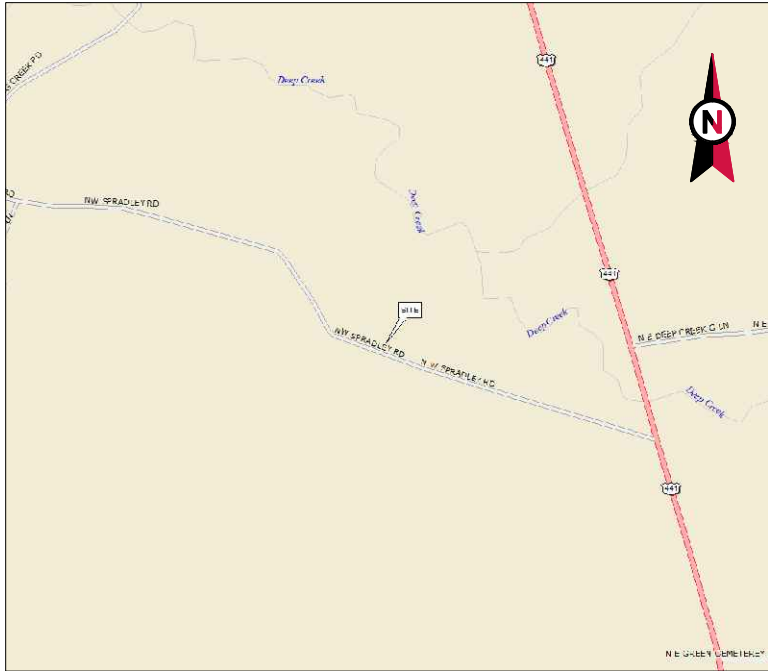




VICINITY MAP



AMERICAN TOWER®

ATC SITE NAME: THOMAS ARP3 RAW LAND FL
ATC SITE NUMBER: 417361
VERIZON WIRELESS SITE NAME: THOMAS
VERIZON WIRELESS SITE NUMBER: 228810
VERIZON WIRELESS FUZE PID: 16276345
VERIZON WIRELESS MDG LOCATION CODE: 5000025813
SITE ADDRESS: 744 NW SPRADLEY RD
LAKE CITY, FL 32055-5951



LOCATION MAP

VERIZON WIRELESS
ANTENNA AMENDMENT DRAWINGS

COMPLIANCE CODE		PROJECT SUMMARY		PROJECT DESCRIPTION		SHEET INDEX				
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. 1. 2023 FLORIDA BUILDING CODE, 8TH EDITION 2. ANSI/TIA-222-H 3. 8TH EDITION FLORIDA FIRE PREVENTION CODE 4. 2020 NATIONAL ELECTRICAL CODE (NFPA 70) 5. CITY/COUNTY ORDINANCES DESIGN CRITERIA FOR TOWER STRUCTURAL ANALYSIS BY AMERICAN TOWER CORPORATION DATED APRIL 6, 2023: ULTIMATE WIND SPEED: 117 MPH (3-SECOND GUST) SERVICE WIND SPEED: 30 MPH RISK CATEGORY: II EXPOSURE CATEGORY: C TOPOGRAPHIC CATEGORY: 1		<u>SITE ADDRESS:</u> 744 NW SPRADLEY RD LAKE CITY, FL 32055-5951 COUNTY: COLUMBIA <u>REGISTERED COORDINATES:</u> LATITUDE: 30° 21' 58.42" N (NAD 83) LONGITUDE: 82° 37' 45.91" W (NAD 83) <u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 30.36624 LONGITUDE: -82.62942 GROUND ELEVATION: 115' SE <u>ZONING INFORMATION:</u> JURISDICTION: COLUMBIA COUNTY PARCEL ID: 32-1S-17-04619-000		VERIZON WIRELESS IS PROPOSING THE FOLLOWING WORK TO BE COMPLETED ON AN EXISTING 300' GUYED TOWER: <u>TOWER WORK:</u> REMOVE (3) T-ARM MOUNT(S), (9) ANTENNA(S), (3) RRU(s), (12) TMA(s), AND (12) 1-5/8" COAX CABLE(S). INSTALL (3) SECTOR FRAME(S), (9) ANTENNA(S), (3) RRU(s), (1) OVP(s), AND (1) 6X12 (1.43") HYBRID CABLE(S). EXISTING (1) OVP(s) AND (1) 6X12 (1.43") HYBRID CABLE(S) TO REMAIN. <u>GROUND WORK:</u> REMOVE (1) CDMA CABINET(S), (1) CDMA AMPLIFIER RACK(S), (1) 6201 CABINET(S), (1) 50KW DIESEL GENERATOR(S), (6) RRU(s), AND (2) +24 VRLA BATTER(IES). INSTALL (1) 900A -48VDC POWER PLANT(S), (1) 50KW DIESEL GENERATOR(S), (1) 19" RACK(S), (1) OVP6(s), (1) ROUTER(S), (1) UPCONVERTER(S), (1) BASEBAND(S), AND (1) SITEBOSS(ES).		SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
		G-001	TITLE SHEET			0	09/23/25	VDS		
		G-002	GENERAL NOTES			0	09/23/25	VDS		
		C-001	OVERALL SITE PLAN			0	09/23/25	VDS		
		C-101	DETAILED SITE PLAN			0	09/23/25	VDS		
C-102	DETAILED EQUIPMENT PLAN	0	09/23/25	VDS						
C-201	TOWER ELEVATION	0	09/23/25	VDS						
C-401	ANTENNA INFORMATION & SCHEDULE	0	09/23/25	VDS						
C-501	CONSTRUCTION DETAILS	0	09/23/25	VDS						
E-101 - E-102	EXISTING & PROPOSED PANEL SCHEDULE	0	09/23/25	VDS						
E-103	ONE-LINE DIAGRAM	0	09/23/25	VDS						
E-104	GROUNDING PLAN & SCHEMATIC	0	09/23/25	VDS						
E-105	ANTENNA GROUNDING PLAN	0	09/23/25	VDS						
E-501	GROUNDING DETAILS	0	09/23/25	VDS						
R-601 - R-608	SUPPLEMENTAL									
						CONTRACTOR PMI REQUIREMENTS				
UTILITY COMPANIES POWER COMPANY: SUWANNEE VALLEY PHONE: (386) 362-2226 TELEPHONE COMPANY: AT&T PHONE: (800) 331-0500		<u>TOWER OWNER REPRESENTATIVE:</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801 <u>ENGINEER:</u> TEP OPCO, LLC 326 TRYON ROAD RALEIGH, NC 27603		<u>APPLICANT:</u> VERIZON WIRELESS <u>PROPERTY OWNER:</u> NORRIS RONALD E JR 501 UPLAND DR WILMINGTON, NC 28411		PMI ACCESSED AT: HTTPS://PMI.VZWSMART.COM				
						SMART TOOL VENDOR PROJECT NUMBER: 10316998				
		PROJECT LOCATION DIRECTIONS FROM I-10 TAKE EXIT 303 ONTO US-441.2 MILES KEEP LEFT TOWARD FRAGO500 FT TURN LEFT ONTO N US HIGHWAY 4428.8 MILES TURN LET ONTO SPRADLEY RD.6 MILES ACCESS ROAD ON LEFT		VZW LOCATION CODE (PSLC): 228810						
				***PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT						
				MOUNT MODIFICATION REQUIRED: YES (MOUNT REPLACEMENT)						
				VZW APPROVED SMART KIT VENDORS: REFER TO MOUNT MODIFICATION DRAWINGS PAGES FOR VZW SMART KIT APPROVED VENDORS						



