



CERTIFICATE OF APPROPRIATENESS PLACARD

for Raleigh Historic Resources

5 W HARGETT STREET

Address

Historic District

Raleigh Banking + Trust Co. Bldg.

Historic Property

077-18-MW

Certificate Number

05-21-2018

Date of Issue

11-21-2018

Expiration Date

Project Description:

- Install antennas on roof

This card must be kept pasted in a location within public view until all phases of the described project are complete. The work must conform with the code of the City of Raleigh and laws of the state of North Carolina. When your project is complete, you are required to ask for a final zoning inspection in a historic district area. Telephone the RHDC office at 832-7238 and commission staff will coordinate the inspection with the Inspections Department. If you do not call for this final inspection, your Certificate of Appropriateness is null and void.

Signature, Collette R K
Raleigh Historic Development Commission

Pending the resolution of appeals, commencement of work is at your own risk.

Raleigh Historic Development Commission – Certificate of Appropriateness (COA) Application



**DEVELOPMENT
SERVICES
DEPARTMENT**

Development Services
Customer Service Center
One Exchange Plaza
1 Exchange Plaza, Suite 400
Raleigh, North Carolina 27601
Phone 919-996-2495
eFax 919-996-1831



<input checked="" type="checkbox"/> Minor Work (staff review) – 1 copy <input type="checkbox"/> Major Work (COA Committee review) – 10 copies <input type="checkbox"/> Additions Greater than 25% of Building Square Footage <input type="checkbox"/> New Buildings <input type="checkbox"/> Demo of Contributing Historic Resource <input type="checkbox"/> All Other <input type="checkbox"/> Post Approval Re-review of Conditions of Approval	<p style="text-align: center; margin: 0;">For Office Use Only</p> <p>Transaction # <u>552593</u></p> <p>File # <u>077-18-MW</u></p> <p>Fee _____</p> <p>Amount Paid _____</p> <p>Received Date _____</p> <p>Received By _____</p>
--	--

Property Street Address 5 West Hargett Street, Raleigh, NC 27601

Historic District ~~Fayetteville Street Historic District~~

Historic Property/Landmark name (if applicable) The Raleigh Banking and Trust Company Building

Owner's Name The Raleigh Building (Steve Lewis)

Lot size <u>.17 acres</u>	(width in feet) <u>114</u>	(depth in feet) <u>66</u>
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For applications that require review by the COA Committee (Major Work), provide addressed, stamped envelopes to owners of all properties within 100 feet (i.e. both sides, in front (across the street), and behind the property) not including the width of public streets or alleys ([Label Creator](#)).

Property Address	Property Address

I understand that all applications that require review by the commission's Certificate of Appropriateness Committee must be submitted by 4:00 p.m. on the application deadline; otherwise, consideration will be delayed until the following committee meeting. An incomplete application will not be accepted.

Type or print the following:

Applicant **AT&T Mobility**

Mailing Address **c/o Ramsey Development Solutions, LLC, 83 Lars Lane**

City **Garner**

State **NC**

Zip Code **27529**

Date

Daytime Phone **(919) 961-1747**

Email Address **mike@ramseydevelopmentsolutions.com**

Applicant Signature

Michael Williams As agent for AT+T mobility

Will you be applying for rehabilitation tax credits for this project? Yes No

Did you consult with staff prior to filing the application? Yes No

Office Use Only

Type of Work 50

Design Guidelines - Please cite the applicable sections of the design guidelines (www.rhdc.org).

Section/Page	Topic	Brief Description of Work (attach additional sheets as needed)

Minor Work Approval (office use only)

Upon being signed and dated below by the Planning Director or designee, this application becomes the Minor Work Certificate of Appropriateness. It is valid until 11/21/2018. Please post the enclosed placard form of the certificate as indicated at the bottom of the card. Issuance of a Minor Work Certificate shall not relieve the applicant, contractor, tenant, or property owner from obtaining any other permit required by City Code or any law. Minor Works are subject to an appeals period of 30 days from the date of approval.

Signature (City of Raleigh) Collette R K Date 05/21/2018

	TO BE COMPLETED BY APPLICANT		TO BE COMPLETED BY CITY STAFF		
	YES	N/A	YES	NO	N/A
Attach 8-1/2" x 11" or 11" x 17" sheets with written descriptions and drawings, photographs, and other graphic information necessary to completely describe the project. Use the checklist below to be sure your application is complete. Minor Work (staff review) – 1 copy Major Work (COA Committee review) – 10 copies			✓		
1. Written description. Describe clearly and in detail the nature of your project. Include exact dimensions for materials to be used (e.g. width of siding, window trim, etc.)	<input checked="" type="checkbox"/>		✓		
2. Description of materials (Provide samples, if appropriate)	<input checked="" type="checkbox"/>		✓		
3. Photographs of existing conditions are required. Minimum image size 4" x 6" as printed. Maximum 2 images per page.	<input checked="" type="checkbox"/>		✓		
4. Paint Schedule (if applicable)	<input type="checkbox"/>	<input checked="" type="checkbox"/>			✓
5. Plot plan (if applicable). A plot plan showing relationship of buildings, additions, sidewalks, drives, trees, property lines, etc., must be provided if your project includes any addition, demolition, fences/walls, or other landscape work. Show accurate measurements. You may also use a copy of the survey you received when you bought your property. Revise the copy as needed to show existing conditions and your proposed work.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	✓		
6. Drawings showing existing and proposed work <input checked="" type="checkbox"/> Plan drawings <input checked="" type="checkbox"/> Elevation drawings showing the façade(s) <input checked="" type="checkbox"/> Dimensions shown on drawings and/or graphic scale (required) <input checked="" type="checkbox"/> 11" x 17" or 8-1/2" x 11" reductions of full-size drawings. If reduced size is so small as to be illegible, make 11" x 17" or 8-1/2" x 11" snap shots of individual drawings from the big sheet.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	✓		
7. Stamped envelopes addressed to all property owners within 100 feet of property not counting the width of public streets and alleys (required for Major Work). Use the Label Creator to determine the addresses.	<input type="checkbox"/>	<input checked="" type="checkbox"/>			✓
8. Fee (See Development Fee Schedule)	<input checked="" type="checkbox"/>		✓		

Certificate of Appropriateness: Written Description

To whom it may concern,

AT&T will be modifying their telecommunication facility on the rooftop of the historic Raleigh Banking and Trust Company Building. Modifications to the existing building to include the addition of antennas. Below is a description including reference drawings and documents.

Antennas

AT&T proposes to install/add three (3) Air5331 LTE 5G antennas (24" x 11.8" x 3.5") to their existing installation on the penthouse/elevator shaft using wall mounts with a radiation centerline of 142'-0" above top of existing building gradeline. Antennas will be painted to match the existing brick of each sector of the building. See Construction Drawings by Mastec Network Solutions dated March 30, 2018 for more details.



Ramsey Development Solutions, LLC
Telecommunications Site Development Consulting

April 10, 2018

City of Raleigh
RHDC Office
One Exchange Plaza, Suite 300
Fayetteville Street, Raleigh, NC 27601

ATTN: Tania Georgiou Tully

RE: Minor Work COA Application for AT&T's roof top Modifications at 5 W. Hargett Street (AT&T 368-615)

Tania:

In the enclosed package you will find:

- 11"x17" construction drawings for review
- Certificate of Appropriateness Minor Work Application
- Photo simulation of proposed upgrades
- Written Description of Work Proposed

This information is for your review and approval for the proposed AT&T modifications on the roof top for the building at 5 West Hargett Street, Raleigh, NC 27601 (PIN:1703689301.000). Please do not hesitate to contact me should you require any additional information or have any questions. Please, contact me when the permit(s) are ready to be picked up.

Thank you for your time,

Mike Hitchcock
Ramsey Development Solutions, LLC
83 Lars Lane
Garner, NC 27529
Office/Mobile: (919)961-1747
E-mail: mike@ramseydevelopmentsolutions.com



<p>SE VIEW</p>	<p>AT&T ANTENNAS NOT VISIBLE</p>	<p>SE AND SW VIEW FROM MARTIN AND FAYETTEVILLE ST</p>	<p>AT&T ANTENNAS NOT VISIBLE</p>	<p>SW VIEW</p>	<p>WELLS FARGO</p>	<p>LET'S GO CANES</p>	<p>FAYETTEVILLE ST. DIS</p>	<p>AT&T ANTENNAS NOT VISIBLE</p>	<p>AT&T ANTENNAS NOT VISIBLE</p>
<p>PREPARED BY:</p> <p>MasTec Network Solutions 1000 CENTREGREEN WAY, SUITE 207 CARY, NC 27513</p>		<p>PREPARED FOR:</p> <p>at&t</p>		<p>SITE TYPE:</p> <p>ROOFTOP</p>		<p>SITE ID:</p> <p>388-615</p>		<p>COUNTY:</p> <p>WAKE</p>	
<p>THE INFORMATION CONTAINED IN THESE DRAWINGS IS THE PROPERTY OF MAS-TEC NETWORK SOLUTIONS. NO PART OF THESE DRAWINGS IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEMS. PERMISSION IS PROHIBITED.</p>		<p>DRAWN BY:</p> <p>EJL</p>		<p>APPROVED BY:</p> <p>RM</p>		<p>PHOTOSIM DATE:</p> <p>03/13/18</p>		<p>MNS PROJECT NO.:</p> <p>0703013301-02</p>	



NORTH VIEW FROM FAVETTERVILLE ST

PREPARED BY:
Mastec
 Network Solutions
 1000 CENTREGREEN WAY, SUITE 300
 CARY, NC 27513



SITE TYPE:
ROOFTOP

SITE ID:
388-415
 SITE ADDRESS:
**5 WEST HARGETT ST
 RALEIGH, NC 27601**

COUNTY:
WAKE

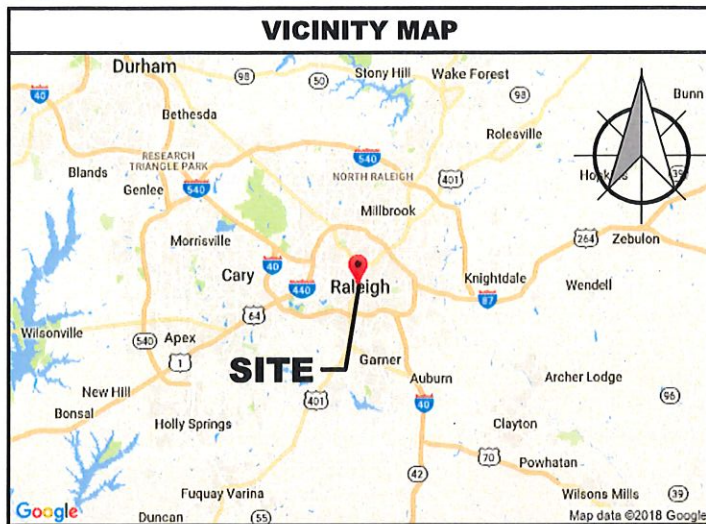
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DRAWN BY:
 APPLIED BY:
 PHOTOGRAPH DATE:
 MNS PROJECT NO.: 0700613301-02

E.I.L.

R.M.

02/12/18



DIRECTIONS

FROM AT&T OFFICE: 2002 PISGAH CHURCH ROAD, SUITE 300, GREENSBORO, NC 27455

GET ON I-785/I-840 IN GILMER FROM LAWDALE DR AND W WENDOVER AVE E. HEAD SOUTHWEST ON PISGAH CHURCH RD TOWARD LAWDALE DR. TURN LEFT ONTO LAWDALE DR. USE ANY LANE TO TURN SLIGHTLY LEFT ONTO BATTLEGROUND AVE. SLIGHT RIGHT ONTO THE U.S. 220 S RAMP TO WENDOVER AVENUE E. MERGE ONTO W WENDOVER AVE E. CONTINUE ONTO US-70 E/BURLINGTON RD. TURN RIGHT ONTO THE I-840 E RAMP TO I-40. FOLLOW I-40 E TO WADE AVE/WADE AVENUE IN RALEIGH. MERGE ONTO I-785/I-840. USE THE RIGHT 2 LANES TO TAKE EXIT 21 TO MERGE ONTO I-40 E TOWARD I-85 N/DURHAM/RALEIGH. KEEP RIGHT AT THE FORK TO STAY ON I-40 E. FOLLOW SIGNS FOR INTERSTATE 40/RALEIGH. USE THE RIGHT 2 LANES TO TAKE EXIT 289 FOR WADE AVENUE TOWARD I-440/US-1 N. CONTINUE ONTO WADE AVENUE. CONTINUE ON WADE AVE. DRIVE TO W HARGETT ST. KEEP LEFT TO CONTINUE ON WADE AVE/WADE AVENUE. CONTINUE TO FOLLOW WADE AVE. KEEP RIGHT TO CONTINUE ON NC-50 S/US-70 E/WADE AVE. FOLLOW SIGNS FOR DOWNTOWN/CAPITAL BOULEVARD S. CONTINUE TO FOLLOW NC-50 S/US-70 E. TURN LEFT ONTO W HARGETT ST. DESTINATION WILL BE ON THE RIGHT.



