGUOUS TO THE SITE WHICH MAY AFFECT PERFORMANCE AND COST OF THE WORK.
- DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST EXISTING FIELD CONDITIONS.
- THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES.
- ALL DIMENSIONS, ELEVATIONS, AND OTHER REFERENCES TO EXISTING STRUCTURES, SURFACE, AND SUBSURFACE CONDITIONS ARE APPROXIMATE. NO GUARANTEE IS MADE FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS, ELEVATIONS, ANGLES WITH EXISTING CONDITIONS AND WITH ARCHITECTURAL AND SITE DRAWINGS BEFORE PROCEEDING WITH ANY WORK.
- AS THE WORK PROGRESSES, THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONDITIONS WHICH ARE IN CONFLICT OR OTHERWISE NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS AND SHALL NOT PROCEED WITH SUCH WORK UNTIL THE CONFLICT IS SATISFACTORILY RESOLVED.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE SHORING, BRACING, AND BARRICADES AS MAY BE REQUIRED FOR THE PROTECTION OF EXISTING PROPERTY, CONSTRUCTION WORKERS, AND FOR PUBLIC SAFETY.
- THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING SITE OPERATIONS, COORDINATE WORK WITH NORTHEAST UTILITIES
- THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER FOUNDATION REMEDIATION WORK IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, TEMPORARY BRACING, GUYS OR TIEDOWNS, WHICH MIGHT BE NECESSARY.
- ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
- SHOP DRAWINGS, CONCRETE MIX DESIGNS, TEST REPORTS, AND OTHER SUBMITTALS PERTAINING TO STRUCTURAL WORK SHALL BE FORWARDED TO THE OWNER FOR REVIEW BEFORE FABRICATION AND/OR INSTALLATION IS MADE. SHOP DRAWINGS SHALL INCLUDE ERECTION DRAWINGS AND COMPLETE DETAILS OF CONNECTIONS AS WELL AS MANUFACTURER'S SPECIFICATION DATA WHERE APPROPRIATE. SHOP DRAWINGS SHALL BE CHECKED BY THE CONTRACTOR AND BEAR THE CHECKER'S INITIALS BEFORE BEING SUBMITTED FOR REVIEW.
- NO DRILLING WELDING OR TAPING ON EVERSOURCE OWNED EQUIPMENT.
- REFER TO DRAWING T1 FOR ADDITIONAL NOTES AND REQUIREMENTS.

STRUCTURAL STEEL

- ALL STRUCTURAL STEEL IS DESIGNED BY ALLOWABLE STRESS DESIGN (ASD)
 - STRUCTURAL STEEL (W SHAPES)---ASTM A992 (FY = 50 KSI)
 - STRUCTURAL STEEL (OTHER SHAPES)---ASTM A36 (FY = 36 KSI)
 - STRUCTURAL HSS (RECTANGULAR SHAPES)---ASTM A500 GRADE B, (FY = 46 KSI)
 - STRUCTURAL HSS (ROUND SHAPES)---ASTM A500 GRADE B, (FY = 42 KSI)
 - PIPE---ASTM A53 (FY = 35 KSI)
 - CONNECTION BOLTS---ASTM A325-N
 - U-BOLTS---ASTM A36
 - ANCHOR RODS---ASTM F 1554
 - WELDING ELECTRODE---ASTM E 70XX
- CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE ENGINEER FOR REVIEW. SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING: SECTION PROFILES, SIZES, CONNECTION ATTACHMENTS, REINFORCING, ANCHORAGE, SIZE AND TYPE OF FASTENERS AND ACCESSORIES. INCLUDE ERECTION DRAWINGS, ELEVATIONS AND DETAILS.
- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST PROVISIONS OF AISC MANUAL OF STEEL CONSTRUCTION.
- PROVIDE ALL PLATES, CLIP ANGLES, CLOSURE PIECES, STRAP ANCHORS, MISCELLANEOUS PIECES AND HOLES REQUIRED TO COMPLETE THE STRUCTURE.
- FIT AND SHOP ASSEMBLE FABRICATIONS IN THE LARGEST PRACTICAL SECTIONS FOR DELIVERY TO SITE.
- INSTALL FABRICATIONS PLUMB AND LEVEL, ACCURATELY FITTED, AND FREE FROM DISTORTIONS OR DEFECTS.
- AFTER ERECTION OF STRUCTURES, TOUCHUP ALL WELDS, ABRASIONS AND NON-GALVANIZED SURFACES WITH A 95% ORGANIC ZINC RICH PAINT IN ACCORDANCE WITH ASTM 780.
- ALL STEEL MATERIAL (EXPOSED TO WEATHER) SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT DIPPED GALVANIZED) COATINGS" ON IRONS AND STEEL PRODUCTS.
- ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC COATING (HOT-DIP) ON IRON AND STEEL HARDWARE".
- THE ENGINEER SHALL BE NOTIFIED OF ANY INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NON CONFORMING MATERIALS OR CONDITIONS TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE ENGINEER REVIEW.
- CONNECTION ANGLES SHALL HAVE A MINIMUM THICKNESS OF 1/4 INCHES.
- STRUCTURAL CONNECTION BOLTS SHALL CONFORM TO ASTM A325. ALL BOLTS SHALL BE 3/4" DIAMETER MINIMUM AND SHALL HAVE A MINIMUM OF TWO BOLTS, UNLESS OTHERWISE ON THE DRAWINGS.
- LOCK WASHER ARE NOT PERMITTED FOR A325 STEEL ASSEMBLIES.
- SHOP CONNECTIONS SHALL BE WELDED OR HIGH STRENGTH BOLTED.
- MILL BEARING ENDS OF COLUMNS, STIFFENERS, AND OTHER BEARING SURFACES TO TRANSFER LOAD OVER ENTIRE CROSS SECTION.
- FABRICATE BEAMS WITH MILL CAMBER UP.
- LEVEL AND PLUMB INDIVIDUAL MEMBERS OF THE STRUCTURE TO AN ACCURACY OF 1:500, BUT NOT TO EXCEED 1/4" IN THE FULL HEIGHT OF THE COLUMN.
- COMMENCEMENT OF STRUCTURAL STEEL WORK WITHOUT NOTIFYING THE ENGINEER OF ANY DISCREPANCIES WILL BE CONSIDERED ACCEPTANCE OF PRECEDING WORK.
- INSPECTION AND TESTING OF ALL WELDING AND HIGH STRENGTH BOLTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY.
- FOUR COPIES OF ALL INSPECTION TEST REPORTS SHALL BE SUBMITTED TO THE ENGINEER WITHIN TEN (10) WORKING DAYS OF THE DATE OF INSPECTION.

