

VERIZON SITE NUMBER: 5000302732

VERIZON SITE NAME: SBA LULU

PROJECT DESCRIPTION: REWORK

TOWER TYPE: 250' GUYED

SITE ADDRESS: 120 SOUTH EAST
COMMUNITY ROAD
LAKE CITY, FL 32054
(COLUMBIA COUNTY)

JURISDICTION: COLUMBIA COUNTY

PRESENT
OCCUPANCY TYPE: TELECOMMUNICATIONS
FACILITY

CURRENT ZONING: A-3

PARCEL ID #: 27-4S-18-10491-001

PROJECT INFORMATION

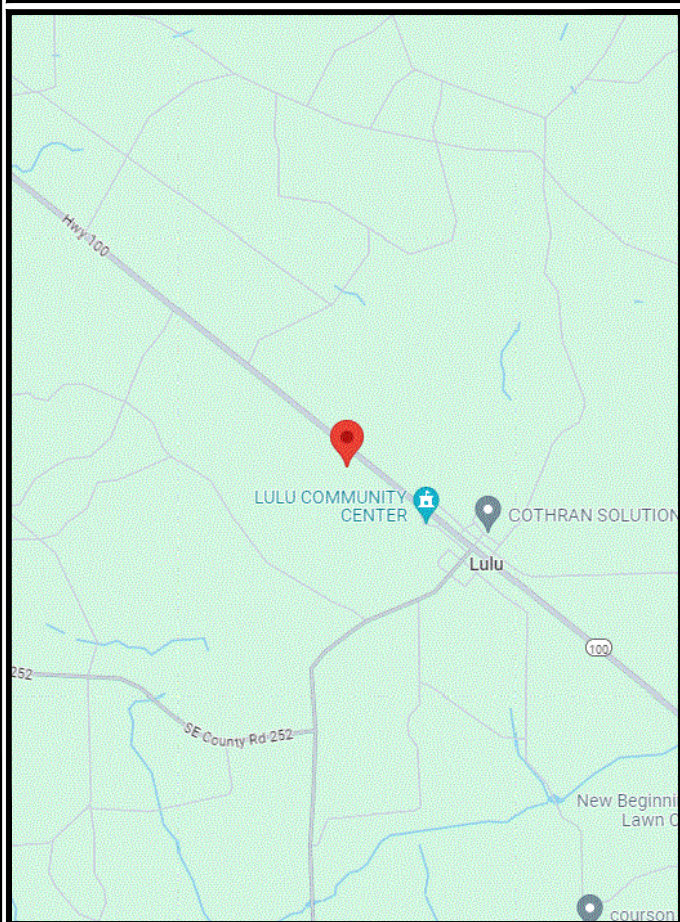
LATITUDE: N 30° 06' 50.52" (NAD 83) *

LONGITUDE: W 82° 30' 07.04" (NAD 83) *

GROUND ELEVATION: 151.0'± (AMSL) *

*INFORMATION PROVIDED BY FAA

SITE COORDINATES



LOCATION MAP

4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431
(561) 995-5539

VZW SITE #: 5000302732
VZW SITE NAME: SBA LULU

120 SOUTH EAST COMMUNITY ROAD
LAKE CITY, FL 32054

LESSEE:

NAME: VERIZON WIRELESS

ADDRESS: 4700 EXCHANGE COURT, SUITE 100

CITY, STATE, ZIP: BOCA RATON, FL 33431

CONTACT: TOM SPANO

PHONE: (561) 995-5539

TOWER OWNER:

NAME: SBA COMMUNICATIONS CORPORATION

ADDRESS: 8051 CONGRESS AVENUE

CITY, STATE, ZIP: BOCA RATON, FL 33487

CONTACT: GENERAL INQUIRES

PHONE: (800) 487-7483

SURVEYOR:

NAME: N/A

ADDRESS: N/A

CITY, STATE, ZIP: N/A

CONTACT: N/A

PHONE: N/A

CIVIL ENGINEER:

NAME: TEP OPCO, LLC

ADDRESS: 326 TRYON ROAD

CITY, STATE, ZIP: RALEIGH, NC 27603-3530

CONTACT: JOSHUA H. CARDEN, P.E.

PHONE: (919) 661-6351

ELECTRICAL ENGINEER:

NAME: TEP OPCO, LLC

ADDRESS: 326 TRYON ROAD

CITY, STATE, ZIP: RALEIGH, NC 27603-3530

CONTACT: JOSHUA H. CARDEN, P.E.

PHONE: (919) 661-6351

PROPERTY OWNER:

NAME: COX, DONALD W. & MICHELLE L.

ADDRESS: 2274 SOUTH WEST DAIRY STREET

CITY, STATE, ZIP: LAKE CITY, FL 32024

CONTACT: DONALD W. COX

PHONE: UNKNOWN

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. 2023 FLORIDA BUILDING CODE, 8TH EDITION

2. LOCAL BUILDING CODE

3. ANSI/TIA-222-H

4. 2020 NATIONAL ELECTRIC CODE

5. CITY/COUNTY ORDINANCES

CODE COMPLIANCE

BASIC WIND SPEED WIND SPEED: 119 MPH

SERVICE LOAD WIND SPEED: 60 MPH + 0" RADIAL ICE

RISK CATEGORY: II

EXPOSURE CATEGORY: C

TOPOGRAPHIC PARAMETERS: METHOD 1

INFORMATION PROVIDED BY PASSING STRUCTURAL ANALYSIS BY TOWER ENGINEERING SOLUTIONS, LLC DATED 07/07/24.

DESIGN CRITERIA

UTILITIES:

POWER COMPANY: CLAY ELECTRIC COOPERATIVE, INC.

CUSTOMER SERVICE (352) 473-8000

154 588 707

CONTACT: UNKNOWN

PHONE: UNKNOWN

METER # NEAR SITE: (386) 755-6574

UNKNOWN

TELEPHONE COMPANY: UNKNOWN

CONTACT: UNKNOWN

PHONE: UNKNOWN

PHONE # NEAR SITE: (386) 755-6574

PEDESTAL # NEAR SITE: UNKNOWN

THE PURPOSE OF THIS PROJECT IS AS FOLLOWS:

TOWER SCOPE OF WORK:

• REMOVE (6) ANTEL WPA-80080-8CF ANTENNAS

• REMOVE (3) COMMSCOPE NHH-65C-R2B ANTENNAS

• REMOVE (3) ERICSSON RRUS 8843 RRUs

• INSTALL (6) JMA WIRELESS MX06FHG865-HG ANTENNAS

• INSTALL (3) ERICSSON AIR6419 ANTENNAS

• INSTALL (3) ERICSSON RRUS 4490 RRUs

• INSTALL (3) ERICSSON RRUS 4890 RRUs

• INSTALL (1) 1½" HYBRID CABLE

GROUND SCOPE OF WORK:

• REMOVE (3) ERICSSON RRUS 4449 RRUs

• REMOVE (1) 6201 CABINET

• REMOVE (1) CMDA CABINET

• REMOVE ALL BATTERIES

• INSTALL (1) GE INFINITY DC PLANT

• INSTALL (1) 19" RACK

• INSTALL (1) AVR 95-09 BATTERY STING OR EQUIVALENT

FOR MOUNT MODS: SEE THE ANTENNA MOUNT ANALYSIS REPORT WITH HARDWARE UPGRADES AND PMI REQUIREMENTS BY COLLIERS ENGINEERING & DESIGN DATED 06/27/24.

SCOPE OF WORK

SHEET

DESCRIPTION

REV

T-1

TITLE SHEET

2

N-1

PROJECT NOTES

2

C-1

SITE PLAN

2

C-1A

EXISTING EQUIPMENT SHELTER LAYOUT

2

C-1B

PROPOSED EQUIPMENT SHELTER LAYOUT

2

C-2

TOWER ELEVATION

2

C-3A

EXISTING ANTENNA LAYOUT

2

C-3B

PROPOSED ANTENNA LAYOUT

2

C-3C

EXISTING ANTENNA & COAX SCHEDULE

2

C-3D

PROPOSED ANTENNA & COAX SCHEDULE

2

C-4

DC PLANT DETAILS

2

E-1

ELECTRICAL NOTES

2

E-2

POWER PANEL SCHEDULE

2

E-3

ONE-LINE DIAGRAM

2

E-4

POWER ROUTING PLAN

2

G-1

GROUNDING DETAILS

2

INDEX OF SHEETS

CONTRACTOR PMI REQUIREMENTS

PMI ACCESSED AT: HTTPS://PMI.VZWSMART.COM

SMART TOOL VENDOR PROJECT NUMBER: 10239500

VZW LOCATION CODE (MDG/PSLC): 5000302732

ANALYSIS DATE: 06/27/24

PMI REQUIREMENTS EMBEDDED THE ANTENNA MOUNT ANALYSIS REPORT WITH HARDWARE UPGRADES AND PMI REQUIREMENTS DATED 06/27/24.

MOUNT MOD/REPLACEMENT REQUIRED

Y

VZW APPROVED SMART KIT VENDORS

SEE REPLACEMENT THE ANTENNA MOUNT ANALYSIS REPORT WITH HARDWARE UPGRADES AND PMI REQUIREMENTS DATED 06/27/24, PAGE 6.

PLANS PREPARED BY:

TEP OPCO, LLC

326 TRYON ROAD

RALEIGH, NC 27603-3530

OFFICE: (919) 661-6351

www.tepgroup.net

FL COA # 31011

2	09-09-24	CONSTRUCTION
1	08-26-24	CONSTRUCTION
0	08-12-24	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: SKK

CHECKED BY: JHJ

DIGITAL SEAL:
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSHUA H. CARDEN ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SEAL:

SHEET NUMBER: T-1

REVISION: 2

TEP#: 26487.955089

PROJECT NOTES:

1. ALL REFERENCES TO THE OWNER AND/OR LESSEE IN THESE DOCUMENTS SHALL BE CONSIDERED VERIZON OR ITS DESIGNATED REPRESENTATIVE.
2. WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE 2023 FLORIDA BUILDING CODE, 8TH EDITION.
3. 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.
4. ALL HARDWARE ASSEMBLY MANUFACTURER’S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
5. 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 VERIFICATIONS. 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.
6. 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.
7. 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 ENSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
8. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE RESIDENT LEASING AGENT FOR APPROVAL.
9. 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.
10. IF APPLICABLE, ALL CONCRETE WORK SHALL COMPLY TO LOCAL CODES AND THE ACI 318–14, "BUILDING REQUIREMENTS FOR STRUCTURAL CONCRETE".
11. ALL TOWER DIMENSIONS SHALL BE VERIFIED WITH THE PLANS (LATEST REVISION) PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE DISCOVERED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.
12. ALL TOWER MODIFICATION WORK SHALL BE IN ACCORDANCE WITH TIA–1019–A STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431
(561) 995–5539

PROJECT INFORMATION:

VZW SITE #: 5000302732

VZW SITE NAME:
SBA LULU

120 SOUTH EAST COMMUNITY ROAD
LAKE CITY, FL 32054
(COLUMBIA COUNTY)

PLANS PREPARED BY:

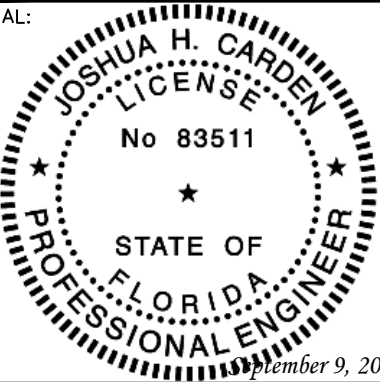


TEP OPCO, LLC
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net
FL COA # 31011

DIGITAL SEAL:

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2	09-09-24	CONSTRUCTION
1	08-26-24	CONSTRUCTION
REV	DATE	ISSUED FOR:

DRAWN BY: SKK CHECKED BY: JHJ

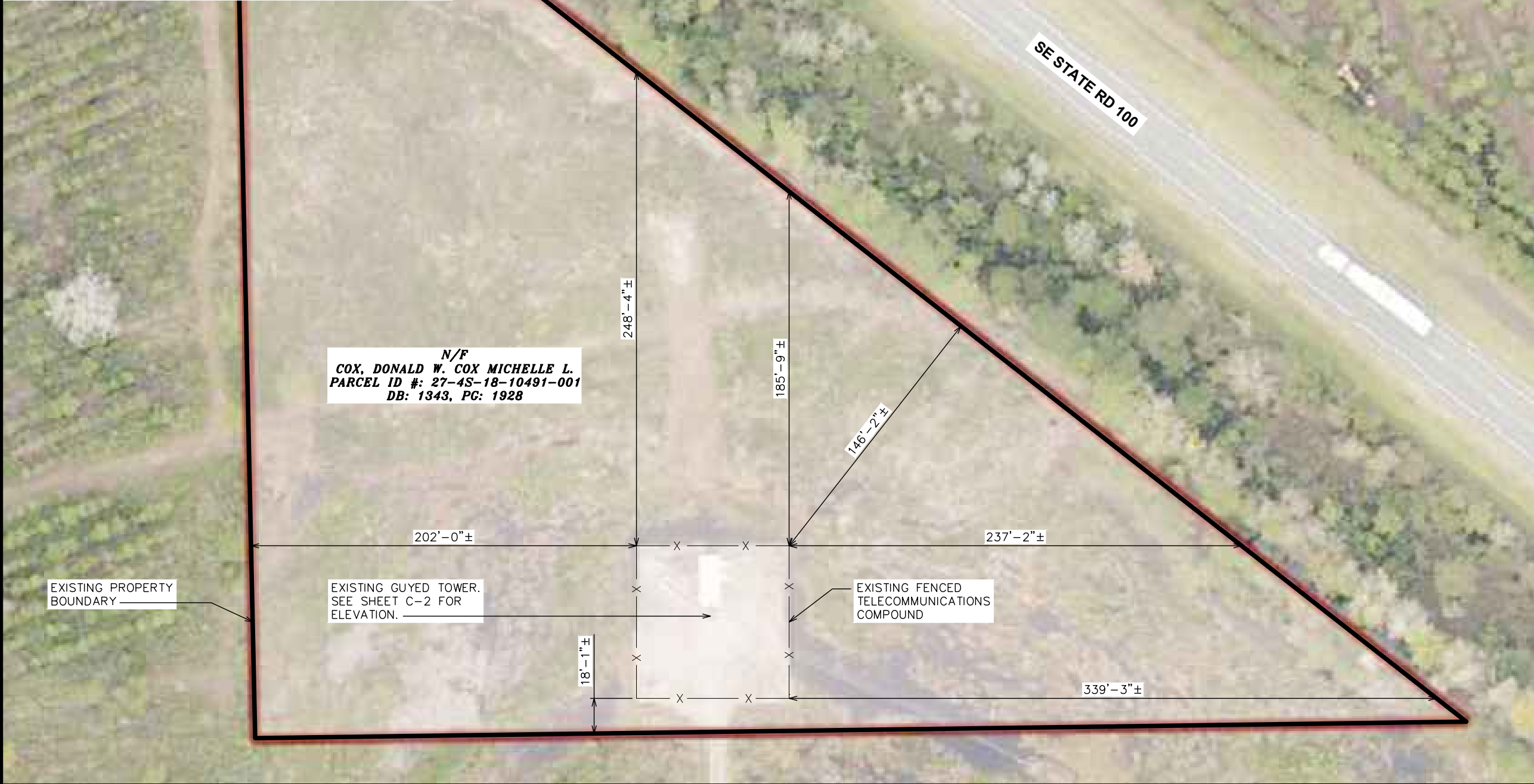
SHEET TITLE:

PROJECT
NOTES

SHEET NUMBER: N-1	REVISION: 2 TEP#: 26487.955089
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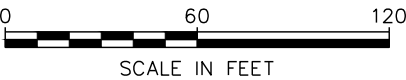
NOTES:

- 1. SITE PLAN SHOWN BELOW WAS REPRODUCED FROM INFORMATION PROVIDED BY COLUMBIA COUNTY GIS. CONTRACTOR TO VERIFY ALL EXISTING INFORMATION IS AS INDICATED ON SITE PLAN. CONTRACTOR IS TO ESTABLISH THE EXISTENCE AND LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES. IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES.
- 2. EXISTING INFORMATION INDICATED ON THE SITE PLAN SHOWN WAS REPRODUCED FROM MAPS PROVIDED BY COLUMBIA COUNTY GIS. TEP DOES NOT GUARANTEE, OR ENSURE THE PRECISION, ACCURACY OR CORRECTNESS AND ASSUMES NO RESPONSIBILITY OR LIABILITY FOR DAMAGES, LOSS OF REVENUE, OR INJURY THAT MIGHT OCCUR.
- 3. THE TOWER IS LOCATED IN ZONE "X" AREAS OF MINIMAL FLOODING ACCORDING TO FEMA COMMUNITY PANEL #12023C0410C, DATED 02/04/2009.



SITE PLAN

SCALE: 1" = 60'



PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431
(561) 995-5539

PROJECT INFORMATION:

VZW SITE #: 5000302732

VZW SITE NAME:

SBA LULU

120 SOUTH EAST COMMUNITY ROAD
LAKE CITY, FL 32054
(COLUMBIA COUNTY)

PLANS PREPARED BY:

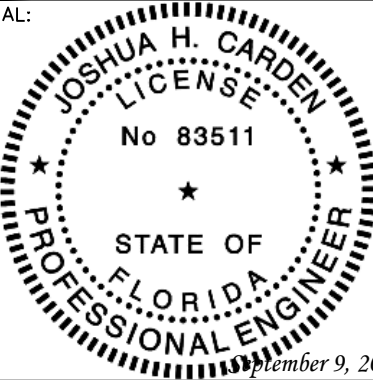


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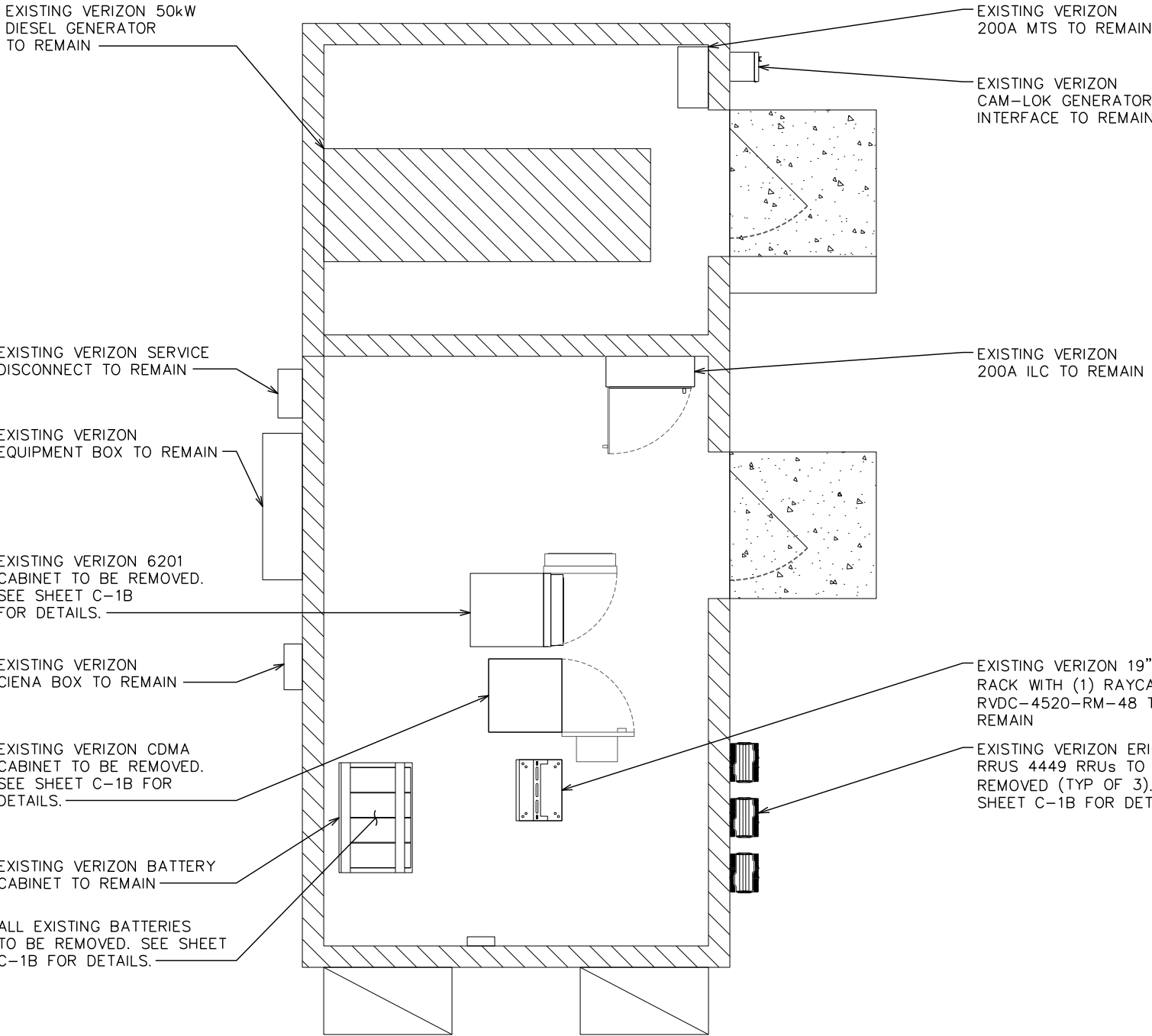
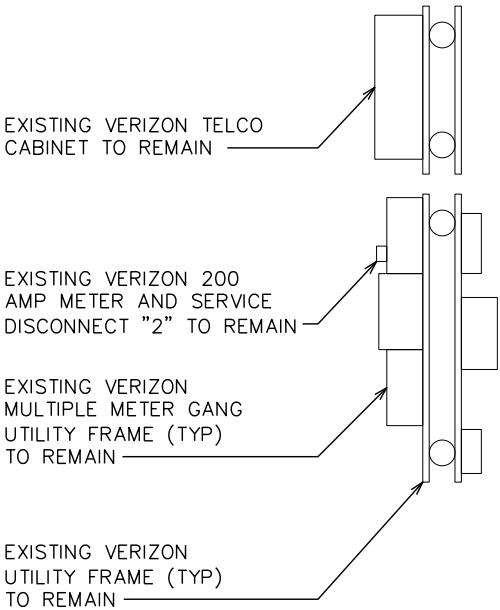
SHEET TITLE:

SITE PLAN

SHEET NUMBER:	REVISION:
C-1	2
	TEP#: 26487.955089

NOTE:

EQUIPMENT LAYOUT SHOWN BELOW BASED ON DOCUMENTS PROVIDED BY VERIZON WIRELESS.



PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431
(561) 995-5539

PROJECT INFORMATION:

VZW SITE #: 5000302732

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SBA LULU

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LAKE CITY, FL 32054
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PLANS PREPARED BY:



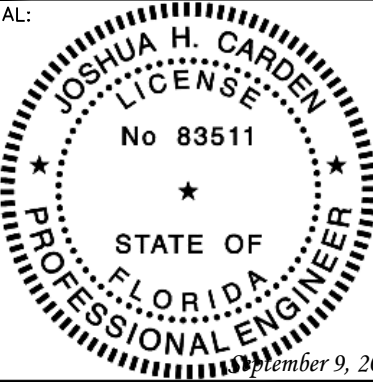
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REV	DATE	ISSUED FOR:

DRAWN BY: SKK CHECKED BY: JHJ

SHEET TITLE:

**EXISTING
EQUIPMENT
SHELTER LAYOUT**

SHEET NUMBER: C-1A	REVISION: 2 TEP#: 26487.955089
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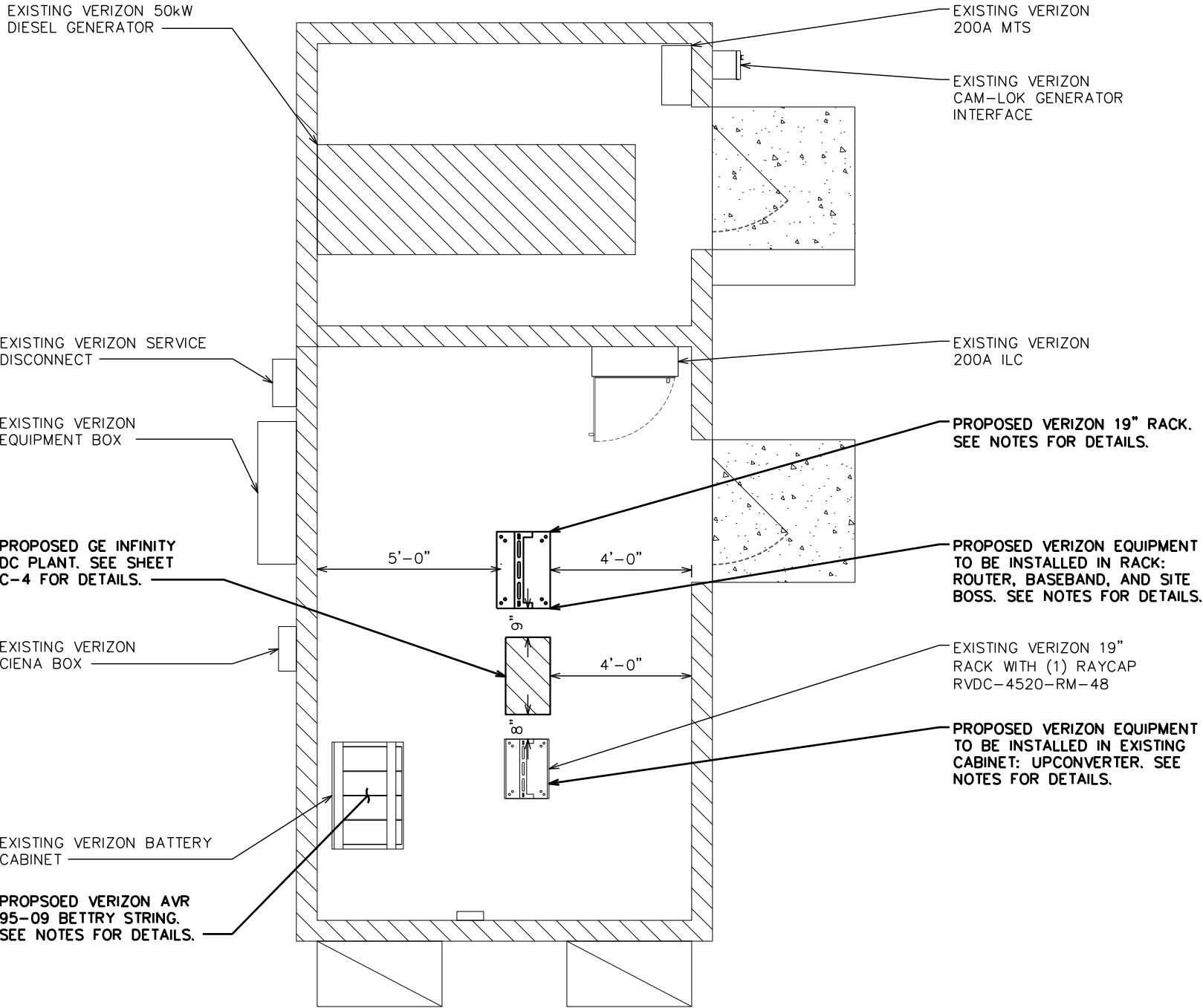
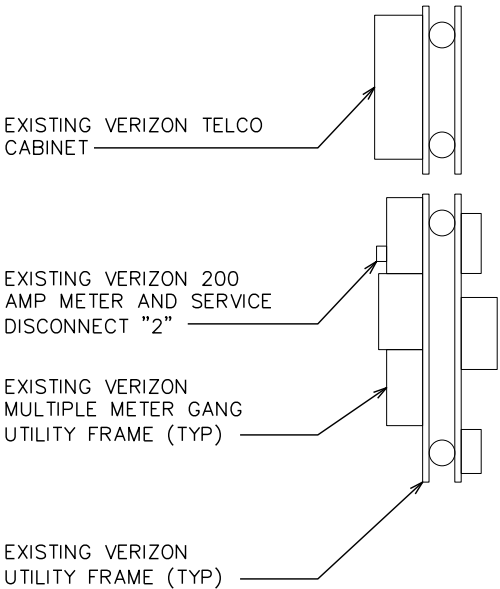
EXISTING EQUIPMENT SHELTER LAYOUT

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



NOTES:

- 1. EQUIPMENT LAYOUT SHOWN BELOW BASED ON DOCUMENTS PROVIDED BY VERIZON WIRELESS.
- 2. CONTRACTOR TO INSTALL EQUIPMENT PER MANUFACTURER'S SPECIFICATIONS.



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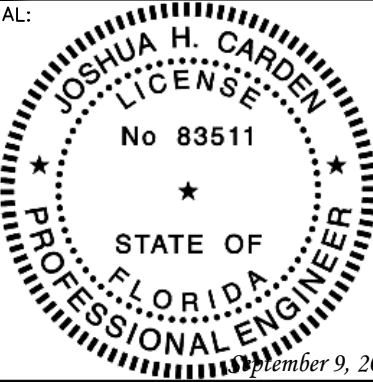
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**PROPOSED
EQUIPMENT
SHELTER LAYOUT**

SHEET NUMBER:	REVISION:
C-1B	2
	TEP#: 26487.955089

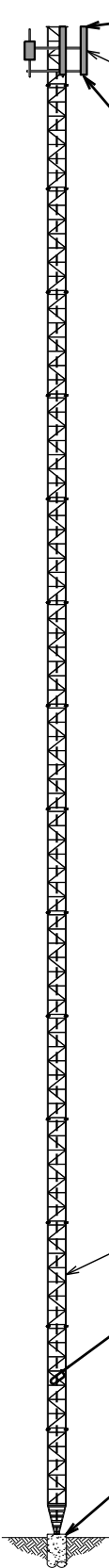
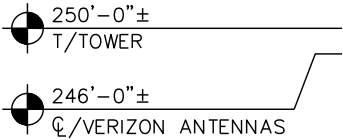
PROPOSED EQUIPMENT SHELTER LAYOUT

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



NOTES:

- 1. EXISTING TOWER HAS SUFFICIENT CAPACITY TO HOLD PROPOSING LOADING. CONTRACTOR TO VERIFY LOADING WITH PASSING STRUCTURAL ANALYSIS BY TOWER ENGINEERING SOLUTIONS, LLC DATED JULY 07, 2024 PRIOR TO CONSTRUCTION.
- 2. CONTRACTOR TO INSTALL EQUIPMENT PER MANUFACTURE’S SPECIFICATIONS.
- 3. THE DRAWINGS IS ONLY A GRAPHIC REPRESENTATION OF THE STRUCTURE. CONDITIONS IN THE FIELD MAY VARY.
- 4. FAA APPROVED OVERALL HEIGHT = 255’-0”.



PROPOSED VERIZON ANTENNA TO BE INSTALLED (TYP OF 9). SEE SHEETS C-3B THROUGH C-3D FOR DETAILS.

EXISTING VERIZON EQUIPMENT TO REMAIN: (1) RAYCAP. SEE SHEETS C-3B THROUGH C-3D FOR DETAILS.

PROPOSED VERIZON EQUIPMENT TO BE INSTALLED: (6) ERICCSO RRUs. SEE SHEETS C-3B THROUGH C-3D FOR DETAILS.



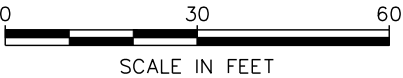
EXISTING GUYED TOWER

PER SPECIFICATIONS OF RFDS: (12) 1 5/8"Ø COAX AND (1) 1 5/8"Ø HYBRID CABLE TO REMAIN. (1) 1 5/8"Ø HYBRID CABLE TO BE INSTALLED

PROPOSED VERIZON EQUIPMENT TO BE INSTALLED AT SHELTER: (1) GE INFINITY DC PLANT, (1) 19" RACK, AND (1) AVR 95-09 BATTERY STING OR EQUIVALENT. SEE SHEET C-1B FOR DETAILS.

