



SBA COMMUNICATIONS CORP. 5900 BROKEN SOUND PKWY NW BOCA RATON, FL 33487



LOCATION: 40 RAVEN ROCK RD LILLINGTON, NC 27546

SBA: MAMERS NC40177-T T-MOBILE: L-SPRINT RA73XC047 5RA0821A

SITE TYPE: 195' MONOPOLE T-MOBILE SPRINT KEEP

Table with 3 columns: REV, DATE, DESCRIPTION. Row 1: 0, 12/30/20, FOR CONSTRUCTION

SITE COORDINATES LAT: 35.41925 LONG: -78.919083

DRAWN: RSW CHECKED: PWM JOB#: 20ASBTMMNC-0042

APPENDIX B

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: MT MORIAH -5RA0039A Address: 2883 MT MORIAH ROAD DURHAM, NC 27707 Zip Code Owner/Authorized Agent: MACKENZIE CLIFFORD Phone # (704) 527-0003 x 2106 E-Mail: MCLIFFORD@SBASITE.COM

CONTACT:

Table with columns: DESIGNER, FIRM, NAME, LICENSE #, TELEPHONE #, E-MAIL. Includes entries for Architectural, Civil, Electrical, etc.

2018 NC BUILDING CODE: [] New Building [] Shell/Core [] 1st Time Interior Completions [x] Addition [] Phased Construction - Shell Core

2018 NC EXISTING BUILDING CODE: [] Prescriptive [x] Alteration Level I [] Historic Property [] Repair [] Alteration Level II [] Change of Use [] Chapter 14 [] Alteration Level III

CONSTRUCTED: (date) CURRENT OCCUPANCY(S) (Ch. 3): RENOVATED: (date) PROPOSED OCCUPANCY(S) (Ch. 3):

OCCUPANCY CATEGORY (Table 1604.5): Current: UTILITY Proposed: UTILITY

BASIC BUILDING DATA

Construction Type: [] I-A [x] II-A [] III-A [] IV [] V-A [] I-B [] II-B [] III-B [] V-B

Sprinklers: [x] No [] Partial [] NFPA 13 [] NFPA 13R [] NFPA 13D

Standpipes: [x] No Class [] I [] II [] III [] Wet [] Dry

Primary Fire District: [x] No [] Yes Flood Hazard Area: [] No [] Yes

Special Inspections Required: [] No [] Yes

GROSS BUILDING AREA TABLE

Table with 4 columns: FLOOR, EXISTING (SQ FT), NEW (SQ FT), SUB-TOTAL. Rows for 3rd Floor, 2nd Floor, Mezzanine, 1st Floor, Basement, TOTAL.

ALLOWABLE AREA

Primary Occupancy Classification(s): Assembly [] A-1 [] A-2 [] A-3 [] A-4 [] A-5 Business [] Educational [] Factory [] F-1 Moderate [] F-2 Low Hazardous [] H-1 Detonate [] H-2 Deflagrate [] H-3 Combust [] H-4 Health [] H-5 HPM Institutional [] I-1 [] I-2 [] I-3 [] I-4 I-1 Condition [] 1 [] 2 I-2 Condition [] 1 [] 2 I-3 Condition [] 1 [] 2 [] 3 [] 4 [] 5 Mercantile [] Residential [] R-1 [] R-2 [] R-3 [] R-4 Storage [] S-1 Moderate [] S-2 Low [] High-piled [] Parking Garage [] Open [] Enclosed [] Repair Garage Utility and Miscellaneous [x]

Accessory Occupancy Classification(s):

Incidental Uses (Table 509):

This separation is not exempt as a Non-Separate(s).

