AT&T SITE #:

PROJECT DESCRIPTION: LTE 4C UPGRADE

PACE JOB #: MRVWN006085

TOWER TYPE: 225' MONOPOLE

SITE ADDRESS: 1275 NC 55 EAST

COATS NC, 27521 (HARNETT COUNTY)

JURISDICTION: CITY OF COATS

PRESENT **TELECOMMUNICATIONS**

OCCUPANCY TYPE: FACILITY

CURRENT ZONING: INDUSTRIAL

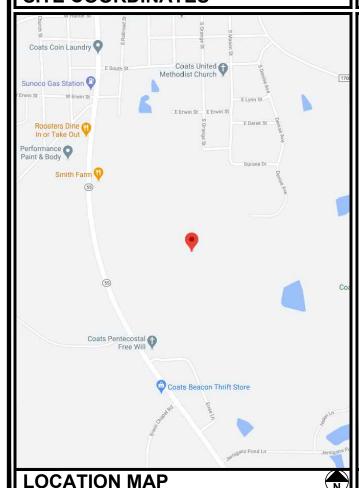
PIN #: 0599-98-5894.000

PROJECT INFORMATION

LATITUDE: N 35° 23' 48.19" (35.3967222) * LONGITUDE: W 78° 40' 05.74" (-78.6682611) *

GROUND ELEVATION: *INFORMATION PROVIDED BY AT&T

SITE COORDINATES



Harnett 1/02/2020

> **1275 NC 55 EAST COATS NC, 27521** (HARNETT COUNTY)

AT&T SITE #: 368-355 FA LOCATION CODE: 10034555

> ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES
> AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE
> PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING:

1. NORTH CAROLINA BUILDING CODE 4. NCEC 2017

(2018 EDITION)
2. NORTH CAROLINA CODE COUNCIL
3. ANSI/TIA-222-G-2009
4. NOEC 2017 + NC ADDENDUM)
5. LOCAL BUILDING CODE
6. CITY/COUNTY ORDINANCES

CODE COMPLIANCE

UTILITIES: HIGH PERFORMANCE SERVICES

POWER COMPANY: DUKE ENERGY CUSTOMER SERVICE ADDRESS: 111 EAST SAINT PETER STREET
CITY, STATE, ZIP: CARENCRO, LA 70520
CONTACT: ALEXIS ADAMS METER # NEAR SITE:

> TOWER ENGINEERING PROFESSIONALS PHONE # NEAR SITE: PEDESTAL # NEAR SITE: UNKNOWN

TELEPHONE COMPANY: CENTURYLINK
CONTACT: CUSTOMER SERVICE
PHONE: (888) 723-8010

OFFICE: (336) 255-8081 NOC #: (800) 638-2822 PLANS PREPARED FOR:

2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455



111 EAST SAINT PETER STREET CARENCRO, LA 70520 OFFICE: (337) 565-2921

SHEET	DESCRIPTION	REV
T1	TITLE SHEET	2
T2-T6	APPENDIX B	2
N1	GENERAL NOTES	2
C1	TOWER ELEVATION & EXISTING ANTENNA SCHEDULE	2
C1A	EXISTING ANTENNA ORIENTATION	2
C1B	PROPOSED ANTENNA ORIENTATION	2
C1C	PROPOSED ANTENNA/CABLE SCHEDULE	2
C2	EQUIPMENT LAYOUT	2
E1	ELECTRICAL NOTES	2
E2	TYPICAL LTE ONE-LINE DIAGRAM	2
E3	TYPICAL LTE RISER DIAGRAM	2



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N.C. LICENSE # P-1403

2	10-06-20	CONSTRUCTION
1	09-30-20	PRELIMINARY
0	09-24-20	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: ER CHECKED BY:





October 6, 2020

SHEET NUMBER:

INDEX OF SHEETS

CONTACT INFORMATION

TOWER OWNER:

APPLICANT/LESSEE:

SITE PROJECT MANAGER:

CITY, STATE, ZIP: RALEIGH, NC 27603

ELECTRICAL ENGINEER:

CIVIL ENGINEER:

NAME:

CONTACT: PHONE:

NAME:

8051 CONGRESS AVE

ADDRESS: 2002 PISGAH CHURCH RD, ST 300
CITY, STATE, ZIP: GREENSBORO, NC 27455
KEN WEI KEP

(337) 565-2921

326 TRYON ROAD

326 TRYON ROAD

SCOTT C. BRANTLEY, P.E. (919) 661-6351

MARK S. QUAKENBUSH, P.E. (919) 661-6351

TOWER ENGINEERING PROFESSIONALS

CITY, STATE, ZIP: BOCA RATON, FL 33487 OFFICE PHONE: (800) 487-7483

NAME:

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Nama of Project	• AT&T 260 255 EA# 100245	==					
	Name of Project: AT&T 368-355 FA# 10034555 Address: 1275 NC 55 EAST COATS, NC Zip Code 27521						
	• • • • • • • • • • • • • • • • • • • •						
	_		·	E-Mail			
Owned By:		City/County		☐ Sta	nte		
Code Enforceme	ent Jurisdiction:	City COATS	County	Sta	nte		
CONTACT:		Tower Engineering Pro	fessionals				
DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL		
Architectural				()	1		
Civil	Tower Engineering Profession		048226	(919) 661-6351	sbrantley@tepgroup.net mquakenbush@tepgroup		
Electrical	Tower Engineering Profession	nals Mark S. Quakenbush	042109	(919)661-6351	inquakenousn@tepgrouj		
Fire Alarm Plumbing				()			
Mechanical							
	pipe						
Structural							
Retaining Walls	>5' High			()			
Other				()			
("Other" should	include firms and indiv	iduals such as truss, p	precast, pre-engin	eered, interior desi	gners, etc.)		
1st Time Interior Completion Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements Phased Construction - Shell/Core- Contact the local inspection jurisdiction for possible additional procedures and requirements 2018 NC EXISTING BUILDING CODE: EXISTING:							
BASIC BUILD Construction T (check all that ap Sprinklers: Standpipes: Fire District: Special Inspecti	ype:	Flood Hazard A	□ III □ We	et Dry Yes n jurisdiction for a	□ V-A □ V-B PA 13D dditional		

2018 NC Administrative Code and Policies

	Gross Building Area Table
FLOOR	EXISTING (SQ FT) NEW (SQ FT) SUB-TOTAL
3 rd Floor	N/A
2 nd Floor	N/A 4.
Mezzanine	N/A
1st Floor	
Basement	
TOTAL	// c'x'/
	EXISTING (SQ FT) NEW (SQ FT) N/A N/A N/A N/A N/A N/A N/A N/
Hazardous [Institutional [☐ F-1 Moderate ☐ F-2 Low ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM ☐ I-1 Condition ☐ I ☐ 2 ☐ I-2 Condition ☐ I ☐ 2 ☐ I-3 Condition ☐ I ☐ 2 ☐ I-4 I-4
Utility and Mis	R-1 R-2 R-3 R-4 S-1 Moderate S-2 Low High-piled Parking Garage Open Enclosed Repair Garage
ncidental Uses (T	Γable 509): <u>N/A</u>
pecial Uses (Cha	apter 4 – List Code Sections): N/A
Special Provisions	s: (Chapter 5 – List Code Sections): N/A
Aixed Occupancy	y: 🛛 No 🗌 Yes Separation: Hr. Exception:
☐ Non-S	Separated Use (508.3) - The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.
☐ Separa	ated Use (508.4) - See below for area calculation be such that the sum of the actual floor area of each use divided by the allowable floor are
	$\frac{Area\ of\ Occupancy\ A}{e\ Area\ of\ Occupancy\ A} + \frac{Ac}{AV} = \frac{B}{AV} \le 1$ $+ \dots = \underline{\qquad} \le 1.00$
	Area of Occupancy A

PLANS PREPARED FOR: 2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455

PLANS PREPARED FOR: HIGH PERFORMANCE SERVICES, LLC 111 EAST SAINT PETER STREET CARENCRO, LA 70520

PROJECT INFORMATION:

AT&T SITE #: 368-355

1275 NC 55 EAST COATS NC, 27521 (HARNETT COUNTY)



326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net N.C. LICENSE # P-1403



CONSTRUCTION 10-06-20 09-30-20 PRELIMINARY ISSUED FOR: REV DATE

DRAWN BY: ER CHECKED BY:

SHEET TITLE:

APPENDIX B

SHEET NUMBER: **T-2**

REVISION:

TEP#: 43027.44563

STOR	Y DESCRIPTION AND	(A)	(B)	(C)	(D)
NO.	USE	BLDG AREA PER	TABLE 506.24	REA FOR FRONTAGE	ALLOWABLE AREA PER
		STORY (ACTUAL)	AREA	INCREASE ^{1,5}	STORY OR UNLIMITED ^{2,3}
				<i>i</i> . //	
				Y //	
rontage	area increases from Sect	ion 506.2 are	MARKE		
a. P	erimeter which fronts a p	ublic way	', ' ⊘ ' '	feet minimum width	(F)
b. T	otal Building Perimeter				
	atio (F/P) =	_ (F/ /	O'//		
d. V	V = Minimum width of p	ub ¹			
e. P	ercent of frontage increase	✓ 1,	$\sqrt{x} W/30 = 1$	(%)	
nlimite	d area applicable under c	on	3 07.	. ,	
	D 1111 A 1		Z.1 1 11 11 11	D (' 2 . '	(50(2)

ALLOWABLE HEIGHT ALLOWABLE

MO CHANGE

In the building x D (maximum3 stories) (506.2).

comply with Table 406.5.4. The maximum area of air traffic

V PLANS

CODE REFERENCE

¹ Frontage area increases from Section 506.2 are
a. Perimeter which fronts a public way

² Unlimited area applicable under con-

Building Height in Feet (Table 504.3) Building Height in Stories (Table 504.4)

³ Maximum Building Area = total numb

Provide code reference if the "Shown on Plans" quantity is not by

⁴ The maximum area of open parking garage control towers must comply with Table 412..1.

