

Please Print or Type Information

For Office use only:

6/11/19 Filing date

SR-11-12M1 Case #

RA-1, BA District

This APPLICATION is for: [ ] Dish [ ] Tower [X] Antenna modifications

SUBJECT PROPERTY ADDRESS - Location of Proposal:

3020 James Street and Nichols Avenue, Syracuse, NY 13206

APPLICANT INFORMATION

PROPERTY OWNER:

Name: American Legion/Crown Castle Phone: 724-416-2137

Address:

3020 James Street & Nichols Avenue
Syracuse, NY 13206

REPRESENTATIVE:

[ ] Attorney, [ ] Architect, [ ] Contractor, [X] Other: Agent

Name: Centerline Communications, Agent Phone: 585-760-9776

Address:

750 West Center Street, Suite 301
West Bridgewater, MA 02379

OTHERS INVOLVED (if applicable):

[ ] Lessee, [ ] Contract Purchaser, [ ] Other:

Name: Phone:

Address:

STRUCTURE INFORMATION:

MAXIMUM HEIGHT from ground level to top of structure: 65'

DISTANCE from structure to front property line: N/A

DISTANCE to closest side property line: N/A

DIAMETER of structure (if dish)

HEIGHT from ground to bottom of structure (if dish)

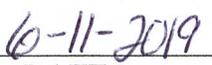
**DECLARATION**

I understand that false statements made herein are punishable as a Class A Misdemeanor, pursuant to section 210.45 of the Penal Law of the State of New York. I declare that, subject to the penalties of perjury, any statements made on this application and any attachments are the truth and to the best of my knowledge correct.

I also understand that any false statements and/or attachments presented knowingly in connection with this application will be considered null and void.

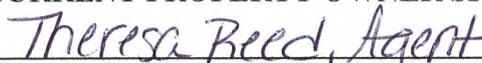
**CURRENT PROPERTY OWNER SIGNATURE**

As listed on the City of Syracuse Tax Assessment Roll. If not listed as the owner on the current rolls, please include a proof of ownership, for example, a copy of the deed. Attorney's signing on behalf of the owner must include a one page letter describing the legal representative arrangement. Architects, engineers, contractors, tenants, etc. cannot sign on behalf of the property owner. If property owner is a Corporation or an Organization, then the person signing must provide verification they are a member of such, and can sign on the owners' behalf.

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**CURRENT PROPERTY OWNER SIGNATURE** **DATE**



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**Please legibly PRINT SIGNATURE NAME and TITLE**

**REQUIRED SUBMITTALS**

- APPLICATION:** Completely filled out and signed by owner of property
- PROPERTY SURVEY:** One full sized, to scale copy of a property survey drawn by a licensed land surveyor *N/A - existing site/building. Not altering building, not changing existing property. Construction Drawings included with this application. CDs (13 pages), dated March 8, 2019, prepared by C&S*
- SITE PLAN:** Showing proposed showing exact location of proposed tower, dish or antenna. *CDs dated 3/8/19 included.*
- For towers and other antenna support structures, not including satellite dish antennas and antennas on buildings: supporting drawings, calculations, and other documentation, signed and sealed by licensed engineers, showing the location and dimensions of all improvements, including:
  - Information concerning topography
  - Radio frequency coverage
  - Tower height requirements
  - Setbacks
  - Fencing
  - Landscaping
  - Depending on the specifics of the application the City Planning Commission may request additional information necessary to assess the nature of the proposal and its potential impacts.

**NOTE: To facilitate review of the application, it is recommended that the applicant submit PHOTOS of the property where structures is to be erected.**

617.20  
**Appendix B**  
**Short Environmental Assessment Form**

**Instructions for Completing**

**Part 1 - Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

<b>Part 1 - Project and Sponsor Information</b>			
New Cingular Wireless PCS, LLC, d/b/a AT&T Mobility, c/o Centerline Communications			
Name of Action or Project: Eastwood / 10000786			
Project Location (describe, and attach a location map): 3020 James Street & Nichols Avenue, Syracuse, NY 13206			
Brief Description of Proposed Action: Existing Telecommunications Site: equipment modifications to wireless telecommunications facility located on the rooftop of the Subject Property building.			
Name of Applicant or Sponsor: New Cingular Wireless PCS, LLC, d/b/a AT&T Mobility c/o Centerline Communications		Telephone: 585-760-9776	
		E-Mail: treed@clinellc.com	
Address: 750 West Center Street, Suite 301			
City/PO: West Bridgewater		State: MA	Zip Code: 02379
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval:			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
3.a. Total acreage of the site of the proposed action?		.85 acres	
b. Total acreage to be physically disturbed?		0 acres	
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		.85 acres	
4. Check all land uses that occur on, adjoining and near the proposed action.			
<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential (suburban)			
<input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____			
<input type="checkbox"/> Parkland			



18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____ _____	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE</b>		
Applicant/sponsor name: AT&T Mobility c/o Centerline Communications	Date: 6/11/2019	
Signature: <i>Shirsa Reed, Agent</i>		

**Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2.** Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

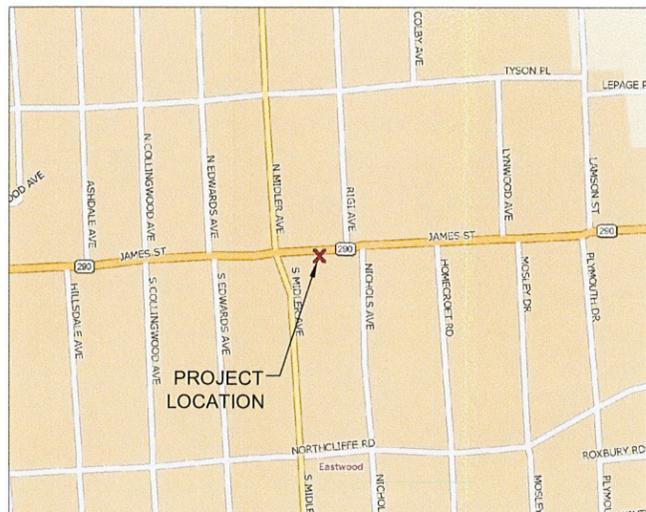
	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Will the proposed action result in a change in the use or intensity of use of land?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Will the proposed action impair the character or quality of the existing community?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Will the proposed action impact existing:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a. public / private water supplies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. public / private wastewater treatment utilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	No, or small impact may occur	Moderate to large impact may occur
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Will the proposed action create a hazard to environmental resources or human health?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3.** For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

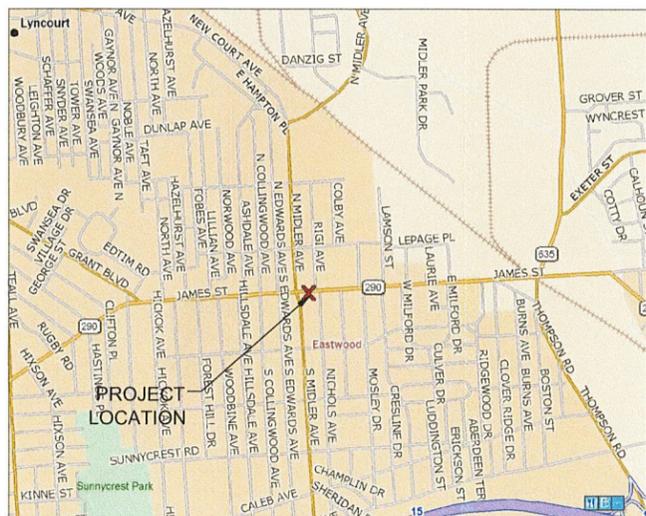
<input type="checkbox"/>	Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.
<input type="checkbox"/>	Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.
_____	_____
Name of Lead Agency	Date
_____	_____
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
_____	_____
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

**PRINT**



LOCATION MAP

**DIRECTIONS TO SITE: (FROM SYRACUSE AT&T OFFICE) HEAD SOUTHWEST ON BRIDGE ST TOWARD CELI DR. TURN RIGHT ONTO NY-5 W/ERIE BLVD E. TURN RIGHT ONTO NY-635 N/THOMPSON RD. TURN LEFT ONTO NY-290 W/JAMES ST. DESTINATION WILL BE ON THE LEFT.**



VICINITY MAP

**PROJECT INFORMATION**

LANDLORD NAME: CROWN CASTLE  
 SITE NAME: EASTWOOD  
 SITE NUMBER: 0031  
 USID NUMBER: 61370  
 FA NUMBER: 10000786  
 SITE ADDRESS: 102 NICHOLS AVENUE SYRACUSE, NY 13206

TAX MAP #: 024-13-04.0  
 LATITUDE: N43° 04' 7.83"  
 LONGITUDE: W76° 06' 16.41"

GROUND ELEVATION: 534± AMSL  
 ZONING JURISDICTION: CITY OF SYRACUSE  
 COUNTY: ONONDAGA  
 TYPE OF SITE: ROOFTOP WITH ROOM BUILD  
 HEIGHT: 52'-0" AGL  
 RAD CENTER: 59'-0" AGL (BETA & GAMMA)  
 61'-0" AGL (ALPHA)

DESCRIPTION OF WORK: PROPOSED SIX (6) ANTENNAS TO REPLACE EXISTING SIX (6) ANTENNAS. THREE (3) ANTENNAS TO BE REMOVED. ADD NINE (9) RRHs (TYP.3 PER SECTOR). PROPOSED ONE (1) NR BB6630 TO REPLACE EXISTING ONE (1) DUS, ADD PROPOSED ONE (1) 2ND NR BB6630 IN EXISTING FIF RACK. REPLACE DC2s WITH (3) DC6-48-60-18-8F SQUIDS (1 PER SECTOR). ADD (6) DC 3-PAIR AND (3) FIBER 18-PAIR. REMOVE COAX IF NEEDED TO MAKE ROOM IN CHASEWAY AND HATCH. INSTALL (1) 48V CONVERTER SHELF WITH (4) CONVERTER MODS IN PROPOSED POWER RACK. INSTALL TWO (2) FIBER TRAYS IN EXISTING FIF RACK. INSTALL (6) 30A, (9) 25A AND (1) 15A, 1P BREAKERS TO NEW CONVERTER SHELF. INSTALL (2) STEEL ANGLES PER SECTOR, TOTAL OF (6).