PAINT NOTES

PAINTING SCHEDULE:

- ANTENNA PANELS:**
 - SHERWIN WILLIAMS POLANE-B
 - COLOR TO BE MATCHED WITH EXISTING TOWER STRUCTURE.
 - COAXIAL CABLES:**
 - ONE COAT OF DTM BONDING PRIMER (2-5 MILS. DRY FINISH)
 - TWO COATS OF DTM ACRYLIC PRIMER/FINISH (2.5-5 MILS. DRY FINISH)
 - COLOR TO BE FIELD MATCHED WITH EXISTING STRUCTURE.
- EXAMINATION AND PREPARATION:**
- DO NOT APPLY PAINT IN SNOW, RAIN, FOG OR MIST OR WHEN RELATIVE HUMIDITY EXCEEDS 85%. DO NOT APPLY PAINT TO DAMP OR WET SURFACES.
 - VERIFY THAT SUBSTRATE CONDITIONS ARE READY TO RECEIVE WORK. EXAMINE SURFACE SCHEDULED TO BE FINISHED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY CONDITION THAT MAY POTENTIALLY AFFECT PROPER APPLICATION.
 - TEST SHOP APPLIED PRIMER FOR COMPATIBILITY WITH SUBSEQUENT COVER MATERIALS.
 - PERFORM PREPARATION AND CLEANING PROCEDURE IN STRICT ACCORDANCE WITH COATING MANUFACTURER'S INSTRUCTIONS FOR EACH SUBSTRATE CONDITION.
 - CORRECT DEFECTS AND CLEAN SURFACES WHICH AFFECT WORK OF THIS SECTION. REMOVE EXISTING COATINGS THAT EXHIBIT LOOSE SURFACE DEFECTS.
 - IMPERVIOUS SURFACE: REMOVE MILDEW BY SCRUBBING WITH SOLUTION OF TRI-SODIUM PHOSPHATE AND BLEACH. RINSE WITH CLEAN WATER AND ALLOW SURFACE TO DRY.
 - ALUMINUM SURFACE SCHEDULED FOR PAINT FINISH: REMOVE SURFACE CONTAMINATION BY STEAM OR HIGH-PRESSURE WATER. REMOVE OXIDATION WITH ACID ETCH AND SOLVENT WASHING. APPLY ETCHING PRIMER IMMEDIATELY FOLLOWING CLEANING.
 - FERROUS METALS: CLEAN UNGALVANIZED FERROUS METAL SURFACES THAT HAVE NOT BEEN SHOP COATED; REMOVE OIL, GREASE, DIRT, LOOSE MILL SCALE, AND OTHER FOREIGN SUBSTANCES. USE SOLVENT OR MECHANICAL CLEANING METHODS THAT COMPLY WITH THE STEEL STRUCTURES PAINTING COUNCIL'S (SSPC) RECOMMENDATIONS. TOUCH UP BARE AREAS AND SHOP APPLIED PRIME COATS THAT HAVE BEEN DAMAGED. WIRE BRUSH, CLEAN WITH SOLVENTS RECOMMENDED BY PAINT MANUFACTURER, AND TOUCH UP WITH THE SAME PRIMER AS THE SHOP COAT.
 - GALVANIZED SURFACES: CLEAN GALVANIZED SURFACES WITH NON-PETROLEUM-BASED SOLVENTS SO SURFACE IS FREE OF OIL AND SURFACE CONTAMINANTS. REMOVE PRETREATMENT FROM GALVANIZED SHEET METAL FABRICATED FROM COIL STOCK BY MECHANICAL METHODS.
 - ANTENNA PANELS: REMOVE ALL OIL, DUST, GREASE, DIRT, AND OTHER FOREIGN MATERIAL TO ENSURE ADEQUATE ADHESION. PANELS MUST BE WIPED WITH METHYL ETHYL KETONE (MEK).
 - COAXIAL CABLES: REMOVE ALL OIL, DUST, GREASE, DIRT, AND OTHER FOREIGN MATERIAL TO ENSURE ADEQUATE ADHESION.
- CLEANING:**
- COLLECT WASTE MATERIAL, WHICH MAY CONSTITUTE A FIRE HAZARD, PLACE IN CLOSED METAL CONTAINERS AND REMOVE DAILY FROM SITE.
- APPLICATION:**
- APPLY PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 - DO NOT APPLY FINISHES TO SURFACES THAT ARE NOT DRY.
 - APPLY EACH COAT TO UNIFORM FINISH.
 - APPLY EACH COAT OF PAINT SLIGHTLY DARKER THAN PRECEDING COAT UNLESS OTHERWISE APPROVED.
 - SAND METAL LIGHTLY BETWEEN COATS TO ACHIEVE REQUIRED FINISH.
 - VACUUM CLEAN SURFACES FREE OF LOOSE PARTICLES. USE TACK CLOTH JUST PRIOR TO APPLYING NEXT COAT.
 - ALLOW APPLIED COAT TO DRY BEFORE NEXT COAT IS APPLIED.
- COMPLETED WORK:**
- SAMPLES: PREPARE 24" x 24" SAMPLE AREA FOR REVIEW.
 - MATCH APPROVED SAMPLES FOR COLOR, TEXTURE AND COVERAGE. REMOVE REFINISH OR REPAINT WORK NOT IN COMPLIANCE WITH SPECIFIED REQUIREMENTS.

ANTENNA SCHEDULE

SECTOR	EXISTING/PROPOSED	BAND	ANTENNA	SIZE (INCHES) (L x W x D)	ANTENNA H HEIGHT	AZIMUTH	(E/P) TMA/DIPLEXER/TRIPLEXER (QTY)	(E/P) RRU (QTY)	FEEDER (QTY)	(E/P) RAYCAP (QTY)	RRU	SIZE (INCHES) (L x W x D)
A1	EXISTING	UMTS 850	KATHREIN 800-10121	54.5 x 10.3 x 5.9	61'	143'	TMA: POWERWAVE: (E) TT19-08BP111-001 (1) DIPLEXER: (E) POWERWAVE: LGP 21901 (2)		1/2" COAX (2), LENGTH ±120'	(E) RAYCAP DC6-48-60-18-8C (1)	RRUS-11	19.7 x 17 x 7.2
A2	EXISTING	LTE 700/1900/1900/WCS	QUINTEL QS66512-2	72 x 12 x 9.6	61'	20'		(E) RRUS-E2 B29 (1), (E) RRUS-32 B2 (1), (E) RRUS-32 (1)	1/2" COAX (2)*, LENGTH ±120' FEEDER AND DC POWER (1)	(E) RAYCAP DC6-48-60-18-8C (1)	RRUS-32 B2	27.2 x 12.1 x 7
A3	PROPOSED	LTE 850/700/AWS/5G 850	KATHREIN 800-10965	78.7 x 20 x 6.9	61'	20'	LOWBAND COMBINERS: KAELUS: (P) DBC0061F1V51-2 (2)	(P) B14 4478 (1), (P) 4478 B5 (1), (P) 4426 B66 (1)	FEEDER AND DC POWER (1)	(P) RAYCAP DC6-48-60-18-8C (1)	RRUS-32	27.2 x 12.1 x 7
A4	EXISTING	LTE 700	CCI HPA-65R-BUU-H6	72 x 14.8 x 9	61'	20'		(E) RRUS-11 (REUSE ONLY) (1)	FEEDER AND DC POWER (1)		RRUS-E2 B29	20.4 x 18.5 x 7.5
B1	EXISTING	UMTS 850	KATHREIN 800-10121	54.5 x 10.3 x 5.9	61'	263'	TMA: POWERWAVE: (E) TT19-08BP111-001 (1) DIPLEXER: (E) POWERWAVE: LGP 21901 (2)		1/2" COAX (2), LENGTH ±120'	(E) RAYCAP DC6-48-60-18-8C (1)	B14 4478	14.9 x 13.1 x 7.3
B2	EXISTING	LTE 700/1900/1900/WCS	QUINTEL QS66512-2	72 x 12 x 9.6	61'	150'		(E) RRUS-E2 B29 (1), (E) RRUS-32 B2 (1), (E) RRUS-32 (1)	1/2" COAX (2)*, LENGTH ±120' FEEDER AND DC POWER (1)		4478 B5	16.5 x 13.4 x 7.7
B3	PROPOSED	LTE 850/700/AWS/5G 850	KATHREIN 800-10965	78.7 x 20 x 6.9	61'	150'	LOWBAND COMBINERS: KAELUS: (P) DBC0061F1V51-2 (2)	(P) B14 4478 (1), (P) 4478 B5 (1), (P) 4426 B66 (1)	FEEDER AND DC POWER (1)		4426 B66	15.0 x 13.2 x 5.8
B4	EXISTING	LTE 700	CCI HPA-65R-BUU-H6	72 x 14.8 x 9	61'	150'		(E) RRUS-11 (REUSE ONLY) (1)	FEEDER AND DC POWER (1)			
C1	EXISTING	UMTS 850	KATHREIN 800-10121	54.5 x 10.3 x 5.9	61'	23'	TMA: POWERWAVE: (E) TT19-08BP111-001 (1) DIPLEXER: (E) POWERWAVE: LGP 21901 (2)		1/2" COAX (2), LENGTH ±120'	(E) RAYCAP DC6-48-60-18-8C (1)		
C2	EXISTING	LTE 700/1900/1900/WCS	QUINTEL QS66512-2	72 x 12 x 9.6	61'	260'		(E) RRUS-E2 B29 (1), (E) RRUS-32 B2 (1), (E) RRUS-32 (1)	1/2" COAX (2)*, LENGTH ±120' FEEDER AND DC POWER (1)			
C3	PROPOSED	LTE 850/700/AWS/5G 850	KATHREIN 800-10965	78.7 x 20 x 6.9	61'	260'	LOWBAND COMBINERS: KAELUS: (P) DBC0061F1V51-2 (2)	(P) B14 4478 (1), (P) 4478 B5 (1), (P) 4426 B66 (1)	FEEDER AND DC POWER (1)			
C4	EXISTING	LTE 700	CCI HPA-65R-BUU-H6	72 x 14.8 x 9	61'	260'		(E) RRUS-11 (REUSE ONLY) (1)	FEEDER AND DC POWER (1)			