Special Uses (Chapter 4 - List Code Sections):

Special Provisions: (Chapter 5 - List Code)

Mixed Occupancy: Select one Ser

Actual Area of Occupancy A / Allowable Area A + Actual Area of Occupancy B / Allowable Area B ≤ 1

Table with 6 columns: STORY NO., DESCRIPTION AND USE, (A) BLDG AREA PER STORY (ACTUAL), (B) TABLE 506.2 AREA, (C) AREA FOR FRONTAGE INCREASE, (D) ALLOWABLE AREA PER STORY OR UNLIMITED

1 Frontage area increases from Section 506.2 are computed thus: a. Perimeter which fronts a public way or open space having 20 feet minimum width = (F) b. Total Building Perimeter = (P) c. Ratio (F/P) = (F/P) d. W = Minimum width of public way = (W) 2 Unlimited area applicable under conditions of Section 507. 3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2). 4 The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1. 5 Frontage increase is based on the unsprinklered area value in Table 506.2.

N/A NOT A BUILDING



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GENERAL NOTES

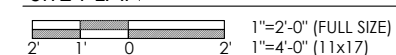
1. REMOVE ALL EXISTING NOT-IN-USE EQUIPMENT FROM EXISTING SHELTER. LEAVE EXISTING POWER PANEL, DISCONNECT, AND ALL EQUIPMENT REQUIRED TO CONTINUE SERVICING EXISTING B-25 TOWER TOP RADIO. RE-USE ALL EXISTING GROUND HALOS/BARS AND COAX PORTS. CABLE TRAYS TO REMAIN.
2. EXISTING POWER PANEL. REMOVE EXISTING BREAKERS NOT UTILIZED BY B25 RADIO EQUIPMENT AND INSTALL PROPOSED BREAKERS FOR PROPOSED EQUIPMENT.
3. PROPOSED 19" RACK WITH 6230 PP, AND RBS 6601. SEE RFDS FOR FULL EQUIPMENT LIST.
4. REPLACE EXISTING APPLETON GEN PLUGS AND INSTALL PROPOSED CAM-LOC PLUGS.

EQUIPMENT NOTE

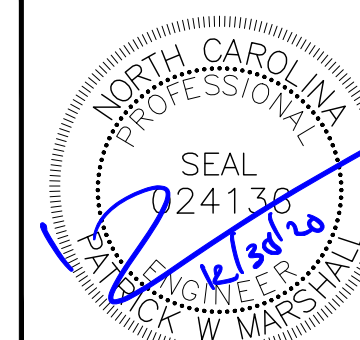
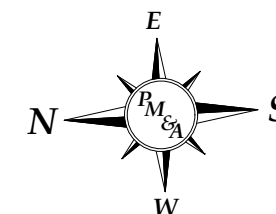
THE CABINETS ARE CONSTRUCTED OF NONCOMBUSTIBLE MATERIALS TO MEET THE REQUIREMENTS OF THE CURRENT NFPA 37 EDITION 2018. CABINET CONSTRUCTION THAT PASSED A SIMULATED BRUSH FIRE TEST TO DEMONSTRATE COMPLIANCE TO TELCORDIA GR-487-CORE SECTION 3.39 FIRE RESISTANCE REQUIREMENT R3-265. REFER TO THE NATIONAL TECHNICAL SYSTEMS (NTS) REPORT NO. PR067628-GR487.