**PROJECT DIRECTORY**

PROJECT MANAGER: CENTERLINE COMMUNICATIONS, LLC  
 CONTACT: PETER LAMONTAGNE  
 PHONE: (508) 341-7854  
 EMAIL: plamontagne@clinellc.com

CIVIL ENGINEERING FIRM: C&S ENGINEERS INC.  
 499 COL. EILEEN COLLINS BLVD.  
 SYRACUSE, NY 13212  
 CONTACT: ERIC N. KENNA P.E.  
 PHONE: (315) 455-2000

APPLICANT: at&t MOBIILITY CORP.  
 5841 BRIDGE STREET  
 EAST SYRACUSE, NY 13057  
 CONTACT: ROB MINNICK  
 PHONE: (585) 703-4827

POWER COMPANY: NATIONAL GRID  
 PHONE: (800) 867-5222

TELEPHONE COMPANY: VERIZON COMMUNICATIONS  
 (800) 837-4966

**GENERAL NOTES**

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

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 www.digsafelynewyork.org

- Call Before You Dig
- Wait The Required Time
- Confirm Utility Response
- Respect the Marks
- Dig With Care



**CONTRACT DRAWINGS FOR THE CONSTRUCTION OF**

**FA NUMBER: 10000786**

**SITE ID: 0031**

**SITE NAME: EASTWOOD**

**at&t UPSTATE NY LTE 4C PROJECT**

**ABC-D'D'\_7TRD'8TRD'2TRD'9TRD'\_Ft8u**

**102 NICHOLS AVENUE SYRACUSE, NY 13206**

C&S PROJECT: N25.001.002

**JANUARY 2019**



TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF THE PLANS AND SPECIFICATIONS FOR THIS PROJECT ARE IN COMPLIANCE WITH THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE AND THE BUILDING CODE OF NEW YORK STATE

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

**DRAWING LIST**

SHEET NO.	SHEET NAME	REV	DATE
G-001	TITLE SHEET	1	3-8-19
G-002	GENERAL NOTES	1	3-8-19
G-003	GENERAL NOTES	1	3-8-19
<b>CIVIL</b>			
C-101	ROOF PLAN	1	3-8-19
C-102	EQUIPMENT LAYOUT PLAN	1	3-8-19
C-201	BUILDING ELEVATION	1	3-8-19
C-501	DETAILS	1	3-8-19
C-502	DETAILS	1	3-8-19
C-503	DETAILS	1	3-8-19
<b>TELECOMMUNICATIONS</b>			
T-601	LTE SCHEMATIC	1	3-8-19
T-602	SCHEMATICS, DIAGRAMS AND NOTES	1	3-8-19
<b>ELECTRICAL</b>			
E-501	GROUNDING DETAILS	1	3-8-19
E-502	GROUNDING DETAILS	1	3-8-19

**APPROVALS**

AT&T PROJECT MANAGER	DATE
CENTERLINE COMMUNICATIONS PROJECT MANAGER	DATE

**G-001**

GROUNDING NOTES:

- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
- THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
- THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
- METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE EQUIPMENT GROUND RING WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
- CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
- ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED. ALL BENDS SHALL BE MADE WITH 12" RADIUS OR LARGER.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS. EXCEPT FOR GROUND BAR CONNECTION FROM MGB TO OUTSIDE. EXTERIOR GROUND SHALL ALL BE CADWELD CONNECTIONS.
- COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
- ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED TO THE TOWER GROUND BAR.
- APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ALL EXTERIOR AND INTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
- GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:  
CONTRACTOR - CENTERLINE  
SUBCONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION)  
OWNER - AT&T MOBILITY CORP.
- ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
- DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
- THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
- SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- 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.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
- SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.

- ABBREVIATIONS
- AC ALTERNATING CURRENT
  - AGL ABOVE GRADE LEVEL
  - AIC AMPERAGE INTERRUPTION CAPACITY
  - ATS AUTOMATIC TRANSFER SWITCH
  - AWG AMERICAN WIRE GAUGE
  - BCW BARE COPPER WIRE
  - BTC BARE TINNED COPPER CONDUCTOR
  - BTS BASE TRANSCEIVER STATION
  - BATT BATTERY
  - CHG CHARGING
  - COMM COMMON
  - DC DIRECT CURRENT
  - DIA DIAMETER
  - DWG DRAWING
  - (E) EXISTING
  - EC ELECTRICAL CONDUCTOR
  - EG EQUIPMENT GROUND
  - EGR EQUIPMENT GROUND RING
  - EMT ELECTRICAL METALLIC TUBING
  - FIF FACILITY INTERFACE FRAME
  - GEN GENERATOR
  - GPS GLOBAL POSITIONING SYSTEM
  - GSM GLOBAL SYSTEM FOR MOBILE
  - HVAC HEAT/VENTILATION/AIR CONDITIONING
  - IGR INTERIOR GROUNDING RING (HALO)
  - MGB MASTER GROUNDING BAR
  - MIN MINIMUM
  - M/W MICROWAVE
  - MTS MANUAL TRANSFER SWITCH
  - NEC NATIONAL ELECTRICAL CODE
  - N.T.S. NOT TO SCALE
  - OC ON CENTER
  - PP POLARIZING PERSERVING
  - PCJ PRIMARY CONTROL UNIT
  - PDJ PROTOCOL DATA UNIT
  - RBS RADIO BASE STATION
  - RECT RECTIFIER
  - REF REFERENCE
  - REQ REQUIRED
  - RET REMOTE ELECTRICAL TILT
  - RF RADIO FREQUENCY
  - RMC RIGID METALLIC CONDUIT
  - RRH REMOTE RADIO HEAD
  - RRU REMOTE RADIO UNIT
  - RWY RACEWAY
  - SIAD SMART INTEGRATED ACCESS DEVICE
  - T.B.D. TO BE DETERMINED
  - T.B.R. TO BE RESOLVED
  - TDMA TIME-DIVISION MULTIPLE ACCESS
  - TMA TOWER MOUNT AMPLIFIER
  - TVSS TRANSIENT VOLTAGE SUPPRESSION SYSTEM
  - TYP TYPICAL
  - UMTS UNIVERSAL MOBILE TELECOMMUNICATION SYSTEM

- SYMBOLS:
- SOLID GROUND BUS BAR
  - SOLID NEUTRAL BUS BAR
  - SUPPLEMENTAL GROUND CONDUCTOR
  - 2-POLE THERMAL-MAGENTIC CIRCUIT BREAKER
  - SINGLE-POLE THERMAL-MAGENTIC CIRCUIT BREAKER
  - CHEMICAL GROUND ROD
  - GROUND ROD
  - DISCONNECT SWITCH
  - METER
  - CADWELD TYPE CONNECTION
  - COMPRESSION TYPE CONNECTION
  - GROUNDING WIRE
  - GROUND ROD WITH INSPECTION SLEEVE
  - TEST GROUND ROD WITH INSPECTION SLEEVE
  - EXOTHERMIC WITH INSPECTION SLEEVE

- NOTES:
- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
  - ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI AT 28 DAYS, UNLESS OTHERWISE NOTED.
  - REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
  - THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:  
CONCRETE CAST AGAINST EARTH.....3 IN.  
CONCRETE EXPOSED TO EARTH OR WEATHER:  
#6 AND LARGER .....2 IN.  
#5 AND SMALLER & WWF .....1 1/2" IN.  
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:  
SLAB AND WALL .....3/4" IN.  
BEAM AND COLUMNS .....1 1/2" IN.
  - A CHAMFER OF 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
  - INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.
  - CONCRETE SHALL COMPLY WITH ACI 304 AND ASTM C94 WITH A MAXIMUM WATER-CEMENT RATIO OF 0.50. TIME BETWEEN INTRODUCTION OF WATER AND THE PLACEMENT OF CONCRETE SHALL NOT EXCEED 1-1/2 HOURS.
  - CONCRETE SLUMP SHALL NOT EXCEED 5 INCHES UNLESS SPECIFICALLY AUTHORIZED BY THE ENGINEER. SLUMP SHALL BE OR AS SPECIFIED ON THE CONCRETE MIX DESIGN.
  - PROVIDE AIR ENTRAINMENT IN EXTERIOR EXPOSED CONCRETE TO OBTAIN TOTAL AIR CONTENT OF 5% ± 1% IN ACCORDANCE WITH ACI 301.

**A1 CONCRETE AND REINFORCING STEEL NOTES**  
NOT TO SCALE

**A2 GROUNDING NOTES**  
NOT TO SCALE

**A3 GENERAL NOTES**  
NOT TO SCALE

**A4 ABBREVIATIONS AND SYMBOLS**  
NOT TO SCALE



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EASTWOOD  
FA#:10000786 / SITE ID: 0031  
LTE 4C PROJECT**

NO.	DATE	DESCRIPTION
1	3-8-19	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: N25.001.002		
DATE: JANUARY 2019		
DRAWN BY: J. OSWALD		
DESIGNED BY:		
CHECKED BY: E.N. KENIA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

**GENERAL NOTES**

**G-002**

Mar 11, 2019 - 1:31pm  
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ELECTRICAL INSTALLATION NOTES:

- 1. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
2. CONDUIT ROUTING ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
5. CABLES SHALL NOT BE ROUTES THROUGH LADDER-STYLE CABLE TRAY RUNGS.
6. EACH END OF EVERY POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
8. PANELBOARDS (ID NUMBERS AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2, CLASS BE STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90°C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
15. RIGID GALVANIZED STEEL CONDUIT (RGS) SHALL BE USED FOR ALL INDOOR LOCATIONS.
16. RIGID GALVANIZED STEEL CONDUIT (RGS) SHALL BE USED FOR ALL OUTDOOR LOCATIONS ABOVE GRADE.
17. RIGID NON-METALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TIGHT FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
21. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

ELECTRICAL INSTALLATION NOTES (CONTINUED):

- 22. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
23. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
24. NON-METALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
25. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
26. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROSPERITY.

C2 ELECTRICAL NOTES NOT TO SCALE

NOTES:

- 1. SUBCONTRACTOR SHALL VERIFY THE ACTUAL LENGTH IN THE FIELD BEFORE INSTALLATION.
2. TAG AND COLOR CODE ALL MAIN CABLES AT LOCATIONS PER AT&T TOWER/ANTENNA CABLE MARKING STANDARD:
- TOP OF TOWER END OF MAIN COAX
- BOTTOM OF TOWER END OF MAIN COAX
- DIRECTLY BEFORE AND AFTER RF EQUIPMENT
- END OF JUMPERS AT BTS EQUIPMENT
3. ANTENNAS SHALL BE PROCURED AND INSTALLED WITH DOWN TILT MOUNTING BRACKETS SUPPLIED BY ANTENNA MANUFACTURER.
4. PRIOR APPROVAL IS REQUIRED BEFORE PERFORMING ANY WORK ON EXISTING CELL SITE EQUIPMENT.
5. SUBCONTRACTOR SHALL PROVIDE ALL GROUNDING KITS AND WEATHERPROOFING KITS.
6. THE MAIN COAX LENGTH DIFFERS FROM THE RF DATA SHEET BASED ON WALKDOWN BY THE AE.
7. BASED UPON RF CONFIGURATION PROVIDED BY at&t MOBILITY CORP. RF SHEET.