⁵ Frontage increase is based on the unsprinklered area value in Table 506.2.

BUILDING ELEMENT	FIRE		RATING	DETAIL#	DESIGN#	SHEET # FOR	SHEET #
	SEPARATION	REQ'D	PROVIDED	AND	FOR	RATED	FOR
	DISTANCE		(W/* REDUCTION)	SHP	RATED	PENETRATION	RATED
	(FEET)		,	// \	ASSEMBLY		JOINTS
Structural Frame,			MOCHA				
including columns, girders,					<i>>>></i>		
trusses				U.			
Bearing Walls				$-c^{N}$	//		
Exterior			1	40//			
North			4, 6	> //_			
East			, 'A,				
West			(C, \	Z			
South			·O //				
Interior	$\longrightarrow \langle \langle$		4				
Nonbearing Walls and			•//				
Partitions							
Exterior walls							
North				-			
East							
West							
South				•			
Interior walls and partitions				1.			
Floor Construction				\sim			
Including supporting beams							
and joists		_	71, 6	$\mathbf{Z}/\!\!\!/$			
Floor Ceiling Assembly			, 'Y				
Columns Supporting Floors			C) ∕				
Roof Construction, including			MOCHA				
supporting beams and joists			70/				
Roof Ceiling Assembly			•//				
Columns Supporting Roof							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy/Fire Barrier Separat	ion						
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/							
Sleeping Unit Separation							
Incidental Use Separation							

FIRE PROTECTION REQUIREMENTS

2018 NC Administrative Code and Policies



PLANS PREPARED FOR:

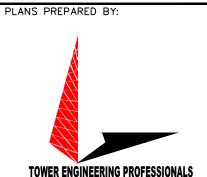
2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455

PLANS PREPARED FOR: HIGH PERFORMANCE SERVICES, LLC 111 EAST SAINT PETER STREET CARENCRO, LA 70520

PROJECT INFORMATION:

AT&T SITE #: 368-355

1275 NC 55 EAST COATS NC, 27521 (HARNETT COUNTY)



326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net N.C. LICENSE # P-1403



2	10-06-20	CONSTRUCTION
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DRAWN BY: ER CHECKED BY:

SHEET TITLE:

APPENDIX B

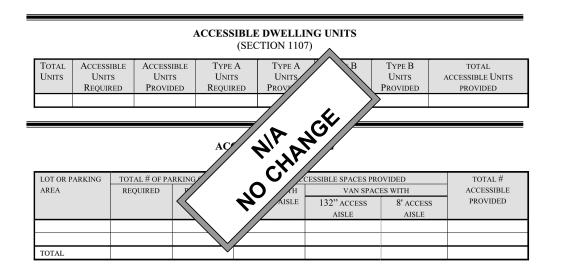
SHEET NUMBER:

REVISION:

TEP#: 43027.4456

^{*} Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS ALLOWABLE AREA FIRE SEPARATION DISTANCE DEGREE OF OPENINGS ACTUAL SHOWN ON PLANS (FEET) FROM PROPERTY LINES PROTECTION (TABLE 705.8) CHANGE REQUIREMENTS Emergency Lighting: 40 Exit Signs: Fire Alarm: Smoke Detection Systems: Panic Hardware: LIFE SAFETY PLAN REQUIREMENTS Life Safety Plan Sheet #: __ Fire and/or smoke rated wall locations (Chapter 7) Assumed and real property line locations (if not on the site plan) Exterior wall opening area with respect to distance to assum property lines (705.8) Occupancy Use for each area as it relates to occupant log tion (Table 1004.1.2) Occupant loads for each area Exit access travel distances (1017) MOCHANGE Common path of travel distances (Tables 1006) Dead end lengths (1020.4) ☐ Clear exit widths for each exit door Maximum calculated occupant load an accommodate based on egress width (1005.3) Actual occupant load for each exi A separate schematic plan ind loor/ceiling and/or roof structure is provided for purposes of occupancy sep Location of doors with pan and the amount of delay (1010.1.9.7) Location of doors with delayed Location of doors with electromas gress locks Location of doors equipped with holo open devices gress locks (1010.1.9.9) Location of emergency escape windows (1030) ☐ The square footage of each fire area (202) ☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5) Note any code exceptions or table notes that may have been utilized regarding the items above



PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

MALE	FEMALE	UNISEX	SPE	MALE	J.C., DPI, DHH	/TUBS	REGULAR	ACCESSIBLE
			SPE	IA	NGE.			
			SPE	IA	NGE -			
			SPE	IA	JOH /			
			SPE	IP.	NGE /			
: (Loca	l Jurisdictio	on, Dep	7 0,	CH	C, DPI, DHH	S, etc., des	cribe below	v)
			7					
		<		40	40	40	40/	40

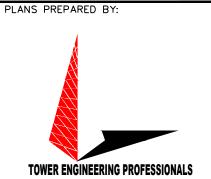
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REV	DATE	ISSUED FOR:
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DRAWN BY: ER CHECKED BY:

SHEET TITLE:

APPENDIX B

SHEET NUMBER:

REVISION:

2 TEP#: 43027.4456

ENERGY SUMMARY

PNE	$\mathbf{p}_{\mathbf{C}}\mathbf{v}$	DEO	HIDEN	TENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard ference design vs annual energy cost for the proposed design.

Existing building envelope complies with code:		mainder of this section is not applicable)
Exempt Building: No Yes (Provide code	×/	
Climate Zone: 3A 4A	JIP TIC	
Method of Compliance: Energy ASV	CHANGE ance arce here)	Prescriptive Prescriptive
THERMAL ENVELOPE (Prescrip		
Roof/ceiling Assembly (each ass		
Description of assembly:		
U-Value of total assembly:		
R-Value of insulation:		
Skylights in each assembly: U-Value of skylight:		
total square footage of skylights in	n each assembly:	
Exterior Walls (each assembly)		
Description of assembly:		
U-Value of total assembly:		
R-Value of insulation: Openings (windows or doors with	glaging)	
77.77.1 0 11	//	
Solar heat gain coefficient	nt:	
projection factor:	7/	
Door R-Values:	// 4.	
Walls below grade (each assembly)	ALANGE CHANGE	
Description of assembly:	4, 4,	
U-Value of total assemb	C.X.	
R-Value of insulation	\ 0 //	
Floors over uncondition		
Description of asso		
U-Value of total assex		
R-Value of insulation:		
Floors slab on grade		
Description of assembly:		
U-Value of total assembly:		
R-Value of insulation: Horizontal/vertical requirement:		
slab heated:		

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

Importance Factors:	Snow (I _S) Seismic (I _E)
Live Loads:	Roof psf Mezzanine psf Floor
Ground Snow Load:	psf
	psf sic Wind Speed posure Category Y: D sign D III IV
SEISMIC DESIGN CATEGOR	Y: D
Provide the following Seismic Des Risk Category (Table 16 Spectral Response Acc	sign III IV S ₁ %g
Site Classification (ASC	B C D E F
Data Sou	urce:
Basic structural system	☐ Caring Wall ☐ Dual w/Special Moment Frame
	☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel
	Moment Frame Inverted Pendulum
Analysis Procedure:	Simplified Equivalent Lateral Force Dynamic
Architectural, Mechanic	cal, Components anchored?
LATERAL DESIGN CONTROL	L: Earthquake Wind
SOIL BEARING CAPACITIES	:
	of test report) psf
	acitypsf
Pile size, type, and capac	ity

2018 NC Administrative Code and Policies

DESIGN LOADS:



PLANS PREPARED FOR:

HIGH PERFORMANCE
SERVICES, LLC

111 EAST SAINT PETER STREET
CARENCRO, LA 70520

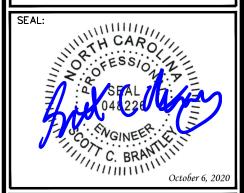
PROJECT INFORMATION:

AT&T SITE #: 368-355

1275 NC 55 EAST COATS NC, 27521 (HARNETT COUNTY)



326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
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REV	DATE	ISSUED FOR:
1	09-30-20	PRELIMINARY
2	10-06-20	CONSTRUCTION

DRAWN BY: ER CHECKED BY: BSE

SHEET TITLE:

APPENDIX B

SHEET NUMBER:

REVISION:

TEP#: 43027.445632

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

MECHANICAL DESIGN (PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

Thermal Zone	
winter dry bulb:	
summer dry bulb:	
Interior design conditions	MOCHANGE
winter dry bulb:	
summer dry bulb:	_ G '//
relative humidity:	.0 //
Building heating load:	*
Building cooling load:	
Mechanical Spacing Conditionir	ng System
Unitary	
description of unit:	
heating efficiency:	
cooling efficiency:	
size category of unit:	
Boiler	
Size category. If over	rsized, state reason.:
Chiller	

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

ELECTRICAL DESIGN (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

LECTRICAL SYSTEM AND EQUIPMENT
Method of Compliance: Energy Code Perf
ASHRAE 90.1 \square
ASHRAE 90.1 Lighting schedule (each fixture type) lamp type required in fixture number of lamps in fixture ballast type used in the number of ballasts total wattage per total interior w owed (whole building or space by space)
lamp type required in fixtur
number of lamps in fixty
ballast type used in th
number of ballasts.
total wattage pe
total interior (whole building or space by space)
total exterior was
Additional Efficiency Package ons
(When using the 2018 NCECC; not required for ASHRAE 90.1)
C406.2 More Efficient HVAC Equipment Performance
C406.3 Reduced Lighting Power Density
C406.4 Enhanced Digital Lighting Controls
C406.5 On-Site Renewable Energy
C406.6 Dedicated Outdoor Air System
C406.7 Reduced Energy Use in Service Water Heating
_ c.ss., reduced Energy and in Service Water Heating

2018 NC Administrative Code and Policies 2018 NC Administrative Code and Policies



2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE
SERVICES, LLC

111 EAST SAINT PETER STREET
CARENCRO, LA 70520

PROJECT INFORMATION:

AT&T SITE #: 368-355

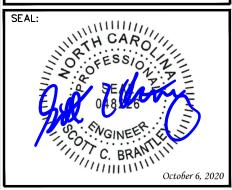
1275 NC 55 EAST COATS NC, 27521 (HARNETT COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net N.C. LICENSE # P-1403



2 10-06-20 CONSTRUCTION
1 09-30-20 PRELIMINARY
REV DATE ISSUED FOR:

DRAWN BY: ER CHECKED BY: BSE

SHEET TITLE:

APPENDIX B

SHEET NUMBER:

REVISION:

- 1. ALL REFERENCES MADE TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED AT&T OR IT'S DESIGNATED REPRESENTATIVE.
- 2. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE OF NORTH CAROLINA
- 3. THE STRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH ANSI/TIA-222-G-2-2009. THIS CONFORMS TO THE REQUIREMENTS OF THE NORTH CAROLINA BUILDING CODE, 2018 EDITION.
- 4. WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING CODE, 2018 EDITION.
- 5. UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
- 6. ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
- 7. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE STRUCTURE AND IT'S COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
- 8. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATION. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES.
- 9. 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. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK. RENTAL CHARGES, SAFETY, PROTECTION AND MAINTENANCE OF RENTED EQUIPMENT SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 11. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE AT&T PROJECT MANAGER
- 12. BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR/OWNER. CONTRACTOR/OWNER SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
- 13. ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
- 14. 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.
- 15. THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUBGRADE IN ITS PRESENT STATE. AFTER REWORKING, IF THE MATERIAL REMAINS UNSUITABLE, THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL. ALL SUBGRADES SHALL BE PROOFROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFT MATERIAL SHALL BE REWORKED OR REPLACED.
- 16. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL PIPES, DITCHES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURE IN OPERABLE CONDITION.
- 17. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.

- B. ANY BUILDINGS ON THIS SITE ARE INTENDED TO SHELTER EQUIPMENT WHICH WILL ONLY BE PERIODICALLY MAINTAINED AND ARE NOT INTENDED FOR HUMAN OCCUPANCY.
- 19. TEMPORARY FACILITIES FOR PROTECTION OF TOOLS AND EQUIPMENT SHALL CONFORM TO LOCAL REGULATIONS AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 20. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL CARRY LIABILITY INSURANCE IN THE AMOUNTS AND FORM IN ACCORDANCE WITH AT&T SPECIFICATIONS. CERTIFICATES DEMONSTRATING PROOF OF COVERAGE SHALL BE PROVIDED TO AT&T PRIOR TO THE START OF THE WORK ON THE PROJECT.
- 21. THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITY SERVICES TO VERIFY LOCATIONS OF EXISTING UTILITIES AND REQUIREMENTS FOR NEW UTILITY CONNECTIONS PRIOR TO EXCAVATING.
- 22. THE CONTRACTOR SHALL MAINTAIN THE JOB CLEAR OF TRASH AND DEBRIS. ALL WASTE MATERIALS SHALL BE REMOVED FROM THE SITE PRIOR TO SUBSTANTIAL COMPLETION AND PRIOR TO FINAL ACCEPTANCE. THE CONTRACTOR SHALL FURNISH ONE 55 GALLON BARREL, AND TRASH BAGS, AND SHALL REMOVE TRASH, DEBRIS, ETC., ON A DAILY BASIS.
- 23. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS WITH THOSE AT THE SITE. ANY VARIATION WHICH REQUIRES PHYSICAL CHANGE SHALL BE BROUGHT TO THE ATTENTION OF THE AT&T PROJECT ENGINEER FOR FACILITIES/CONSTRUCTION.
- 24. THE CONTRACTOR SHALL GUARANTEE THE WORK PERFORMED ON THE PROJECT BY THE CONTRACTOR AND ANY OR ALL OF THE SUBCONTRACTORS WHO PERFORMED WORK FOR THE CONTRACTOR ON THIS PROJECT. THE GUARANTEE SHALL BE FOR A FULL YEAR FOLLOWING ISSUANCE OF THE FINAL PAYMENT OF RETAINAGE. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.



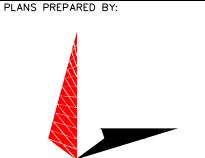
2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455



PROJECT INFORMATION:

AT&T SITE #: 368-355

1275 NC 55 EAST COATS NC, 27521 (HARNETT COUNTY)



TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net N.C. LICENSE # P-1403



REV	DATE	ISSUED FOR:
1	09-30-20	PRELIMINARY
2	10-06-20	CONSTRUCTION

DRAWN BY: ER CHECKED BY: BSE

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

N-1

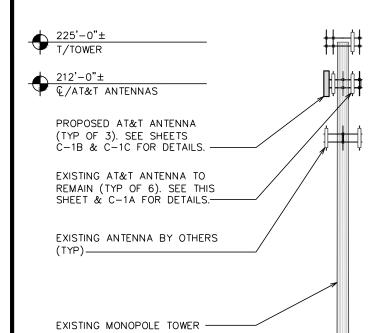
REVISION:

TEP#: 43027.445632

GENERAL NOTES

NOTES:

- PROPOSED CABLES TO BE ROUTED PER SPECIFICATIONS OF STRUCTURAL ANALYSIS.
- 2. THE TOWER DRAWING IS ONLY A GRAPHIC REPRESENTATION OF THE STRUCTURE. THE ACTUAL TOWER IN THE FIELD MAY VARY.



TOWER SCOPING NOTES:

FIRSTNET:

- ADD (3) 4478 B14 RADIOS
- ADD (3) XXQLH-654L8H8-iVT-V2 ANTENNAS
- DECOMMISSION (3) SBNHH-1D65C ANTENNAS
- RE-USE DC POWER TRUNKS
- ADD (1) 18 CHANNEL FIBER TRUNK
- RE-USÉ DC6 SQUIDS

0'-0"±
T/CONCRETE

ADD (3) SINGLE MOUNT BRACKETS SUPPLIED BY

GENERAL NOTES:

- 1. THIS ANTENNA ORIENTATION PLAN IS A SCHEMATIC. THE CONTRACTOR SHALL VERIFY TOWER ORIENTATION AND FIELD COORDINATE REQUIRED ADJUSTMENTS TO ACHIEVE THE DESIRED ANTENNA AZIMUTHS.
- 2. ANTENNA CENTERLINE HEIGHT BASED ON TOP OF FOOTING ELEVATION.
- 3. ALL ANTENNAS, CABLES AND MOUNTS SHALL BE INSTALLED IN ACCORDANCE WITH THE STRUCTURAL ENGINEER'S RECOMMENDATIONS IN A MANNER CONSISTENT WITH THE STRUCTURAL ANALYSIS REPORT.
- 4. ALL ANTENNA BRACKETS PER ANTENNA MANUFACTURER, OR EQUAL. CONTRACTOR TO COORDINATE REQUIRED MECHANICAL DOWN TILT WITH AT&T.
- 5. ALL ANTENNA INFORMATION TO BE CONFIRMED WITH AT&T RF DESIGN PRIOR TO INSTALLATION.
- 6. TEP DID NOT PERFORM A STRUCTURAL ANALYSIS ON THE MOUNT. IT IS THE CARRIER'S RESPONSIBILITY TO ENSURE MOUNT CAN SUPPORT ADDITIONAL LOADS.
- 7. EXISTING LOADING INFORMATION PROVIDED BY HIGH PERFORMANCE SERVICES RFDS ID: 4092139.