PROPOSED TOWER ELEVATION

SCALE: 1" = 30'



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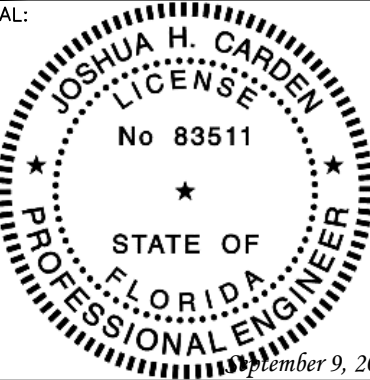


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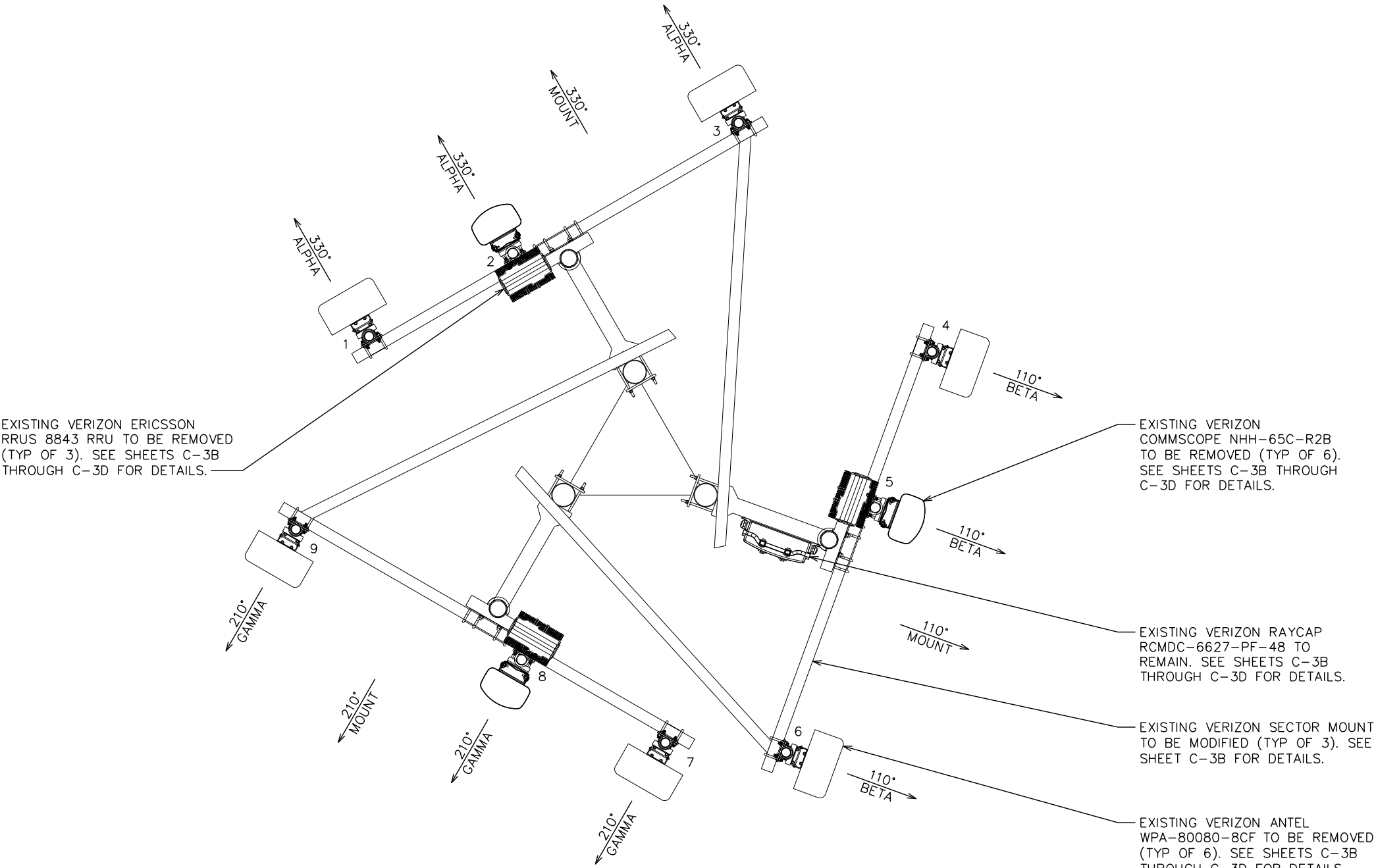
SHEET TITLE:

TOWER
ELEVATION

SHEET NUMBER: C-2	REVISION: 2 TEP#: 26487.955089
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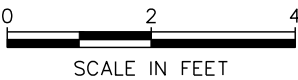
NOTE:

EXISTING MOUNTS DO NOT HAVE SUFFICIENT CAPACITY TO HOLD PROPOSED LOADING. SEE THE ANTENNA MOUNT ANALYSIS REPORT WITH HARDWARE UPGRADES AND PMI REQUIREMENTS BY COLLIERS ENGINEERING & DESIGN DATED 06/27/24 FOR DETAILS.



EXISTING ANTENNA LAYOUT @ 246'-0"

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



PLANS PREPARED FOR:



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BOCA RATON, FL 33431
(561) 995-5539

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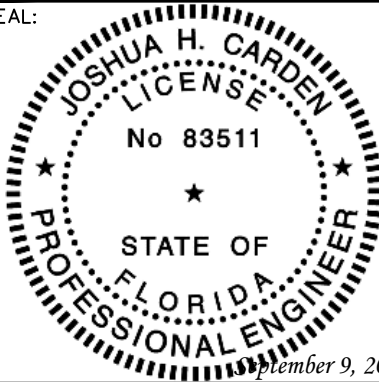
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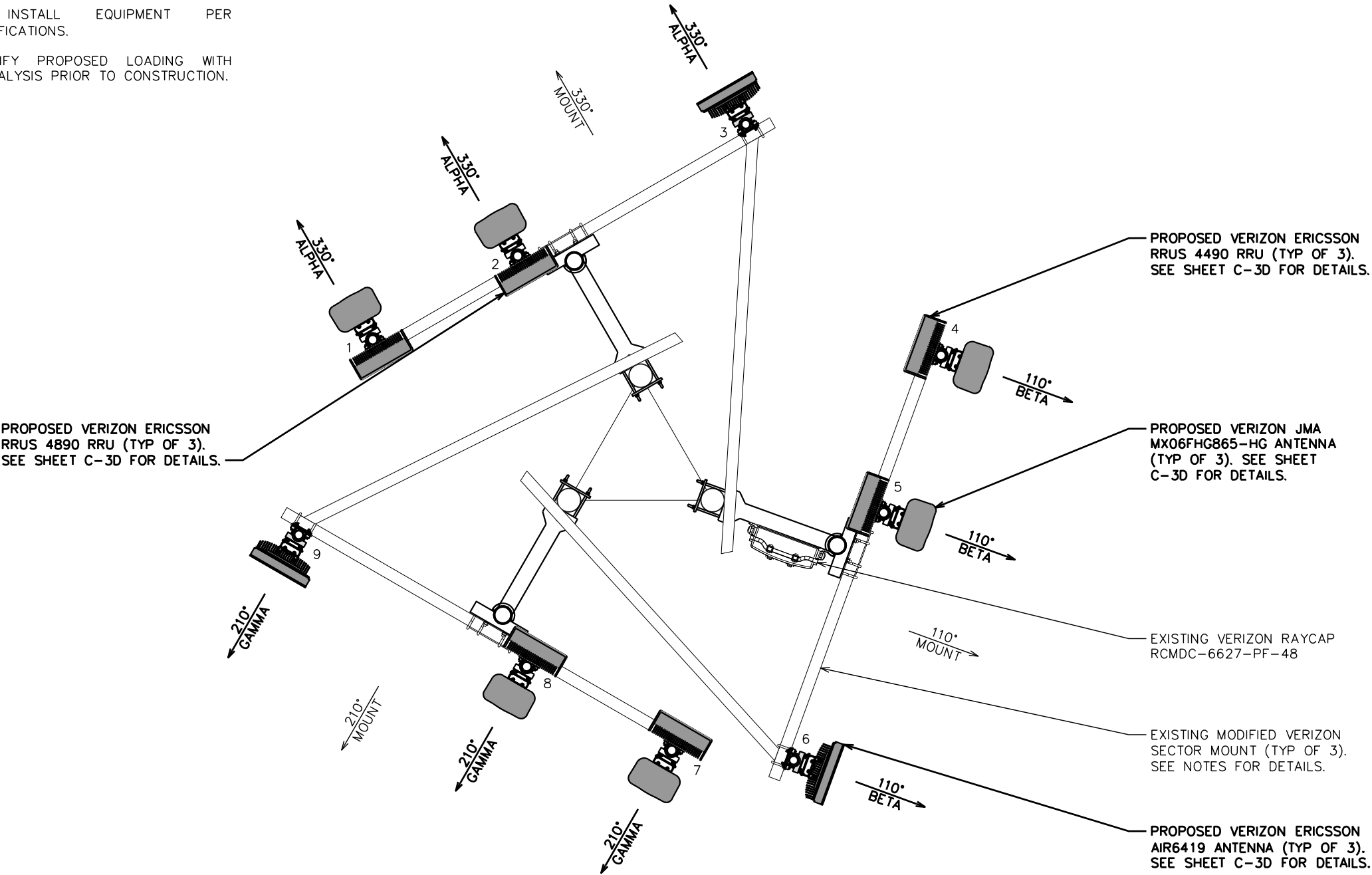
SHEET TITLE:

EXISTING
ANTENNA LAYOUT

SHEET NUMBER:	REVISION:
C-3A	2
	TEP#: 26487.955089

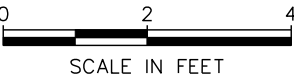
NOTES:

1. EXISTING MOUNTS WITH PROPOSED MODIFICATIONS HAVE SUFFICIENT CAPACITY TO HOLD PROPOSED LOADING. SEE THE ANTENNA MOUNT ANALYSIS REPORT WITH HARDWARE UPGRADES AND PMI REQUIREMENTS BY COLLIERS ENGINEERING & DESIGN DATED 06/27/24 FOR DETAILS.
2. CONTRACTOR TO INSTALL EQUIPMENT PER MANUFACTURER'S SPECIFICATIONS.
2. CONTRACTOR TO VERIFY PROPOSED LOADING WITH TOWER STRUCTURAL ANALYSIS PRIOR TO CONSTRUCTION.