B2 ANTENNA AND CABLE SCHEDULE NOTES NOT TO SCALE

- 1. ACTUAL LENGTHS SHALL BE DETERMINED PER SITE CONDITION BY SUBCONTRACTOR.
2. THE DESIGN IS BASED ON RF DATA SHEETS, SIGNED AND APPROVED.
3. RADIO SIGNAL CABLE AND RACEWAY SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC, NFPA 70), CHAPTER 8.
4. ALL SPECIFIED MATERIAL FOR EACH LOCATION (E.G. OUTDOORS-OCCUPIED, INDOORS-UNOCCUPIED, PLENUMS, RISER SHAFTS, ETC.) SHALL BE APPROVED, LISTED, OR LABELED AS REQUIRED BY THE NEC.
5. RADIO SIGNAL CABLE SHALL BE SUPPORTED AT MINIMUM OF EVERY THREE (3) FEET EXCEPT INSIDE MONOPOLES OR LATTICE TOWERS WHERE CABLE AND CONNECTOR MANUFACTURERS SUPPORT RECOMMENDATIONS SHALL BE FOLLOWED. MANUFACTURER RECOMMENDED CABLE SUPPORT ACCESSORIES SHALL BE USED.
6. THE OUTDOOR CABLE SUPPORT SYSTEM SHALL BE PROVIDED WITH AN ICE SHIELD TO SUPPORT AND PROTECT ANTENNA CABLE RUNS.
7. DRIP LOOPS SHALL BE REQUIRED ON ALL OUTSIDE CABLES. CABLES SHALL BE SLOPED AWAY FROM BUILDING OR OUTDOOR BTS CABINETS TO PREVENT WATER FROM ENTERING THROUGH THE COAXIAL CABLE PORT.
8. ALL FEEDER LINE AND JUMPER CONNECTORS SHALL BE 7/16 DIN CABLE CONNECTORS THAT MEET IP68 STANDARDS.
9. 7/16 DIN CONNECTORS REQUIRE NO ADDITIONAL WEATHER PROOFING IN INDOOR APPLICATIONS IF INSTALLED AND TORQUED PROPERLY. IN OUTDOOR APPLICATIONS WEATHER PROOFING IS REQUIRED AND THE FOLLOWING PROCEDURE SHOULD BE FOLLOWED.
10. USING WEATHERPROOFING KIT APPROVED BY CABLE MANUFACTURE AND CONTRACTOR START TAPE APPROXIMATELY 5 INCHES FROM THE CONNECTOR AND WRAP 2 INCHES TOWARD THE CONNECTOR, THEN REVERSE THE TAPE SO THAT THE STICKY SIDE IS UP. TAPE OVER THE CONNECTOR OR SURGE ARRESTOR UNTIL THREE (3) TO FOUR (4) INCHES BEYOND THE CONNECTOR AND REVERSE AGAIN WITH THE STICKY SIDE DOWN FOR ANOTHER INCH OR TWO. ADD THE BUTYL RUBBER AND FINISH WITH A FINAL LAYER OF TAPE.
11. WHEN REQUIRED BY THE LANDLORD OR AUTHORITY OF HAVING JURISDICTION, ANTENNAS SHALL BE PAINTED IN ACCORDANCE WITH ANTENNA MANUFACTURERS' SURFACES PREPARATION AND PAINTING REQUIREMENTS.
12. CABLE SHIELDS, AND TOWER CONDUITS SHALL BE GROUNDED AT THE TOP OF THE TOWER, WITHIN 10 FEET OF THEIR CONNECTORS, AND AT THE BOTTOM OF THE TOWER ABOUT 6 INCHES BEFORE THEY TURN TOWARD THE FACILITY. THEY SHALL BE GROUNDED AT THE MIDPOINT OF THE TOWERS THAT ARE BETWEEN 100 FEET AND 200 FEET HIGH, AND AT INTERVALS OF 100 FEET OR LESS ON TOWERS THAT ARE HIGHER THAN 200 FEET.
13. APPROVED GROUNDING KITS, WHICH INCLUDE GROUNDING STRAPS, SHALL BE USED TO GROUND THE COAXIAL CABLE SHIELDS, AND CONDUITS. THE GROUND CONDUCTORS FOR THE KITS AT THE TOP OF THE TOWER, AND IN THE MIDDLE SECTION OF THE TOWER, ARE BONDED DIRECTLY TO GROUND BAR USING EXOTHERMIC OR COMPRESSION CONNECTIONS.
14. ALL RADIO SIGNAL CABLE SHALL BE LABELED PER MARKET REQUIREMENTS.
15. ANTENNA FEED LINE SYSTEM SWEEP TESTING SHALL BE PERFORMED AND REPORTED IN ACCORDANCE WITH CARRIER REQUIREMENTS. CONTRACTOR WILL NOT ACCEPT A RADIO SIGNAL CABLE INSTALLATION WITH UNSATISFACTORY SWEEP TEST RESULTS. THERE SHALL ALSO BE A HARD COPY OF SWEEPS LEFT AT SITE UPON COMPLETION OF SWEEP TEST.

A3 RF NOTES NOT TO SCALE

NOTES:

- 1. ALL STEEL SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.
2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION." PAINTED SURFACES SHALL BE TOUCHED UP.
3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4"Ø) CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE MANUFACTURER'S STANDARD SADDLE CLAMPS & SCREWS (GALVANIZED).
5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.
6. ALL METAL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A123. ALL SHOP WELDED MEMBERS SHALL BE GALVANIZED AFTER FABRICATION.

C4 STRUCTURAL STEEL NOTES NOT TO SCALE

NOTES:

- 1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.
3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SIRE AND DISPOSED OF LEGALLY.
5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
6. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.
7. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
8. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED ON ANY FILL OR EMBANKMENT.
9. THE SUB-GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
10. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
11. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
12. SUBCONTRACTOR TO PROVIDE COMBINATION LOCKS PER CARRIER SPECIFICATIONS.

A4 SITE WORK GENERAL NOTES NOT TO SCALE

A1 ELECTRICAL NOTES NOT TO SCALE

A2 NOT USED NOT TO SCALE



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FA#:10000786 / SITE ID: 0031
LTE 4C PROJECT

Table with 3 columns: NO., DATE, DESCRIPTION. Includes a row for 'ISSUED FOR PERMITTING' and a 'REVISIONS' section with project details like PROJECT NO: N25.001.002, DATE: JANUARY 2019, DRAWN BY: J. OSWALD, DESIGNED BY: E.N. KENNA, P.E., and a note about no alteration permitted hereon.

GENERAL NOTES

G-003

Apr 11, 2019 - 1:32pm
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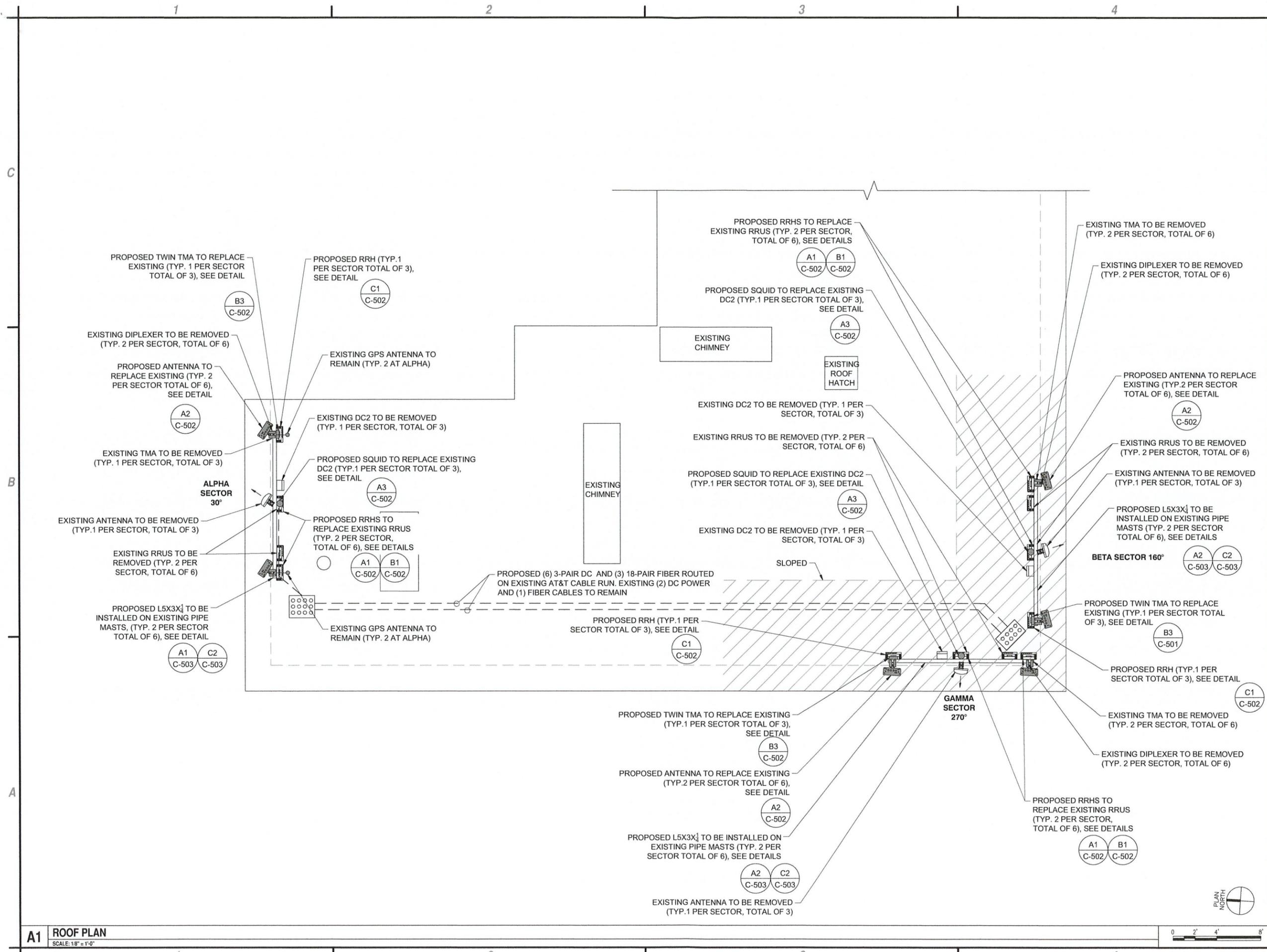
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**ROOF PLAN**

**C-101**

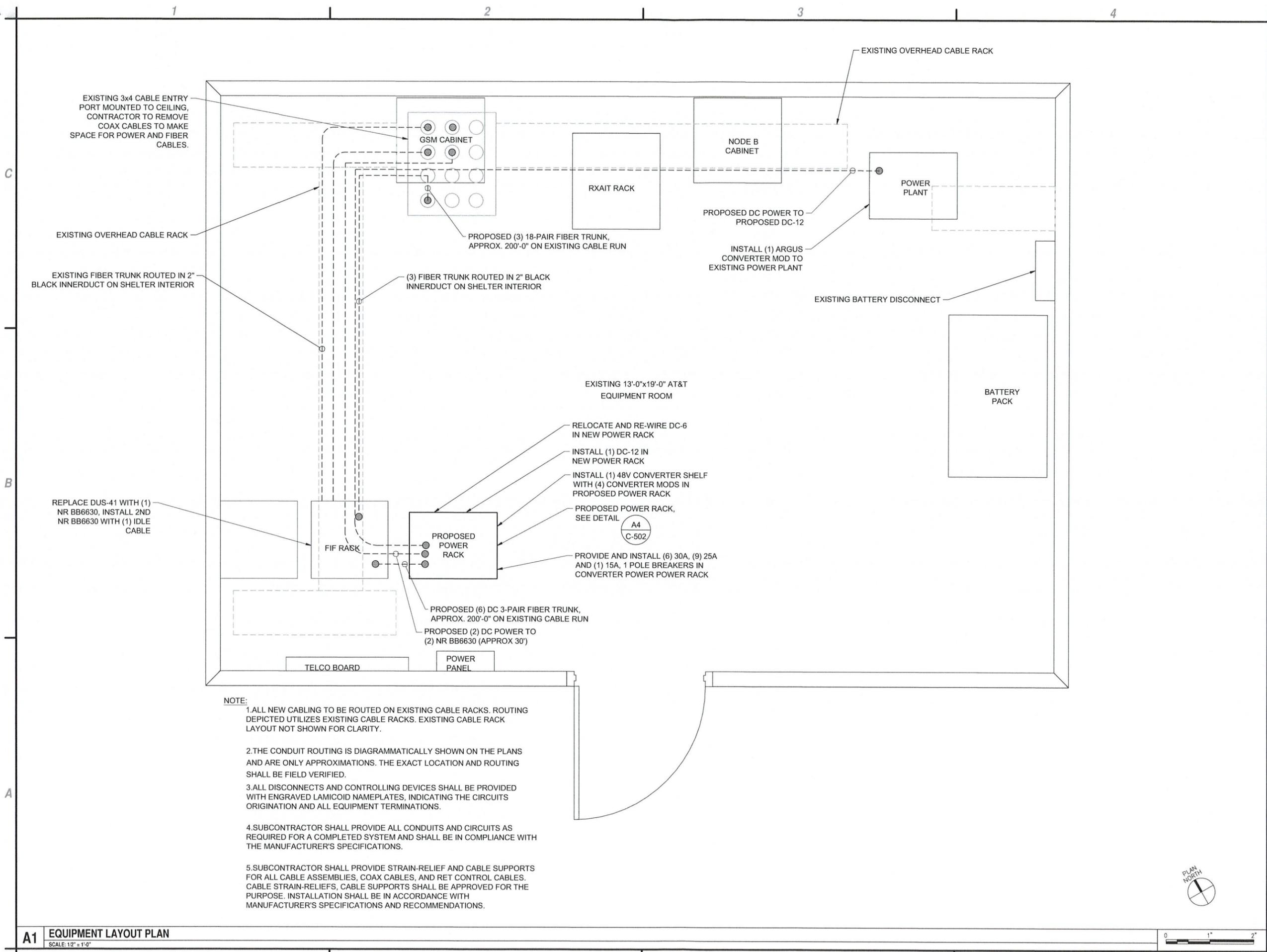
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**A1 ROOF PLAN**

SCALE: 1/8" = 1'-0"





- NOTE:**
1. ALL NEW CABLING TO BE ROUTED ON EXISTING CABLE RACKS. ROUTING DEPICTED UTILIZES EXISTING CABLE RACKS. EXISTING CABLE RACK LAYOUT NOT SHOWN FOR CLARITY.
  2. THE CONDUIT ROUTING IS DIAGRAMMATICALLY SHOWN ON THE PLANS AND ARE ONLY APPROXIMATIONS. THE EXACT LOCATION AND ROUTING SHALL BE FIELD VERIFIED.
  3. ALL DISCONNECTS AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES, INDICATING THE CIRCUITS ORIGINATION AND ALL EQUIPMENT TERMINATIONS.
  4. SUBCONTRACTOR SHALL PROVIDE ALL CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED SYSTEM AND SHALL BE IN COMPLIANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
  5. SUBCONTRACTOR SHALL PROVIDE STRAIN-RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES, COAX CABLES, AND RET CONTROL CABLES. CABLE STRAIN-RELIEFS, CABLE SUPPORTS SHALL BE APPROVED FOR THE PURPOSE. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.