	EXISTING ANTENNA/CABLE SCHEDULE									
ANT. MARK	SECTOR		MANUFACTURER/ MODEL #	AZIMUTH (TN)	RAD CENTER	ELEC. D-TILT	TMA MODEL	COAX/ CABLE	SURGE PROTECTION	RRU MODEL
A1	ALPHA	LTE 700 LTE AWS LTE 1900	KMW EPBQ-652L8H8	0°	212'	2° 2°		(1) FIBER ₁₈ (2) DC POWER	(1) DC6-48-60-18-8F	(1) RRUS-11 B12 (1) 8843 B2/B66A
A4	ALPHA	UMTS 1900	KATHREIN 741–989	0°	212'	2*	(2) RFS ATM192012-0	(1) ¾" RET (2) 1%" COAX		
A5	ALPHA	*GSM 1900 (INACTIVE)	*COMMSCOPE SBNHH-1D65C	0°	212'			**(2) 1%" COAX		
B1	ВЕТА	LTE 700 LTE AWS LTE 1900	KMW EPBQ-652L8H8	120°	212'	2° 2° 2°		(2) DC POWER	(1) DC6-48-60-18-8F	(1) RRUS-11 B12 (1) 8843 B2/B66A
В4	ВЕТА	UMTS 1900	KATHREIN 741–989	120°	212'	2*	(2) RFS ATM192012-0	(2) 1%" COAX		
B5	ВЕТА	*GSM 1900 (INACTIVE)	*COMMSCOPE SBNHH-1D65C	120°	212'			**(2) 1%" COAX		
C1	GAMMA	LTE 700 LTE AWS LTE 1900	KMW EPBQ-652L8H8	240°	212'	2° 2° 2°				(1) RRUS-11 B12 (1) 8843 B2/B66A
C4	GAMMA	UMTS 1900	KATHREIN 741–989	240°	212'	2°	(2) RFS ATM192012-0	(2) 1%" COAX		
C5	GAMMA	*GSM 1900 (INACTIVE)	*COMMSCOPE SBNHH-1D65C	240°	212'			**(2) 1%" COAX		

* - EXISTING AT&T EQUIPMENT & TECHNOLOGY TO BE REMOVED

** - INACTIVE COAX TO BE REMOVED

PLANS PREPARED FOR: at&t

2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455



PROJECT INFORMATION:

AT&T SITE #: 368-355

1275 NC 55 EAST COATS NC, 27521 (HARNETT COUNTY)

PLANS PREPARED BY:



326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net N.C. LICENSE # P-1403



REV	DATE	ISSUED FOR:
- 1	09-30-20	PRELIMINARY
2	10-06-20	CONSTRUCTION

DRAWN BY: ER CHECKED BY:

SHEET TITLE:

TOWER ELEVATION & EXISTING **ANTENNA SCHEDULE**

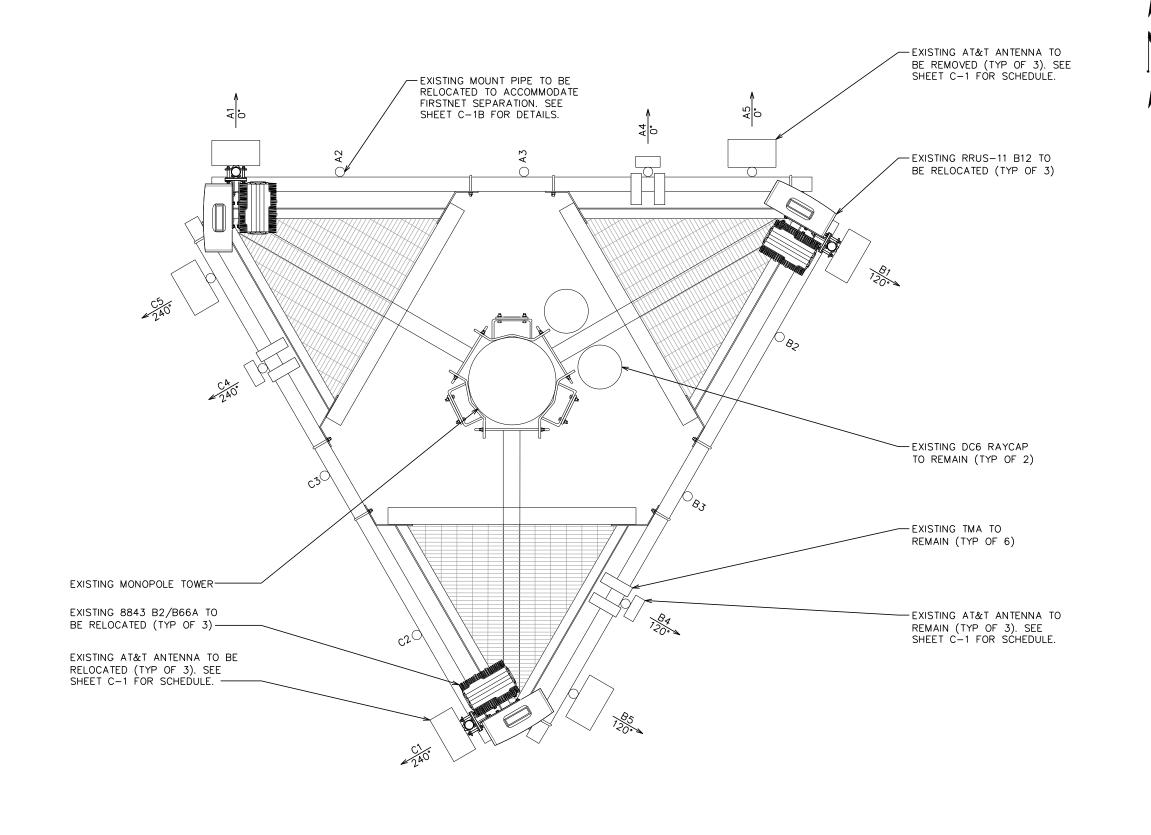
SHEET NUMBER:

REVISION:

TEP#: 43027.4456

EXISTING ANTENNA/CABLE SCHEDULE SCALE: N.T.S

TOWER ELEVATION SCALE: 1" = 20'SCALE IN FEET





2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC 111 EAST SAINT PETER STREET CARENCRO, LA 70520

PROJECT INFORMATION:

AT&T SITE #: 368-355

1275 NC 55 EAST COATS NC, 27521 (HARNETT COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net N.C. LICENSE # P-1403



REV	DATE	ISSUED FOR:
- 1	09-30-20	PRELIMINARY
2	10-06-20	CONSTRUCTION

DRAWN BY: ER CHECKED BY:

SHEET TITLE:

EXISTING ANTENNA ORIENTATION

SHEET NUMBER:

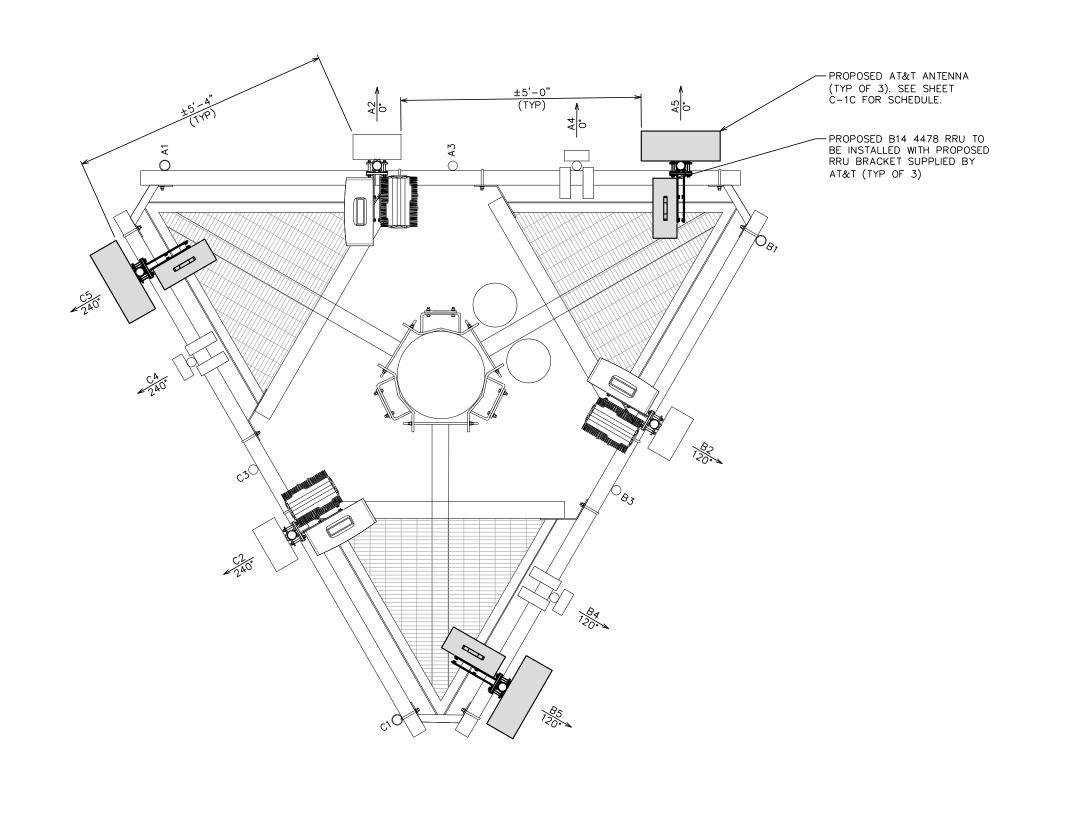
REVISION:

TEP#: 43027.4456

EXISTING ANTENNA ORIENTATION

SCALE IN FEET

SCALE: $\frac{1}{2}$ " = 1'-0"



PLANS PREPARED FOR: at&t

2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455

PLANS PREPARED FOR:

HICH PERFORMANCE SERVICES, LLC 111 EAST SAINT PETER STREET CARENCRO, LA 70520

PROJECT INFORMATION:

AT&T SITE #: 368-355

1275 NC 55 EAST COATS NC, 27521 (HARNETT COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net N.C. LICENSE # P-1403



2	10-06-20	CONSTRUCTION
- 1	09-30-20	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: ER CHECKED BY:

SHEET TITLE:

PROPOSED ANTENNA ORIENTATION

SHEET NUMBER:

TEP#: 43027.4456

PROPOSED ANTENNA ORIENTATION

SCALE: $\frac{1}{2}$ " = 1'-0"

SCALE IN FEET

GENERAL NOTES:

- 1. THIS ANTENNA ORIENTATION PLAN IS A SCHEMATIC. THE CONTRACTOR SHALL VERIFY TOWER ORIENTATION AND FIELD COORDINATE REQUIRED ADJUSTMENTS TO ACHIEVE THE DESIRED ANTENNA AZIMUTHS.
- 2. ANTENNA CENTERLINE HEIGHT BASED ON TOP OF FOOTING ELEVATION.
- 3. ALL ANTENNAS, CABLES AND MOUNTS SHALL BE INSTALLED IN ACCORDANCE WITH THE STRUCTURAL ENGINEER'S RECOMMENDATIONS IN A MANNER CONSISTENT WITH THE STRUCTURAL ANALYSIS REPORT.
- 4. ALL ANTENNA BRACKETS PER ANTENNA MANUFACTURER, OR EQUAL. CONTRACTOR TO COORDINATE REQUIRED MECHANICAL DOWN TILT WITH AT&T.
- 5. ALL ANTENNA INFORMATION TO BE CONFIRMED WITH AT&T RF DESIGN PRIOR TO INSTALLATION.
- 6. TEP DID NOT PERFORM A STRUCTURAL ANALYSIS ON THE MOUNT. IT IS THE CARRIER'S RESPONSIBILITY TO ENSURE MOUNT CAN SUPPORT ADDITIONAL LOADS.
- 7. EXISTING LOADING INFORMATION PROVIDED BY HIGH PERFORMANCE SERVICES RFDS ID: 4092139.
- 8. CABLE LENGTH TAKEN FROM AT&T RFDS. CONTRACTOR TO VERIFY LENGTH PRIOR TO ORDERING MATERIALS.

	PROPOSED ANTENNA/CABLE SCHEDULE												
ANT. MARK	SECTOR	TECH.	STATUS	MANUFACTURER/ MODEL #	DIMS (HxWxD)	AZIMUTH (TN)	RAD CENTER	ELEC. D-TILT	TMA MODEL	COAX/ CABLE	CABLE LENGTH	SURGE PROTECTION	RRU MODEL
A2	ALPHA	(E) LTE 700 (E) LTE AWS (E) LTE 1900	EXISTING	(E) KMW EPBQ-652L8H8	H 99.6" W 12.0" D 6.3"	0°	212'	2° 2° 2°		(1) FIBER ₁₈ (E) (2) DC POWER (E)	262'±	(1) DC6-48-60-18-8F (E)	(1) RRUS-11 B12 (E) (1) 8843 B2/B66A (E)
A4	ALPHA	(E) UMTS 1900	EXISTING	(E) KATHREIN 741–989	H 51.3" W 6.1" D 2.7"	0.	212'	2°	(2) RFS ATM192012-0 (E)	(2) 15%" COAX (E) (1) 3%" RET (E)	262'±		
A5	ALPHA	(P) LTE 700	PROPOSED	(P) ACE XXQLH-654L8H8- IVT-V2	Н 99.0" W 19.7" D 7.5"	0,	212'	2°					(1) B14 4478 (P)
B2	ВЕТА	(E) LTE 700 (E) LTE AWS (E) LTE 1900	EXISTING	(E) KMW EPBQ-652L8H8	H 99.6" W 12.0" D 6.3"	120°	212'	2° 2° 2°		(1) FIBER ₁₈ (P) (2) DC POWER (E)	262'±	(1) DC6-48-60-18-8F (E)	(1) RRUS-11 B12 (E) (1) 8843 B2/B66A (E)
B4	ВЕТА	(E) UMTS 1900	EXISTING	(E) KATHREIN 741–989	H 51.3" W 6.1" D 2.7"	120°	212'	2°	(2) RFS ATM192012-0 (E)	(2) 1%" COAX (E)	262'±		
B5	BETA	(P) LTE 700	PROPOSED	(P) ACE XXQLH-654L8H8- IVT-V2	H 99.0" W 19.7" D 7.5"	120°	212'	2°					(1) B14 4478 (P)
C2	GAMMA	(E) LTE 700 (E) LTE AWS (E) LTE 1900	EXISTING	(E) KMW EPBQ-652L8H8	H 99.6" W 12.0" D 6.3"	240°	212'	2° 2° 2°					(1) RRUS-11 B12 (E) (1) 8843 B2/B66A (E)
C4	GAMMA	(E) UMTS 1900	EXISTING	(E) KATHREIN 741–989	H 51.3" W 6.1" D 2.7"	240°	212'	2°	(2) RFS ATM192012-0 (E)	(2) 1%" COAX (E)	262'±		
C5	GAMMA	(P) LTE 700	PROPOSED	(P) ACE XXQLH-654L8H8- IVT-V2	Н 99.0" W 19.7" D 7.5"	240°	212'	2*					(1) B14 4478 (P)

- (E) EXISTING AT&T EQUIPMENT & TECHNOLOGY
- (P) PROPOSED AT&T EQUIPMENT & TECHNOLOGY

PROPOSED ANTENNA/CABLE SCHEDULE

SCALE: N.T.S



2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455



PROJECT INFORMATION:

AT&T SITE #: 368-355

1275 NC 55 EAST COATS NC, 27521 (HARNETT COUNTY)

PLANS PREPARED BY:



326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net

N.C. LICENSE # P-1403



2	10-06-20	CONSTRUCTION
- 1	09-30-20	PRELIMINARY
REV	DATE	ISSUED FOR:

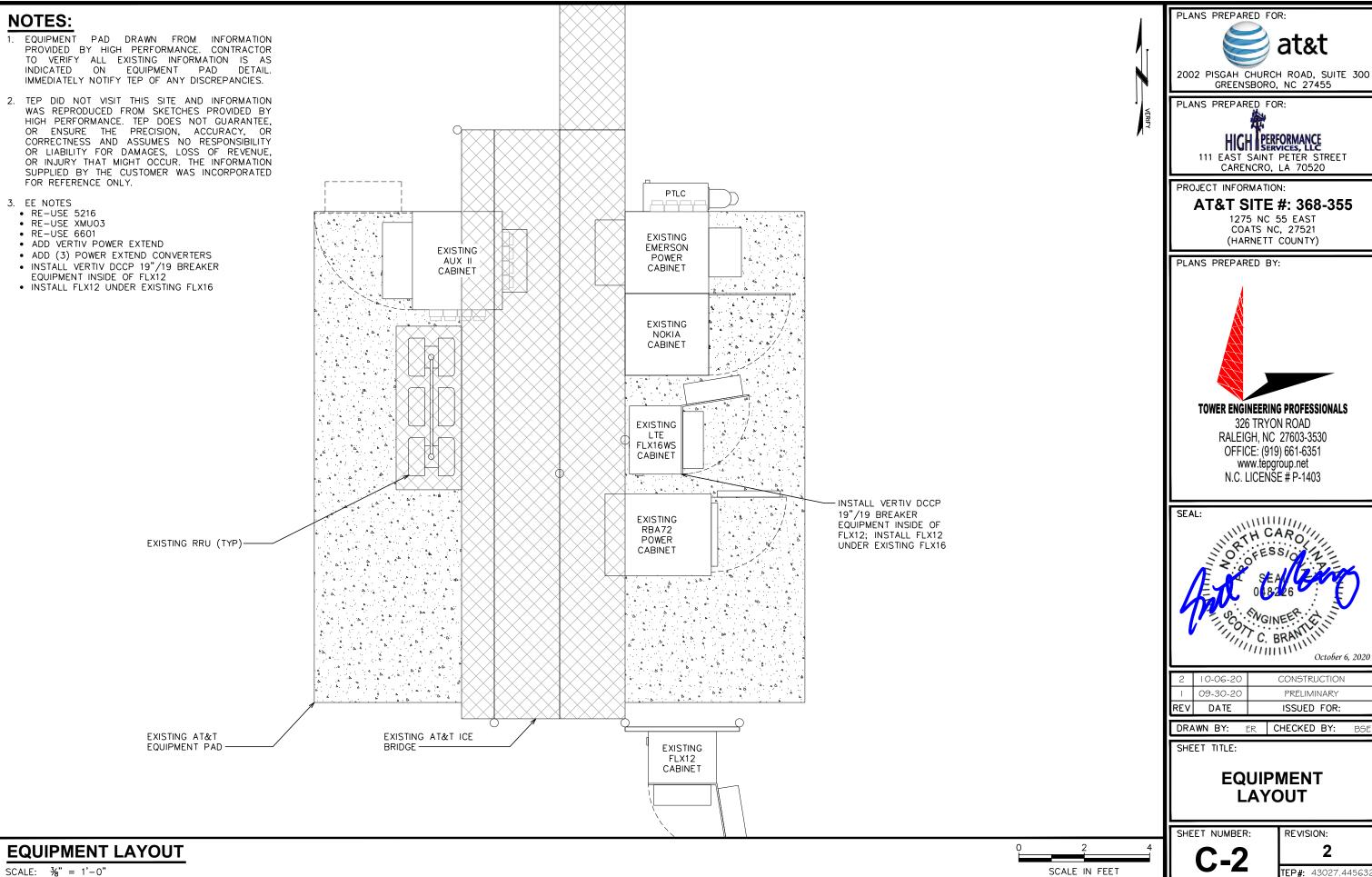
DRAWN BY: ER CHECKED BY: BSE

SHEET TITLE:

PROPOSED ANTENNA/CABLE SCHEDULE

SHEET NUMBER:

REVISION:



at&t

TEP#: 43027.4456

October 6, 2020

CONSTRUCTION PRELIMINARY

ISSUED FOR:

CHECKED BY:

REVISION:

SCOPE:

PROVIDE LABOR, MATERIALS, INSPECTION, AND TESTING TO PROVIDE CODE COMPLIANCE FOR ELECTRIC, TELEPHONE, AND GROUNDING/LIGHTNING SYSTEMS.

- THE INSTALLATION SHALL COMPLY WITH APPLICABLE LAWS AND CODES. THESE INCLUDE BUT ARE NOT LIMITED TO THE LATEST ADOPTED EDITIONS OF:
 - THE NATIONAL ELECTRICAL SAFETY CODE B. THE NATIONAL ELECTRIC CODE - NFPA-70
- D. LOCAL AND STATE AMENDMENTS
- E. THE INTERNATIONAL ELECTRIC CODE -
- IEC (WHERE APPLICABLE) C. REGULATIONS OF THE SERVING UTILITY COMPANY
- 2. PERMITS REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR.
- 3. AFTER COMPLETION AND FINAL INSPECTION OF THE WORK, THE OWNER SHALL BE FURNISHED A CERTIFICATE OF COMPLETION AND APPROVAL.

1. UPON COMPLETION OF THE INSTALLATION, OPERATE AND ADJUST THE EQUIPMENT AND SYSTEMS TO MEET SPECIFIED PERFORMANCE REQUIREMENTS. THE TESTING SHALL BE DONE BY QUALIFIED PERSONNEL.

GUARANTEE:

- 1. IN ADDITION TO THE GUARANTEE OF THE EQUIPMENT BY THE MANUFACTURER, EACH PIECE OF EQUIPMENT SPECIFIED HEREIN SHALL ALSO BE GUARANTEED FOR DEFECTS OF MATERIAL OR WORKMANSHIP OCCURRING DURING A PERIOD OF ONE (1) YEAR FROM FINAL ACCEPTANCE OF THE WORK BY THE OWNER AND WITHOUT EXPENSE TO THE OWNER
- 2. THE WARRANTEE CERTIFICATES & GUARANTEES FURNISHED BY THE MANUFACTURERS SHALL BE TURNED OVER TO THE OWNER.

UTILITY CO-ORDINATION:

1. CONTRACTOR SHALL COORDINATE WORK WITH THE POWER AND TELEPHONE COMPANIES AND SHALL COMPLY WITH THE SERVICE REQUIREMENTS OF EACH UTILITY COMPANY.

EXAMINATION OF SITE:

1. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE JOB AND SHALL FAMILIARIZE HIMSELF WITH THE CONDITIONS AFFECTING THE PROPOSED ELECTRICAL INSTALLATION AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. FAILURE TO COMPLY WITH THE INTENT OF THIS SECTION WILL IN NO WAY RELIEVE THE CONTRACTOR OF PERFORMING THE WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM OR SYSTEMS.

CUTTING, PATCHING AND EXCAVATION:

- COORDINATION OF SLEEVES, CHASES, ETC., BETWEEN SUBCONTRACTORS WILL BE REQUIRED PRIOR TO THE CONSTRUCTION OF ANY PORTION OF THE WORK. CUTTING AND PATCHING OF WALLS, PARTITIONS, FLOORS, AND CHASES IN CONCRETE, WOOD, STEEL OR MASONRY SHALL BE DONE AS PROVIDED ON THE DRAWINGS.
- 2. NECESSARY EXCAVATIONS AND BACKFILLING INCIDENTAL TO THE ELECTRICAL WORK SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWING.
- 3. SEAL PENETRATIONS THROUGH RATED WALLS, FLOORS, ETC., WITH APPROVED METHOD AS LISTED BY UL.

RACEWAYS / CONDUITS GENERAL:

- CONDUCTORS SHALL BE INSTALLED IN LISTED RACEWAYS. CONDUIT SHALL BE RIGID STEEL, EMT, SCH40 PVC, OR SCH80PVC AS INDICATED ON THE DRAWINGS. THE RACEWAY SYSTEM SHALL BE COMPLETE COMPLETE BEFORE INSTALLING CONDUCTORS.
- 2. EXTERIOR RACEWAYS AND GROUNDING SLEEVES SHALL BE SEALED AT POINTS OF ENTRANCE AND EXIT. THE RACEWAY SYSTEM SHALL BE BONDED PER NEC.

EXTERIOR CONDUIT:

- 1. EXPOSED CONDUIT SHALL BE NEATLY INSTALLED AND RUN PARALLEL OR PERPENDICULAR TO STRUCTURAL ELEMENTS. SUPPORTS AND MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL.
- 2. THE CONDUIT SHALL BE RIGID STEEL AT GRADE TRANSITIONS OR WHERE EXPOSED TO DAMAGE.
- 3. UNDERGROUND CONDUITS SHALL BE RIGID STEEL, SCH40 PVC, OR SCH80 PVC AS INDICATED ON THE DRAWINGS.
- 4. BURIAL DEPTH OF CONDUITS SHALL BE AS REQUIRED BY CODE FOR EACH SPECIFIC CONDUIT TYPE AND APPLICATION, BUT SHALL NOT BE LESS THAN THE FROST DEPTH AT THE SITE.
- 5. CONDUIT ROUTES ARE SCHEMATIC. CONTRACTOR SHALL FIELD VERIFY ROUTES BEFORE BID. COORDINATE ROUTE WITH WIRELESS CARRIER AND/OR BUILDING OWNER.