* = SPARE COAX CABLE TO BE CAPPED

PROFESSIONAL ENGINEER SEAL

DATE: 08/23/18
SCALE: AS NOTED
JOB NO. 18000.36

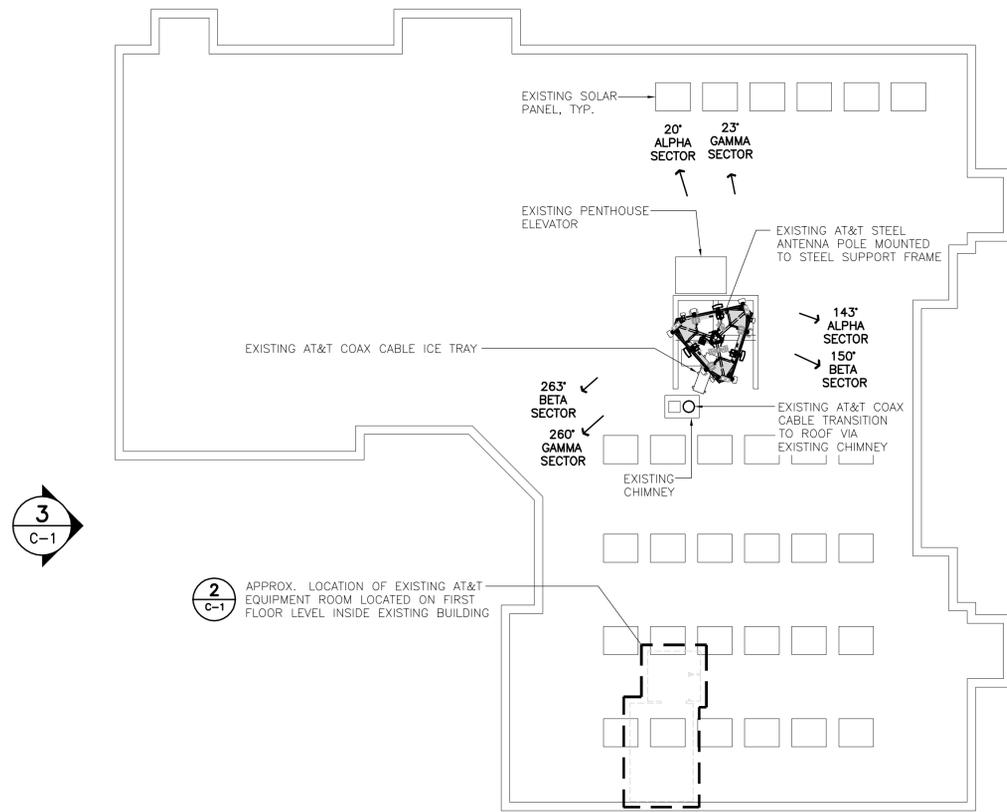
NOTES, SPECIFICATIONS & ANTENNA SCHEDULE

N-1

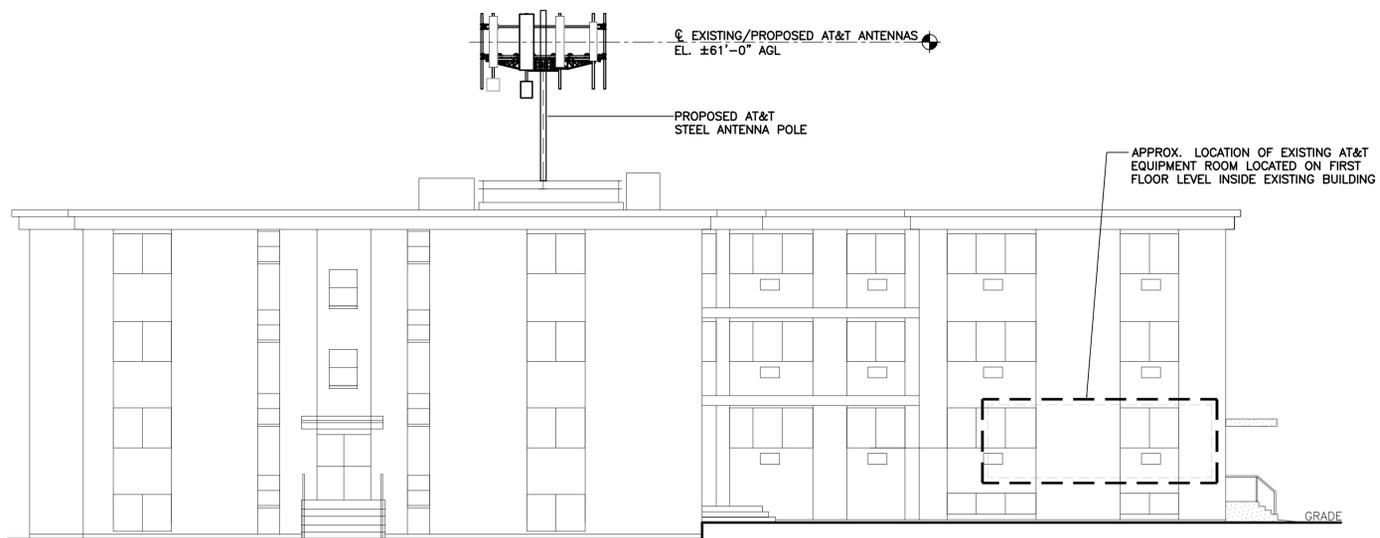
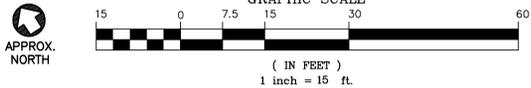
Sheet No. 2 of 9