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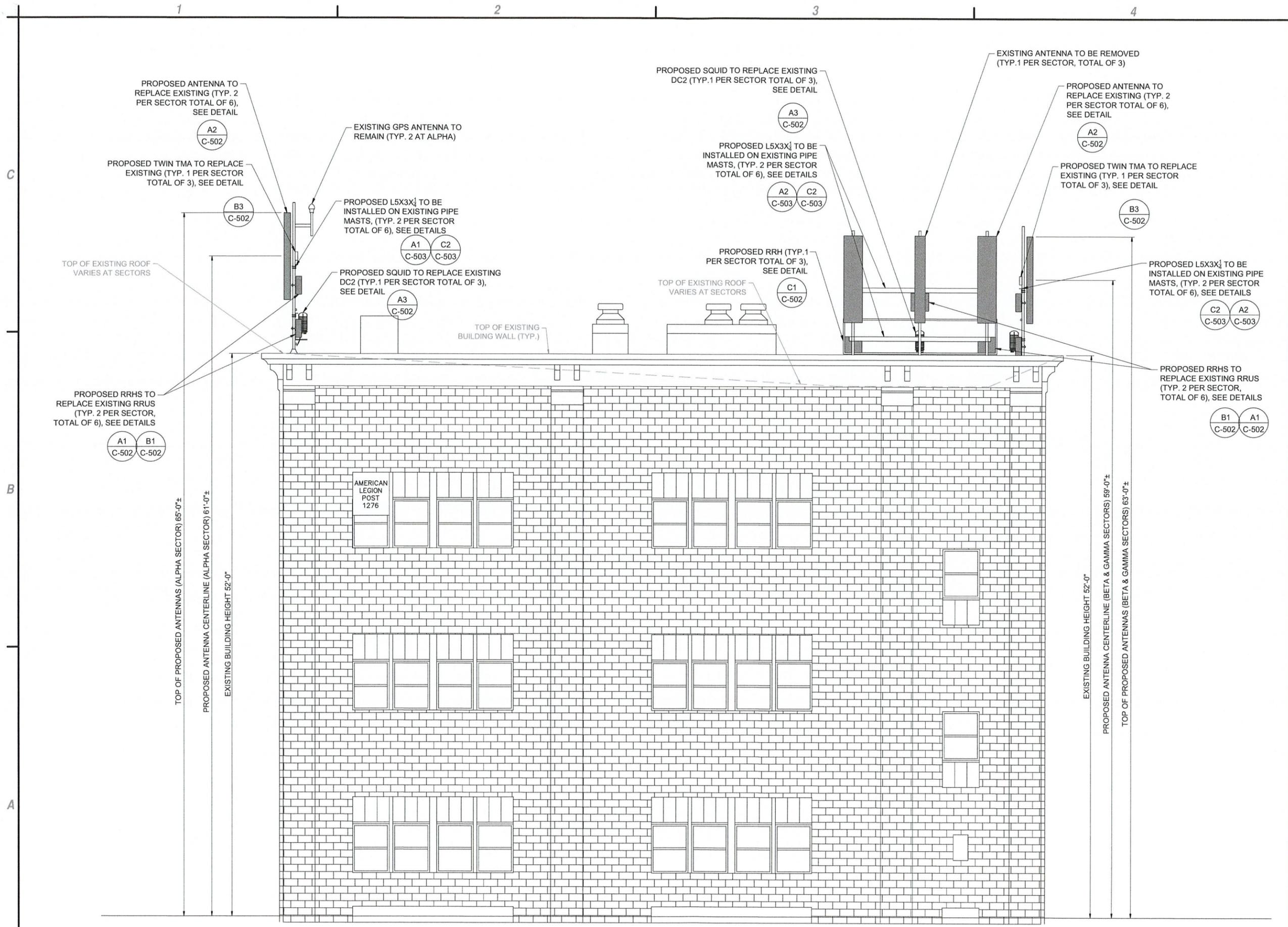
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**EQUIPMENT LAYOUT PLAN**

**C-102**

Mar 13, 2019 - 2:26pm  
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**BUILDING ELEVATION**

**C-201**

**A1 BUILDING ELEVATION**  
 NOT TO SCALE

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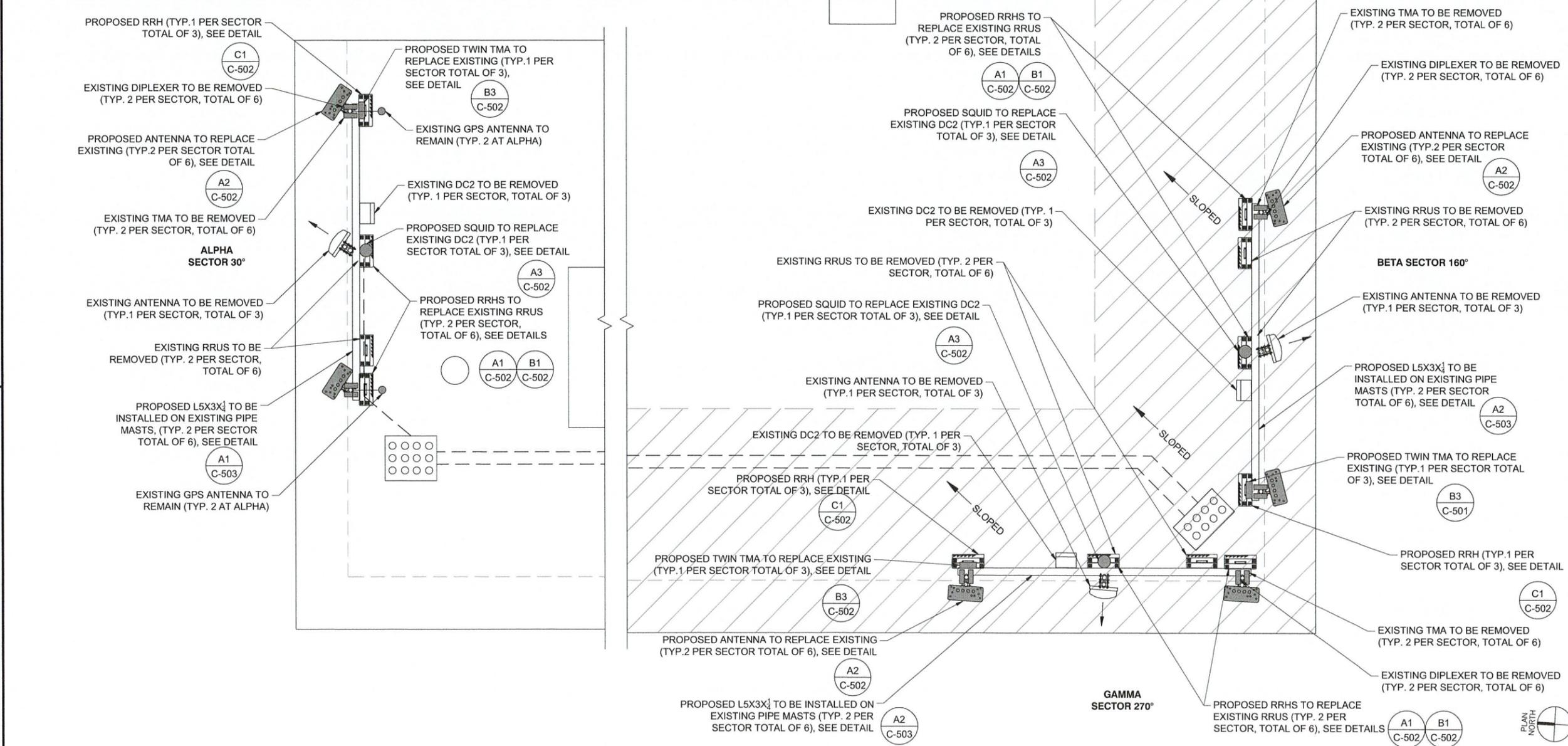
EXISTING ANTENNA AND EQUIPMENT								
SECTOR	BAND	ANTENNA	ANTENNA $\epsilon$ HEIGHT	AZIMUTH	TMA	RRU	CABLE	CABLE LENGTH
ALPHA	850 MHz/AWS	(1) DBXLH-9090A (E)	61'-0" AGL	30°	(1) ETD819G-12UB (E)	-	LDF5-50A (2) (E)	40± (E)
	700 MHz/PCS	(1) SBNH-1D6565C (E)	61'-0" AGL	30°	-	(1) RRUS - 12 (A2)(E), (1) RRUS - 11 (E)	FIBER (E)	40± (E)
	850 MHz/AWS	(1) DBXLH-9090A (E)	61'-0" AGL	30°	(1) ETD819G-12UB (E)	-	LDF5-50A (2) (E)	40± (E)
BETA	850 MHz/AWS	(1) DBXLH-9090A (E)	59'-0" AGL	160°	(1) ETD819G-12UB (E)	-	LDF5-50A (2) (E)	40± (E)
	700 MHz/PCS	(1) SBNH-1D6565C (E)	59'-0" AGL	160°	-	(1) RRUS - 12 (A2)(E), (1) RRUS - 11 (E)	FIBER (E)	40± (E)
	850 MHz/AWS	(1) DBXLH-9090A (E)	59'-0" AGL	160°	(1) ETD819G-12UB (E)	-	LDF5-50A (2) (E)	40± (E)
GAMMA	850 MHz/AWS	(1) DBXLH-9090A (E)	59'-0" AGL	270°	(1) ETD819G-12UB (E)	-	LDF5-50A (2) (E)	40± (E)
	700 MHz/PCS	(1) SBNH-1D6565C (E)	59'-0" AGL	270°	-	(1) RRUS - 12 (A2)(E), (1) RRUS - 11 (E)	FIBER (E)	40± (E)
	850 MHz/AWS	(1) DBXLH-9090A (E)	59'-0" AGL	270°	(1) ETD819G-12UB (E)	-	LDF5-50A (2) (E)	40± (E)

PROPOSED ANTENNA AND EQUIPMENT								
SECTOR	BAND	ANTENNA	ANTENNA $\epsilon$ HEIGHT	AZIMUTH	TMA	RRU	CABLE	CABLE LENGTH
ALPHA	700 MHz/ 850 MHz/ PCS / AWS	(1) NNH4-65C-R6 (P)	61'-0" AGL	30°	-	(1) 4449 B5/B12 (P), (1) 8843 B2/B66A (P)	LDF5-50A (2) (E), FIBER (P)	40± (P)
	700 MHz / WCS / AWS	(1) NNH4-65C-R6 (P)	61'-0" AGL	30°	(1) E15Z01P13 (P)	(1) B14 4478 (P)	FIBER (E)	40± (E)
BETA	700 MHz/ 850 MHz/ PCS / AWS	(1) NNH4-65C-R6 (P)	59'-0" AGL	160°	-	(1) 4449 B5/B12 (P), (1) 8843 B2/B66A (P)	LDF5-50A (2) (E), FIBER (P)	40± (P)
	700 MHz / WCS / AWS	(1) NNH4-65C-R6 (P)	59'-0" AGL	160°	(1) E15Z01P13 (P)	(1) B14 4478 (P)	FIBER (E)	40± (E)
GAMMA	700 MHz/ 850 MHz/ PCS / AWS	(1) NNH4-65C-R6 (P)	59'-0" AGL	270°	-	(1) 4449 B5/B12 (P), (1) 8843 B2/B66A (P)	LDF5-50A (2) (E), FIBER (P)	40± (P)
	700 MHz / WCS / AWS	(1) NNH4-65C-R6 (P)	59'-0" AGL	270°	(1) E15Z01P13 (P)	(1) B14 4478 (P)	FIBER (E)	40± (E)

PROPOSED LTE RRU & CABLE SCHEDULE						
SECTOR	FIBER TRUNK	SINGLE FIBER	DC 3 PAIR	DC SINGLE PAIR	RRU'S	COAX JUMPERS
ALPHA		(2) (P)			850/700 - 4449 B5/B12 (P)	2 (P)
		(2) (E)			PCS/AWS - 8843 B2/B66A (P)	8 (P)
		5 METER			700 B14 4478 (P)	2 (P)
BETA	(3) (P) (1) (E) 15 METER	(2) (P)	(6) (P)	(2) (E) 40 FEET	850/700 - 4449 B5/B12 (P)	2 (P)
		(2) (E)			PCS/AWS - 8843 B2/B66A (P)	8 (P)
		5 METER			700 B14 4478 (P)	2 (P)
GAMMA		(2) (P)			850/700 - 4449 B5/B12 (P)	2 (P)
		(2) (E)			PCS/AWS - 8843 B2/B66A (P)	8 (P)
		5 METER			700 B14 4478 (P)	2 (P)

NOTE:  
VERIFY DOWNTILT  
REQUIREMENTS  
WITH AT&T PRIOR  
TO INSTALLATION.