PROPOSED ANTENNA LAYOUT @ 246'-0"

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



PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431
(561) 995-5539

PROJECT INFORMATION:

VZW SITE #: 5000302732

VZW SITE NAME:

SBA LULU

120 SOUTH EAST COMMUNITY ROAD
LAKE CITY, FL 32054
(COLUMBIA COUNTY)

PLANS PREPARED BY:



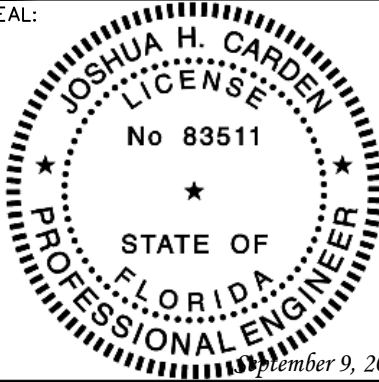
TEP OPCO, LLC

326 TRYON ROAD
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SEAL:



2	09-09-24	CONSTRUCTION
1	08-26-24	CONSTRUCTION
REV	DATE	ISSUED FOR:

DRAWN BY: SKK CHECKED BY: JHJ

SHEET TITLE:

PROPOSED
ANTENNA LAYOUT

SHEET NUMBER:	REVISION:
C-3B	2
	TEP#: 26487.955089

PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431
(561) 995-5539

PROJECT INFORMATION:

VZW SITE #: 5000302732

VZW SITE NAME:

SBA LULU

120 SOUTH EAST COMMUNITY ROAD
LAKE CITY, FL 32054
(COLUMBIA COUNTY)

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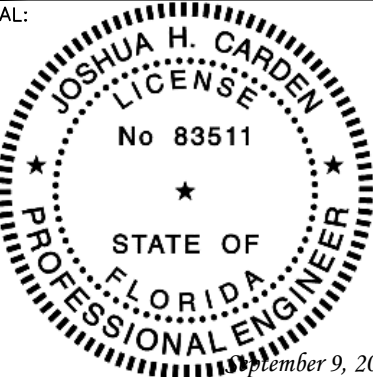


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1	08-26-24	CONSTRUCTION
REV	DATE	ISSUED FOR:

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SHEET TITLE:

EXISTING ANTENNA
& COAX SCHEDULE

SHEET NUMBER: C-3C	REVISION: 2 TEP#: 26487.955089
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EXISTING ANTENNA & COAX SCHEDULE

POS.	SECTOR	USE	MANUFACTURER (MODEL #)	RAD CENTER	CABLE SIZE	AZIMUTH (TN)	CABLE LENGTH	MECH. D-TILT	ELEC. D-TILT	EQUIPMENT [MODEL #]	J-BOX (TOWER)
1	ALPHA	700 LTE AWS LTE AWS3 LTE	*ANTEL WPA-80080-8CFB	☑ @ 246'-0"±	(12) 1½"Ø COAX (1) 1½"Ø HYBRID	330°	296'±	-	-	*(1) ERICSSON RRU [RRUS 8843]	(1) RAYCAP [RCMDC-6627-PF-48] **(1) RAYCAP [RVDC-4520-RM-48]
2	ALPHA		*COMMSCOPE NHH-65C-R2B	☑ @ 246'-0"±		330°		1°	0°		
3	ALPHA		*ANTEL WPA-80080-8CFB	☑ @ 246'-0"±		330°		-	-		
4	BETA	700 LTE AWS LTE AWS3 LTE	*ANTEL WPA-80080-8CFB	☑ @ 246'-0"±		110°		-	-	*(1) ERICSSON RRU [RRUS 8843]	
5	BETA		*COMMSCOPE NHH-65C-R2B	☑ @ 246'-0"±		110°		1°	0°		
6	BETA		*ANTEL WPA-80080-8CFB	☑ @ 246'-0"±		110°		-	-		
7	GAMMA	700 LTE AWS LTE AWS3 LTE	*ANTEL WPA-80080-8CFB	☑ @ 246'-0"±		210°		-	-	*(1) ERICSSON RRU [RRUS 8843]	
8	GAMMA		*COMMSCOPE NHH-65C-R2B	☑ @ 246'-0"±		210°		1°	0°		
9	GAMMA		*ANTEL WPA-80080-8CFB	☑ @ 246'-0"±		210°		-	-		

*NOTE - EXISTING ANTENNA/EQUIPMENT TO BE REMOVED
**NOTE - EXISTING EQUIPMENT LOCATED IN SHELTER ON GROUND LEVEL

GROUND WORK:

CONTRACTOR TO REMOVE: (3) ERICSSON RRUS 4449 RRUs, (1) 6201 CABINET, (1) CMDA CABINET, AND ALL BATTERIES.

EXISTING ANTENNA & COAX SCHEDULE @ 246'-0"

SCALE: N.T.S.

PROPOSED EQUIPMENT IN BOLD>

PROPOSED ANTENNA & COAX SCHEDULE											
POS.	SECTOR	USE	MANUFACTURER (MODEL #)	RAD CENTER	CABLE SIZE	AZIMUTH (TN)	CABLE LENGTH	MECH. D-TILT	ELEC. D-TILT	EQUIPMENT [MODEL #]	J-BOX (TOWER)
1	ALPHA	700 LTE AWS LTE 850 LTE 850 NR 1900 LTE CBAND NR	JMA WIRELESS MX06FHG865-HG	☉ 246'-0"±	(12) 1½"∅ COAX	330°	*296'±	••	••	(1) ERICSSON RRU [RRUS 4490]	(1) RAYCAP [RCMDC-6627-PF-48] ***(1) RAYCAP [RVDC-4520-RM-48]
2	ALPHA		JMA WIRELESS MX06FHG865-HG	☉ 246'-0"±		330°		••	••	(1) ERICSSON RRU [RRUS 4890]	
3	ALPHA		ERICSSON AIR6419	☉ 246'-0"±		330°		••	••		
4	BETA	700 LTE AWS LTE 850 LTE 850 NR 1900 LTE CBAND NR	JMA WIRELESS MX06FHG865-HG	☉ 246'-0"±	(1) 1½"∅ HYBRID	110°		••	••	(1) ERICSSON RRU [RRUS 4490]	
5	BETA		JMA WIRELESS MX06FHG865-HG	☉ 246'-0"±		110°		••	••	(1) ERICSSON RRU [RRUS 4890]	
6	BETA		ERICSSON AIR6419	☉ 246'-0"±		110°		••	••		
7	GAMMA	700 LTE AWS LTE 850 LTE 850 NR 1900 LTE CBAND NR	JMA WIRELESS MX06FHG865-HG	☉ 246'-0"±		210°		••	••	(1) ERICSSON RRU [RRUS 4490]	
8	GAMMA		JMA WIRELESS MX06FHG865-HG	☉ 246'-0"±		210°		••	••	(1) ERICSSON RRU [RRUS 4890]	
9	GAMMA		ERICSSON AIR6419	☉ 246'-0"±		210°		••	••		

*NOTE – CONTRACTOR TO VERIFY COAX/CABLE LENGTHS PRIOR TO CONSTRUCTION
**NOTE – CONTRACTOR TO REFERENCE VERIZON ISSUED RFDS FOR MECH./ELEC. D-TILTS
***NOTE – EXISTING EQUIPMENT LOCATED IN SHELTER ON GROUND LEVEL

GROUND WORK:

CONTRACTOR TO INSTALL: (1) GE INFINITY DC PLANT, (1) 19” RACK, AND (1) AVR 95-09 BATTERY STING OR EQUIVALENT.

PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431
(561) 995-5539

PROJECT INFORMATION:

VZW SITE #: 5000302732

VZW SITE NAME:

SBA LULU

120 SOUTH EAST COMMUNITY ROAD
LAKE CITY, FL 32054
(COLUMBIA COUNTY)

PLANS PREPARED BY:

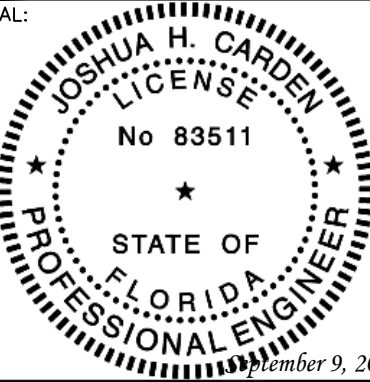


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SEAL:



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1	08-26-24	CONSTRUCTION
REV	DATE	ISSUED FOR:

DRAWN BY: SKK CHECKED BY: JHJ

SHEET TITLE:

PROPOSED ANTENNA
& COAX SCHEDULE

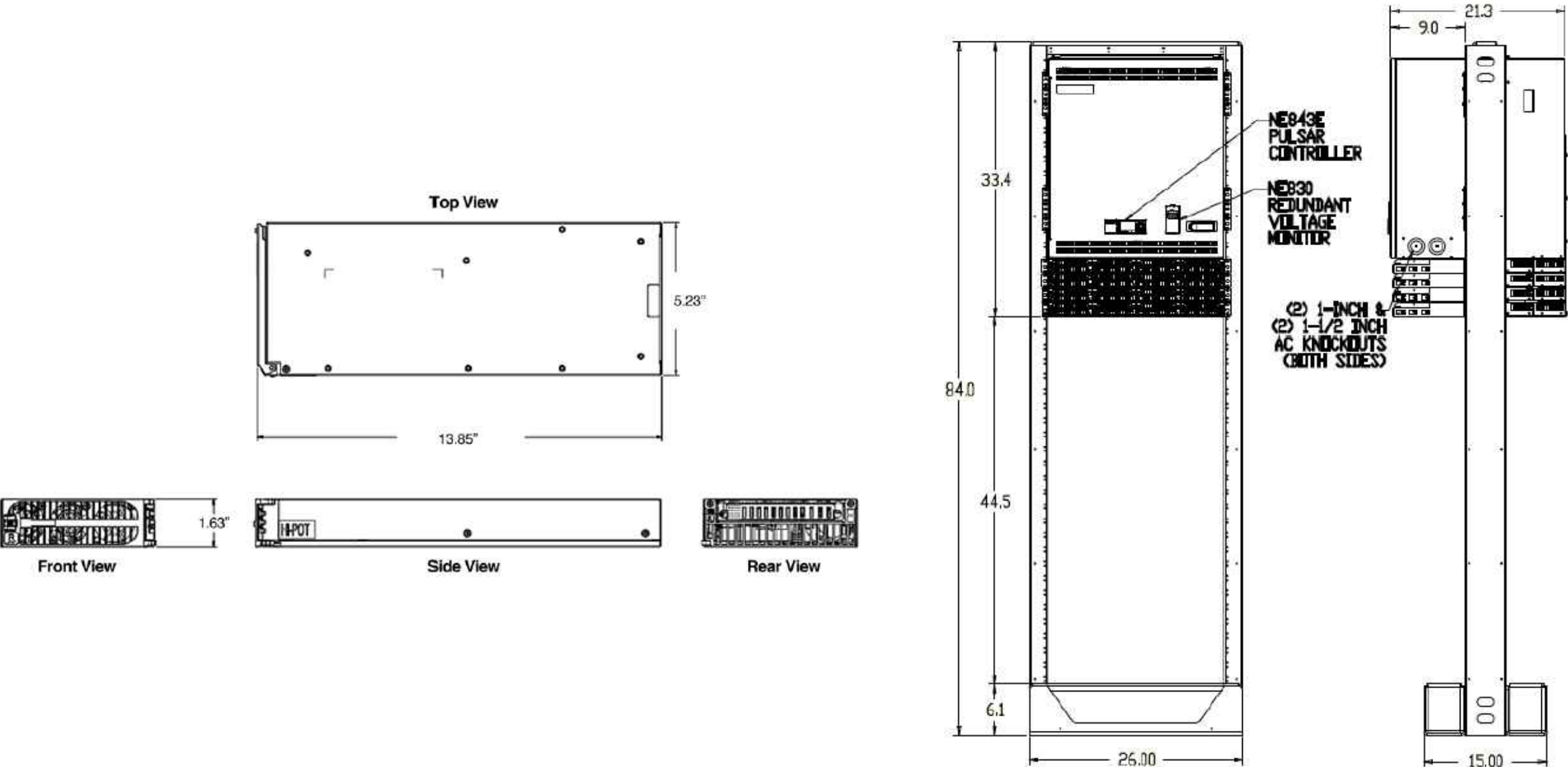
SHEET NUMBER:	REVISION:
C-3D	2
	TEP#: 26487.955089

PROPOSED ANTENNA & COAX SCHEDULE @ 246'-0"

SCALE: N.T.S.

