



November 2, 2018

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

Regarding: Notice of Exempt Modification- Antenna Modification
Property: 205 Kaechele Place, Bridgeport, CT 06606
Latitude: 41° 13 24.04 / Longitude: -73° 13 0.38
Applicant: AT&T Mobility ("AT&T", Site#2106)

Dear Ms. Bachman:

AT&T currently maintains nine (9) antennas at the 154-foot level of the existing 150-foot monopole tower at 205 Kaechele Place in Bridgeport, CT. The tower and property is owned by Crown Castle. AT&T now intends to replace three (3) antennas with three (3) new antennas and their associated ancillary equipment, and adding (3) Remote Radio Heads.

This facility was approved by the Connecticut Siting Council in Docket No. 45 on September 14, 1984. This approval included the conditions that:

1. The towers shall be no taller than necessary to provide the proposed service, and in no event shall exceed a. 167' at the Bridgeport site, b. 167' at the Norwalk, c. 189.5' at the Shelton site, d. 167' at the Stamford site, e. 117' at the Westport site;
2. A fence not lower than eight feet shall surround each tower and its associated equipment;
3. The applicant or its successor shall notify the Council if and when directional antennas or any other equipment is added to any of these facilities;

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.S.C.A. § 16-50j-73, a copy of this letter is being sent to The Honorable Joseph Ganin, Mayor, City of Bridgeport, Dennis Buckley, Zoning Administrator, City of Bridgeport, as well as Crown Castle (Southern New England Tel/SBC) as the tower owner.

1. The proposed modifications will not result in an increase in the height of the existing tower.
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modification will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communication Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, AT&T respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Nora Oliver
Site Acquisition Manager
16 Esquire Rd
Billerica, MA 01862
Tel: 978-808-2111
noliver@empiretelecomm.com

Enclosures: Exhibit 1 – Field Card and GIS Map
Exhibit 2 – Construction Drawings
Exhibit 3 – Structural Analysis
Exhibit 4 – RF Emissions Analysis Report Evaluation

cc: The Honorable Joseph Ganin, Mayor City of Bridgeport
Dennis Buckley, Zoning Administrator, City of Bridgeport
Crown Castle as the tower owner.

SENDER: COMPLETE THIS SECTION

Complete items 1, 2, and 3.

Print your name and address on the reverse so that we can return the card to you.

Attach this card to the back of the mailpiece, or on the front if space permits.

Article Addressed to:

Crown Castle
Paul Pedicone, Project Manager
3 Corporate Drive, Suite 101
Clifton Park, NY 12065

9590 9402 3845 8032 6732 72

7014 2120 0001 6938 3524

Form 3811, July 2015 PSN 7530-02-000-9053

SENDER: COMPLETE THIS SECTION

Complete items 1, 2, and 3.

Print your name and address on the reverse so that we can return the card to you.

Attach this card to the back of the mailpiece, or on the front if space permits.

Article Addressed to:

Honorable Joseph Ganin, Mayor
by of Bridgeport
19 Broad Street
Bridgeport, CT 06604

9590 9402 3845 8032 6734 49

7015 0640 0007 2962 5563

Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

[Signature]

B. Received by (Printed Name)

[Signature]

D. Is delivery address different from item 1? If YES, enter delivery address below:

Yes No

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery
- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

Domestic Return Receipt

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Article Addressed to:

Dennis Buckley
Zoning Administrator
Zoning Department, City Hall
45 Lyon Terrace, Room 210
Bridgeport, CT 06604

9590 9402 3845 8032 6734 63

7015 0640 0007 2962 5570

PS Form 3811, July 2015 PSN 7530-02-000-9053

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- Registered Mail™
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Article Addressed to:

Melanie A. Bachman
Executive Director
Connecticut Siting Council
15090 CT 06604
New Britain, CT 06604

9590 000-20-0652 NSD 5102 Apr '11 88 000

14 2329 2308 5488 2066 0656

Form 3811, July 2015 PSN 7530-02-000-9053

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- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
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Domestic Return Receipt

205 KAECELE PL

Location 205 KAECELE PL

Mblu 81/ 2602/ 9/ /

Acct# R--0148640

Owner SOUTHERN NEW ENGLAND
TEL

Assessment \$104,120

Appraisal \$148,730

PID 29859

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2015	\$51,340	\$97,390	\$148,730

Assessment			
Valuation Year	Improvements	Land	Total
2015	\$35,950	\$68,170	\$104,120

Owner of Record

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

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

Ownership History

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

Building Information

Building 1 : Section 1

Year Built:
Living Area: 0
Replacement Cost: \$0
Building Percent
Good:
Replacement Cost
Less Depreciation: \$0

Building Photo

Building Attributes	
Field	Description
Style	Vacant Land
Model	

Grade:	
Stories:	
Occupancy:	
Exterior Wall 1:	
Exterior Wall 2:	
Roof Structure:	
Roof Cover:	
Interior Wall 1:	
Interior Wall 2:	
Interior Flr 1:	
Interior Flr 2:	
Heat Fuel:	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Full Baths:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Fireplaces:	
Fin Bsmt Area:	
Fin Bsmt Quality:	
Bsmt Garages:	
.	



(http://images.vgsi.com/photos/BridgeportCTPhotos//\00\03\05\86.JPG)

Building Layout

Building Layout

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use		Land Line Valuation	
Use Code	499	Size (Acres)	0.15
Description	Utility Vac Ln	Frontage	0
Zone	RA	Depth	0
Neighborhood	2080	Assessed Value	\$68,170
Alt Land Appr Category	No	Appraised Value	\$97,390

Outbuildings

Outbuildings	Legend
No Data for Outbuildings	

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

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2014	\$51,340	\$106,880	\$158,220
2013	\$51,340	\$106,880	\$158,220
2012	\$51,340	\$106,880	\$158,220

Assessment			
Valuation Year	Improvements	Land	Total
2014	\$35,950	\$74,820	\$110,770
2013	\$35,950	\$74,820	\$110,770
2012	\$35,950	\$74,820	\$110,770

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Legend

- Parcels

1:1,703



283.9 0 141.95 283.9 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
 Created by Connecticut Metropolitan Council of Governments

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION





WIRELESS COMMUNICATIONS FACILITY

CT2106 - LTE 4C/5C

BRIDGEPORT NORTH

2 KAECHELE PLACE

BRIDGEPORT, CT 06606

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2016 CONNECTICUT STATE BUILDING CODE, INCLUDING THE TIA-222 REVISION "G" STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES, 2016 CONNECTICUT FIRE SAFETY CODE AND, NATIONAL ELECTRICAL CODE AND LOCAL CODES.
2. THE COMPOUND, TOWER, PRIMARY GROUND RING, ELECTRICAL SERVICE TO THE METER BANK AND TELEPHONE SERVICE TO THE DEMARCATION POINT ARE PROVIDED BY SITE OWNER. AS BUILT FIELD CONDITIONS REGARDING THESE ITEMS SHALL BE CONFIRMED BY THE CONTRACTOR. SHOULD ANY FIELD CONDITIONS PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
3. CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
4. CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
5. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
6. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, PLUMBING, ELECTRICAL AND HVAC. PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
7. CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
8. LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
9. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING BUILDING'S/PROPERTY'S OPERATIONS, COORDINATE WORK WITH BUILDING/PROPERTY OWNER.
10. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
11. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
12. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR.'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
13. ANY AND ALL ERRORS, DISCREPANCIES, AND "MISSED" ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE AT&T CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO 'EXTRA' WILL BE ALLOWED FOR MISSED ITEMS.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
15. CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
16. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
17. COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
18. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB-CONTRACTORS FOR ANY CONDITION PER THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
19. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
20. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED PRIOR TO ANY EXCAVATION WORK. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.
21. CONTRACTOR SHALL COMPLY WITH OWNERS ENVIRONMENTAL ENGINEER ON ALL METHODS AND PROVISIONS FOR ALL EXCAVATION ACTIVITIES INCLUDING SOIL DISPOSAL. ALL BACKFILL MATERIALS TO BE PROVIDED BY THE CONTRACTOR.

SITE DIRECTIONS

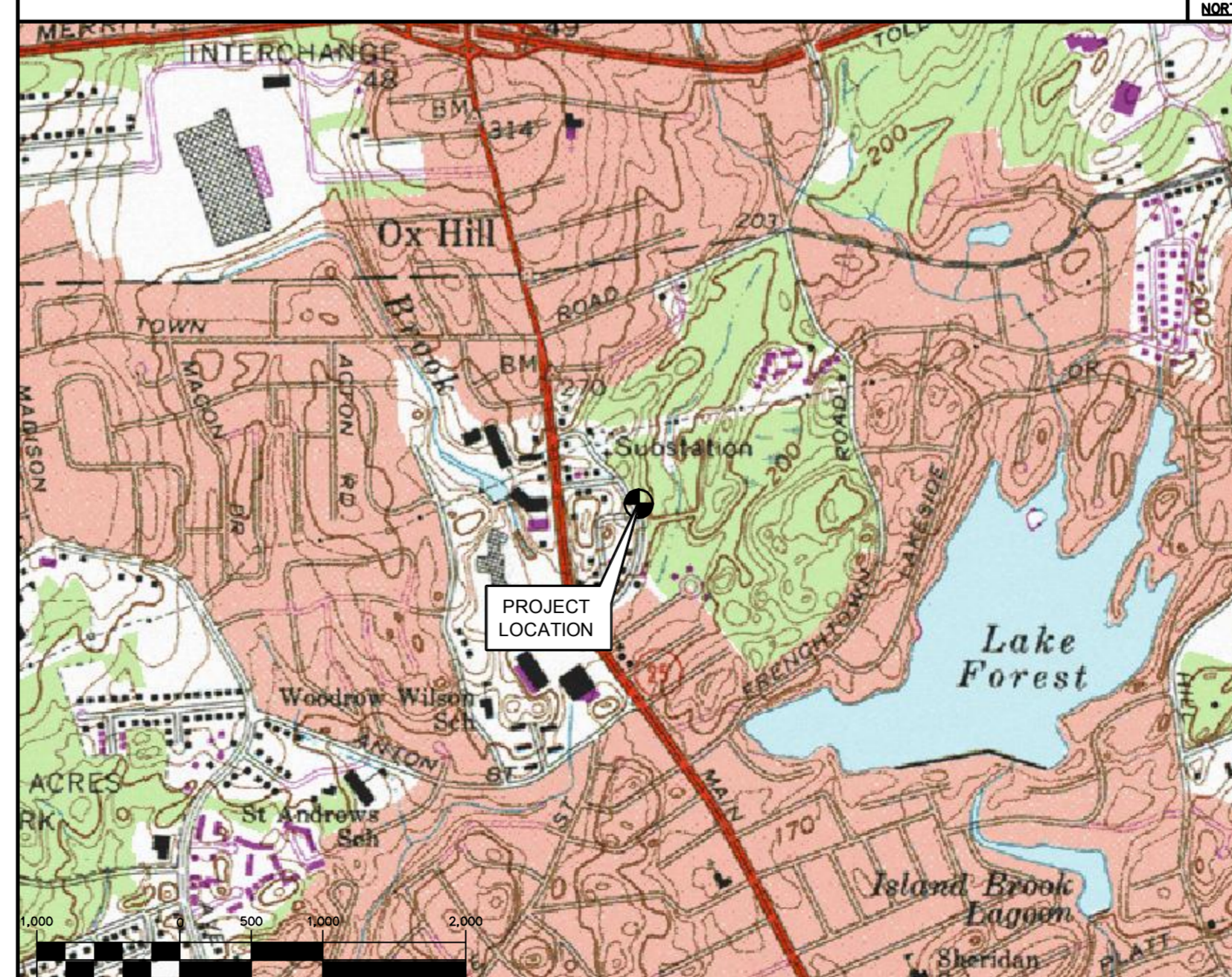
FROM: 500 ENTERPRISE DRIVE
ROCKY HILL, CONNECTICUT

TO: 2 KAECHELE PLACE
BRIDGEPORT, CONNECTICUT

1. TURN LEFT ONTO CAPITAL BLVD. 0.36 MI
2. TURN LEFT ONTO WEST ST. 0.27 MI
3. TURN LEFT TO MERGE ONTO I-91 S TOWARD NEW HAVEN. 0.30 MI
4. MERGE ONTO CT-15 S VIA EXIT 17 TOWARD E MAIN ST. 9.59 MI
5. TAKE THE MAIN ST/CT-111 EXIT, EXIT 4B. 34.11 MI
6. KEEP LEFT TO TAKE THE RAMP TOWARD BRIDGEPORT/ST VINCENTS COLL/MALL. 0.12 MI
7. TURN SLIGHT LEFT ONTO MAIN ST. 0.06 MI
8. TURN LEFT ONTO KAECHELE PL. 0.81 MI
9. 2 KAECHELE PL, BRIDGEPORT, CT 06606-1810, 2 KAECHELE PL IS ON THE RIGHT. 0.01 MI

VICINITY MAP

SCALE: 1" = 1000'



PROJECT SUMMARY

1. THE PROPOSED SCOPE OF WORK CONSISTS OF A MODIFICATION TO THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING THE FOLLOWING:
 - A. **AT ANTENNA SECTORS:**
 - REMOVE POWERWAVE ANTENNA AT POS. 4. AND REPLACE WITH CCI ANTENNA AT POS. 4. (TOTAL OF 3)
 - INSTALL RRUS-32 B66 AT POS. 4. (TOTAL OF 3)
 - B. **AT THE EQUIPMENT SHELTER**
 - USE EXISTING (3) UMTS 850 (ON SITE) FOR (3) RRUS-11 LTE 850. **DO NOT ORDER.**
 - IN LTE RACK, ADD 2ND XMU.
 - INSTALL (6) SURGE ARRESTORS (APTDC-BDFDM-DBW) AT RE-PURPOSED RRUS-11.