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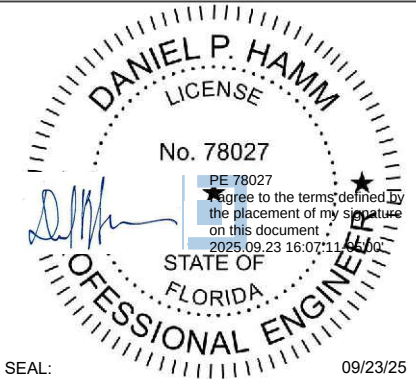
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THOMAS ARP3 RAW LAND FL
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SITE ADDRESS:
744 NW SPRADLEY RD
LAKE CITY, FL 32055

REV.	DESCRIPTION	BY	DATE
A	PRELIMINARY	SSG	08/21/25
0	100% CONSTRUCTION	VDS	09/23/25

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DATE DRAWN:	09/23/25
ATC JOB NO:	15248584
CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

TITLE SHEET

SHEET NUMBER: G-001	REVISION: 0
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GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, VERIZON "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL

A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)

B. AC/TELCO INTERFACE BOX (PPC)

C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)

D. TOWERS, MONOPOLES

E. TOWER LIGHTING

F. GENERATORS & LIQUID PROPANE TANK

G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING

H. ANTENNAS (INSTALLED BY OTHERS)

I. TRANSMISSION LINE

J. TRANSMISSION LINE JUMPERS

K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS

L. TRANSMISSION LINE GROUND KITS

M. HANGERS

N. HOISTING GRIPS

O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF VERIZON TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE VERIZON REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH VERIZON AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.

22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.

23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON SPECIFICATIONS AND REQUIREMENTS.

24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.

26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

27. CONTRACTOR SHALL NOTIFY VERIZON REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.

28. WHEN THE PROJECT SCOPE REQUIRES THE USE OF THE SAFETY CLIMB, THE GENERAL CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS FREE OF OBSTRUCTIONS, NOT RUBBING ON OR TRAPPED BY ANY INSTALLED CUSTOMER EQUIPMENT, IS VISUALLY TAUT, MEETS MANUFACTURER INSTALLATION SPECIFICATIONS, AND IS FIRMLY SECURED AT ALL CABLE GUIDE LOCATIONS UPON PROJECT COMPLETION.

29. COMPLETION OF PROJECT SHALL NOT OBSTRUCT, TRAP, LOOSEN, OR OTHERWISE CAUSE FAILURE TO MEET MANUFACTURER INSTALLATION REQUIREMENTS FOR THE SAFETY CLIMB.

30. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.

31. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.

32. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE VERIZON REP. ANY WORK FOUND BY THE VERIZON REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.

33. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.

34. VERIZON FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE VERIZON WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.

35. VERIZON OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO VERIZON OR THEIR ARCHITECT/ENGINEER.

SPECIAL CONSTRUCTION
ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:

A. ANTENNA AND COAXIAL/HYBRID CABLES ARE FURNISHED BY VERIZON UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL.

B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND VERIZON SPECIFICATIONS.

C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.

D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.

E. INSTALL COAXIAL/HYBRID CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL/HYBRID CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.

2. ANTENNA AND COAXIAL/HYBRID CABLE GROUNDING:

A. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.

B. ALL COAXIAL/HYBRID CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL/HYBRID CABLE (NOT WITHIN BENDS)

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.



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RALEIGH, NC 27603-3530
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www.tepgroup.net
FL COA#: 31011

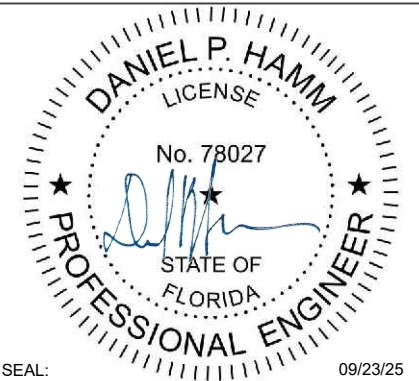
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VERIZON WIRELESS SITE NAME:
THOMAS
SITE ADDRESS:
744 NW SPRADLEY RD
LAKE CITY, FL 32055

REV.	DESCRIPTION	BY	DATE
A	PRELIMINARY	SSG	08/21/25
B	100% CONSTRUCTION	VDS	09/23/25

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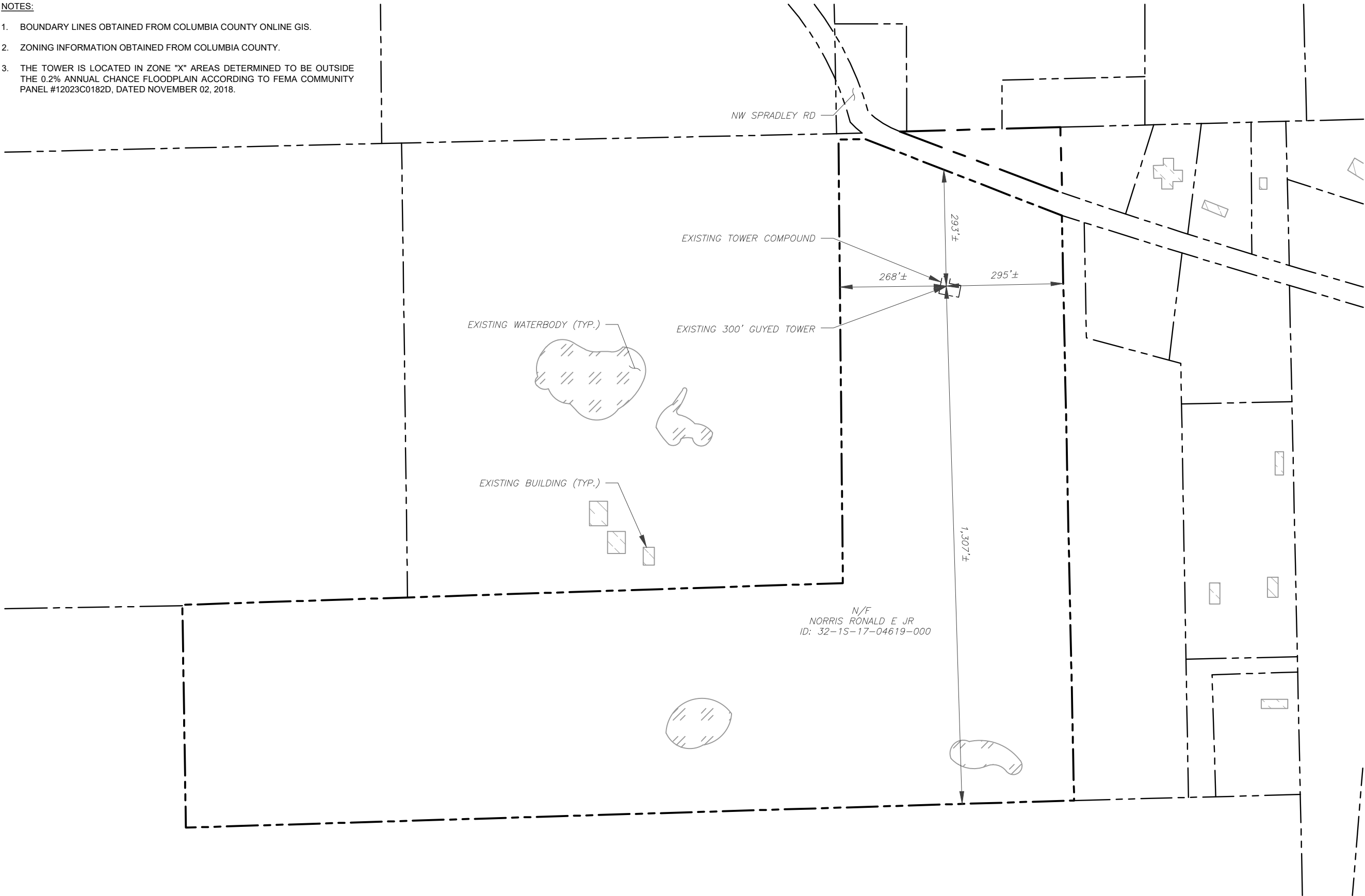
DATE DRAWN:	09/23/25
ATC JOB NO:	15248584
CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