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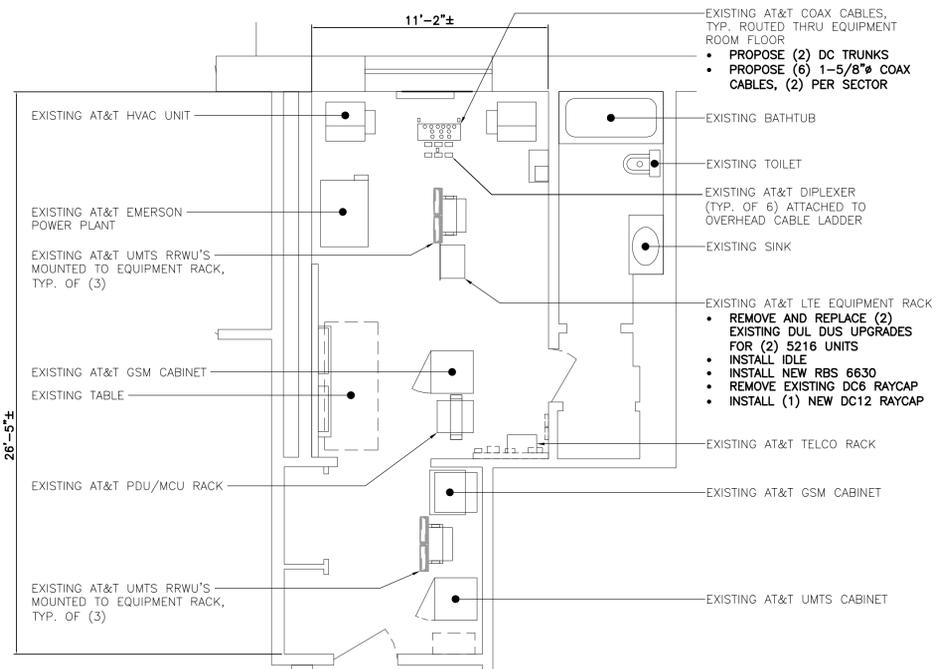
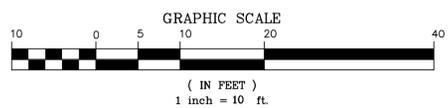
AT&T MOBILITY
WIRELESS COMMUNICATIONS FACILITY
HAMDEN
CT2035 - LTE 6C AWS/7C 700 UPPER D/5G 850
975 MIX AVENUE
HAMDEN, CT 06514



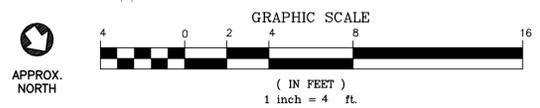
1 ROOF PLAN - PROPOSED
SCALE: 1" = 15'-0"



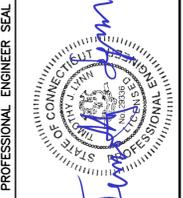
3 NORTHWEST ELEVATION - PROPOSED
SCALE: 1" = 10'-0"



2 EQUIPMENT ROOM PLAN - PROPOSED
SCALE: 1/4" = 1'-0"



REV.	DATE	BY	CHKD	DESCRIPTION
1	3/6/18	TUL	DMD	CONSTRUCTION DRAWINGS - UPDATED CODE REFERENCE
0	11/29/18	TUL	DMD	CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION



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www.CenTekEng.com

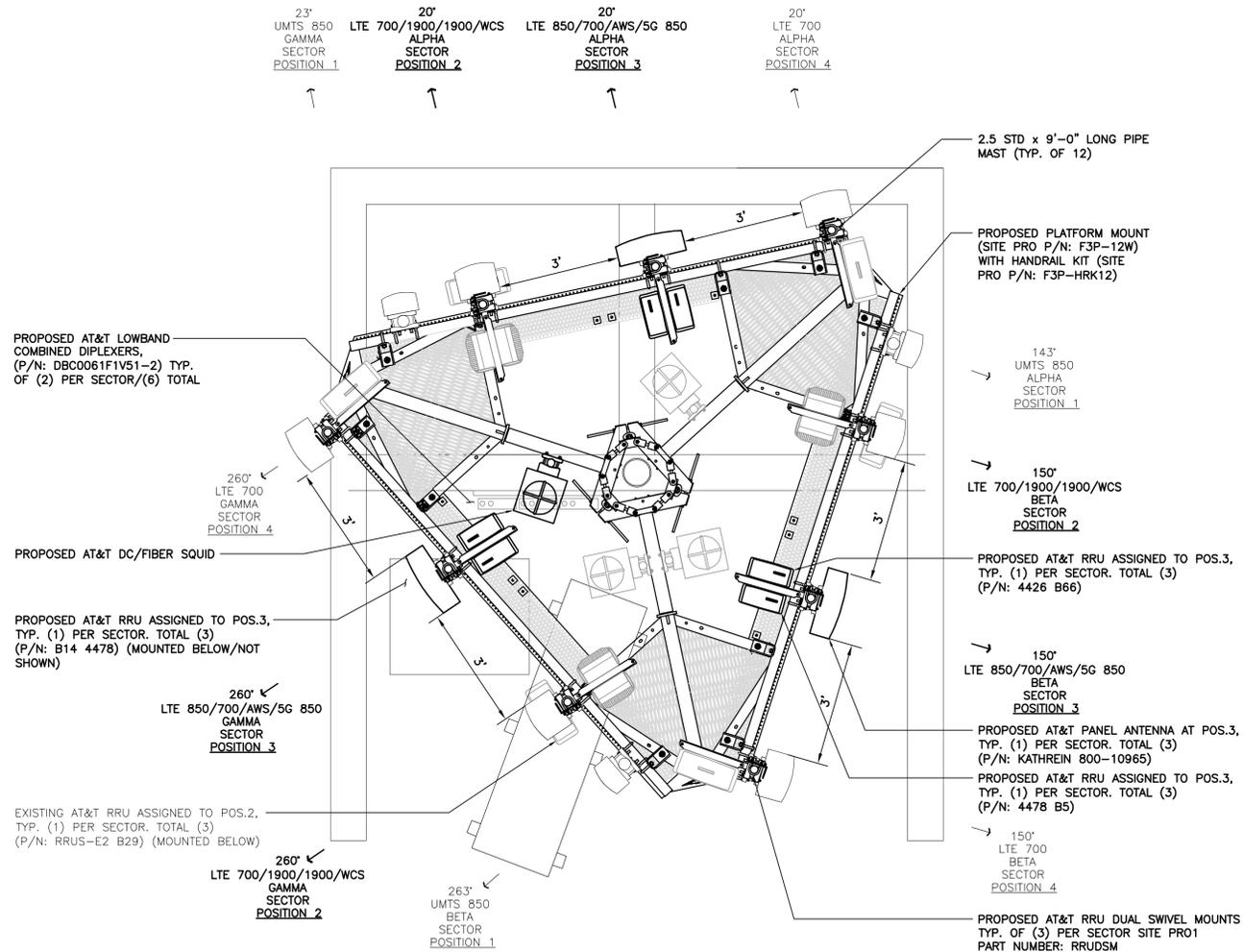
AT&T MOBILITY
WIRELESS COMMUNICATIONS FACILITY
HAMDEN
CT2035 - LTE 6C AWS/7C 700 UPPER D/5G 850
975 MIX AVENUE
HAMDEN, CT 06514