PROJECT INFORMATION

AT&T SITE NUMBER: CT2106

AT&T SITE NAME: BRIDGEPORT NORTH

SITE ADDRESS: 2 KAECHELE
BRIDGEPORT, CT 06606

LESSEE/APPLICANT: AT&T MOBILITY
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

AT&T PACE ID NUMBER: PACE JOB 1 - MRCTB025284
PACE JOB 2 - MRCTB025342

AT&T FA LOCATION CODE: 10034977

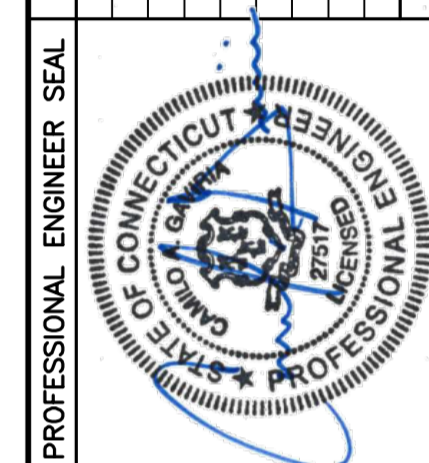
ENGINEER: CENTEK ENGINEERING, INC.
63-2 NORTH BRANFORD RD.
BRANFORD, CT 06405

PROJECT COORDINATES: LATITUDE: 41°-13'-24.07" N
LONGITUDE: 73°-13'-00.38" W
GROUND ELEVATION: ±240' AMSL
SITE COORDINATES AND GROUND ELEVATION REFERENCED FROM GOOGLE EARTH.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	0
N-1	NOTES, SPECIFICATIONS AND ANTENNA SCHEDULE	0
C-1	PLANS AND ELEVATION	0
C-2	ANTENNA CONFIGURATION DETAILS	0
C-3	DETAILS	0
E-1	SCHEMATIC DIAGRAM AND NOTES	0
E-2	WIRING DIAGRAM	0
E-3	TYPICAL ELECTRICAL DETAILS	0

REV.	DATE	TJR	DND	CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION
0	03/19/18			



CENTEK engineering
Centek on Solutions

(203) 498-0380
(203) 498-3387 Fax
632 North Branford Road
Branford, CT 06405
www.CentekEng.com

AT&T MOBILITY
WIRELESS COMMUNICATIONS FACILITY
BRIDGEPORT NORTH
CT2106 - LTE 4C/5C
2 KAECHELE PLACE
BRIDGEPORT, CT 06606

DATE: 03/07/18
SCALE: AS NOTED
JOB NO. 18000.08

TITLE SHEET

T-1

NOTES AND SPECIFICATIONS

DESIGN BASIS:

GOVERNING CODE: 2012 INTERNATIONAL BUILDING (IBC) AS MODIFIED BY THE 2016 CT STATE BUILDING CODE AND AMENDMENTS.

- DESIGN CRITERIA:
 - WIND LOAD: PER TIA 222 G (ANTENNA MOUNTS): 90-110 MPH (3 SECOND GUST)
 - RISK CATEGORY: II (BASED ON IBC TABLE 1604.5)
 - NOMINAL DESIGN SPEED (OTHER STRUCTURE): 93 MPH (V_{asd}) (EXPOSURE B/IMPORTANCE FACTOR 1.0 BASED ON ASCE 7-10) PER 2012 INTERNATIONAL BUILDING CODE (IBC) AS MODIFIED BY THE 2016 CONNECTICUT STATE BUILDING CODE.
 - SEISMIC LOAD (DOES NOT CONTROL): PER ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES.

GENERAL NOTES:

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

STRUCTURAL STEEL

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

PAINT NOTES

PAINTING SCHEDULE:

- ANTENNA PANELS:**
 - SHERWIN WILLIAMS POLANE-B
 - COLOR TO BE MATCHED WITH EXISTING TOWER STRUCTURE.
 - COAXIAL CABLES:**
 - ONE COAT OF DTM BONDING PRIMER (2-5 MILS. DRY FINISH)
 - TWO COATS OF DTM ACRYLIC PRIMER/FINISH (2.5-5 MILS. DRY FINISH)
 - COLOR TO BE FIELD MATCHED WITH EXISTING STRUCTURE.
- EXAMINATION AND PREPARATION:**
- DO NOT APPLY PAINT IN SNOW, RAIN, FOG OR MIST OR WHEN RELATIVE HUMIDITY EXCEEDS 85%. DO NOT APPLY PAINT TO DAMP OR WET SURFACES.
 - VERIFY THAT SUBSTRATE CONDITIONS ARE READY TO RECEIVE WORK. EXAMINE SURFACE SCHEDULED TO BE FINISHED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY CONDITION THAT MAY POTENTIALLY AFFECT PROPER APPLICATION.
 - TEST SHOP APPLIED PRIMER FOR COMPATIBILITY WITH SUBSEQUENT COVER MATERIALS.
 - PERFORM PREPARATION AND CLEANING PROCEDURE IN STRICT ACCORDANCE WITH COATING MANUFACTURER'S INSTRUCTIONS FOR EACH SUBSTRATE CONDITION.
 - CORRECT DEFECTS AND CLEAN SURFACES WHICH AFFECT WORK OF THIS SECTION. REMOVE EXISTING COATINGS THAT EXHIBIT LOOSE SURFACE DEFECTS.
 - IMPERVIOUS SURFACE: REMOVE MILDEW BY SCRUBBING WITH SOLUTION OF TRI-SODIUM PHOSPHATE AND BLEACH. RINSE WITH CLEAN WATER AND ALLOW SURFACE TO DRY.
 - ALUMINUM SURFACE SCHEDULED FOR PAINT FINISH: REMOVE SURFACE CONTAMINATION BY STEAM OR HIGH-PRESSURE WATER. REMOVE OXIDATION WITH ACID ETCH AND SOLVENT WASHING. APPLY ETCHING PRIMER IMMEDIATELY FOLLOWING CLEANING.
 - FERROUS METALS: CLEAN UNGALVANIZED FERROUS METAL SURFACES THAT HAVE NOT BEEN SHOP COATED; REMOVE OIL, GREASE, DIRT, LOOSE MILL SCALE, AND OTHER FOREIGN SUBSTANCES. USE SOLVENT OR MECHANICAL CLEANING METHODS THAT COMPLY WITH THE STEEL STRUCTURES PAINTING COUNCIL'S (SSPC) RECOMMENDATIONS. TOUCH UP BARE AREAS AND SHOP APPLIED PRIME COATS THAT HAVE BEEN DAMAGED. WIRE BRUSH, CLEAN WITH SOLVENTS RECOMMENDED BY PAINT MANUFACTURER, AND TOUCH UP WITH THE SAME PRIMER AS THE SHOP COAT.
 - GALVANIZED SURFACES: CLEAN GALVANIZED SURFACES WITH NON-PETROLEUM-BASED SOLVENTS SO SURFACE IS FREE OF OIL AND SURFACE CONTAMINANTS. REMOVE PRETREATMENT FROM GALVANIZED SHEET METAL FABRICATED FROM COIL STOCK BY MECHANICAL METHODS.
 - ANTENNA PANELS: REMOVE ALL OIL, DUST, GREASE, DIRT, AND OTHER FOREIGN MATERIAL TO ENSURE ADEQUATE ADHESION. PANELS MUST BE WIPED WITH METHYL ETHYL KETONE (MEK).
 - COAXIAL CABLES: REMOVE ALL OIL, DUST, GREASE, DIRT, AND OTHER FOREIGN MATERIAL TO ENSURE ADEQUATE ADHESION.

CLEANING:

- COLLECT WASTE MATERIAL, WHICH MAY CONSTITUTE A FIRE HAZARD, PLACE IN CLOSED METAL CONTAINERS AND REMOVE DAILY FROM SITE.
- APPLICATION:**
- APPLY PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 - DO NOT APPLY FINISHES TO SURFACES THAT ARE NOT DRY.
 - APPLY EACH COAT TO UNIFORM FINISH.
 - APPLY EACH COAT OF PAINT SLIGHTLY DARKER THAN PRECEDING COAT UNLESS OTHERWISE APPROVED.
 - SAND METAL LIGHTLY BETWEEN COATS TO ACHIEVE REQUIRED FINISH.
 - VACUUM CLEAN SURFACES FREE OF LOOSE PARTICLES. USE TACK CLOTH JUST PRIOR TO APPLYING NEXT COAT.
 - ALLOW APPLIED COAT TO DRY BEFORE NEXT COAT IS APPLIED.

COMPLETED WORK:

- SAMPLES: PREPARE 24" X 24" SAMPLE AREA FOR REVIEW.
- MATCH APPROVED SAMPLES FOR COLOR, TEXTURE AND COVERAGE. REMOVE REFINISH OR REPAINT WORK NOT IN COMPLIANCE WITH SPECIFIED REQUIREMENTS.

PROPOSED ANTENNA AND APPURTENANCE SCHEDULE

ANTENNAS								APPURTENANCES			
SECTOR	POSITION	AZIMUTH	DOWNTILT (M)	MAKE & MODEL	RAD CENTER (AGL)	TECHNOLOGY	STATUS	TMA (QTY)	DIPLEXER/TRIPLEXER (QTY)	RRU (QTY)	FEEDER TYPE
ALPHA	POS. 1	141'	2'	POWERWAVE (7770)	154'	UMTS	REMAIN	PWAV: TT19-08BP111-001 TWIN 1900 W/850BP (1)	PWAV: CM1007-DBPXBC-003 (2)	RRUS-32 (1), RRUS-32 B2 (1), RRUS-11 (1)	1 ^{1/2} " COAX (2)
ALPHA	POS. 2	30'	0'	QUINTEL (QS66512-2)	154'	LTE WCS/PCS/850	REMAIN		CCI TRIPLEXER: TPX-070821 (4)		1 ^{1/2} " COAX (2), FIBER AND DC POWER
ALPHA	POS. 4	30'	0'	CCI (HPA-65R-BUU-H6)	154'	LTE 700 BC/AWS	NEW			RRUS-11 (1), RRUS-32 B66 (1)	FIBER AND DC POWER
BETA	POS. 1	263'	0'	POWERWAVE (7770)	154'	UMTS	REMAIN	PWAV: TT19-08BP111-001 TWIN 1900 W/850BP (1)	PWAV: CM1007-DBPXBC-003 (2)	RRUS-32 (1), RRUS-32 B2 (1), RRUS-11 (1)	1 ^{1/2} " COAX (2)
BETA	POS. 2	150'	0'	QUINTEL (QS66512-2)	154'	LTE WCS/PCS/850	REMAIN		CCI TRIPLEXER: TPX-070821 (4)		1 ^{1/2} " COAX (2), FIBER AND DC POWER
BETA	POS. 4	150'	0'	CCI (HPA-65R-BUU-H6)	154'	LTE 700 BC/AWS	NEW			RRUS-11 (1), RRUS-32 B66 (1)	FIBER AND DC POWER
GAMMA	POS. 1	20'	0'	POWERWAVE (7770)	154'	UMTS	REMAIN	PWAV: TT19-08BP111-001 TWIN 1900 W/850BP (1)	PWAV: CM1007-DBPXBC-003 (2)	RRUS-32 (1), RRUS-32 B2 (1), RRUS-11 (1)	1 ^{1/2} " COAX (2)
GAMMA	POS. 2	270'	0'	QUINTEL (QS66512-2)	154'	LTE WCS/PCS/850	REMAIN		CCI TRIPLEXER: TPX-070821 (4)		1 ^{1/2} " COAX (2), FIBER AND DC POWER
GAMMA	POS. 4	270'	0'	CCI (HPA-65R-BUU-H6)	154'	LTE 700 BC/AWS	NEW			RRUS-11 (1), RRUS-32 B66 (1)	FIBER AND DC POWER

