Syracuse Zoning Administration **Application for TOWER, DISH or ANTENNA**

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Please Print or Type Information For Office use only: ~~SR-11-13M1~~ 7-19-2018 (Filing date) | SR-11-13M1 (Case #) | RC (District)

This APPLICATION is for: ☐ **Dish** ☐ **Tower** ☒ **Antenna**

SUBJECT PROPERTY ADDRESS - Location of Proposal:

3229 East Genesee Street

APPLICANT INFORMATION

PROPERTY OWNER:

Name: 3229 East Genesee Associates **Phone:** 315-254-3116

Address:

3229 East Genesee Street, Syracuse, NY

P.O. Box 2055 Syracuse, NY 13220

REPRESENTATIVE:

☐ **Attorney,** ☐ **Architect,** ☐ **Contractor,** ☒ **Other:** Agent - Centerline - Agent For AT&T - Tenant

Name: Paul Reid, Centerline Communications **Phone:** 508-813-3526

Address:

95 Ryan Drive, Suite 1 Raynham, MA 02767

OTHERS INVOLVED (if applicable):

☒ **Lessee,** ☐ **Contract Purchaser,** ☐ **Other:**

Name: AT&T - c/o Centerline Communications, LLC **Phone:** 508-813-3526

Address:

95 Ryan Drive, Suite 1 Raynham, MA 02767

STRUCTURE INFORMATION:

MAXIMUM HEIGHT from ground level to top of structure:

DISTANCE from structure to front property line:

DISTANCE to closest side property line

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.

(Agent for AT&T) 7/11/18

CURRENT PROPERTY OWNER SIGNATURE **DATE**

Tim Whalen - Agent for Tenant (see Attached

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

☐ **SITE PLAN:** Showing proposed showing exact location of proposed tower, dish or antenna.

☐ 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:

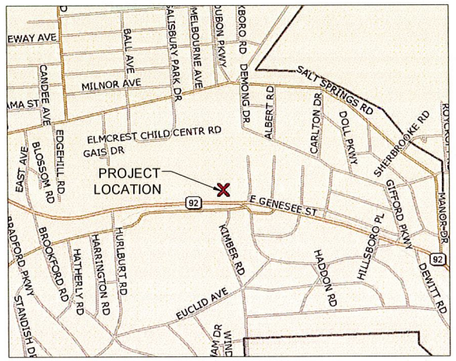
- Information concerning topography
- Radio frequency coverage
- Tower height requirements
- Setbacks
- Fencing
- Landscaping
- Depending on the specifics of the application the City Planning Commission may request additional information necessary to assess the nature of the proposal and its potential 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.

at&t

at&t MOBILITY CORP.
5841 BRIDGE STREET
EAST SYRACUSE, NY 13057

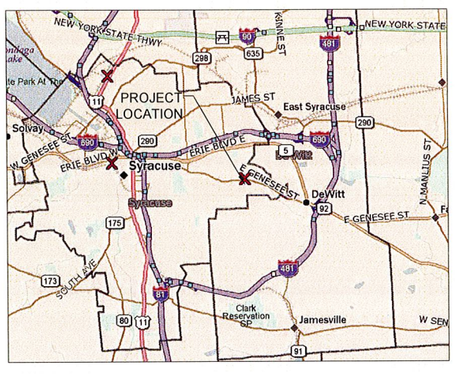
NORTH



LOCATION MAP

NORTH

DIRECTIONS TO SITE: (FROM SYRACUSE AT&T OFFICE) TRAVEL SOUTH ON VINE ST. TO A LEFT ONTO OSWEGO STREET BEAR LEFT ONTO CR137. FOLLOW CR137 TO I-81 SOUTH. FOLLOW I-81 SOUTH TO I-690 EAST EXIT. FOLLOW I-690 TO EXIT 14, TURN RIGHT ONTO TEALL AVE. FOLLOW TEALL AVE TO A LEFT ONTO SR92 (GENESSE STREET). FOLLOW GENESEE STREET TO SITE ON LEFT (APPROX. 1.5 MILES).



VICINITY MAP

PROJECT INFORMATION

LANDLORD:	3229 EAST GENESEE ASSOCIATES 3229 EAST GENESEE STREET SYRACUSE, NY 13214
SITE CONTACT: PHONE:	PAUL BECALLO (315) 422-9233
SITE NAME: SITE NUMBER: USID NUMBER: FA NUMBER: SITE ADDRESS:	EAST GENESEE 0051 61388 10000802 3229 EAST GENESEE STREET SYRACUSE, NY 13214
TAX MAP #:	038-16-34.0
LATITUDE: LONGITUDE:	N43° 02' 36.20" W76° 05' 40.67"
GROUND ELEVATION: ZONING JURISDICTION:	512'± AMSL CITY OF SYRACUSE
COUNTY: TYPE OF SITE: STRUCTURE HEIGHT: RAD CENTER:	ONONDAGA ROOFTOP WITH ROOM BUILD 23' AGL. 26'-0" AGL
DESCRIPTION OF WORK:	ADD (1) ANTENNA FOR LTE, ADD (2) RADIO HEAD . REMOVE GSM CABINET, REPLACE DC6 WITH DC12 AND INSTALL IN NEW RACK IN GSM CABINETS PLACE. BYPASS RXIAT AND DECOMISSION RXIAT EQUIPMENT IN RACK. INSTALL (1) TRAY IN EXISTING LTE RACK AND SWAP DUL TO DUS. INSTALL (1) SQUID TO REPLACE EXISTING DC2/FC12. INSTALL PROPOSED MODIFICATIONS TO ONE (1) EXISTING ANTENNA FRAME.

PROJECT DIRECTORY

PROJECT MANAGER: CONTACT: PHONE: EMAIL:	CENTERLINE COMMUNICATIONS, LLC PETER LAMONTAGNE (508) 341-7854 plamontagne@clinellc.com
CIVIL ENGINEERING FIRM:	C&S ENGINEERS INC. 499 COL. EILEEN COLLINS BLVD. SYRACUSE, NY 13212
CONTACT: PHONE:	ERIC N. KENNA, P.E. (315) 455-2000
APPLICANT:	at&t MOBILITY CORP. 5841 BRIDGE STREET EAST SYRACUSE, NY 13057
CONTACT: PHONE:	BILL FURDOCK (315) 447-0746
POWER COMPANY: PHONE:	NATIONAL GRID (800) 867-4272
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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811

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CONTRACT DRAWINGS FOR THE CONSTRUCTION OF

FA NUMBER: 10000802
SITE ID: 0051

SITE NAME: EAST GENESEE

at&t UPSTATE NY LTE 2C PROJECT

A-D'Qq_120_Ft9TR_7_8u

3229 EAST GENESEE ST SYRACUSE, NY 13214

C&S PROJECT: N25.001.002

APRIL 2018

STATE OF NEW YORK
ERIC N. KENNA
088339
LICENSED PROFESSIONAL ENGINEER

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	2	6-21-18
G-002	GENERAL NOTES	2	6-21-18
G-003	GENERAL NOTES	2	6-21-18
CIVIL			
C-100	PROPERTY PLAN	2	6-21-18
C-101	ROOF PLAN	2	6-21-18
C-102	EQUIPMENT LAYOUT PLAN	2	6-21-18
C-201	ANTENNA FRAME AND NOTES	2	6-21-18
C-501	DETAILS	2	6-21-18
C-502	DETAILS	2	6-21-18
TELECOMMUNICATIONS		2	6-21-18
T-601	RF PLUMBING DIAGRAM	2	6-21-18
T-602	SCHEMATICS, DIAGRAMS AND NOTES	2	6-21-18
ELECTRICAL		2	6-21-18
E-501	GROUNDING DETAILS	2	6-21-18
E-502	GROUNDING DETAILS	2	6-21-18