DATE: 08/23/18
SCALE: AS NOTED
JOB NO. 18000.36

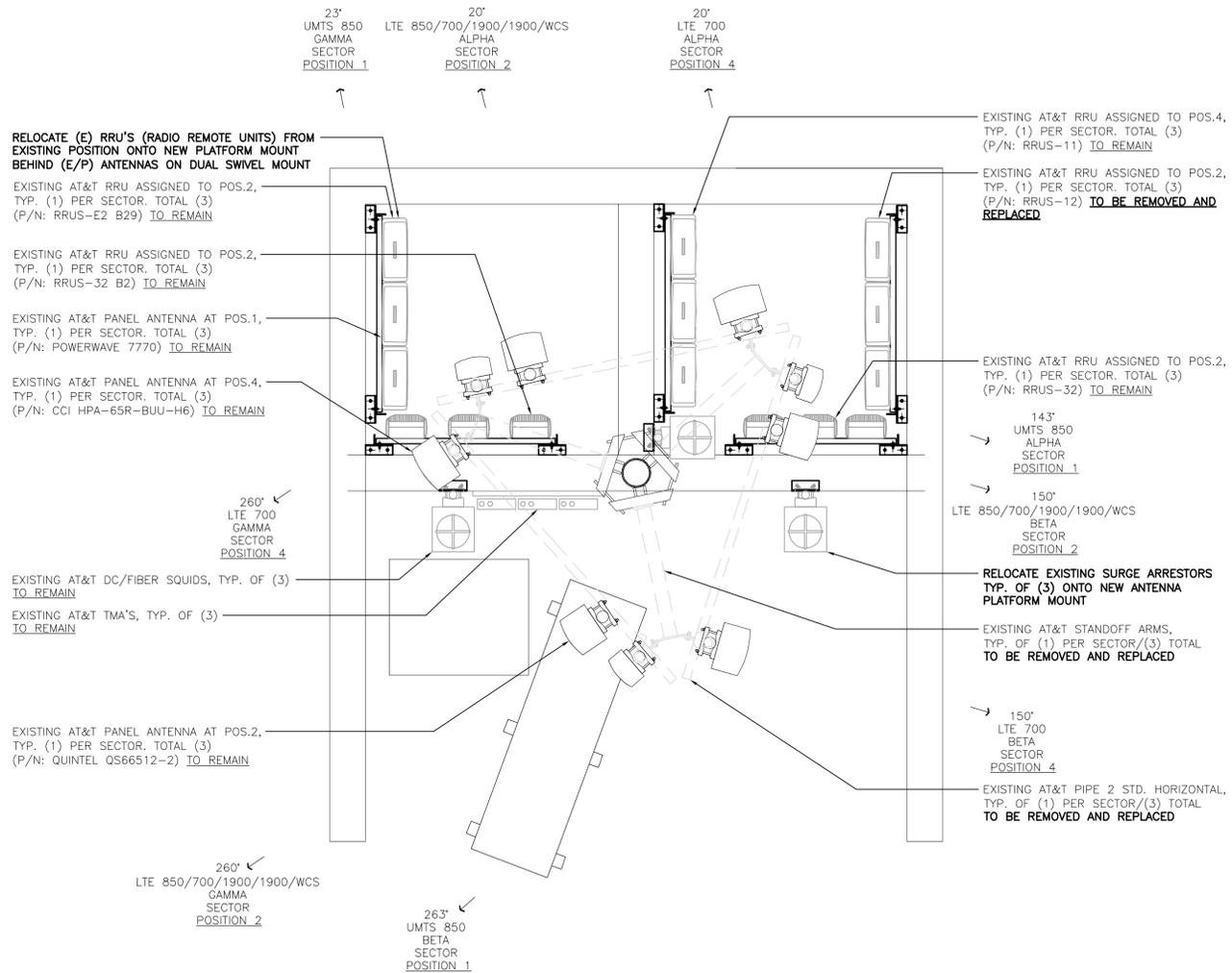
PLANS AND ELEVATION

C-1

NOTE:
ALL EXISTING AND/OR PROPOSED RRU'S SHALL BE MOUNTED A MINIMUM OF 8" FROM THE BACK OF ADJACENT AT&T ANTENNA.



2 PROPOSED ANTENNA PLAN
C-2 SCALE: 1/2" = 1'-0" TRUE NORTH



1 EXISTING ANTENNA PLAN
C-2 SCALE: 1/2" = 1'-0" TRUE NORTH

REV	DATE	BY	CHKD	DESCRIPTION
1	3/6/18	TUL	DMD	CONSTRUCTION DRAWINGS - UPDATED CODE REFERENCE
0	11/29/18	TUL	DMD	CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER SEAL
STATE OF CONNECTICUT
JULIAN J. JACOBSON
REGISTERED PROFESSIONAL ENGINEER
No. 10000-0000

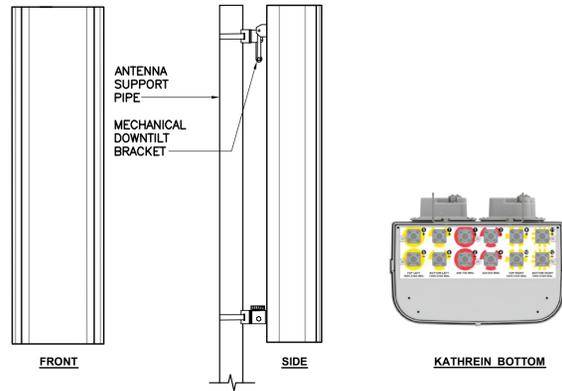


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AT&T MOBILITY
WIRELESS COMMUNICATIONS FACILITY
HAMDEN
CT2035 - LTE 6C AWS/7C 700 UPPER D/5G 850
975 MIX AVENUE
HAMDEN, CT 06514

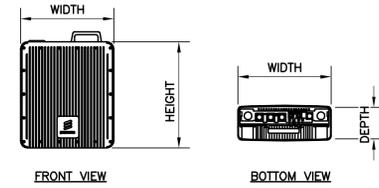
DATE: 08/23/18
SCALE: AS NOTED
JOB NO. 18000.36

ANTENNA CONFIGURATION DETAILS



ALPHA/BETA/GAMMA ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: KATHREIN MODEL: 800-10965	78.7"L x 20"W x 6.9"D	108.6 LBS.

1 PROPOSED ANTENNA DETAIL
C-3 SCALE: NTS



RRU (REMOTE RADIO UNIT)			
EQUIPMENT	DIMENSIONS	WEIGHT	CLEARANCES
MAKE: ERICSSON MODEL: 4426 B66	15.0"L x 13.2"W x 5.8"D	48.5 LBS.	ABOVE: 16" MIN. BELOW: 12" MIN. FRONT: 36" MIN.

NOTES:
1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH AT&T CONSTRUCTION MANAGER PRIOR TO ORDERING.

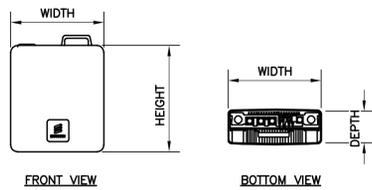
2 ERICSSON 4426 B66 DETAIL
C-3 SCALE: 1" = 1'-0"



RRU (REMOTE RADIO UNIT)			
EQUIPMENT	DIMENSIONS	WEIGHT	CLEARANCES
MAKE: ERICSSON MODEL: 4478 B5	16.5"L x 13.4"W x 7.7"D	59.9 LBS.	ABOVE: 16" MIN. BELOW: 12" MIN. FRONT: 36" MIN.

NOTES:
1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH AT&T CONSTRUCTION MANAGER PRIOR TO ORDERING.

3 ERICSSON 4478 B5 DETAIL
C-3 NOT TO SCALE



RRU (REMOTE RADIO UNIT)			
EQUIPMENT	DIMENSIONS	WEIGHT	CLEARANCES
MAKE: ERICSSON MODEL: B14 4478	14.9"L x 13.1"W x 7.3"D	60 LBS.	ABOVE: 16" MIN. BELOW: 12" MIN. FRONT: 36" MIN.

NOTES:
1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH AT&T CONSTRUCTION MANAGER PRIOR TO ORDERING.