PROFESSIONAL ENGINEER SEAL



CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION
DND DRAWN BY/CHK'D BY
TJR
DATE 03/18/18
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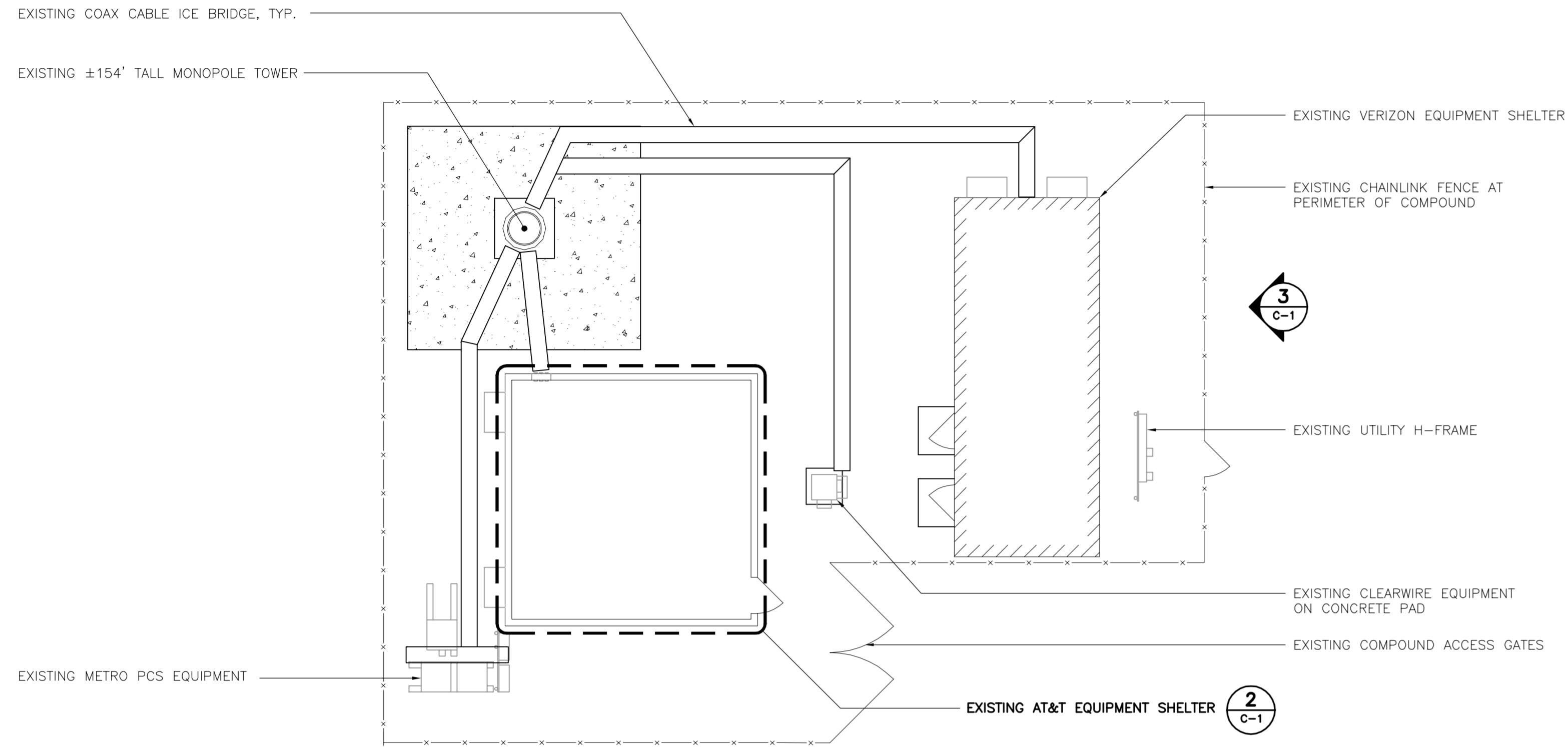
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DATE: 03/07/18
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JOB NO. 18000.08

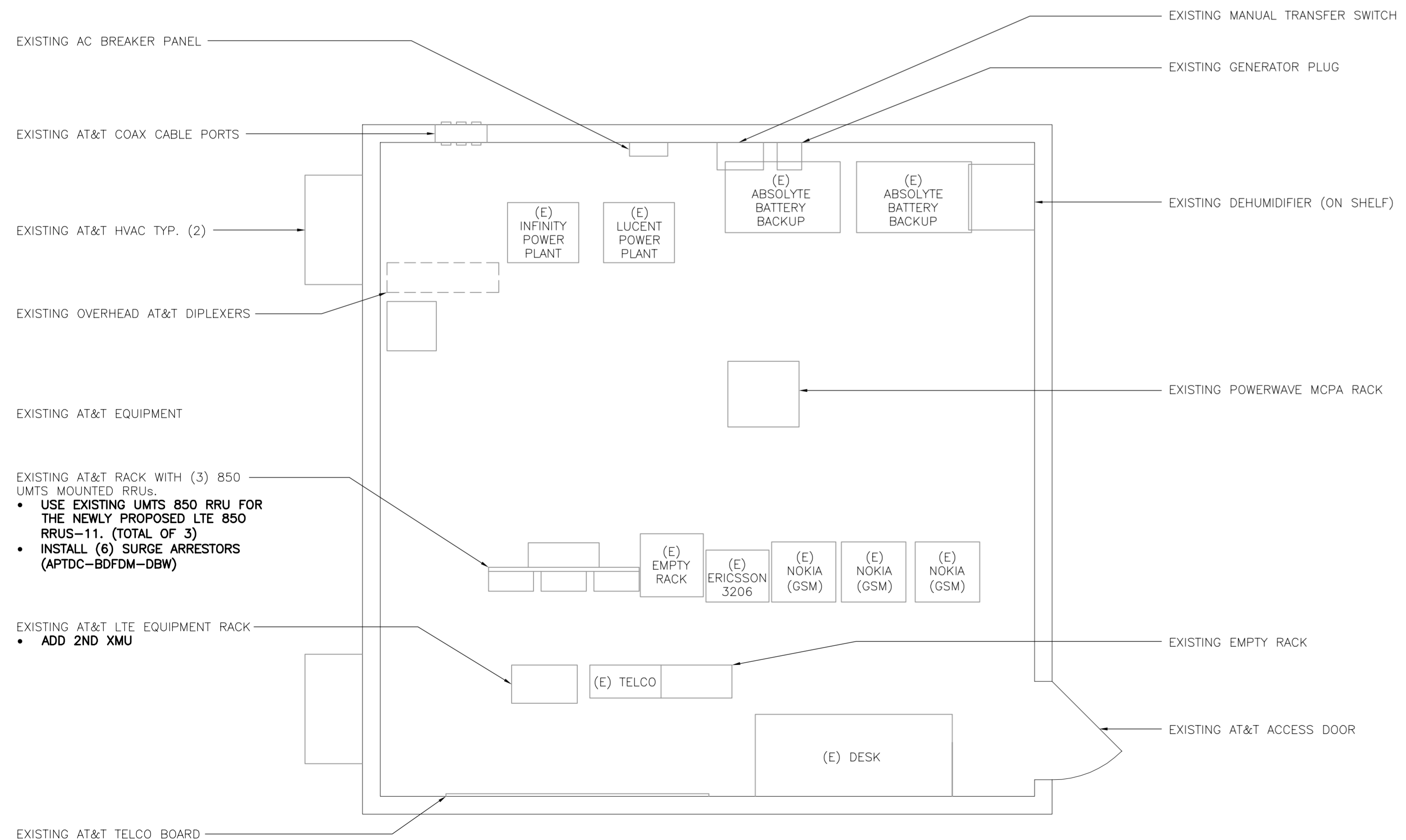
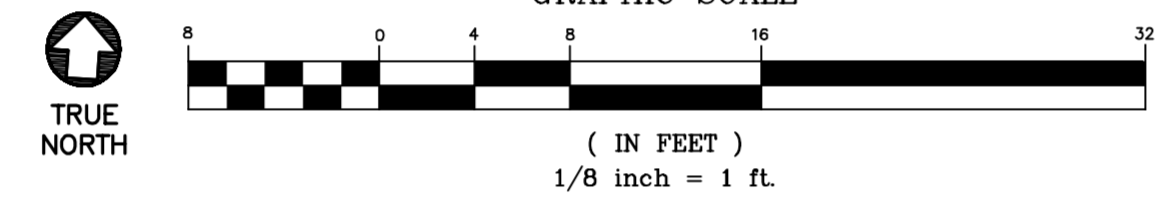
NOTES, SPECIFICATIONS AND ANTENNA SCHEDULE