GRAPHIC SCALE

SITE PLAN

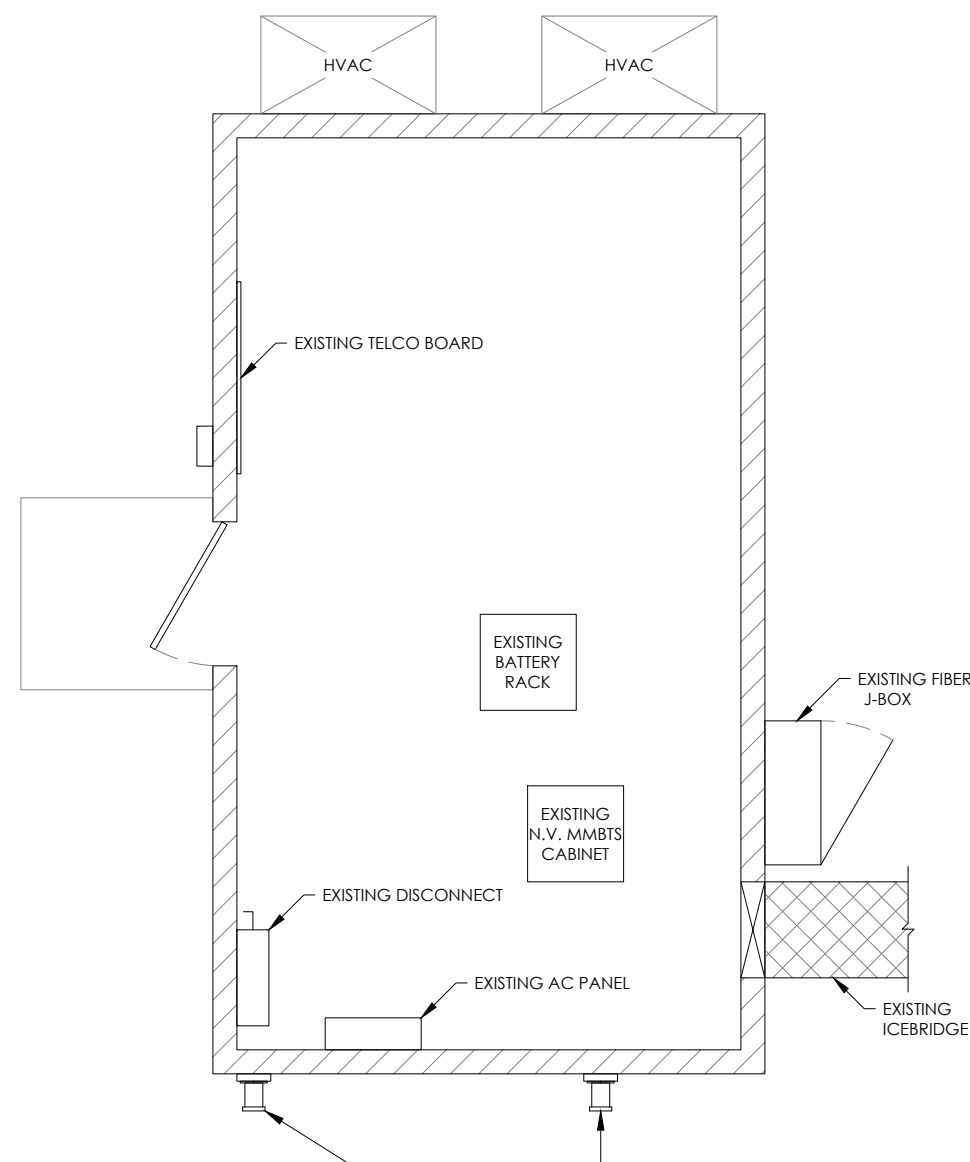


NORTH ARROW



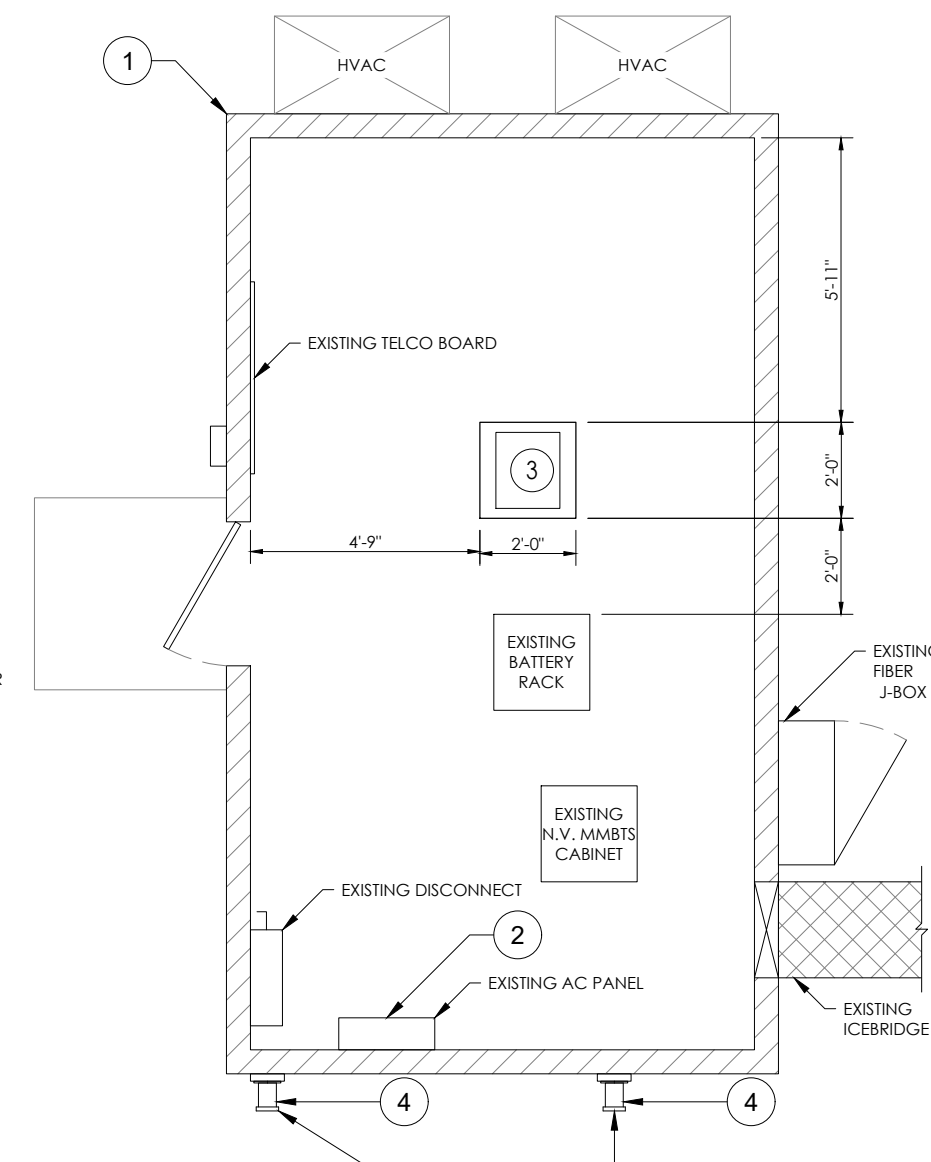
**EXISTING
EQUIPMENT PLAN**

C-2



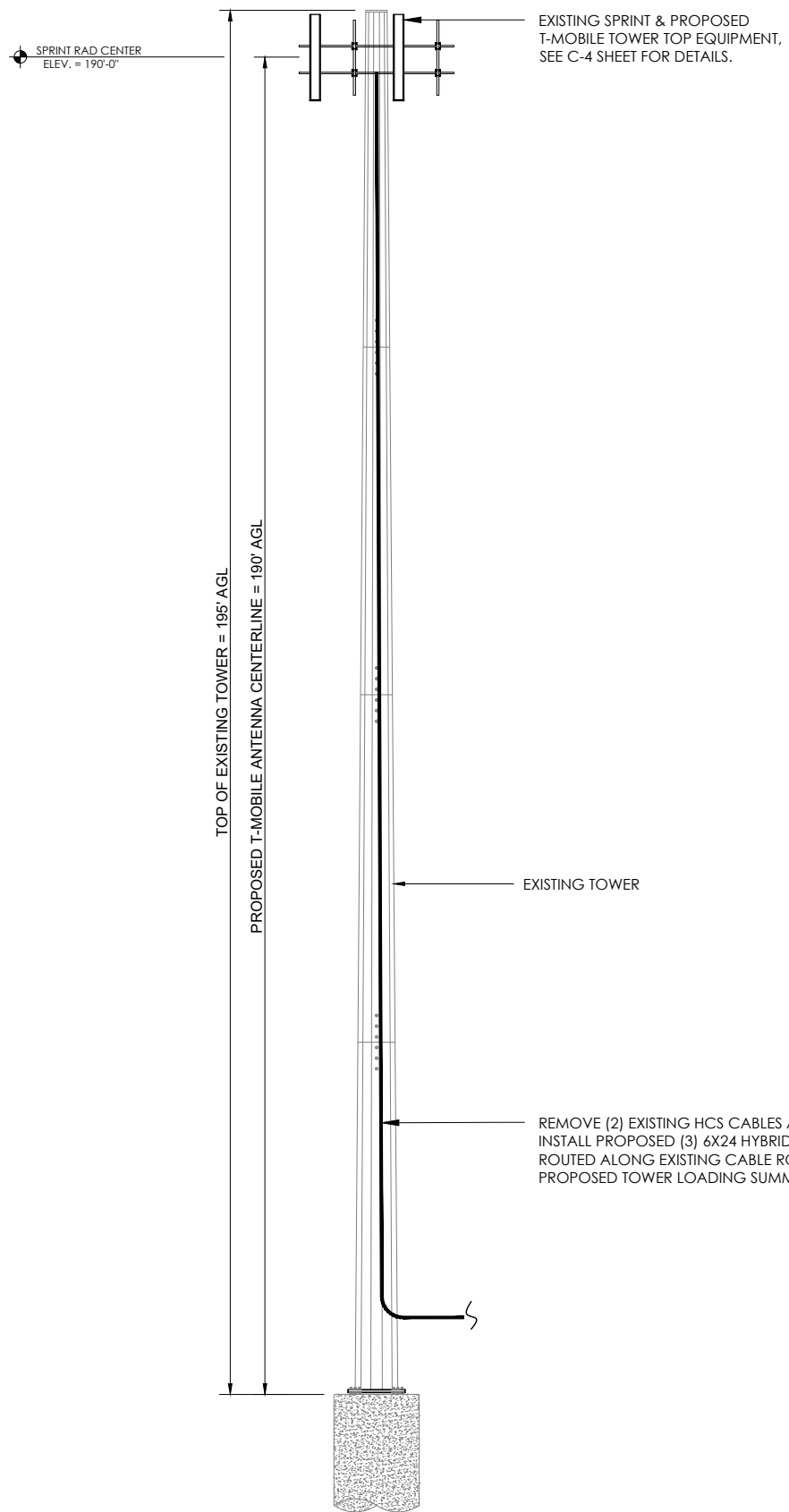
1 EXISTING EQUIPMENT PLAN
SCALE: SEE GRAPHIC SCALE

EXISTING APPLETON
GENERATOR PLUG
TO BE REPLACED.



2 PROPOSED EQUIPMENT PLAN
SCALE: SEE GRAPHIC SCALE

EXISTING APPLETON
GENERATOR PLUG