LTE 5G FFA CONSTRUCTION DRAWINGS



FA #: **10549293** SITE ID: **368-615**

SITE NAME:
368-615

SITE ADDRESS:
**5 WEST HARGETT STREET
RALEIGH, NC 27601
(WAKE COUNTY)**

Raphael Mohamed

Digitally signed by Raphael Mohamed
DN: CN=Raphael Mohamed, O=Raphael I. Mohamed, L=Cary, S=North Carolina, C=US,
SERIALNUMBER=sm10zvgqn5d48r4k7ygg5d64cl8n
Date: 2018.03.30 22:15:44-04'00'

SITE SUMMARY	
SCOPE TYPE:	CARRIER ADD
OCCUPANCY TYPE:	TELECOMMUNICATIONS
STRUCTURE HEIGHT:	146±
STRUCTURE TYPE:	ROOFTOP
LATITUDE:	35.7780920
LONGITUDE:	-78.6394610
JURISDICTION:	CITY OF RALEIGH
COUNTY:	WAKE
PARCEL ID:	1703689301-000

PROJECT DIRECTORY	
APPLICANT:	AT&T MOBILITY CORP. 2002 PISGAH CHURCH ROAD, SUITE 300 GREENSBORO, NC 27455
TOWER OWNER:	THE RALEIGH BUILDING LLC 5 WEST HARGETT STREET, RM 102 RALEIGH, NC 27601 CONTACT: STEVE LEWIS PHONE: (910) 256-2198
PROJECT MANAGER:	MASTEC NETWORK SOLUTIONS 1000 CENTREGREEN WAY, SUITE 300 CARY, NC 27513 VAL WOOD PHONE: (919) 674-5846
SITE DESIGN:	MASTEC ENGINEERING, PLLC 1000 CENTREGREEN WAY, SUITE 300 CARY, NC 27513 CONTACT: RAPHAEL MOHAMED PHONE: (919) 674-5895

SHEET INDEX			
SHEET	DESCRIPTION	REV.	REV. DATE
T-1	TITLE SHEET	0	03/30/18
AB-1	APPENDIX-B	0	03/30/18
AB-2	APPENDIX-B	0	03/30/18
C-1	EQUIPMENT LAYOUT	0	03/30/18
C-2	EXISTING ANTENNA LAYOUT	0	03/30/18
C-3	FINAL ANTENNA LAYOUT	0	03/30/18
C-4	BUILDING ROOF PLAN & PROFILE	0	03/30/18
C-5	CIVIL DETAILS	0	03/30/18
E-1	SINGLE LINE DIAGRAM	0	03/30/18
E-2	RISER DIAGRAM	0	03/30/18
	MOUNT SHEETS ATTACHED		

GENERAL NOTES

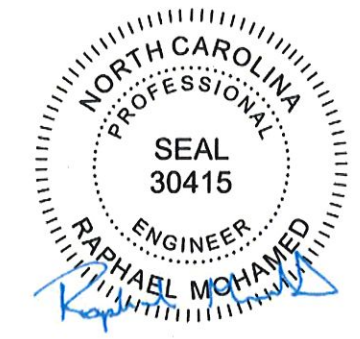
811
Know what's below.
Call before you dig.

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION, THEREFORE HANDICAP ACCESS IS NOT REQUIRED. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED. NO WORK SHALL COMMENCE WITHOUT THE APPROVED TOWER/ANTENNA MOUNT STRUCTURAL ANALYSIS REPORT SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER UNDER SEPARATE COVER.

CODE COMPLIANCE

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:

- 2012 NC BUILDING CODE
- ANSI/TIA/EIA-222-G
- LOCAL BUILDING CODE
- CITY/COUNTY ORDINANCES
- FAA COMPLIANCE
- FCC COMPLIANCE
- 2014 NEC CODE COMPLIANCE
- 2012 INTERNATIONAL RESIDENTIAL CODE
- 2012 INTERNATIONAL FIRE CODE
- 2012 INTERNATIONAL MECHANICAL CODE
- 2015 NC EXISTING BUILDING CODE (BASED ON 2012 IEBC)
- 2012 RESIDENTIAL CODES



03/30/18
RAPHAEL MOHAMED, P.E.
NORTH CAROLINA NO. 30415

SUBMITTALS			
DATE	DESCRIPTION	REV	ISSUED BY
03/30/18	CONSTRUCTION	0	RM

DRAWN BY: CLS
CHECKED BY: JFS
APPV'D BY: RM
MNS PROJECT NO: 0213013301-03

THE INFORMATION CONTAINED IN THESE DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF MASTEC NETWORK SOLUTIONS IS PROHIBITED.

PREPARED FOR:

PREPARED BY:

1000 CENTREGREEN WAY, SUITE 300
CARY, NC 27513

SITE ID:
368-615

SITE NAME:
368-615

SITE ADDRESS:
**5 WEST HARGETT STREET
RALEIGH, NC 27601**

FA LOCATION:
10549293

TOWER OWNER ID:
N/A

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

**CITY OF RALEIGH
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: 368-615
 Address: 5 West Hargett St., Raleigh, NC 27601 Suite #: _____ Phone: (704) 424-1400
 Owner or Authorized Agent: AT&T Mobility-Edmund McDonald Phone: (704) 424-1400
 Email: EM6753@att.com Fax: _____
 Owned By: Privately City/County State City/County
 Code Enforcement Jurisdiction: City County City/County
 Name of Jurisdiction: City of Raleigh

PROJECT SUMMARY:
 Building Description: _____
 AT&T Cellular Compound

Scope of Work:
 • INSTALL (3) AIRSUN ANTENNAS
 • INSTALL (3) PROPOSED MAST PIPES
 • INSTALL (3) 15 AMP BREAKERS INTO INDOOR POWER PLANT
 • ADD (3) BRG'S INSIDE EXISTING PIP RACK

Code Compliance Summary:
 • 2012 NC BUILDING CODE
 • ANS/ASSE/AIA-222-G
 • LOCAL BUILDING CODE
 • CITY/COUNTY ORDINANCES
 • FAA COMPLIANCE
 • FCC COMPLIANCE
 • 2011 NEC CODE COMPLIANCE

Alternative Means of Compliance Request:

Lead Design Professional/Project Coordinator:

DESIGNER FIRM NAME LICENSE TELEPHONE
 Architectural: _____
 Civil: Mastec Network Solutions Raphael Mohamed 30415 (919) 674-5895
 Electrical: _____
 Fire Alarm: _____
 Plumbing: _____
 Mechanical: _____
 Sprinkler-Standpipe: _____
 Structural: _____
 Precast: _____
 Trusses: _____
 Retaining Walls > 5' High: _____
 Other: _____

Incidental Use Separation (508.2.5)
 This separation is not exempt as a Non-Separated Use (see exceptions).
 Non-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.
 Separated Use (508.4) - See below for area calculations.
 For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

$$N/A + N/A = N/A \leq 1.00$$

1 Frontage area increases from Section 506.2 are computed thus:
 a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
 b. Total Building Perimeter = _____ (P)
 c. Ratio (F/P) = _____ (F/P)
 d. W = Minimum width of public way = _____ (W)
 e. Percent of frontage increase $I_f = 100[(F/P - 0.25) \times W/30] = \text{_____} (\%)$
2 The sprinkler increase per Section 506.3 is as follows:
 a. Multi-story building $I_s = 200$ percent
 b. Single-story building $I_s = 500$ percent
3 Unlimited area applicable under conditions of Section 507.
4 Maximum Building Area = total number of stories in the building x E (506.4).
5 The maximum area of open parking garages must comply with Table 406.3.5. The maximum area of air traffic control towers must comply with Table 412.1.2.

ALLOWABLE HEIGHT

ALLOWABLE (TABLE 505)	INCREASE FOR SPRINKLERS	SHOWS ON PLANS	CODE REFERENCE
Type _____	Type _____	Type _____	
Building Height in Feet	Feet = H - 20 = _____		
Building Height in Stories	Stories + 1 = _____		

2012 NC Administrative Code and Policies

ALLOWABLE AREA

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

Accessory Occupancies:
 A-1 A-2 A-3 A-4 A-5
 Educational F-1 Moderate F-2 Low
 Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM
 Institutional I-1 I-2 I-3 I-4 I-5
 1-3 Condition 1 2 3 4 5
 Mercantile R-1 R-2 R-3 R-4
 Residential S-1 Moderate S-2 Low
 Storage Parking Garage Open Enclosed High-piled Repair Garage
 Utility and Miscellaneous Open Enclosed Repair Garage

Incidental Uses (Table 508.2.5):

- Furnace room where any piece of equipment is over 400,000 Btu per hour input
 - Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower
 - Refrigerant machine room
 - Hydrogen cutoff rooms, not classified as Group H
 - Incinerator rooms
 - Paint shops, not classified as Group H, located in occupancies other than Group F
 - Laboratories and vocational shops, not classified as Group H, located in a Group E or I-2 occupancy
 - Laundry rooms over 100 square feet
 - Group I-2 waste and linen collection rooms
 - Group I-2 cells equipped with padded surfaces
 - Waste and linen collection rooms over 100 square feet
 - Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies
 - Rooms containing fire pumps
 - Group I-2 storage rooms over 100 square feet
 - Group I-2 commercial kitchens
 - Group I-2 laundries equal to or less than 100 square feet
 - Group I-2 rooms or spaces that contain fuel-fired heating equipment
- Special Uses:** 402 403 404 405 406 407 408 409 410 411 412
 413 414 415 416 417 418 419 420 421 422 423 424
 425 426 427
- Special Provisions:** 509.2 509.3 509.4 509.5 509.6 509.7 509.8 509.9
Mixed Occupancy: No Yes Separation: _____ Hr. Exception: _____

2012 NC Administrative Code and Policies

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RECP'D PROVIDED (REDUCTION)	RATING (W/ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses							
Beaming 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							
Roof Construction							
Including supporting beams and joists							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy Separation							
Party Fire Wall Separation							
Smoke Barrier Separation							
Tenant Separation							
Incidental Use Separation							

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: No Yes
 Exit Signs: No Yes
 Fire Alarm: No Yes
 Smoke Detection Systems: No Yes Partial
 Panic Hardware: No Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: THIS IS A 2-HR FIRE RATED BUILDING
 Fire and/or smoke rated wall locations (Chapter 7)
 Assumed and test property line locations

2012 NC Administrative Code and Policies



03/30/18
 RAPHAEL MOHAMED, P.E.
 NORTH CAROLINA NO. 30415

SUBMITTALS			
DATE	DESCRIPTION	REV	ISSUED BY
03/30/18	CONSTRUCTION	0	RM

DRAWN BY: _____ CLS
 CHECKED BY: _____ JFS
 APP'VD BY: _____ RM
 MNS PROJECT NO: _____ 0213013301-03

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PREPARED BY:
Mastec
 Network Solutions
 1000 CENTREGREEN WAY, SUITE 300
 CARY, NC 27513

SITE ID:
368-615

SITE NAME:
368-615

SITE ADDRESS:
**5 WEST HARGETT STREET
 RALEIGH, NC 27601**

FA LOCATION:
10549293

TOWER OWNER ID:
N/A

SHEET TITLE
**APPENDIX B-BUILDING
 CODE SUMMARY**

SHEET NUMBER
AB-1

- Exterior wall opening area with respect to distance to assumed property lines (705.8)
- Existing structures within 30' of the proposed building
- Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.1)
- Occupant loads for each area
- Exit access travel distances (101.6)
- Common path of travel distances (101.4.3 & 1028.8)
- Dead end lengths (1018.4)
- Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)
- Actual occupant load for each exit door
- A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- Location of doors with panic hardware (1008.1.10)
- Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)
- Location of doors with electromagnetic egress locks (1008.1.9.8)
- Location of doors equipped with hold-open devices
- Location of emergency escape windows (1029)
- The square footage of each fire area (902)
- The square footage of each smoke compartment (407.4)
- Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

TOTAL ACCESSIBLE UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE B UNITS PROVIDED	TYPE B UNITS REQUIRED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	TOTAL # OF ACCESSIBLE SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
			REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 13' ACCESS AISLE	8' ACCESS AISLE	
TOTAL						

STRUCTURAL DESIGN

Design Loads:

Importance Factors: Wind (Iw) 1.00
Snow (Is) 1.00
Seismic (Ie) 1.00

Live Loads: Roof 20 psf
Mezzanine N/A psf
Floor (See Equipment Info.) psf

Ground Snow Load: 15 psf

2012 NC Administrative Code and Policies

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.

