AT&T SITE NUMBER :	**368-762**
PROJECT DESCRIPTION:	**CO-LOCATION ON AN EXISTING SELF-SUPPORT TOWER**
TOWER TYPE:	**290.6' SELF-SUPPORT**
SITE ADDRESS:	**538 SMITH PRINCE ROAD FUQUAY VARINA, NC 27526 (HARNETT COUNTY)**
JURISDICTION:	**HARNETT COUNTY**
AREA OF CONSTRUCTION:	**360 ± SQ. FT. (LEASE AREA)**
PRESENT OCC. TYPE:	**TELECOMMUNICATIONS FACILITY**
CURRENT ZONING:	**RA-30**
PIN #:	**0634-60-0332.000**

PROJECT INFORMATION

LATITUDE:	**N 35° 30' 30.718" (35.508532849)**
LONGITUDE:	**W 78° 52' 47.745" (-78.879929248)**
GROUND ELEVATION:	**±331.7' (AMSL)**

TOWER COORDINATES

LOCATION MAP

PROJECT INFORMATION:

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(HARNETT COUNTY)

AT&T SITE #: 368-762
FA LOCATION CODE: 12682141

TOWER OWNER:

NAME:	**AMERICAN TOWER CORPORATION**
ADDRESS:	**10 PRESIDENTIAL WAY**
CITY, STATE, ZIP:	**WOBURN, MA 01801**
CONTACT:	**MARK LANDERS**
PHONE:	**(336) 287-9779**
SITE ID:	**280860**
SITE NAME:	**SMITH PRINCE NC**

APPLICANT/LESSEE:

NAME:	**AT&T MOBILITY**
ADDRESS:	**2002 PISGAH CHURCH RD, STE 300**
CITY, STATE, ZIP:	**GREENSBORO, NC 27455**
CONTACT:	**KEN WELKER**
PHONE:	**(336) 549-9987**
NOC #:	**(800) 638-2822**

SITE PROJECT MANAGER:

NAME:	**HIGH PERFORMANCE SERVICES, LLC**
ADDRESS:	**3001 MILLS ST**
CITY, STATE, ZIP:	**LAFAYETTE, LA 70507**
CONTACT:	**ALLYSON POE**
PHONE:	**(919) 961-1747**

CIVIL ENGINEER:

NAME:	**TOWER ENGINEERING PROFESSIONALS**
ADDRESS:	**326 TRYON ROAD**
CITY, STATE, ZIP:	**RALEIGH, NC 27603**
CONTACT:	**SCOTT C. BRANTLEY, P.E.**
PHONE:	**(919) 661-6351**

ELECTRICAL ENGINEER:

NAME:	**TOWER ENGINEERING PROFESSIONALS**
ADDRESS:	**326 TRYON ROAD**
CITY, STATE, ZIP:	**RALEIGH, NC 27603**
CONTACT:	**MARK S. QUAKENBUSH, P.E.**
PHONE:	**(919) 661-6351**

CONTACT INFORMATION

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 (2018 EDITION)
2. NORTH CAROLINA CODE COUNCIL
3. ANSI/TIA-222-H
4. 2017 NCEC (2017 NEC & NC ADDENDUM)
5. LOCAL BUILDING CODE
6. CITY/COUNTY ORDINANCES

CODE COMPLIANCE

UTILITIES:

POWER COMPANY:	**DUKE ENERGY PROGRESS**
CONTACT:	**CUSTOMER SERVICE**
PHONE:	**(800) 777-9898**
XFMR # NEAR SITE:	**18CH29 50 Z**
TELEPHONE COMPANY:	**SPRINT**
CONTACT:	**CUSTOMER SERVICE**
PHONE:	**(800) 743-3793**
PHONE # NEAR SITE:	**(919) 427-3104**
PEDESTAL # NEAR SITE:	**1412RP133E**

PROPERTY OWNER:

NAME:	**LINDA L. SEARS**
ADDRESS:	**2434 OAK RIDGE RIVER ROAD**
CITY, STATE, ZIP:	**FUQUAY VARINA, NC 27526**
CONTACT:	**LINDA L. SEARS**
PHONE:	**UNKNOWN**

APPLICANT/LESSEE:

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455
OFFICE: (336) 286-6163
NOC #: (800) 638-2822

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC

3001 MILLS STREET
LAFAYETTE, LA 70507

SHEET	DESCRIPTION	REV
T1	TITLE SHEET	3
T2-T6	APPENDIX B	3
N1	GENERAL NOTES	3
SP1	SITE PLAN	3
C1	PROPOSED COMPOUND DETAIL	3
C2	TOWER ELEVATION	3
C3	WIC DETAILS	3
C4-C4A	FOUNDATION DETAILS	3
C5	ICE BRIDGE DETAILS I	3
C6	ICE BRIDGE DETAILS II	3
C7A	GENERATOR SPECIFICATIONS I	3
C7B	GENERATOR SPECIFICATIONS II	3
C8	GENERATOR FOUNDATION & SIGNAGE DETAILS	3
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E3	SERVICE ROUTING PLAN	3
E4	GROUNDING PLAN	3
E5	GROUNDING DETAILS I	3
E6	GROUNDING DETAILS II	3
	APPENDIX	
	PROPOSED MOUNT SPECIFICATIONS	

INDEX OF SHEETS

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:
3	10-28-20	CONSTRUCTION
2	10-23-20	PRELIMINARY
1	10-15-20	PRELIMINARY
0	09-23-20	PRELIMINARY

DRAWN BY: GLB | CHECKED BY: JKW

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048220 ENGINEER SCOTT C. BRANTLEY

October 28, 2020

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 042109 ENGINEER MARK S. QUAKENBUSH

October 28, 2020

SHEET NUMBER: **T-1**

REVISION: **3**

TEP#: 47297.444335

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)

Name of Project: AT&T 368-762 FA# 12682141
Address: 538 SMITH PRINCE ROAD, FUQUAY VARINA, NC Zip Code 27526
Owner/Authorized Agent: KEN WELKER (AT&T) Phone # (336) 549 - 9987 E-Mail
Owned By: ☐ City/County ☒ Private ☐ State
Code Enforcement Jurisdiction: ☐ City ☒ County HARNETT ☐ State

CONTACT: Tower Engineering Professionals

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural				( )	
Civil	Tower Engineering Professionals	Scott C. Brantley	048226	(919) 661-6351	sbrantley@tepgroup.net
Electrical	Tower Engineering Professionals	Mark S. Quakenbush	042109	(919) 661-6351	mquakenbush@tepgroup.net
Fire Alarm				( )	
Plumbing				( )	
Mechanical				( )	
Sprinkler-Standpipe				( )	
Structural				( )	
Retaining Walls >5' High				( )	
Other				( )	

("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: ☐ New Building ☒ Addition ☐ Renovation
☐ 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: ☐ Prescriptive ☐ Repair ☐ Chapter 14
Alteration: ☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use

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

OCCUPANCY CATEGORY (Table 1604.5): **Current:** ☐ I ☒ II ☐ III ☐ IV
Proposed: ☐ I ☒ II ☐ III ☐ IV

BASIC BUILDING DATA
Construction Type: ☒ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
(check all that apply) ☐ I-B ☐ II-B ☐ III-B ☐ V-B
Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☒ No ☐ Yes **Flood Hazard Area:** ☒ No ☐ Yes
Special Inspections Required: ☒ No ☐ Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

Gross Building Area Table

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor		N/A	
2nd Floor		N/A	
Mezzanine		N/A	
1st Floor		96 SQ FT CONCRETE PAD	
Basement		N/A	
TOTAL		96 SQ FT CONCRETE PAD	

ALLOWABLE AREA

Primary Occupancy Classification(s): Select one Select one Select one Select one Select one Select one
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 Condition ☐ 1 ☐ 2
☐ I-2 Condition ☐ 1 ☐ 2
☐ I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ I-4
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 ☐

Accessory Occupancy Classification(s): N/A
Incidental Uses (Table 509): N/A
Special Uses (Chapter 4 – List Code Sections): N/A
Special Provisions: (Chapter 5 – List Code Sections): N/A
Mixed Occupancy: ☒ No ☐ Yes Separation: Exception:

☐ Non-Separated Use (508.3) - The required ty… the building shall be determined by applying the … is for each of the applicable occupanci… The most restrictive type of constru… ll apply to the entire building.

☐ Separated Use (508.4) - See belo… or each story, the area of the occupancy shall be su… os of the actual floor area of each use divided by the … each use shall not exceed 1.

Actual Area of Occupan… / Allowable Area of Occu… *…rea of Occupancy B / …le Area of Occupancy B* ≤ 1

_____ + ….. = _____ ≤ 1.00

N/A
NOT A BUILDING

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

PLANS PREPARED FOR:
HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:
AT&T SITE #: 368-762
538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(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

SEAL:
NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY
October 28, 2020

REV	DATE	ISSUED FOR:
3	10-28-20	CONSTRUCTION
2	10-23-20	PRELIMINARY

DRAWN BY: GLB CHECKED BY: JKW

SHEET TITLE:
APPENDIX B

SHEET NUMBER: **T-2**
REVISION: 3
TEP#: 47297.444335

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]

N/A
NOT A BUILDING

[1] Frontage area increases from Section 506.2 are
a. Perimeter which fronts a public way feet minimum width = _____ (F)
b. Total Building Perimeter
c. Ratio (F/P) = _____ (F/
d. W = Minimum width of publ W)
e. Percent of frontage increa x W/30 = _____ (%)

[2] Unlimited area applicable under con 507.

[3] Maximum Building Area = total numb n the building x D (maximum3 stories) (506.2).

[4] The maximum area of open parking garag t comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.6.1.

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

ALLOWABLE HEIGHT

	ALLOWABLE	N PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)			
Building Height in Stories (Table 504.4)			

[1] Provide code reference if the "Shown on Plans" quantity is not b

N/A
NOT A BUILDING

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/_____* REDUCTION)	DETAIL # AND SHE	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses							
Bearing Walls							
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing Walls and Partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction Including supporting beams and joists							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy/Fire Barrier Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

N/A
NOT A BUILDING

N/A
NOT A BUILDING

* Indicate section number permitting reduction

2018 NC Administrative Code and Policies

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

PLANS PREPARED FOR:
HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(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

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY

October 28, 2020

REV	DATE	ISSUED FOR:
3	10-28-20	CONSTRUCTION
2	10-23-20	PRELIMINARY

DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:

APPENDIX B

SHEET NUMBER: **T-3**

REVISION: 3

TEP#: 47297.444335

PERCENTAGE OF WALL OPENING CALCULATIONS

Fire Separation Distance (Feet) from Property Lines	Degree of openings Protection (Table 705.8)	Allowable area (%)	Actual shown on plans (%)

N/A
NOT A BUILDING

LIFE [illegible] REQUIREMENTS

Emergency Lighting:
Exit Signs:
Fire Alarm:
Smoke Detection Systems: ☐ [illegible] ☐ Yes ☐ Partial _____
Panic Hardware: ☐ [illegible] ☐ Yes

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[illegible] property lines (705.8)
- ☐ Occupancy Use for each area as it relates to occupant loa[illegible]tion (Table 1004.1.2)
- ☐ Occupant loads for each area
- ☐ Exit access travel distances (1017)
- ☐ Common path of travel distances (Tables 1006
- ☐ Dead end lengths (1020.4)
- ☐ Clear exit widths for each exit door
- ☐ Maximum calculated occupant load [illegible] can accommodate based on egress width (1005.3)
- ☐ Actual occupant load for each exi[illegible]
- ☐ A separate schematic plan ind[illegible] floor/ceiling and/or roof structure is provided for purposes of occupancy sep[illegible]
- ☐ Location of doors with pani[illegible]10)
- ☐ Location of doors with delayed [illegible] and the amount of delay (1010.1.9.7)
- ☐ Location of doors with electromag[illegible]gress locks (1010.1.9.9)
- ☐ Location of doors equipped with hold-open devices
- ☐ 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

N/A
NOT A BUILDING

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

Total Units	Accessible Units Required	Accessible Units Provided	Type A Units Required	Type A Units Provi[illegible]	[illegible] B	Type B Units Provided	Total accessible Units provided

N/A
NOT A BUILDING

AC[illegible]

Lot or Parking Area	Total # of Parking [illegible]		[illegible] Accessible Spaces Provided			Total # Accessible Provided
	Required		[illegible]th aisle	Van spaces with 132" access aisle	Van spaces with 8' access aisle	
Total						

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

Use		Watercloset Male	Watercloset Female	Watercloset Unisex	Urinals	Lavatories Male	Lavatories Fem[illegible]	Lavatories Unisex	Showers /Tubs	Drinking Fountains Regular	Drinking Fountains Accessible
Space	Exist'g										
	New										
	Req'd										

N/A
NOT A BUILDING

SPE[illegible]

Special approval: (Local Jurisdiction, Dep[illegible]C, DPI, DHHS, etc., describe below)

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

PLANS PREPARED FOR:
HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:
AT&T SITE #: 368-762
538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(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

SEAL:
NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY
October 28, 2020

REV	DATE	ISSUED FOR:
3	10-28-20	CONSTRUCTION
2	10-23-20	PRELIMINARY

DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:
APPENDIX B

SHEET NUMBER: **T-4**
REVISION: 3
TEP#: 47297.444335

ENERGY SUMMARY

ENERGY REQUIREMENTS:
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 reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ N (remainder of this section is not applicable)

Exempt Building: ☐ No ☐ Yes (Provide code or

Climate Zone: ☐ 3A ☐ 4A ☐

Method of Compliance: Energy ☐ Prescriptive
ASH ance ☐ Prescriptive
rce here)_____

N/A
NOT A BUILDING

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 each assembly: _____

Exterior Walls (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Openings (windows or doors with glazing)
U-Value of assembly: _____
Solar heat gain coefficient: _____
projection factor:
Door R-Values:

N/A
NOT A BUILDING

Walls below grade (each assembly)
Description of assembly: _____
U-Value of total assembly
R-Value of insulation

Floors over uncondition y)
Description of asse _____
U-Value of total asse _____
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)

DESIGN LOADS:

Importance Factors: Snow (I_S) _____
Seismic (I_E) _____

Live Loads: Roof _____ psf
Mezzanine _____ psf
Floor _____ p

Ground Snow Load: _____ psf

Wind Load: Basic Wind Speed (E-7)
Exposure Category

N/A
NOT A BUILDING

SEISMIC DESIGN CATEGORY: ☐ D

Provide the following Seismic Design
Risk Category (Table 160 ☐ III ☐ IV
Spectral Response Acc _____ %g S_1_____ %g
Site Classification (ASCE ☐ B ☐ C ☐ D ☐ E ☐ F
Data Source: ☐ Test ☐ Presumptive ☐ Historical Data

Basic structural system
☐ earing 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, Mechanical, Components anchored? ☐ Yes ☐ No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind ☐

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity _____ psf
Pile size, type, and capacity _____

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

PLANS PREPARED FOR:
HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(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

SEAL:
NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY
October 28, 2020

REV	DATE	ISSUED FOR:
3	10-28-20	CONSTRUCTION
2	10-23-20	PRELIMINARY

DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:
APPENDIX B

SHEET NUMBER: **T-5**
REVISION: 3
TEP#: 47297.444335

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

N/A
NOT A BUILDING

Thermal Zone

winter dry bulb: _____
summer dry bulb: _____

Interior design conditions

winter dry bulb: _____
summer dry bulb: _____
relative humidity: _____

Building heating load: _____

Building cooling load: _____

Mechanical Spacing Conditioning System

Unitary
- description of unit: _____
- heating efficiency: _____
- cooling efficiency: _____
- size category of unit: _____

Boiler
- Size category. If oversized, state reason.: _____

Chiller
- Size category. If oversized, state reason.: _____

List equipment efficiencies: _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

N/A
NOT A BUILDING

Method of Compliance: Energy Code ☐ Perf… ☐ Prescriptive
ASHRAE 90.1 ☐ P… Prescriptive

Lighting schedule (each fixture type)

lamp type required in fixtur…
number of lamps in fixtu…
ballast type used in th…
number of ballasts …
total wattage pe…
total interior w… …owed (whole building or space by space)
total exterior wat… …allowed

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

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

PLANS PREPARED FOR:
HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:
AT&T SITE #: 368-762
538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(HARNETT COUNTY)

PLANS PREPARED BY:
TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
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OFFICE: (919) 661-6351
www.tepgroup.net
N.C. LICENSE # P-1403

SEAL:
NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY
October 28, 2020

REV	DATE	ISSUED FOR:
3	10-28-20	CONSTRUCTION
2	10-23-20	PRELIMINARY

DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:
APPENDIX B

SHEET NUMBER: **T-6**
REVISION: **3**
TEP#: 47297.444335

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-H. 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.

18. 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.

GENERAL NOTES

PLANS PREPARED FOR:

at&t

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(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

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY

October 28, 2020

REV	DATE	ISSUED FOR:
3	10-28-20	CONSTRUCTION
2	10-23-20	PRELIMINARY

DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:

GENERAL NOTES

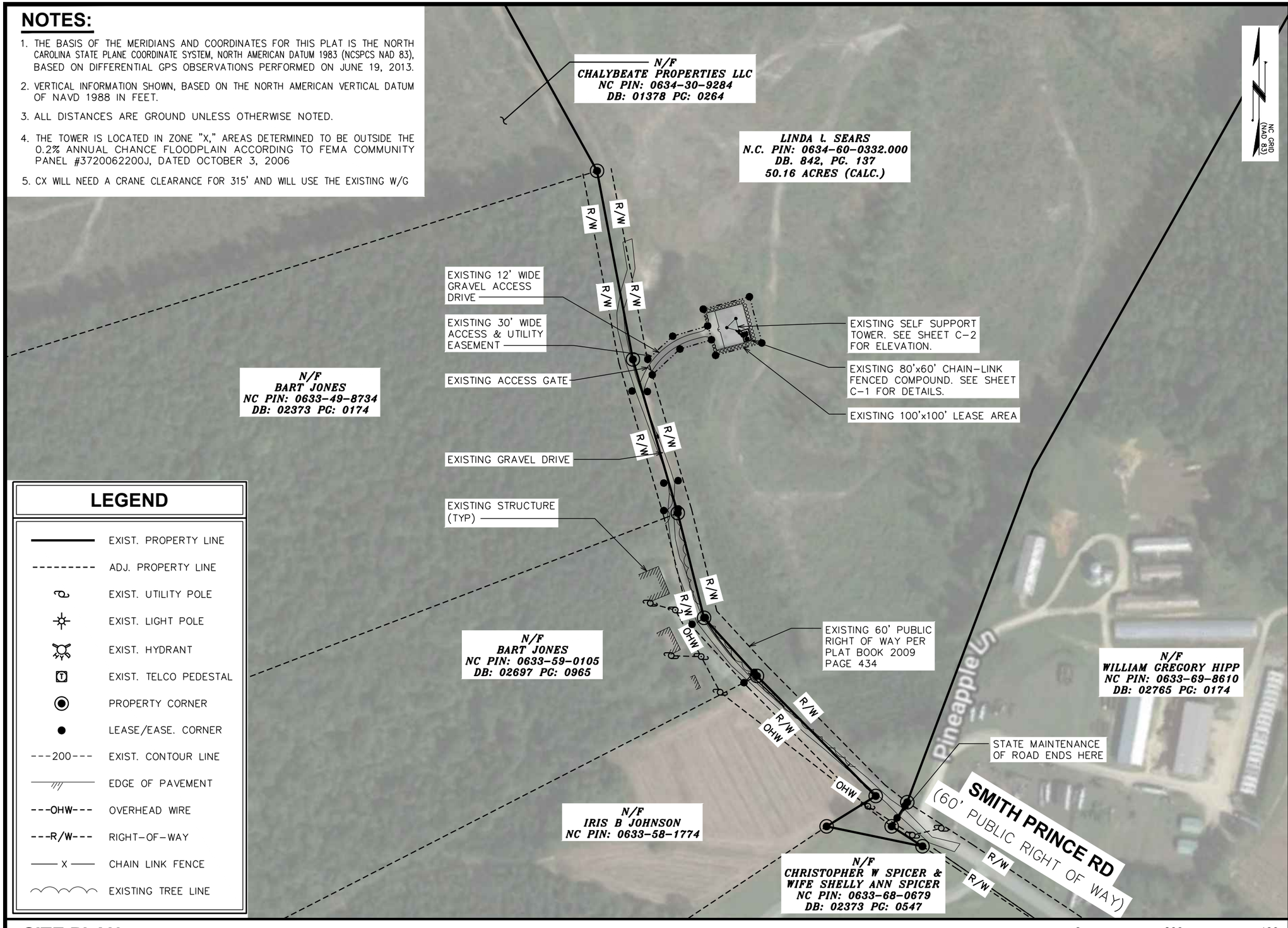
SHEET NUMBER: **N-1**

REVISION: **3**

TEP #: 47297.444335

NOTES:

1. THE BASIS OF THE MERIDIANS AND COORDINATES FOR THIS PLAT IS THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM 1983 (NCSPCS NAD 83), BASED ON DIFFERENTIAL GPS OBSERVATIONS PERFORMED ON JUNE 19, 2013.
2. VERTICAL INFORMATION SHOWN, BASED ON THE NORTH AMERICAN VERTICAL DATUM OF NAVD 1988 IN FEET.
3. ALL DISTANCES ARE GROUND UNLESS OTHERWISE NOTED.
4. THE TOWER IS LOCATED IN ZONE "X," AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEMA COMMUNITY PANEL #3720062200J, DATED OCTOBER 3, 2006
5. CX WILL NEED A CRANE CLEARANCE FOR 315' AND WILL USE THE EXISTING W/G