**C1** EXISTING/PROPOSED TABLES  
NOT TO SCALE



**A2** SLED ANTENNA DETAIL  
NOT TO SCALE



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**AT&T UPSTATE NY  
EASTWOOD  
FA#:10000786 / SITE ID: 0031  
LTE 4C PROJECT**

NO.	DATE	DESCRIPTION
1	3-8-19	ISSUED FOR PERMITTING

REVISIONS

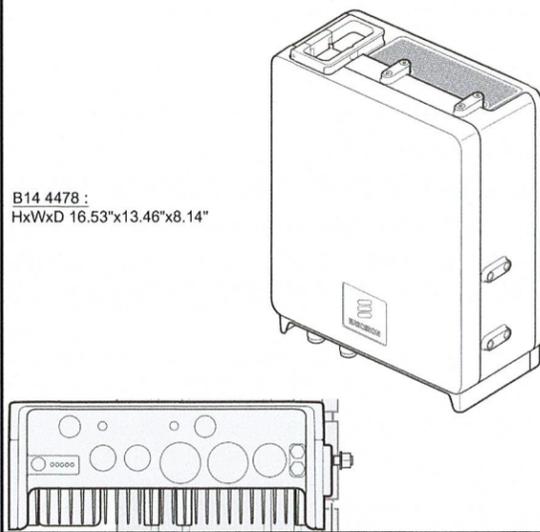
PROJECT NO: N25.001.002  
DATE: JANUARY 2019  
DRAWN BY: J. OSWALD  
DESIGNED BY: -  
CHECKED BY: E.N. KENNA, P.E.

NO ALTERATION PERMITTED HEREON  
EXCEPT AS PROVIDED UNDER SECTION  
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**DETAILS**

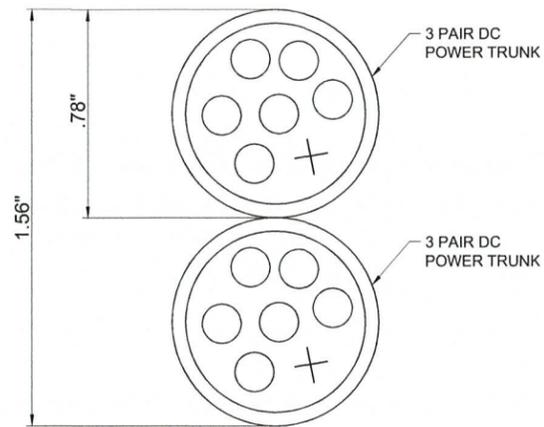
**C-501**

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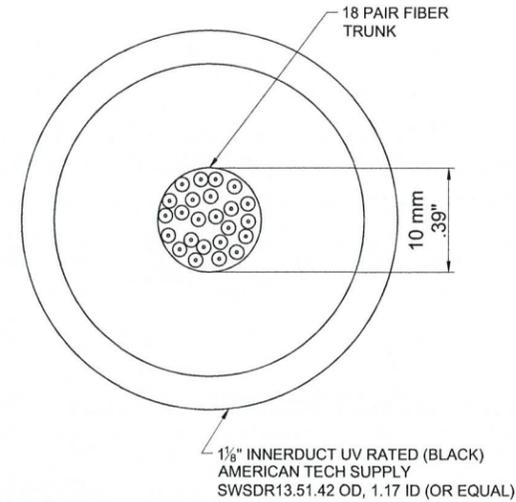


B14 4478 :  
HxWxD 16.53"x13.46"x8.14"

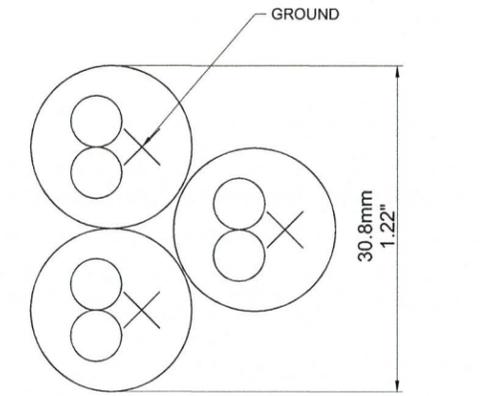
**C1 RRU-B14 4478 DETAIL**  
NOT TO SCALE



**C2 3 PAIR DC POWER DETAIL**  
NOT TO SCALE

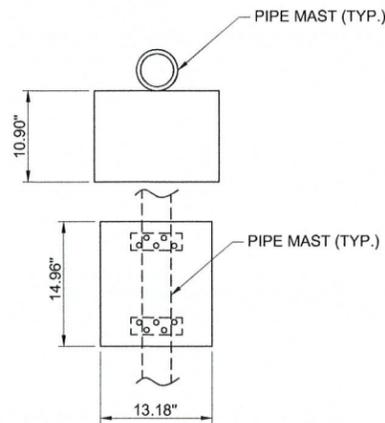


**C3 FIBER TRUNK DETAIL**  
NOT TO SCALE

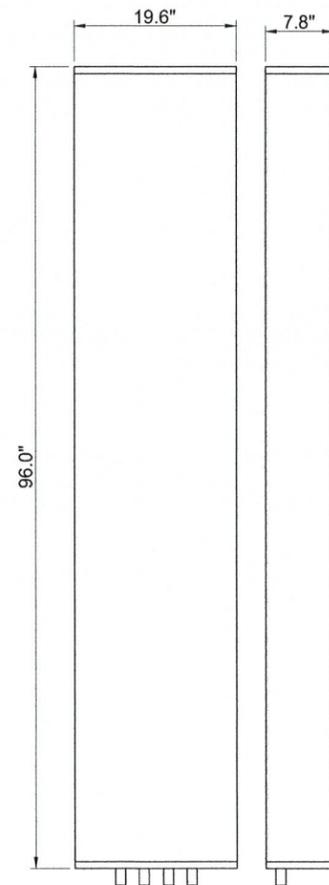


NOTES:  
1. 1 PAIR DC POWER CABLE RSS 8 (ONE PER RRU)  
2. SECURE TO CABLE RUN WITH 1/4" SNAPSTACK SNAP-INS.

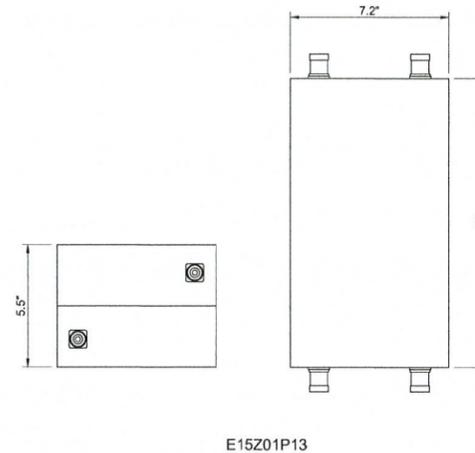
**C4 1 PAIR POWER DETAIL**  
NOT TO SCALE



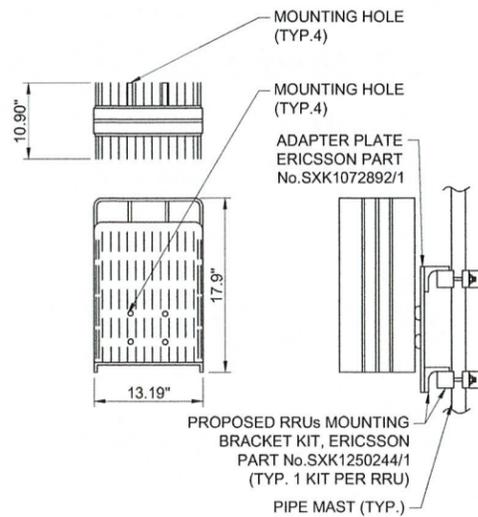
**B1 RRH-8843 B2 B66 DETAIL**  
NOT TO SCALE



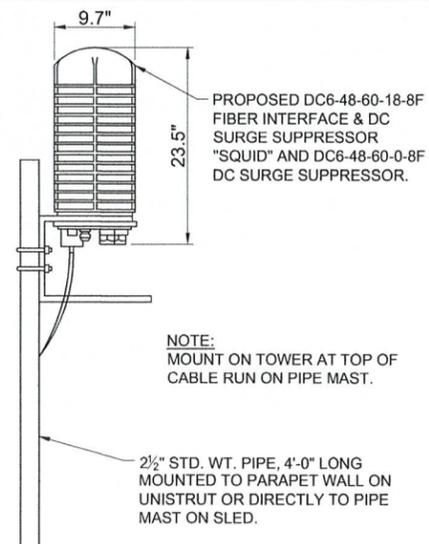
**A2 PANEL ANTENNA DETAIL**  
NOT TO SCALE