TO BE REPLACED.



TOWER ELEVATION
NOT TO SCALE

GENERAL NOTES

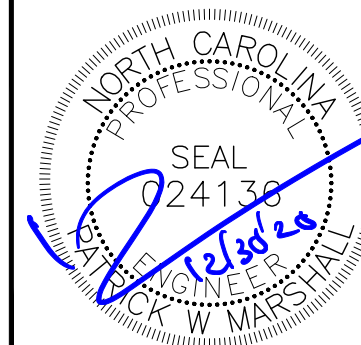
1. PM&A HAS NOT PERFORMED A TOWER STRUCTURAL ANALYSIS FOR THIS PROJECT. REFER TO TOWER STRUCTURAL ANALYSIS BY OTHERS FOR PROPOSED ANTENNA CABLE LOADING DETAILS
2. TOWER ELEVATION SHOWN IS NOT DRAWN TO SCALE AND IS ONLY INTENDED FOR REFERENCE PURPOSES. REFER TO ORIGINAL TOWER DESIGN FOR ADDITIONAL INFORMATION.
3. ALL TOWER DIMENSIONS SHALL BE VERIFIED WITH THE PLANS PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE DISCOVERED.
4. ALL HARDWARE ASSEMBLE MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
5. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND OF QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
6. CONTRACTOR TO REFER TO THE MOUNT ANALYSIS FOR THIS PROJECT.