N-1

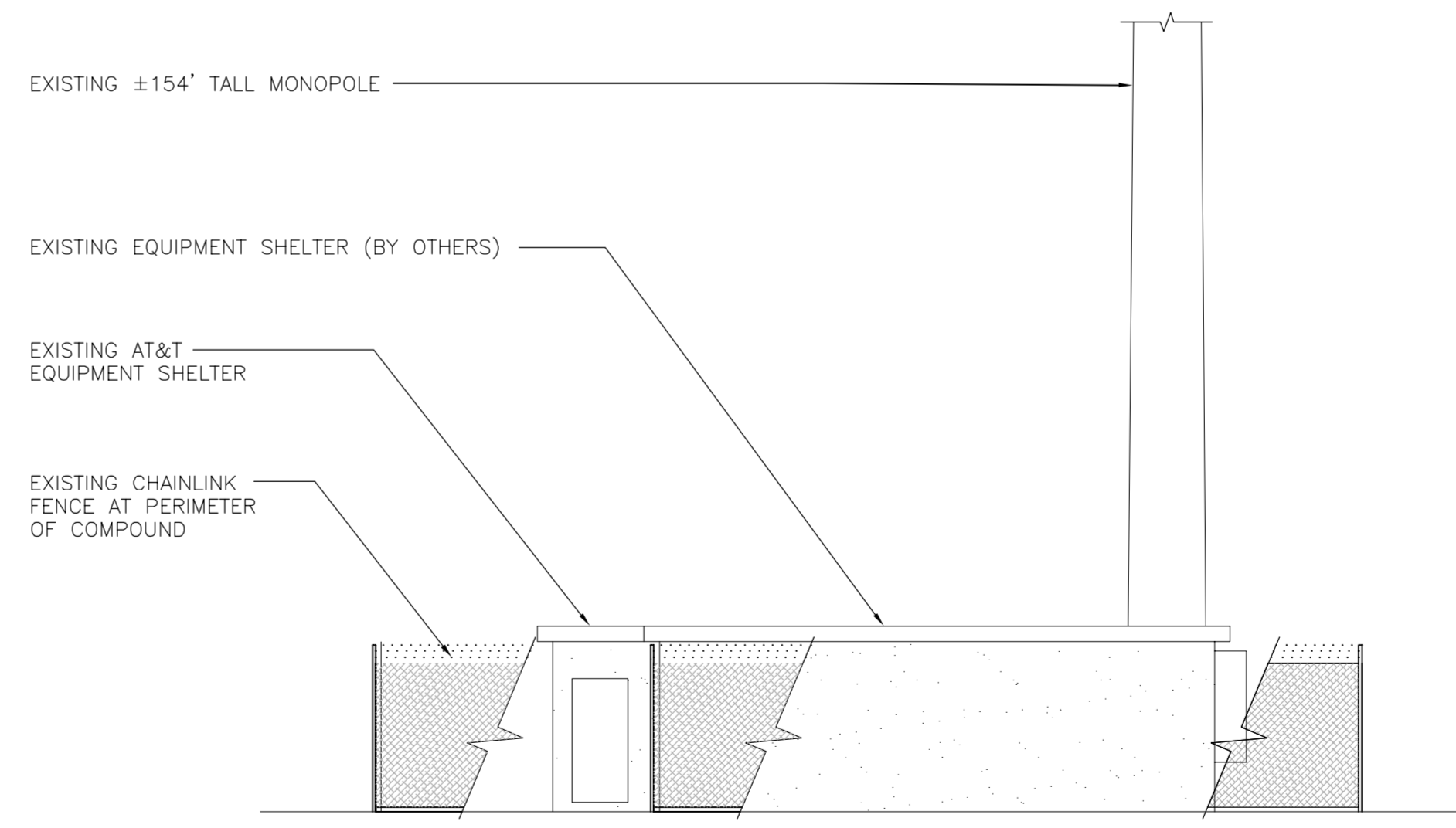
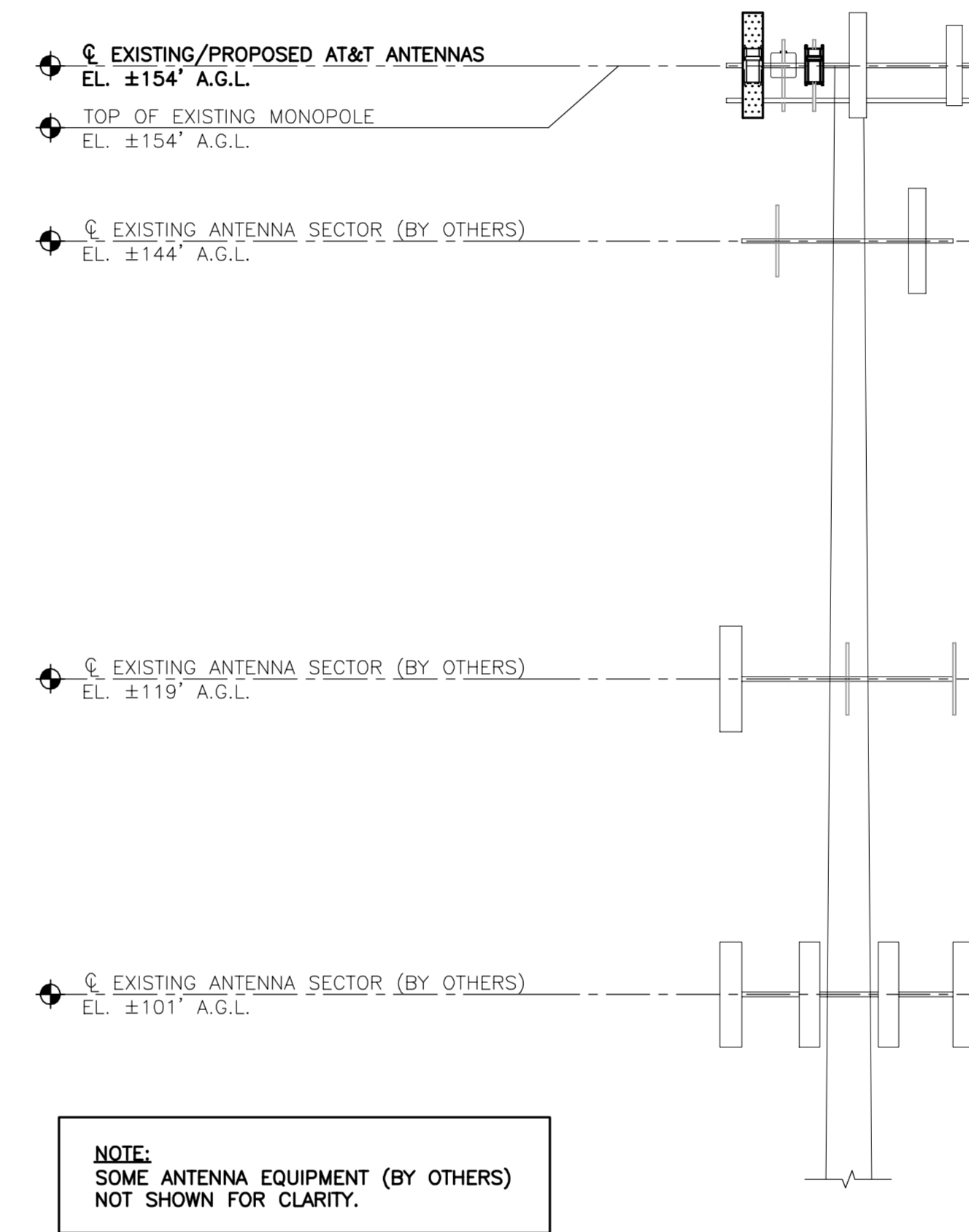
Sheet No. 2 of 8



1 PARTIAL SITE PLAN
C-1 SCALE: 1/8" = 1'-0"

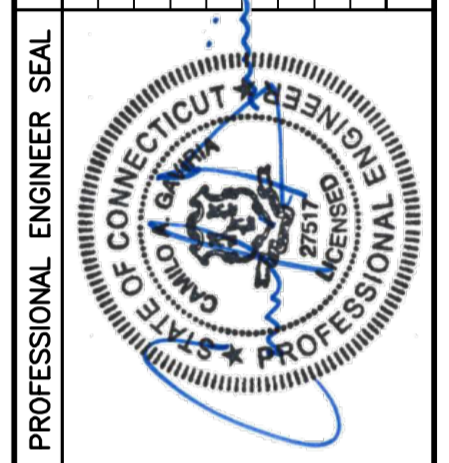


2 PROPOSED EQUIPMENT LAYOUT PLAN
C-1 SCALE: 3/8" = 1'-0"



3 EAST ELEVATION - PROPOSED
C-1 SCALE: 1/8" = 1'-0"

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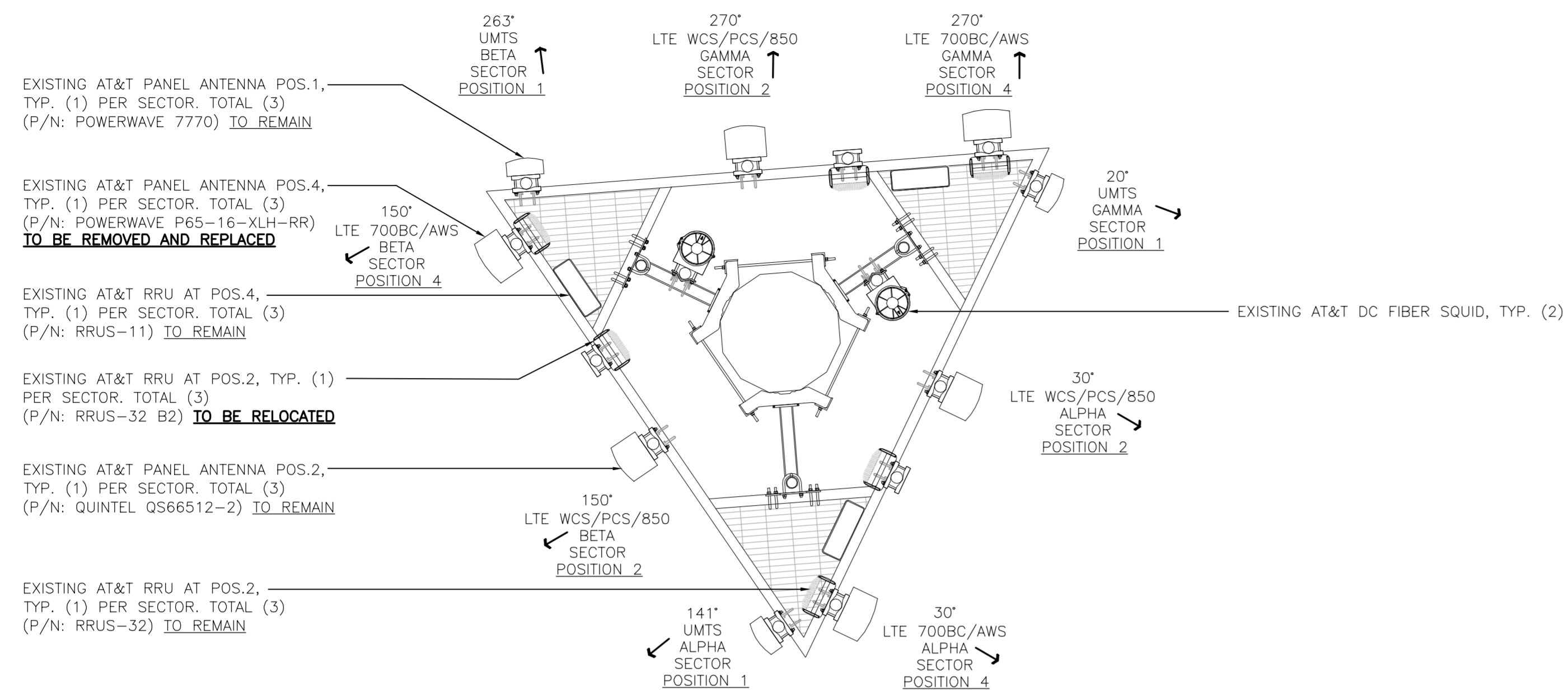
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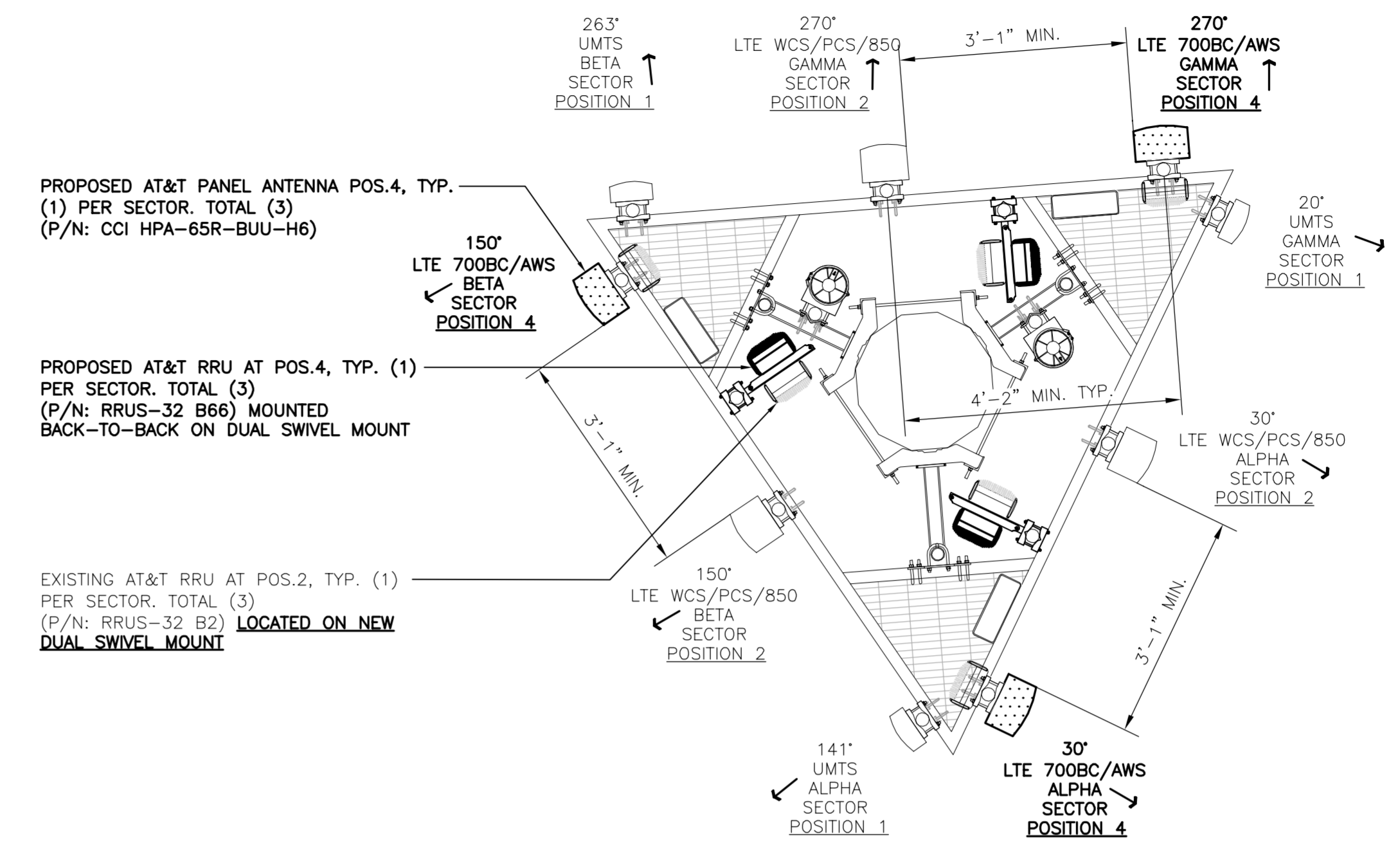
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PLANS AND ELEVATION