INTERIOR CONDUIT:

- 1. CONCEALED CONDUIT IN WALLS OR INTERIOR SPACES ABOVE GRADE MAY BE EMT OR PVC.
- 2. CONDUIT RUNS SHALL USE APPROVED COUPLINGS AND CONNECTORS. PROVIDE INSULATED BUSHING FOR ALL CONDUIT TERMINATIONS. CONDUIT RUNS IN A WET LOCATION SHALL HAVE WATERPROOF FITTINGS.
- 3. PROVIDE SUPPORTS FOR CONDUITS IN ACCORDANCE WITH NEC REQUIREMENTS. CONDUITS SHALL BE SIZED AS REQUIRED BY NEC.

EQUIPMENT:

- 1. DISCONNECT SWITCHES SHALL BE SERVICE ENTRANCE RATED, HEAVY DUTY TYPE.
- 2. CONTRACTOR SHALL VERIFY MAXIMUM AVAILABLE FAULT CURRENT AND COORDINATE INSTALLATION WITH THE LOCAL UTILITY BEFORE STARTING WORK. CONTRACTOR WILL VERIFY THAT EXISTING CIRCUIT BREAKERS ARE RATED FOR MORE THAN AVAILABLE FAULT CURRENT AND REPLACE AS NECESSARY.
- 3. NEW CIRCUIT BREAKERS SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT AS DETERMINED BY THE LOCAL UTILITY.

CONDUCTORS:

- 1. FURNISH AND INSTALL CONDUCTORS SPECIFIED IN THE DRAWINGS, CONDUCTORS SHALL BE COPPER AND SHALL HAVE TYPE THWN (MIN) (75° C) INSULATION, RATED FOR 600 VOLTS.
- 2. THE USE OF ALUMINUM CONDUCTORS SHALL BE LIMITED TO THE SERVICE FEEDERS INSTALLED BY THE UTILITY.
- 3. CONDUCTORS SHALL BE PROVIDED AND INSTALLED AS FOLLOWS:
 - A. MINIMUM WIRE SIZE SHALL BE #12 AWG.
 - CONDUCTORS SIZE #8 AND LARGER SHALL BE STRANDED. CONDUCTORS SIZED #10 AND #12 MAY BE SOLID OR STRANDED.
 - CONNECTION FOR #10 AWG #12 AWG SHALL BE BY TWISTING TIGHT AND INSTALLING INSULATED PRESSURE OR WIRE NUT CONNECTIONS.
 - CONNECTION FOR #8 AWG AND LARGER SHALL BE BY USE OF STEEL CRIMP-ON SLEEVES WITH NYLON INSULATOR.
- 3. CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC STANDARDS.

UL COMPLIANCE:

1. ELECTRICAL MATERIALS, DEVICES, CONDUCTORS, APPLIANCES, AND EQUIPMENT SHALL BE LABELED/LISTED BY UL OR ACCEPTED BY JURISDICTION (I.E., LOCAL COUNTY OR STATE) APPROVED THIRD PARTY TESTING AGENCY.

EGR

FSC

PNL

- 1. ELECTRICAL NEUTRALS, RACEWAYS AND NON-CURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT AND ASSOCIATED ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC ARTICLE 250. THIS SHALL INCLUDE NEUTRAL CONDUCTORS, CONDUITS, SUPPORTS, CABINETS, BOXES, GROUND BUSSES, ETC. THE NEUTRAL CONDUCTOR FOR EACH SYSTEM SHALL BE GROUNDED AT A SINGLE POINT.
- 2. PROVIDE GROUND CONDUCTOR IN RACEWAYS PER NEC.

ISOLATED GROUND BAR

NATIONAL ELECTRIC CODE

KILOWATTS

PHASE

PANEL

INTERIOR GROUND RING (HALO)

PERSONAL COMMUNICATION SYSTEM

- 3. PROVIDE BONDING AND GROUND TO MEET NFPA 780 "LIGHTNING PROTECTION" AS A MINIMUM.
- 4. PROVIDE GROUNDING SYSTEM AS INDICATED ON THE DRAWINGS, AS REQUIRED BY THE NATIONAL ELECTRIC CODE, RADIO EQUIPMENT MANUFACTURERS, AND MOTOROLA R56 (AS APPLICABLE).

ABBREVIATIONS AND LEGEND

PNLBD - PANELBOARD AMPERE ABOVE FINISHED GRADE PVC RIGID NON-METALLIC CONDUIT ATS - AUTOMATIC TRANSFER SWITCH RGS - RIGID GALVANIZED STEEL CONDUIT AMERICAN WIRE GAUGE SW SWITCH BARE COPPER WIRE TGB TOWER GROUND BAR BELOW FINISHED GRADE UL UNDERWRITERS LABORATORIES BREAKER VOLTAGE WATTS CONDUIT CKT XFMR - TRANSFORMER CIRCUIT TRANSMITTER DISC XMTR DISCONNECT

 EXTERNAL GROUND RING ELECTRIC METALLIC TUBING ---E--- UNDERGROUND ELECTRICAL CONDUIT FLEXIBLE STEEL CONDUIT GENERATOR ---T--- UNDERGROUND TELEPHONE CONDUIT GLOBAL POSITIONING SYSTEM KILOWATT-HOUR METER 凸 GROUND

UNDERGROUND BONDING AND GROUNDING CONDUCTOR

GROUND ROD CADWELD

GROUND ROD WITH INSPECTION WELL

PLANS PREPARED FOR: at&t 2002 PISGAH CHURCH ROAD, SUITE 300

PLANS PREPARED FOR: HIGH PERFORMANCE 111 EAST SAINT PETER STREET CARENCRO, LA 70520

GREENSBORO, NC 27455

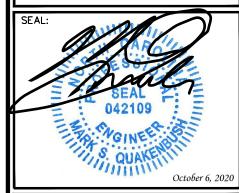
PROJECT INFORMATION:

AT&T SITE #: 368-355

1275 NC 55 EAST COATS NC, 27521 (HARNETT COUNTY)



326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net N.C. LICENSE # P-1403



0-06-2 CONSTRUCTION **PRELIMINARY** 09-30-20 REV DATE ISSUED FOR:

CHECKED BY: DRAWN BY: ER

SHEET TITLE:

ELECTRICAL NOTES

SHEET NUMBER:

REVISION:

GENERAL NOTES:

- CONTRACTOR SHALL COORDINATE INCOMING SERVICES WITH LOCAL UTILITIES PRIOR TO TRENCHING.
- 2. ALL CONDUCTORS SHALL BE COPPER, 75 DEGREES C RATED, AND CONDUCTOR INSULATION SHALL BE THWN OR THHN
- 3. ALL TERMINATIONS SHALL BE LISTED AND IDENTIFIED FOR USE WITH 75°C RATED CONDUCTORS OPERATING AT 75°C.
- GROUND FAULT PROTECTION REQUIRED FOR UTILITY RECEPTACLES.
- 5. SERVICE NEUTRAL SHALL BE GROUNDED AT ONE LOCATION ONLY.
- 6. WHITE/NEUTRAL, GREEN/GROUND SHALL BE MAINTAINED THROUGHOUT THE SITE ELECTRICAL SYSTEM (TAPE WILL NOT BE ACCEPTABLE).
- 7. EQUIPMENT LOCATED OUTSIDE OR EXPOSED TO MOISTURE SHALL BE NEMA 3R RATED.
- CONTRACTOR SHALL USE SCHEDULE 80 PVC CONDUIT THROUGHOUT, UNLESS OTHERWISE NOTED.
- 9. ALL NEWLY INSTALLED EQUIPMENT SHALL BE RATED AT 10K AIC MINIMUM. HIGHER RATINGS SHALL BE REQUIRED WHERE AVAILABLE FAULT CURRENT EXCEEDS THIS VALUE. EXACT FAULT CURRENT AVAILABLE SHALL BE COORDINATED WITH LOCAL UTILITY BASED ON EXACT CONDITIONS (XFMR SIZE, PERCENT IMPEDANCE, LENGTH OF CONDUCTORS, ETC).
- 10. CONTRACTOR TO VERIFY REPLACEMENT EQUIPMENT DOES NOT EXCEED SYSTEM CAPABILITY.