NOTES:

1. INFINITY M POWER SYSTEM, DUAL VOLTAGE, RACK MOUNTED POWER SYSTEM BY GE. CONTRACTOR TO VERIFY DIMENSIONS WITH MANUFACTURER.
2. CONTRACTOR TO INSTALL PER MANUFACTURER'S SPECIFICATIONS.



PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431
(561) 995-5539

PROJECT INFORMATION:

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VZW SITE NAME:

SBA LULU

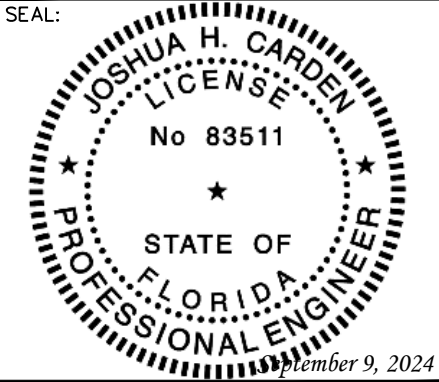
120 SOUTH EAST COMMUNITY ROAD
LAKE CITY, FL 32054
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PLANS PREPARED BY:



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REV	DATE	ISSUED FOR:

DRAWN BY: SKK CHECKED BY: JHJ

SHEET TITLE:

DC PLANT
DETAILS

SHEET NUMBER:	REVISION:
C-4	2
	TEP#: 26487.955089

DC PLANT DETAILS

SCALE: N.T.S.

ELECTRICAL NOTES:

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

D. LOCAL AND STATE AMENDMENTS

B. THE NATIONAL ELECTRIC CODE – NFPA–70

E. THE INTERNATIONAL ELECTRIC CODE – IEC (WHERE APPLICABLE)

C. REGULATIONS OF THE SERVING UTILITY COMPANY
2. PERMITS REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR.
3. AFTER COMPLETION AND FINAL INSPECTION OF THE WORK, THE OWNER SHALL BE FURNISHED A CERTIFICATE OF COMPLETION AND APPROVAL.

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

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

PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431
(561) 995-5539

PROJECT INFORMATION:

VZW SITE #: 5000302732

VZW SITE NAME:

SBA LULU

120 SOUTH EAST COMMUNITY ROAD
LAKE CITY, FL 32054
(COLUMBIA COUNTY)

PLANS PREPARED BY:

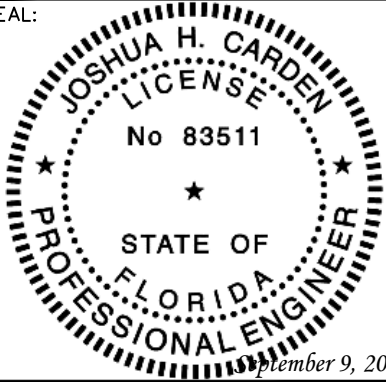


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2	09-09-24	CONSTRUCTION
1	08-26-24	CONSTRUCTION
REV	DATE	ISSUED FOR:

DRAWN BY: SKK CHECKED BY: JHJ

SHEET TITLE:

ELECTRICAL
NOTES

SHEET NUMBER: E-1	REVISION: 2 TEP#: 26487.955089
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NOTES:

1. ALL CONDUCTORS ARE TYPE THWN (75°C) COPPER.
2. MAXIMUM LENGTH OF RUN FOR RECTIFIER CIRCUITS IS 50-FT.
3. INTERSECT/GENERAC INTEGRATED LOAD CENTER INCLUDES 200A MAIN DISCONNECT AND TRANSFER SWITCH FOR PORTABLE OR PERMANENT GENERATOR.
4. RECTIFIER LOADS ARE CONSIDERED TO BE NON-CONTINUOUS.
5. IF ADDITIONAL FUTURE LOADS ARE ADDED WHICH CAUSE TOTAL DEMAND TO EXCEED GENERATOR BREAKER SIZE, BACKUP POWER SYSTEM SHALL BE EVALUATED AND UPGRADED AS NECESSARY.
6. THE RECTIFIER QUANTITY AND LOADING SHOWN ARE BASED ON CALCULATIONS PROVIDED BY VERIZON THE OTHR3000 MACRO AND CRAN CALC – RIGHT SIZE CALC V8.23. CHANGES TO THE DC LOADING MY REQUIRE UPDATES TO THE AC POWER DESIGN OR OTHER EQUIPMENT CHANGES.

PROPOSED BREAKER/LOAD SHOWN IN BOLD

PANEL SCHEDULE - ILC WITH 200A MCB 120/240V												
LOAD SERVED	VOLT AMPERES (WATTS)		TRIP	CKT #	PHASE			CKT #	TRIP	VOLT AMPERES (WATTS)		LOAD SERVED
	L1	L2								L1	L2	
RECTIFIER #1	497		30A	1	A	B		2	60A	2319		HVAC #1
		497		3				4			2319	
RECTIFIER #2	497		30A	5	A	B		6	60A	2319		HVAC #2
		497		7				8			2319	
RECTIFIER #3	497		30A	9	A	B		10	20A	500		INT./EXT. LIGHTS
		497		11				12	20A		500	INT. GEN LIGHTS
RECTIFIER #4	497		30A	13	A	B		14	15A	0		WALL HEATER (OFF)
		497		15				16			0	
RECTIFIER #5	497		30A	17	A	B		18	20A	720		QUAD./GFCI RECEPT.
		497		19				20	20A		720	QUAD RECEPT. DUPLEX
RECTIFIER #6 (OFF)	0		30A	21	A	B		22	20A	180		TWIST LOCK RECEPT.
		0		23				24	15A		0	SMOKE/HEAT DET. (OFF)
RECTIFIER #7 (OFF)	0		30A	25	A	B		26	15A	180		EXHAUST FAN
		0		27				28	15A		100	HEAT DETECTOR GEN
RECTIFIER #8 (OFF)	0		30A	29	A	B		30	–	–		SPACE
		0		31				32	–		–	SPACE
SPACE	–		–	33	A			34	–	–		SPACE
SPACE		–	–	35	B			36	–		–	SPACE
SPACE	–		–	37	A			38	–	–		SPACE
SPACE		–	–	39	B			40	–		–	SPACE
SPACE	–		–	41	A			42	–	–		SPACE
VOLT AMPS	2485	2485								6218	5958	VOLT AMPS
				L1 VOLT AMPERES		8703	8443	L2 VOLT AMPERES				
				L1 AMPS		72.53	70.36	L2 AMPS				
						72.53		MAX AMPS				
						90.66		MAX AMPS x125%				

PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431
(561) 995-5539

PROJECT INFORMATION:

VZW SITE #: 5000302732

VZW SITE NAME:

SBA LULU

120 SOUTH EAST COMMUNITY ROAD
LAKE CITY, FL 32054
(COLUMBIA COUNTY)

PLANS PREPARED BY:

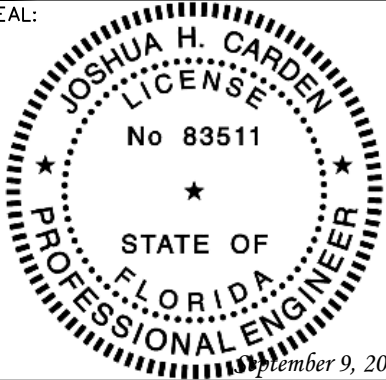


TEP OPCO, LLC
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RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net
FL COA #31011

DIGITAL SEAL:

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SEAL:



2	09-09-24	CONSTRUCTION
1	08-26-24	CONSTRUCTION
REV	DATE	ISSUED FOR:

DRAWN BY: SKK CHECKED BY: JHJ

SHEET TITLE:

POWER PANEL
SCHEDULE

SHEET NUMBER:	REVISION:
E-2	2
	TEP#: 26487.955089

POWER PANEL SCHEDULE

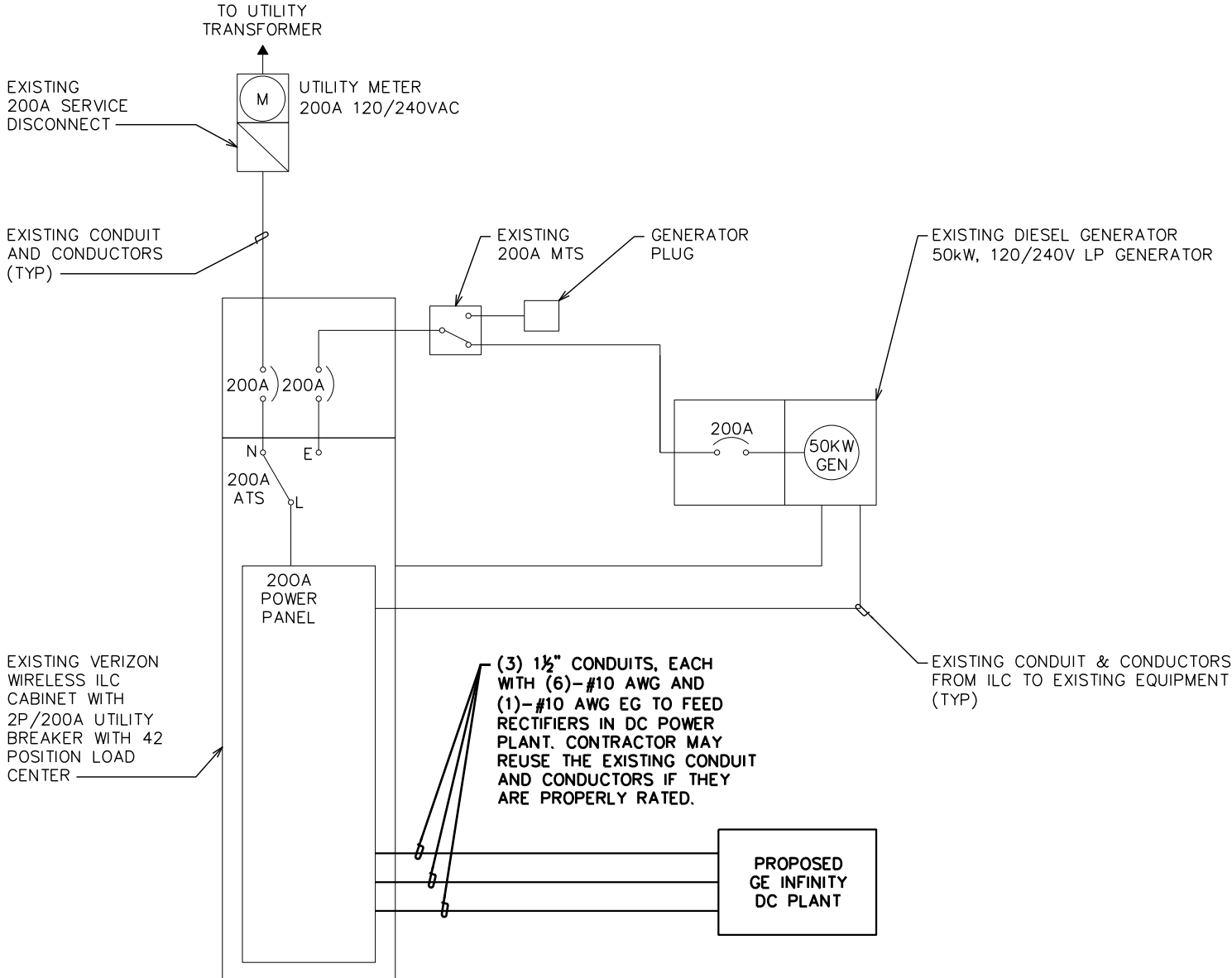
SCALE: N.T.S.