GENERAL NOTES

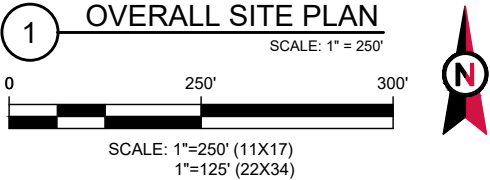
SHEET NUMBER: G-002	REVISION: 0
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NOTES:

1. BOUNDARY LINES OBTAINED FROM COLUMBIA COUNTY ONLINE GIS.
2. ZONING INFORMATION OBTAINED FROM COLUMBIA COUNTY.
3. THE TOWER IS LOCATED IN ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEMA COMMUNITY PANEL #12023C0182D, DATED NOVEMBER 02, 2018.



LEGEND	
	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE
	EXISTING LEASE AREA



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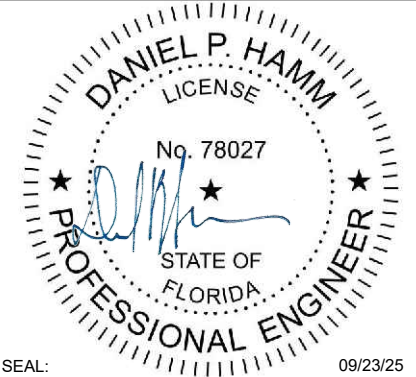
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DATE DRAWN:	09/23/25
ATC JOB NO:	15248584
CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

OVERALL SITE PLAN

SHEET NUMBER:	REVISION:
C-001	0

SITE PLAN NOTES:

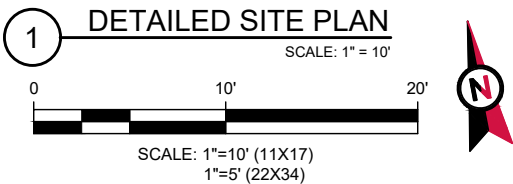
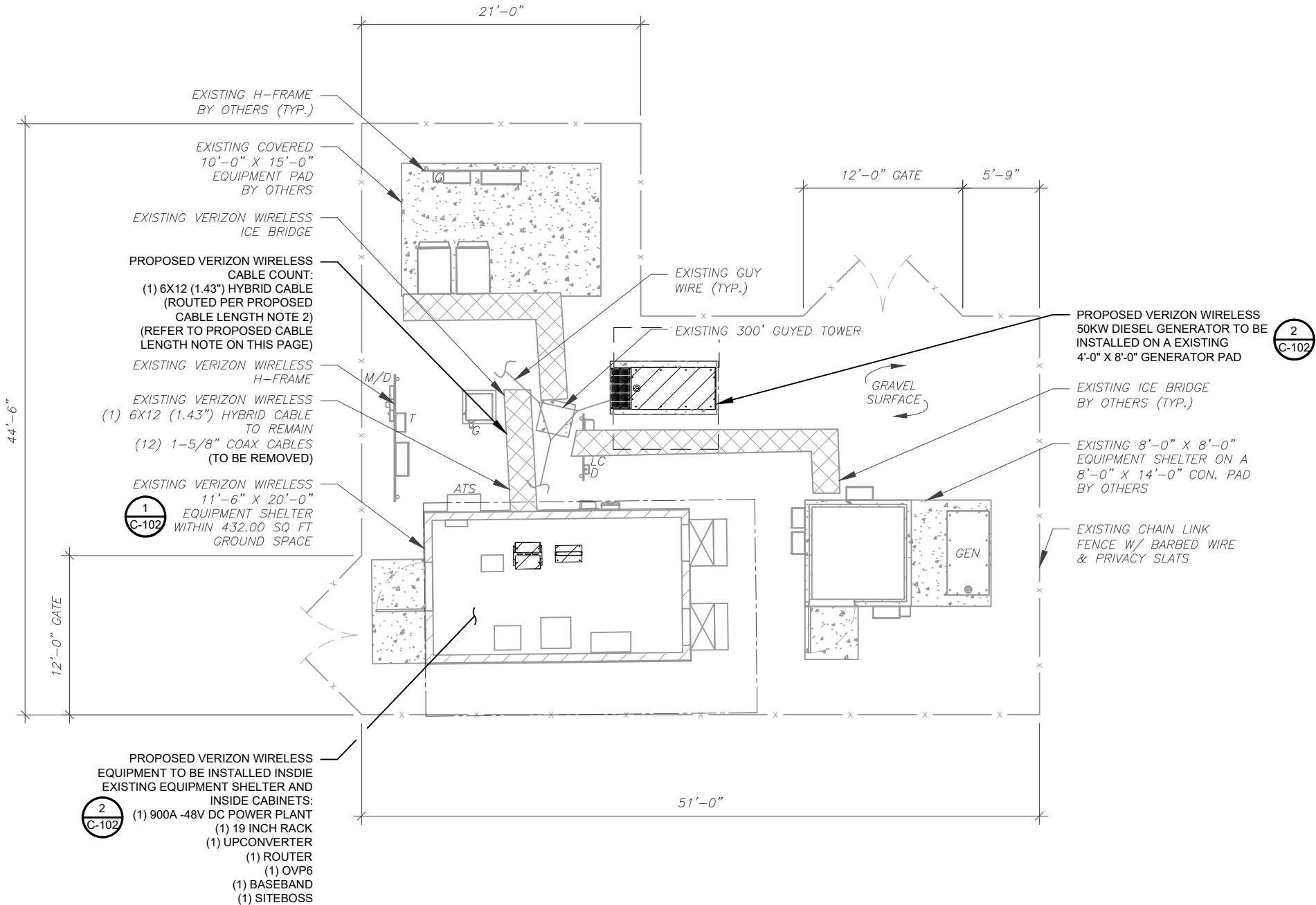
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE VERIZON REPRESENTATIVE AND LOCAL UTILITY COMPANY FOR THE INSTALLATION OF CONDUITS, CONDUCTORS, BREAKERS, DISCONNECTS, OR ANY OTHER EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.