APPROVALS

AT&T PROJECT MANAGER — DATE

CENTERLINE COMMUNICATIONS PROJECT MANAGER — DATE

G-001

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Jun 21, 2018 – 2:53pm
F:\Projects\NSG – Centerline Communications, LLC\N25.001.002 – AT&T LTE 2C\Design\Cadd\East Genesee 2C\Construction\Sheet Files\General\N25001002_G-001.dwg

NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI AT 28 DAYS, UNLESS OTHERWISE NOTED.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. 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 .....1½" IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....¾" IN.
   BEAM AND COLUMNS .....1½" IN.
5. A CHAMFER OF 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. 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.
7. 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.
8. CONCRETE SLUMP SHALL NOT EXCEED 5 INCHES UNLESS SPECIFICALLY AUTHORIZED BY THE ENGINEER. SLUMP SHALL BE OR AS SPECIFIED ON THE CONCRETE MIX DESIGN.
9. 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

GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-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.
3. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
4. 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.
5. 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.
6. 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.
7. 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.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. 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.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. 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.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED TO THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR AND INTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
19. 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.

A2 GROUNDING NOTES
NOT TO SCALE

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR - CENTERLINE
   SUBCONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER - AT&T MOBILITY CORP.
2. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
3. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
4. 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.
5. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. 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.
9. 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.
10. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
17. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
18. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
19. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
20. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.

A3 GENERAL NOTES
NOT TO SCALE

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/VENTALATION/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:

S/G	SOLID GROUND BUS BAR
S/N	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
M	METER
	CADWELD TYPE CONNECTION
	COMPRESSION TYPE CONNECTION
	GROUNDING WIRE
	GROUND ROD WITH INSPECTION SLEEVE
T	TEST GROUND ROD WITH INSPECTION SLEEVE
	EXOTHERMIC WITH INSPECTION SLEEVE

A4 ABBREVIATIONS AND SYMBOLS
NOT TO SCALE

C&S COMPANIES
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Phone: 315-455-2000
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STATE OF NEW YORK · ERIC KENNA · 088339 · LICENSED PROFESSIONAL ENGINEER

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5841 BRIDGE STREET
EAST SYRACUSE, NY 13057

CENTERLINE COMMUNICATIONS

UPSTATE NY
EAST GENESEE
FA#: 10000802/ SITE ID: 0051
LTE 2C PROJECT

MARK	DATE	DESCRIPTION
2	6-21-18	FINAL DRAWINGS
1	5-2-18	ISSUED FOR PERMITTING

REVISIONS

PROJECT NO:	N25.001.002
DATE:	APRIL 2018
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

GENERAL NOTES

G-002

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A1 ELECTRICAL NOTES
NOT TO SCALE

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 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.
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; 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.

C2 ELECTRICAL NOTES
NOT TO SCALE

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.

B2 ANTENNA AND CABLE SCHEDULE 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.

A2 NOT USED
NOT TO SCALE

A3 RF 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.

C4 STRUCTURAL STEEL 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.

A4 SITE WORK GENERAL 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.

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at&t MOBILITY CORP.
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EAST SYRACUSE, NY 13057

CENTERLINE COMMUNICATIONS

UPSTATE NY
EAST GENESEE
FA#: 10000802/ SITE ID: 0051
LTE 2C PROJECT

MARK	DATE	DESCRIPTION
2	6-21-18	FINAL DRAWINGS
1	5-2-18	ISSUED FOR PERMITTING

REVISIONS

PROJECT NO:	N25.001.002
DATE:	APRIL 2018
DRAWN BY:	J. OSWALD
DESIGNED BY:	
CHECKED BY:	E.N. KENNA, P.E.

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GENERAL NOTES

G-003

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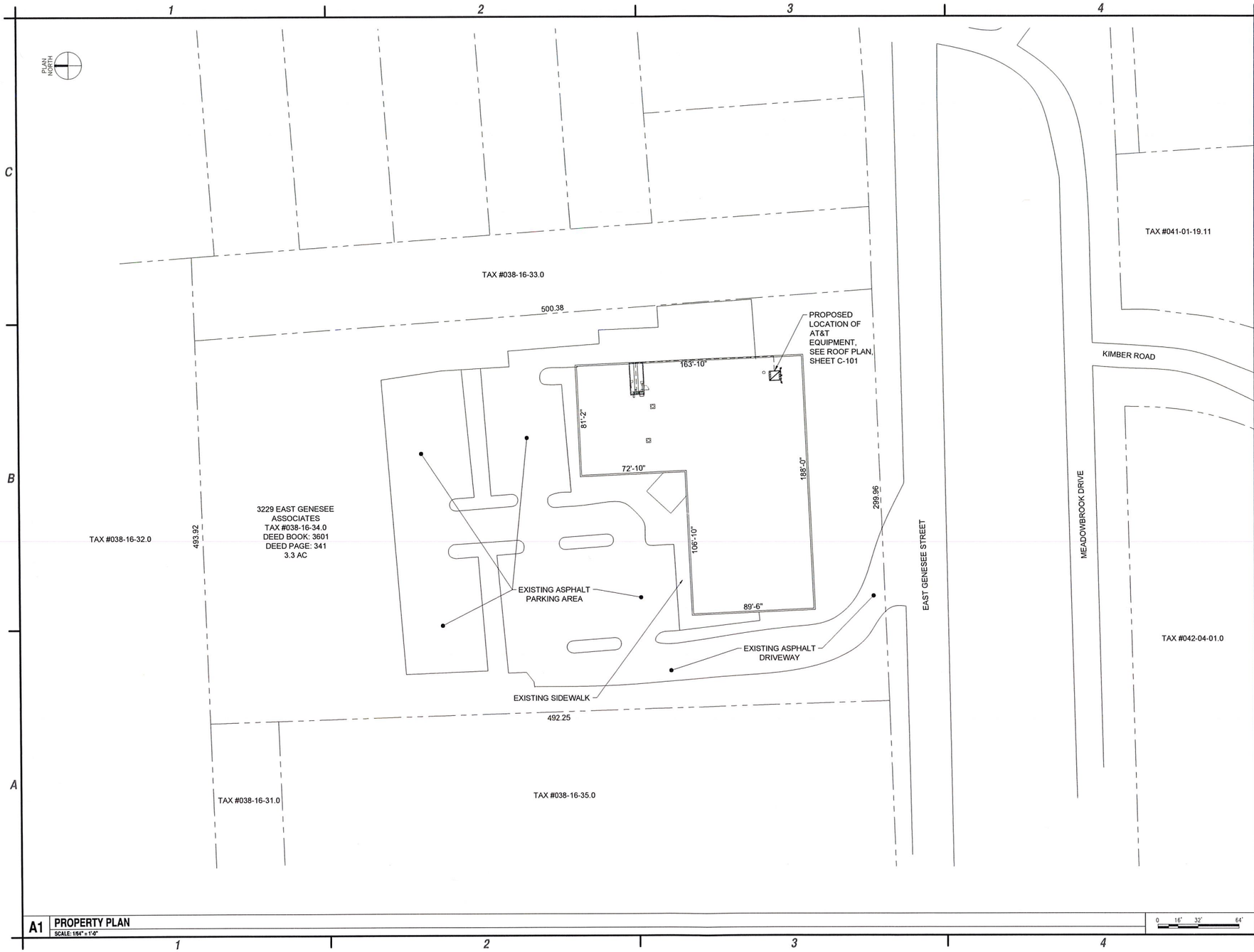