NOTES:

- 1. FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT, REFER TO VENDOR PRINTS PROVIDED BY EQUIPMENT MANUFACTURER.
- 2. WHEN UTILITY COMPANY REQUIRES A SERVICE DISCONNECT OTHER THAN THE MAIN BREAKER IN POWER PANEL OF THE UTILITY CABINET, REMOVE BONDING JUMPER IN EQUIPMENT CABINETS AND BOND SERVICE DISCONNECT PER NEC REQUIREMENTS.
- 3. CONTRACTOR SHALL REVIEW AND COMPLY WITH MANUFACTURERS EQUIPMENT DRAWINGS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SHOWN.
- 4. CONTRACTOR SHALL OBTAIN THE MAXIMUM AVAILABLE FAULT CURRENT AT THE UTILITY SERVICE POINT FROM THE ELECTRIC COMPANY IN WRITING PRIOR TO ORDERING MATERIALS AND ENSURE THE EQUIPMENT WILL HAVE HIGHER RATING WITH A MIN VALUE OF 10,000A.
- 5. THE GROUNDED SERVICE CONDUCTOR SHALL BE GROUNDED AT THE SERVICE DISCONNECT ONLY.
- 6. DO NOT BOND THE NEUTRAL TO GROUND AT THE GENERATOR.
- 7. SIGNAGE MUST BE DISPLAYED ON DISCONNECT "OPENING THE EQUIPMENT DISCONNECT WILL CAUSE THE EMERGENCY GENERATOR TO START. TO REMOVE POWER ENTIRELY FROM EQUIPMENT, THE GENERATOR MUST BE TURNED OFF USING THE GENERATOR STOP SWITCH."

ONE-LINE DIAGRAM NOTES:

- 1. ELECTRICAL SERVICE SHALL BE 200A, 240/120V, 1ø, 3W.
- 2. COMPLY WITH MANUFACTURER SPECIFICATIONS REGARDING WIRING REQUIREMENTS.
- 3. CONDUCTOR SIZES BASED ON TYPICAL CONFIGURATIONS. CONTRACTOR WILL VERIFY WITH MANUFACTURER SPECIFICATIONS BEFORE ORDERING OR INSTALLING PARTS.
- 4. WIRE COUNT IS BASED ON EQUIPMENT SPECIFICATIONS PROVIDED BY VERIZON WIRELESS.
- 5. NEUTRAL CONDUCTORS TO THE RECTIFIERS WERE LEFT OFF AT THE ADVICE OF VERIZON WIRELESS EQUIPMENT ENGINEER. CONTRACTOR TO VERIFY WIRING REQUIREMENTS WITH RECTIFIER MANUFACTURER SPECIFICATIONS.
- 6. EXISTING GROUNDING ELECTRODE CONDUCTOR & MAIN BONDING JUMPER. CONTRACTOR TO VERIFY EXISTENCE AND LOCATION.
- 7. CONDUCTOR SIZED BASED ON A MAXIMUM GENERATOR BREAKER RATING OF 200A.
- 8. THE RECTIFIER QUANTITY AND LOADING SHOWN ARE BASED ON CALCULATIONS PROVIDED BY VERIZON THE OTHR3000 MACRO AND CRAN CALC – RIGHT SIZE CALC V8.23. CHANGES TO THE DC LOADING MY REQUIRE UPDATES TO THE AC POWER DESIGN OR OTHER EQUIPMENT CHANGES.



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SBA LULU

120 SOUTH EAST COMMUNITY ROAD
LAKE CITY, FL 32054
(COLUMBIA COUNTY)

PLANS PREPARED BY:



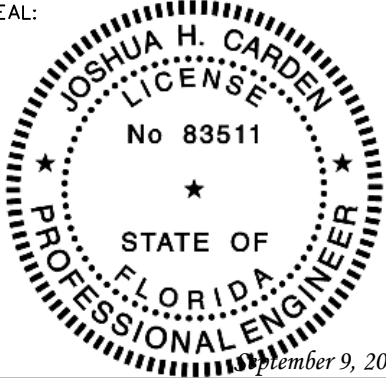
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DRAWN BY: SKK CHECKED BY: JHJ

SHEET TITLE:

ONE-LINE
DIAGRAM

SHEET NUMBER:	REVISION:
E-3	2
	TEP#: 26487.955089

ELECTRICAL ONE-LINE DIAGRAM

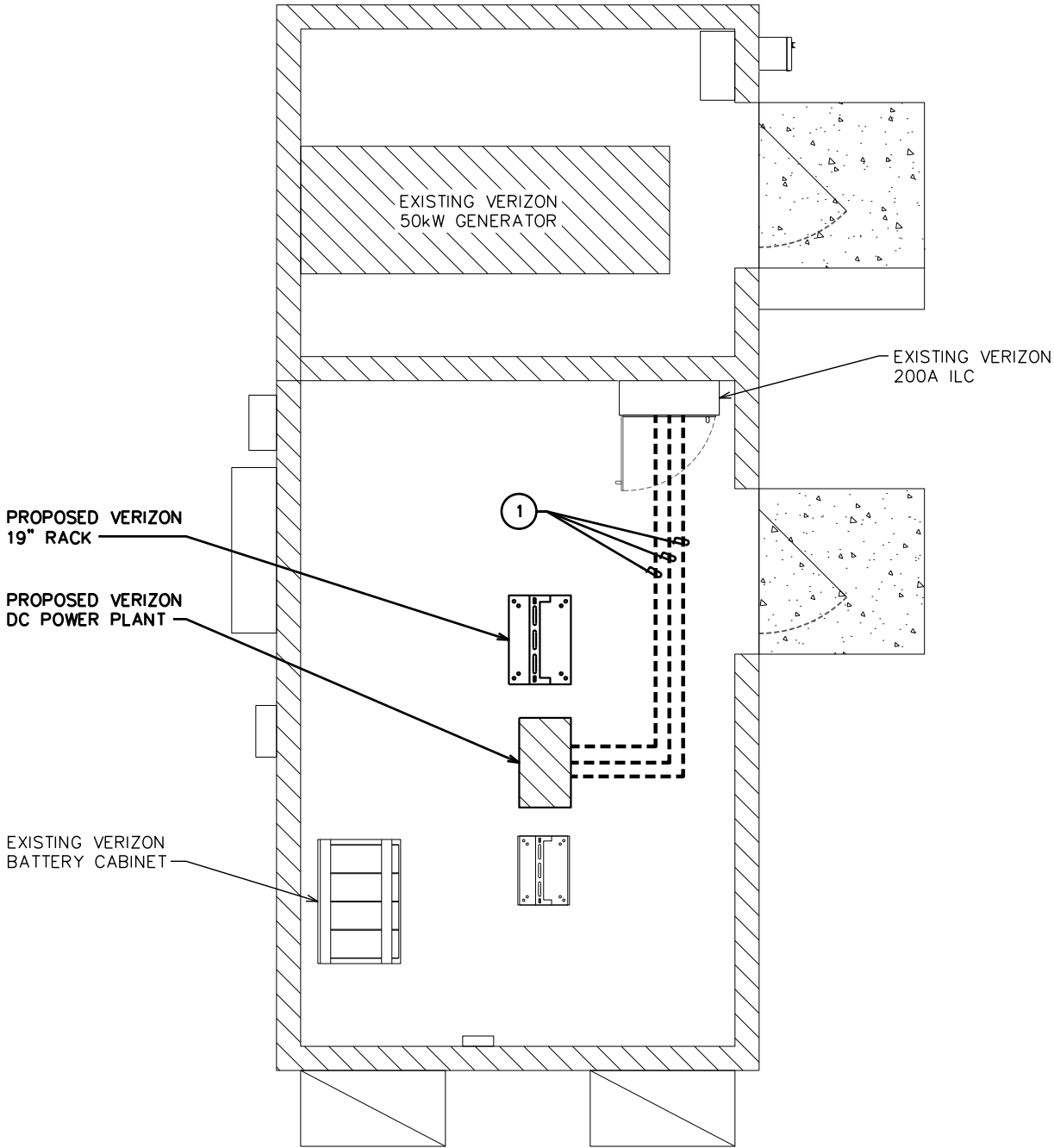
SCALE: N.T.S.

LABEL LIST:

- ① (3)-1½" CONDUITS FOR RECTIFIERS IN DC POWER PLANT

NOTES:

1. POWER AND TELCO CONDUITS RECEIVING CONDUCTORS BY OTHERS TO HAVE PULL ROPES.
2. ALL TELCO CONDUITS ARE TO BE STUBBED IN D-MARC LOCATION.
3. ALL POWER CONDUITS ARE TO BE TERMINATED AT THE METER CENTER.
4. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO TRENCHING. ANY DAMAGE CAUSED TO THE EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
5. ALL CONDUITS SHALL BE INSTALLED PRIOR TO FINISH GRADING, GEOFABRIC, AND STONE INSTALLATION.
6. CONTRACTOR SHALL INSTALL SWEEPS AT ALL CONDUIT DIRECTION CHANGES UNLESS NOTED OTHERWISE.
7. RUN CONDUITS FROM ILC TO GENERATOR UNDERGROUND AND STUB UP CONDUITS MINIMUM 6" HIGH INSIDE GENERATOR BASE AND TERMINATE WITH MALE ADAPTER AND THREADED BUSHING.