LEGEND

- EXIST. PROPERTY LINE
- ADJ. PROPERTY LINE
- EXIST. UTILITY POLE
- EXIST. LIGHT POLE
- EXIST. HYDRANT
- EXIST. TELCO PEDESTAL
- PROPERTY CORNER
- LEASE/EASE. CORNER
- ---200--- EXIST. CONTOUR LINE
- EDGE OF PAVEMENT
- ---OHW--- OVERHEAD WIRE
- ---R/W--- RIGHT-OF-WAY
- ——X—— CHAIN LINK FENCE
- EXISTING TREE LINE

SITE PLAN

SCALE: 1" = 200'

0 200 400

SCALE IN FEET

PLANS PREPARED FOR:

at&t

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(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

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048210 ENGINEER SCOTT C. BRANTLEY

October 28, 2020

REV	DATE	ISSUED FOR:
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2	10-23-20	PRELIMINARY

DRAWN BY: GLB CHECKED BY: JKW

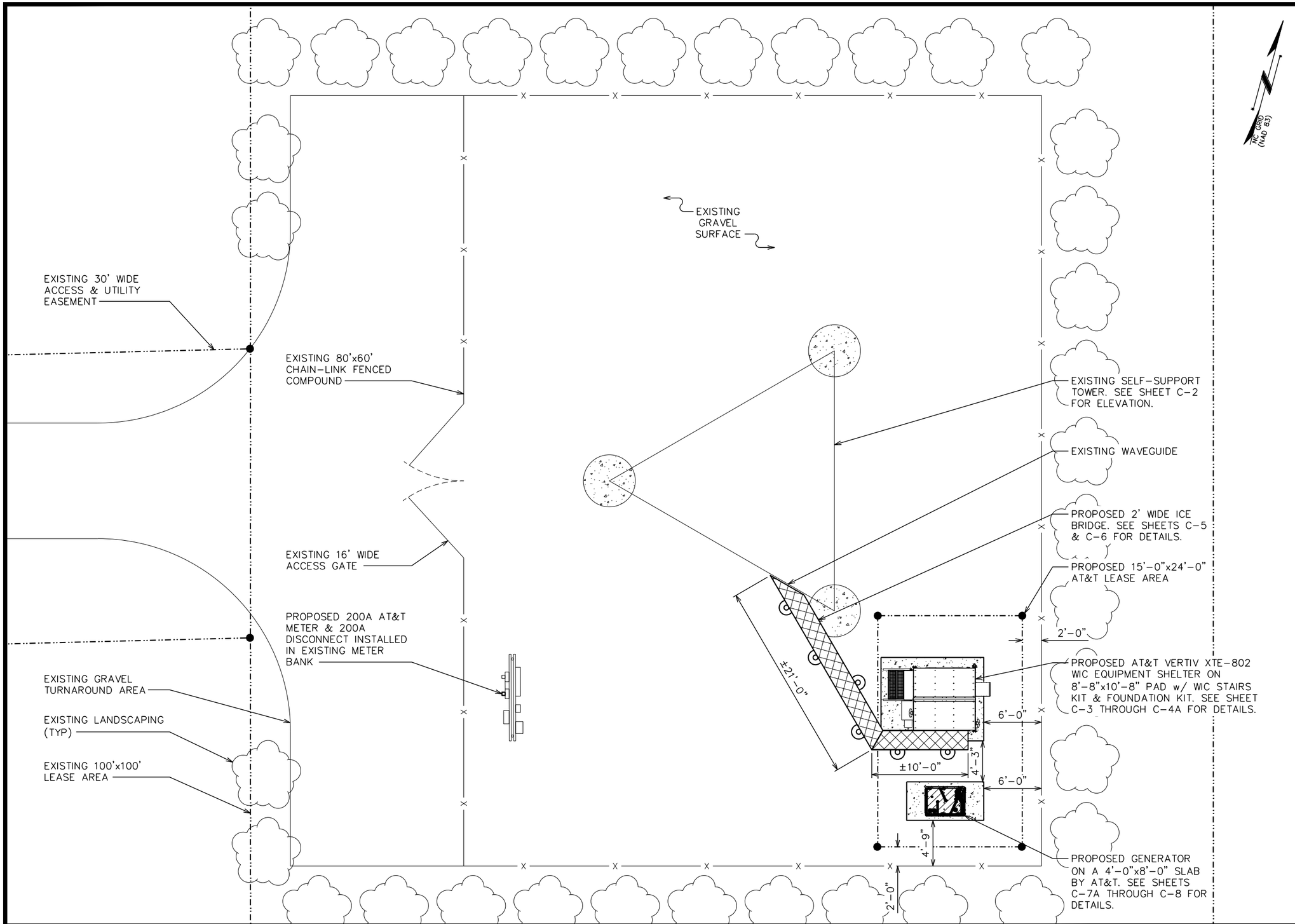
SHEET TITLE:

SITE PLAN

SHEET NUMBER: **SP-1**

REVISION: 3

TEP#: 47297.444335



PROPOSED COMPOUND DETAIL

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

0 8 16

SCALE IN FEET

PLANS PREPARED FOR:

at&t

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(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

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 040227 ENGINEER SCOTT C. BRANTLEY

October 28, 2020

REV	DATE	ISSUED FOR:
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DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:

PROPOSED COMPOUND DETAIL

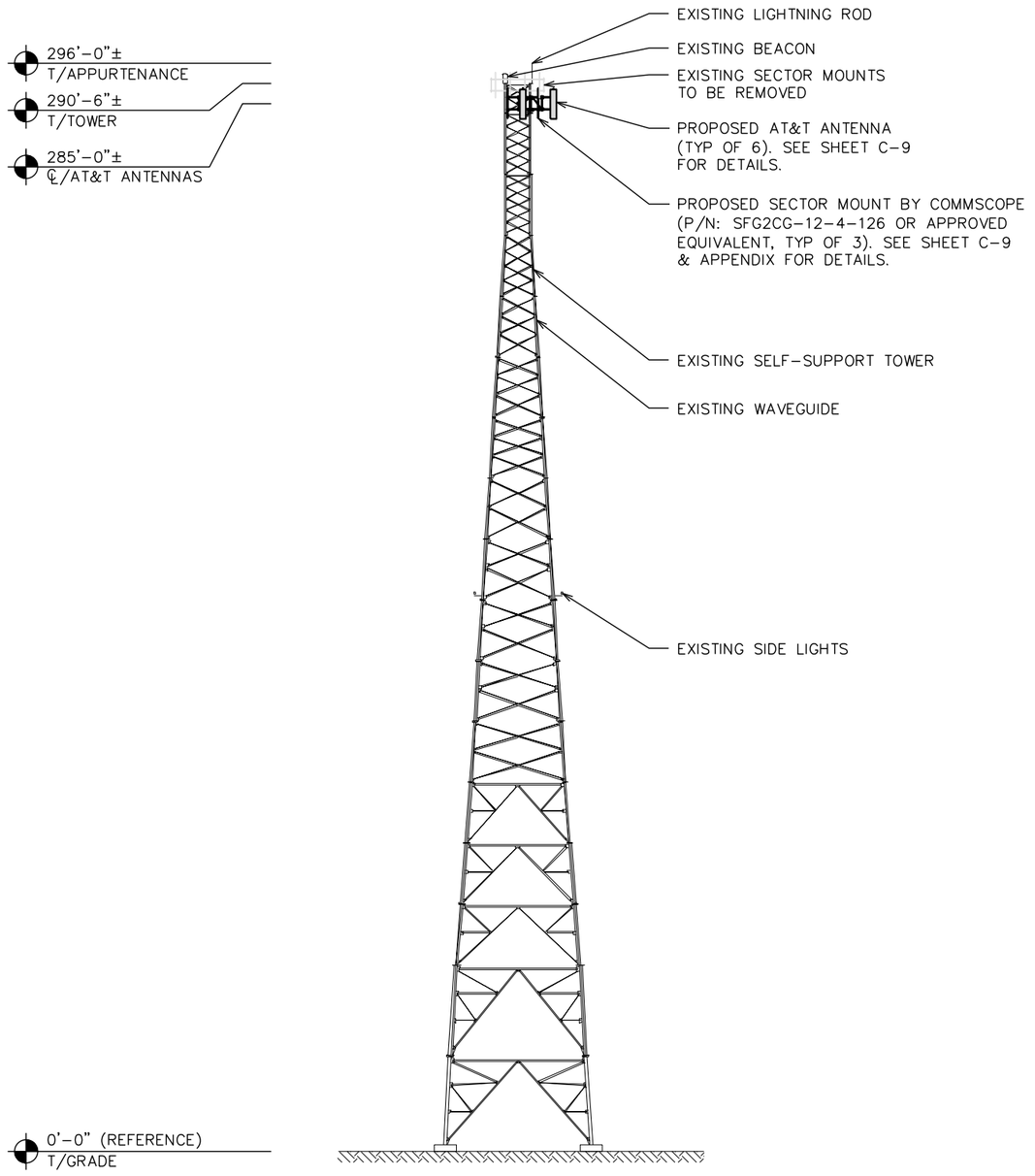
SHEET NUMBER: **C-1**

REVISION: 3

TEP#: 47297.444335

NOTES:

1. PROPOSED CABLES TO BE ROUTED PER SPECIFICATIONS OF STRUCTURAL ANALYSIS.
2. TOWER DRAWING IS ONLY A GRAPHIC REPRESENTATION OF THE STRUCTURE. THE ACTUAL TOWER IN THE FIELD MAY VARY.
3. PER ANTENNA MOUNT ANALYSIS REPORT COMPLETED BY SMW ENGINEERING GROUP, INC, DATED AUGUST 14, 2020, THE PROPOSED MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.
4. CX WILL NEED A CRANE CLEARANCE FOR 315' AND WILL USE THE EXISTING W/G.



TOWER ELEVATION

SCALE: 1" = 40'

0 40 80

SCALE IN FEET

PLANS PREPARED FOR:

at&t

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(HARNETT COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
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RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
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SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048211 ENGINEER SCOTT C. BRANTLEY

October 28, 2020

REV	DATE	ISSUED FOR:
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DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:

TOWER ELEVATION

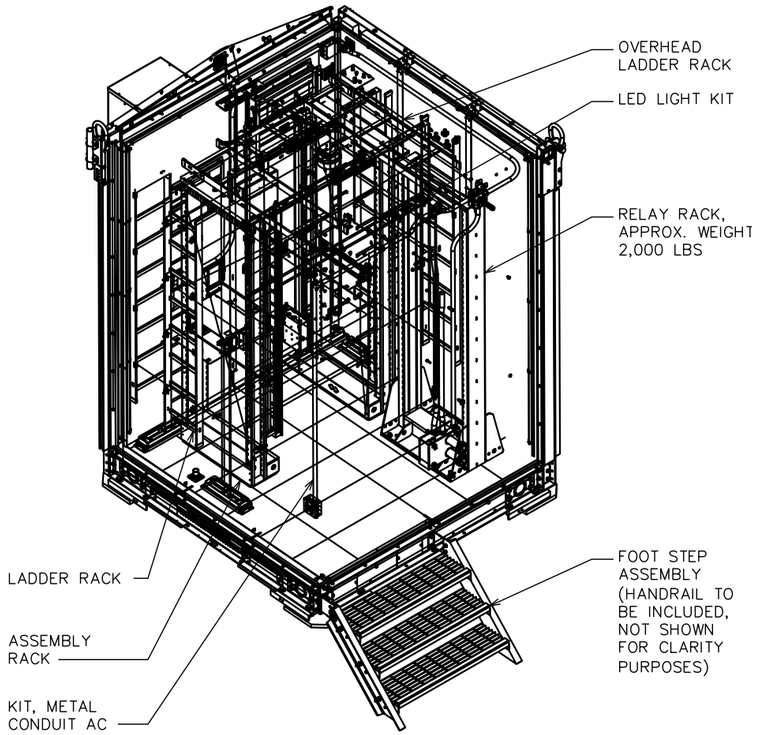
SHEET NUMBER: **C-2**

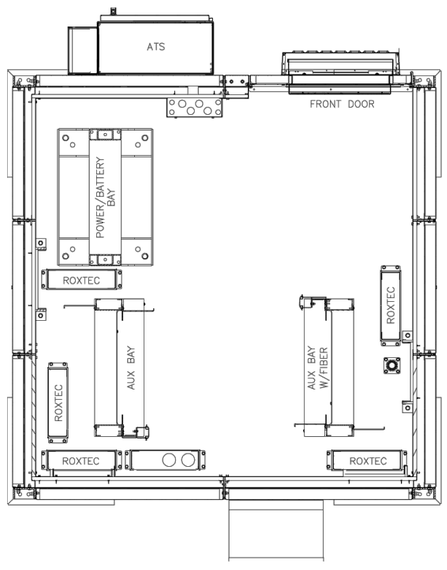
REVISION: **3**

TEP#: 47297.444335

NOTE:

REFER TO MANUFACTURER'S INSTALLATION SPECIFICATIONS FOR MORE DETAILS.





VERTIV XTE-802 WIC DETAILS

SCALE: N.T.S.

PLANS PREPARED FOR:

at&t

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(HARNETT COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
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SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY

October 28, 2020

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DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:

WIC DETAILS

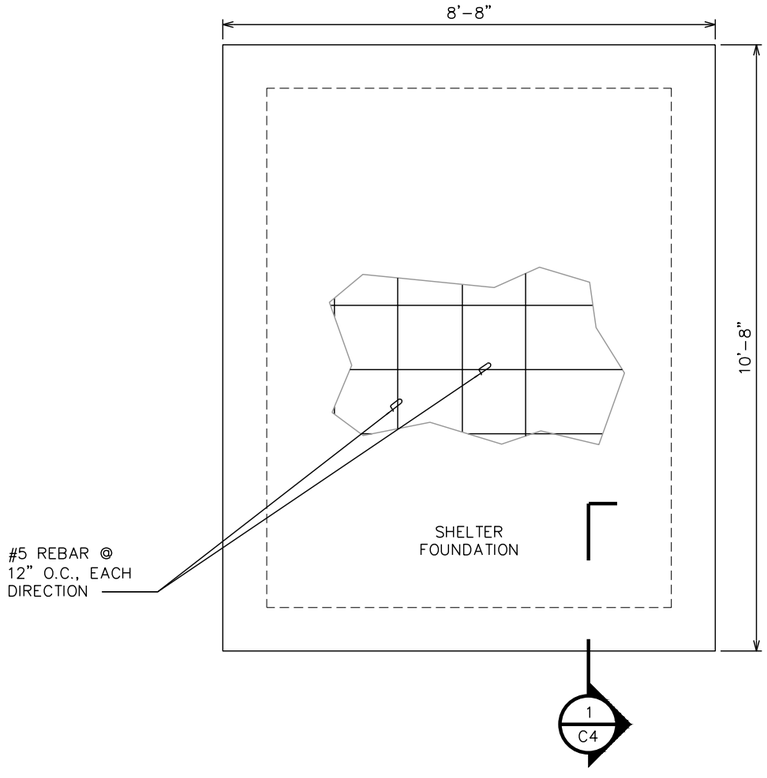
SHEET NUMBER: **C-3**

REVISION: 3

TEP#: 47297.444335

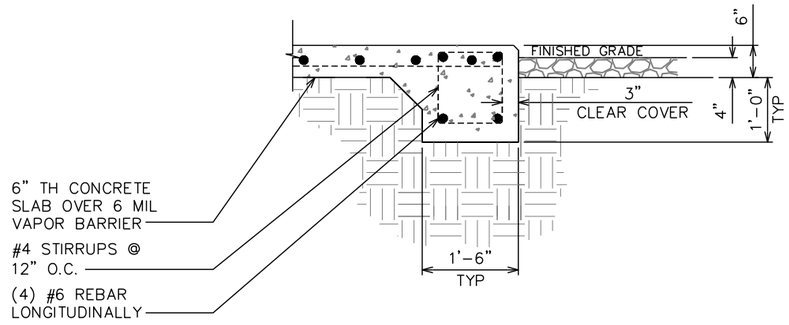
FOUNDATION NOTES:

1. FOUNDATION DESIGN BASED ON 2,000 PSF SOIL BEARING CAPACITY.
2. CONCRETE SHALL BE 3,000 PSI @ 28 DAYS.
3. REINFORCING STEEL Fy = 60,000 PSI.
4. ALL BACKFILL SHALL BE THOROUGHLY COMPACTED TO A MINIMUM OF 95% DENSITY USING THE MODIFIED PROCTOR METHOD.
5. SURFACE OF FINISHED SLAB SHALL BE LEVEL AND FLAT WITHIN ¼".
6. CONTRACTOR SHALL VERIFY WITH MANUFACTURER ACTUAL DIMENSIONS OF EQUIPMENT PRIOR TO LAYING OUT FOUNDATION.
7. ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH ACI 318-14.



FOUNDATION PLAN DETAIL

SCALE: N.T.S.



SHELTER FOUNDATION SECTION CUT DETAIL (1 / C4)

SCALE: N.T.S.

PLANS PREPARED FOR:

at&t

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(HARNETT COUNTY)

PLANS PREPARED BY:

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October 28, 2020

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DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:

FOUNDATION DETAILS

SHEET NUMBER: **C-4**

REVISION: 3

TEP #: 47297.444335

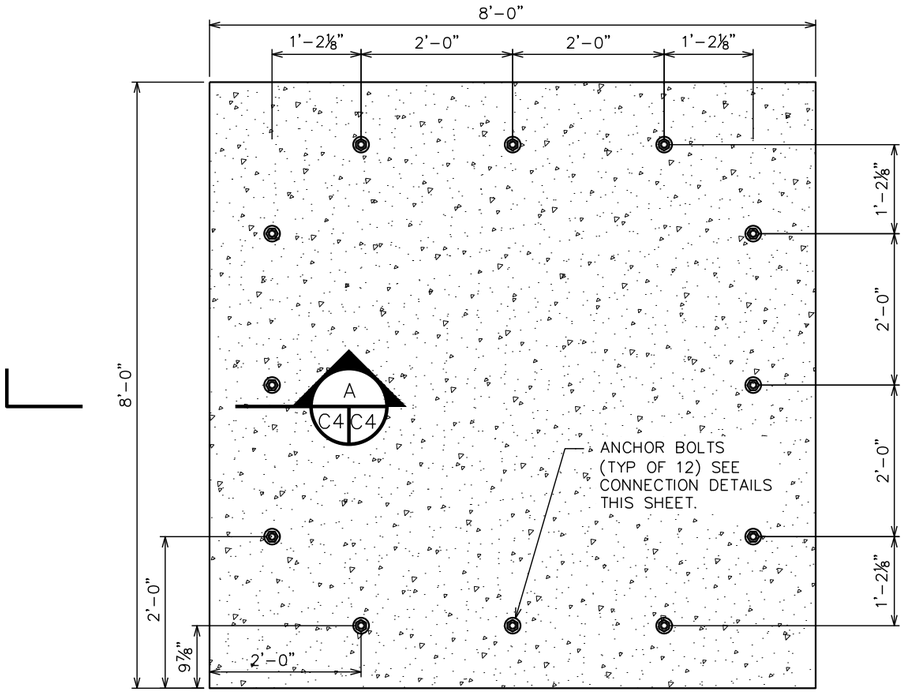
GENERAL STRUCTURAL NOTES:

SPECIFICATION/CODES:

1. CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
2. REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE".
3. DESIGN SHALL BE PER NORTH CAROLINA BUILDING CODE, 2018 EDITION.

FOUNDATION NOTES:

1. FOUNDATION DESIGN BASED ON 2000 PSF SOIL BEARING CAPACITY. IF OTHER CONDITIONS EXIST, FOUNDATION SHALL BE REDESIGNED. CONTRACTOR SHALL HAVE SOIL BEARING CAPACITY VERIFIED BY A LICENSED PROFESSIONAL GEOTECHNICAL ENGINEER PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES.
2. CONCRETE SHALL BE 4,000 PSI.
3. REBAR Fy = 60,000 PSI.
4. ALL BACKFILL SHALL BE THOROUGHLY COMPACTED TO A MINIMUM OF 95% DENSITY USING THE MODIFIED PROCTOR METHOD.

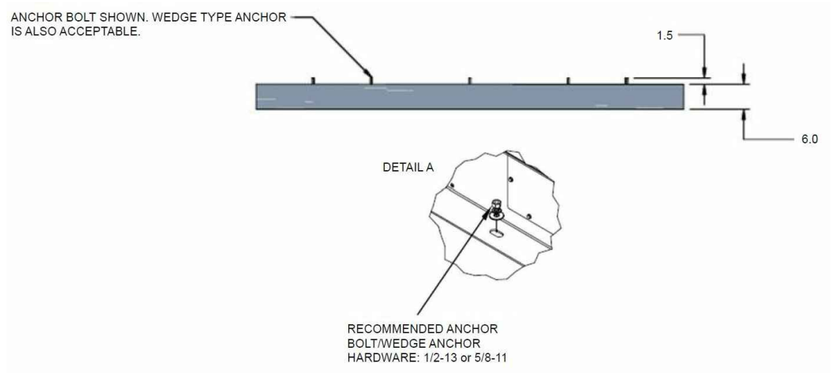


FOUNDATION PLAN

SCALE: ½" = 1'-0"

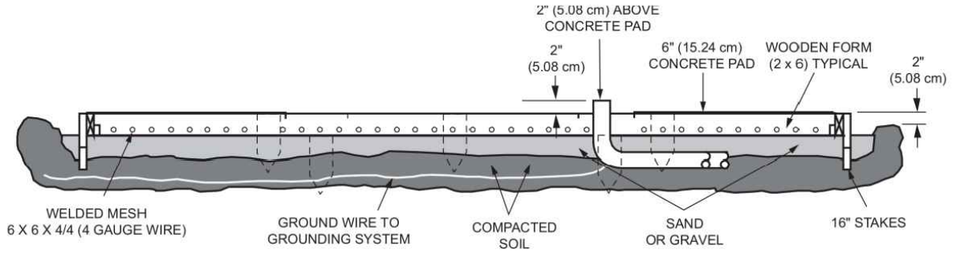
0 2 4

SCALE IN FEET



CONNECTION DETAIL

SCALE: N.T.S.