A1 PROPERTY PLAN
SCALE: 1/64" = 1'-0"

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DESIGNED BY:	-
CHECKED BY:	E.N. KENNA, P.E.

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PROPERTY PLAN

C-100

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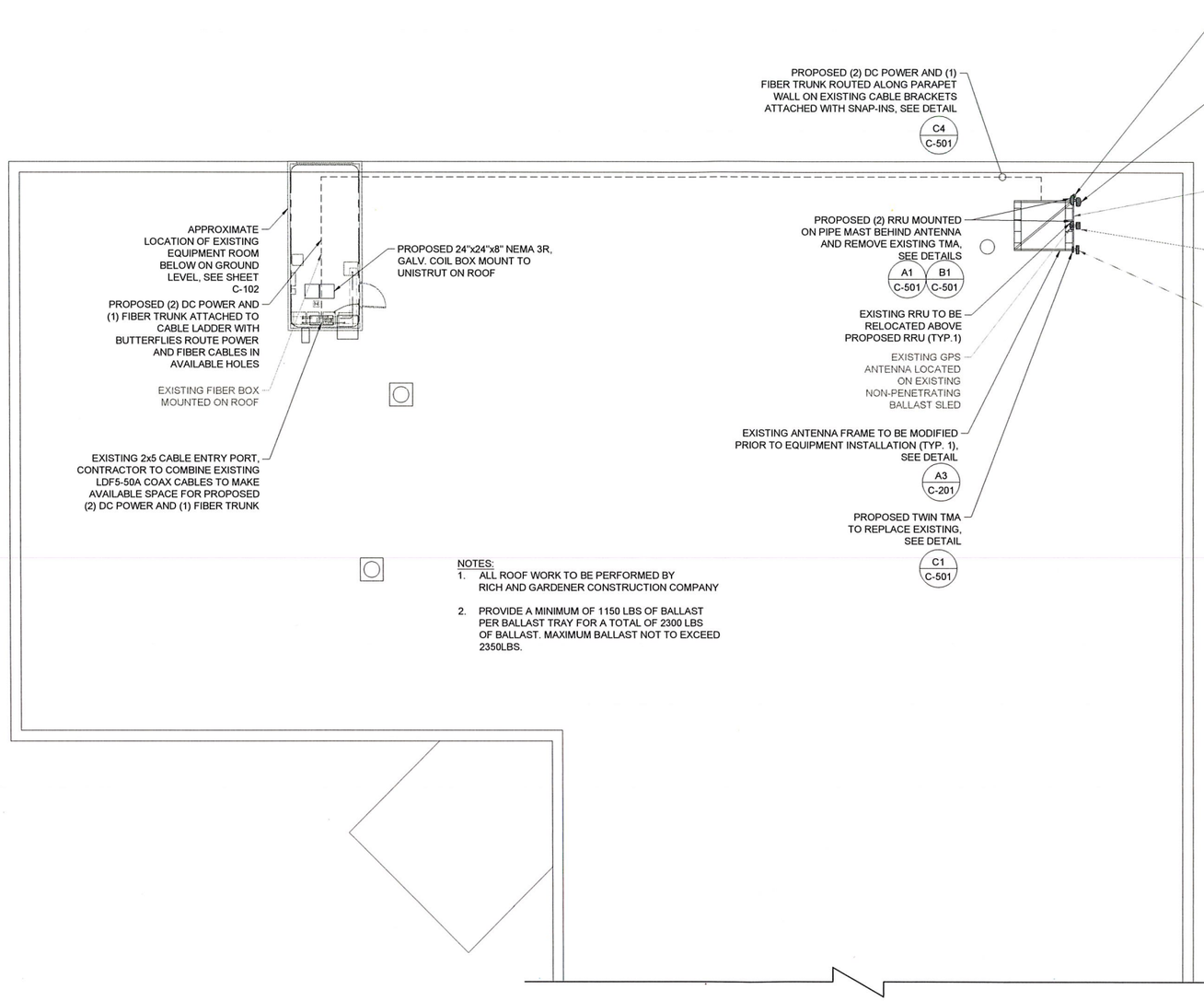

NOTES:
1. ALL ROOF WORK TO BE PERFORMED BY RICH AND GARDENER CONSTRUCTION COMPANY
2. PROVIDE A MINIMUM OF 1150 LBS OF BALLAST PER BALLAST TRAY FOR A TOTAL OF 2300 LBS OF BALLAST. MAXIMUM BALLAST NOT TO EXCEED 2350LBS.

A1 ROOF PLAN
SCALE: 1/16" = 1'-0"

0 8' 16' 32'

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1	5-2-18	ISSUED FOR PERMITTING

REVISIONS

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DESIGNED BY:	-
CHECKED BY:	E.N. KENNA, P.E.