POWER ROUTING PLAN

SCALE: ¼" = 1'-0"



PLANS PREPARED FOR:



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BOCA RATON, FL 33431
(561) 995-5539

PROJECT INFORMATION:

VZW SITE #: 5000302732

VZW SITE NAME:

SBA LULU

120 SOUTH EAST COMMUNITY ROAD
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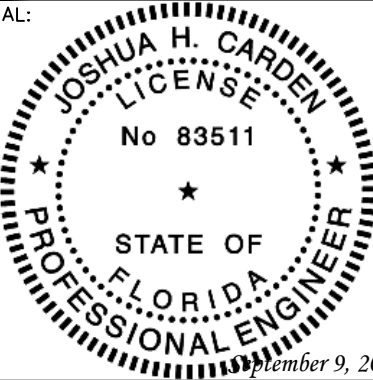


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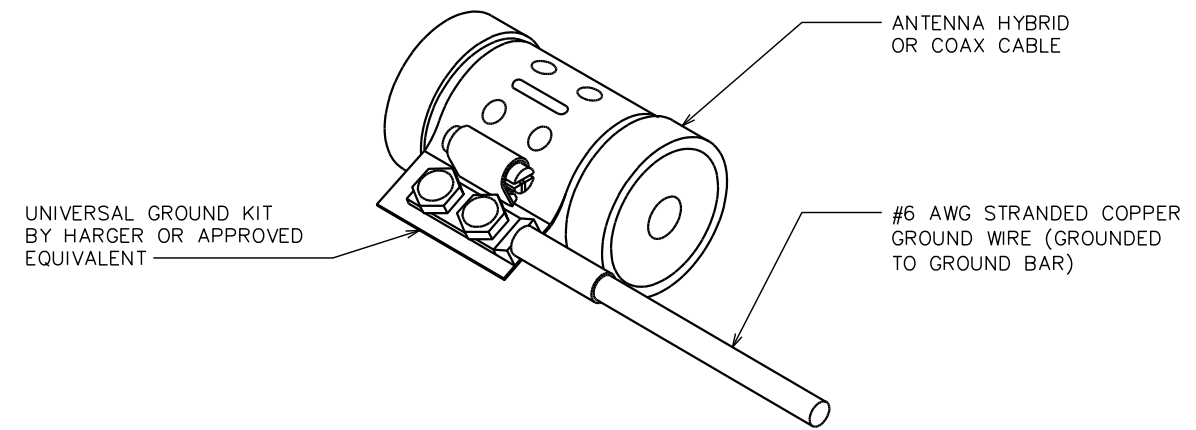
SHEET TITLE:

**POWER
ROUTING PLAN**

SHEET NUMBER: E-4	REVISION: 2 TEP#: 26487.955089
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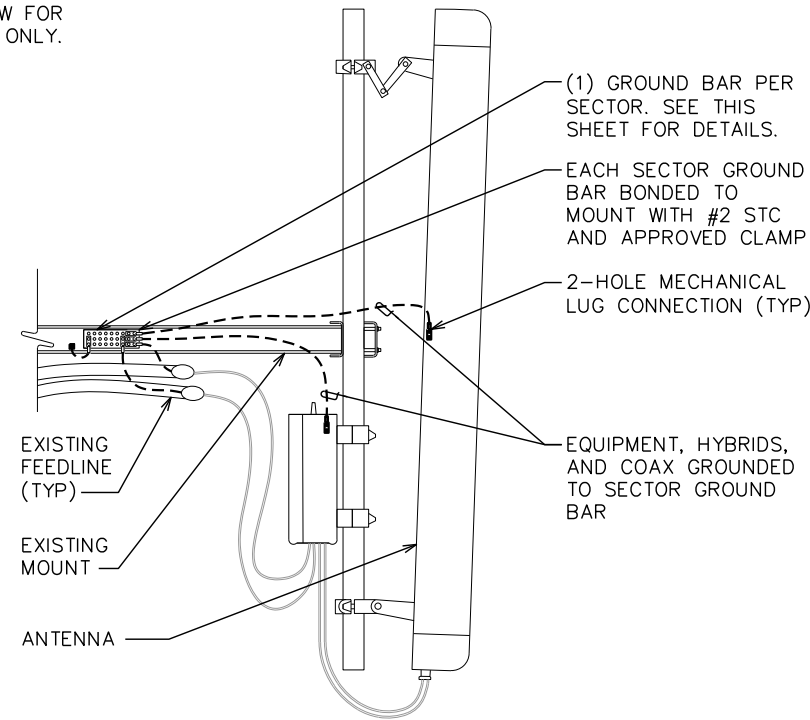
NOTES:

- 1. DO NOT INSTALL COAX GROUND KIT AT A BEND.
- 2. CONTRACTOR TO WEATHERPROOF COAX GROUND.



NOTE:

DRAWING SHOWN BELOW FOR SCHEMATIC PURPOSES ONLY.

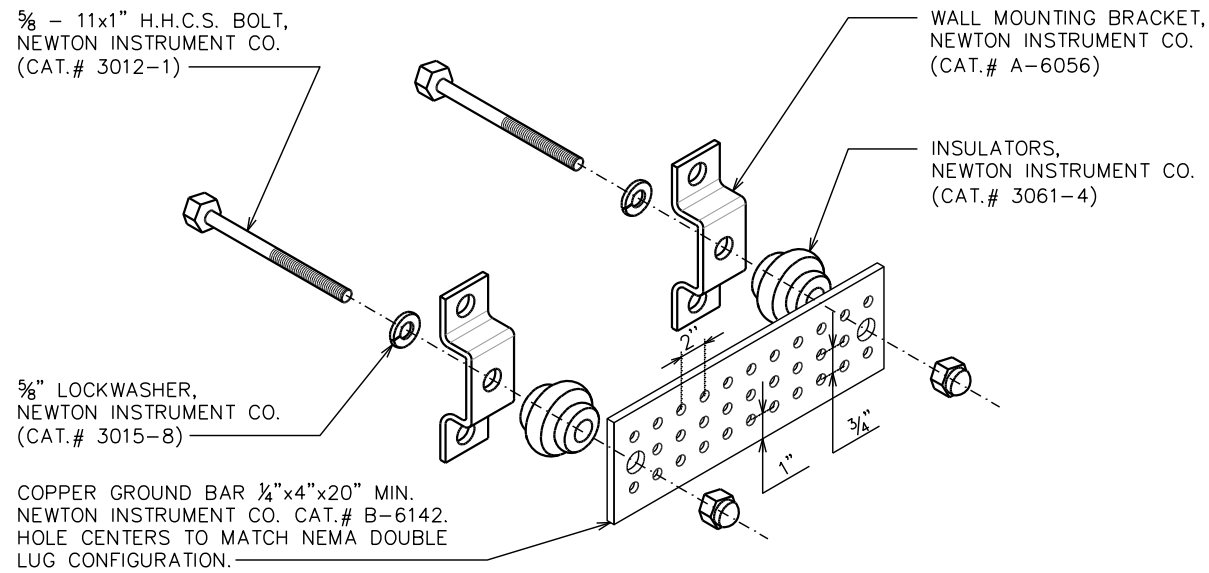
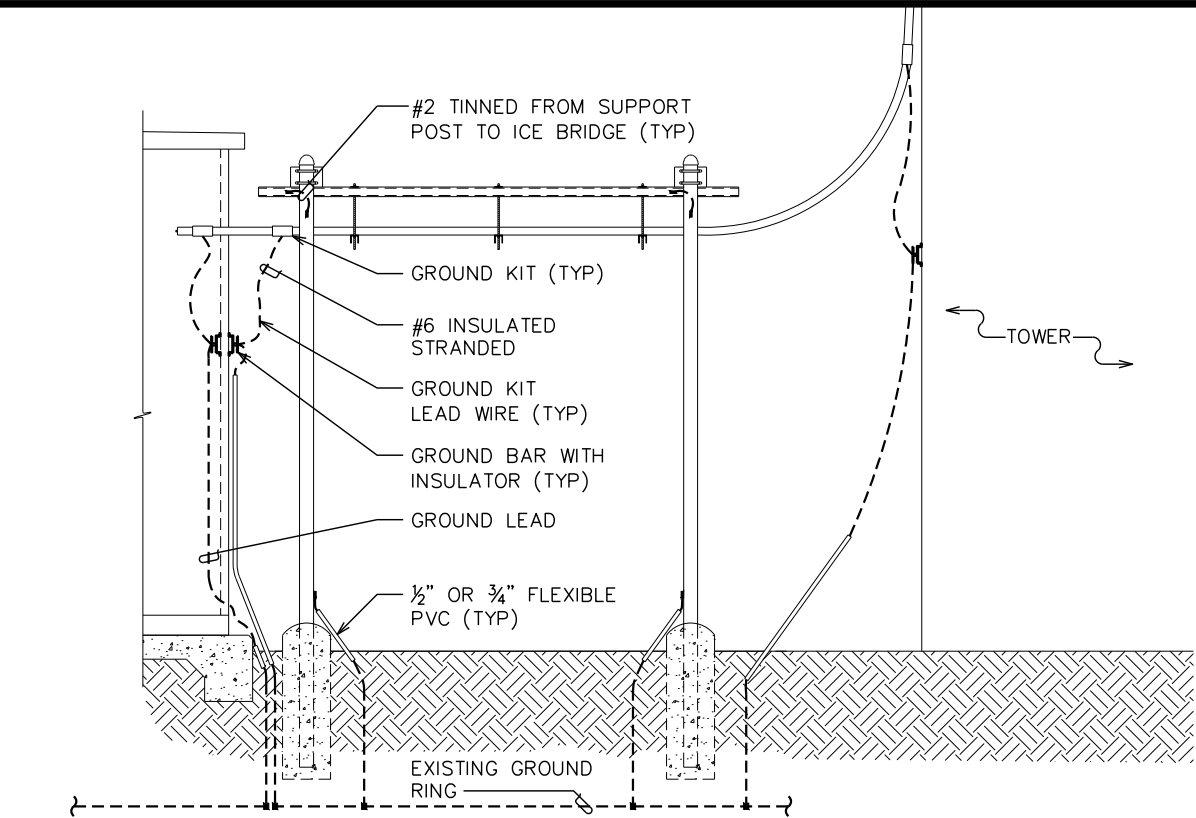


GROUNDING DETAILS

SCALE: N.T.S.

ANTENNA & EQUIPMENT GROUNDING DETAIL

SCALE: N.T.S.



NOTES:

- 1. GROUND BAR SHALL BE SIZED TO ACCOMMODATE ALL GROUNDING CONNECTIONS REQUIRED AS WELL AS PROVIDE 50% SPARE CAPACITY.
- 2. ALL RACKS AND EQUIPMENT CABINETS ARE TO HAVE TWO GROUNDING LEADS. ALL EQUIPMENT INSTALLED IN RACKS MUST HAVE A CHASSIS GROUND ATTACHED TO A COMMON BUS BAR ON THE RACK. COMMON BUS BAR MUST BE GROUND TO MAIN GROUND BAR.

ICE BRIDGE/HYBRID/COAX/GROUNDING BAR ELEVATION

SCALE: N.T.S.

STANDARD GROUND BAR DETAILS

SCALE: N.T.S.

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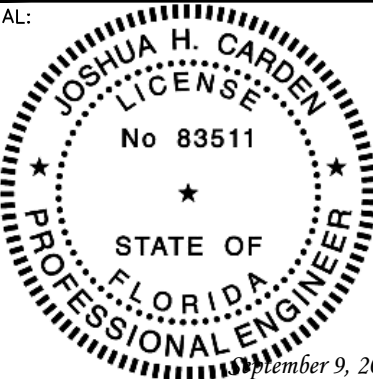


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SHEET TITLE:

GROUNDING
DETAILS

SHEET NUMBER:	REVISION:
G-1	2
	TEP#: 26487.955089