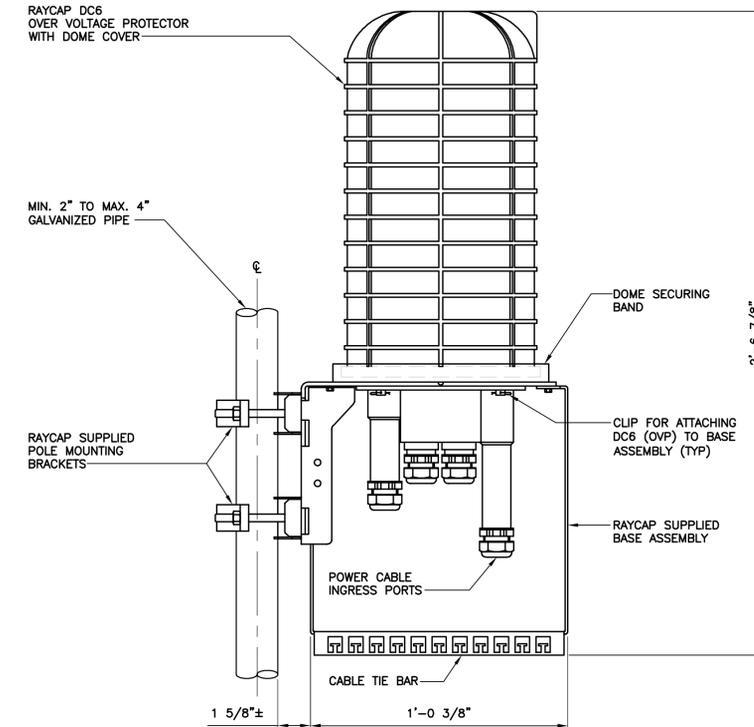
4 ERICSSON B14 4478 DETAIL
C-3 SCALE: 1" = 1'-0"



LOW BAND COMBINER		
DIPLEXER 700/850		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: KAEUS MODEL: DBC0061FV51-2	8"H x 1.45"W x 6.2"D	18.3 LBS.

NOTES:
1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH AT&T CONSTRUCTION MANAGER PRIOR TO ORDERING.

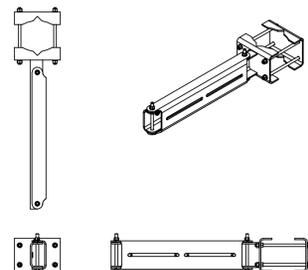
5 KAEUS DBC0061FV51-2 DETAIL
C-3 SCALE: NOT TO SCALE



SITE TYPE	ARRESTOR MAKE/MODEL	QTY REQUIRED	ARRESTOR LOCATION	WEIGHT
	MAKE: RAYCAP (SQUID) MODEL: DC6-48-60-18-8F	(1) PER SITE	ANTENNA PLATFORM	20 LBS. (WITHOUT MOUNT)

NOTES:
1. CONTRACTOR TO COORDINATE FINAL SURGE ARRESTOR MODEL SELECTION(S) WITH AT&T CONSTRUCTION MANAGER PRIOR TO ORDERING.
2. CONTRACTOR TO INSTALL ARRESTOR IN CONFORMANCE WITH MANUFACTURERS RECOMMENDATIONS.
3. RAYCAP VIA AT&T SUPPLIES THE DC6 OVER VOLTAGE PROTECTOR AND PIPE MOUNTING BRACKETS. SUBCONTRACTOR SHALL SUPPLY THE PIPE.

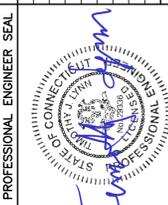
7 TYPICAL DC FIBER SQUID DETAIL
C-3 NOT TO SCALE



RRU DUAL SWIVEL MOUNT		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: SITE PRO 1 PART NO.: RRUDSM	27.75"L x 6.5"W x 4.7"D	39.4 LBS.

6 RRU DUAL SWIVEL MOUNT DETAIL
C-3 NOT TO SCALE

REV.	DATE	BY	CHK'D	DESCRIPTION
1	3/6/19	TJL		CONSTRUCTION DRAWINGS - UPDATED CODE REFERENCE
0	11/29/18	DMD		CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION



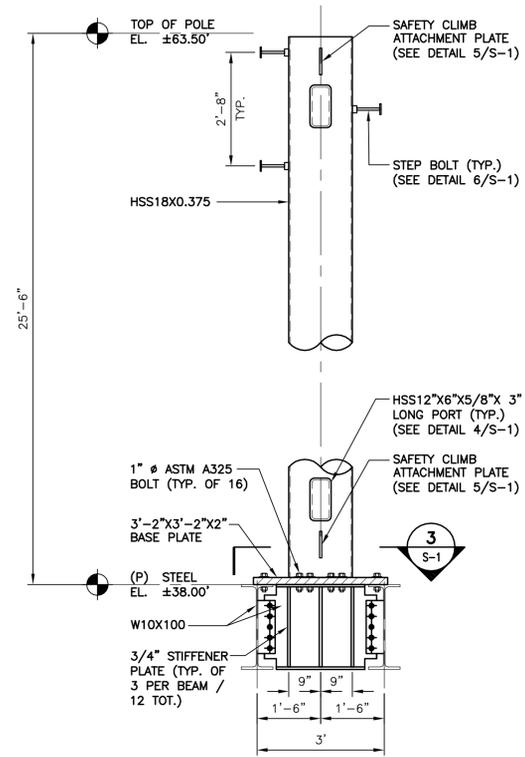
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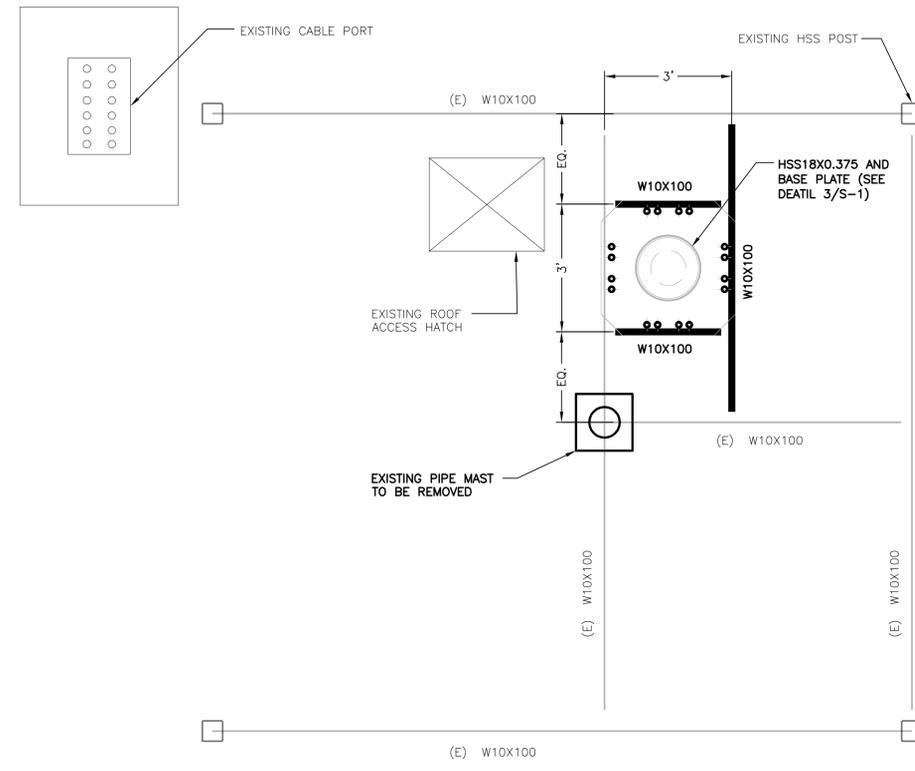
DATE: 08/23/18
SCALE: AS NOTED
JOB NO. 18000.36

DETAILS

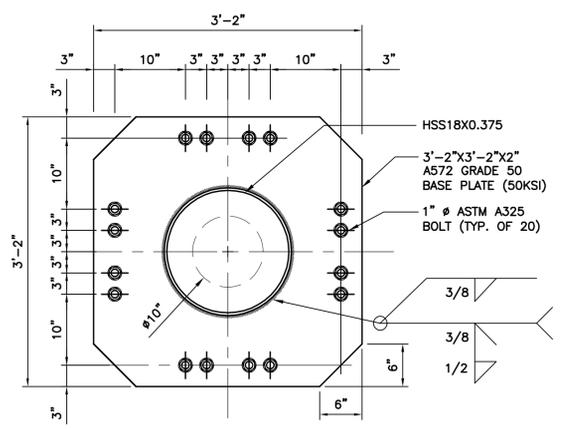
C-3
Sheet No. 5 of 9



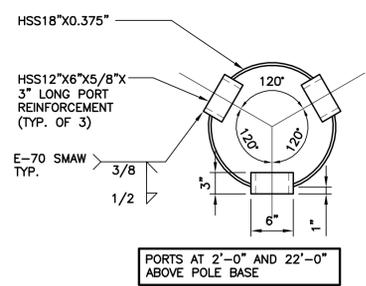
2 POLE DETAIL
S-1 SCALE: 1/2" = 1'-0"