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ROOF PLAN

C-101

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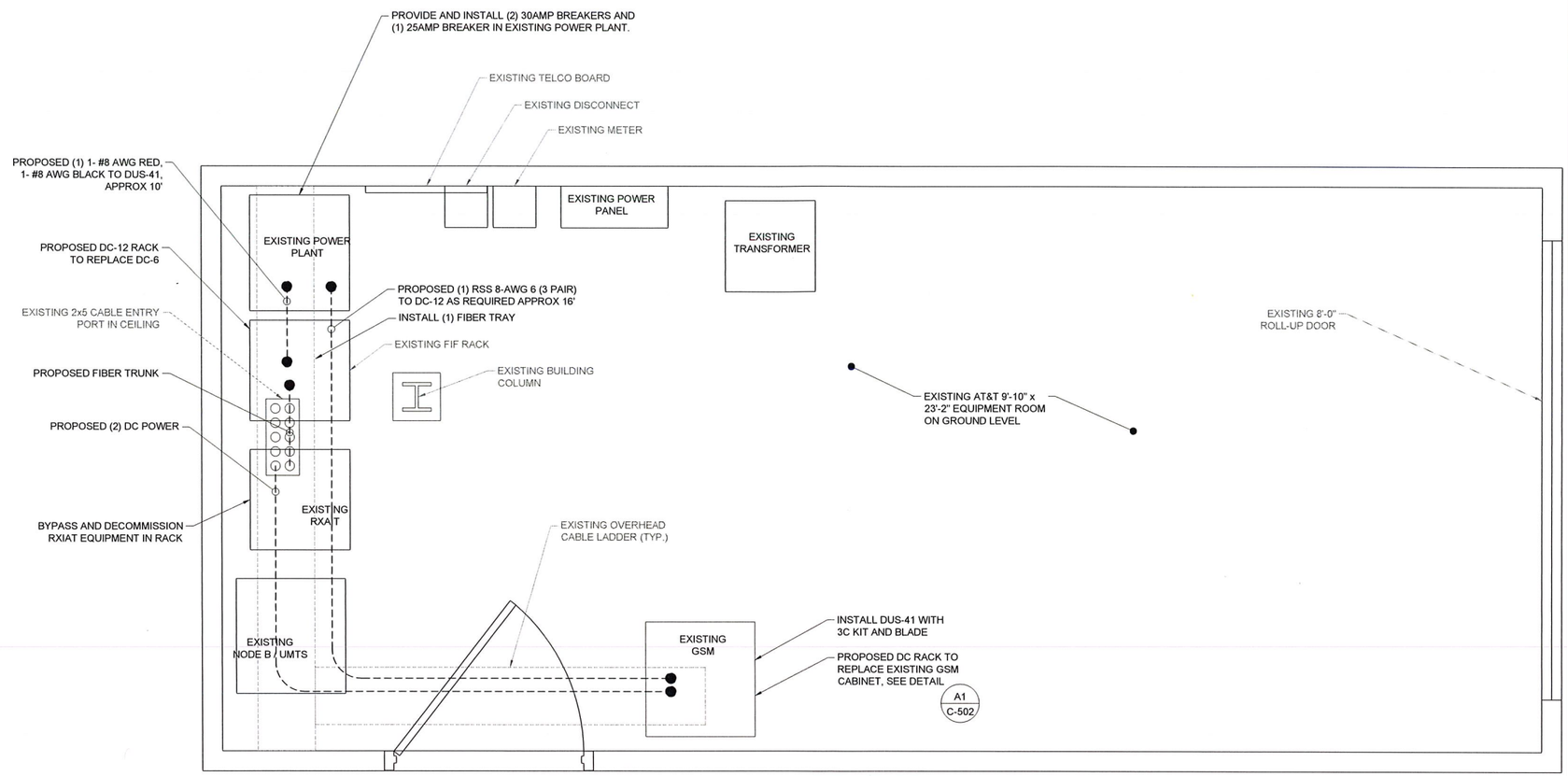

NOTE:
ALL NEW CABLING TO BE ROUTED ON EXISTING CABLE RACKS. ROUTING DEPICTED UTILIZES EXISTING CABLE RACKS. EXISTING CABLE RACK LAYOUT NOT SHOWN FOR CLARITY.

NOTES:

1. THE CONDUIT ROUTING IS DIAGRAMMATICALLY SHOWN ON THE PLANS AND ARE ONLY APPROXIMATIONS. THE EXACT LOCATION AND ROUTING SHALL BE FIELD VERIFIED.
2. ALL DISCONNECTS AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES, INDICATING THE CIRCUITS ORIGINATION AND ALL EQUIPMENT TERMINATIONS.
3. SUBCONTRACTOR SHALL PROVIDE ALL CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED SYSTEM AND SHALL BE IN COMPLIANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
4. 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.

A1 EQUIPMENT LAYOUT PLAN
SCALE: 1/2" = 1'-0"

0 1' 2'

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EQUIPMENT LAYOUT PLAN

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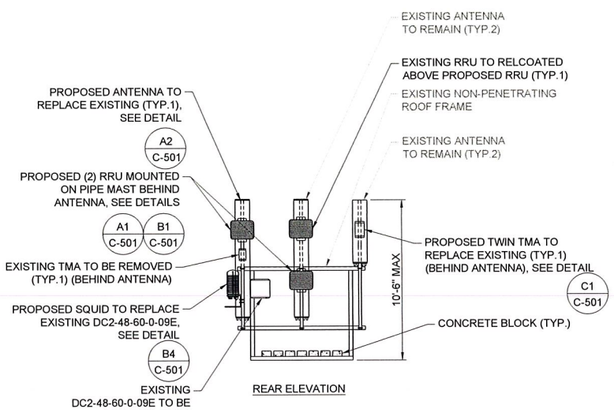
EXISTING ANTENNA AND EQUIPMENT								
SECTOR	BAND	ANTENNA	ANTENNA ℄ HEIGHT	AZIMUTH	TMA	RRU	COAX CABLE	COAX LENGTH
ALPHA	850 MHz / 1900MHz	(1) DBXLH-9090A-VTM (E)	28'-0" AGL	180°	(1) ETD819-G-12UB (E)	-	LDF7-50A (1) (E)	160'± (E)
	700 MHz/AWS	(1) SBNH-1D6565C (E)	28'-0" AGL	180°	-	(1) RRUS - 11 (E)	FIBER (E)	160'± (E)
	850 MHz / 1900MHz	(1) DBXLH-9090A-VTM (E)	28'-0" AGL	180°	(1) ETD819-G-12UB (E)	-	LDF7-50A (1) (E)	160'± (E)

PROPOSED ANTENNA AND EQUIPMENT								
SECTOR	BAND	ANTENNA	ANTENNA ℄ HEIGHT	AZIMUTH	TMA	RRU	COAX CABLE	COAX LENGTH
ALPHA	700 MHz/AWS	(1) EPBQ-654L8H8-L2 (P)	28'-0" AGL	180°	-	(1) B14 4478 (P), (1) RRUS - 32 B2 (P)	FIBER (P)	160'± (P)
	700 MHz / PCS	(1) SBNH-1D6565C (E)	28'-0" AGL	180°	-	(1) RRUS - 11 (E)	FIBER (E)	160'± (E)
	850 MHz / 1900MHz	(1) DBXLH-9090A-VTM (E)	28'-0" AGL	180°	(1) E15Z01P13 (P)	-	LDF7-50A (1) (E)	160'± (E)

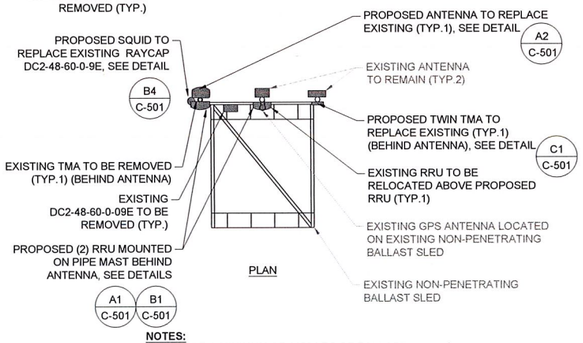
PROPOSED LTE RRU & CABLE SCHEDULE						
SECTOR	FIBER TRUNK	SINGLE FIBER	DC 3 PAIR	DC SINGLE PAIR	RRU'S	COAX JUMPERS
ALPHA	(1) (E) (1) (P) 75 METER	(2) (E) (1) (P) 5 METER	(2) (E) (2) (P) 160 FEET	(2) (E) (1) (P) 8 AWG, 15'	700-B14 4478 (P)	2 (P)
					PCS-RRUS-32 (P)	4 (P)
					700-RRUS-11 (E)	2 (E)