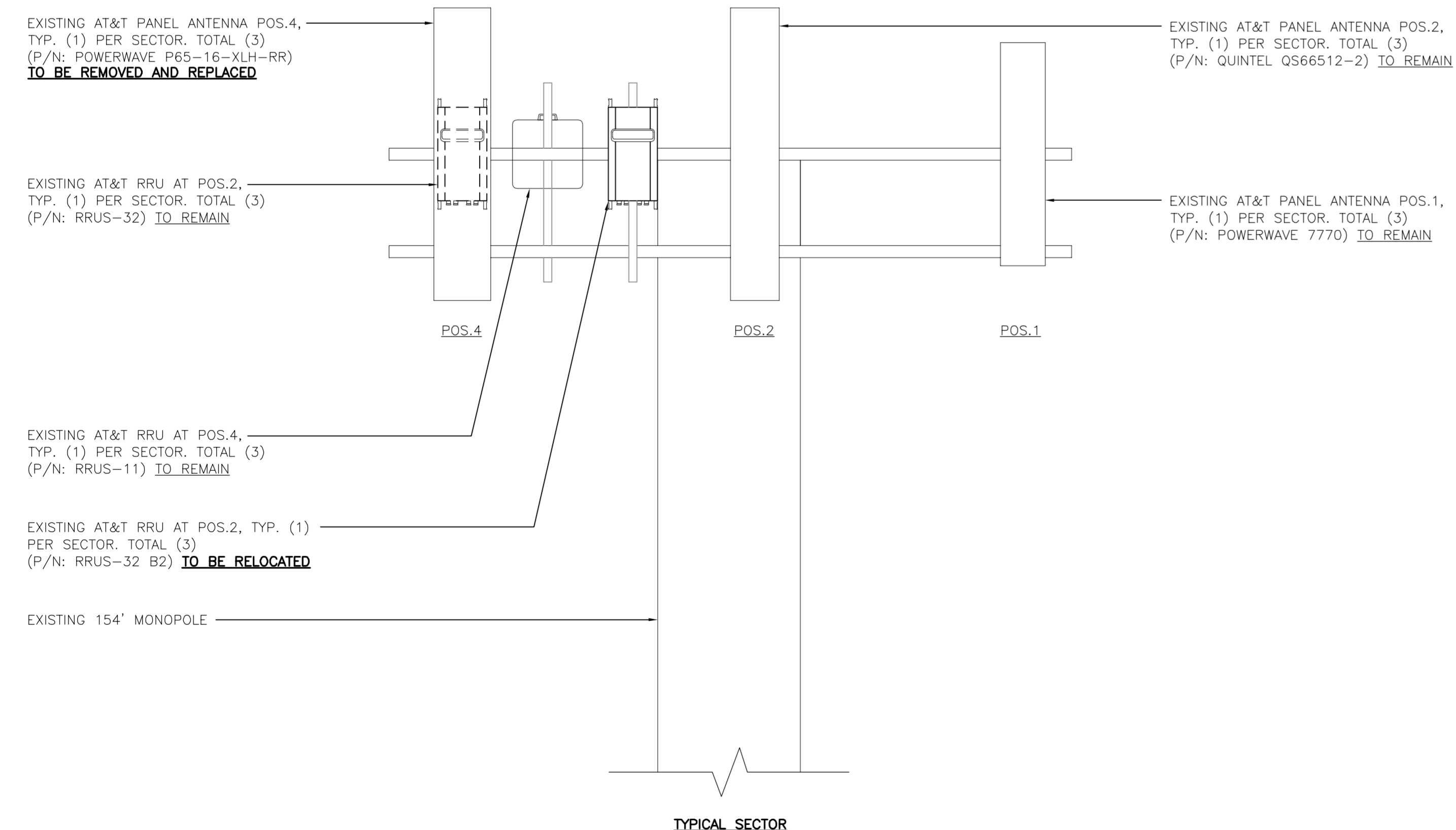
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Sheet No. 3 of 8



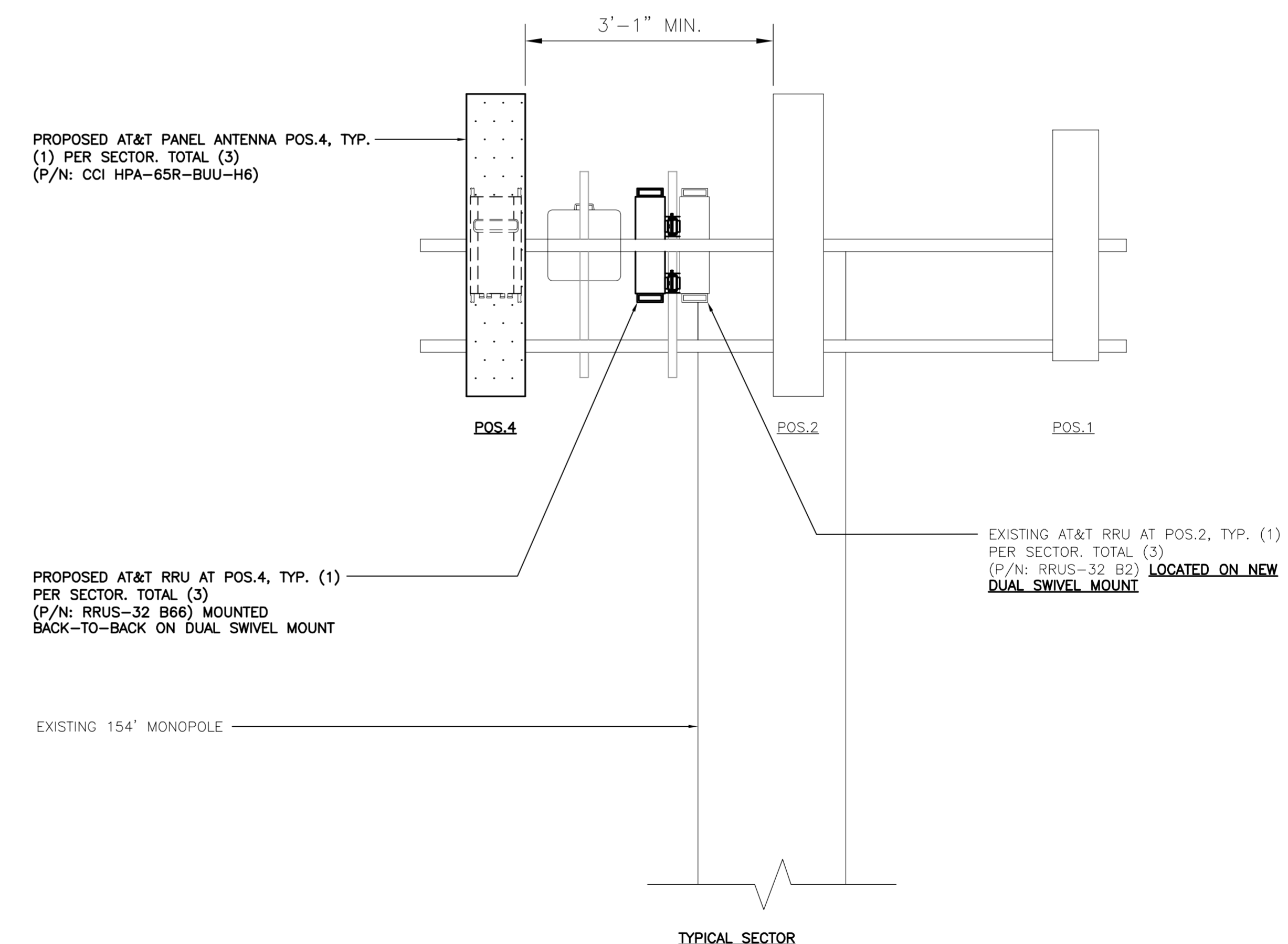
1 EXISTING ANTENNA PLAN
 C-2 SCALE: 3/8" = 1'-0"
 TRUE NORTH



2 PROPOSED ANTENNA PLAN
 C-2 SCALE: 3/8" = 1'-0"
 TRUE NORTH

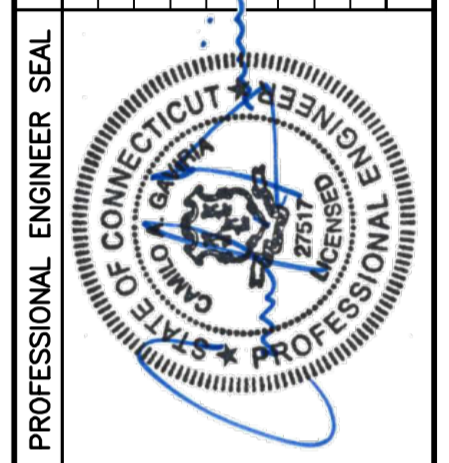


1A EXISTING ANTENNA ELEVATION
 C-2 SCALE: 3/8" = 1'-0"



2A PROPOSED ANTENNA ELEVATION
 C-2 SCALE: 3/8" = 1'-0"

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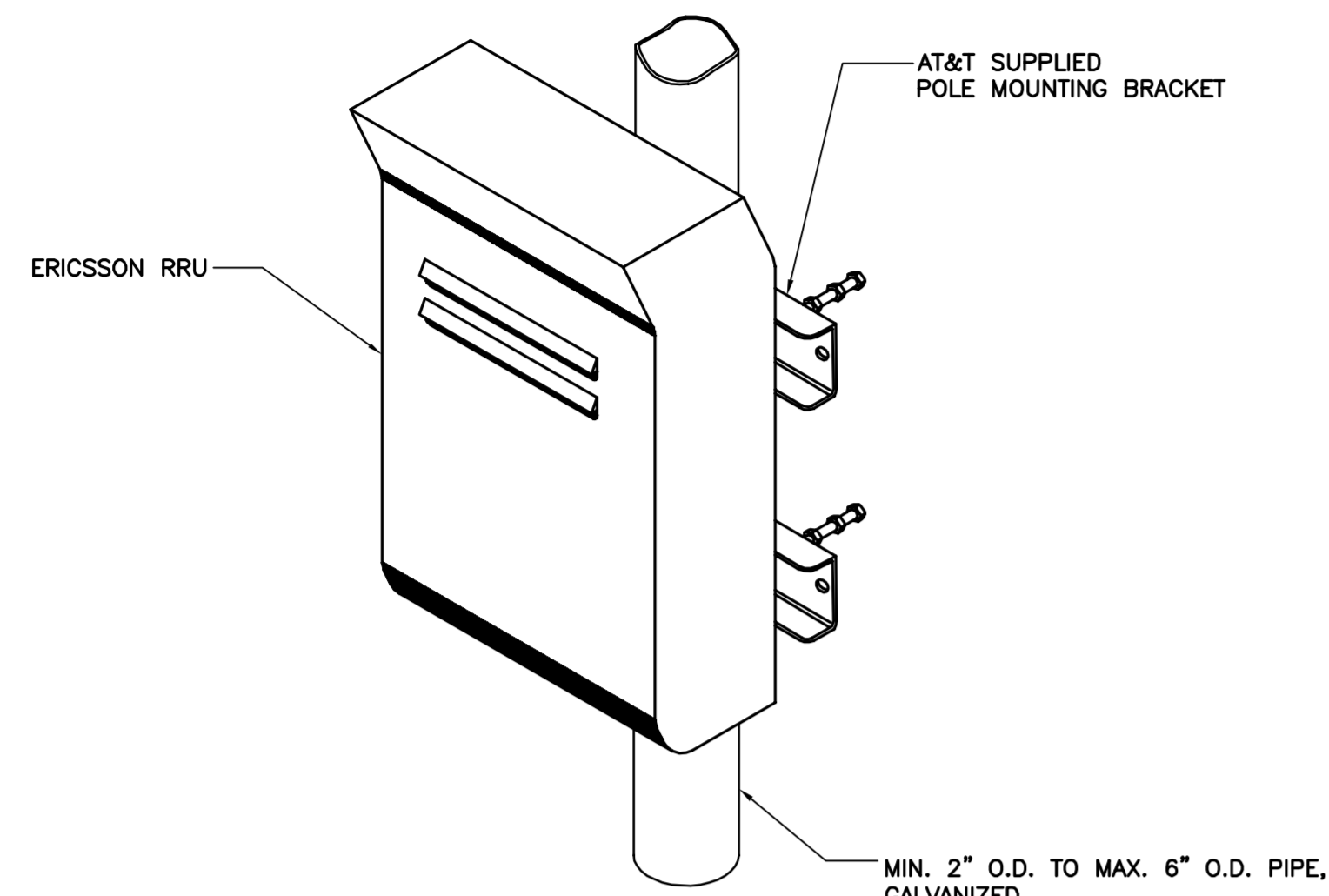