FINISH NOTES:

TOWER-	GALVANIZED
TOWER MOUNTS-	GALVANIZED
ANTENNA-	NEUTRAL (MANUFACTURER FINISH)
FOUNDATIONS-	UNPAINTED CONCRETE
ICE BRIDGE-	GALVANIZED
CABLES-	BLACK
BASE CABINETS/EQUIPMENT-	NEUTRAL (MANUFACTURER FINISH)

TOWER LOADING SUMMARY

EXISTING	REMOVE	EQUIPMENT	ADD	TOTAL
6	6	ANTENNA	9	9
0	0	TMA	0	0
9	6	RADIOS	3	6
0	0	COAX	0	0
4	2	HYBRIDS	3	5



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TOWER ELEVATION



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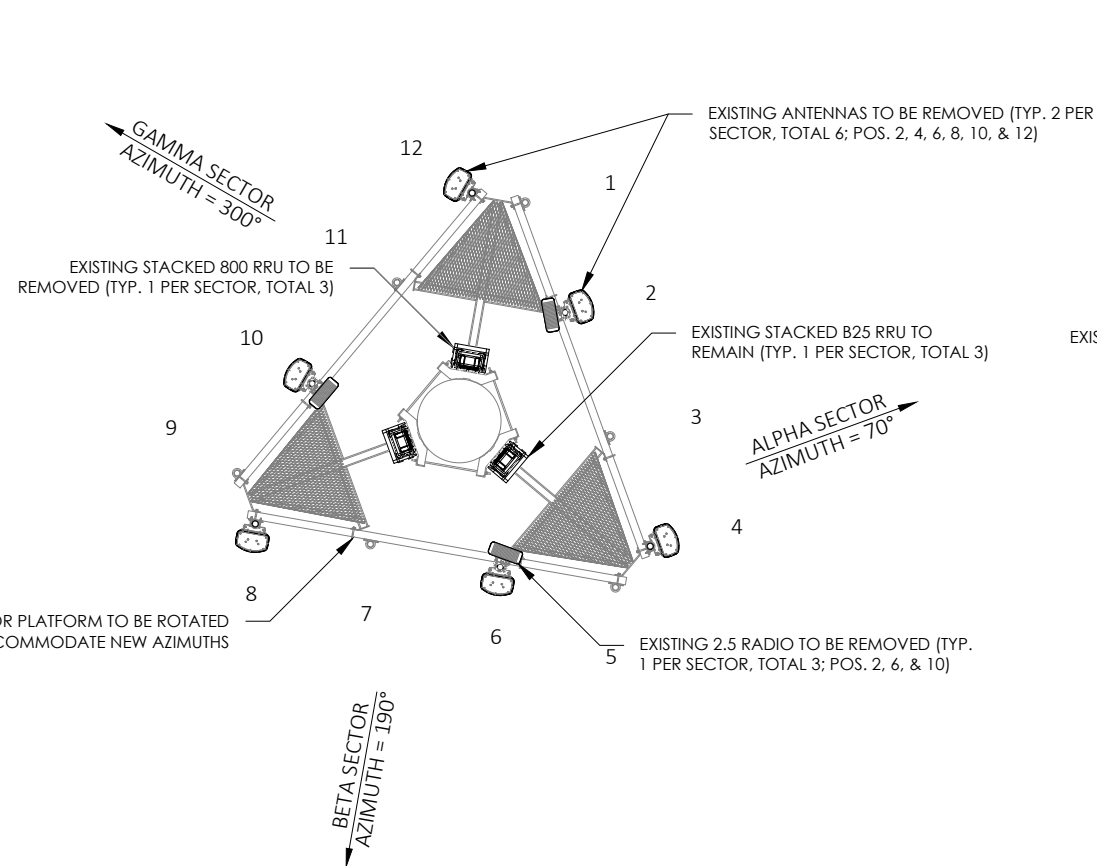
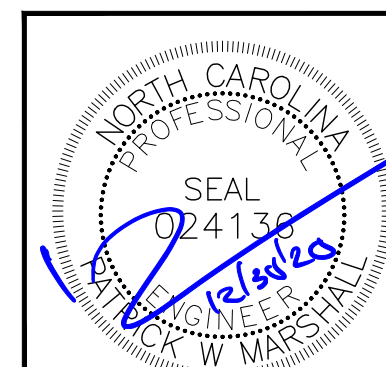
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**ANTENNA
ORIENTATION &
CABLE SCHEDULE**