PAD SECTION

SCALE: N.T.S.

A
C4 C4

PLANS PREPARED FOR:

at&t

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(HARNETT COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
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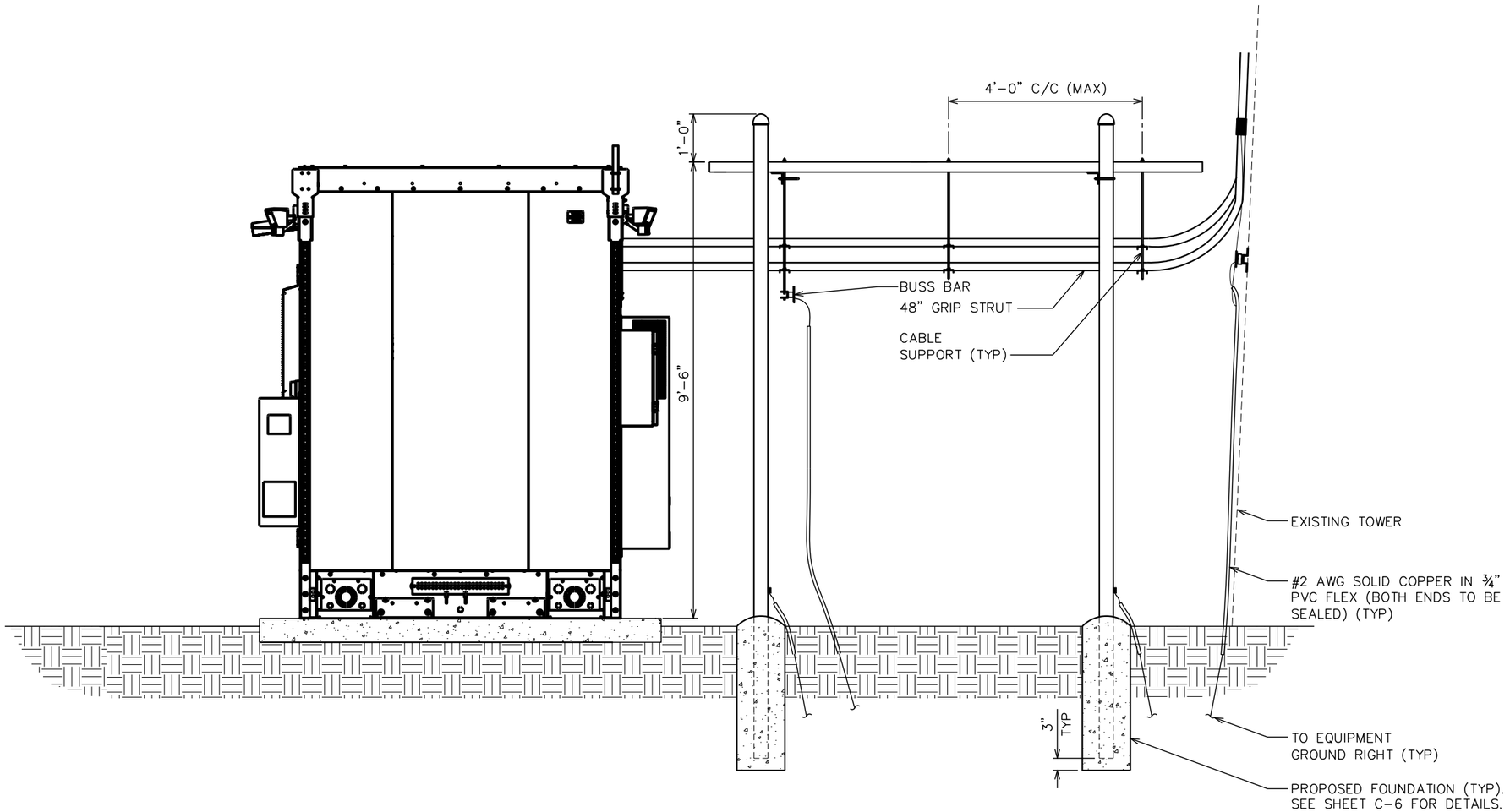
SHEET TITLE:

FOUNDATION DETAILS

SHEET NUMBER: **C-4**

REVISION: **3**

TEP#: 47297.444335



ICE BRIDGE DETAILS - SIDE VIEW

SCALE: ⅜" = 1'-0"

0 2 4

SCALE IN FEET

PLANS PREPARED FOR:

at&t

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(HARNETT COUNTY)

PLANS PREPARED BY:

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OFFICE: (919) 661-6351
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N.C. LICENSE # P-1403

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048221 ENGINEER SCOTT C. BRANTLEY

October 28, 2020

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DRAWN BY: GLB | CHECKED BY: JKW

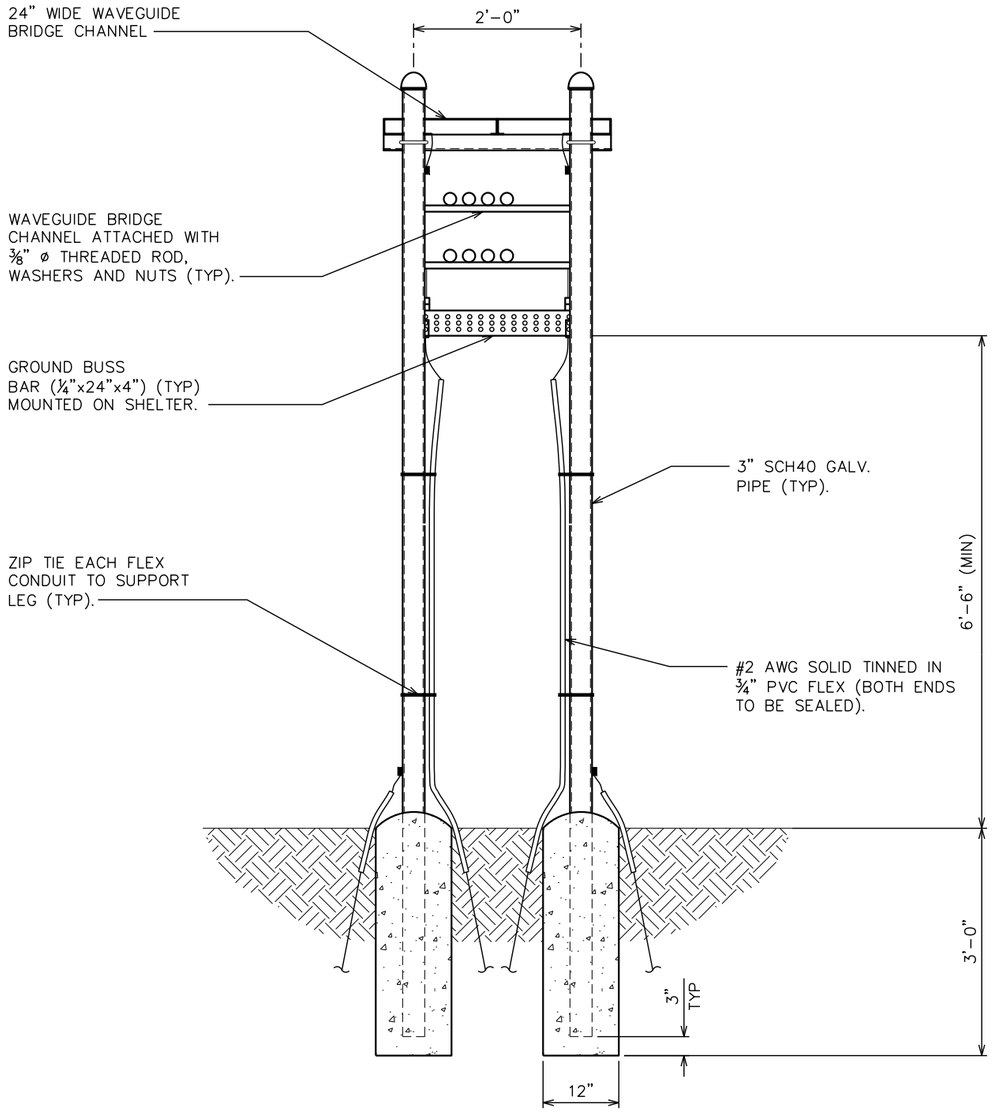
SHEET TITLE:

ICE BRIDGE DETAILS I

SHEET NUMBER: **C-5**

REVISION: **3**

TEP#: 47297.444335



ICE BRIDGE DETAILS - FRONT VIEW

SCALE: ½" = 1'-0"

0 2 4

SCALE IN FEET

PLANS PREPARED FOR:

at&t

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(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

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY

October 28, 2020

REV	DATE	ISSUED FOR:
3	10-28-20	CONSTRUCTION
2	10-23-20	PRELIMINARY

DRAWN BY: GLB | CHECKED BY: JKW

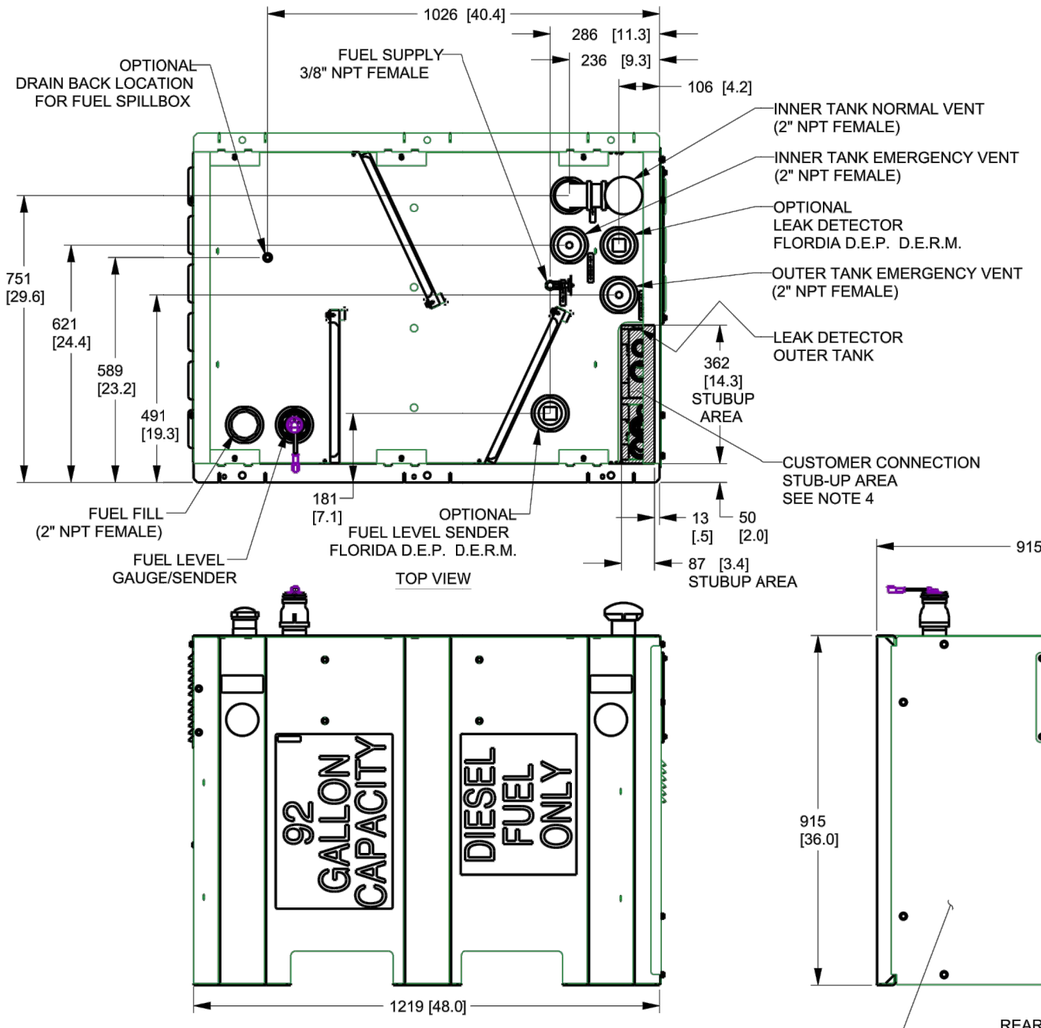
SHEET TITLE:

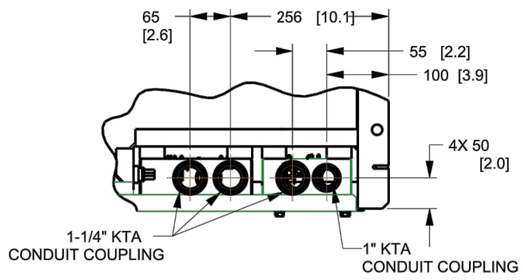
ICE BRIDGE DETAILS II

SHEET NUMBER: **C-6**

REVISION: **3**

TEP#: 47297.444335

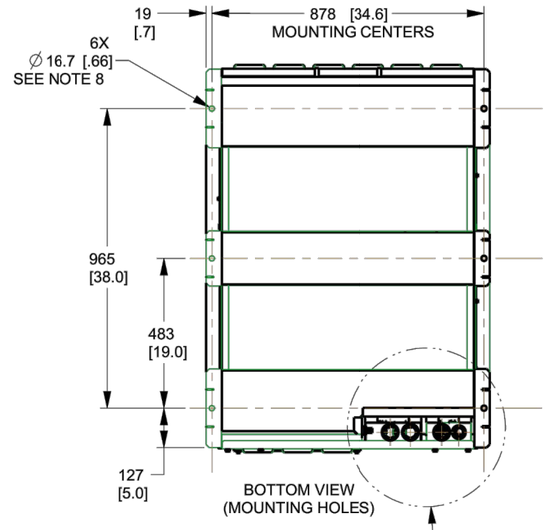




DETAIL A
CUSTOMER CONNECTION TERMINATIONS
(INCLUDED WITH GENERATOR)

FUEL TANK	
TOTAL CAPACITY	363.4 [97]
USABLE CAPACITY	348.3 [92]

CAPACITY: LITER [GALLONS]
DIMENSION: mm [inch]
THIS TANK IS LISTED TO UL142



DRAWING CREATED FROM PRO/ENGINEER 3D FILE. ECO MODIFICATION TO BE APPLIED TO SOLID MODEL ONLY.

INSTALLATION DRAWING

ELECTRONICALLY APPROVED
INSIDE WINDCHILL

GENERAC

TITLE
STUB-UP VIEW
INSTALL, D2.5L 20 KW AC,
15 KW DC TELECOM

ISSUE DATE: 1/15/16

SIZE	CAGE NO	DWG NO	REV
B	N/A	10000000489	1
SCALE NTS	WT-KG	SHEET 2 of 2	

GENERATOR SPECIFICATIONS

SCALE: N.T.S.

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

PLANS PREPARED FOR:
HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:
AT&T SITE #: 368-762
538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(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

SEAL:
NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY
October 28, 2020

REV	DATE	ISSUED FOR:
3	10-28-20	CONSTRUCTION
2	10-23-20	PRELIMINARY

DRAWN BY: GLB | CHECKED BY: JKW

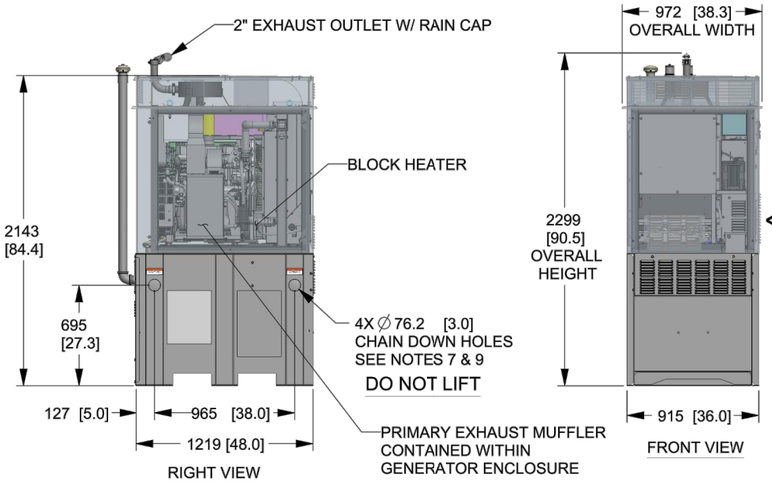
SHEET TITLE:
GENERATOR SPECIFICATIONS I

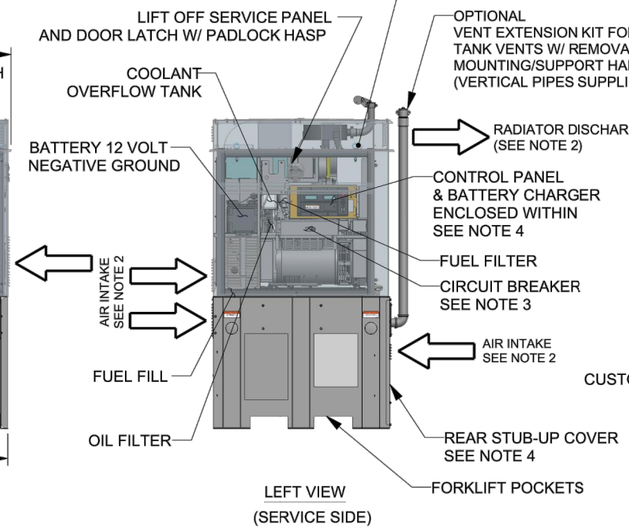
SHEET NUMBER: **C-7A**
REVISION: 3
TEP #: 47297.444335

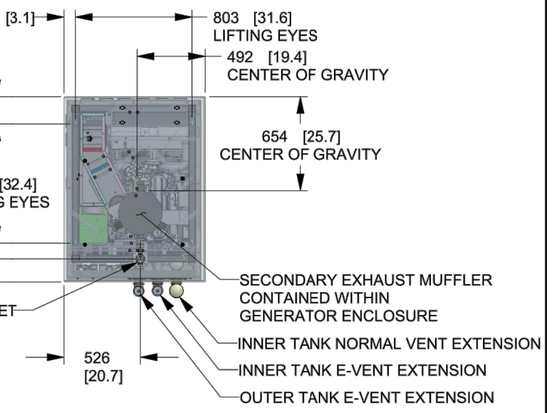
NOTES:
1. REFERENCE INSTALLATION GUIDE SUPPLIED WITH UNIT FOR CONCRETE PAD GUIDELINES
2. ALLOW SUFFICIENT ROOM ON ALL SIDES OF THE GENERATOR FOR MAINTENANCE/SERVICE, INTAKE AIR FLOW, AND RADIATOR/EXHAUST DISCHARGE. THIS UNIT MUST BE INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE NFPA 37 AND NFPA 70 STANDARDS AS WELL AS ANY OTHER FEDERAL, STATE AND LOCAL CODES.
3. CONTROL PANEL / CIRCUIT BREAKER INFORMATION:
   - SEE SPECIFICATION SHEET OR OWNERS MANUAL
   - ACCESSIBLE WITH REMOVAL OF SERVICE PANEL
4. REMOVE THE REAR TANK STUB-UP COVER TO ACCESS THE STUB-UP AREAS AS FOLLOWS:
   - HIGH VOLTAGE CONNECTION INCLUDING AC LOAD LEAD CONDUIT CONNECTION NEUTRAL CONNECTION, BATTERY CHARGER 120 VOLT AC (0.5 AMP MAX) CONNECTION.
   - LOW VOLTAGE CONNECTIONS INCLUDING TRANSFER SWITCH CONTROL WIRES AND ACCESSORY RELAY CONNECTION (QTY 4)
   - DC VOLTAGE CONNECTION (DC UNIT ONLY)
5. CENTER OF GRAVITY AND WEIGHT MAY CHANGE DUE TO UNIT OPTIONS.
6. EXHAUST SYSTEM MAXIMUM BACK PRESSURE: 24.0 INCHES OF H2O
7. REFERENCE OWNERS MANUAL FOR LIFTING WARNINGS.
8. MOUNTING BOLTS OR STUDS TO MOUNTING PAD SHALL BE 5/8-11 GRADE 5. (USE STANDARD SAE TORQUE SPECS)
9. CHAIN DOWN HOLES MUST BE PLUGGED AFTER INSTALLATION. PLUGS ARE PROVIDED AND ARE LOCATED IN THE OWNERS MANUAL BAG.
10. STUB-UPS: BASE TANK REQUIRES ALL STUB-UPS TO BE IN REAR TANK STUB-UP AREA.
11. UNIT IS SHIPPED WITH FUEL SUPPLY AND RETURN LINES DISCONNECTED AND PLUGGED BETWEEN ENGINE AND FUEL TANK. THIS HAS BEEN DONE TO FACILITATE PRESSURE TESTING OF THE TANK IN THE FIELD. FOR INFORMATION REGARDING CONNECTING THE FUEL SUPPLY AND RETURN LINES PRIOR TO START UP, SEE THE FUEL TANK FIELD TESTING PROCEDURE SUPPLIED IN THE TANK LOOSE VENTS KIT, WHICH IS SHIPPED WITH THIS GENERATOR.
12. TRANSFORMER SWITCH/COMMUNICATION CONDUITS - COMMUNICATIONS AND 2-WIRE START MUST NOT BE RUN IN CONDUIT WITH AC WIRING.
13. CONTROL WIRES TO BE SHIELDED AND TWISTED PAIR (40M MAX LENGTH).
14. UNIT MUST BE LOCATED NOT MORE THAN 20FT FROM ANY OTHER EQUIPMENT (DC ONLY)

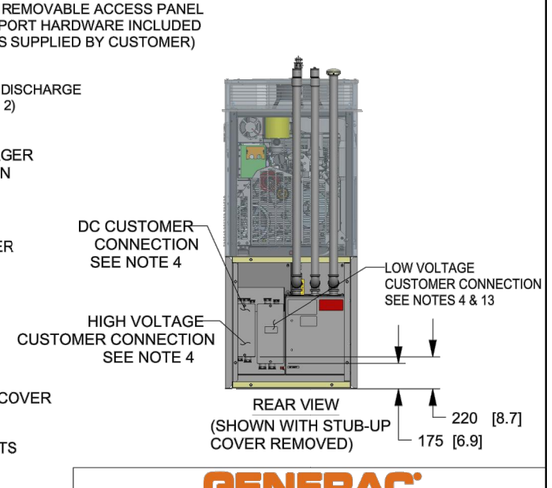
ITEMS ACCESSIBLE SERVICE SIDE OF UNIT
BATTERY
CONTROL PANEL
COOLANT OVERFLOW TANK
COOLANT DRAIN
MOTOR OIL DIPSTICK
FUEL FILTER
OIL FILL
OIL FILTER
OIL DRAIN
MLCB
FUEL FILL
AIR FILTER

WEIGHT DATA WITH EMTPY BASETANK (SEE NOTE 5)		WEIGHT DATA WITH FULL BASETANK (SEE NOTE 5)	
GENERATOR AS SHOWN	1088.6 KG [2400 LBS]	GENERATOR AS SHOWN	1395 KG [3075 LBS]









DRAWING CREATED FROM PRO/ENGINEER 3D FILE. ECO MODIFICATION TO BE APPLIED TO SOLID MODEL ONLY.