LEGEND

⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACLE
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
— x —	CHAINLINK FENCE

PROPOSED CABLE NOTES:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **360'**. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES). CDS DEFER TO GREATEST CABLE LENGTH.
2. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES, USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).



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

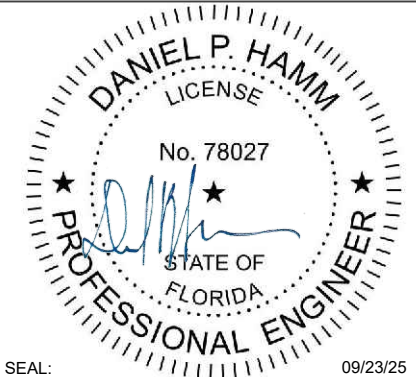
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ATC SITE NUMBER:
417361
ATC SITE NAME:
THOMAS ARP3 RAW LAND FL
VERIZON WIRELESS SITE NAME:
THOMAS
SITE ADDRESS:
744 NW SPRADLEY RD
LAKE CITY, FL 32055

REV.	DESCRIPTION	BY	DATE
A	PRELIMINARY	SSG	08/21/25
B	100% CONSTRUCTION	VDS	09/23/25

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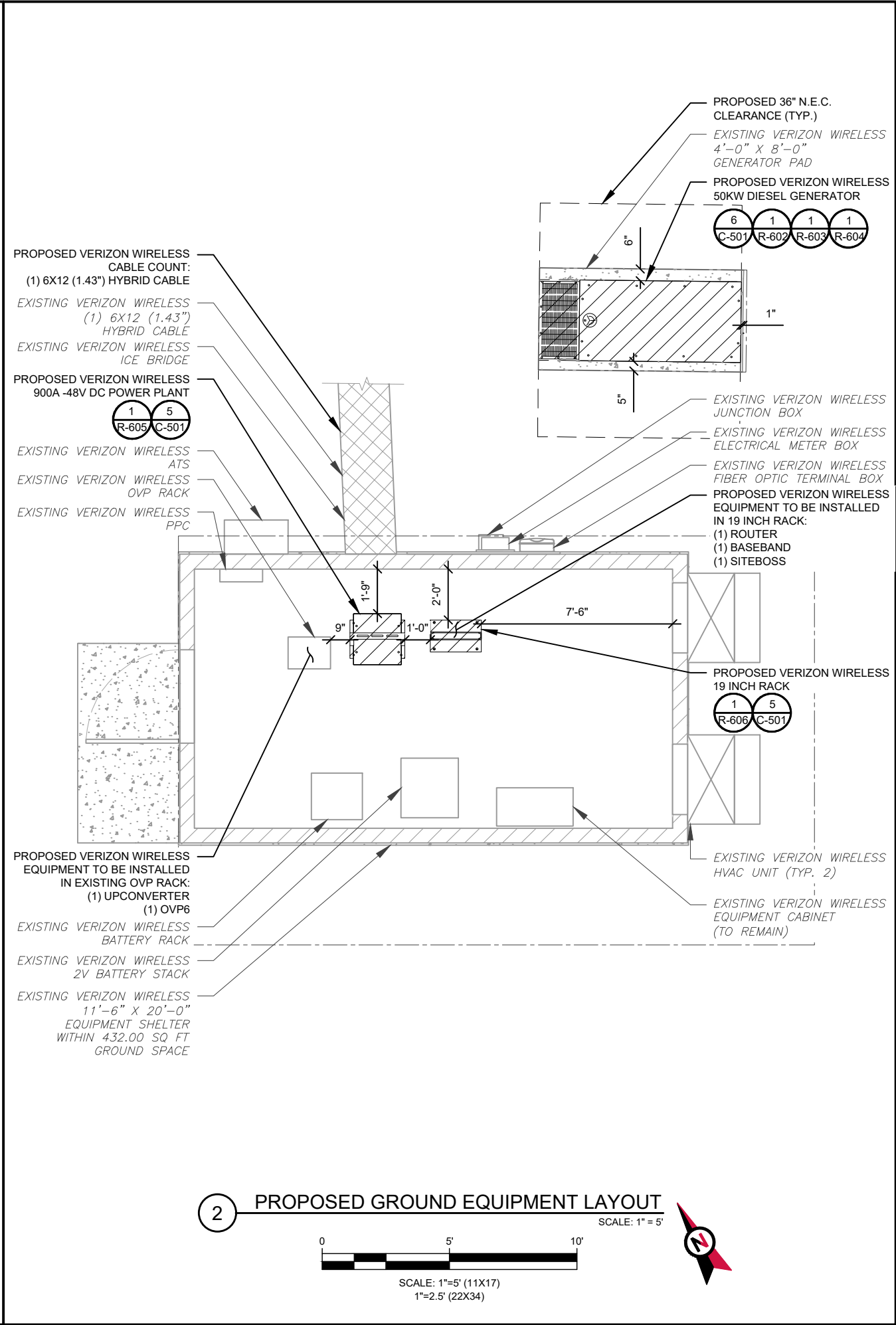
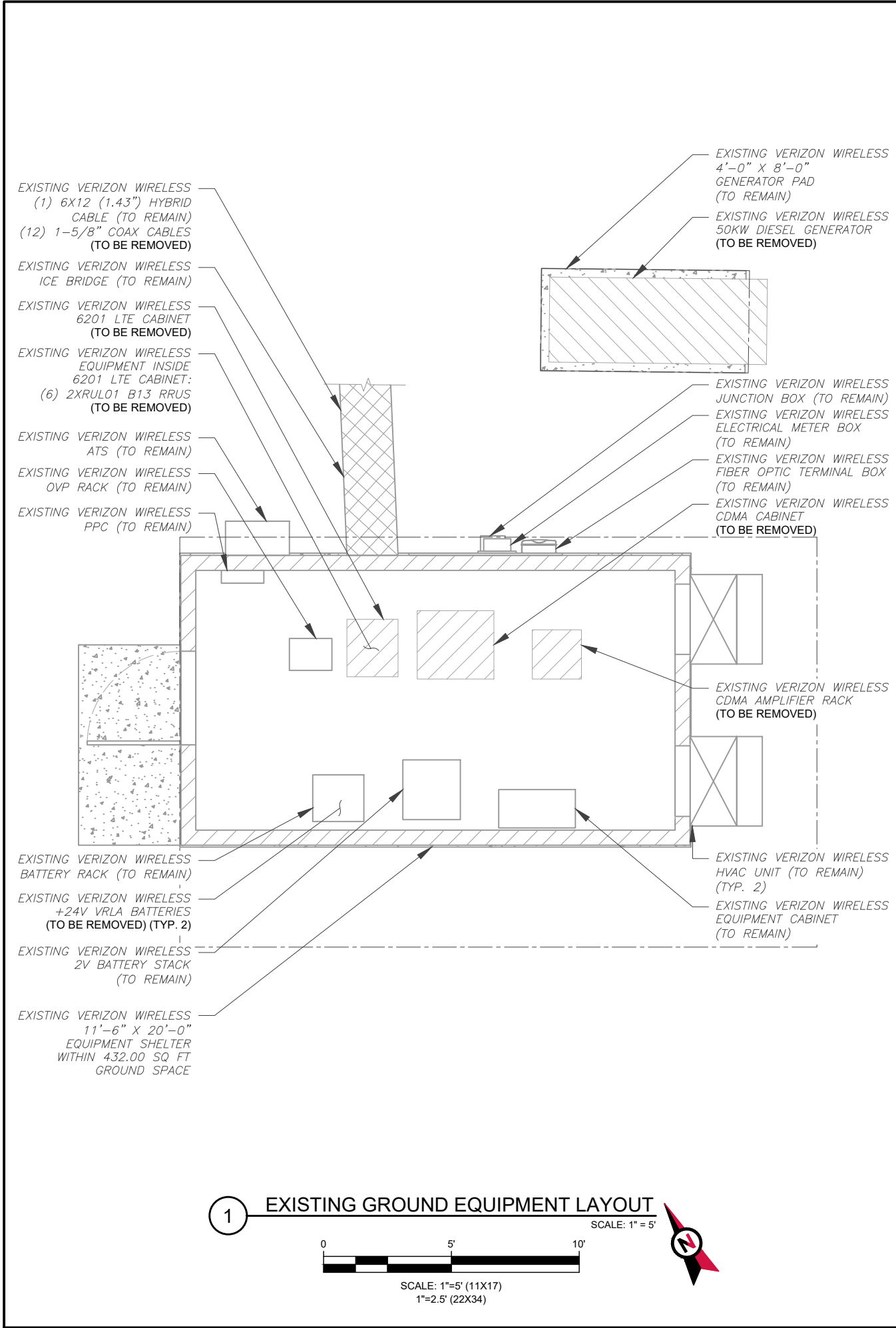