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ANTENNA CONFIGURATION DETAILS

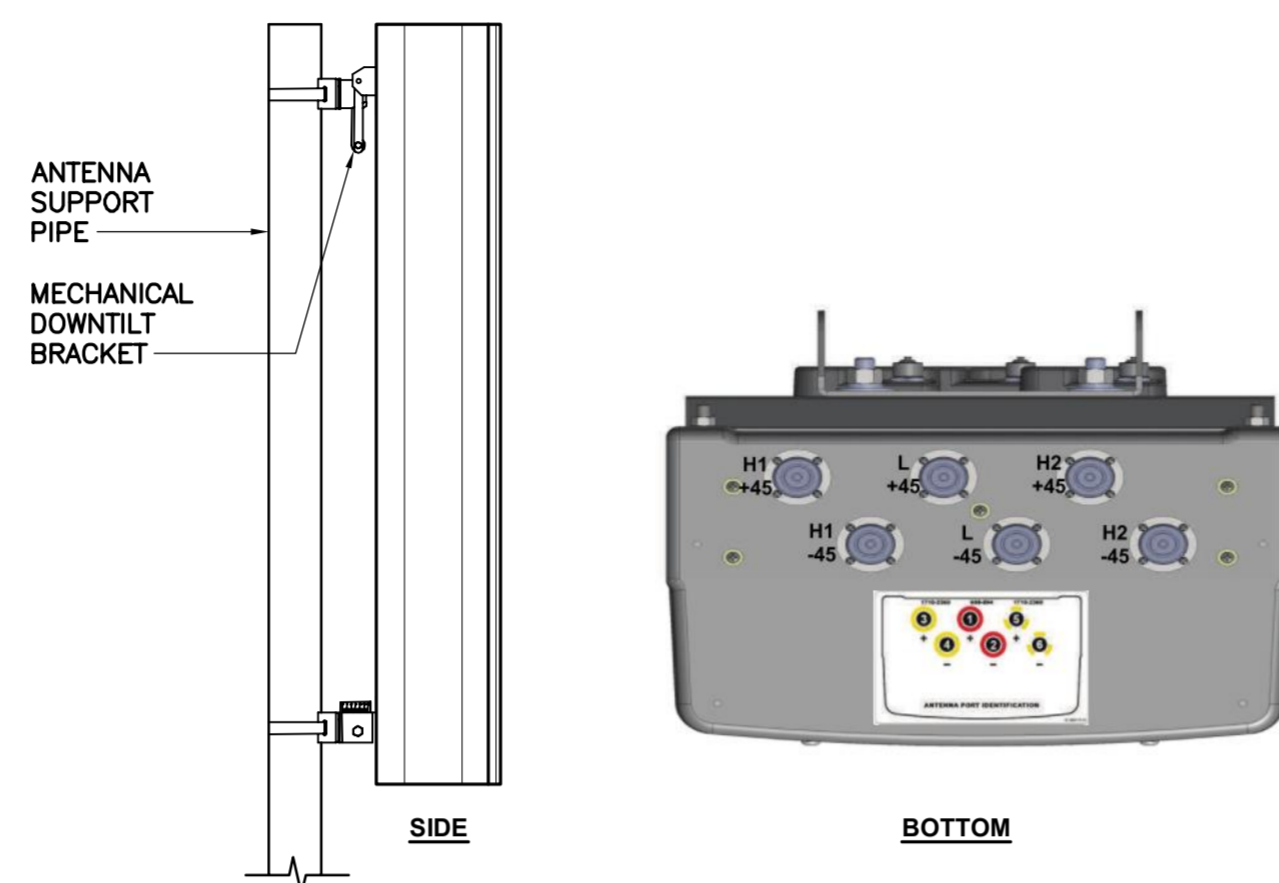


ISOMETRIC VIEW

NOTES:

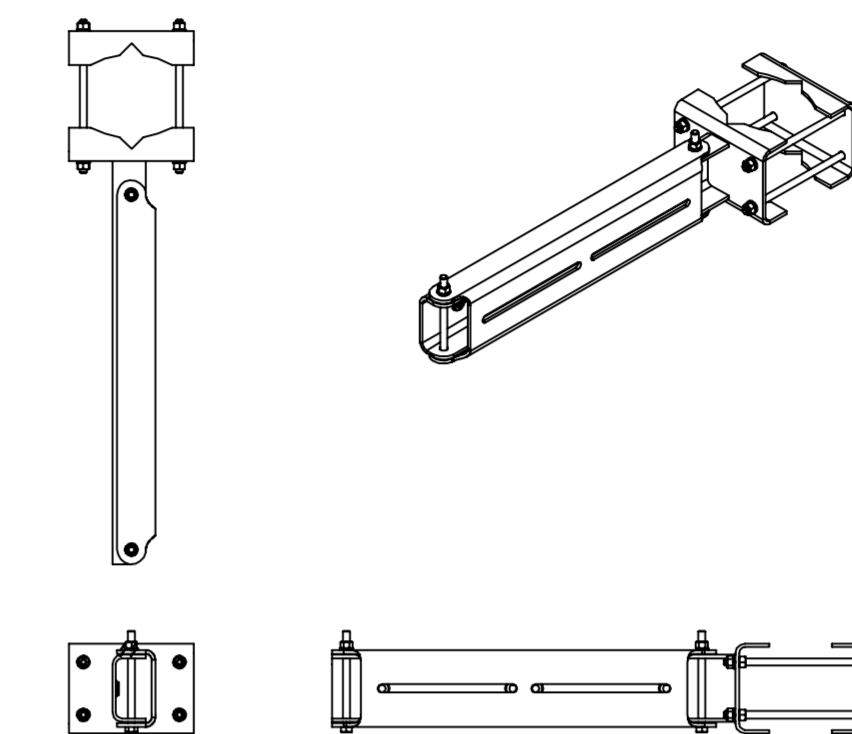
1. AT&T SHALL SUPPLY RRU, AND RRU POLE-MOUNTING BRACKET. CONTRACTOR SHALL SUPPLY POLE/PIPE AND INSTALL ALL MOUNTING HARDWARE INCLUDING ERICSSON RRU POLE-MOUNTING BRACKET. CONTRACTOR SHALL INSTALLS RRU AND MAKES CABLE TERMINATIONS.
2. NO PAINTING OF THE RRU OR SOLAR SHIELD IS ALLOWED.

1 TYPICAL RRUS MOUNTING DETAILS
C-3 NOT TO SCALE



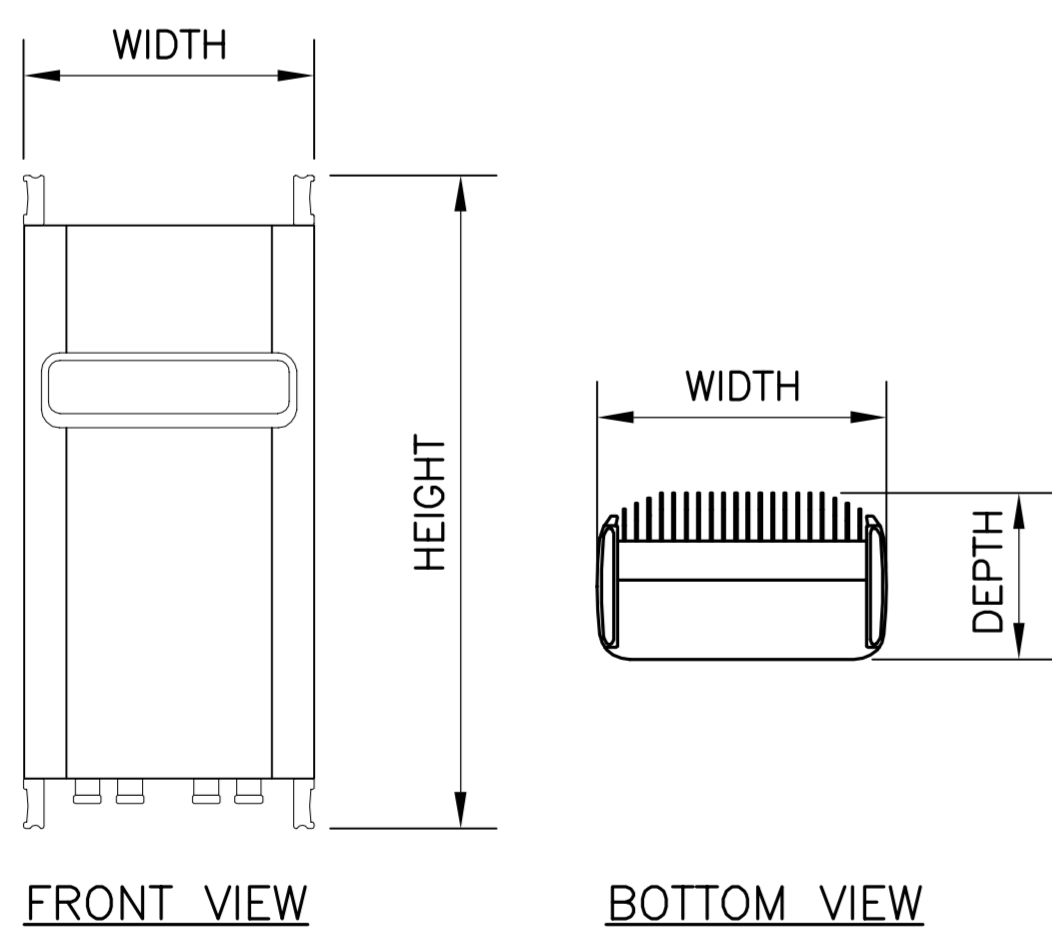
ALPHA/BETA/GAMMA ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: CCI MODEL: HPA-65R-BUU-H6	72"L x 14.8"W x 9"D	51 LBS.

2 PROPOSED ANTENNA DETAIL
C-3 NOT TO SCALE



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

3 RRH DUAL SWIVEL MOUNT DETAIL
C-3 NOT TO SCALE



RRU (REMOTE RADIO UNIT)			
EQUIPMENT	DIMENSIONS	WEIGHT	CLEARANCES
MAKE: ERICSSON MODEL: RRUS-32 B66	27.17"L x 12.05"W x 7.01"D	52.91 LBS.	ABOVE: 16" MIN. BELOW: 12" MIN. FRONT: 36" MIN.