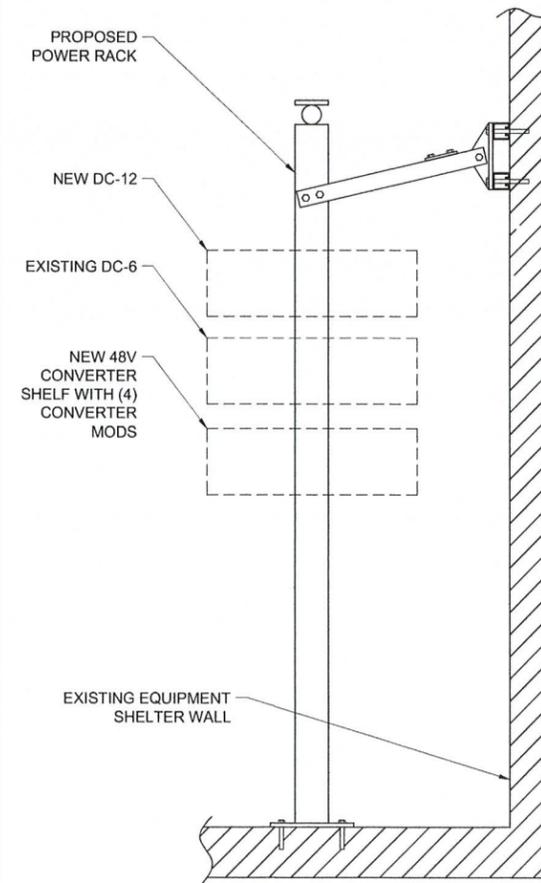
**B3 TMA DETAIL**  
NOT TO SCALE



**A1 RRH-4449 B5/B12 DETAIL**  
NOT TO SCALE



**A3 SQUID DETAIL**  
NOT TO SCALE



**A4 PROPOSED POWER RACK**  
NOT TO SCALE



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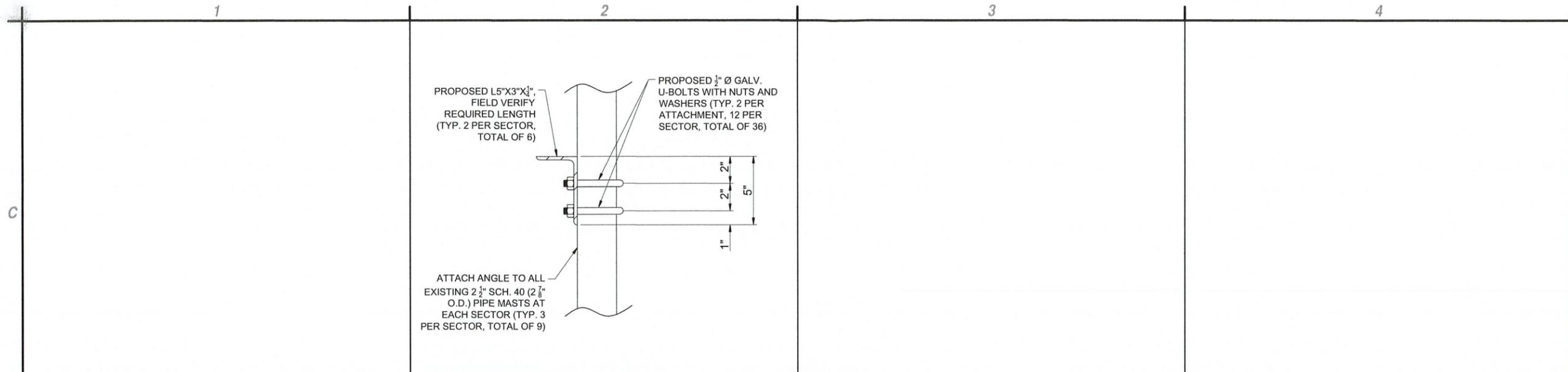


**AT&T UPSTATE NY  
EASTWOOD  
FA#:10000786 / SITE ID: 0031  
LTE 4C PROJECT**

NO.	DATE	DESCRIPTION
1	3-8-19	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: N25.001.002		
DATE: JANUARY 2019		
DRAWN BY: J. OSWALD		
DESIGNED BY:		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

**DETAILS**

**C-502**

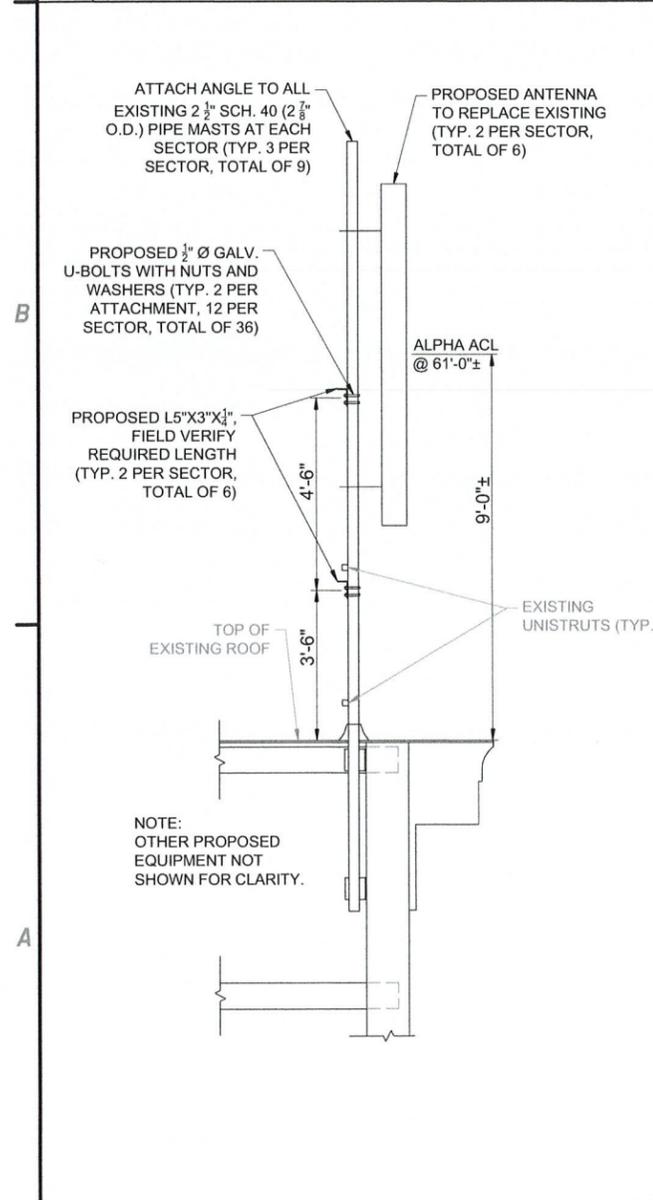


C1 NOT USED

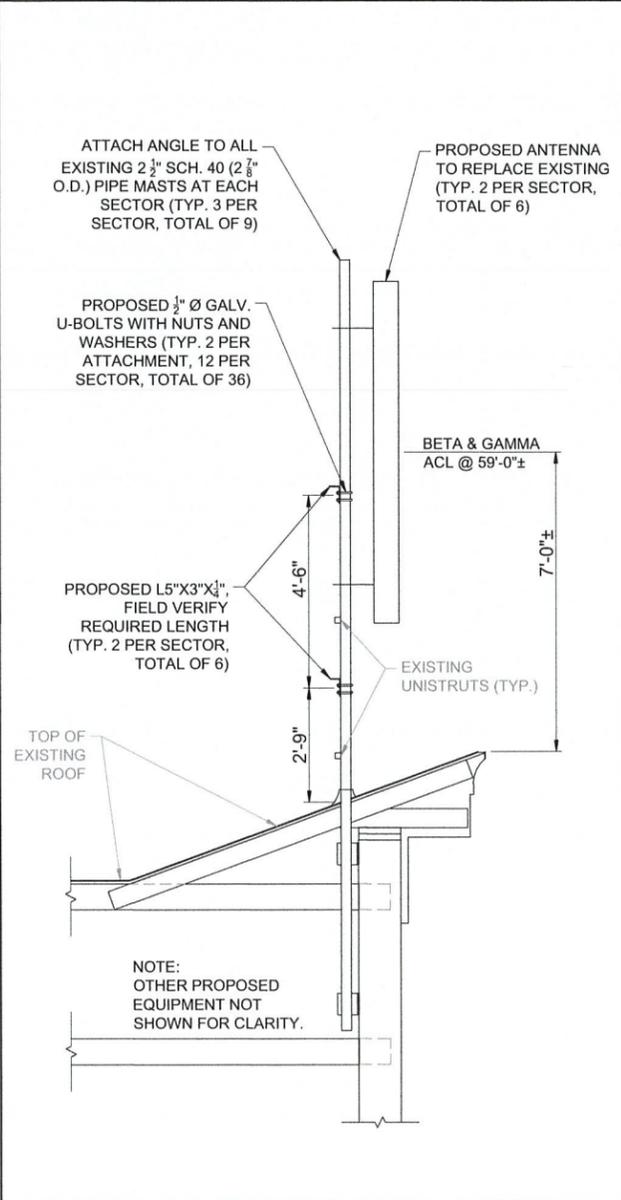
C2 ANGLE CONNECTION TO PIPE DETAIL  
NOT TO SCALE

C3 NOT USED  
NOT TO SCALE

C4 NOT USED  
NOT TO SCALE



A1 PROPOSED ANGLE DETAIL (ALPHA SECTOR)  
NOT TO SCALE



A2 PROPOSED ANGLE DETAIL (BETA & GAMMA SECTORS)  
NOT TO SCALE

B3 NOT USED  
NOT TO SCALE

A3 NOT USED  
NOT TO SCALE

A4 NOT USED  
NOT TO SCALE



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LTE 4C PROJECT**

NO.	DATE	DESCRIPTION
1	3-8-19	ISSUED FOR PERMITTING

REVISIONS

PROJECT NO: N25.001.002  
DATE: JANUARY 2019  
DRAWN BY: R. AZZOTO  
DESIGNED BY:  
CHECKED BY: E.N. KENNA, P.E.

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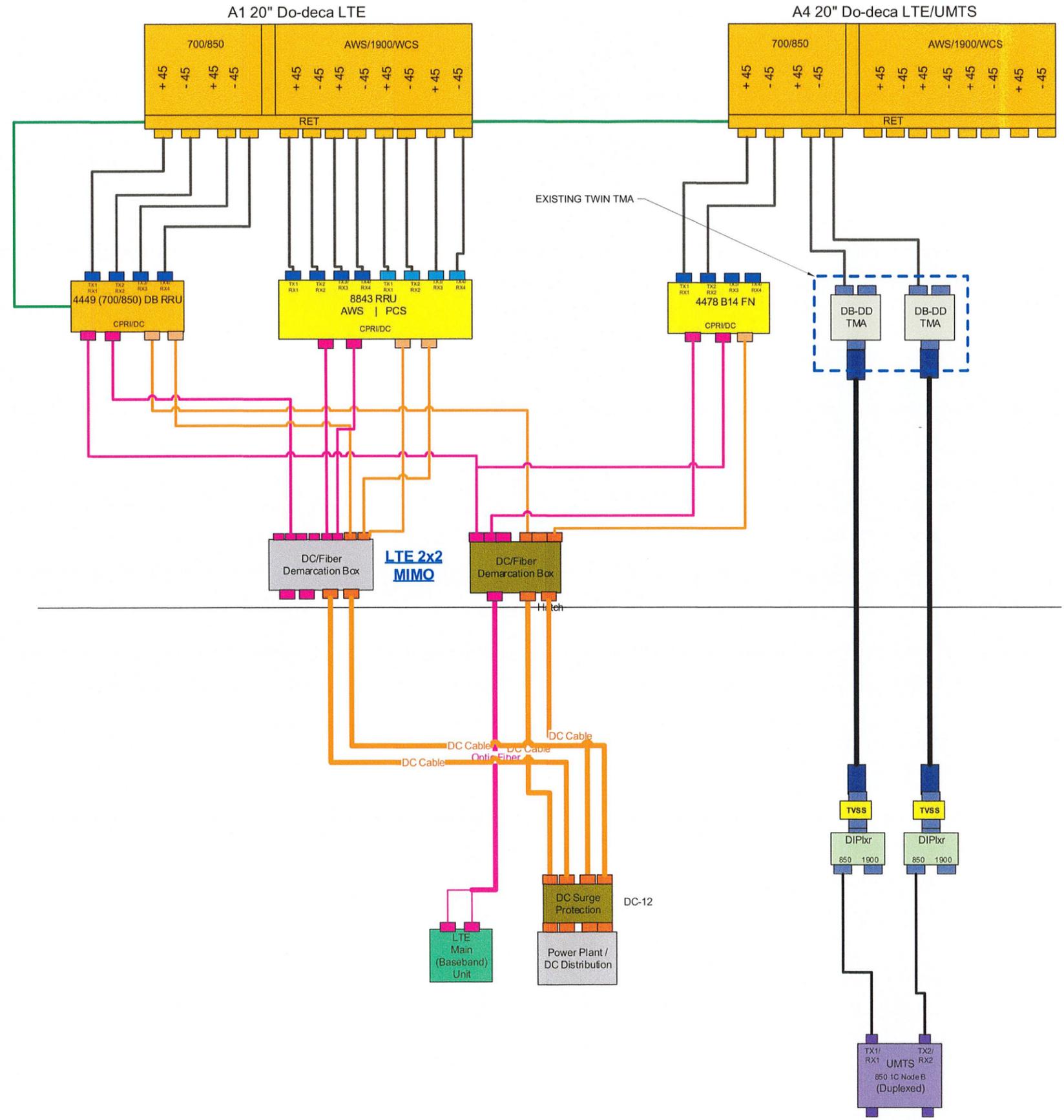
DETAILS

C-503

Mar 11, 2019 - 1:35pm  
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1 2 3 4

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FA#: 10000786 / SITE ID: 0031  
LTE 4C PROJECT

Mar 11, 2019 - 1:33pm  
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NO.	DATE	DESCRIPTION
1	3-8-19	ISSUED FOR PERMITTING

REVISIONS

PROJECT NO: N25.001.002  
DATE: JANUARY 2019  
DRAWN BY: J. OSWALD  
DESIGNED BY:  
CHECKED BY: E.N. KENNA, P.E.  
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RF PLUMBING  
DIAGRAM

T-601

1 2 3 4

CABLE MARKING LOCATIONS TABLE	
NO	LOCATIONS
1	EACH TOP-JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS.
2	EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS NEAR THE TOP-JUMPER CONNECTION AND WITH (1) SET OF 3/4" WIDE COLOR BANDS. JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING.
3	CABLE ENTRY PORT ON THE INTERIOR OF THE SHELTER.
4	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.
5	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.