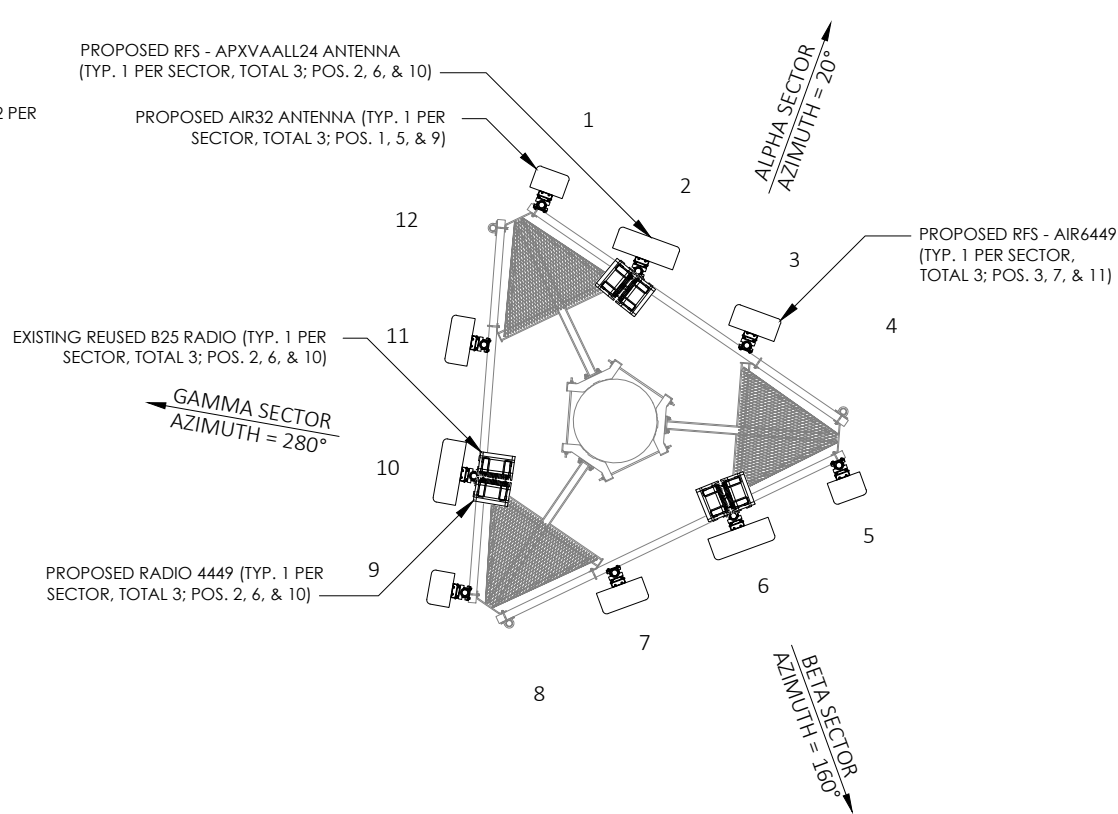
C-4

EQUIPMENT NOTES

1. THE HYBRID CABLE LENGTH SHOWN IS ONLY AN ESTIMATE AND SHOULD NOT BE USED FOR ORDERING MATERIALS. CONFIRM THE REQUIRED HYBRID CABLE LENGTH WITH T-MOBILE PRIOR TO ORDERING OR INSTALLATION.
2. THE CONTRACTOR SHALL TEST THE OPTICAL FIBER AFTER INSTALLATION IN ACCORDANCE WITH T-MOBILE STANDARDS AND SUPPLY THE RESULTS TO T-MOBILE.
3. THE CONTRACTOR SHALL CONFIRM THE TOWER TOP EQUIPMENT LIST ABOVE WITH THE FINAL T-MOBILE RFDS PRIOR TO INSTALLATION.
4. ALL PROPOSED ANTENNA CABLES SHALL BE COLOR CODED PER T-MOBILE MARKET STANDARDS.
5. REFER TO ERICSSON EQUIPMENT INSTALLATION STANDARDS FOR ADDITIONAL INFORMATION.
6. REFER TO EQUIPMENT MANUFACTURER'S SPECIFICATION SHEETS FOR ADDITIONAL INFORMATION NOT LISTED ABOVE.
7. CONTRACTOR TO FIELD COORDINATE EXACT LOCATION OF PROPOSED EQUIPMENT WITH EXISTING CONDITIONS ON SITE.
8. PROPOSED EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE FASTENERS SHALL BE HIGH STRENGTH (A325, A36)
9. DRILLING OF EXISTING STEEL MEMBERS IS NOT PERMITTED.
10. BOND PROPOSED EQUIPMENT TO EXISTING SECTOR GROUND BAR PER MANUFACTURER'S SPECIFICATIONS. PROVIDE ADDITIONAL SECTOR GROUND BARS AS REQUIRED.
11. ALL ANTENNAS, CABLES, AND MOUNTS SHALL BE INSTALLED IN ACCORDANCE WITH THE ENGINEER'S RECOMMENDATIONS IN A MANNER CONSISTENT WITH THE STRUCTURAL ANALYSIS REPORT.