DATE DRAWN:	09/23/25
ATC JOB NO:	15248584
CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

DETAILED SITE PLAN

SHEET NUMBER:
C-101

REVISION:
0





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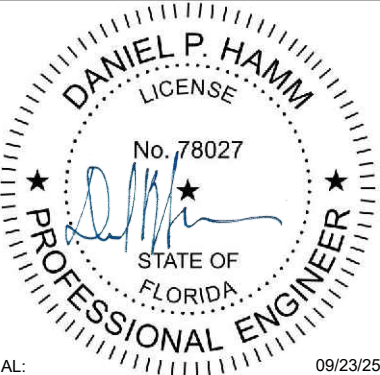
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REV.	DESCRIPTION	BY	DATE
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SEAL: 09/23/25

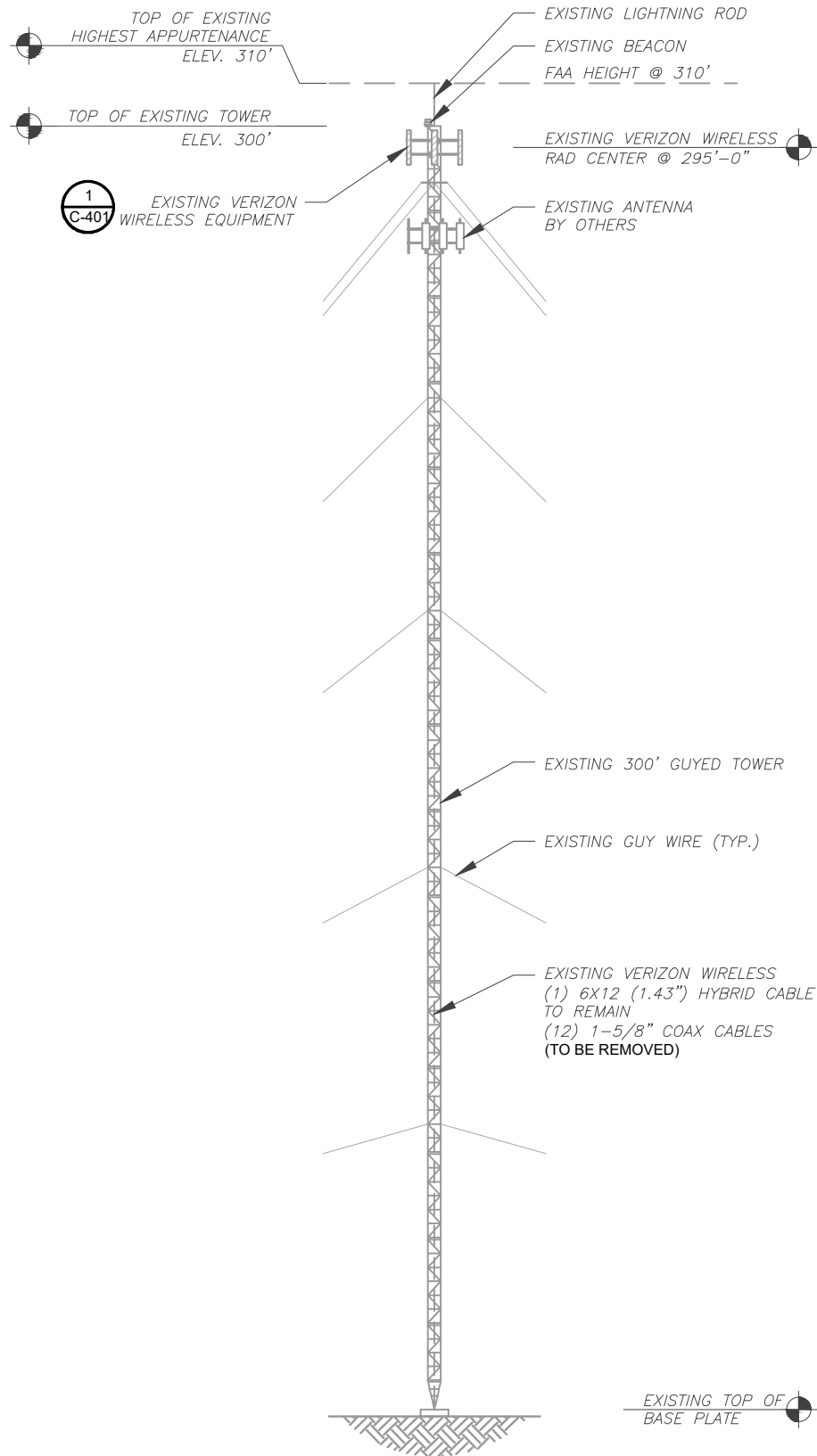


DATE DRAWN:	09/23/25
ATC JOB NO:	15248584
CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