**COAX COLOR CODING & IDENTIFICATION NOTES**

- SECTOR ORIENTATION/AZIMUTH WILL VARY FROM REGION TO REGION AND IS SITE SPECIFIC. REFER TO RF REPORT FOR EACH SITE TO DETERMINE THE ANTENNA LOCATION AND FUNCTION OF EACH TOWER SECTOR FACE.
- THE ANTENNA SYSTEM COAX SHALL BE LABELED WITH VINYL TAPE EXCEPT IN LOCATIONS WHERE ENVIRONMENTAL CONDITIONS CAUSE PHYSICAL DAMAGE, THE PHYSICAL TAGS ARE PREFERRED.
- THE STANDARD IS BASED ON EIGHT COLORED TAPES-RED, BLUE, GREEN, YELLOW, ORANGE, BROWN, WHITE, AND VIOLET. THESE TAPES MUST BE 1/2" WIDE & UV RESISTANT SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE AND SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR SUBCONTRACTOR ON SITE.
- USING COLOR BANDS ON THE CABLES, MARK ALL RF CABLE BY SECTOR AND CABLE NUMBER AS SHOWN ON 'CABLE MARKING COLOR CONVENTION TABLE'.
- WHEN AN EXISTING COAXIAL LINE THAT IS INTENDED TO BE A SHARED LINE BETWEEN GSM/3G AND IS-136/TDMA IS ENCOUNTERED, THE SUBCONTRACTOR SHALL REMOVE THE EXISTING COLOR CODING SCHEME AND REPLACE IT WITH THE COLOR CODING AND TAGGING STANDARD THAT IS OUTLINED IN THE CURRENT VERSION OF ND-00027. IN THE ABSENCE OF AN EXISTING COLOR CODING AND TAGGING SCHEME, OR WHEN INSTALLING PROPOSED COAXIAL CABLES, THE GUIDELINE SHALL BE IMPLEMENTED AT THAT SITE REGARDLESS OF TECHNOLOGY.
- ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE INSTALLED USING A MINIMUM OF (3) THREE WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID UNRAVELING.
- ALL COLOR BANDS INSTALLED AT THE TOP OF THE TOWER SHALL BE A MINIMUM OF 3" WIDE, AND SHALL HAVE A MINIMUM OF 1/4" OF SPACE BETWEEN EACH COLOR.
- ALL COLOR CODES SHALL BE INSTALLED SO AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE-TO-SIDE.

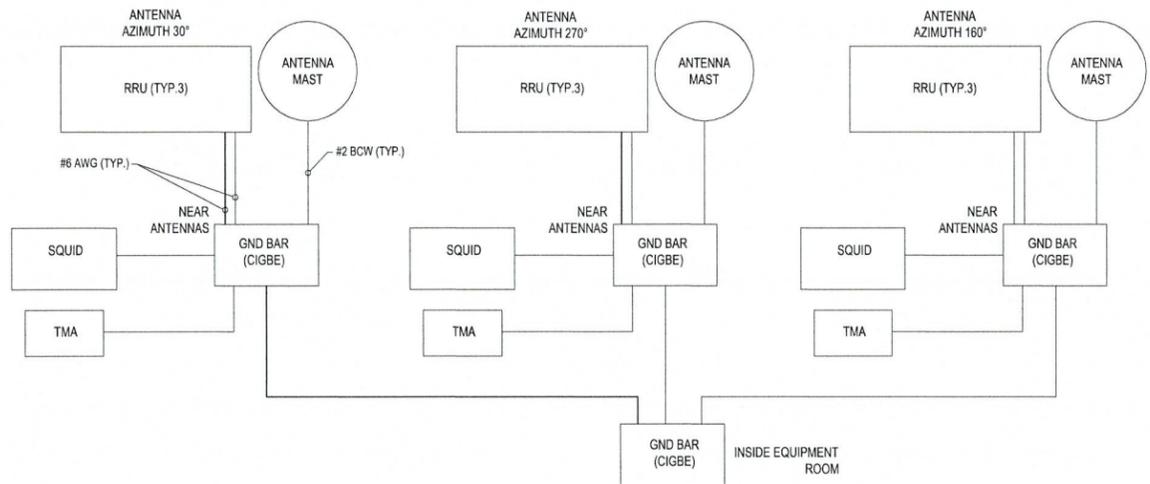
**COAX COLOR CODING & IDENTIFICATION NOTES CONT.**

- IF EXISTING CABLES AT THE SITE ALREADY HAVE A COLOR CODING SCHEME AND THEY ARE NOT INTENDED TO BE REUSED OR SHARED WITH THE GSM TECHNOLOGY, THE EXISTING COLOR CODING SCHEME SHALL REMAIN UNTOUCHED.

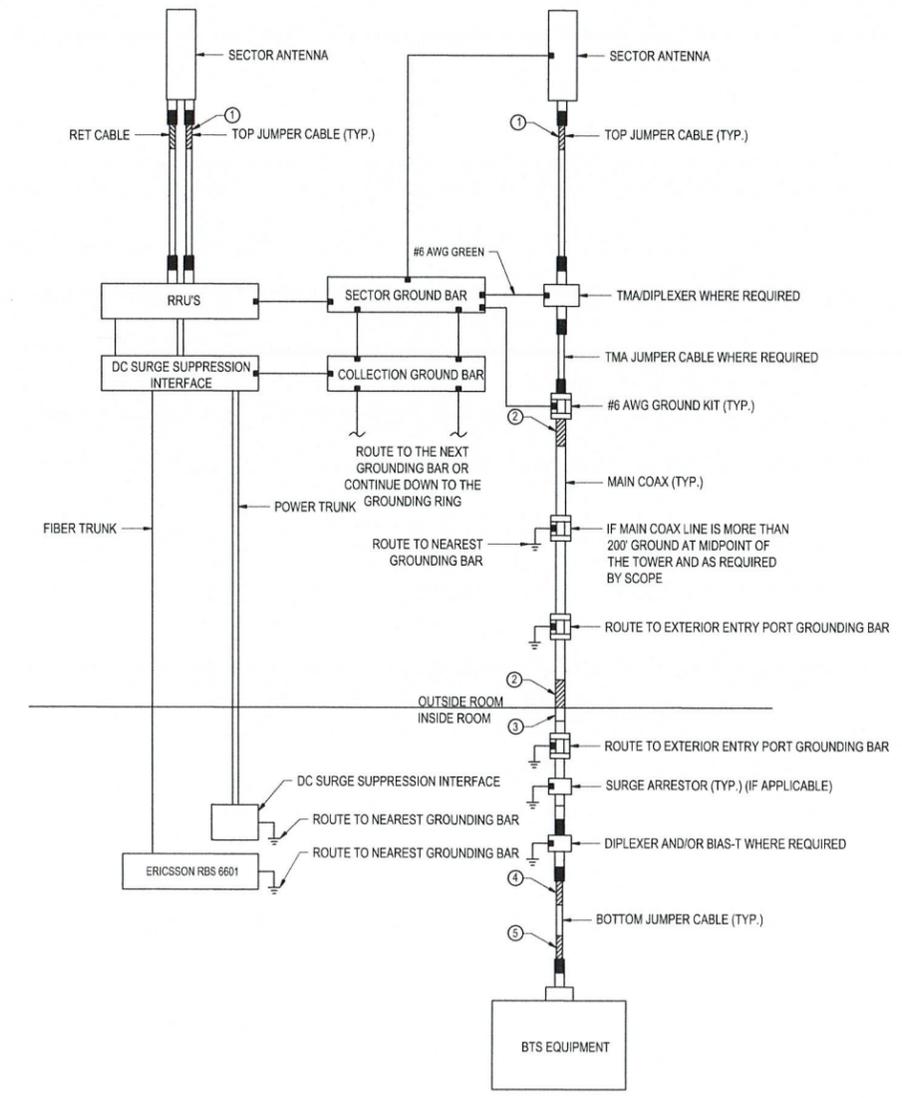
**CABLE MARKING TAGS**

WHEN USING THE ALTERNATIVE LABELING METHOD, EACH RF CABLE SHALL BE IDENTIFIED WITH A METAL ID TAG MADE OF STAINLESS STEEL OR BRASS. THE TAG SHALL BE 1 1/2" IN DIAMETER WITH 1/2" STAMPED LETTERS AND NUMBERS INDICATING THE SECTOR, ANTENNA POSITION, AND CABLE NUMBER. THE ID MARKING LOCATIONS SHOULD BE AS PER 'CABLE MARKING LOCATIONS TABLE'. THE TAG SHOULD BE ATTACHED WITH CORROSION PROOF WIRE AROUND THE CABLE AT THE SAME LOCATION AS DEFINED ABOVE. THE TAG SHOULD BE LABELED AS SHOWN ON THE 'GSM AND UMTS LINE TAG' DETAIL.

**C1 CABLE MARKING LOCATIONS TABLE AND NOTES**  
NOT TO SCALE



**B1 SCHEMATIC DIAGRAM GROUNDING SYSTEM**  
NOT TO SCALE



**A3 CABLE MARKING LOCATIONS DIAGRAM**  
NOT TO SCALE



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EASTWOOD  
FA#:10000786 / SITE ID: 0031  
LTE 4C PROJECT**

Mar 11, 2019 - 1:33pm  
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NO.	DATE	DESCRIPTION
1	3-8-19	ISSUED FOR PERMITTING

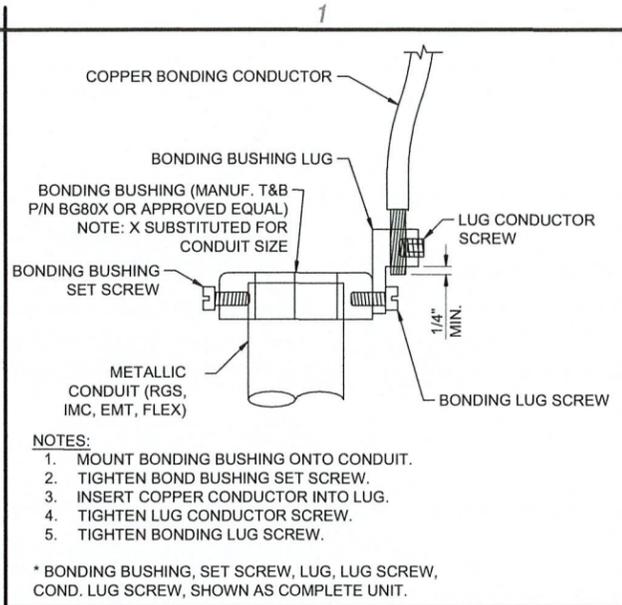
REVISIONS

PROJECT NO: N25.001.002  
DATE: JANUARY 2019  
DRAWN BY: J. OSWALD  
DESIGNED BY: -  
CHECKED BY: E.N. KENNA P.E.