Climate Zone: 3 4 5

Method of Compliance:

- Prescriptive (Energy Code)
- Performance (Energy Code)
- Prescriptive (ASHRAE 90.1)
- Performance (ASHRAE 90.1)

THERMAL ENVELOPE

Roof/ceiling Assembly (each assembly)

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: _____

Walls below grade (each assembly)

Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

Floors over unconditioned space (each assembly)

Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

Floors slab on grade

Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Horizontal/vertical requirement: No Yes
slab heated: _____

2012 NC Administrative Code and Policies

Wind Load: Basic Wind Speed 90 mph (ASCE-7)
Exposure Category B
Wind Base Shear (for MWFRS) Vx = (See Equip. Info.) Vy = (See Equip. Info.)

SEISMIC DESIGN CATEGORY:

Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5) I II III IV
Spectral Response Acceleration Sa 23.1 %g C D E F
Site Classification (Table 1613.5.2) A B C D E F
Data Source: Field Test Presumptive Historical Data

Basic structural system (check one)
 Bearing Wall Dual w/Special Moment Frame Slab Mounted Equip. only
 Building Frame Dual w/Intermediate R/C or Special Steel
 Moment Frame Inverted Pendulum

Seismic base shear: Vx = 4000lb Vy = 4000lb
Analysis Procedure: Simplified Equivalent Lateral Force Dynamic
Architectural, Mechanical, Components anchored? Yes No

LATERAL DESIGN CONTROL:

Earthquake Wind N/A

SOIL BEARING CAPACITIES:

Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity 1500 psf
Pile size, type, and capacity N/A

SPECIAL INSPECTIONS REQUIRED: Yes No

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

SPACE	EXISTING	NEW	REQUIRED	WATERCLOSETS		URINALS		LAVATORIES		SHOWERS/TUBS		DRINKING FOUNTAINS	
				MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	REGULAR	ACCESSIBLE		

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPL, DHHS, ICC, etc., describe the below)

2012 NC Administrative Code and Policies

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Method of Compliance: Prescriptive Performance Energy Cost Budget

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: N/A
Chiller Size category. If oversized, state reason: N/A

List equipment efficiencies:

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance:

Energy Code: Prescriptive Performance
ASHRAE 90.1: Prescriptive Performance

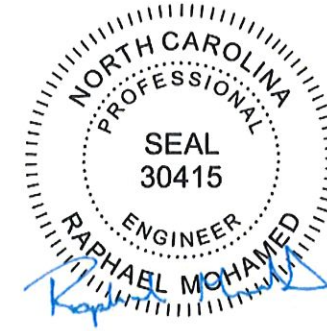
Lighting schedule (each fixture type)

lamp type required in fixture: _____
number of lamps in fixture: _____
ballast type used in the fixture: _____
number of ballasts in fixture: _____
total wattage per fixture: _____
total interior wattage specified vs. allowed (whole building or space by space): _____
total exterior wattage specified vs. allowed: _____

Additional Prescriptive Compliance

- 506.2.1 More Efficient Mechanical Equipment
- 506.2.2 Reduced Lighting Power Density
- 506.2.3 Energy Recovery Ventilation Systems
- 506.2.4 Higher Efficiency Service Water Heating
- 506.2.5 On-Site Supply of Renewable Energy
- 506.2.6 Automatic Daylighting Control Systems

2012 NC Administrative Code and Policies



RAPHAEL MOHAMED, P.E.
NORTH CAROLINA NO. 30415

03/30/18

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
03/30/18	CONSTRUCTION	0	RM

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CHECKED BY: JFS
APP'VD BY: RM
MNS PROJECT NO: 0213013301-03

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PREPARED BY:



SITE ID:
368-615

SITE NAME:
368-615

SITE ADDRESS:
5 WEST HARGETT STREET
RALEIGH, NC 27601

FA LOCATION:
10549293

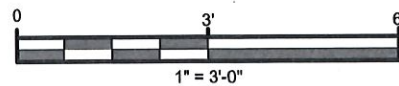
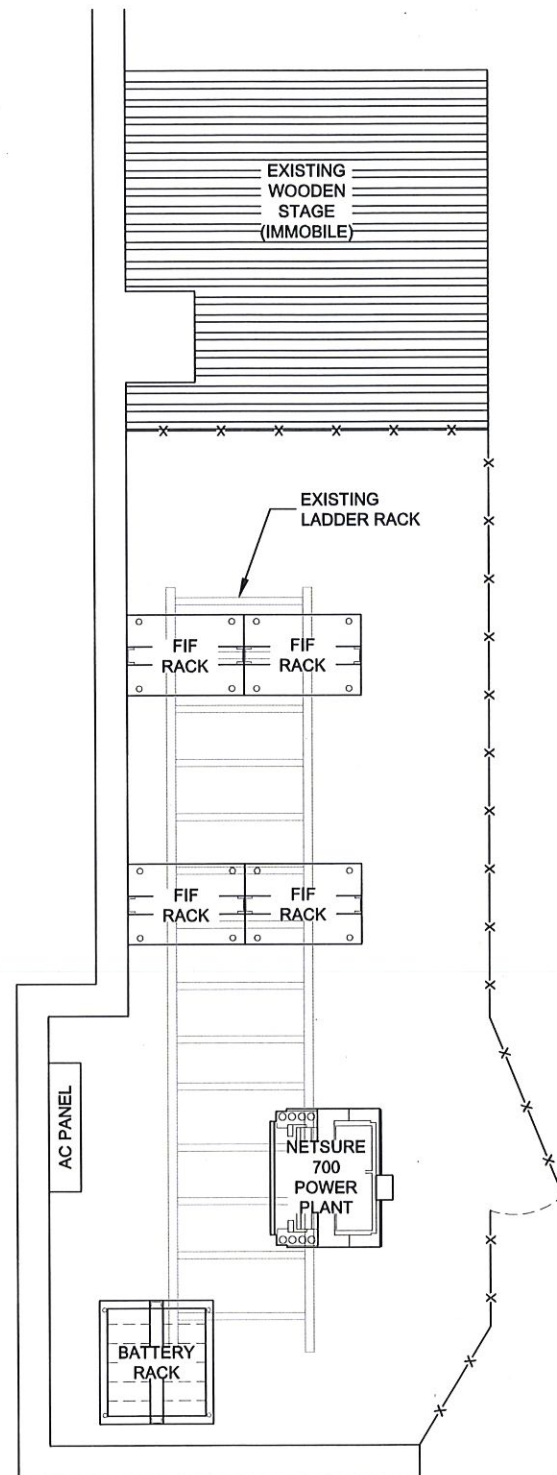
TOWER OWNER ID:
N/A

SHEET TITLE
APPENDIX B-BUILDING
CODE SUMMARY

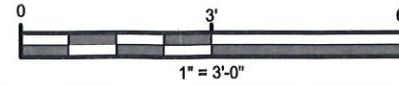
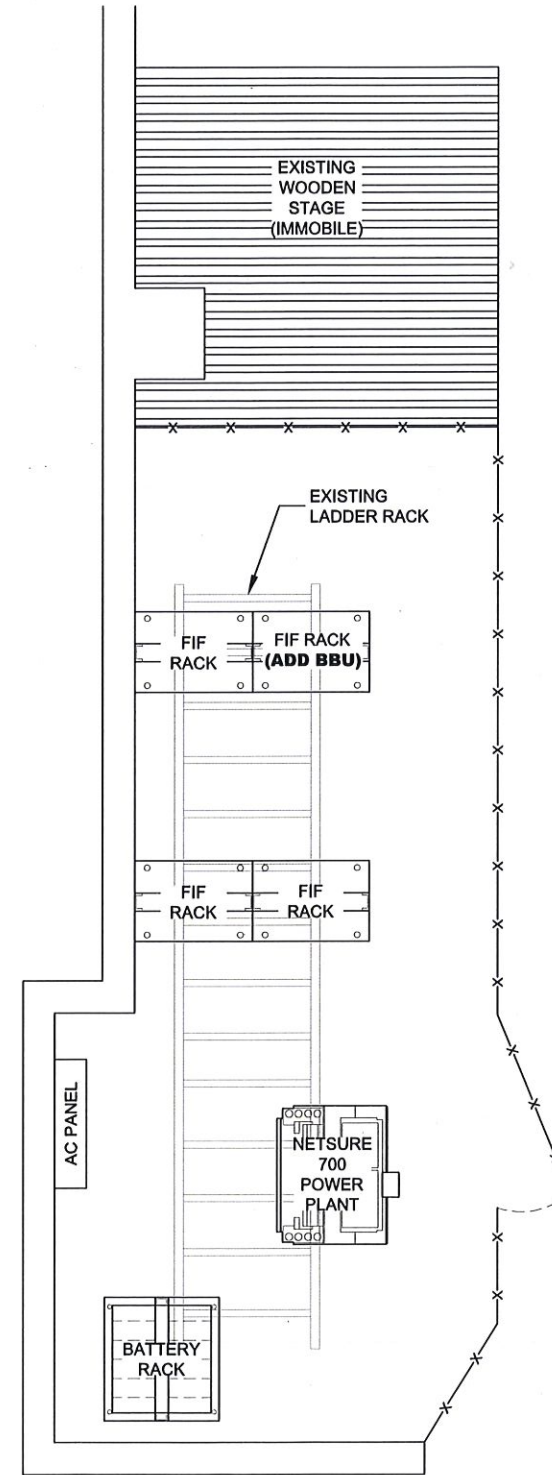
SHEET NUMBER
AB-2

SCOPING NOTES - GROUND

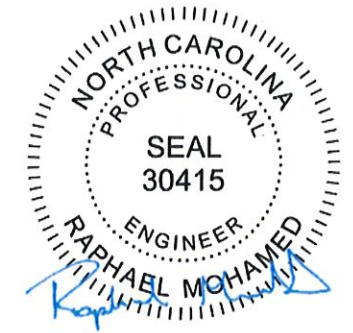
- INSTALL (3) 15 AMP BREAKERS INTO INDOOR POWER PLANT
- ADD (3) BBU'S INSIDE EXISTING FIF RACK



EXISTING EQUIPMENT LAYOUT
11"x17" SCALE: 1" = 3'-0"



FINAL EQUIPMENT LAYOUT
11"x17" SCALE: 1" = 3'-0"



03/30/18

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**5 WEST HARGETT STREET
RALEIGH, NC 27601**

FA LOCATION:

10549293

TOWER OWNER ID:

N/A

SHEET TITLE
EQUIPMENT LAYOUT

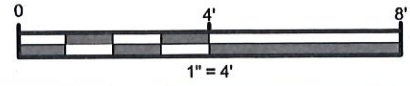
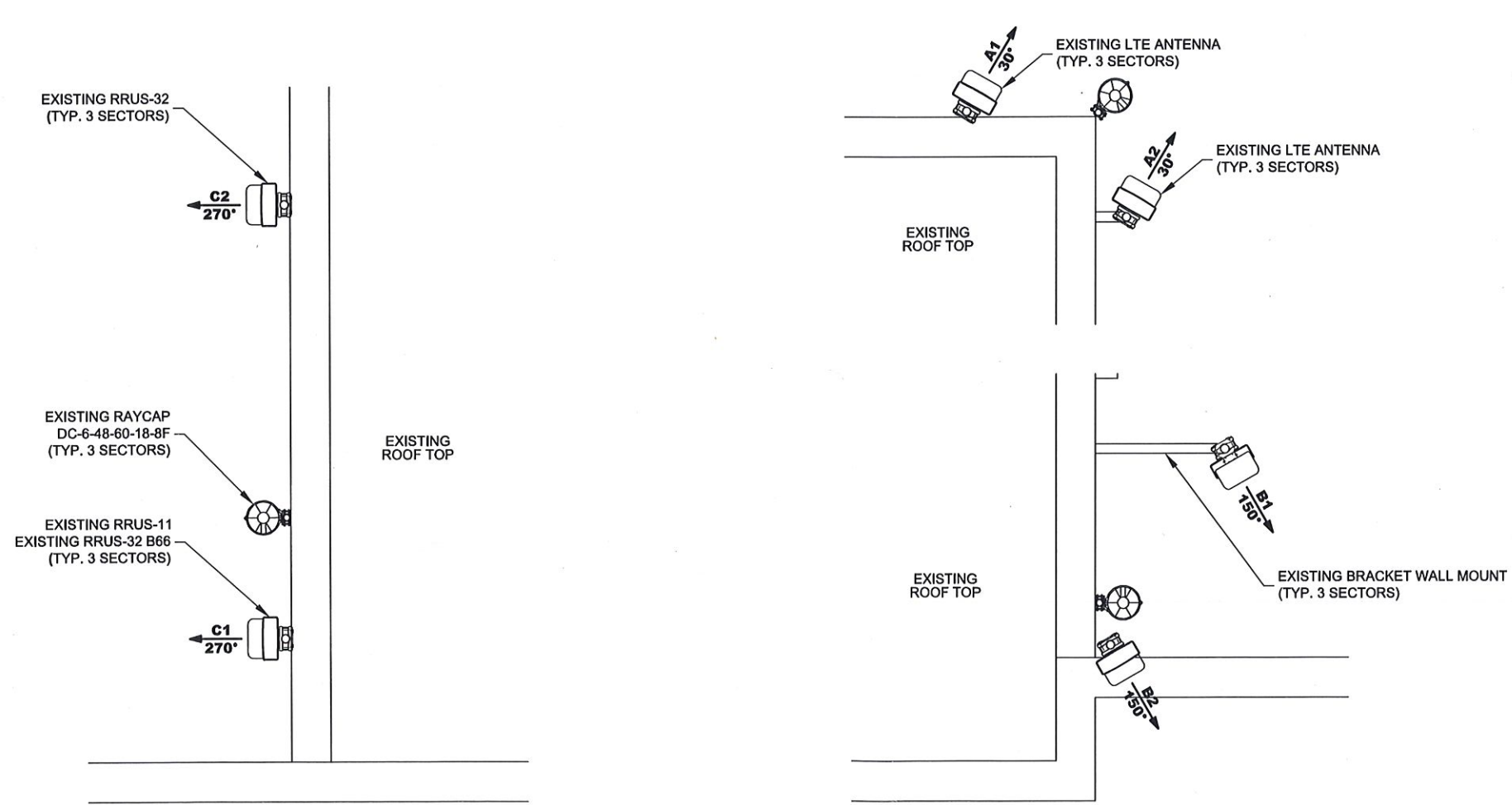
SHEET NUMBER

C-1

EXISTING RF EQUIPMENT SCHEDULE											
SECTOR - POSITION	FREQUENCY BAND	ANTENNA MAKE/MODEL	RAD CENTER	AZIMUTH	E. TILT	M. TILT	(QTY.) RADIO	(QTY.) TMA	(QTY.) SURGE PROTECTION	(QTY.) CABLES	CABLE LENGTH
A1	LTE 700/AWS	COMMSCOPE - SBNHH-1D65B	142'-0"	30°	4°/3°	0°	(1) RRUS-11 (1) RRUS-32 B66	-	(1) DC6-48-60-18-8F	(1) FIBER TRUNK (2) DC TRUNKS	N/A
A2	LTE WCS	COMMSCOPE - SBNHH-1D65B	142'-0"	30°	1°	0°	(1) RRUS-32	-	-	-	-
A3	-	-	-	-	-	-	-	-	-	-	-
A4	-	-	-	-	-	-	-	-	-	-	-
B1	LTE 700/AWS	COMMSCOPE - SBNHH-1D65B	142'-0"	150°	9°/3°	0°	(1) RRUS-11 (1) RRUS-32 B66	-	(1) DC6-48-60-18-8F	(1) FIBER TRUNK (2) DC TRUNKS	N/A
B2	LTE WCS	COMMSCOPE - SBNHH-1D65B	142'-0"	150°	1°	0°	(1) RRUS-32	-	-	-	-
B3	-	-	-	-	-	-	-	-	-	-	-
B4	-	-	-	-	-	-	-	-	-	-	-
C1	LTE 700/AWS	COMMSCOPE - SBNHH-1D65B	142'-0"	270°	7°/3°	0°	(1) RRUS-11 (1) RRUS-32 B66	-	(1) DC6-48-60-18-8F	(1) FIBER TRUNK (2) DC TRUNKS	N/A
C2	LTE WCS	COMMSCOPE - SBNHH-1D65B	142'-0"	270°	1°	0°	(1) RRUS-32	-	-	-	-
C3	-	-	-	-	-	-	-	-	-	-	-
C4	-	-	-	-	-	-	-	-	-	-	-
TOTALS		(6) ANTENNAS					(9) RRU'S	(0) TMA'S	(3) SPD'S	(9) CABLES	-

(RM) = REMOVE
(RL) = RELOCATE
(I) = INACTIVE

EXISTING - RESERVED RF EQUIPMENT SCHEDULE						
	ANTENNA MAKE/MODEL	(QTY.) RADIO	(QTY.) TMA	(QTY.) SURGE PROTECTION	(QTY.) CABLES	CABLE LENGTH
-	-	(3) RRUS-11 (3) RRUS-12+A2	-	-	-	-



EXISTING ANTENNA LAYOUT
11"x17" SCALE: 1" = 4'



03/30/18
RAPHAEL MOHAMED, P.E.
NORTH CAROLINA NO. 30415

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MNS PROJECT NO: 0213013301-03

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PREPARED FOR:

PREPARED BY:

1000 CENTREGREEN WAY, SUITE 300
CARY, NC 27513

SITE ID:
368-615

SITE NAME:
368-615

SITE ADDRESS:
**5 WEST HARGETT STREET
RALEIGH, NC 27601**

FA LOCATION:
10549293

TOWER OWNER ID:
N/A

SHEET TITLE
**EXISTING ANTENNA
LAYOUT**

SHEET NUMBER
C-2

FINAL RF EQUIPMENT SCHEDULE											
SECTOR - POSITION	FREQUENCY BAND	ANTENNA MAKE/MODEL	RAD CENTER	AZIMUTH	E. TILT	M. TILT	(QTY.) RADIO	(QTY.) TMA	(QTY.) SURGE PROTECTION	(QTY.) CABLES	CABLE LENGTH
A1	LTE 700/AWS	COMMSCOPE - SBNHH-1D65B	142'-0"	30°	4°/3°	0°	(1) RRUS-11 (1) RRUS-32 B66	-	(1) DC6-48-60-18-8F	(1) FIBER TRUNK (2) DC TRUNKS	N/A
A2	LTE WCS	COMMSCOPE - SBNHH-1D65B	142'-0"	30°	1°	0°	(1) RRUS-32	-	-	-	-
A3	LTE 5G	ERICSSON - AIR 5331 (P)	142'-0"	30°	-	0°	-	-	-	-	-
A4	-	-	-	-	-	-	-	-	-	-	-
B1	LTE 700/AWS	COMMSCOPE - SBNHH-1D65B	142'-0"	150°	9°/3°	0°	(1) RRUS-11 (1) RRUS-32 B66	-	(1) DC6-48-60-18-8F	(1) FIBER TRUNK (2) DC TRUNKS	N/A
B2	LTE WCS	COMMSCOPE - SBNHH-1D65B	142'-0"	150°	1°	0°	(1) RRUS-32	-	-	-	-
B3	LTE 5G	ERICSSON - AIR 5331 (P)	142'-0"	150°	-	0°	-	-	-	-	-
B4	-	-	-	-	-	-	-	-	-	-	-
C1	LTE 700/AWS	COMMSCOPE - SBNHH-1D65B	142'-0"	270°	7°/3°	0°	(1) RRUS-11 (1) RRUS-32 B66	-	(1) DC6-48-60-18-8F	(1) FIBER TRUNK (2) DC TRUNKS	N/A
C2	LTE WCS	COMMSCOPE - SBNHH-1D65B	142'-0"	270°	1°	0°	(1) RRUS-32	-	-	-	-
C3	LTE 5G	ERICSSON - AIR 5331 (P)	142'-0"	270°	-	0°	-	-	-	-	-
C4	-	-	-	-	-	-	-	-	-	-	-
TOTALS		(9) ANTENNAS					(9) RRU'S	(0) TMA'S	(3) SPD'S	(9) CABLES	-

(P) = PROPOSED
(RL) = RELOCATED
(I) = INACTIVE

FINAL - RESERVED RF EQUIPMENT SCHEDULE						
	ANTENNA MAKE/MODEL	(QTY.) RADIO	(QTY.) TMA	(QTY.) SURGE PROTECTION	(QTY.) CABLES	CABLE LENGTH
-	-	(3) RRUS-11 (3) RRUS-12+A2	-	-	-	-



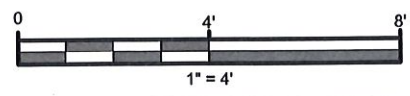
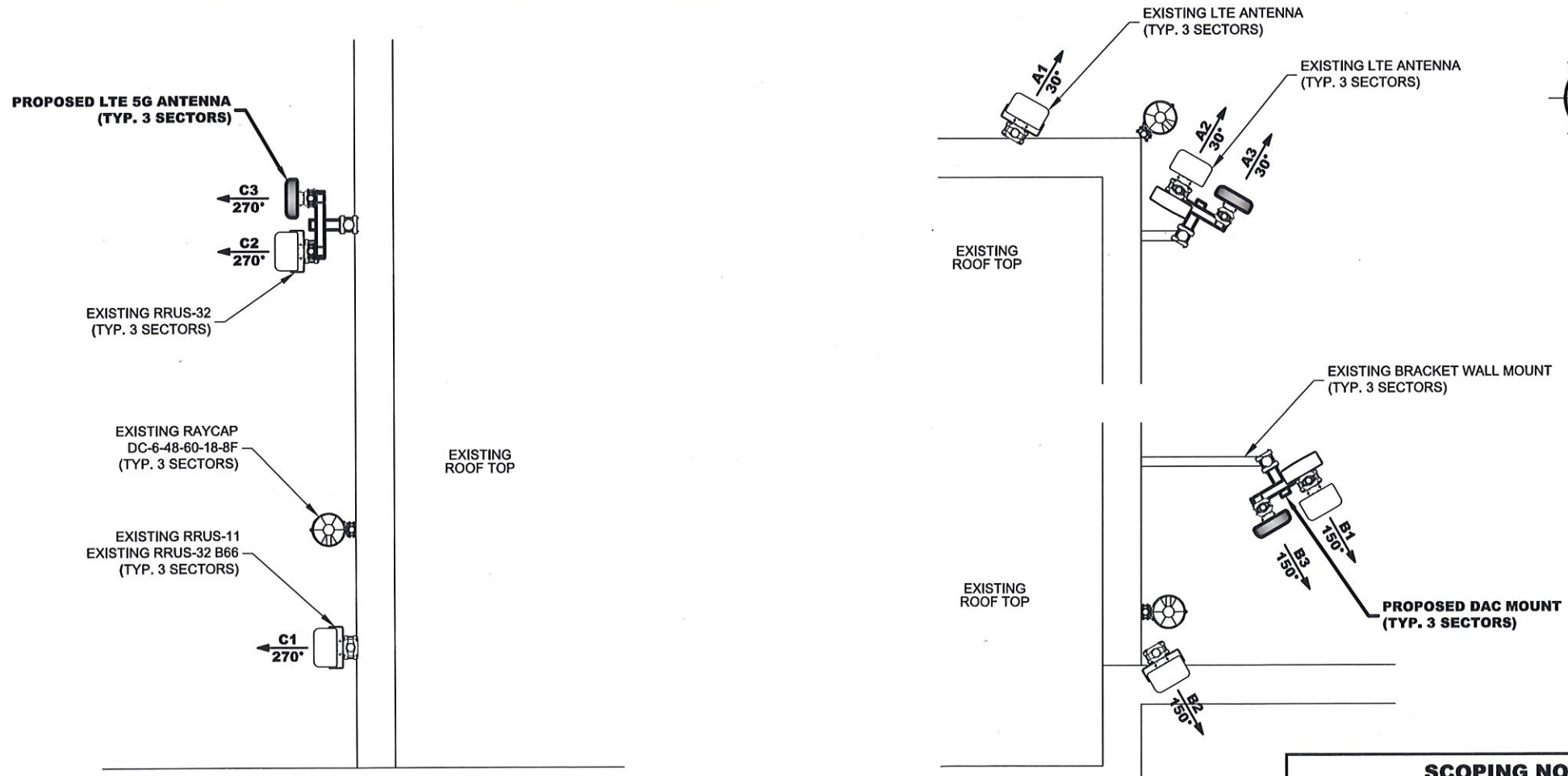
03/30/18
RAPHAEL MOHAMED, P.E.
NORTH CAROLINA NO. 30415

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03/30/18	CONSTRUCTION	0	RM

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- NOTES:**
- THE REQUIRED FAA LIGHTING MUST NOT BE BLOCKED IN ANY WAY BY THE ANTENNAS. THE REQUIRED 360° LIGHTING VISIBILITY MUST BE MAINTAINED.
 - ALL ANTENNAS, CABLES AND MOUNTS SHALL BE INSTALLED IN ACCORDANCE WITH THE TOWER ENGINEER'S RECOMMENDATIONS IN A MANNER CONSISTENT WITH THE STRUCTURAL ANALYSIS REPORT.
 - ALL ANTENNA INFORMATION BASED ON MOST RECENT VERSION OF THIS SITES RFDS.