12. CONTRACTOR TO CONTACT T-MOBILE FOR UP-TO-DATE RF DESIGN DATA. NOTIFY ENGINEER IF CONFLICT EXISTS.



EXISTING ANTENNA PLAN
NOT TO SCALE



FINAL ANTENNA PLAN
NOT TO SCALE

PROPOSED ANTENNA SCHEDULE

SECTOR	MARK	AZIMUTH	ANTENNA MODEL	RADIO MODEL	CABLE DESCRIPTION
ALPHA	1	20°	ERICSSON - AIR32 KRD901146-1_B66A_B2A (OCTO) (P)	-	(1) 1 1/2" 6x12 HCS (EXISTING TO REMAIN)
ALPHA	2	20°	RFS - APXVAALL24_43-U-NA20 (OCTO) (P)	(1) B25 4TRT RRU (E) (1) RADIO 4449 B71+B85 (P)	(1) ERICSSON 6x24 HCS 4AWG 80M (263') (P)
ALPHA	3	20°	ERICSSON - AIR6449 B41 (MASSIVE MIMO) (P)	-	-
-	4	-	-	-	-
BETA	5	160°	ERICSSON - AIR32 KRD901146-1_B66A_B2A (OCTO) (P)	-	(1) 1 1/2" 6x12 HCS (EXISTING TO REMAIN)
BETA	6	160°	RFS - APXVAALL24_43-U-NA20 (OCTO) (P)	(1) B25 4TRT RRU (E) (1) RADIO 4449 B71+B85 (P)	(1) ERICSSON 6x24 HCS 4AWG 80M (263') (P)
BETA	7	160°	ERICSSON - AIR6449 B41 (MASSIVE MIMO) (P)	-	-
-	8	-	-	-	-
GAMMA	9	280°	ERICSSON - AIR32 KRD901146-1_B66A_B2A (OCTO) (P)	-	-
GAMMA	10	280°	RFS - APXVAALL24_43-U-NA20 (OCTO) (P)	(1) B25 4TRT RRU (E) (1) RADIO 4449 B71+B85 (P)	(1) ERICSSON 6x24 HCS 4AWG 80M (263') (P)
GAMMA	11	280°	ERICSSON - AIR6449 B41 (MASSIVE MIMO) (P)	-	-
-	12	-	-	-	-

ANTENNA NOTE

CONTRACTOR TO ROTATE THE ANTENNAS AND OR MOUNTS TO OBTAIN NEW AZIMUTHS. REFER TO FINAL RF DOCUMENTS TO CONFIRM NEW AZIMUTHS

(E)- EXISTING
(P) - PROPOSED

GC TO PROVIDE POST CONSTRUCTION DOCUMENTATION ON ALL ANTENNA AZIMUTHS AND COLOR CODING FOR CABLES.