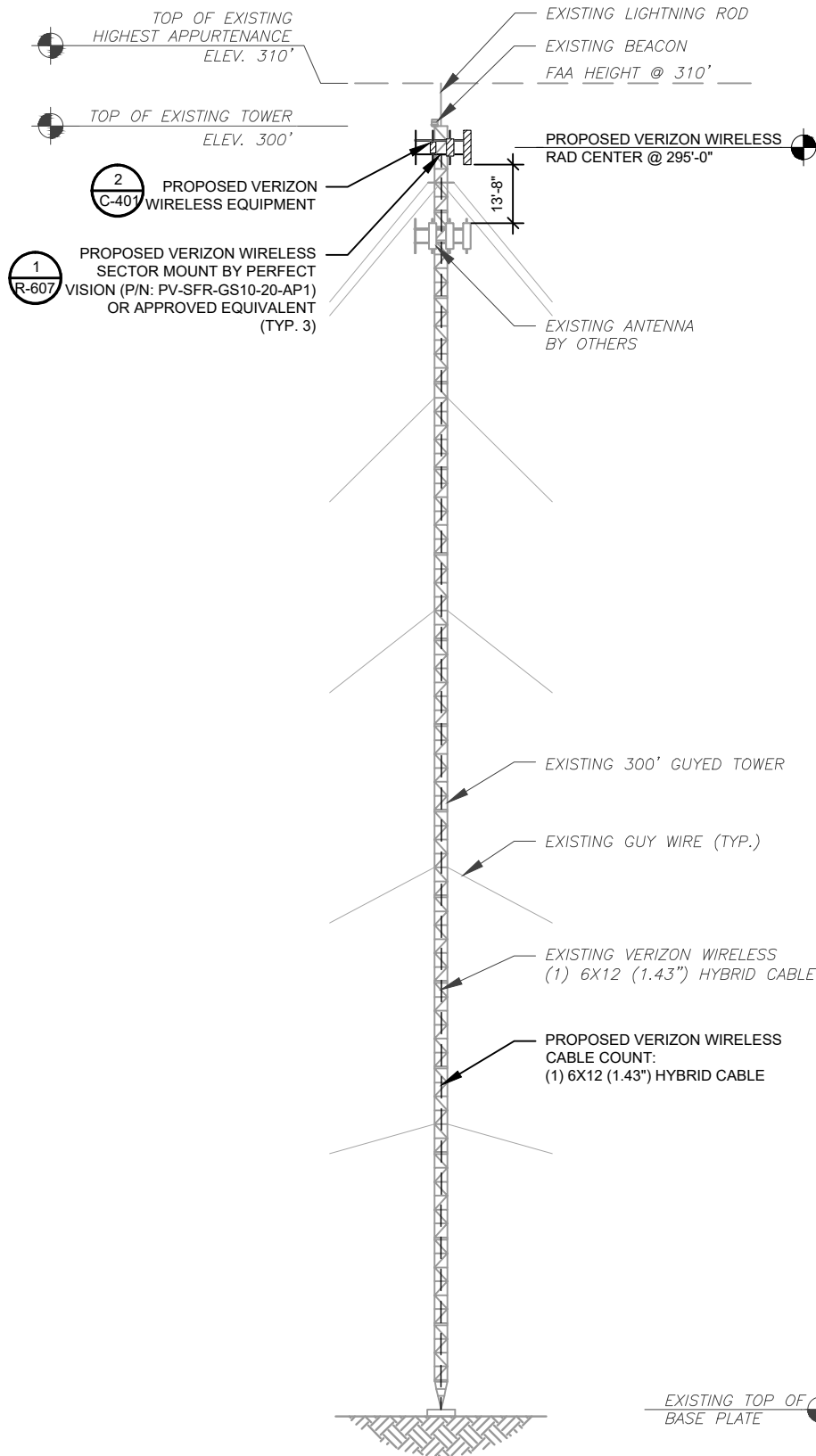
DETAILED EQUIPMENT LAYOUT

SHEET NUMBER: C-102	REVISION: 0
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1 EXISTING TOWER ELEVATION
SCALE: N.T.S.



2 PROPOSED TOWER ELEVATION
SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN, DATED AUGUST 7, 2025. THE EXISTING MOUNT CAN NOT ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT REPLACEMENT PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.

ATC IS CURRENTLY FILED FOR FAA HEIGHT ABOVE THE TOP OF TOWER AND EQUAL TO THE HIGHEST APPURTENANCE

- TOWER NOTES:**
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
 - WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
 - ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES, USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).
 - TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.



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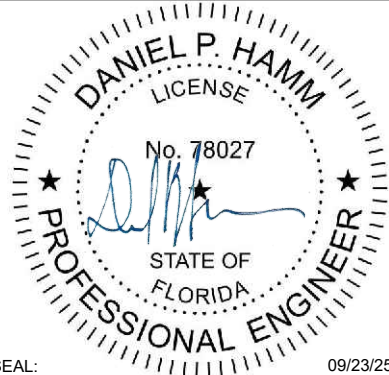
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0	100% CONSTRUCTION	VDS	09/23/25