ELECTRICAL SCOPE:

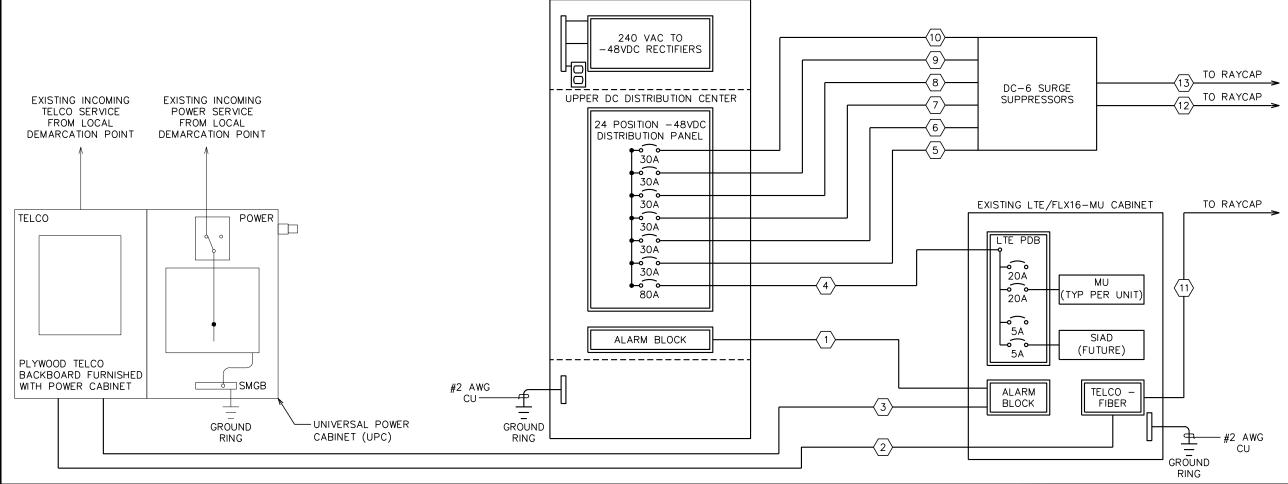
- NEW ANTENNA'S. SEE SHEET E-3 FOR DETAILS
- 2. NEW RRU's. SEE SHEET E-3 FOR DETAILS.
- 3. CONNECT EXISTING BREAKERS TO DC6 SURGE SUPPRESSOR. SEE MARK 5-7 ON THE CONDUIT SCHEDULE.
- 4. CONTRACTOR TO INSTALL THE FOLLOWING EQUIPMENT TO SUPPORT LTE 4C:

 - RE-USE 5216RE-USE XMU03
 - RE-USE 6601
 - ADD VERTIV POWER EXTEND
 - ADD (3) POWER EXTEND CONVÈRTERS
 - INSTALL VERTIV DCCP 19"/19 BREAKER EQUIPMENT INSIDE OF
 - INSTALL FLX12 UNDER EXISTING FLX16

	CABLE AND CONDUIT SCHEDULE							
MARK	CON QUANT.	DUIT SIZE	QUANT.	CABL SIZE	.E GROUND SIZE	REMARKS		
1	1	2"		BELDIN C		ALARM CONTROL FROM RBA72 TO LTE/FLX16-MU.		
2	1	2"		FIBER 12	-PAIR	FIBER FROM UPC TO LTE/FLX16-MU.		
3	1	2"	BELDIN CABLES			ALARM CONTROL FROM UPC TO LTE/FLX16-MU. IMC REQUIRED.		
4	1	2"	1	#2	#2	DC POWER FROM RBA72 TO LTE PDB		
5			1	#8	#8	DC POWER FROM RBA72 TO DC-6 SURGE SUPPRESSOR		
6	1	2"	1	#8	#8	DC POWER FROM RBA72 TO DC-6 SURGE SUPPRESSOR		
7			1	#8	#8	DC POWER FROM RBA72 TO DC-6 SURGE SUPPRESSOR		
8			1	#8	#8	DC POWER FROM RBA72 TO DC-6 SURGE SUPPRESSOR		
9	1	2"	1	#8	#8	DC POWER FROM RBA72 TO DC-6 SURGE SUPPRESSOR		
(10)			1	#8	#8	DC POWER FROM RBA72 TO DC-6 SURGE SUPPRESSOR		
(11)	1	2"	FIBER 18-PAIR			FIBER FROM LTE/FLX16-MU TO RAYCAP		
(12)	1	2"	3PR DC #8 AWG			DC POWER FROM DC-6 SURGE SUPPRESSOR TO RAYCAP		
(13)	1	2"	3	3PR DC #	8 AWG	DC POWER FROM DC-6 SURGE SUPPRESSOR TO RAYCAP		

*CARLE AND CONDUIT SCHEDULE

*ALL CIRCUITS AND CABLES IN CHART EXISTING UNLESS OTHERWISE NOTED



EXISTING RBA72 CABINET

TYPICAL LTE ONE-LINE DIAGRAM

SCALE: N.T.S.



2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455



PROJECT INFORMATION:

AT&T SITE #: 368-355

1275 NC 55 EAST COATS NC, 27521 (HARNETT COUNTY)



RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net N.C. LICENSE # P-1403



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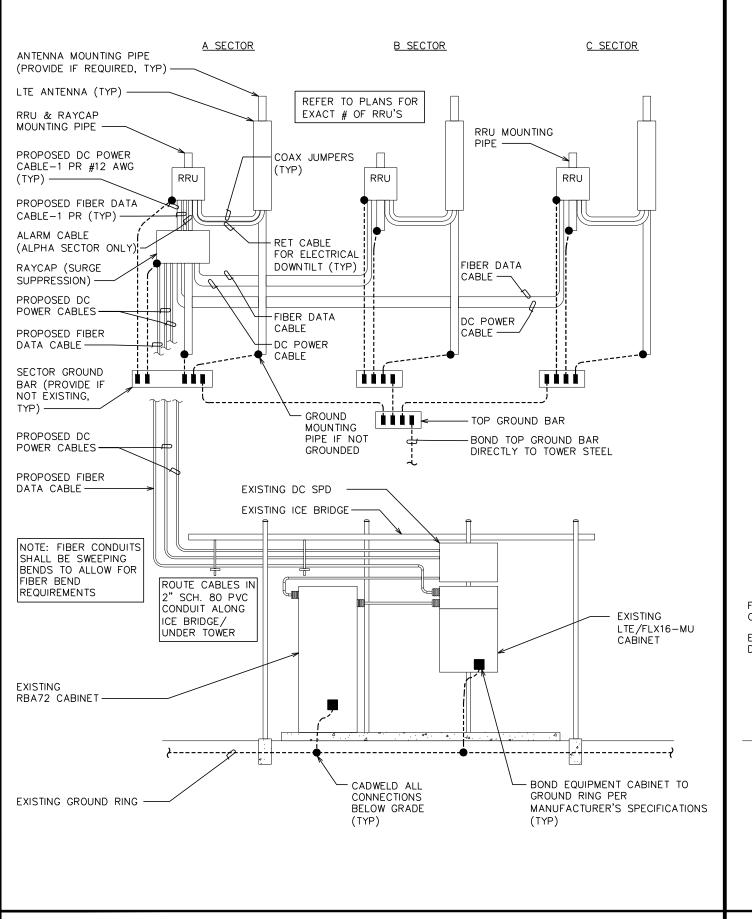
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SHEET TITLE:

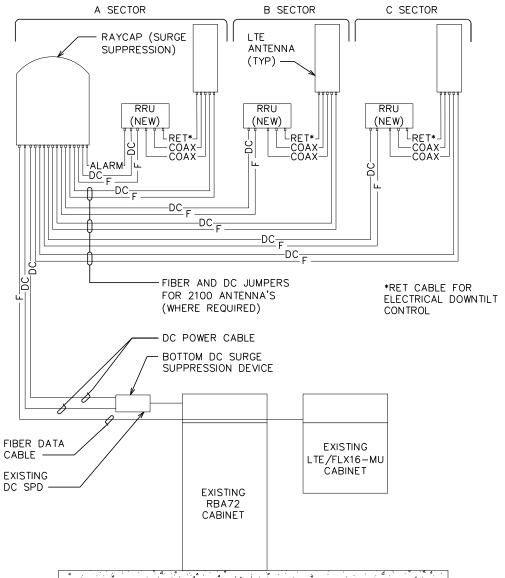
TYPICAL LTE **ONE-LINE DIAGRAM**

SHEET NUMBER: **E-2**

REVISION:



NOTE: REFER TO SHEET C-1C FOR ADDITIONAL ANTENNA INFORMATION REGARDING POSSIBLE ADDITIONAL AND FUTURE ANTENNAS AND RRUS





2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455

PLANS PREPARED FOR: HIGH PERFORMANCE

111 EAST SAINT PETER STREET CARENCRO, LA 70520

PROJECT INFORMATION:

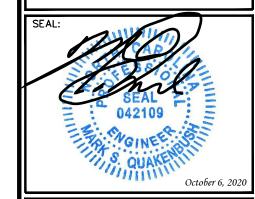
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PLANS PREPARED BY:



326 TRYON ROAD RALEIGH, NC 27603-3530 OFFICE: (919) 661-6351 www.tepgroup.net N.C. LICENSE # P-1403



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TYPICAL LTE **RISER DIAGRAM**

SHEET NUMBER:

REVISION:

TEP#: 43027.4456

E-3

TYPICAL CABLE AND GROUNDING RISER DIAGRAM

SCALE: N.T.S.

TYPICAL RF RISER DIAGRAM

SCALE: N.T.S.