DIMENSION: mm [inch]

INSTALLATION DRAWING

ELECTRONICALLY APPROVED
INSIDE WINDCHILL

GENERAC

TITLE: INSTALL, D2.5L 20 KW AC, 15 KW DC TELECOM

ISSUE DATE:	1/15/16		
SIZE: B	CAGE NO: N/A	DWG NO: 10000000489	REV: 1
SCALE: 0.032	WT-KG	SHEET: 1 of 2	

GENERATOR SPECIFICATIONS

SCALE: N.T.S.

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

PLANS PREPARED FOR:
HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:
AT&T SITE #: 368-762
538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(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

SEAL:
NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY
October 28, 2020

REV	DATE	ISSUED FOR:
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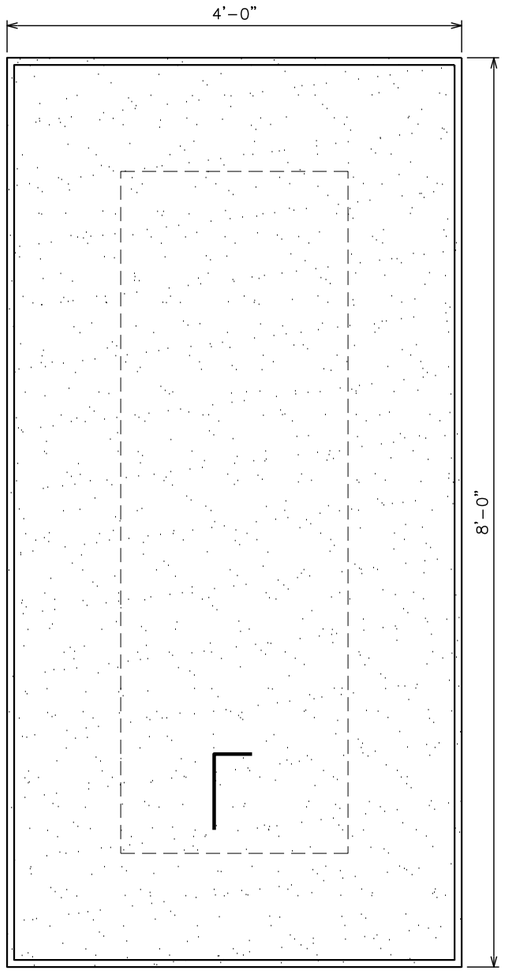
2	10-23-20	PRELIMINARY

DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:
GENERATOR SPECIFICATIONS II

SHEET NUMBER: **C-7B**
REVISION: 3
TEP #: 47297.444335



B
C8 C8

GENERATOR FOUNDATION

SCALE: 3/4" = 1'-0"

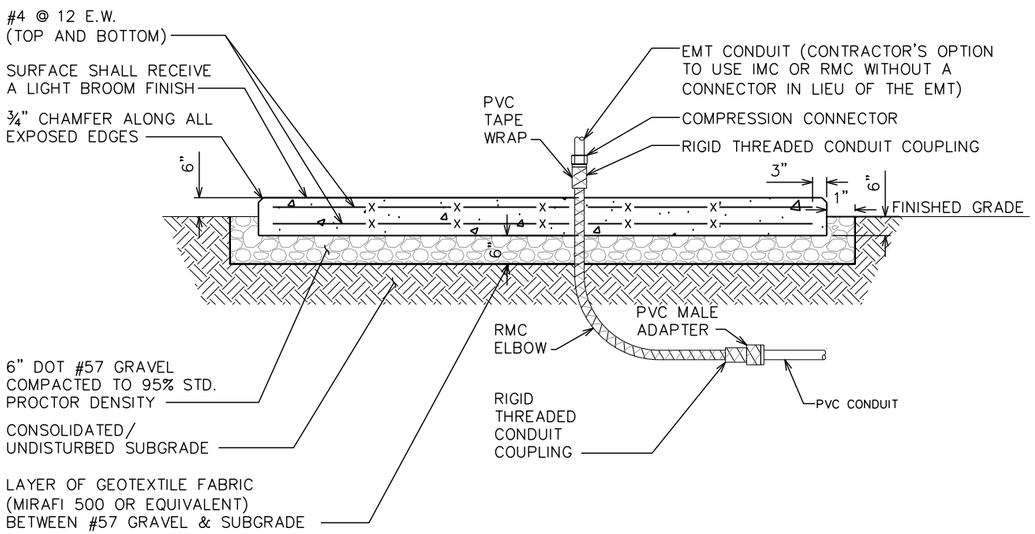
0 1 2
SCALE IN FEET

NOTE:

THESE PLACARDS ARE REQUIRED TO BE INSTALLED ON PROPOSED GENERATOR FREE OF ANY OBSTRUCTION AS TO BE CLEARLY VISIBLE WITHIN COMPOUND

PROPOSED GENERATOR SIGNAGE

SCALE: N.T.S.



SECTION

SCALE: 3/8" = 1'-0"

B
C8 C8

0 2 4
SCALE IN FEET

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

PLANS PREPARED FOR:
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3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(HARNETT COUNTY)

PLANS PREPARED BY:
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326 TRYON ROAD
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DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:

GENERATOR FOUNDATION & SIGNAGE DETAILS

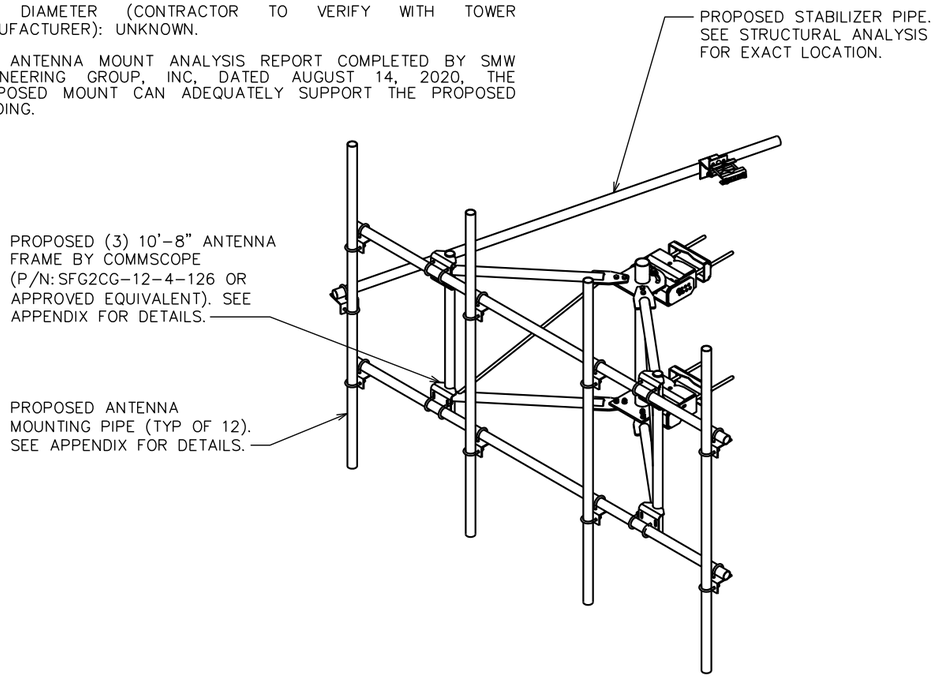
SHEET NUMBER: **C-8**

REVISION: 3

TEP#: 47297.444335

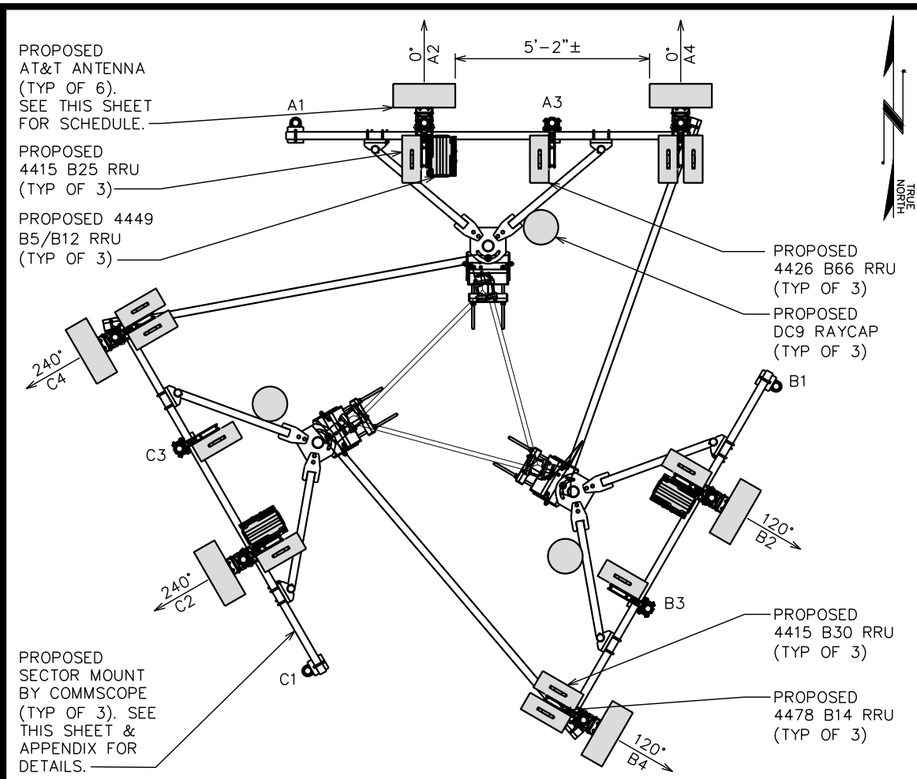
NOTES:

1. AN APPROVED EQUIVALENT ANTENNA MOUNT IS ACCEPTABLE WITH APPROVAL FROM THE AT&T PROJECT MANAGER.
2. LEG DIAMETER (CONTRACTOR TO VERIFY WITH TOWER MANUFACTURER): UNKNOWN.
3. PER ANTENNA MOUNT ANALYSIS REPORT COMPLETED BY SMW ENGINEERING GROUP, INC, DATED AUGUST 14, 2020, THE PROPOSED MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.



PROPOSED MOUNT DETAIL

SCALE: N.T.S.



PROPOSED ANTENNA ORIENTATION

SCALE: ¼" = 1'-0"

0 4 8

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 OR THE TOWER. IT IS THE CARRIER'S RESPONSIBILITY TO ENSURE MOUNT AND TOWER CAN SUPPORT ADDITIONAL LOADS.
7. EXISTING LOADING INFORMATION PROVIDED BY HIGH PERFORMANCE, AT&T RFDS ID: 4066802.
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	COAX/ CABLE	CABLE LENGTH	SURGE PROTECTION	RRU MODEL
A2	ALPHA	LTE 700 LTE AWS LTE 1900	PROPOSED	COMMSCOPE NNH4-65C-R6-V3	H 96.0" W 19.6" D 7.8"	0°	285'	2° 2° 2°	(1) 0.39"ø $FIBER_{24}$ (2) 0.92"ø DC POWER	336'	(1) DC9-48-60-24-8C-EV	(1) 4449 B5/B12 (1) 4426 B66 (1) 4415 B25
A4	ALPHA	LTE 700 LTE WCS	PROPOSED	COMMSCOPE NNH4-65C-R6-V3	H 96.0" W 19.6" D 7.8"	0°	285'	2° 2°	–	–	SHARED	(1) 4478 B14 (1) 4415 B30
B2	BETA	LTE 700 LTE AWS LTE 1900	PROPOSED	COMMSCOPE NNH4-65C-R6-V3	H 96.0" W 19.6" D 7.8"	120°	285'	2° 2° 2°	(1) 0.39"ø $FIBER_{24}$ (2) 0.92"ø DC POWER	336'	(1) DC9-48-60-24-8C-EV	(1) 4449 B5/B12 (1) 4426 B66 (1) 4415 B25
B4	BETA	LTE 700 LTE WCS	PROPOSED	COMMSCOPE NNH4-65C-R6-V3	H 96.0" W 19.6" D 7.8"	120°	285'	2° 2°	–	–	SHARED	(1) 4478 B14 (1) 4415 B30
C2	GAMMA	LTE 700 LTE AWS LTE 1900	PROPOSED	COMMSCOPE NNH4-65C-R6-V3	H 96.0" W 19.6" D 7.8"	240°	285'	2° 2° 2°	(1) 0.39"ø $FIBER_{24}$ (2) 0.92"ø DC POWER	336'	(1) DC9-48-60-24-8C-EV	(1) 4449 B5/B12 (1) 4426 B66 (1) 4415 B25
C4	GAMMA	LTE 700 LTE WCS	PROPOSED	COMMSCOPE NNH4-65C-R6-V3	H 96.0" W 19.6" D 7.8"	240°	285'	2° 2°	–	–	SHARED	(1) 4478 B14 (1) 4415 B30

PROPOSED ANTENNA/CABLE SCHEDULE

SCALE: N.T.S.

PLANS PREPARED FOR:

at&t

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(HARNETT COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
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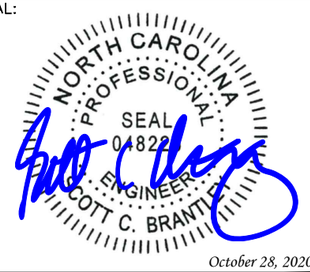
SEAL:



October 28, 2020

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DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:

ANTENNA MOUNTING DETAILS

SHEET NUMBER: **C-9**

REVISION: **3**

TEP#: 47297.444335

property of

at&t

AUTHORIZED PERSONNEL ONLY!

In case of emergency or prior to performing maintenance on this site, call 1-800-638-2822 and reference cell site number:

_____

(1) WHITE/BLUE BACKGROUND W/ BLACK LETTERING

QUANTITY: (1)

SIZE: 9"X12"

(TO BE MOUNTED ON EQUIPMENT SHELTER DOOR ADJACENT TO COMPOUND ENTRY – SEE NOTE 3)

NOTICE

Radio Frequency fields beyond this point may exceed the FCC general public exposure limit.

OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RADIO FREQUENCY ENVIRONMENTS.

In accordance with Federal Communications Commission rules on radio frequency exposure 47 CFR 1.1307(b)

(2) WHITE/BLUE BACKGROUND W/ BLACK LETTERING

QUANTITY: (1)

(TO BE MOUNTED AT EYE LEVEL ON TOWER NEAR SAFETY CLIMB)

DO NOT CLIMB TOWER WITHOUT OWNER'S WRITTEN PERMISSION

(3) WHITE BACKGROUND W/ RED LETTERING

QUANTITY: (1)

(TO BE MOUNTED AT EYE LEVEL ON TOWER NEAR SAFETY CLIMB)

000

(4) WHITE BACKGROUND W/ BLACK LETTERING

E911 STREET #

QUANTITY: (1 TYP)

LETTERS MUST BE A MINIMUM 6" TALL

(TO BE MOUNTED ON THE GATE OF COMPOUND)

(1) SITE IDENTIFICATION SIGN

(2) FCC/RF EXPOSURE SIGN

(3) TOWER CLIMBING SIGN

(4) STREET ADDRESS SIGN

NOTES:

1. SIGNS SHALL MEASURE 8"x12", BE FABRICATED FROM CORROSION RESISTANT PRESSED METAL, AND PAINTED WITH LONG LASTING UV RESISTANT COATINGS.
2. SIGNS (EXCEPT WHERE NOTED OTHERWISE) SHALL BE MOUNTED TO THE TOWER, GATE AND FENCE USING A MINIMUM OF 9 GAUGE ALUMINUM WIRE, HOG RINGS (AS UTILIZED IN FENCE INSTALLATIONS) OR BRACKETS WHERE NECESSARY. BRACKETS SHALL BE OF SIMILAR METAL AS THE STRUCTURE TO AVOID GALVANIC CORROSION.
3. AT&T SITE # AND EMERGENCY CONTACT # SHALL BE MOUNTED ON THE EQUIPMENT SHELTER DOOR ADJACENT TO THE COMPOUND ENTRY WITH PERMANENT SET ADHESIVE. TWO-SIDED TAPE SHALL BE UTILIZED AT EACH CORNER ON THE BACKSIDE TO AID PLACEMENT UNTIL ADHESIVE SETS.
4. ADDITIONAL E911 ADDRESS SIGNS ARE REQUIRED AT EACH ACCESS ROAD GATE LEADING TO THE COMPOUND AS WELL AS ON THE COMPOUND GATE ITSELF. LETTERING ON 911 ADDRESS SIGNS MUST BE A MINIMUM OF 6" TALL.
5. ADDITIONAL FCC REGISTRATION # SIGNS ARE REQUIRED AT EACH ACCESS ROAD GATE LEADING TO THE COMPOUND AS WELL AS ON THE COMPOUND GATE ITSELF.
6. RECOMMENDED SOURCE FOR OBTAINING SIGNAGE:

ST. CLAIR SIGNS
3184 WADE HAMPTON BLVD.
TAYLORS, SC 29687
(864) 244-0040

RF EXPOSURE SIGNS
RICHARD TELL ASSOCIATES
3433 RINGSTAR ROAD, SUITE 3
NORTH LAS VEGAS, NV 89030
(702) 645-3338

TYPICAL SIGNS AND SPECIFICATIONS

SCALE: N.T.S.

PLANS PREPARED FOR:

at&t

2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(HARNETT COUNTY)

PLANS PREPARED BY:

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326 TRYON ROAD
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SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 040220 ENGINEER SCOTT C. BRANTLEY

October 28, 2020

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DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:

SIGNAGE DETAILS

SHEET NUMBER: **C-10**

REVISION: **3**

TEP#: 47297.444335

SCOPE:

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

CODES:

1. THE INSTALLATION SHALL COMPLY WITH APPLICABLE LAWS AND CODES. THESE INCLUDE BUT ARE NOT LIMITED TO THE LATEST ADOPTED EDITIONS OF:
   A. THE NATIONAL ELECTRICAL SAFETY CODE
   B. THE NATIONAL ELECTRIC CODE – NFPA–70
   C. REGULATIONS OF THE SERVING UTILITY COMPANY
   D. LOCAL AND STATE AMENDMENTS
   E. THE INTERNATIONAL ELECTRIC CODE – IEC (WHERE APPLICABLE)
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.

TESTING:

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:

1. 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:

1. 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.
   B. CONDUCTORS SIZE #8 AND LARGER SHALL BE STRANDED. CONDUCTORS SIZED #10 AND #12 MAY BE SOLID OR STRANDED.
   C. CONNECTION FOR #10 AWG #12 AWG SHALL BE BY TWISTING TIGHT AND INSTALLING INSULATED PRESSURE OR WIRE NUT CONNECTIONS.
   D. 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.