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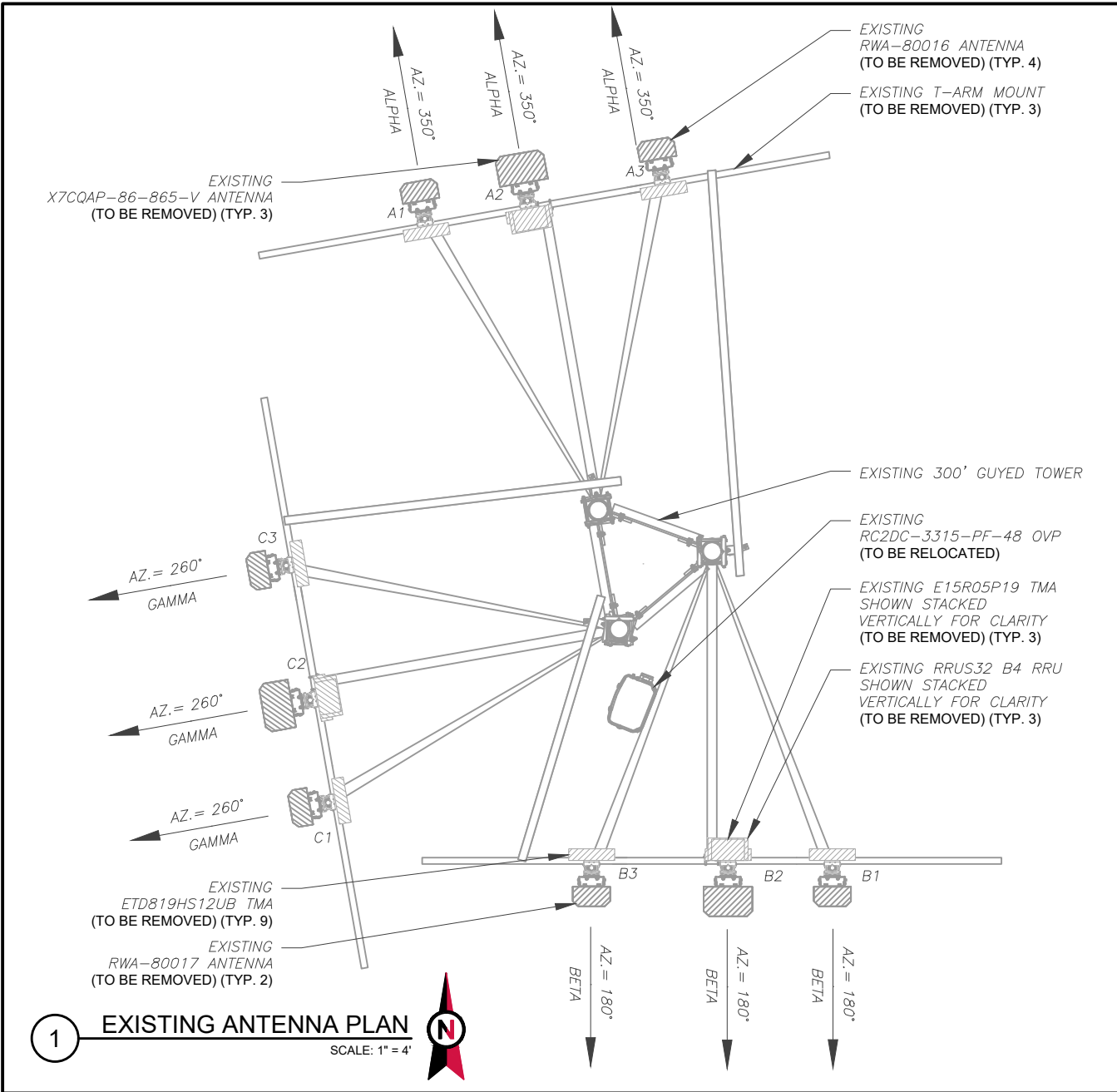
SEAL: 09/23/25



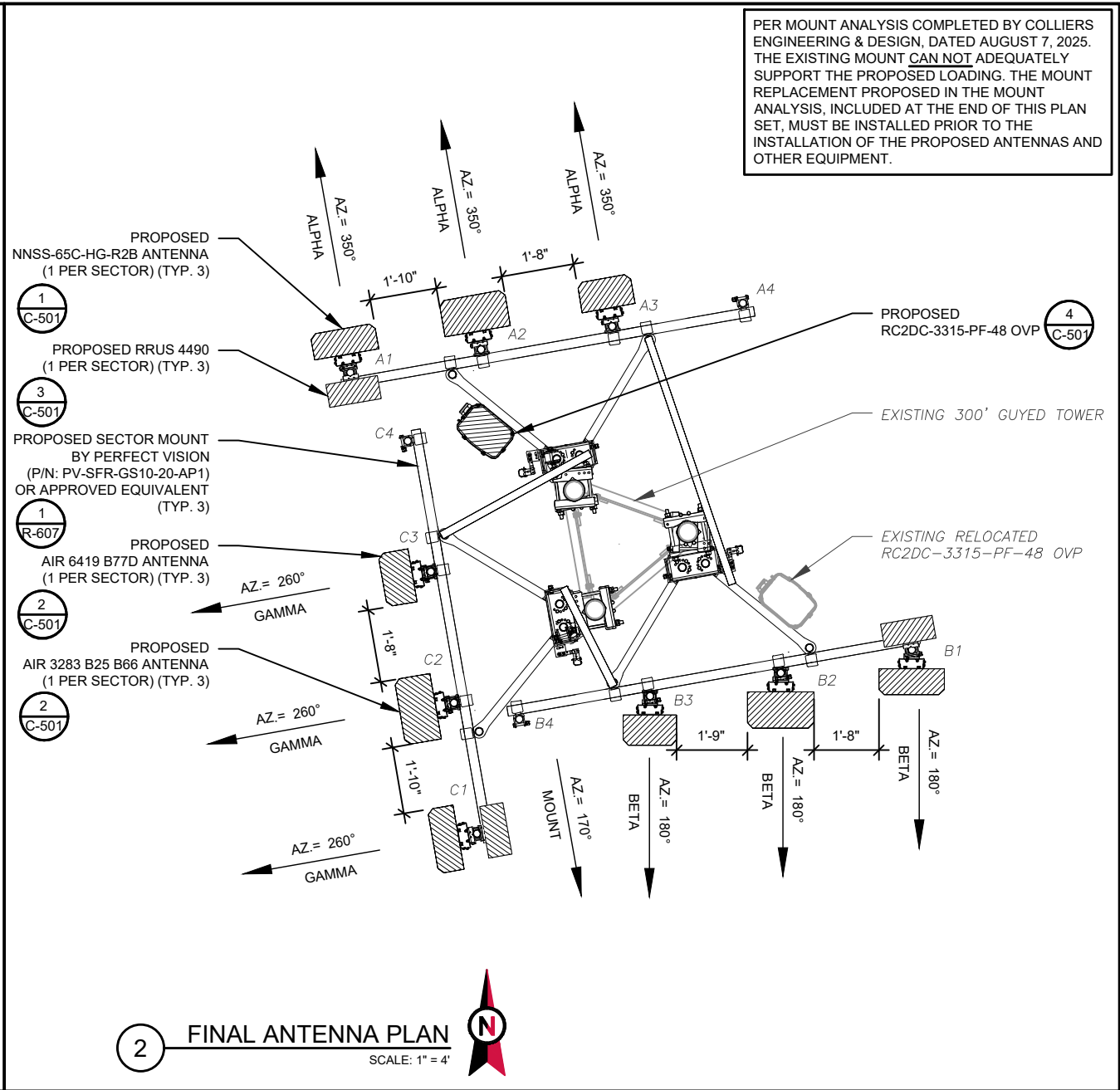
DATE DRAWN:	09/23/25
ATC JOB NO:	15248584
CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

TOWER ELEVATION

SHEET NUMBER:
C-201
REVISION:
0



1 EXISTING ANTENNA PLAN
SCALE: 1" = 4'



2 FINAL ANTENNA PLAN
SCALE: 1" = 4'

PER MOUNT ANALYSIS COMPLETED BY COLLIER'S ENGINEERING & DESIGN, DATED AUGUST 7, 2025. THE EXISTING MOUNT CAN NOT ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT REPLACEMENT PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.