FINAL ANTENNA LAYOUT
11"x17" SCALE: 1" = 4'

SCOPING NOTES - TOWER

- INSTALL (3) AIR5331 ANTENNAS
- INSTALL (3) PROPOSED MAST PIPES

PREPARED FOR:

PREPARED BY:

1000 CENTREGREEN WAY, SUITE 300
CARY, NC 27513

SITE ID:
368-615

SITE NAME:
368-615

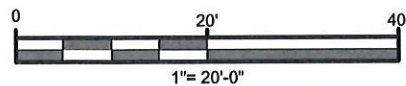
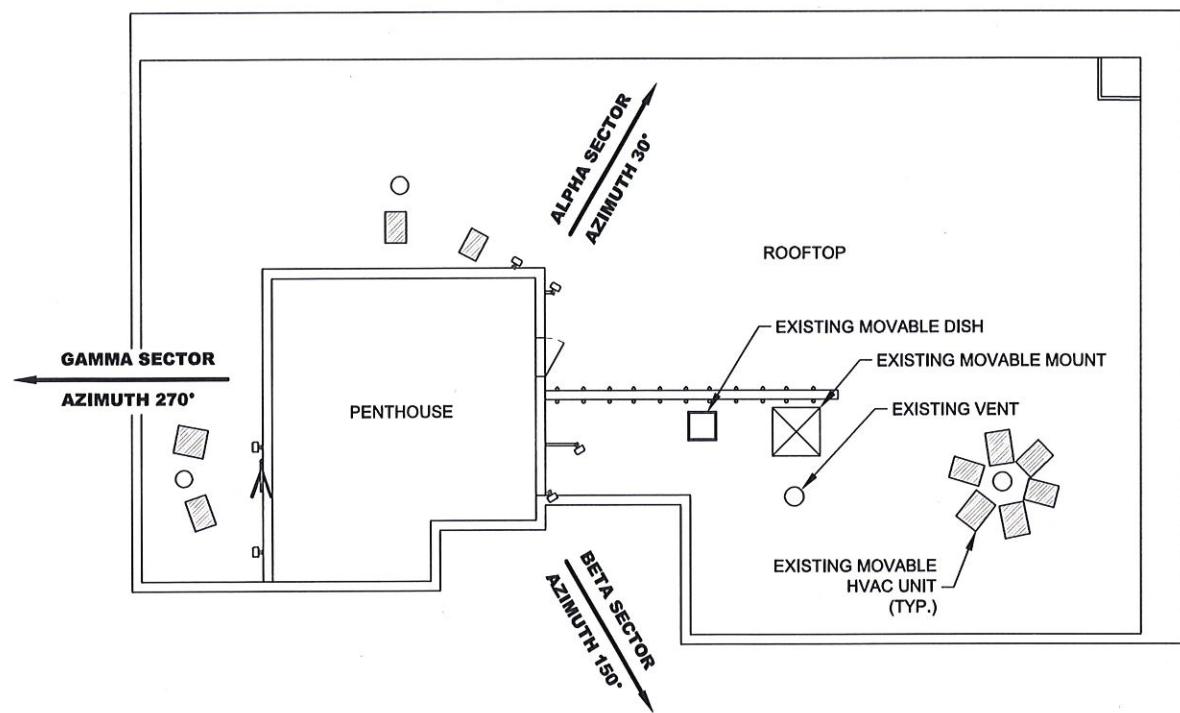
SITE ADDRESS:
**5 WEST HARGETT STREET
RALEIGH, NC 27601**

FA LOCATION:
10549293

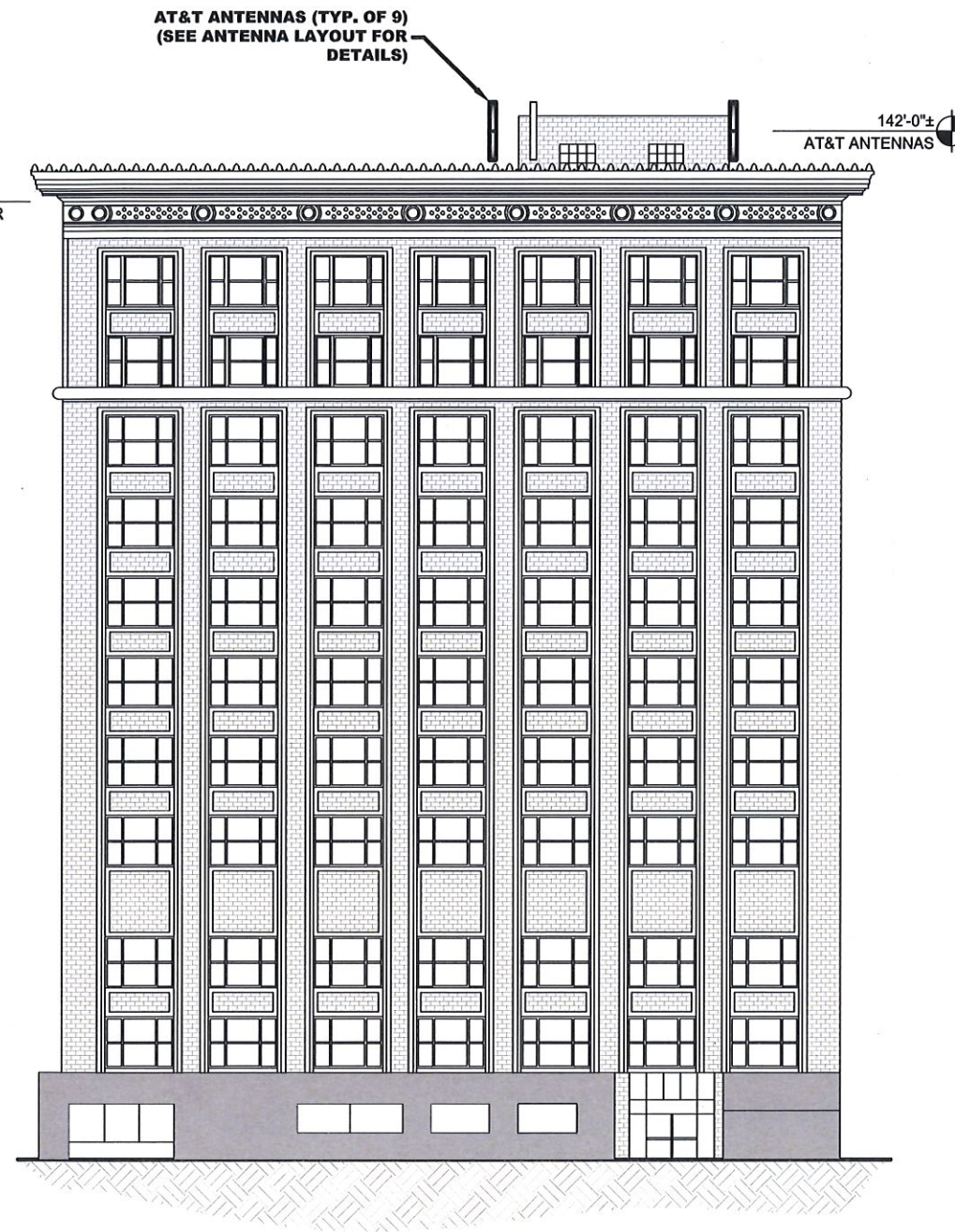
TOWER OWNER ID:
N/A

SHEET TITLE
FINAL ANTENNA LAYOUT

SHEET NUMBER
C-3



BUILDING ROOF PLAN
11"x17" SCALE: 1"= 20'-0"



BUILDING PROFILE
11"x17" SCALE: 1"=25'-0"



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NORTH CAROLINA NO. 30415

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**5 WEST HARGETT STREET
RALEIGH, NC 27601**

FA LOCATION:
10549293

TOWER OWNER ID:
N/A

SHEET TITLE
CIVIL DETAILS

SHEET NUMBER
C-4



03/30/18

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APPV'D BY: _____ RM

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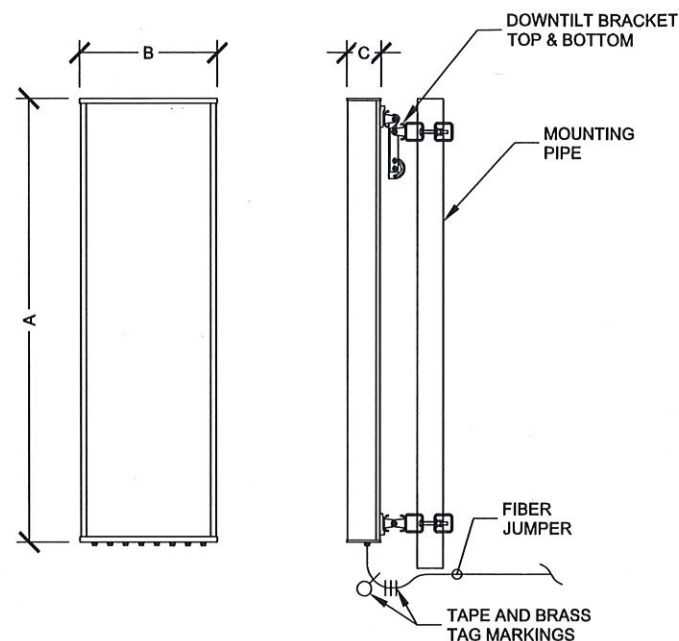
TOWER OWNER ID:

N/A

SHEET TITLE
CIVIL DETAILS

SHEET NUMBER

C-5



NEW ANTENNA SPECIFICATIONS				
ANTENNA MODEL	LENGTH (A)	WIDTH (B)	DEPTH (C)	WEIGHT
ERICSSON AIR 5331	24.0"	11.8"	3.5"	31.0 LBS

NEW ANTENNA SPECIFICATIONS

SCALE: N.T.S.

GENERAL NOTES:

- CONTRACTOR SHALL COORDINATE INCOMING SERVICES WITH LOCAL UTILITIES PRIOR TO TRENCHING.
- ALL CONDUCTORS SHALL BE COPPER, 75 DEGREES C RATED, AND CONDUCTOR INSULATION SHALL BE THWN OR THHN.
- 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.
- SERVICE NEUTRAL SHALL BE GROUNDED AT ONE LOCATION ONLY.
- WHITE/NEUTRAL, GREEN/GROUND SHALL BE MAINTAINED THROUGHOUT THE SITE ELECTRICAL SYSTEM (TAPE WILL NOT BE ACCEPTABLE).
- EQUIPMENT LOCATED OUTSIDE OR EXPOSED TO MOISTURE SHALL BE NEMA 3R RATED.
- CONTRACTOR SHALL USE SCHEDULE 80 PVC CONDUIT THROUGHOUT, UNLESS OTHERWISE NOTED.
- 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 (TRANSFORMER SIZE, PERCENT IMPEDANCE, LENGTH OF CONDUCTORS, ETC.).
- ELECTRICAL CONTRACTOR TO VERIFY ADDITIONAL/PROPOSED LOADING DOES NOT EXCEED SYSTEM CAPACITY. PLEASE NOTIFY MASTEC NETWORK SOLUTIONS WITH ANY DISCREPANCIES.