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

C1 EXISTING/PROPOSED TABLES
NOT TO SCALE



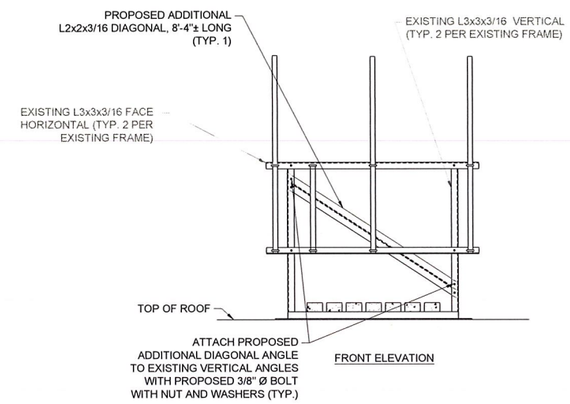
REAR ELEVATION



PLAN

NOTES:
1. PROVIDE A MINIMUM OF 1150 LBS OF BALLAST PER BALLAST TRAY FOR A TOTAL OF 2300 LBS OF BALLAST. MAXIMUM BALLAST NOT TO EXCEED 2350LBS.

A1 NON-PENETRATING BALLAST SLED
NOT TO SCALE



FRONT ELEVATION

NOTES:
1. DO NOT INSTALL ANY PROPOSED EQUIPMENT OR BALLAST ON EXISTING FRAME UNTIL BEFORE PROPOSED MODIFICATIONS TO THE FRAME ARE COMPLETED.
2. FIELD VERIFY ALL PROPOSED MEMBER LENGTHS AND BOLT HOLE LOCATIONS PRIOR TO ORDERING OR FABRICATING PROPOSED MEMBERS.
3. ALL PROPOSED STEEL MEMBERS AND HARDWARE TO BE HOT-DIP GALVANIZED.
4. EQUIPMENT NOT SHOWN FOR CLARITY.

A3 EXISTING FRAME MODIFICATION DETAILS
NOT TO SCALE

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DESIGNED BY:	-
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ANTENNA FRAME AND NOTES

C-201

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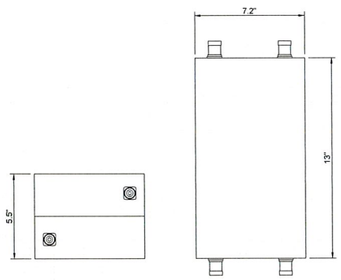

E15Z01P13

C1 TMA DETAIL
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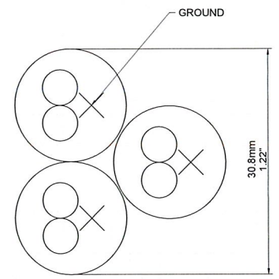
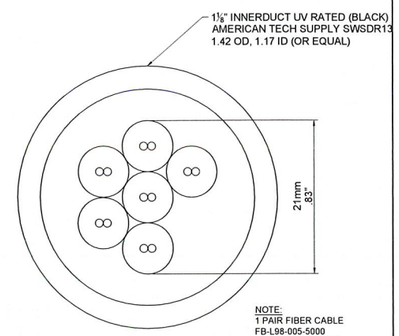


NOTES:
1. 1 PAIR DC POWER CABLE RSS 8 (ONE PER RRUS, SIX TOTAL)

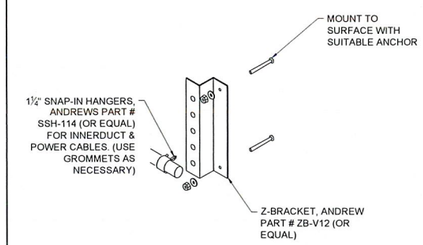
2. SECURE TO ICE BRIDGE AND TOWER WITH 1¼" SNAPSTACK SNAP-INS.

C2 1 PAIR POWER DETAIL
NOT TO SCALE

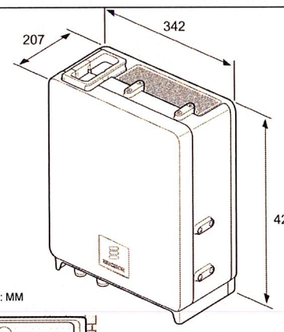


NOTE:
1 PAIR FIBER CABLE
FB-L98-005-5000
(ONE PER RRU, SIX TOTAL)

C3 6 SINGLE 1 PAIR FIBER DETAIL
NOT TO SCALE



C4 VERTICAL-MOUNTED FIBER/POWER DETAIL
NOT TO SCALE



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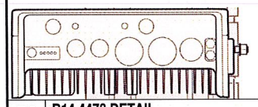

B2 B14 4478 DETAIL
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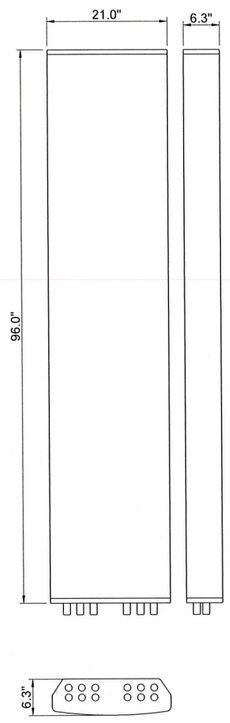
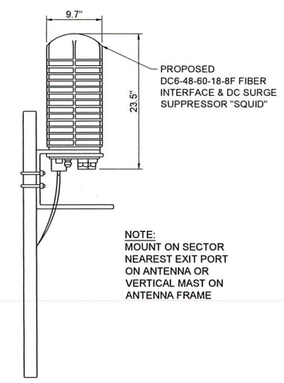


LTE/PCS MODEL
EPBQ-654L8H8-L2
MANF: KMW

A2 PANEL ANTENNA DETAIL
NOT TO SCALE

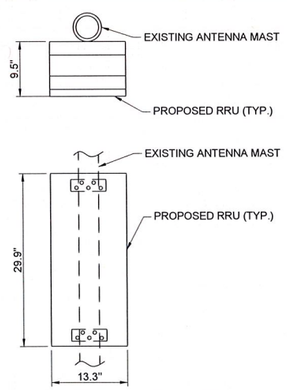
SINGLE FIBER 7MM/.28"
USE GROMMET ROSENBERGER: CX603-HA0711 ANT: 13854 WITH ⅞" SNAPSTACK SNAP-INS.
SINGLE PAIR DC POWER 15.4MM/.61"
USE GROMMET ROSENBERGER: CX604-HA1117 ANT: 13853 WITH ⅞" SNAPSTACK SNAP-INS.