GROUNDING:

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.
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

A	–	AMPERE
AFG	–	ABOVE FINISHED GRADE
ATS	–	AUTOMATIC TRANSFER SWITCH
AWG	–	AMERICAN WIRE GAUGE
BCW	–	BARE COPPER WIRE
BFG	–	BELOW FINISHED GRADE
BKR	–	BREAKER
C	–	CONDUIT
CKT	–	CIRCUIT
DISC	–	DISCONNECT
EGR	–	EXTERNAL GROUND RING
EMT	–	ELECTRIC METALLIC TUBING
FSC	–	FLEXIBLE STEEL CONDUIT
GEN	–	GENERATOR
GPS	–	GLOBAL POSITIONING SYSTEM
GRD	–	GROUND
IGB	–	ISOLATED GROUND BAR
IGR	–	INTERIOR GROUND RING (HALO)
KW	–	KILOWATTS
NEC	–	NATIONAL ELECTRIC CODE
PCS	–	PERSONAL COMMUNICATION SYSTEM
PH	–	PHASE
PNL	–	PANEL
PNLBD	–	PANELBOARD
PVC	–	RIGID NON–METALLIC CONDUIT
RGS	–	RIGID GALVANIZED STEEL CONDUIT
SW	–	SWITCH
TGB	–	TOWER GROUND BAR
UL	–	UNDERWRITERS LABORATORIES
V	–	VOLTAGE
W	–	WATTS
XFMR	–	TRANSFORMER
XMTR	–	TRANSMITTER

----E----	UNDERGROUND ELECTRICAL CONDUIT
----T----	UNDERGROUND TELEPHONE CONDUIT
	KILOWATT–HOUR METER
----------	UNDERGROUND BONDING AND GROUNDING CONDUCTOR.
⌀	GROUND ROD
●	CADWELD
⊠	GROUND ROD WITH INSPECTION WELL

PLANS PREPARED FOR:

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2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC

3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(HARNETT COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
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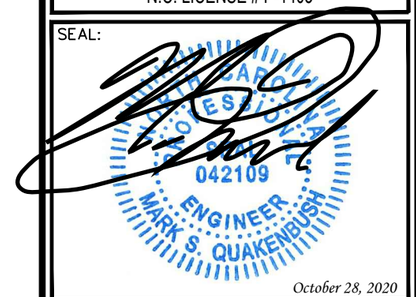

October 28, 2020

REV	DATE	ISSUED FOR:
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2	10-23-20	PRELIMINARY

DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:

ELECTRICAL NOTES

SHEET NUMBER: **E-1**

REVISION: 3

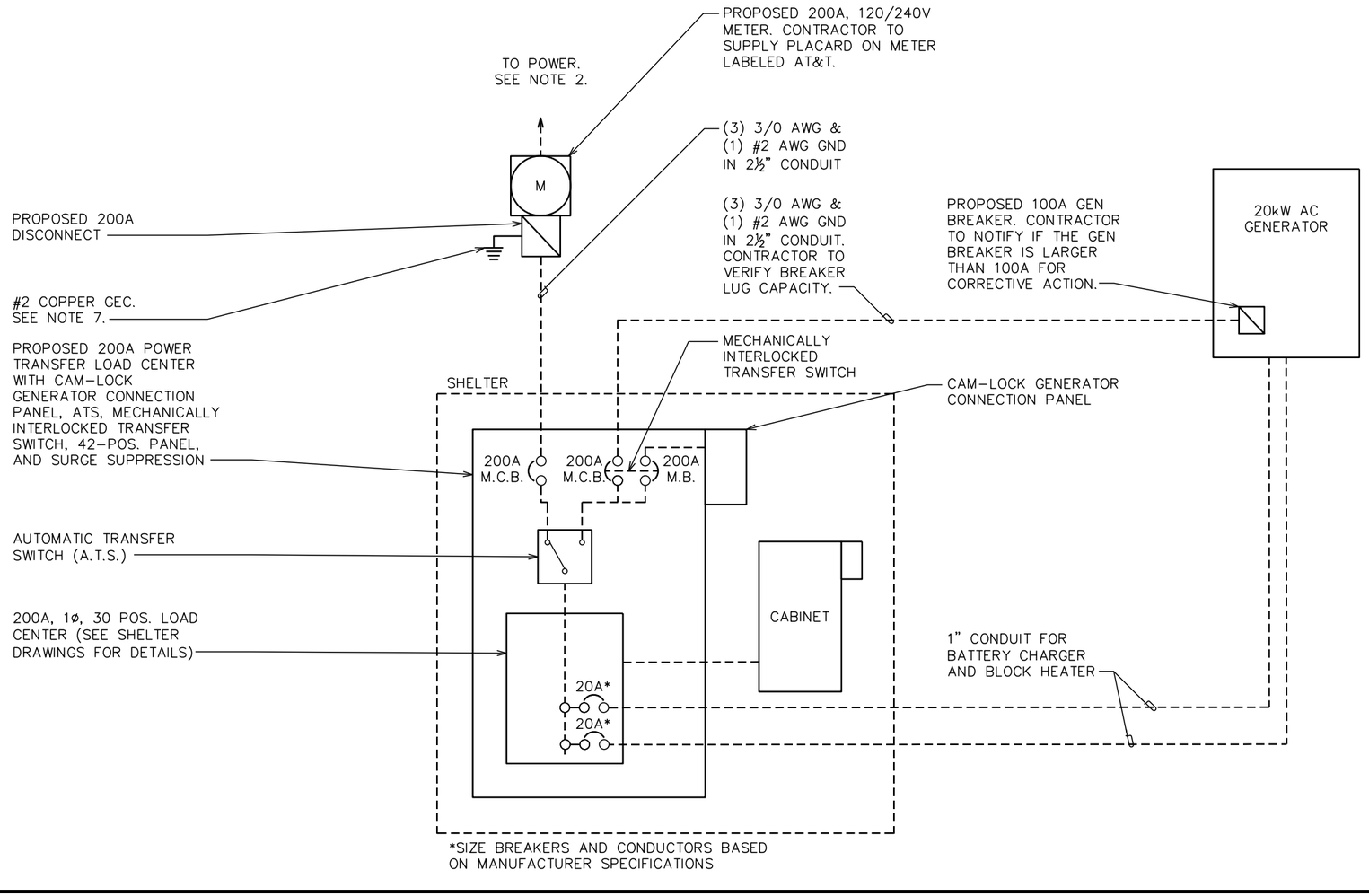
TEP #: 47297.444335

GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY AVAILABLE FAULT CURRENT WITH POWER COMPANY AND ENSURE ALL ELECTRICAL EQUIPMENT IS SUITABLE FOR AVAILABLE FAULT CURRENT.
2. CONTRACTOR SHALL COORDINATE UTILITY SERVICES WITH LOCAL UTILITY COMPANIES. VERIFY ALL REQUIREMENTS WITH UTILITY COMPANY STANDARDS.
3. ONE-LINE DIAGRAM IS FOR SCHEMATIC PURPOSES ONLY AND IS NOT INDICATIVE OF THE ACTUAL EQUIPMENT LAYOUT.
4. CONTRACTOR SHALL LABEL METER SOCKET WITH SERVICE OWNER NAMEPLATE WITH ½" HEIGHT MINIMUM LETTERS.
5. ALL EQUIPMENT WILL HAVE A MINIMUM AIC OF 10 KA. CONTRACTOR TO DETERMINE AVAILABLE FAULT CURRENT BEFORE ENERGIZING EQUIPMENT. THE AMOUNT OF AVAILABLE FAULT CURRENT SHALL BE MARKED ON THE SERVICE EQUIPMENT PER NEC 110.24.
6. CONTRACTOR WILL NOTIFY UTILITY COMPANY OF CHANGES IN ELECTRICAL LOAD.
7. GROUNDING ELECTRODE CONDUCTOR IS SIZED FOR A SINGLE 200A SERVICE ONLY. IF METER BANK SHARES A COMMON NEUTRAL/GROUND, CONTRACTOR WILL INSTALL (1) 3/0 COPPER GEC INSTEAD.

ONE-LINE DIAGRAM NOTES:

1. ELECTRICAL SERVICE SHALL BE 200A, 120/240V, 1ø, 3W.
2. FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT, REFER TO VENDOR PRINTS PROVIDED BY EQUIPMENT MANUFACTURER.



ONE-LINE DIAGRAM

SCALE: N.T.S.

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HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
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SHEET TITLE:

ONE-LINE DIAGRAM

SHEET NUMBER: **E-2A**

REVISION: 3

TEP #: 47297.444335

LOADING SHOWN TAKEN FROM VERTIV WIC DRAWINGS APPROVED JANUARY 16, 2017

PROPOSED 200A, 120/240 VAC AT&T POWER PANEL SCHEDULE

LOAD SERVED	VOLT AMPERES (WATTS) L1	VOLT AMPERES (WATTS) L2	WIRE	BREAKER P	BREAKER TRIP	CKT #	PHASE	CKT #	BREAKER TRIP	BREAKER P	WIRE	VOLT AMPERES (WATTS) L1	VOLT AMPERES (WATTS) L2	LOAD SERVED
RECTIFIER #1	2000		10	2	30	1	A	2	20	1	12	360		GFCI RECEPTACLES
		2000				3	B	4	30	2	10		2000	RECTIFIER #3
RECTIFIER #2	2000		10	2	30	5	A	6				2000		
		2000				7	B	8	20	1	12		1200	GEN. BATTERY CHARGER
BLANK	–		–	–	–	9	A	10	20	1	12	1000		GEN. BLOCK HEATER
		–				11	B	12	–	–	–		–	BLANK
BLANK	–		–	–	–	13	A	14				–		
		–				15	B	16	–	–	–		–	BLANK
BLANK	–		–	–	–	17	A	18				–		
		–				19	B	20	–	–	–		–	BLANK
BLANK	–		–	–	–	21	A	22				–		
		–				23	B	24	–	–	–		–	BLANK
HVAC	1920		12	2	20	25	A	26				–		
		1920				27	B	28	20	1	12		200	FLOOD LIGHTS
APPLIANCE OUTLETS	180		12	2	20	29	A	30	–	–	–	–		BLANK
VOLT AMPS	6100	5920										3360	3400	VOLT AMPS

L1 VOLT AMPERES	9460	9320	L2 VOLT AMPERES
L1 AMPS	78.8	77.7	L2 AMPS
	78.8		MAX AMPS
	97.9		*MAX AMPS X 125%

NOTE:

CONTRACTOR TO LIMIT TOTAL AC LOAD TO 20,000 WATTS

PANEL SCHEDULE

SCALE: N.T.S.

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LAFAYETTE, LA 70507

PROJECT INFORMATION:

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SHEET TITLE:

PANEL SCHEDULE

SHEET NUMBER: **E-2B**

REVISION: 3

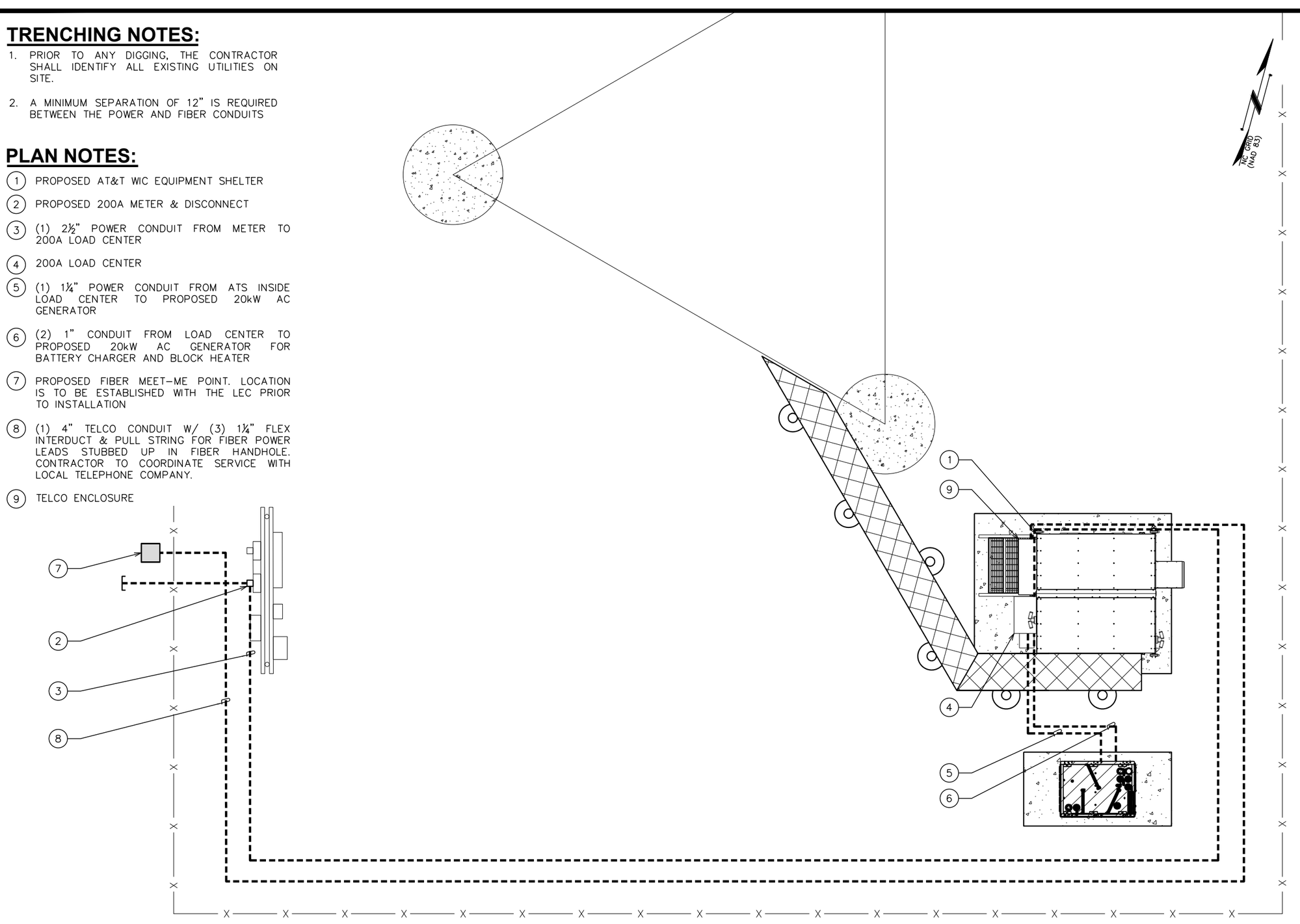
TEP#: 47297.444335

TRENCHING NOTES:

1. PRIOR TO ANY DIGGING, THE CONTRACTOR SHALL IDENTIFY ALL EXISTING UTILITIES ON SITE.
2. A MINIMUM SEPARATION OF 12" IS REQUIRED BETWEEN THE POWER AND FIBER CONDUITS

PLAN NOTES:

1. PROPOSED AT&T WIC EQUIPMENT SHELTER
2. PROPOSED 200A METER & DISCONNECT
3. (1) 2½" POWER CONDUIT FROM METER TO 200A LOAD CENTER
4. 200A LOAD CENTER
5. (1) 1¼" POWER CONDUIT FROM ATS INSIDE LOAD CENTER TO PROPOSED 20kW AC GENERATOR
6. (2) 1" CONDUIT FROM LOAD CENTER TO PROPOSED 20kW AC GENERATOR FOR BATTERY CHARGER AND BLOCK HEATER
7. PROPOSED FIBER MEET-ME POINT. LOCATION IS TO BE ESTABLISHED WITH THE LEC PRIOR TO INSTALLATION
8. (1) 4" TELCO CONDUIT W/ (3) 1¼" FLEX INTERDUCT & PULL STRING FOR FIBER POWER LEADS STUBBED UP IN FIBER HANDHOLE. CONTRACTOR TO COORDINATE SERVICE WITH LOCAL TELEPHONE COMPANY.
9. TELCO ENCLOSURE



SERVICE ROUTING PLAN

SCALE: 3/16" = 1'-0"

0 4 8

SCALE IN FEET

PLANS PREPARED FOR:

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2002 PISGAH CHURCH ROAD, SUITE 300
GREENSBORO, NC 27455

PLANS PREPARED FOR:

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LAFAYETTE, LA 70507

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SHEET TITLE:

SERVICE ROUTING PLAN

SHEET NUMBER: **E-3**

REVISION: 3

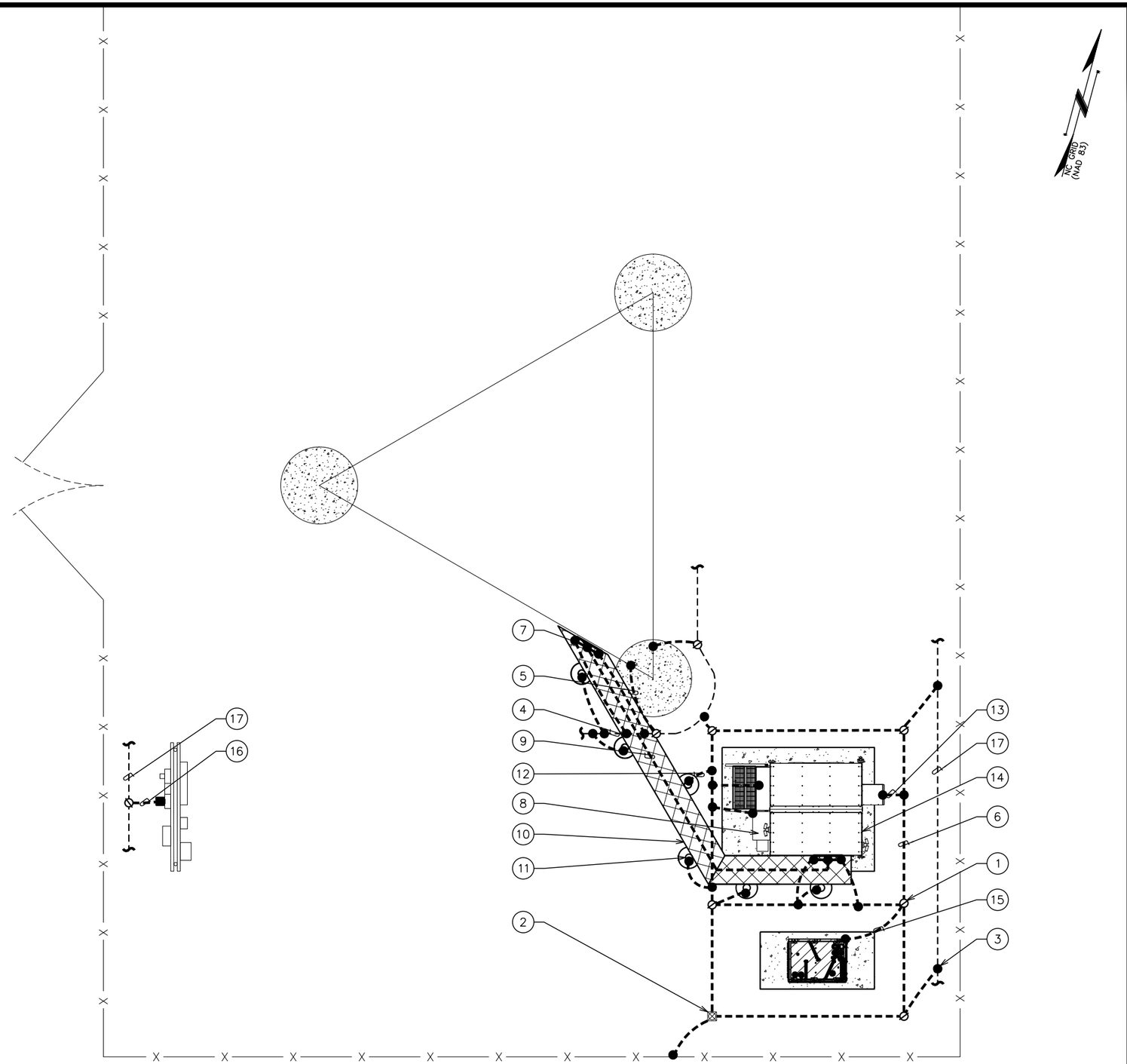
TEP #: 47297.444335

DRAWING NOTES:

1. GROUND ROD ⅝"x10' LONG (TYP)
2. GROUND ROD WITH INSPECTION WELL (TYP)
3. CADWELD (TYP)
4. TOWER GROUND RING (CONTRACTOR TO VERIFY)
5. (2) #2 AWG SOLID BARE TINNED COPPER BONDS BETWEEN TOWER AND TOWER GROUND RING (INSTALL (2) LEADS ON RING ON EITHER SIDE OF THE GROUND ROD IN OPPOSITE DIRECTIONS ON RING. (1) MINIMUM BOND PER TOWER LEG AND (2) MINIMUM BONDS PER TOWER).
6. #2 AWG BARE SOLID BARE TINNED COPPER WIRE GROUND RING (SHELTER)
7. PROPOSED BOTTOM TOWER BUS BAR
8. PROPOSED ICE BRIDGE BUS BAR
9. #2 AWG BARE SOLID TINNED COPPER WIRE BETWEEN BUS BARS
10. PROPOSED ICE BRIDGE
11. PROPOSED ICE BRIDGE POST (TYP)
12. #2 AWG ICE BRIDGE BOND BURIED 30" BFG (TYP)
13. HVAC GROUND. MECHANICAL CONNECTIONS AT HVAC UNITS ABOVE GRADE AS ALLOWED BY CODE.
14. PROPOSED AT&T WIC EQUIPMENT SHELTER
15. #2 AWG BOND BETWEEN GENERATOR AND GROUND RING
16. #2 AWG BOND BONDING PROPOSED METER TO EXISTING EARTH GROUND GROUND SYSTEM
17. EXISTING EARTH GROUND SYSTEM (CONTRACTOR TO VERIFY)

GROUNDING NOTES

1. GROUNDING ELECTRODES SHALL BE CONNECTED IN A RING USING #2 AWG BARE TINNED COPPER WIRE. THE TOP OF THE GROUND RODS AND THE RING CONDUCTOR SHALL BE 2 FEET BELOW FINISHED GRADE. GROUNDING ELECTRODES SHALL BE DRIVEN ON 10'–0" CENTERS. (MIN. 15'–0" MAX)
2. BONDING OF THE GROUNDED CONDUCTOR (NEUTRAL) AND THE GROUNDING CONDUCTOR SHALL BE AT THE SERVICE DISCONNECTING MEANS/ BONDING JUMPER SHALL BE INSTALLED PER N.E.C. ARTICLE 250.30.
3. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER WHEN THE GROUNDING SYSTEM IS COMPLETE. THE CONSTRUCTION MANAGER SHALL INSPECT THE GROUNDING SYSTEM PRIOR TO BACKFILLING.