NOTES BY SYMBOL:

- EXISTING UTILITIES AND EQUIPMENT IN PLACE SHOULD BE USED TO FEED NEW CABINETS INDICATED.
- UNIVERSAL POWER CABINET (UPC) IS SERVICE ENTRANCE RATED, MEETING UL 67 AND UL 50. ALL ITEMS SHOWN WITHIN CABINET ARE PROVIDED WITH THE CABINET AND ARE SHOWN FOR REFERENCE ONLY UNLESS NOTED OTHERWISE. PROVIDE THE CONNECTIONS INDICATED. OBTAIN POWER CABINET DRAWINGS FOR ADDITIONAL INFORMATION.
- THE CONTRACTOR SHALL FURNISH AND INSTALL A 125A/2 POLE BREAKER WITHIN THE EXISTING UPC TO FEED THE PROPOSED DISTRIBUTION PANEL "SUBPANEL". TYPE AND AIC RATING OF BREAKER SHALL MATCH EXISTING (SQ D QO), WHERE NO SPACE IS AVAILABLE, CONSOLIDATE RECEPTACLE CIRCUITS AND PROVIDE MINI-TWIN BREAKER TO CREATE SPACE. (IF REQUIRED)
- PROVIDE AND INSTALL 24VDC TO -48VDC CONVERTERS WITH DISTRIBUTION BOARD WITHIN EXISTING AUX II CABINET.
- CONTRACTOR SHALL PROVIDE ALL AC CIRCUIT BREAKERS REQUIRED TO FEED AT&T EQUIPMENT. DC CIRCUIT BREAKERS SHALL BE PROVIDED BY AT&T. CONTRACTOR SHALL LABEL ALL CIRCUIT BREAKERS WITH RESPECT TO WHAT THEY FEED.
- POWER PLANT CABINET IS MANUFACTURED BY EMERSON AND CSA/UL RATED. ALL ITEMS SHOWN WITHIN CABINET ARE PROVIDED WITH THE CABINET AND ARE SHOWN FOR REFERENCE ONLY UNLESS NOTED OTHERWISE. PROVIDE THE CONNECTIONS INDICATED. OBTAIN POWER CABINET DRAWINGS FOR ADDITIONAL INFORMATION.
- THE CONTRACTOR SHALL REFER TO THE FLX16 LTE CABINET AND EQUIPMENT INSTALLATION MANUALS, SPECIFICATIONS, AND AT&T LTE CONSTRUCTION GUIDELINES FOR ADDITIONAL INFORMATION NOT NECESSARILY INCLUDED WITHIN THESE DRAWINGS.
- THE CONTRACTOR SHALL REFER TO EQUIPMENT DRAWINGS AND SPECIFICATIONS FOR CONTROL AND ALARM WIRING. INTERIOR ALARMS ARE PRE-WIRED.
- WHERE REQUIRED, PROVIDE -48VDC POWER, ALARM, AND FIBER CONNECTIONS TO THE 6601 AS INDICATED. COORDINATE WITH AT&T CONSTRUCTION MANAGER.
- SIAD'S SHALL BE FED FROM THE CABINET THEY ARE LOCATED WITHIN (UPC OR LTE)

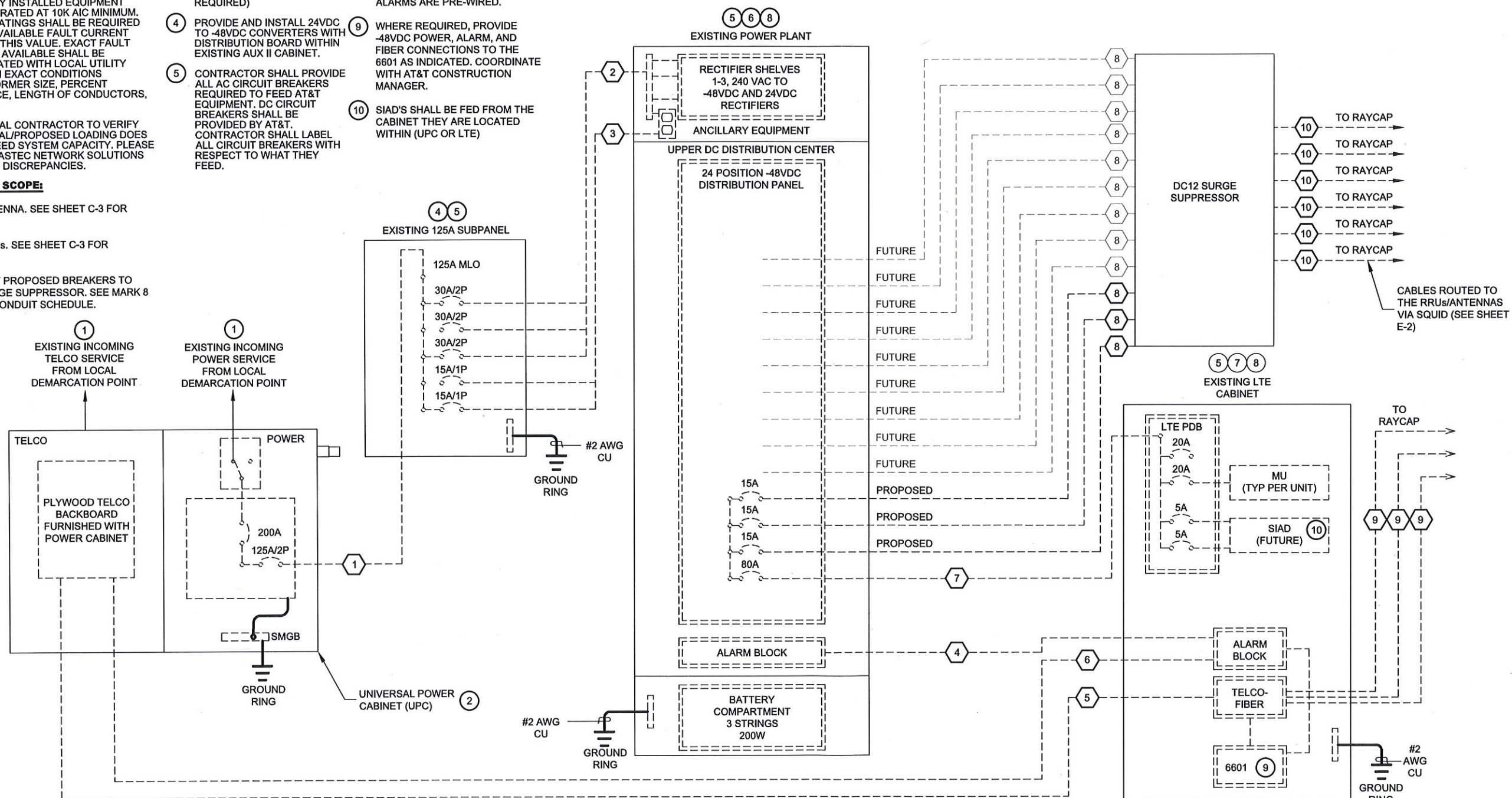
ELECTRICAL SCOPE:

- NEW ANTENNA. SEE SHEET C-3 FOR DETAILS.
- NEW RRU's. SEE SHEET C-3 FOR DETAILS.
- CONNECT PROPOSED BREAKERS TO DC-6 SURGE SUPPRESSOR. SEE MARK 8 ON THE CONDUIT SCHEDULE.

MARK	CONDUIT		CABLE			REMARKS	
	QTY.	SIZE	QTY.	SIZE	GROUND SIZE		
①	1	SCH 80	2"	3	#1	#6	AC POWER FROM UPC TO SUBPANEL (ASSUMED SIZE)
②	1	SCH 80	1 1/2"	6	#8	#8	AC POWER FROM SUBPANEL TO POWER PLANT (POWER FOR RECTIFIERS) (QUANTITY OF CONDUCTORS INDICATED IS PER BREAKER)
③	1	SCH 80	1"	3	#12	#12	AC POWER FROM SUBPANEL TO ANCILLARY EQUIPMENT IN POWER PLANT
④	1	2"		BELDIN CABLES			ALARM CONTROL FROM POWER PLANT TO FLX16
⑤	1	2"		FIBER 18-PAIR (FB-L988-A0213-XXX)			FIBER FROM UPC TO FLX16, SWEEPING BENDS
⑥	1	2"		BELDIN CABLES			ALARM CONTROL FROM UPC TO FLX16
⑦	1	2"	1	#2	#2		DC POWER FROM POWER PLANT TO LTE PDB
⑧	1	2"	3	#8	#8		DC POWER FROM POWER PLANT TO DC-6 SURGE SUPPRESSOR
⑨	-	-	3	FIBER 18-PAIR (FB-L98B-034)			FIBER FROM FLX16 TO RRU's, SWEEPING BENDS
⑩	-	-	6	3PR DC #8 AWG			DC POWER FROM DC-6 SURGE SUPPRESSOR TO RRU's

SCOPING NOTES

- INSTALL (3) AIR5331 ANTENNAS
- INSTALL (3) PROPOSED MAST PIPES
- INSTALL (3) 15 AMP BREAKERS INTO INDOOR POWER PLANT
- ADD (3) BBU'S INSIDE EXISTING FIF RACK



03/30/18
 RAPHAEL MOHAMED, P.E.
 NORTH CAROLINA NO. 30415

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
03/30/18	CONSTRUCTION	0	RM

DRAWN BY: CLS
 CHECKED BY: JFS
 APPVD BY: RM
 MNS PROJECT NO: 0213013301-03

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PREPARED FOR:



PREPARED BY:



SITE ID:
368-615

SITE NAME:
368-615

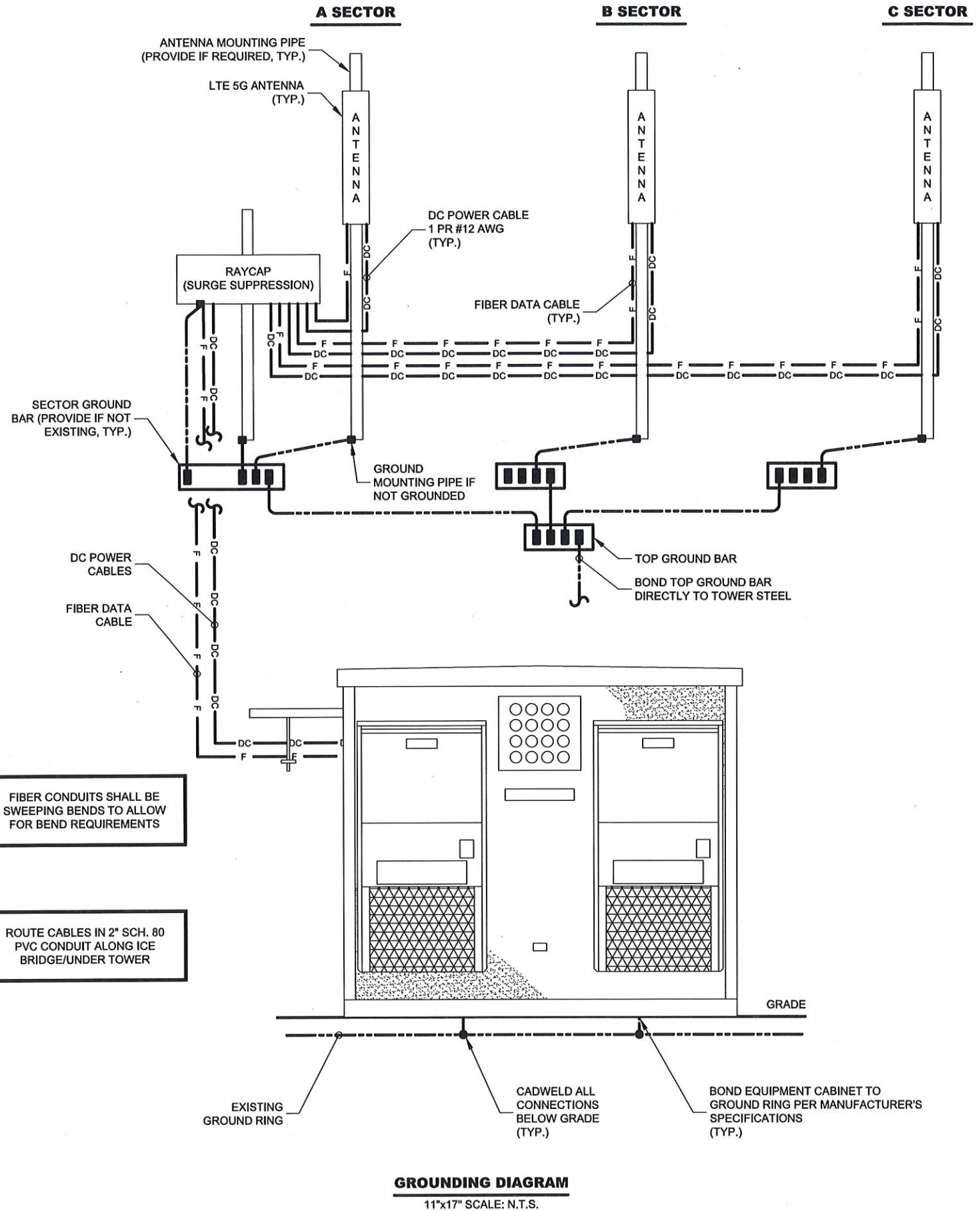
SITE ADDRESS:
**5 WEST HARGETT STREET
 RALEIGH, NC 27601**