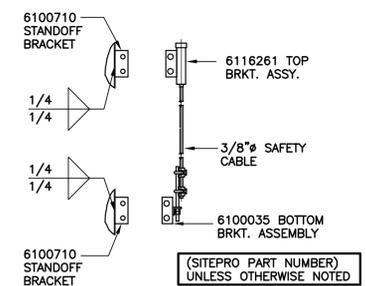
1 FRAMING PLAN
S-1 SCALE: 1/2" = 1'-0"



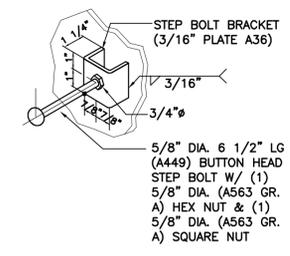
3 POLE BASE PLATE DETAIL
S-1 SCALE: 1" = 1'-0"



4 PORT DETAIL
S-1 SCALE: 1" = 1'-0"

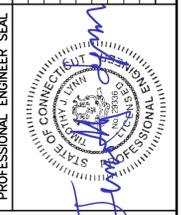


5 SAFETY CLIMB DETAIL
S-1 SCALE: 1/2" = 1'-0"



6 STEP BOLT DETAIL
S-1 SCALE: 3/4" = 1'-0"

REV.	DATE	BY	CHKD	DESCRIPTION
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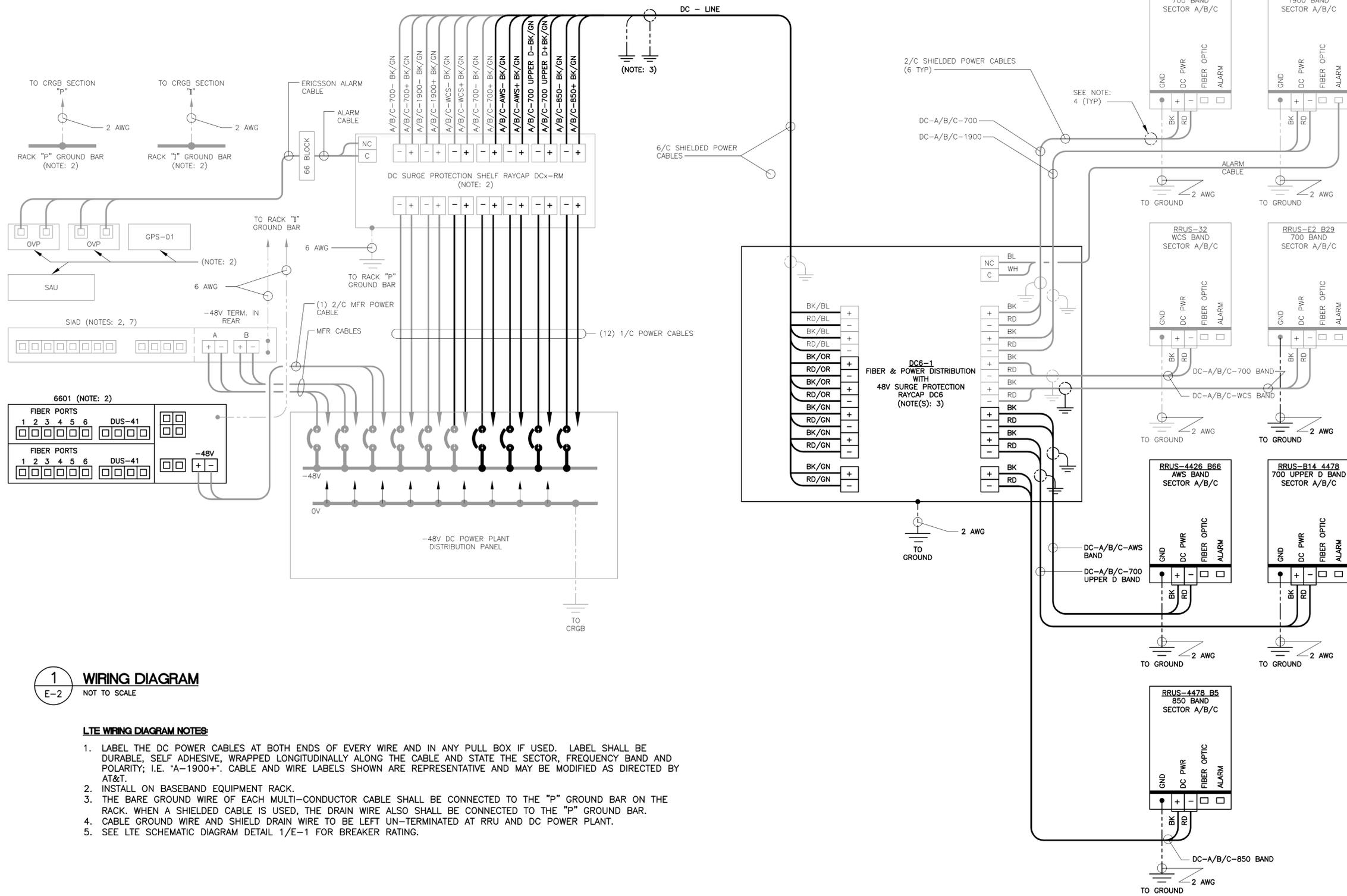


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ANTENNA MAST
 DETAILS

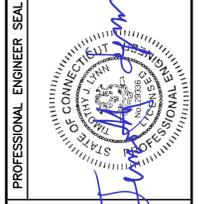


1 WIRING DIAGRAM
E-2 NOT TO SCALE

LTE WIRING DIAGRAM NOTES:

1. LABEL THE DC POWER CABLES AT BOTH ENDS OF EVERY WIRE AND IN ANY PULL BOX IF USED. LABEL SHALL BE DURABLE, SELF ADHESIVE, WRAPPED LONGITUDINALLY ALONG THE CABLE AND STATE THE SECTOR, FREQUENCY BAND AND POLARITY; I.E. "A-1900+". CABLE AND WIRE LABELS SHOWN ARE REPRESENTATIVE AND MAY BE MODIFIED AS DIRECTED BY AT&T.
2. INSTALL ON BASEBAND EQUIPMENT RACK.
3. THE BARE GROUND WIRE OF EACH MULTI-CONDUCTOR CABLE SHALL BE CONNECTED TO THE "P" GROUND BAR ON THE RACK. WHEN A SHIELDED CABLE IS USED, THE DRAIN WIRE ALSO SHALL BE CONNECTED TO THE "P" GROUND BAR.
4. CABLE GROUND WIRE AND SHIELD DRAIN WIRE TO BE LEFT UN-TERMINATED AT RRU AND DC POWER PLANT.
5. SEE LTE SCHEMATIC DIAGRAM DETAIL 1/E-1 FOR BREAKER RATING.