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

4 ERICSSON RRUS-32 B66 DETAIL
C-3 NOT TO SCALE

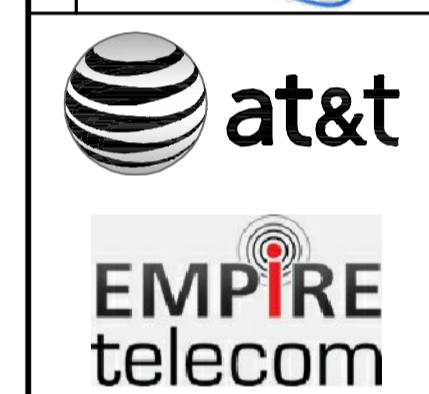
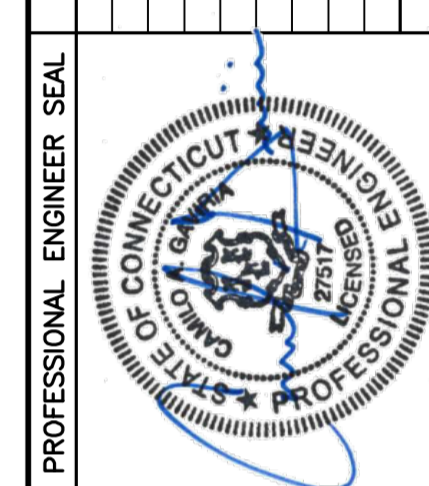


SURGE ARESSTOR		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: ANDREW MODEL: APTDC-BDFDM-DB	3.46"H x 3.46"W x 1.65"D	1.32 LBS.

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

5 ANDREW APTDC-BDFDM-DB DETAIL
C-3 NOT TO SCALE

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DETAILS

C-3
Sheet No. 5 of 8

Date: August 13, 2018

Steve Tuttle
Crown Castle
8 Parkmeadow Drive
Pittsford, NY 14534

Paul J. Ford and Company
250 East Broad st., Suite 600
Columbus, OH 43215
(614) 221-6679

Subject: Structural Analysis Report

Carrier Designation:

AT&T Mobility Co-Locate

Carrier Site Number:

CT2106

Carrier Site Name:

10034977

Crown Castle Designation:

Crown Castle BU Number:

841288

Crown Castle Site Name:

BRIDGEPORT NORTH

Crown Castle JDE Job Number:

480519

Crown Castle Work Order Number:

1604086

Crown Castle Order Number:

422643 Rev. 0

Engineering Firm Designation:

Paul J. Ford and Company Project Number: 37518-0456.007.7700

Site Data:

2 Kaechele Place, BRIDGEPORT, Fairfield County, CT

Latitude 41° 13' 24.04", Longitude -73° 13' 0.38"

150 Foot - Monopole

Dear Mr. Tuttle,

Paul J. Ford and Company is pleased to submit this "Structural Analysis Report" to determine the structural integrity of the above-mentioned tower. This analysis has been performed in accordance with the Crown Castle Structural 'Statement of Work' and the terms of Crown Castle Purchase Order Number 1225606, in accordance with order 422643, revision 0.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation; under the following load case, to be:

LC7: Existing + Reserved + Proposed Equipment


Sufficient Capacity

Note: See Table I and Table II for the proposed and existing/reserved loading, respectively.

This analysis has been performed in accordance with the 2016 Connecticut State Building Code based upon an ultimate 3-second gust wind speed of 125 mph converted to a nominal 3-second gust wind speed of 97 mph per Section 1609.3 and Appendix N as required for use in the ANSI/TIA-222-G-2005 Standard, "Structural Standard for Antenna Supporting Structures and Antennas", with ANSI/TIA-222-G-1-2007 and ANSI/TIA-222-G-2-2009 Addenda per Exception #5 of Section 1609.1.1. Risk Category II, Exposure Category B and Topographic Category 1 with a maximum Topographic Factor, Kzt, of 1 were used in this analysis.

We at Paul J. Ford and Company appreciate the opportunity of providing our continuing professional services to you and Crown Castle. If you have any questions or need further assistance on this or any other projects, please give us a call.

Respectfully submitted by:


Shardul Kadam, P.E. SST
Project Engineer I

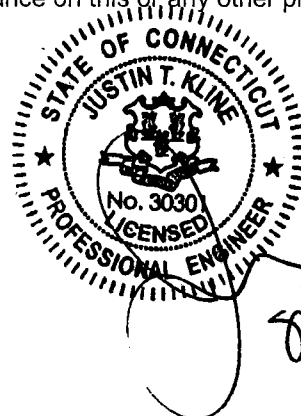


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Additional Calculations

1) INTRODUCTION

This tower is a 150 ft Monopole. The original design code and wind speed are unknown.

2) ANALYSIS CRITERIA

This analysis has been performed in accordance with the 2016 Connecticut State Building Code based upon an ultimate 3-second gust wind speed of 125 mph converted to a nominal 3-second gust wind speed of 97 mph per Section 1609.3 and Appendix N as required for use in the ANSI/TIA-222-G-2005 Standard, "Structural Standard for Antenna Supporting Structures and Antennas", with ANSI/TIA-222-G-1-2007 and ANSI/TIA-222-G-2-2009 Addenda per Exception #5 of Section 1609.1.1. Risk Category II, Exposure Category B and Topographic Category 1 with a maximum Topographic Factor, Kzt, of 1 were used in this analysis.

Table 1 - Proposed Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)	Note
150.0	154.0	3	cci antennas	HPA-65R-BUU-H6	2 1	3/4 3/8	-
		6	cci antennas	TPX-070821			
		3	ericsson	RRUS 11			
		3	ericsson	RRUS 32			
		3	ericsson	RRUS 32 B2			
		3	ericsson	RRUS 32 B66			
		3	powerwave technologies	1001940			
		6	powerwave technologies	7020.00			
		3	quintel technology	QS66512-2			
		2	raycap	DC6-48-60-18-8F			

Table 2 - Existing and Reserved Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)	Note
150.0	154.0	6	cci antennas	TPX-070821	2 1	3/4 3/8	3
		3	ericsson	RRUS 32			
		3	ericsson	RRUS 32 B2			
		3	kathrein	782 10253			
		3	powerwave tech.	P65-16-XLH-RR			
		3	quintel tech.	QS66512-2			
		1	raycap	DC6-48-60-18-8F			
	3	powerwave tech.	7770.00	12	1-5/8	1	
	3	powerwave tech.	TT19-08BP111-001	1	3/8		
	150.0	1	tower mounts	Platform Mount (LP 101-1)	2 1		3/4 Conduit

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)	Note	
147.0	147.0	3	ericsson	RRUS 11	-	-	1	
		1	raycap	TME-DC6-48-60-18-8F				
		1	tower mounts	Pipe Mount [PM 601-3]				
138.0	143.0	1	andrew	VHLP2-18	-	-	1	
		1	andrew	VHLP2-23				
		2	dragonwave	HORIZON COMPACT				
	140.0	140.0	3	alcatel lucent	PCS 1900MHZ 4X45W-65MHZ	3 1 1	1-1/4 1-5/8 Conduit	2
			6	alcatel lucent	RRH2X50-800			
			3	commscope	NNVV-65B-R4 w/ Mount Pipe			
			3	nokia	AAHC w/ Mount Pipe			
		1	clearwire	CW JUNCTION BOX	2	1/2	1	
1	tower mounts	Platform Mount [LP 713-1]						
120.0	120.0	3	commscope	LNx-6515DS-A1M	13 1	1-5/8 1-1/2	2	
		3	ericsson	AIR -32 B2A/B66AA				
		3	ericsson	AIR 21 B2A/B4P				
		3	ericsson	KRY 112 144/1				
		3	ericsson	RRUS 11 B12				
		1	tower mounts	Platform Mount [LP 301-1]				
99.0	103.0	1	gps	GPS_A	-	-	1	
	99.0	3	alcatel lucent	B13 RRH 4X30	2	1-1/4	2	
		3	alcatel lucent	B25 RRH2X60 PCS				
		3	alcatel lucent	B66A RRH4X45				
		2	commscope	RC2DC-3315-PF-48				
		6	css	X7CQAP-465-VR0 w/ Mount Pipe	12 1	1-5/8 1/2	1	
		3	antel	BXA-171063/8CF w/ Mount Pipe				
		3	antel	BXA-70063/4CF w/ Mount Pipe				
		6	rfs celwave	FD9R6004/2C-3L	1			
1	tower mounts	T-Arm Mount [TA 602-3]						

- Notes:
 1) Existing Equipment
 2) Reserved Equipment
 3) Equipment to Be Removed

Table 3 - Design Antenna and Cable Information

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
-	-	-	-	-	-	-

3) ANALYSIS PROCEDURE

Table 4 - Documents Provided

Document	Remarks	Reference	Source
4-GEOTECHNICAL REPORTS	FDH, 08-09065E G1, 09/23/2008	5110784	CCISITES
4-POST-MODIFICATION INSPECTION	TEP, 25567.42283, 10/22/2014	5401472	CCISITES
4-POST-MODIFICATION INSPECTION	TEP, 25567_26102, 06/05/2015	5739992	CCISITES
4-POST-MODIFICATION INSPECTION	Crown Castle, 841288, 05/31/2017	6894091	CCISITES
4-POST-MODIFICATION INSPECTION	TEP, 25567.87194, 06/08/2018	7594134	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	FDH, 08-09065E NA, 09/23/2008	5110783	CCISITES
4-TOWER MAPPING	GPD, 2014777.841288.02, 04/11/2008	4710143	CCISITES

3.1) Analysis Method

tnxTower (version 8.0.2.1), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

- 1) Tower and structures were built in accordance with the manufacturer's specifications.
- 2) The tower and structures have been maintained in accordance with the manufacturer's specification.
- 3) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
- 4) The monopole manufacturer drawings are not available at the time of this analysis. Therefore, we have assumed pole shaft and base plate steel yield strength(s) (F_y) as shown in the attached calculations. Anchor rods are assumed to be ASTM A615 #18J, 2.25" diam, ($F_u = 100$ ksi, $F_y = 75$ ksi).
- 5) Monopole was modified in conformance with the referenced modification drawings.

This analysis may be affected if any assumptions are not valid or have been made in error. Paul J. Ford and Company should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 5 - Section Capacity (Summary)

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
150 - 145	Pole	TP15.732x15x0.2188	Pole	24.2%	Pass
145 - 140	Pole	TP16.463x15.732x0.2188	Pole	38.8%	Pass
140 - 135	Pole	TP17.195x16.463x0.2188	Pole	59.5%	Pass
135 - 130	Pole	TP17.927x17.195x0.2188	Pole	78.5%	Pass
130 - 128.5	Pole	TP18.146x17.927x0.2188	Pole	83.7%	Pass
128.5 - 128.25	Pole + Reinf.	TP18.183x18.146x0.6688	Reinf. 12 Tension Rupture	42.2%	Pass
128.25 - 123.25	Pole + Reinf.	TP18.915x18.183x0.6438	Reinf. 12 Tension Rupture	51.8%	Pass
123.25 - 118.25	Pole + Reinf.	TP19.646x18.915x0.6188	Reinf. 12 Tension Rupture	62.2%	Pass
118.25 - 113.25	Pole + Reinf.	TP20.378x19.646x0.6063	Reinf. 12 Tension Rupture	74.1%	Pass
113.25 - 109	Pole + Reinf.	TP21x20.378x0.5938	Reinf. 12 Tension Rupture	83.6%	Pass
109 - 108.75	Pole + Reinf.	TP21.038x21x0.725	Reinf. 7 Tension Rupture	63.8%	Pass
108.75 - 104.17	Pole + Reinf.	TP21.729x21.038x0.7	Reinf. 7 Tension Rupture	71.2%	Pass
104.17 - 103.92	Pole + Reinf.	TP21.767x21.729x0.975	Reinf. 7 Tension Rupture	63.9%	Pass
103.92 - 103.17	Pole + Reinf.	TP21.88x21.767x0.95	Reinf. 7 Tension Rupture	64.9%	Pass
103.17 - 102.92	Pole + Reinf.	TP21.918x21.88x1.125	Reinf. 7 Tension Rupture	52.9%	Pass
102.92 - 102.42	Pole + Reinf.	TP21.994x21.918x1.1	Reinf. 7 Tension Rupture	53.5%	Pass
102.42 - 102.17	Pole + Reinf.	TP22.031x21.994x0.925	Reinf. 7 Tension Rupture	58.9%	Pass
102.17 - 100.92	Pole + Reinf.	TP22.22x22.031x0.925	Reinf. 7 Tension Rupture	60.5%	Pass
100.92 - 100.67	Pole + Reinf.	TP22.258x22.22x1	Reinf. 7 Tension Rupture	59.1%	Pass
100.67 - 99.58	Pole + Reinf.	TP22.422x22.258x1	Reinf. 7 Tension Rupture	60.5%	Pass
99.58 - 99.33	Pole + Reinf.	TP22.46x22.422x1.375	Reinf. 17 Tension Rupture	43.4%	Pass
99.33 - 95.25	Pole + Reinf.	TP23.076x22.46x1.325	Reinf. 17 Tension Rupture	47.7%	Pass
95.25 - 95	Pole + Reinf.	TP23.114x23.076x1.025	Reinf. 18 Tension Rupture	59.0%	Pass
95 - 90	Pole + Reinf.	TP23.869x23.114x1	Reinf. 18 Tension Rupture	65.3%	Pass
90 - 85	Pole + Reinf.	TP24.624x23.869x0.9625	Reinf. 18 Tension Rupture	71.3%	Pass
85 - 80.5	Pole + Reinf.	TP25.304x24.624x0.925	Reinf. 18 Tension Rupture	76.5%	Pass
80.5 - 80.25	Pole + Reinf.	TP25.341x25.304x1.3	Reinf. 6 Tension Rupture	63.4%	Pass
80.25 - 75.25	Pole + Reinf.	TP26.096x25.341x1.25	Reinf. 6 Tension Rupture	68.2%	Pass
75.25 - 73.58	Pole + Reinf.	TP26.348x26.096x1.225	Reinf. 6 Tension Rupture	69.7%	Pass
73.58 - 73.33	Pole + Reinf.	TP26.386x26.348x1.225	Reinf. 6 Tension Rupture	70.0%	Pass
73.33 - 72	Pole + Reinf.	TP27.04x26.386x1.2	Reinf. 6 Tension Rupture	71.2%	Pass
72 - 67	Pole + Reinf.	TP26.897x26.087x1.2625	Reinf. 6 Tension Rupture	73.1%	Pass
67 - 66.75	Pole + Reinf.	TP26.937x26.897x1.2625	Reinf. 6 Tension Rupture	73.3%	Pass
66.75 - 66.5	Pole + Reinf.	TP26.978x26.937x1.3625	Reinf. 5 Tension Rupture	63.8%	Pass
66.5 - 61.5	Pole + Reinf.	TP27.788x26.978x1.3125	Reinf. 5 Tension Rupture	67.2%	Pass
61.5 - 56.5	Pole + Reinf.	TP28.598x27.788x1.2625	Reinf. 5 Tension Rupture	70.5%	Pass