B3 TABLE
NOT TO SCALE

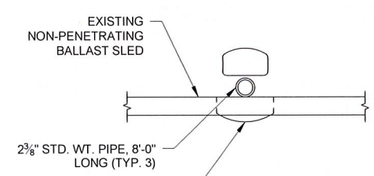


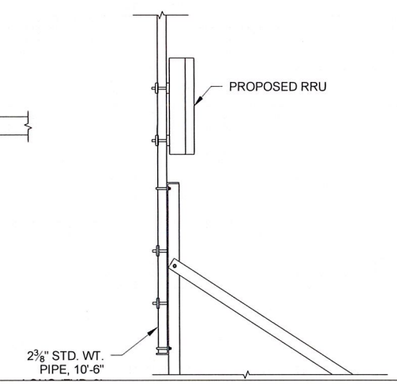
NOTE:
MOUNT ON SECTOR
NEAREST EXIT PORT
ON ANTENNA OR
VERTICAL MAST ON
ANTENNA FRAME

B4 SQUID DETAIL (DC6-48-60-18-8F)
NOT TO SCALE



A1 RRU-32 DETAIL
NOT TO SCALE





A3 RRU MOUNTING DETAIL
NOT TO SCALE

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UPSTATE NY
EAST GENESEE
FA#: 10000802/ SITE ID: 0051
LTE 2C PROJECT

MARK	DATE	DESCRIPTION
2	6-21-18	FINAL DRAWINGS
1	5-2-18	ISSUED FOR PERMITTING

REVISIONS

PROJECT NO:	N25.001.002
DATE:	APRIL 2018
DRAWN BY:	J. OSWALD
DESIGNED BY:	-
CHECKED BY:	E.N. KENNA, P.E.

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DETAILS

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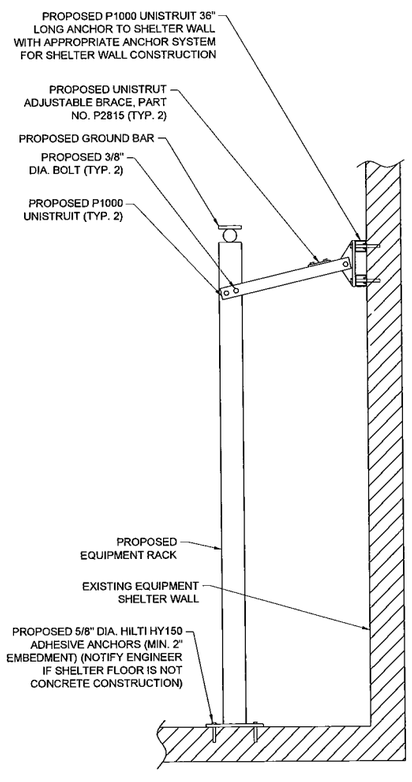
C2 NOT USED NOT TO SCALE	C2 NOT USED NOT TO SCALE	C3 NOT USED NOT TO SCALE	C4 NOT USED NOT TO SCALE
		B3 NOT USED NOT TO SCALE	B4 NOT USED NOT TO SCALE
A1 DC RACK WITH SEISMIC BRACE DETAIL NOT TO SCALE		A3 NOT USED NOT TO SCALE	A4 NOT USED NOT TO SCALE



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DESIGNED BY:	-
CHECKED BY:	E.N. KENNA, P.E.

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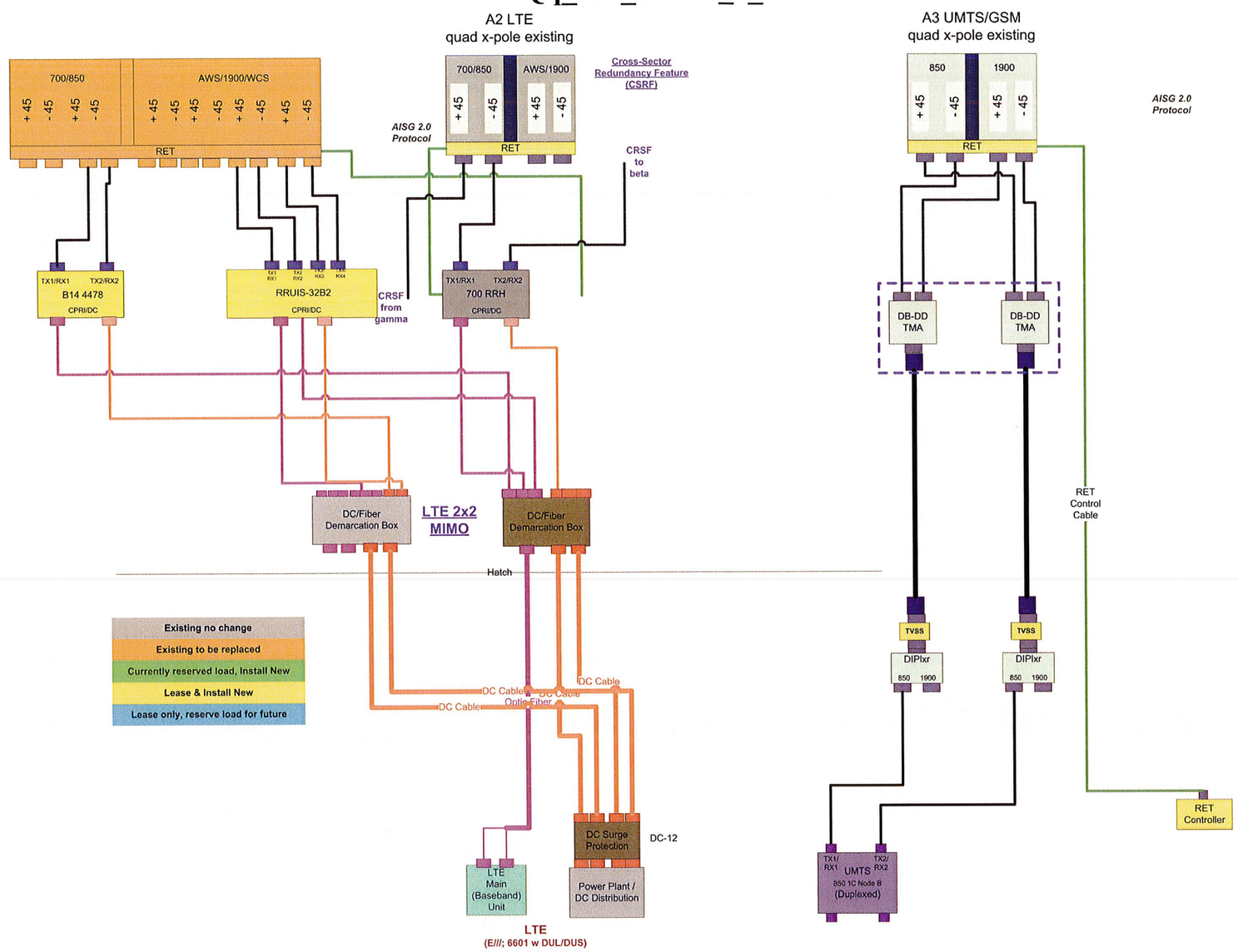

A1 RF PLUMBING DIAGRAM
NOT TO SCALE

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1	5-2-18	ISSUED FOR PERMITTING

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DESIGNED BY:	
CHECKED BY:	E.N. KENNA, P.E.