TOWER GROUNDING PLAN

SCALE: ⅛" = 1'–0"

0 8 16
SCALE IN FEET

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

PLANS PREPARED FOR:
HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

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538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
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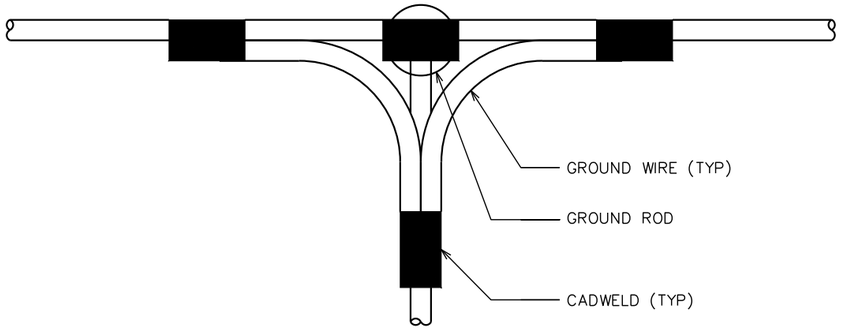
SHEET TITLE:

GROUNDING PLAN

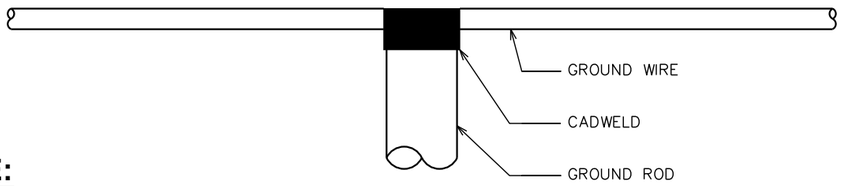
SHEET NUMBER: **E-4**

REVISION: 3

TEP#: 47297.444335



TOP VIEW



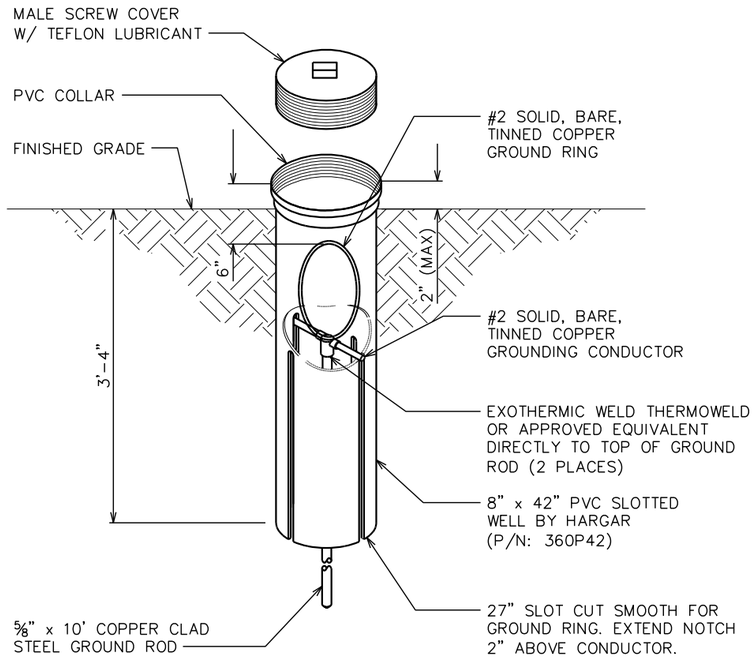
SIDE VIEW

NOTE:

MINIMUM SPACING OF 12" BETWEEN ALL CADWELDS

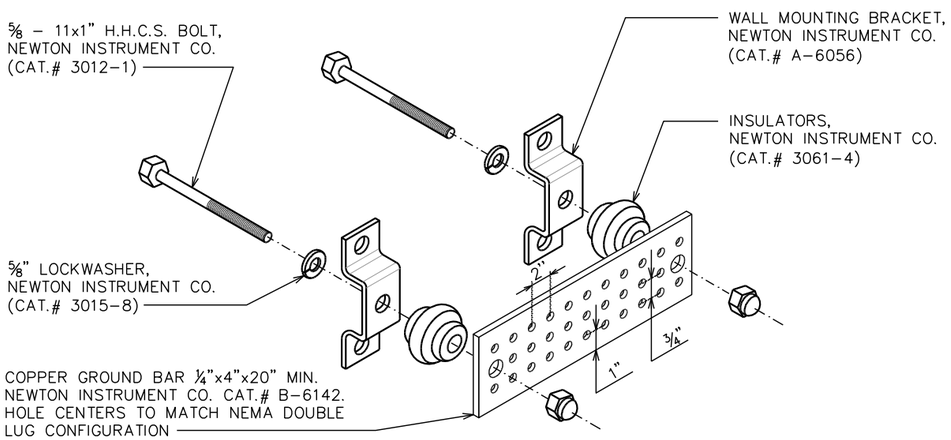
CADWELD GROUNDING DETAIL

SCALE: N.T.S.



GROUND ROD WITH INSPECTION WELL DETAIL

SCALE: N.T.S.

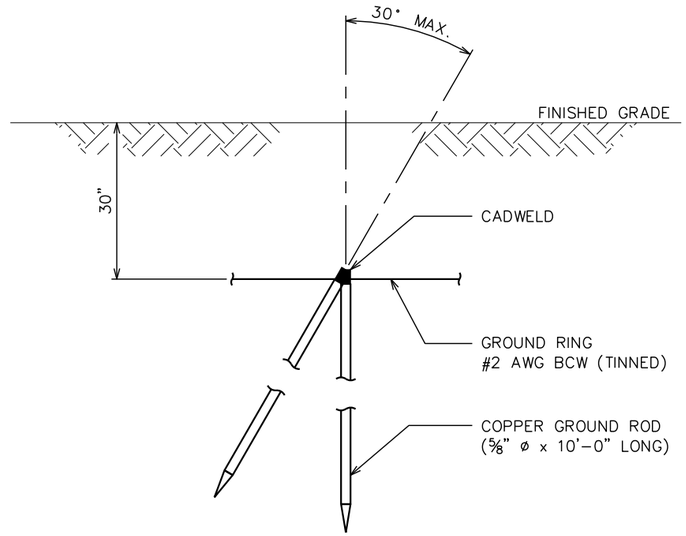


NOTE:

GROUND BAR SHALL BE SIZED TO ACCOMMODATE ALL GROUNDING CONNECTIONS REQUIRED AS WELL AS PROVIDE 50% SPARE CAPACITY

STANDARD GROUND BAR DETAIL

SCALE: N.T.S.



COPPER-CLAD STEEL GROUND ROD DETAIL

SCALE: N.T.S.

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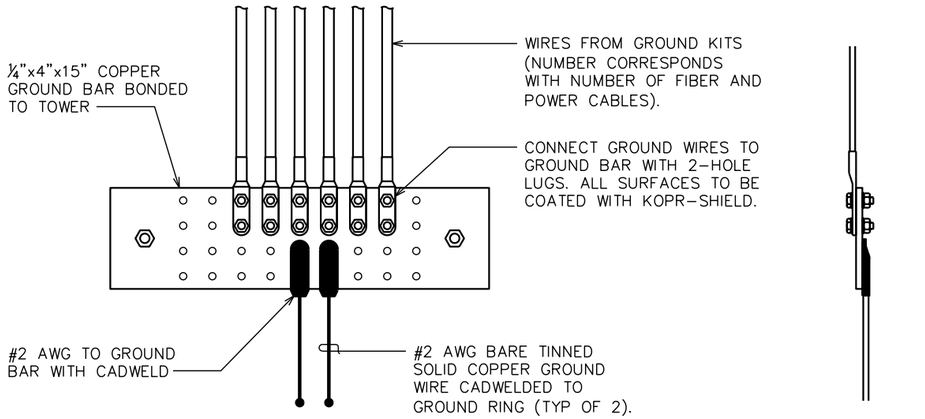
SHEET TITLE:

GROUNDING DETAILS I

SHEET NUMBER: **E-5**

REVISION: 3

TEP#: 47297.444335



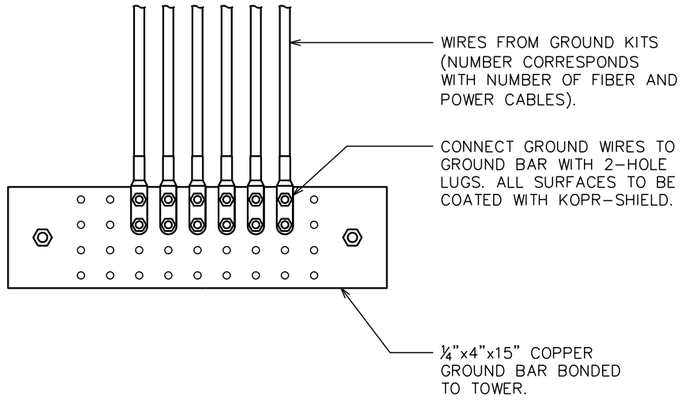
END VIEW

LOWER GROUND BAR

SCALE: N.T.S.

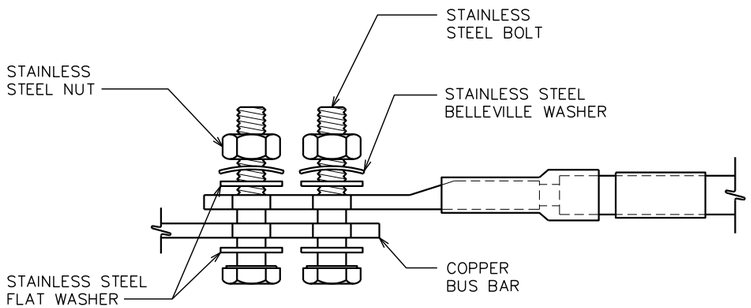
NOTE:

THE CONTRACTOR SHALL UTILIZE AN INTERMEDIATE GROUND BAR FOR ANTENNA RAD CENTERS OVER 200'.



UPPER / INTERMEDIATE GROUND BAR

SCALE: N.T.S.

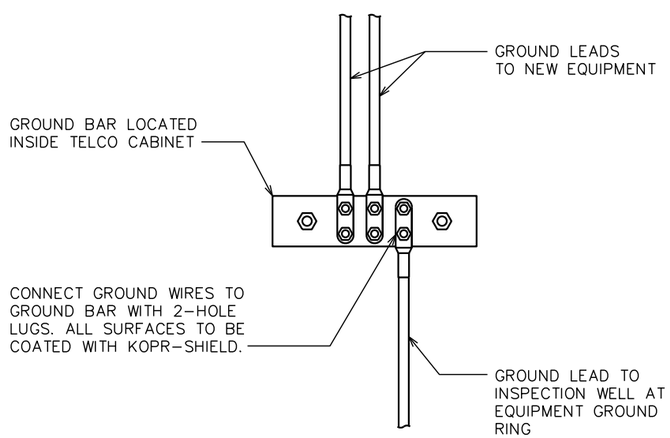


NOTES:

1. ALL HARDWARE SHALL BE 18-8 STAINLESS STEEL, INCLUDING THE BELLEVILLE WASHERS. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY; INSERT A DRAGON TOOTH WASHER BETWEEN THE LUG AND STEEL. COAT ALL SURFACES WITH KOPR-SHIELD.

LUG DETAIL

SCALE: N.T.S.



GROUND BAR IN TELCO CABINET

SCALE: N.T.S.

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GREENSBORO, NC 27455

PLANS PREPARED FOR:

HIGH PERFORMANCE SERVICES, LLC
3001 MILLS STREET
LAFAYETTE, LA 70507

PROJECT INFORMATION:

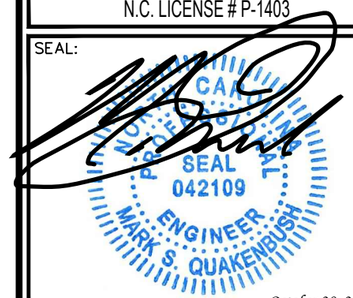
AT&T SITE #: 368-762

538 SMITH PRINCE ROAD
FUQUAY VARINA, NC 27526
(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

SEAL:



October 28, 2020

REV	DATE	ISSUED FOR:
3	10-28-20	CONSTRUCTION
2	10-23-20	PRELIMINARY

DRAWN BY: GLB | CHECKED BY: JKW

SHEET TITLE:

GROUNDING DETAILS II

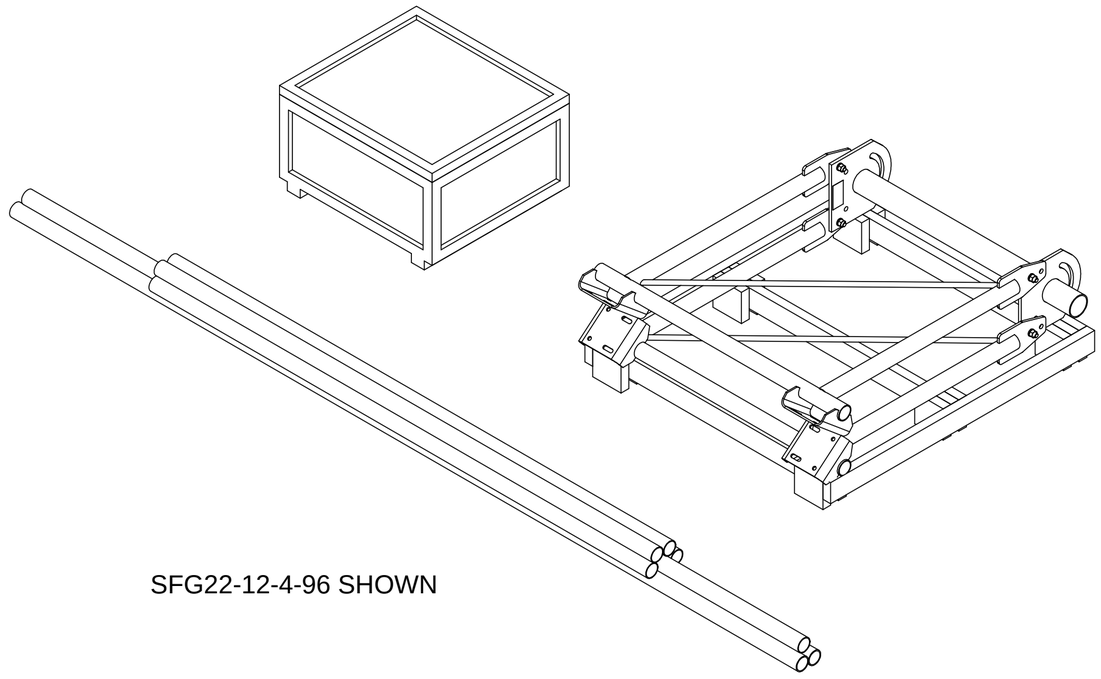
SHEET NUMBER: **E-6**

REVISION: 3

TEP#: 47297.444335

REVISIONS				
REV.	ECN	DESCRIPTION	BY	DATE
B	8000015561	INITIAL RELEASE	DRR	08/08/16
C	8000016892	ADDED DIAGONAL MOUNTING NOTE	RJC	10/25/2016
D	8000018195	CORRECTED TYPOS ON PAGE 4 AND 5	DRR	12/08/16
E	8000024230	CHANGED HARDWARE KITS ON -B KITS	DRR	06/21/17
F	8000029411	SFG2303, SFG2304, SFG2305 WAS SFG230325, SFG230425, SFG230525	RJC	4/13/2018

MOUNT MUST BE INSTALLED WITH DIAGONALS AS SHOWN



SFG22-12-4-96 SHOWN

PART NO.	DESCRIPTION	FRAME KIT	HARDWARE KIT	PIPE BUNDLE	TOTAL WEIGHT
SFG22-10-B	SFG22 SECTOR FRAME KIT, 10' 8" FACE, UNIVERSAL TOWER MOUNT, NO ANTENNA PIPES	SFG22PK	SFG22HK4	SFG2310SB	375.4 lbs
SFG22-10-3-96	SFG22 SECTOR FRAME KIT, 10' 8" FACE, UNIVERSAL TOWER MOUNT, (3) 96" ANTENNA PIPES	SFG22PK	SFG22HK3	SFG2310396SB	469.1 lbs
SFG22-10-3-126	SFG22 SECTOR FRAME KIT, 10' 8" FACE, UNIVERSAL TOWER MOUNT, (3) 126" ANTENNA PIPES	SFG22PK	SFG22HK3	SFG23103126SB	491.5 lbs
SFG22-10-4-96	SFG22 SECTOR FRAME KIT, 10' 8" FACE, UNIVERSAL TOWER MOUNT, (4) 96" ANTENNA PIPES	SFG22PK	SFG22HK4	SFG2310496SB	500.4 lbs
SFG22-10-4-126	SFG22 SECTOR FRAME KIT, 10' 8" FACE, UNIVERSAL TOWER MOUNT, (4) 126" ANTENNA PIPES	SFG22PK	SFG22HK4	SFG23104126SB	530.2 lbs
SFG22-12-B	SFG22 SECTOR FRAME KIT, 12' 8" FACE, UNIVERSAL TOWER MOUNT, NO ANTENNA PIPES	SFG22PK	SFG22HK4	SFG2312SB	389.9 lbs
SFG22-12-3-96	SFG22 SECTOR FRAME KIT, 12' 8" FACE, UNIVERSAL TOWER MOUNT, (3) 96" ANTENNA PIPES	SFG22PK	SFG22HK3	SFG2312396SB	483.6 lbs
SFG22-12-3-126	SFG22 SECTOR FRAME KIT, 12' 8" FACE, UNIVERSAL TOWER MOUNT, (3) 126" ANTENNA PIPES	SFG22PK	SFG22HK3	SFG23123126SB	506.0 lbs
SFG22-12-4-96	SFG22 SECTOR FRAME KIT, 12' 8" FACE, UNIVERSAL TOWER MOUNT, (4) 96" ANTENNA PIPES	SFG22PK	SFG22HK4	SFG2312496SB	514.9 lbs
SFG22-12-4-126	SFG22 SECTOR FRAME KIT, 12' 8" FACE, UNIVERSAL TOWER MOUNT, (4) 126" ANTENNA PIPES	SFG22PK	SFG22HK4	SFG23124126SB	544.7 lbs
SFG22-14-B	SFG22 SECTOR FRAME KIT, 14' 8" FACE, UNIVERSAL TOWER MOUNT, NO ANTENNA PIPES	SFG22PK	SFG22HK4	SFG2314SB	404.5 lbs
SFG22-14-3-96	SFG22 SECTOR FRAME KIT, 14' 8" FACE, UNIVERSAL TOWER MOUNT, (3) 96" ANTENNA PIPES	SFG22PK	SFG22HK3	SFG2314396SB	498.2 lbs
SFG22-14-3-126	SFG22 SECTOR FRAME KIT, 14' 8" FACE, UNIVERSAL TOWER MOUNT, (3) 126" ANTENNA PIPES	SFG22PK	SFG22HK3	SFG23143126SB	520.5 lbs
SFG22-14-4-96	SFG22 SECTOR FRAME KIT, 14' 8" FACE, UNIVERSAL TOWER MOUNT, (4) 96" ANTENNA PIPES	SFG22PK	SFG22HK4	SFG2314496SB	529.4 lbs
SFG22-14-4-126	SFG22 SECTOR FRAME KIT, 14' 8" FACE, UNIVERSAL TOWER MOUNT, (4) 126" ANTENNA PIPES	SFG22PK	SFG22HK4	SFG23144126SB	559.2 lbs

1.0 ALL METRIC DIMENSIONS ARE IN BRACKETS.
2.0 FITS TOWER LEGS UP TO 8" OD, 8" ANGLE 60°, AND 6" ANGLE 90°.
3.0 UP TO 7° TAPER AVAILABLE.