56.5 - 51.5	Pole + Reinf.	TP29.408x28.598x1.2375	Reinf. 5 Tension Rupture	73.6%	Pass
51.5 - 48.25	Pole + Reinf.	TP29.934x29.408x1.2125	Reinf. 5 Tension Rupture	75.6%	Pass
48.25 - 48	Pole + Reinf.	TP29.974x29.934x1.6375	Reinf. 2 Connection	66.4%	Pass
48 - 44.25	Pole + Reinf.	TP30.582x29.974x1.6125	Reinf. 2 Compression	68.4%	Pass
44.25 - 44	Pole + Reinf.	TP30.622x30.582x1.7125	Reinf. 2 Compression	64.5%	Pass
44 - 43.08	Pole + Reinf.	TP30.771x30.622x1.7125	Reinf. 2 Compression	65.0%	Pass
43.08 - 42.83	Pole + Reinf.	TP30.812x30.771x1.7125	Reinf. 2 Compression	65.1%	Pass
42.83 - 37.83	Pole + Reinf.	TP31.622x30.812x1.6375	Reinf. 2 Compression	67.4%	Pass
37.83 - 34	Pole + Reinf.	TP32.89x31.622x1.6125	Reinf. 2 Compression	69.2%	Pass
34 - 29	Pole + Reinf.	TP32.462x31.617x1.7063	Reinf. 2 Compression	68.7%	Pass
29 - 24	Pole + Reinf.	TP33.306x32.462x1.6563	Reinf. 2 Compression	70.5%	Pass
24 - 23.75	Pole + Reinf.	TP33.348x33.306x1.6563	Reinf. 2 Compression	70.6%	Pass
23.75 - 23.5	Pole + Reinf.	TP33.391x33.348x1.6563	Reinf. 2 Compression	70.6%	Pass
23.5 - 18.5	Pole + Reinf.	TP34.235x33.391x1.6063	Reinf. 2 Compression	72.4%	Pass
18.5 - 13.5	Pole + Reinf.	TP35.08x34.235x1.5563	Reinf. 2 Compression	74.0%	Pass
13.5 - 11	Pole + Reinf.	TP35.502x35.08x1.5313	Reinf. 2 Connection	74.8%	Pass
11 - 10.75	Pole + Reinf.	TP35.544x35.502x1.2313	Reinf. 3 Tension Rupture	71.3%	Pass
10.75 - 6	Pole + Reinf.	TP36.347x35.544x1.2563	Reinf. 3 Tension Rupture	72.8%	Pass
6 - 5.75	Pole + Reinf.	TP36.389x36.347x1.5313	Reinf. 3 Tension Rupture	62.9%	Pass
5.75 - 3.25	Pole + Reinf.	TP36.811x36.389x1.5063	Reinf. 3 Tension Rupture	63.7%	Pass
3.25 - 3	Pole + Reinf.	TP36.853x36.811x1.1563	Reinf. 20 Compression	80.3%	Pass
3 - 0	Pole + Reinf.	TP37.36x36.853x1.1313	Reinf. 20 Compression	81.2%	Pass
				Summary	
			Pole	83.7%	Pass
			Reinforcement	83.6%	Pass
			Overall	83.7%	Pass

Table 6 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Flange Connection	109	85.8	Pass
1	Anchor Rods	0	77.5	Pass
1	Base Plate	0	60.5	Pass
1	Base Foundation Structural Steel	0	66.8	Pass
1	Base Foundation Soil Interaction	0	58.5	Pass

Structure Rating (max from all components) =	85.8%
-----------------------------------------------------	--------------

Notes:

- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.

4.1) Recommendations

The monopole and its foundation have sufficient capacity to carry the proposed loading configuration. No modifications are required at this time



Radio Frequency Emissions Analysis Report

AT&T Existing Facility

Site ID: CT2106

FA#: 10034977

Bridgeport North
2 Kaechele Place
Bridgeport, CT 6606

June 7, 2018

Centerline Communications Project Number: 950006-126

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	12.19 %



June 7, 2018

AT&T Mobility – New England
Attn: John Benedetto, RF Manager
550 Cochituate Road
Suite 550 – 13&14
Framingham, MA 06040

Emissions Analysis for Site: **CT2106 – Bridgeport North**

Centerline Communications, LLC (“Centerline”) was directed to analyze the proposed AT&T facility located at **2 Kaechele Place, Bridgeport, CT**, for the purpose of determining whether the emissions from the Proposed AT&T Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 700 and 850 MHz Bands are approximately $467 \mu\text{W}/\text{cm}^2$ and $567 \mu\text{W}/\text{cm}^2$ respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 2300 MHz (WCS) bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.



Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.



CALCULATIONS

Calculations were performed for the proposed AT&T Wireless antenna facility located at **2 Kaechele Place, Bridgeport, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

All emissions values for additional carriers were taken from the Connecticut Siting Council (CSC) active MPE database. Values in this database are provided by the individual carriers themselves

For each sector the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
UMTS	850 MHz	2	30
LTE	850 MHz	2	40
LTE	2300 MHz (WCS)	4	30
LTE	1900 MHz (PCS)	4	40
LTE	700 MHz	2	40
LTE	2100 MHz (AWS)	4	30

Table 1: Channel Data Table



The following antennas listed in *Table 2* were used in the modeling for transmission in the 700 MHz, 850 MHz, 1900 MHz (PCS), 2100 MHz (AWS) and 2300 MHz (WCS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	Powerwave 7770	154
A	2	Quintel QS66512-2	154
A	3	CCI HPA-65R-BUU-H6	154
B	1	Powerwave 7770	154
B	2	Quintel QS66512-2	154
B	3	CCI HPA-65R-BUU-H6	154
C	1	Powerwave 7770	154
C	2	Quintel QS66512-2	154
C	3	CCI HPA-65R-BUU-H6	154

Table 2: Antenna Data

All calculations were done with respect to uncontrolled / general population threshold limits.



RESULTS

Per the calculations completed for the proposed AT&T configurations *Table 3* shows resulting emissions power levels and percentages of the FCC’s allowable general population limit.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	Powerwave 7770	850 MHz	11.4	2	60	828.23	0.24
Antenna A2	Quintel QS66512-2	850 MHz / 2300 MHz (WCS) / 1900 MHz (PCS)	11.35 / 14.85 / 13.85	10	360	8,640.15	1.55
Antenna A3	CCI HPA-65R-BUU-H6	700 MHz / 2100 MHz (AWS)	11.95 / 15.05	6	200	5,092.07	1.07
Sector A Composite MPE%							2.87
Antenna B1	Powerwave 7770	850 MHz	11.4	2	60	828.23	0.24
Antenna B2	Quintel QS66512-2	850 MHz / 2300 MHz (WCS) / 1900 MHz (PCS)	11.35 / 14.85 / 13.85	10	360	8,640.15	1.55
Antenna B3	CCI HPA-65R-BUU-H6	700 MHz / 2100 MHz (AWS)	11.95 / 15.05	6	200	5,092.07	1.07
Sector B Composite MPE%							2.87
Antenna C1	Powerwave 7770	850 MHz	11.4	2	60	828.23	0.24
Antenna C2	Quintel QS66512-2	850 MHz / 2300 MHz (WCS) / 1900 MHz (PCS)	11.35 / 14.85 / 13.85	10	360	8,640.15	1.55
Antenna C3	CCI HPA-65R-BUU-H6	700 MHz / 2100 MHz (AWS)	11.95 / 15.05	6	200	5,092.07	1.07
Sector C Composite MPE%							2.87

Table 3: AT&T Emissions Levels



The Following table (*table 4*) shows all additional carriers on site and their MPE% as recorded in the CSC active MPE database for this facility along with the newly calculated maximum AT&T MPE contributions per this report. FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. For this site, all three sectors have the same configuration yielding the same results on all three sectors. *Table 5* below shows a summary for each AT&T Sector as well as the composite MPE value for the site.

Site Composite MPE%	
Carrier	MPE%
AT&T – Max Sector Value	2.87 %
Verizon Wireless	4.12 %
Clearwire	0.17 %
T-Mobile	5.03 %
Site Total MPE %:	12.19 %

Table 4: All Carrier MPE Contributions

AT&T Sector A Total:	2.87 %
AT&T Sector B Total:	2.87 %
AT&T Sector C Total:	2.87 %
Site Total:	12.19 %

Table 5: Site MPE Summary



FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 6* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated AT&T sector(s). For this site, all three sectors have the same configuration yielding the same results on all three sectors.

AT&T _ Frequency Band / Technology Max Power Values (Per Sector)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
AT&T 850 MHz UMTS – Antenna 1	2	414.12	154	1.36	850 MHz	567	0.24%
AT&T 850 MHz LTE – Antenna 2	2	545.83	154	1.79	850 MHz	567	0.32%
AT&T 2300 MHz (WCS) LTE – Antenna 2	4	916.48	154	6.02	2300 MHz (WCS)	1000	0.60%
AT&T 1900 MHz (PCS) LTE – Antenna 2	4	970.64	154	6.37	1900 MHz (PCS)	1000	0.64%
AT&T 700 MHz LTE – Antenna 3	2	626.70	154	2.06	700 MHz	467	0.44%
AT&T 2100 MHz (AWS) LTE – Antenna 3	4	959.67	154	6.30	2100 MHz (AWS)	1000	0.63%
						Total:	2.87%

Table 6: AT&T Maximum Sector MPE Power Values



Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general population exposure to RF Emissions.

The anticipated maximum composite contributions from the AT&T facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

AT&T Sector	Power Density Value (%)
Sector A:	2.87 %
Sector B:	2.87 %
Sector C:	2.87 %
AT&T Maximum Total (per sector):	2.87 %
Site Total:	12.19 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **12.19 %** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.

A handwritten signature in black ink, appearing to read 'Scott Heffernan', is written over a light blue horizontal line.

Scott Heffernan

RF Engineering Director

Centerline Communications, LLC

95 Ryan Drive, Suite 1

Raynham, MA 02767