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RF PLUMBING DIAGRAM

T-601

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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 ¾" 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 ¾" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.
5	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF ¾" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.

COAX COLOR CODING & IDENTIFICATION NOTES

1. 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.
2. THE ANTENNA SYSTEM COAX SHALL BE LABELED WITH VINYL TAPE EXCEPT IN LOCATIONS WHERE ENVIRONMENTAL CONDITIONS CAUSE PHYSICAL DAMAGE, THE PHYSICAL TAGS ARE PREFERRED.
3. THE STANDARD IS BASED ON EIGHT COLORED TAPES-RED, BLUE, GREEN , YELLOW, ORANGE, BROWN, WHITE, AND VIOLET. THESE TAPES MUST BE ¾" WIDE & UV RESISTANT SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE AND SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR SUBCONTRACTOR ON SITE.
4. USING COLOR BANDS ON THE CABLES, MARK ALL RF CABLE BY SECTOR AND CABLE NUMBER AS SHOWN ON "CABLE MARKING COLOR CONVENTION TABLE".
5. 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.
6. 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.
7. ALL COLOR BANDS INSTALLED AT THE TOP OF THE TOWER SHALL BE A MINIMUM OF 3" WIDE, AND SHALL HAVE A MINIMUM OF ¾" OF SPACE BETWEEN EACH COLOR.
8. ALL COLOR CODES SHALL BE INSTALLED SO AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE-TO-SIDE.

COAX COLOR CODING & IDENTIFICATION NOTES CONT:

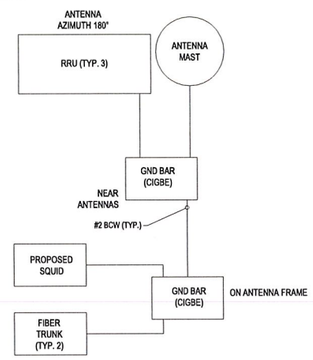
9. IF EXISTING CABLES AT THE SITE ALREADY HAVE A COLOR CODING SCHEME AND THEY ARE NOT INTENDED TO BE REUSED OR SHARED WITH THE GSM TECHNOLOGY, THE EXISTING COLOR CODING SCHEME SHALL REMAIN UNTOUCHED.

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 ¼" 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.

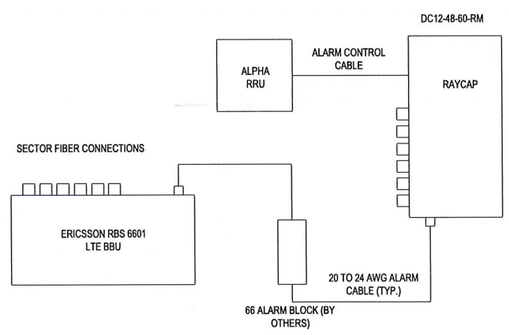
C1 CABLE MARKING LOCATIONS TABLE AND NOTES

NOT TO SCALE



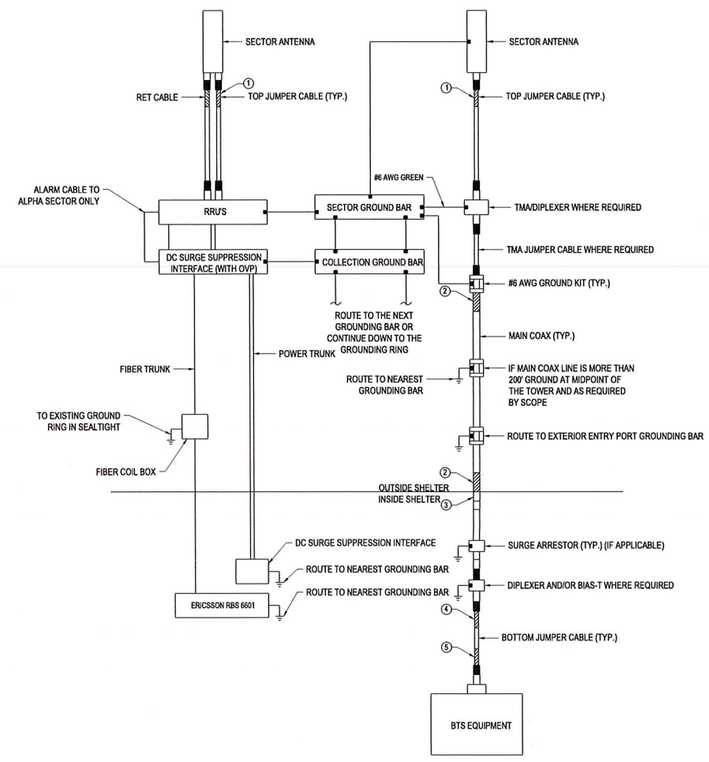
B1 SCHEMATIC DIAGRAM GROUNDING SYSTEM

NOT TO SCALE



A1 ALARM BLOCK CONNECTIONS

NOT TO SCALE



A3 CABLE MARKING LOCATIONS DIAGRAM

NOT TO SCALE

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UPSTATE NY EAST GENESEE FA#: 10000802/ SITE ID: 0051 LTE 2C PROJECT

MARK	DATE	DESCRIPTION
2	6-21-18	FINAL DRAWINGS
1	5-2-18	ISSUED FOR PERMITTING

REVISIONS

PROJECT NO:	N25.001.002
DATE:	APRIL 2018
DRAWN BY:	J. OSWALD
DESIGNED BY:	
CHECKED BY:	E.N. KENNA, P.E.

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SCHEMATICS, DIAGRAMS AND NOTES

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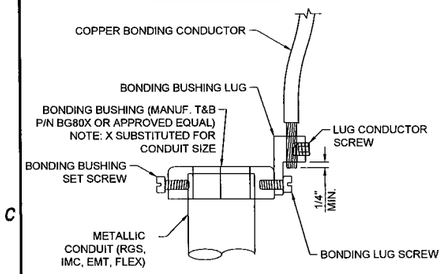
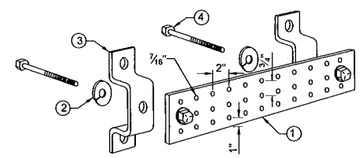


NOTES:
1. MOUNT BONDING BUSHING ONTO CONDUIT.
2. TIGHTEN BOND BUSHING SET SCREW.
3. INSERT COPPER CONDUCTOR INTO LUG.
4. TIGHTEN LUG CONDUCTOR SCREW.
5. TIGHTEN BONDING LUG SCREW.

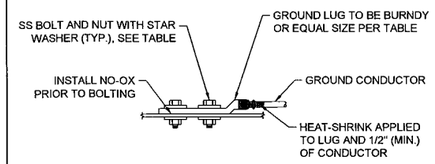
* BONDING BUSHING, SET SCREW, LUG, LUG SCREW, COND. LUG SCREW, SHOWN AS COMPLETE UNIT.