FA LOCATION:
10549293

TOWER OWNER ID:
N/A

SHEET TITLE
SINGLE LINE DIAGRAM

SHEET NUMBER
E-1



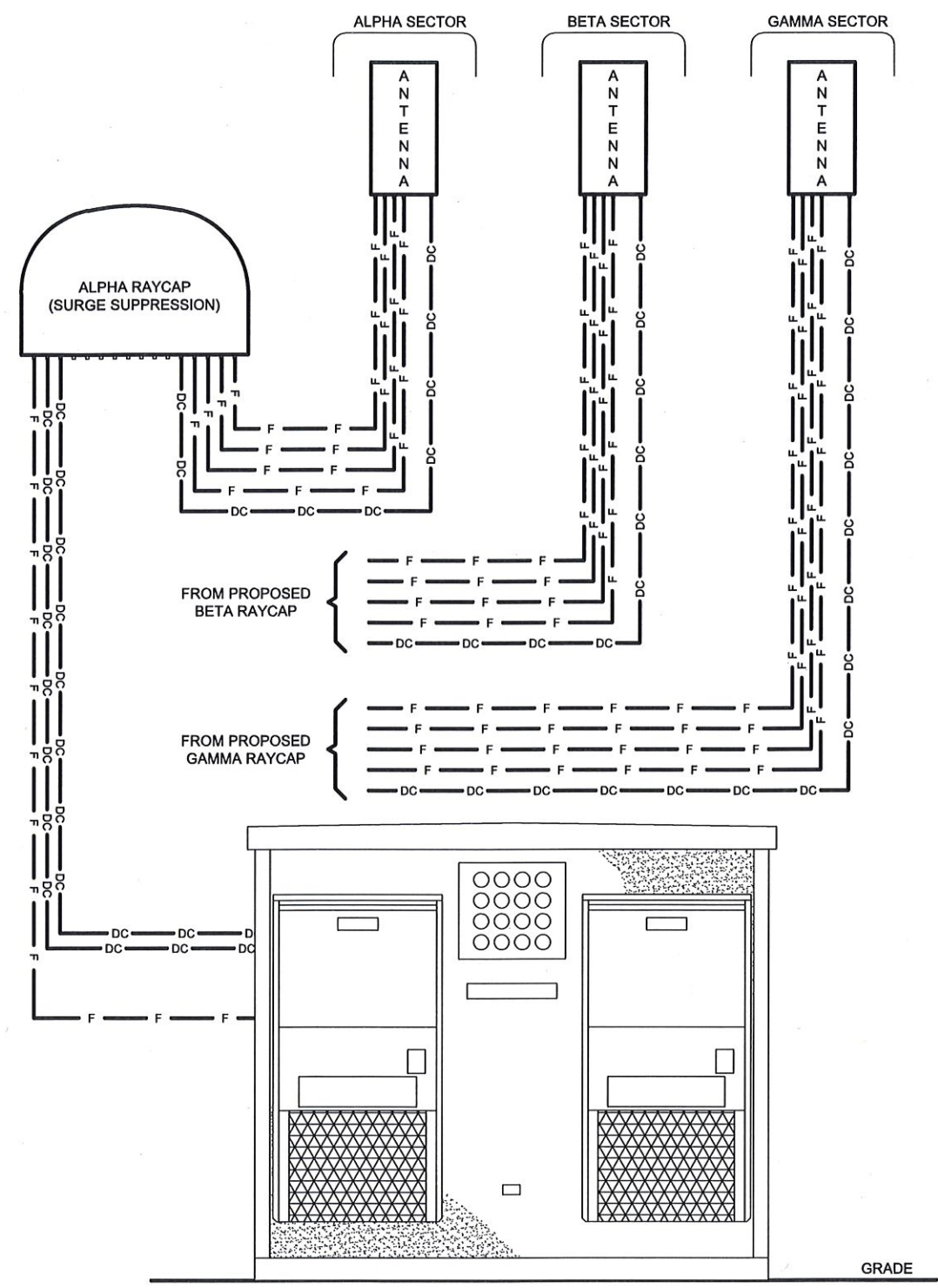
GROUNDING DIAGRAM
11"x17" SCALE: N.T.S.

FIBER CONDUITS SHALL BE SWEEPING BENDS TO ALLOW FOR BEND REQUIREMENTS

ROUTE CABLES IN 2" SCH. 80 PVC CONDUIT ALONG ICE BRIDGE/UNDER TOWER

NOTE: CONTRACTOR TO PERFORM A 30 DAY LOAD STUDY USING A TRUE RMS METER PER NEC 220.87 TO DETERMINE ADDITIONAL SPARE CAPACITY ON EXISTING SUB-PANEL "DP". EXISTING PLUS NEW LOAD SHALL NOT EXCEED CAPACITY OF PANEL.

NOTE: REFER TO SHEET ANTENNA LAYOUT SHEETS FOR ADDITIONAL INFORMATION REGARDING POSSIBLE ADDITIONAL AND FUTURE ANTENNAS



RF RISER DIAGRAM
11"x17" SCALE: N.T.S.



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SITE ID:
368-615

SITE NAME:
368-615

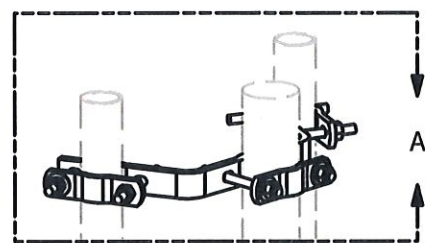
SITE ADDRESS:
**5 WEST HARGETT STREET
RALEIGH, NC 27601**

FA LOCATION:
10549293

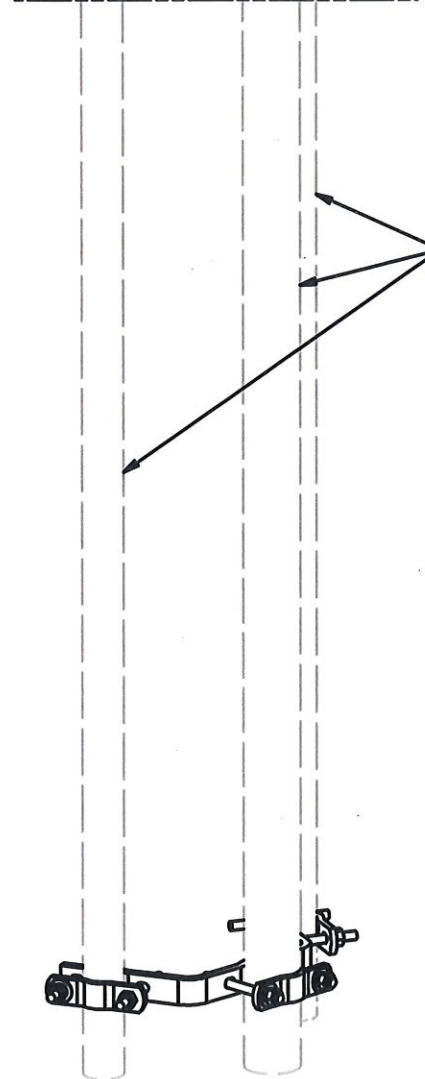
TOWER OWNER ID:
N/A

SHEET TITLE
RISER DIAGRAM

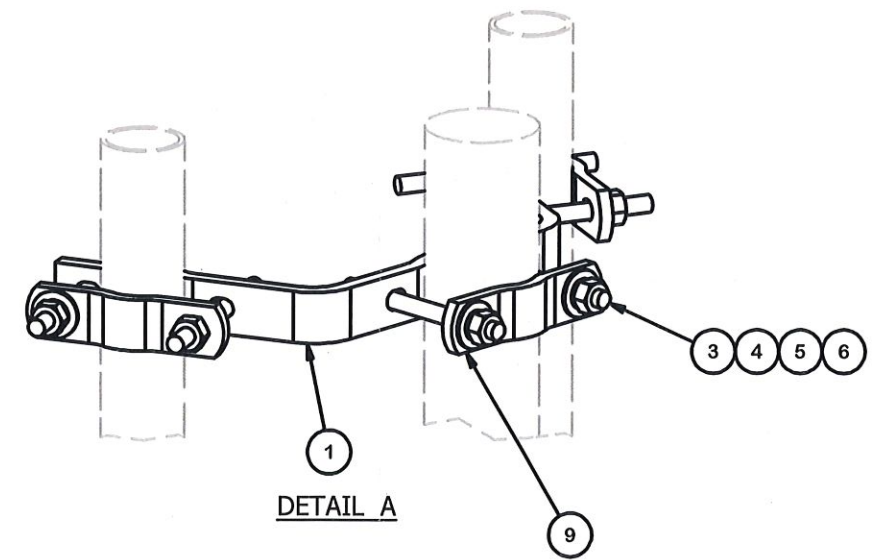
SHEET NUMBER
E-2



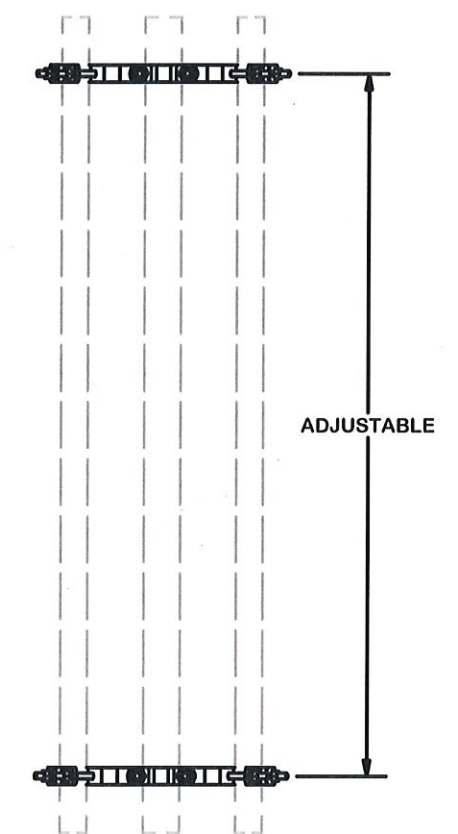
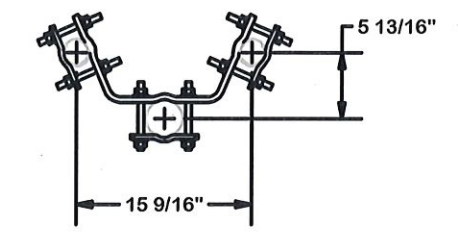
A



1-1/2" to 3-1/2" OD MOUNTING LEG OR ANTENNA PIPE.