DENSITY	0	lbs/in³
MASS	221	lbs
VOLUME		in³
SURFACE AREA		in²
HEIGHT		
LENGTH		
WIDTH		

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TOLERANCES
0 PLACE X ± .25
1 PLACE .X ± .12
2 PLACE .XX ± .06
ANGLES ± 2°

SAP MATERIAL MASTER: SFG22 SERIES

FINISH: GALV A123

MATERIAL: A-36, A-500

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS INTERPRET PER ISO STANDARDS HANDBOOK, TECHNICAL DRAWINGS, VOLUMES 1 & 2, THIRD EDITION (2002)

	NAME	DATE
CE	DRR	08/08/16
RW		
RV		
AD		
RE	TP	08/08/16
ECN	8000015561	

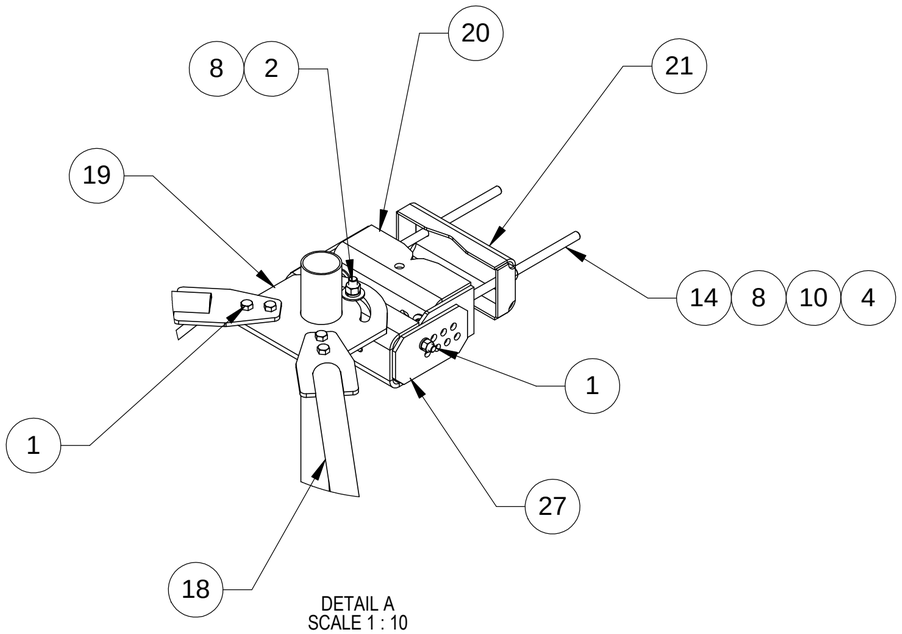
TITLE: SFG22 SERIES DRAWING

SCALE: 1:16

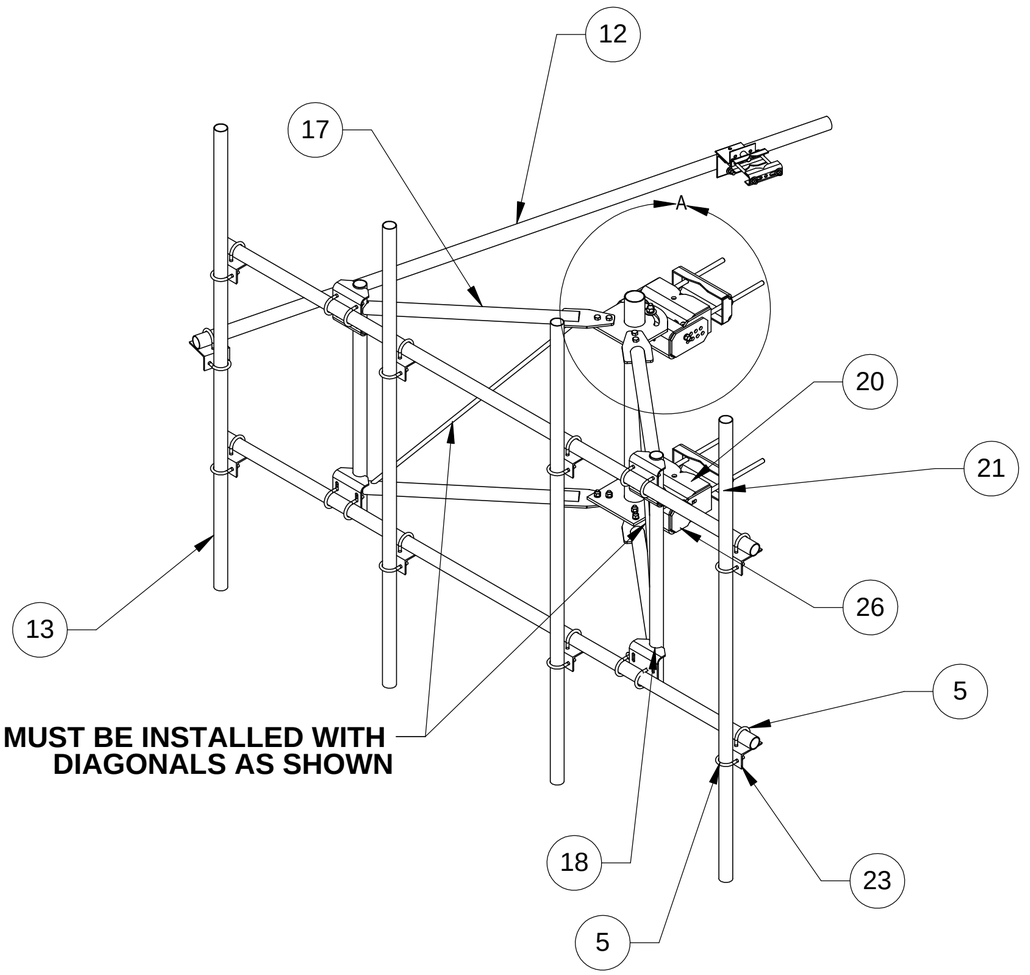
DOCUMENT NO.: SFG22 SERIES

SIZE	WORK AREA	MODEL			DRAWING			SHEET
		VERSION	STATUS	REVISION	VERSION	STATUS	REVISION	
C							F	1 OF 6

NOTES:



DETAIL A
SCALE 1 : 10

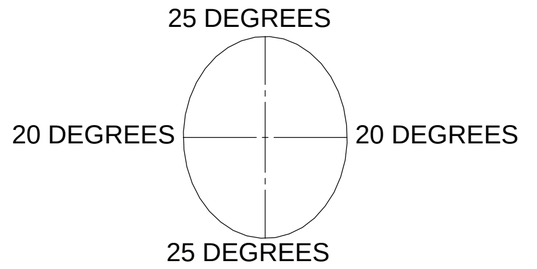


MUST BE INSTALLED WITH DIAGONALS AS SHOWN

ITEM	PART NO.	DESCRIPTION	QTY.	WEIGHT	NOTE NO.
1	GB-0520A	5/8" X 2" GALV BOLT KIT (A325)	12	0.26 LBS	
2	GB-0624A	3/4" X 2-1/2" GALV BOLT KIT (A325)	2	0.47 LBS	
3	GN-04	1/2" GALV HEX NUT	4	0.04 LBS	
4	GN-06	3/4" GALV HEX NUT	12	0.15 LBS	
5	GUB-4240	1/2" X 2-1/2" X 4" GALV U-BOLT	27	0.56 LBS	
6	GUB-53560	5/8" X 3-5/8" X 6" GALV U-BOLT	2	1.28 LBS	
7	GWF-04	1/2" GALV FLAT WASHER	4	0.03 LBS	
8	GWF-06	3/4" GALV FLAT WASHER	10	0.10 LBS	
9	GWL-04	1/2" GALV LOCK WASHER	4	0.01 LBS	
10	GWL-06	3/4" GALV LOCK WASHER	8	0.04 LBS	
11	MT-379-8	1/2" X 8" GALV THREADED ROD	2	0.44 LBS	
12	MT-537	∅2.375" OD x 126" PIPE	1	30.52 LBS	
13	MT-651-96	∅2.375" OD X 96" PIPE	4	23.05 LBS	
14	MT38420	3/4" X 20" GALV THREADED ROD	4	2.49 LBS	
15	OS15034	3/4" X 1-1/2" OFFSET COLLAR	1	0.14 LBS	
16	SAB01	FORMED CLAMP	2	1.35 LBS	
17	SFG2201	SECTOR FRAME ARM WLDMNT	1	52.42 LBS	
18	SFG2202	SECTOR FRAME ARM WLDMNT	1	52.42 LBS	
19	SFG2203	BACK VERTICAL ARM MOUNT	1	50.92 LBS	
20	SFG2305	TOWER SADDLE FRONT CLAMP	2	22.85 LBS	F
21	SFG230625	BACK TOWER LEG CLAMP	2	8.71 LBS	
22	SFG23126	128" SCH 40 PIPE 2-3/8" OD	2	38.76 LBS	
23	XA2020.01	ANTENNA MOUNT ANGLE	11	2.65 LBS	
24	GB-04125	1/2" X 1-1/4" GALV BOLT KIT	1	0.12 LBS	
25	GB-04265	1/2" X 2-3/4" GALV BOLT KIT	1	0.20 LBS	
26	SFG2304	LOWER TAPER BRACKET	1	19.17 LBS	F
27	SFG2303	TOP TAPER BRACKET	1	22.61 LBS	F

RECOMMENDED TIEBACK ANGLE

±25 DEGREES VERTICAL
±20 DEGREES HOTIZONTAL



COMMSCOPE, INC. OF NORTH CAROLINA

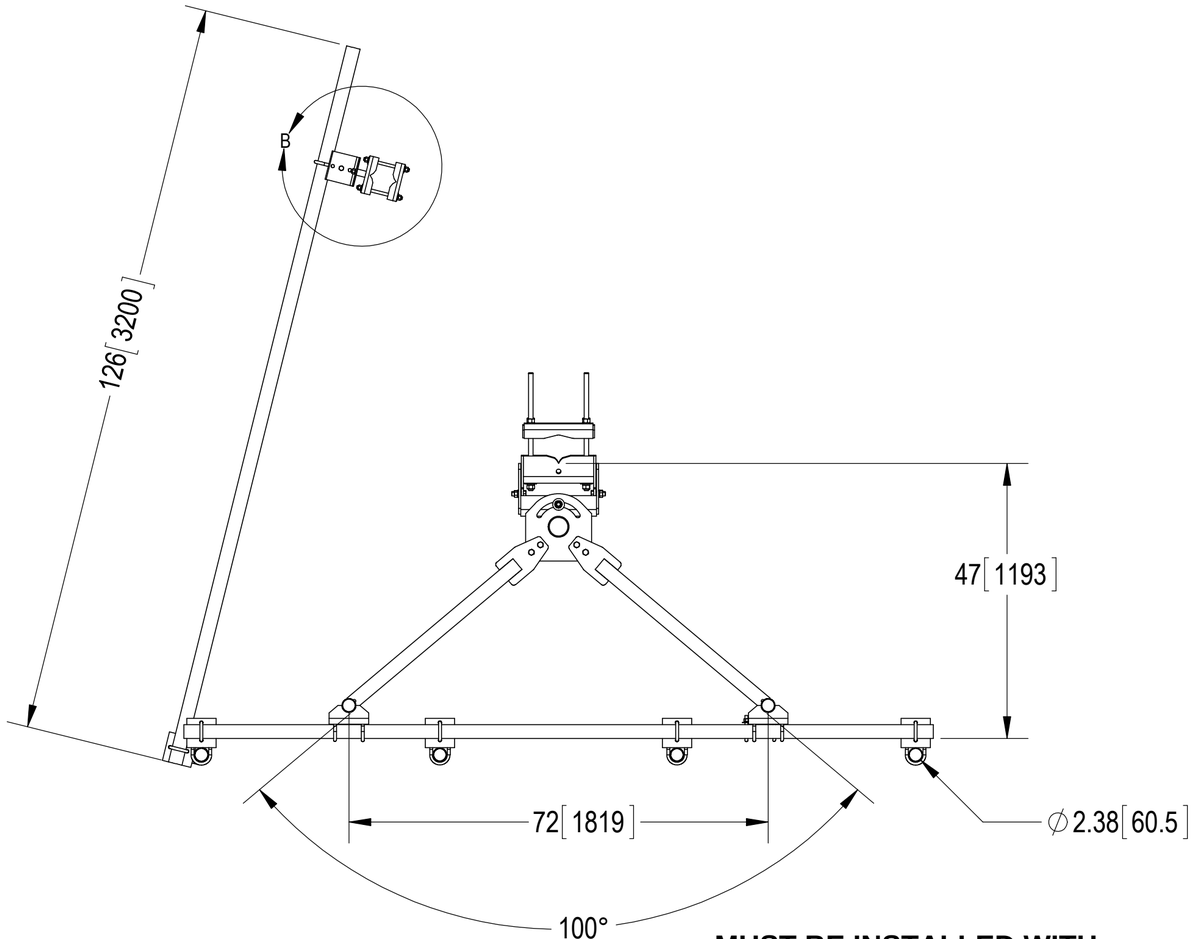
TITLE: SFG22 SERIES DRAWING

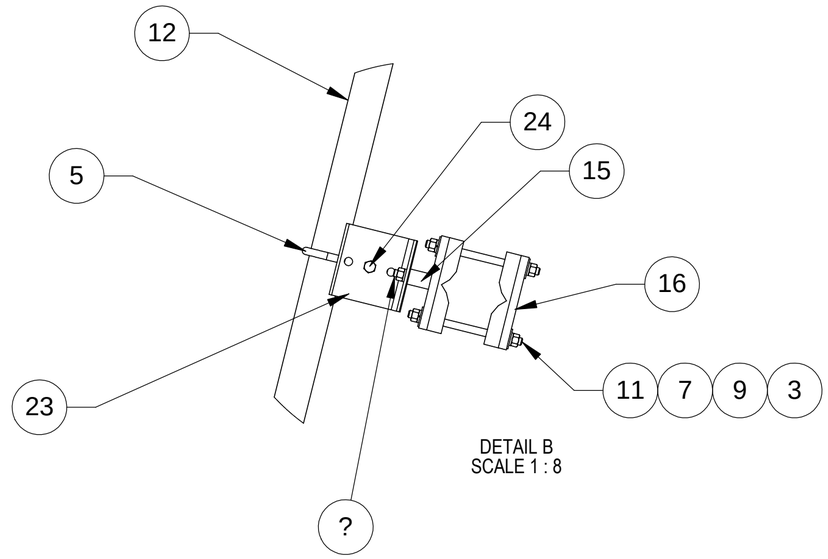
SIZE	SCALE	DOCUMENT NO.
C	1:20	SFG22 SERIES

DRAWING VERSION	DRAWING STATUS	DRAWING REVISION	SHEET
		F	2 OF 6

NOTES:

1.0 ALL METRIC DIMENSIONS ARE IN BRACKETS.

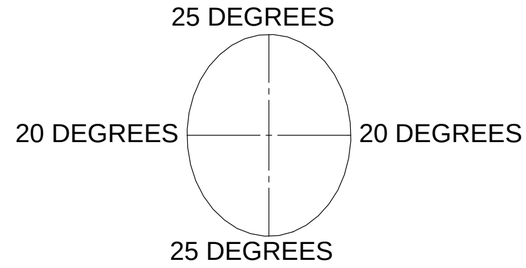




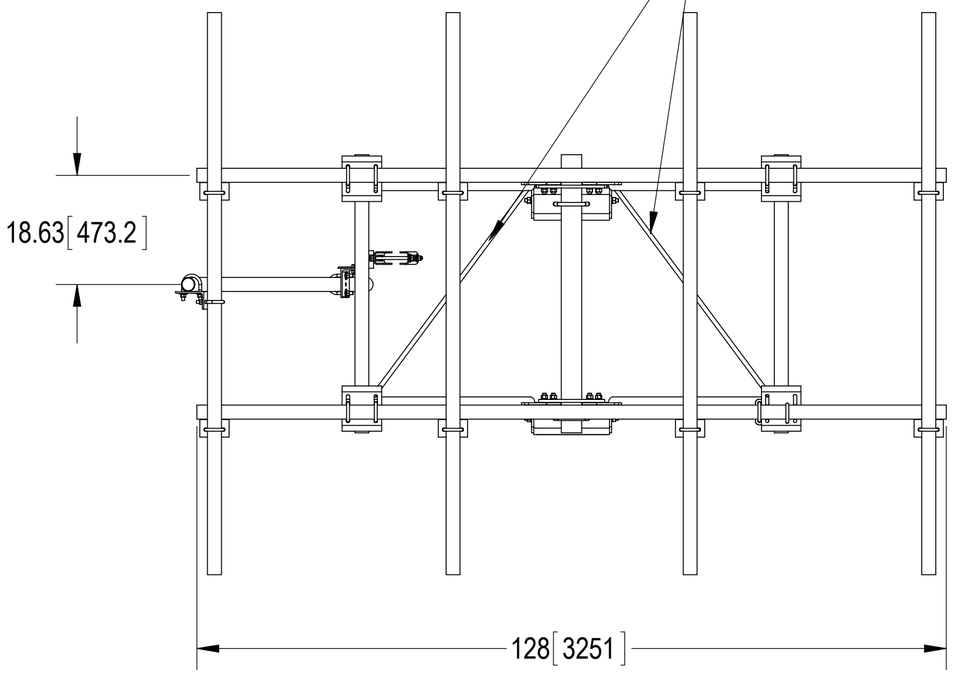
DETAIL B
SCALE 1 : 8

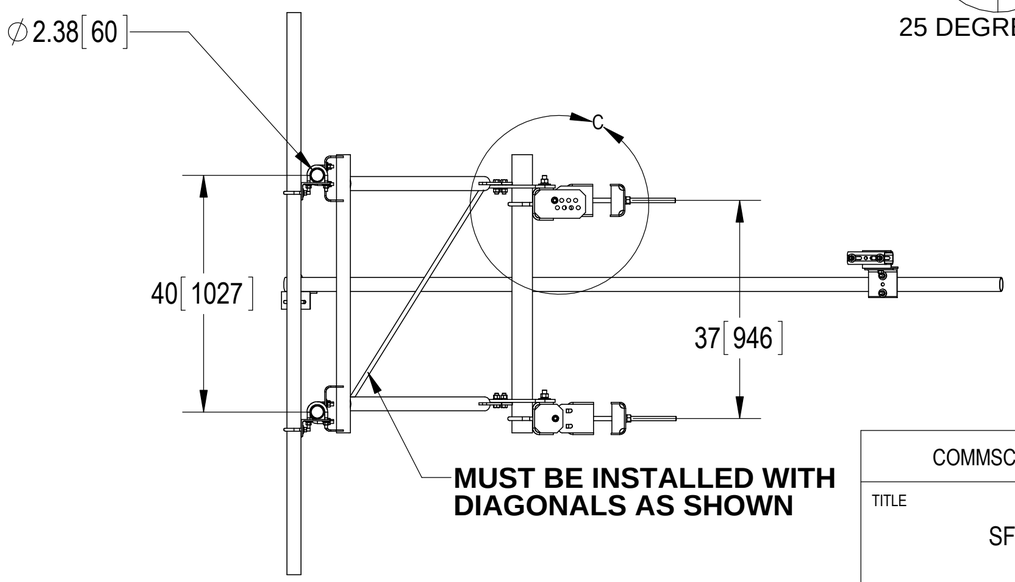
RECOMMENDED TIEBACK ANGLE

±25 DEGREES VERTICAL
±20 DEGREES HOTIZONTAL



MUST BE INSTALLED WITH DIAGONALS AS SHOWN





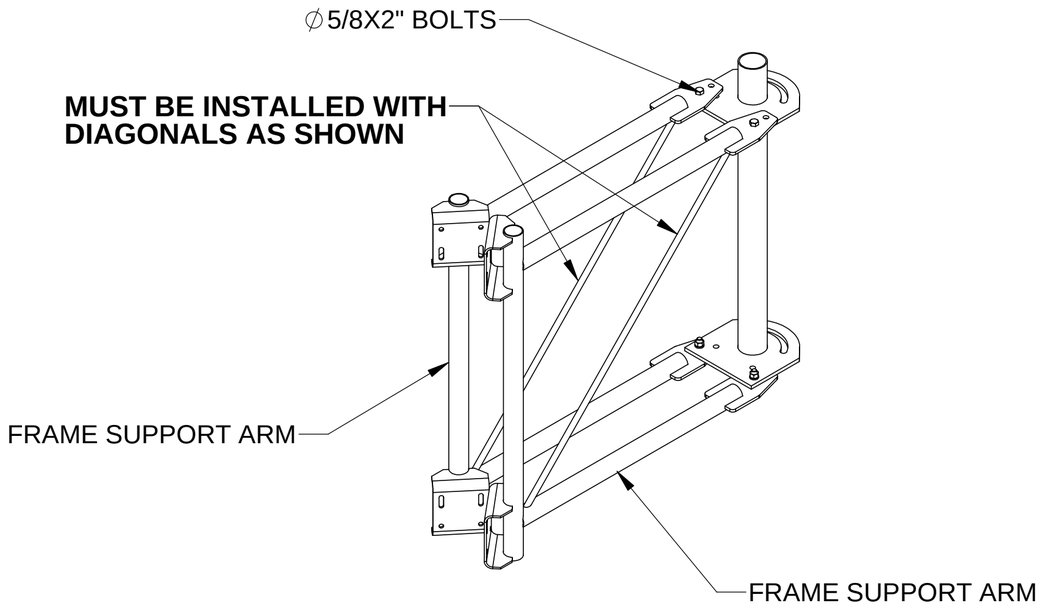
MUST BE INSTALLED WITH DIAGONALS AS SHOWN

COMMSCOPE, INC. OF NORTH CAROLINA

TITLE: SFG22 SERIES DRAWING

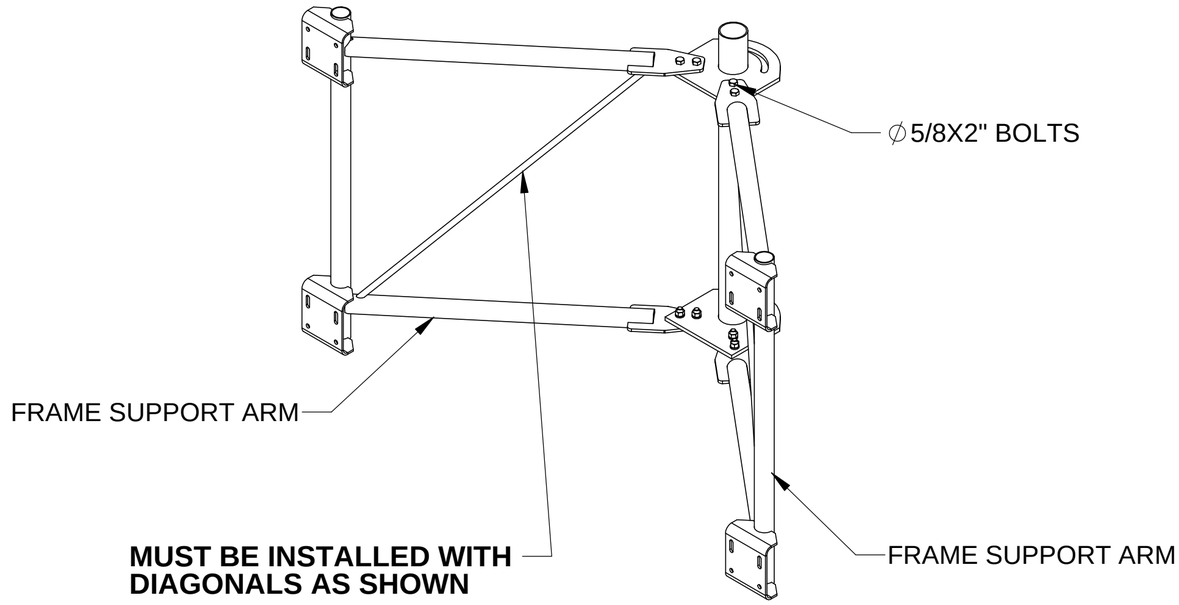
SIZE	SCALE	DOCUMENT NO.			
C	1:20	SFG22 SERIES			
		DRAWING			SHEET
		VERSION	STATUS	REVISION	3 OF 6
				F	

STEP 1: LOOSEN ∅5/8 HARDWARE TO OPEN FRAME SUPPORT ARMS.