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**SCHEMATICS,  
DIAGRAMS AND  
NOTES**

**T-602**

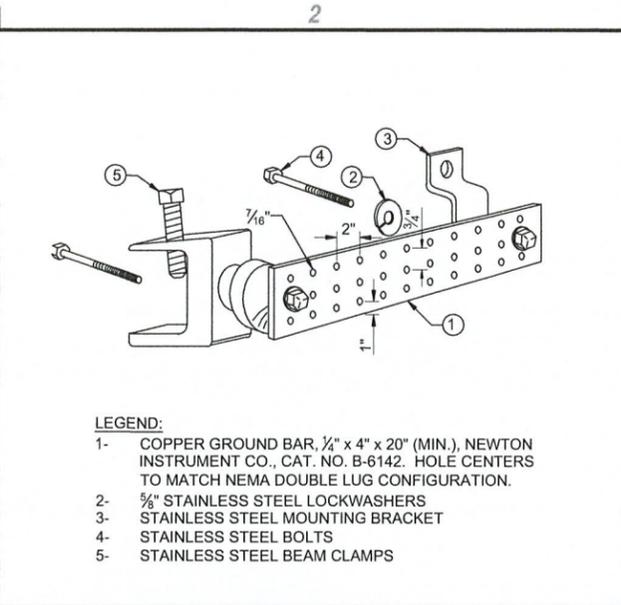


**NOTES:**

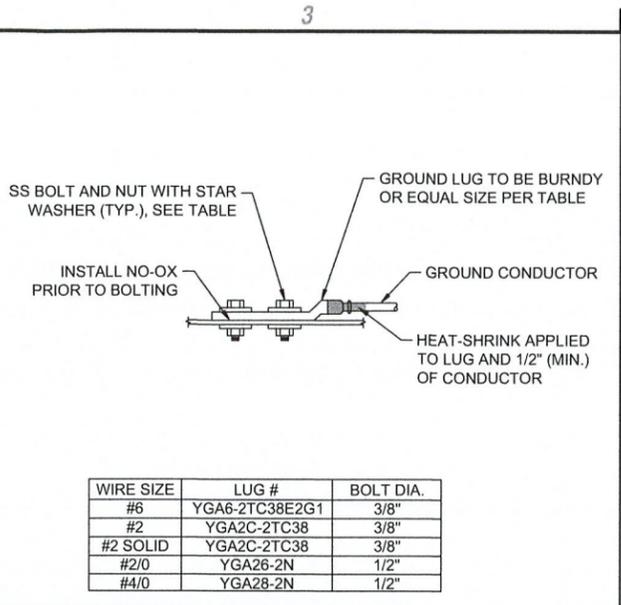
1. MOUNT BONDING BUSHING ONTO CONDUIT.
2. TIGHTEN BOND BUSHING SET SCREW.
3. INSERT COPPER CONDUCTOR INTO LUG.
4. TIGHTEN LUG CONDUCTOR SCREW.
5. TIGHTEN BONDING LUG SCREW.

\* BONDING BUSHING, SET SCREW, LUG, LUG SCREW, COND. LUG SCREW, SHOWN AS COMPLETE UNIT.

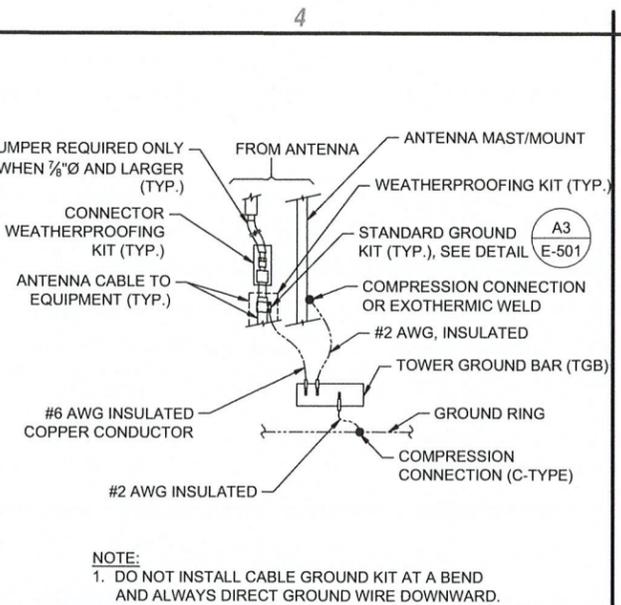
**C1 CONDUIT BOND / GROUND BUSHING**  
NOT TO SCALE



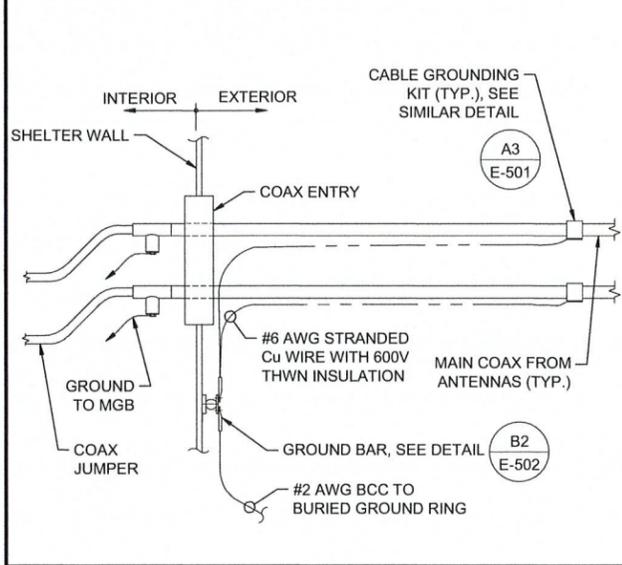
**C2 ANTENNA GROUND BAR DETAIL**  
NOT TO SCALE



**C3 TWO HOLE LUG GROUND CONNECTION**  
NOT TO SCALE



**C4 GROUNDING BAR CONNECTION**  
NOT TO SCALE



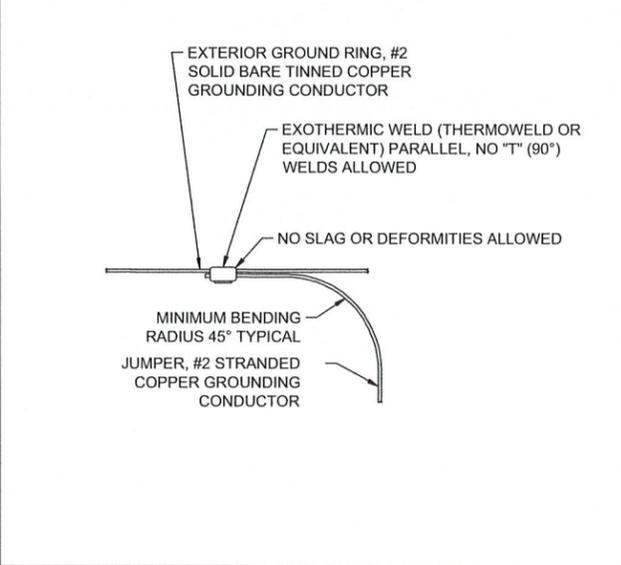
**B1 EXTERIOR ANTENNA CABLE GROUND AT COAX ENTRY**  
NOT TO SCALE

**B2 NOT USED**  
NOT TO SCALE

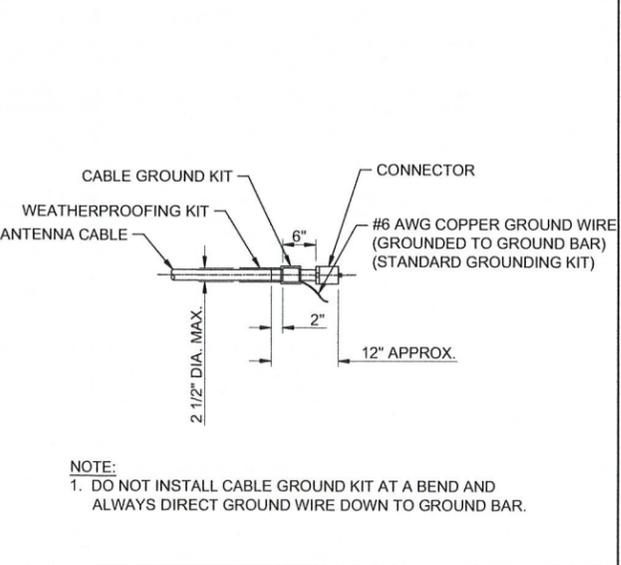
**B3 NOT USED**  
NOT TO SCALE

**B4 NOT USED**  
NOT TO SCALE

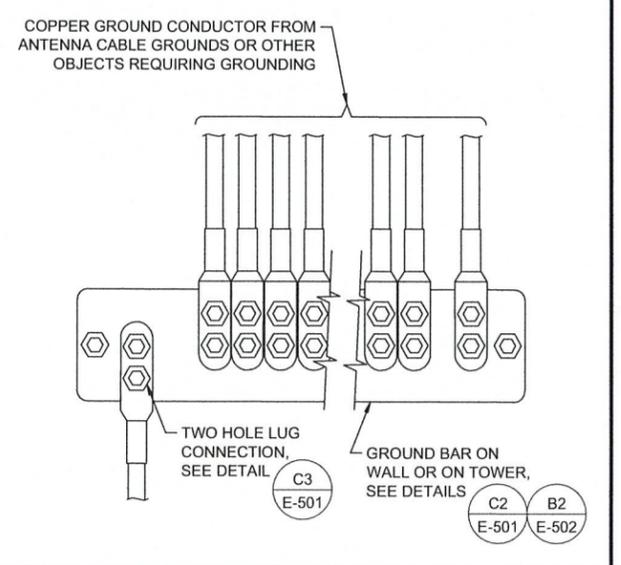
**A1 NOT USED**  
NOT TO SCALE



**A2 TYPICAL GROUNDING CONNECTION DETAIL**  
NOT TO SCALE



**A3 CABLE GROUND KIT CONNECTION**  
NOT TO SCALE



**A4 INSTALLATION OF CONDUCTOR TO GROUNDING BAR**  
NOT TO SCALE



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**AT&T UPSTATE NY  
EASTWOOD  
FA#:10000786 / SITE ID: 0031  
LTE 4C PROJECT**

NO.	DATE	DESCRIPTION
1	3-8-19	ISSUED FOR PERMITTING

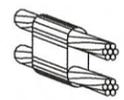
REVISIONS

PROJECT NO: N25 001.002  
DATE: JANUARY 2019  
DRAWN BY: J. OSWALD  
DESIGNED BY:  
CHECKED BY: E.N. KENNA, P.E.

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

**GROUNDING  
DETAILS**

**E-501**

	1	2	3	4
C				
	<b>C1</b> NOT USED NOT TO SCALE	<b>C2</b> NOT USED NOT TO SCALE	<b>C3</b> NOT USED NOT TO SCALE	<b>C4</b> NOT USED NOT TO SCALE
B				
	<b>B1</b> NOT USED NOT TO SCALE	<b>B2</b> NOT USED NOT TO SCALE	<b>B3</b> NOT USED NOT TO SCALE	<b>B4</b> NOT USED NOT TO SCALE
A	 TYPE VS  TYPE TA  TYPE HS  TYPE SS  TYPE PT			
	<p>NOTE: ERICO CADWELD "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.</p>			
	 TYPE CT	 TYPE HS	 TYPE XA	 TYPE VS
			 TYPE YA-2	 TYPE 2-YA-2
	<p>NOTE: USE AS REQUIRED BASED ON SITE SPECIFIC CONDITIONS.</p>			
	<b>A1</b> EXOTHERMIC WELD DETAILS NOT TO SCALE		<b>A3</b> NOT USED NOT TO SCALE	
	1	2	3	4



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NO.	DATE	DESCRIPTION
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REVISIONS

PROJECT NO: N25.001.002  
DATE: JANUARY 2019  
DRAWN BY: J. OSWALD  
DESIGNED BY:  
CHECKED BY: E.N. KENNA, P.E.

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**GROUNDING  
DETAILS**

**E-502**

Mar 11, 2019 - 1:33pm  
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