DETAIL A



ADJUSTABLE

PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	2	X-DAC	DOUBLE ANTENNA MOUNT		5.36	10.72
3	12	G12R-6	1/2" x 6" GALV. THREADED ROD		0.33	4.01
4	24	G12FW	1/2" HDG USS FLATWASHER		0.03	0.82
5	24	G12LW	1/2" HDG LOCKWASHER		0.01	0.33
6	24	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	1.72
9	6	X-100064	CLAMP (S) (4" V-CLAMP) GALVANIZED		0.91	5.48
					TOTAL WT. #	24.75

TOLERANCE NOTES
 TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
 SAWED, SHEARED AND GAS CUT EDGES ($\pm 0.030"$)
 DRILLED AND GAS CUT HOLES ($\pm 0.030"$) - NO CONING OF HOLES
 LASER CUT EDGES AND HOLES ($\pm 0.010"$) - NO CONING OF HOLES
 BENDS ARE $\pm 1/2$ DEGREE
 ALL OTHER MACHINING ($\pm 0.030"$)
 ALL OTHER ASSEMBLY ($\pm 0.060"$)

PROPRIETARY NOTE:
 THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION
DOUBLE ANTENNA CLAMP ASSEMBLY

CPD NO. 4725	DRAWN BY RH18 4/1/2010	ENG. APPROVAL
CLASS 81	SUB 01	DRAWING USAGE CUSTOMER
CHECKED BY BMC 8/15/2013		

SITE PRO 1
 A valmont COMPANY

Locations:
 New York, NY
 Atlanta, GA
 Los Angeles, CA
 Plymouth, IN
 Salem, OR
 Dallas, TX

Engineering Support Team:
 1-888-753-7446

PART NO. DAC	PAGE 1 OF 1
DWG. NO. DAC	

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	REVISED X-DAC DESIGN	4725	RH18	9/23/2010
REVISION HISTORY				

Kinane, Collette

From: Mike Hitchcock <mike@ramseydevelopmentsolutions.com>
Sent: Monday, May 21, 2018 8:50 AM
To: Kinane, Collette; Robb, Melissa
Cc: Tully, Tania; 'Mike Hitchcock'
Subject: RE: 5 W Hargett St minor work COA application (368-615)
Attachments: 368-615 C-4_051818.pdf

Collette,

All antennas except 1 are within 6 inches of the penthouse wall. The 1 is more like 12"-18" from the penthouse wall as it needs to be out that far so it can shoot its signal past the antenna in front of it. I have put a red box around that antenna on the attached C-4 page. If it were mounted at the same location the signal would be blasting into the antenna in front of it. As for the sizes of the antennas the existing antennas are 72" x 11.9" x 7.1" and the ones being added are actually smaller (23.6"x11.8"x3.5"). More to highlight the change. The SE & SW photo sims are existing and proposed. The antennas will be painted to match the brick so the actual color may be slightly off as well as the size as this is a rendering and we try to scale best we can.

Thanks,
Mike Hitchcock
RDS LLC Project Director
83 Lars Lane
Garner, NC 27529
Office/Mobile: (919) 961-1747



From: Kinane, Collette <Collette.Kinane@raleighnc.gov>
Sent: Wednesday, May 16, 2018 5:48 PM
To: Mike Hitchcock <mike@ramseydevelopmentsolutions.com>; Robb, Melissa <Melissa.Robb@raleighnc.gov>
Cc: Tully, Tania <Tania.Tully@raleighnc.gov>
Subject: RE: 5 W Hargett St minor work COA application (368-615)

Hi, Mike –

I'm reviewing your minor work application. I had a few questions from my initial review: On sheet C-4, it appears that the additional antenna is set a few feet from the penthouse walls; but in the description and based on the plan views, the antennas appear to be set within a few inches of the penthouse walls. Can you confirm that the proposed elevation is correct? Additionally, the elevation drawing seems to make it appear as if the

Best,
Melissa

From: Mike Hitchcock [<mailto:mike@ramseydevelopmentsolutions.com>]
Sent: Monday, May 14, 2018 10:45 AM
To: Robb, Melissa <Melissa.Robb@raleighnc.gov>
Cc: Tully, Tania <Tania.Tully@raleighnc.gov>; Kinane, Collette <Collette.Kinane@raleighnc.gov>; 'Mike Hitchcock' <mike@ramseydevelopmentsolutions.com>
Subject: RE: 5 W Hargett St minor work COA application (368-615)

Melissa,

Just checking in to make sure the re-submittal has been routed to your office. Do you have any type of status on where this is in your process?

Thanks,
Mike Hitchcock
RDS LLC Project Director
83 Lars Lane
Garner, NC 27529
Office/Mobile: (919) 961-1747



From: Robb, Melissa <Melissa.Robb@raleighnc.gov>
Sent: Monday, April 16, 2018 1:36 PM
To: Mike Hitchcock <mike@ramseydevelopmentsolutions.com>
Cc: Tully, Tania <Tania.Tully@raleighnc.gov>; Kinane, Collette <Collette.Kinane@raleighnc.gov>
Subject: RE: 5 W Hargett St minor work COA application

Mike,

Payment types include cash, MasterCard, Visa or check made payable to the City of Raleigh.

Melissa

From: Mike Hitchcock [<mailto:mike@ramseydevelopmentsolutions.com>]
Sent: Monday, April 16, 2018 12:39 PM
To: Robb, Melissa <Melissa.Robb@raleighnc.gov>
Cc: Tully, Tania <Tania.Tully@raleighnc.gov>; Kinane, Collette <Collette.Kinane@raleighnc.gov>; 'Mike Hitchcock' <mike@ramseydevelopmentsolutions.com>
Subject: RE: 5 W Hargett St minor work COA application



03/30/18

RAPHAEL MOHAMED, P.E.
NORTH CAROLINA NO. 30415

SUBMITTALS

DATE	DESCRIPTION	REV	ISSUED BY
03/30/18	CONSTRUCTION	0	RM

DRAWN BY: CLS
 CHECKED BY: JFS
 APPVD BY: RM
 MNS PROJECT NO: 0213013301-03

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PREPARED FOR:



PREPARED BY:

MasTec
 Network Solutions
 1000 CENTREGREEN WAY, SUITE 300
 CARY, NC 27513

SITE ID:

368-615

SITE NAME:

368-615

SITE ADDRESS:

**5 WEST HARGETT STREET
 RALEIGH, NC 27601**

FA LOCATION:

10549293

TOWER OWNER ID:

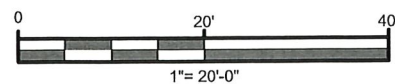
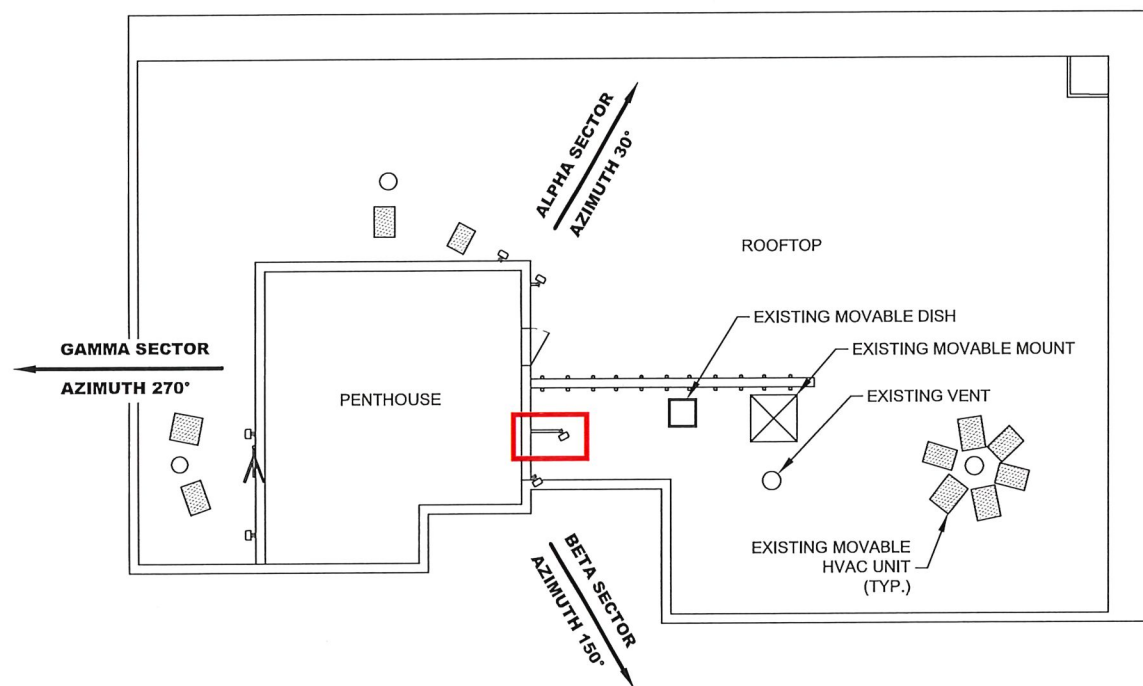
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SHEET TITLE

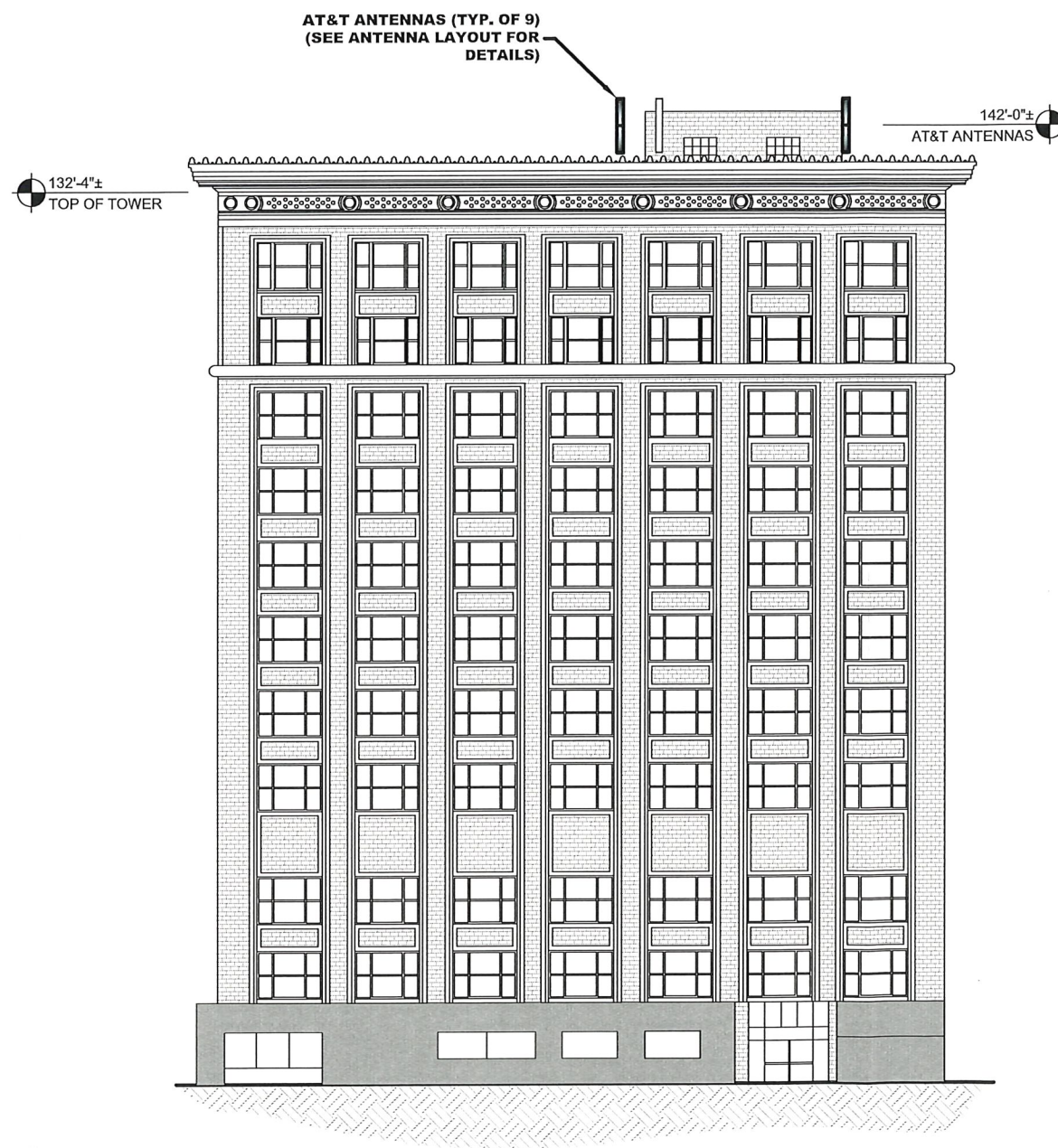
CIVIL DETAILS

SHEET NUMBER

C-4



BUILDING ROOF PLAN
 11"x17" SCALE: 1" = 20'-0"



BUILDING PROFILE
 11"x17" SCALE: 1" = 25'-0"