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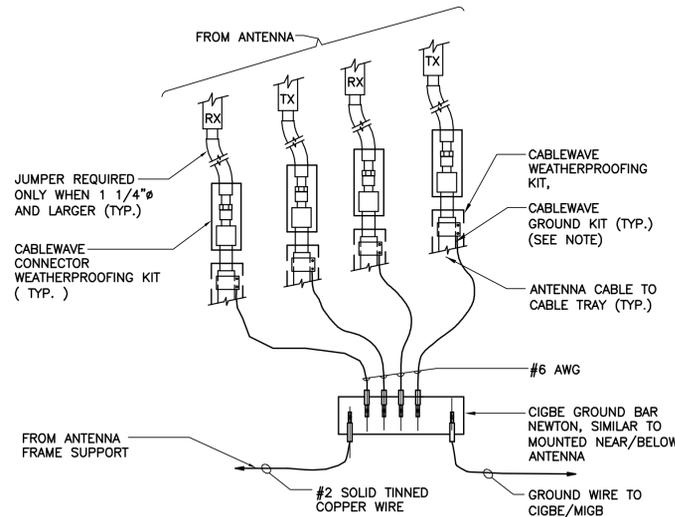


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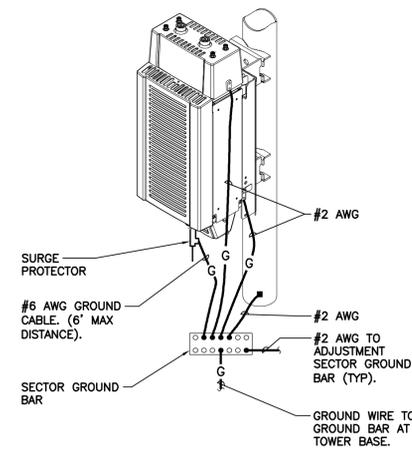
WIRING DIAGRAM



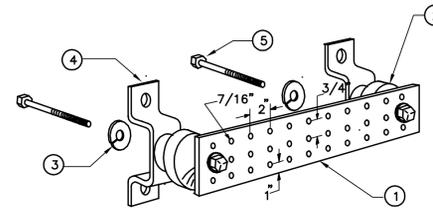
NOTE:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE

1 CONNECTION OF GROUND WIRES TO GROUND BAR
E-3 NOT TO SCALE

EACH RRU CABINET SHALL BE GROUNDED IN THE FOLLOWING MANNER:
1. AT TOP OF THE CABINET
2. AT RIGHT SIDE OF THE CABINET.



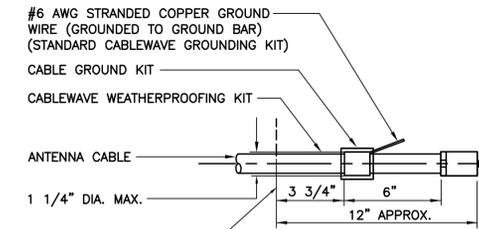
2 RRU POLE MOUNT GROUNDING
E-3 NOT TO SCALE



LEGEND

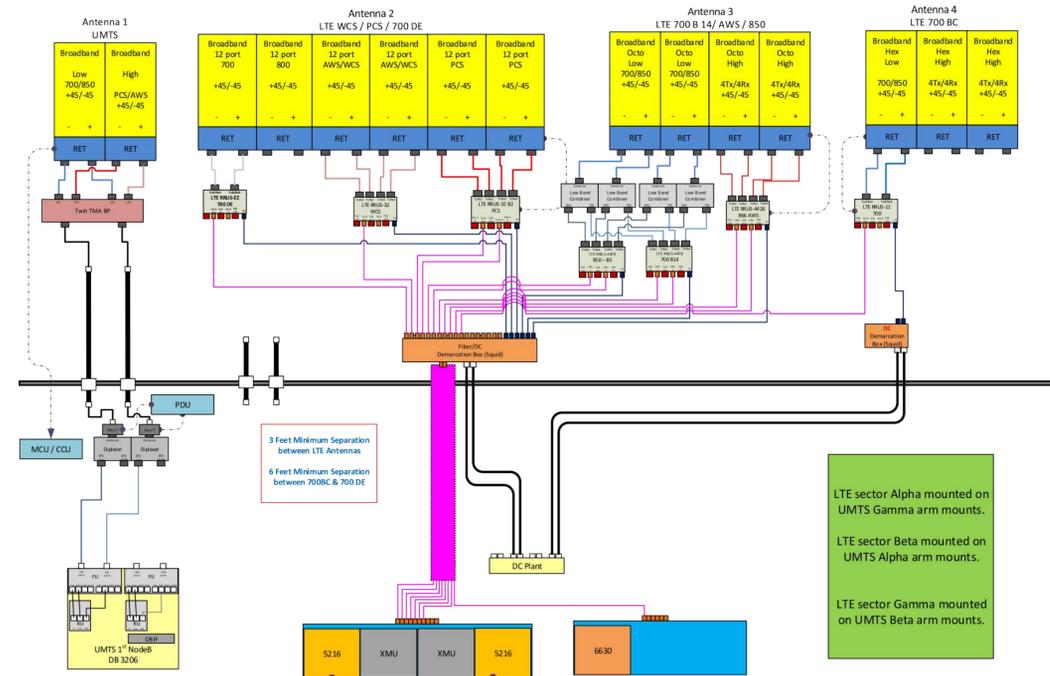
1. TINNED COPPER GROUND BAR, 1/4" x 4" x 20", NEWTON INSTRUMENT CO. HOLE CENTERS TO MATCH NEMA DOUBLE LUG.
2. INSULATORS, NEWTON INSTRUMENT CAT. NO. 2. 3061-4.
3. 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8.
4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT. NO. A-6056.
5. STAINLESS STEEL SECURITY SCREWS.

3 GROUND BAR DETAIL
E-3 NOT TO SCALE

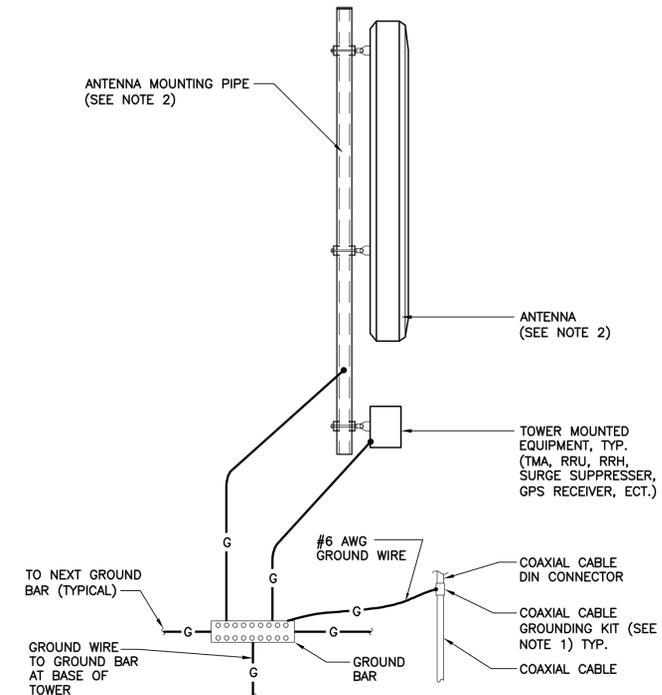


NOTE:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

4 ANTENNA CABLE GROUNDING DETAIL
E-3 NOT TO SCALE



5 RF PLUMBING DIAGRAM
E-3 NOT TO SCALE



NOTES:

1. BOND COAXIAL CABLE GROUND KITS TO EACH OWNER'S GROUND BAR ALONG ENTIRE COAX RUN FROM ANTENNA TO SHELTER.
2. BOND ALL EQUIPMENT TO GROUND PER NEC AND MANUFACTURERS SPECIFICATIONS.
3. DETAIL IS TYPICAL FOR ALL ANTENNA SECTORS, INCLUDING GPS ANTENNA.

6 TYPICAL ANTENNA GROUNDING DETAIL
E-3 NOT TO SCALE

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TYPICAL ELECTRICAL DETAILS