C1 CONDUIT BOND / GROUND BUSHING
NOT TO SCALE



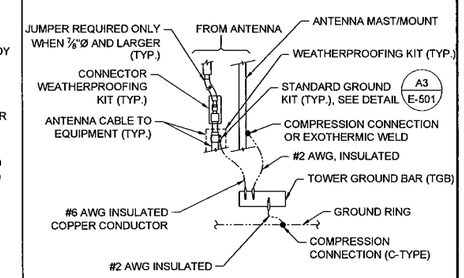
LEGEND:
1- COPPER GROUND BAR, 1/4" x 4" x 20" (MIN.), NEWTON INSTRUMENT CO., CAT. NO. B-6142. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
2- 5/8" STAINLESS STEEL LOCKWASHERS
3- STAINLESS STEEL MOUNTING BRACKET
4- STAINLESS STEEL BOLTS

C2 TOWER GROUND BAR DETAIL
NOT TO SCALE



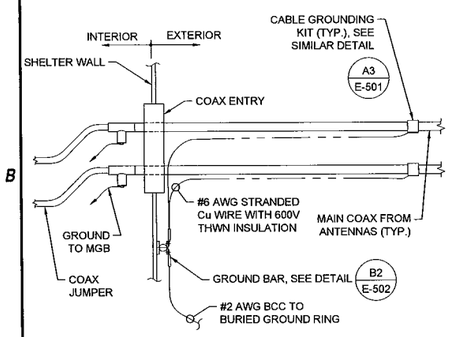
WIRE SIZE	LUG #	BOLT DIA.
#6	YGA6-2TC38E2G1	3/8"
#2	YGA2C-2TC38	3/8"
#2 SOLID	YGA2C-2TC38	3/8"
#2/0	YGA28-2N	1/2"
#4/0	YGA28-2N	1/2"

C3 TWO HOLE LUG GROUND CONNECTION
NOT TO SCALE



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

C4 GROUNDING BAR CONNECTION
NOT TO SCALE



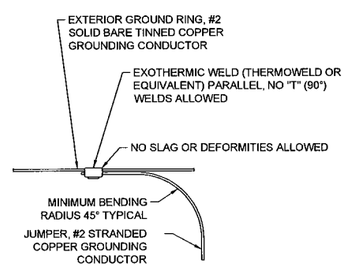
B1 EXTERIOR ANTENNA CABLE GROUND AT COAX ENTRY
NOT TO SCALE

B2 NOT USED
NOT TO SCALE

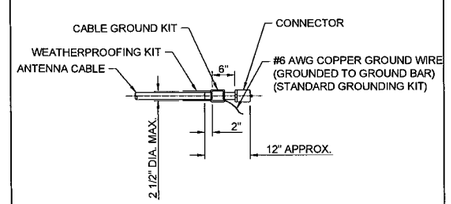
B3 NOT USED
NOT TO SCALE

B4 NOT USED
NOT TO SCALE

A1 NOT USED
NOT TO SCALE

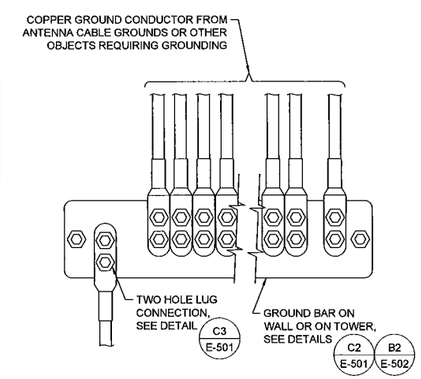


A2 TYPICAL GROUNDING CONNECTION DETAIL
NOT TO SCALE



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

A3 CABLE GROUND KIT CONNECTION
NOT TO SCALE



A4 INSTALLATION OF CONDUCTOR TO GROUNDING BAR
NOT TO SCALE

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1	5-2-18	ISSUED FOR PERMITTING

REVISIONS

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DRAWN BY:	J. OSWALD
DESIGNED BY:	
CHECKED BY:	E.N. KENNA, P.E.

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GROUNDING DETAILS

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C1 NOT USED
NOT TO SCALE

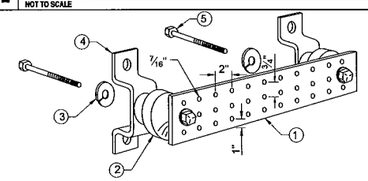
C2 NOT USED
NOT TO SCALE

C3 NOT USED
NOT TO SCALE

C4 NOT USED
NOT TO SCALE

B1 NOT USED
NOT TO SCALE

B2 EXTERNAL GROUND BAR (EGB) DETAIL
NOT TO SCALE



LEGEND:

1- COPPER GROUND BAR, 1/4" x 4" x 20" (MIN.), NEWTON INSTRUMENT CO., CAT. NO. B-6142. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.

2- INSULATORS, NEWTON INSTRUMENT CO. CAT. NO. 3061-4

3- 5/8" STAINLESS STEEL LOCKWASHERS.

4- STAINLESS STEEL MOUNTING BRACKET.

5- STAINLESS STEEL BOLTS.

6- GROUND BAR SHALL BE SIZED TO ACCOMMODATE ALL GROUNDING CONNECTIONS REQUIRED PLUS PROVIDE 50% SPARE CAPACITY.

7- GROUND BARS SHALL BE NEITHER FIELD FABRICATED NOR NEW HOLES DRILLED.

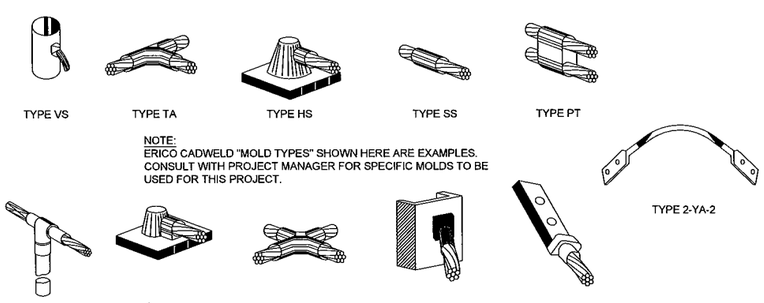
8- GROUND LUGS SHALL MATCH THE HOLE SPACING ON THE BAR.

9- HARDWARE DIAMETER SHALL BE MINIMUM 3/8".

B3 NOT USED
NOT TO SCALE

B4 NOT USED
NOT TO SCALE

A1 EXOTHERMIC WELD DETAILS
NOT TO SCALE



NOTE:
ERICO CADWELD "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.

NOTE:
USE AS REQUIRED BASED ON SITE SPECIFIC CONDITIONS.

A3 NOT USED
NOT TO SCALE

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CENTERLINE COMMUNICATIONS

UPSTATE NY
EAST GENESEE
FA#: 10000802/ SITE ID: 0051
LTE 2C PROJECT

MARK	DATE	DESCRIPTION
2	6-21-18	FINAL DRAWINGS
1	5-2-18	ISSUED FOR PERMITTING

REVISIONS

PROJECT NO:	N25.001.002
DATE:	APRIL 2018
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-502

Jun 21, 2018 - 2:56pm F:\Project\N25 - Centerline Communications LLC\N25.001.002 - AT&T LTE 2C\Design\Cad\Eng Genesee SY\Construction\Sheet Files\Electrical\N25001002_E-502.dwg

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