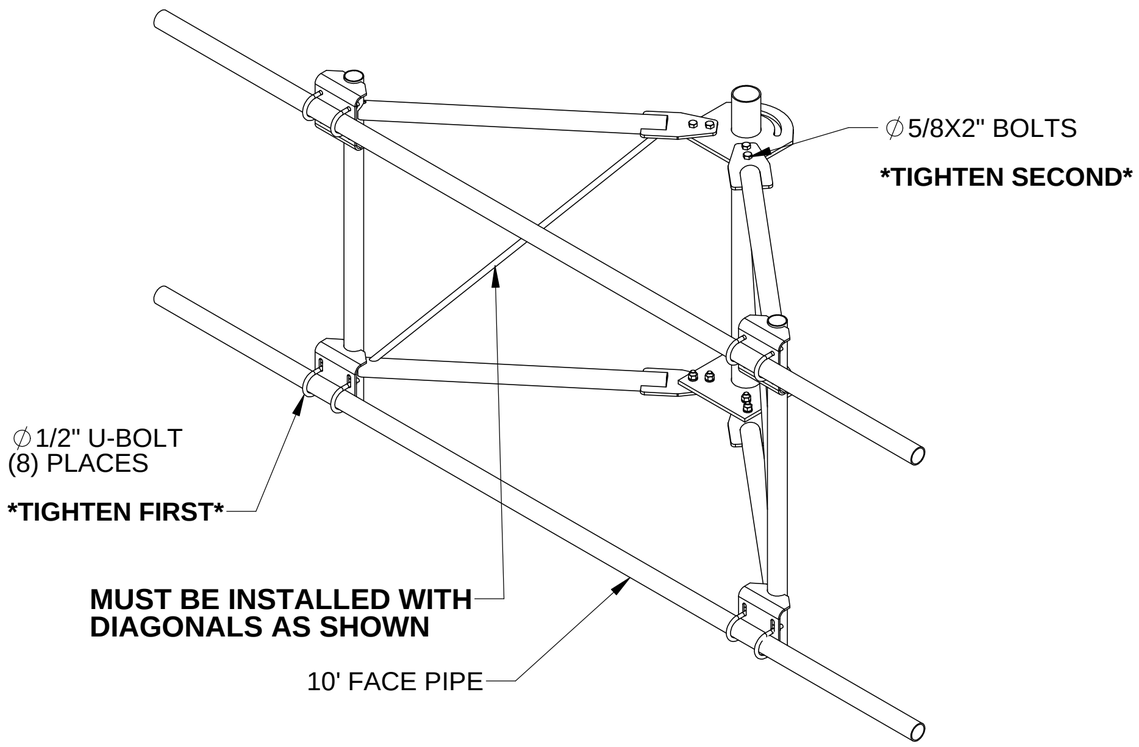
STEP 2: OPEN FRAME SUPPORT ARMS AND INSTALL (4) ∅5/8 X 2" BOLTS.

***DO NOT TIGHTEN ∅5/8" BOLTS AT THIS TIME.**

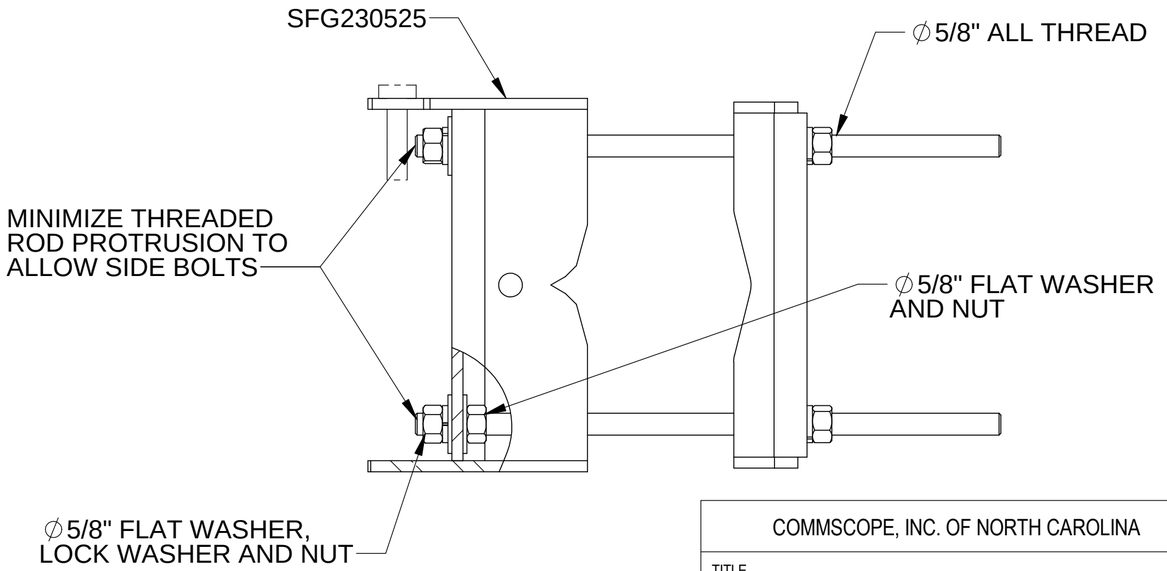


STEP 3: INSTALL FACE PIPES AND ∅1/2" U-BOLTS

TIGHTEN U-BOLTS FIRST AND ∅5/8" BOLTS SECOND



STEP 4: ASSEMBLE TOWER CLAMPS (2X)



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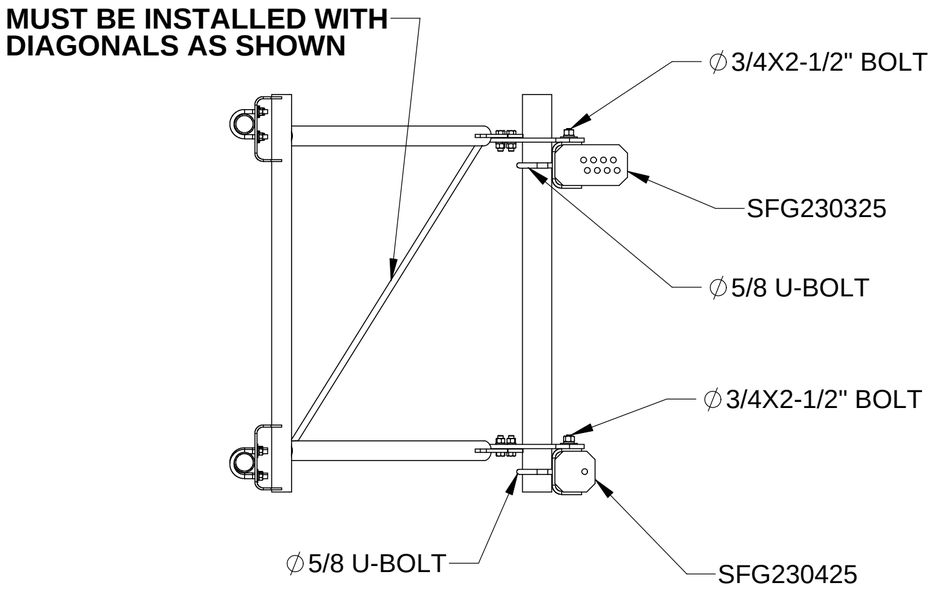
TITLE: SFG22 SERIES DRAWING

SIZE	SCALE	DOCUMENT NO.			
C	1:14	SFG22 SERIES			
		DRAWING			SHEET
		VERSION	STATUS	REVISION	4 OF 6
				F	

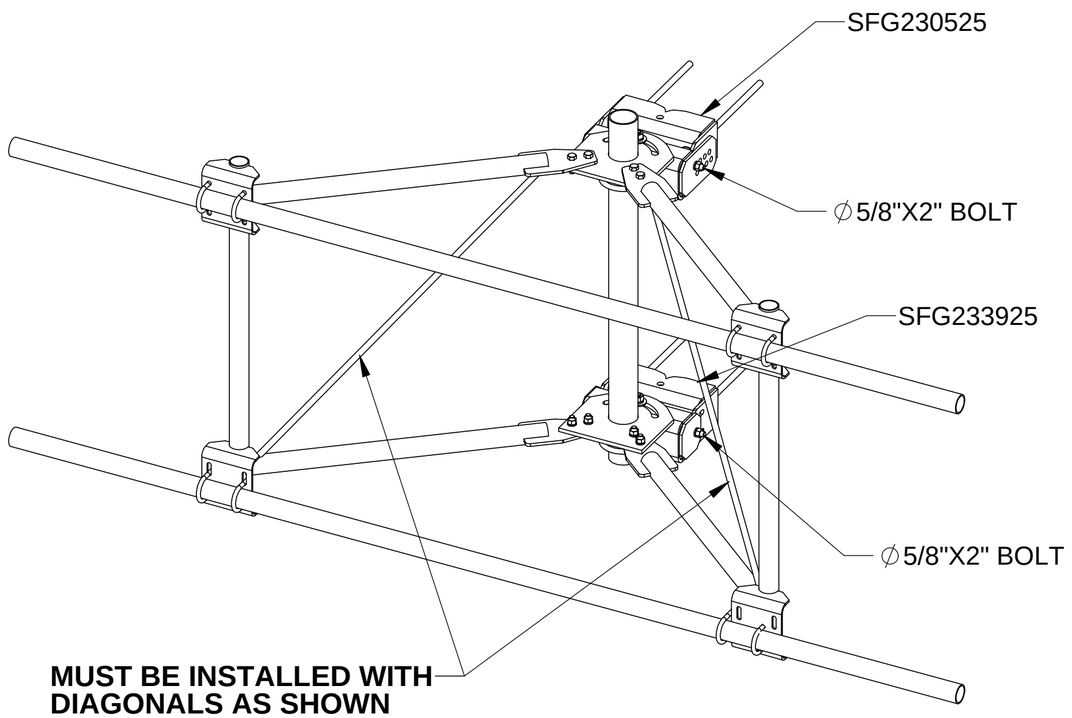
TAPER SETUP (SELF SUPPORT TOWER)

STEP 5

WITH TAPER: INSTALL TAPER BRACKETS (SFG233725 AND SFG232875) WITH HARDWARE

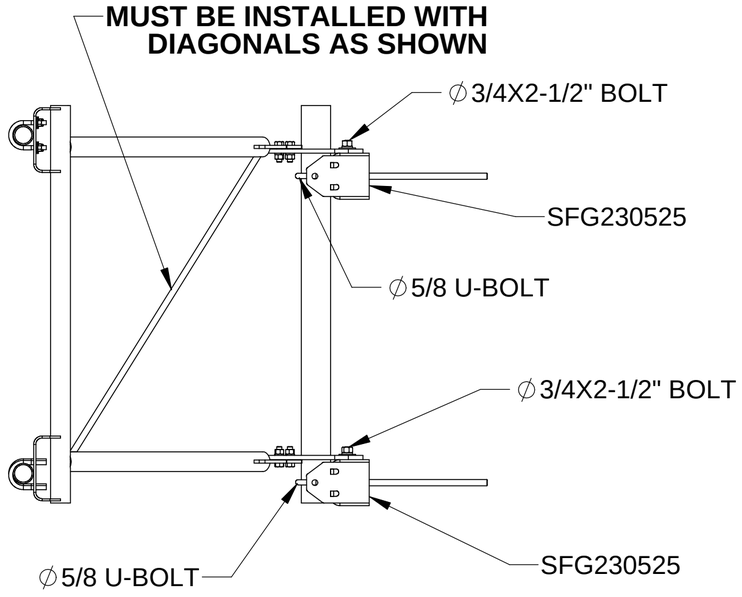


WITH TAPER: INSTALL MOUNT BRACKETS (2X SFG234025) WITH HARDWARE

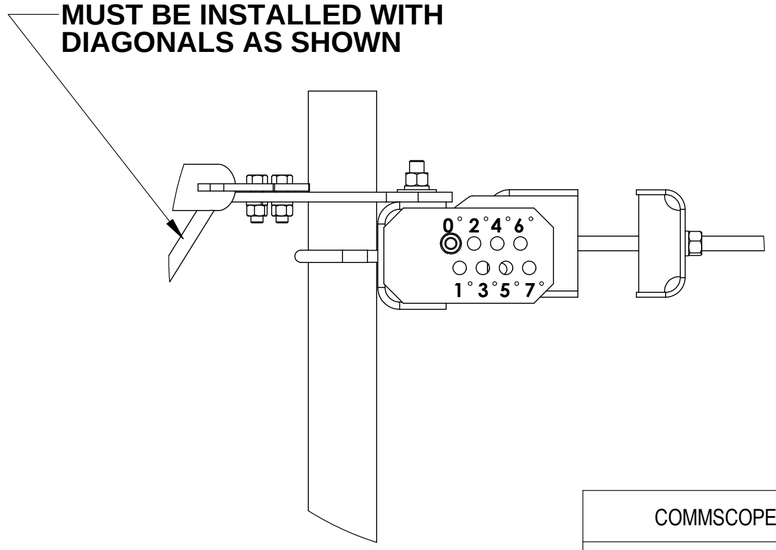


NON-TAPER SETUP (GUYED TOWER)

WITHOUT TAPER: INSTALL MOUNT BRACKETS (2X SFG234025) WITH HARDWARE



TAPER GUIDE

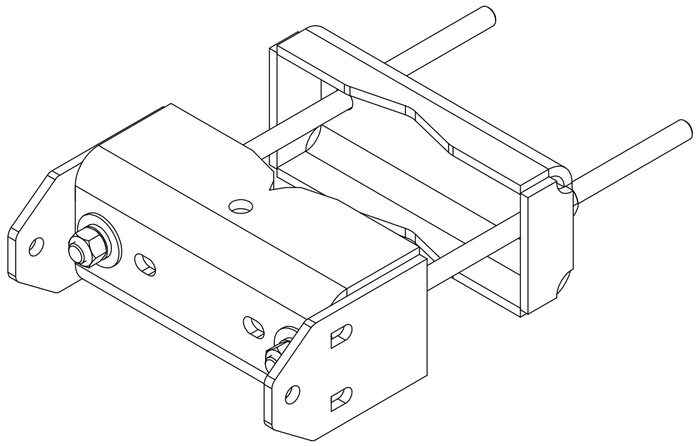


DETAIL C
SCALE 1 : 6

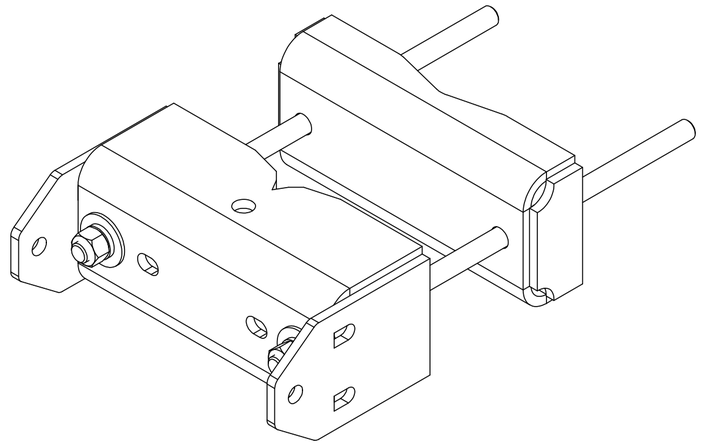
COMMSCOPE, INC. OF NORTH CAROLINA			
TITLE: SFG22 SERIES DRAWING			
SIZE: C	SCALE: 1:14	DOCUMENT NO.: SFG22 SERIES	
		DRAWING: VERSION / STATUS / REVISION: F	SHEET: 5 OF 6

NOTES:

ROUND PIPE SETUP
(BACK CLAMP CAPTURES PIPE)

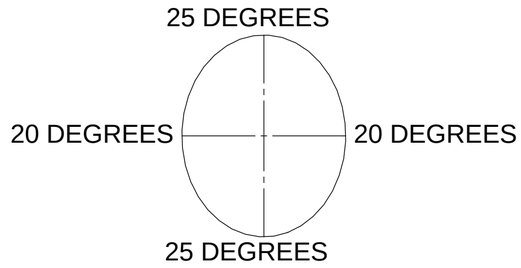


ROUND PIPE SETUP
(BACK CLAMP FLAT AGAINST ANGLE)

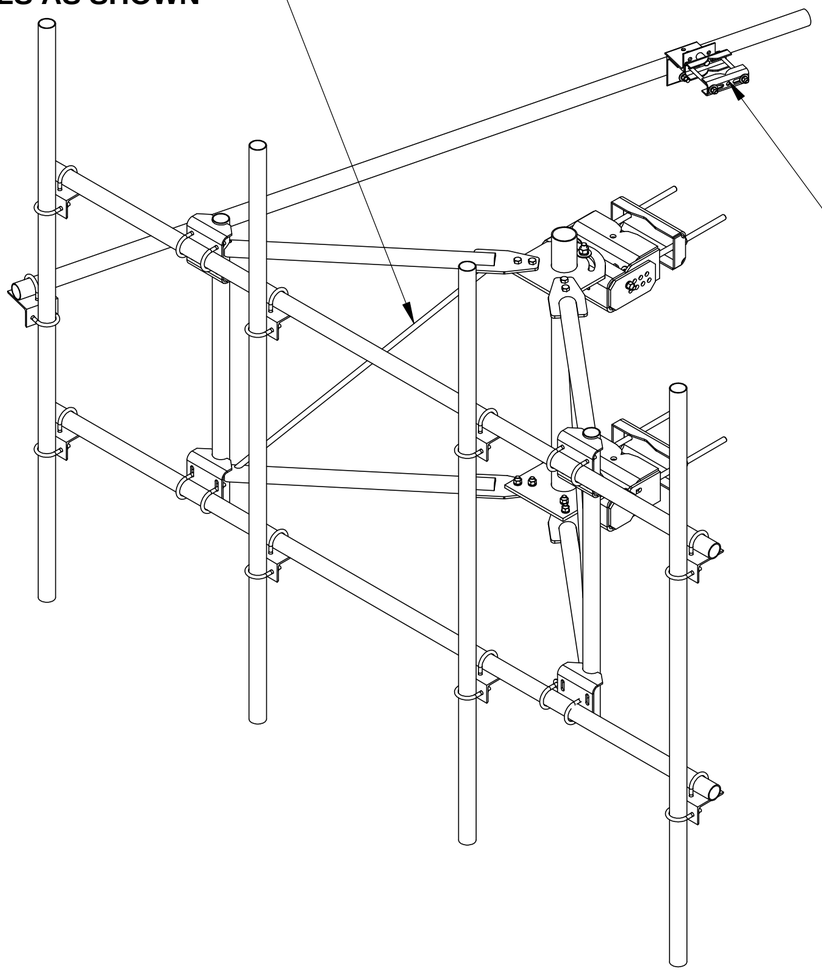


RECOMMENDED TIEBACK ANGLE

±25 DEGREES VERTICAL
±20 DEGREES HOTIZONTAL



MUST BE INSTALLED WITH DIAGONALS AS SHOWN



TIEBACK MUST BE CONNECTED TO A RIGID MEMBER THAT PROVIDES ADEQUATE SUPPORT WITHIN THE LIMITS NOTED IN THE TIEBACK ANGLE RANGE DETAIL, UNLESS APPROVED BY THE ENGINEER OF RECORD.

COMMSCOPE, INC. OF NORTH CAROLINA			
TITLE: SFG22 SERIES DRAWING			
SIZE: C	SCALE: 1:14	DOCUMENT NO.: SFG22 SERIES	
		DRAWING: VERSION / STATUS / REVISION: F	SHEET: 6 OF 6