EXISTING ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT
ALPHA	295'	350°	A1	RWA-80016	-	*	RMV	(1) ETD819HS12UB
			A2	X7CQAP-86-865-V	LTE 700/LTE 1900/LTE AWS	*	RMV	(1) E15R05P19 (1) RRUS32 B4 (1) ETD819HS12UB
			A3	RWA-80016	-	*	RMV	(1) ETD819HS12UB
BETA	295'	180°	B1	RWA-80017	-	*	RMV	(1) ETD819HS12UB
			B2	X7CQAP-86-865-V	LTE 700/LTE 1900/LTE AWS	*	RMV	(1) E15R05P19 (1) RRUS32 B4 (1) ETD819HS12UB
			B3	RWA-80017	-	*	RMV	(1) ETD819HS12UB
GAMMA	295'	260°	C1	RWA-80016	-	*	RMV	(1) ETD819HS12UB
			C2	X7CQAP-86-865-V	LTE 700/LTE 1900/LTE AWS	*	RMV	(1) E15R05P19 (1) RRUS32 B4 (1) ETD819HS12UB
			C3	RWA-80016	-	*	RMV	(1) ETD819HS12UB

* - SEE RFDS FOR VALUES

EXISTING FIBER DISTRIBUTION/OVP BOX		EXISTING CABLING SUMMARY		
MODEL NUMBER	STATUS	COAX	FIBER/HYBRID	STATUS
(1) RC2DC-3315-PF-48	REL	-	(1) 6X12 (1.43")	RMN
-	-	(12) 1-5/8"	-	RMV

NOTES
1. CONFIRM WITH VERIZON WIRELESS REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
2. CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.
3. TEP DID NOT VERIFY THE EXISTING LOADING. LOADING DATA PROVIDED BY ATC AND VERIZON WIRELESS.
STATUS ABBREVIATIONS
RMV: TO BE REMOVED RMN: TO REMAIN REL: TO BE RELOCATED ADD: TO BE ADDED

CABLE LENGTHS FOR JUMPERS
JUNCTION BOX TO RRU: 15' RRU TO ANTENNA: 10'

3 EQUIPMENT SCHEDULES

FINAL ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT
ALPHA	295'	350°	A1	NNSS-65C-HG-R2B	LTE 700/LTE 850/5G 850	*	ADD	(1) RRUS 4490
			A2	AIR 3283 B25 B66	LTE 1900/LTE AWS/ LTE AWS3	*	ADD	-
			A3	AIR 6419 B77D	5G L-SUB6	*	ADD	-
			A4	-	-	*	-	-
BETA	295'	180°	B1	NNSS-65C-HG-R2B	LTE 700/LTE 850/5G 850	*	ADD	(1) RRUS 4490
			B2	AIR 3283 B25 B66	LTE 1900/LTE AWS/ LTE AWS3	*	ADD	-
			B3	AIR 6419 B77D	5G L-SUB6	*	ADD	-
			B4	-	-	*	-	-
GAMMA	295'	260°	C1	NNSS-65C-HG-R2B	LTE 700/LTE 850/5G 850	*	ADD	(1) RRUS 4490
			C2	AIR 3283 B25 B66	LTE 1900/LTE AWS/ LTE AWS3	*	ADD	-
			C3	AIR 6419 B77D	5G L-SUB6	*	ADD	-
			C4	-	-	*	-	-

* - SEE RFDS FOR VALUES

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY		
MODEL NUMBER	STATUS	COAX	FIBER/HYBRID	STATUS
(1) RC2DC-3315-PF-48	RMN	-	(1) 6X12 (1.43")	RMN
(1) RC2DC-3315-PF-48	ADD	-	(1) 6X12 (1.43")	ADD

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417361

ATC SITE NAME:
THOMAS ARP3 RAW LAND FL

VERIZON WIRELESS SITE NAME:
THOMAS

SITE ADDRESS:
744 NW SPRADLEY RD
LAKE CITY, FL 32055

REV.	DESCRIPTION	BY	DATE
A	PRELIMINARY	SSG	08/21/25
B	100% CONSTRUCTION	VDS	09/23/25
C			
D			

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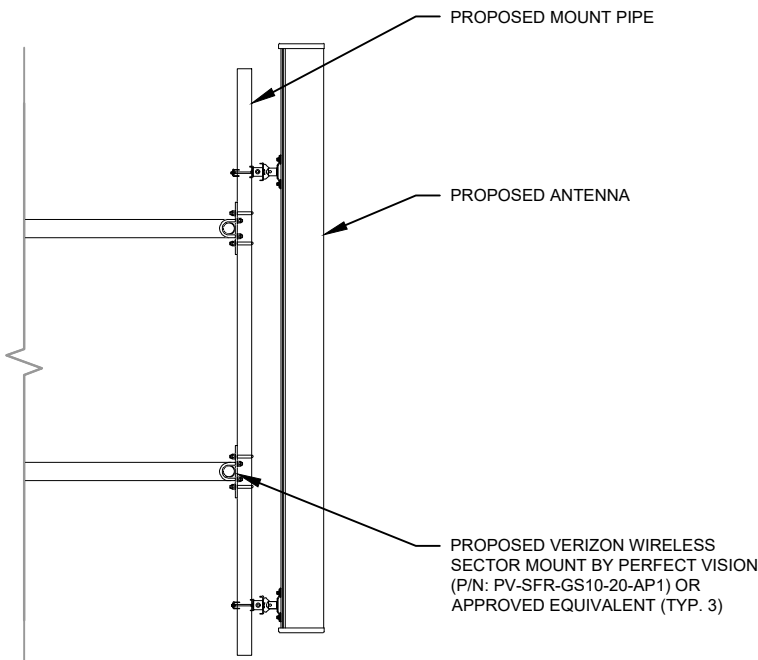
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SEAL: 09/23/25

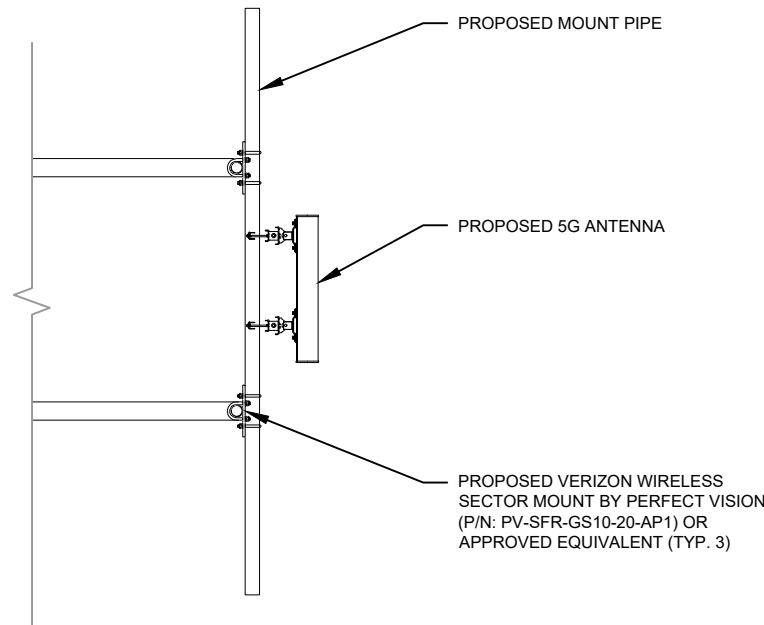
DATE DRAWN:	09/23/25
ATC JOB NO:	15248584
CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

ANTENNA INFORMATION & SCHEDULE

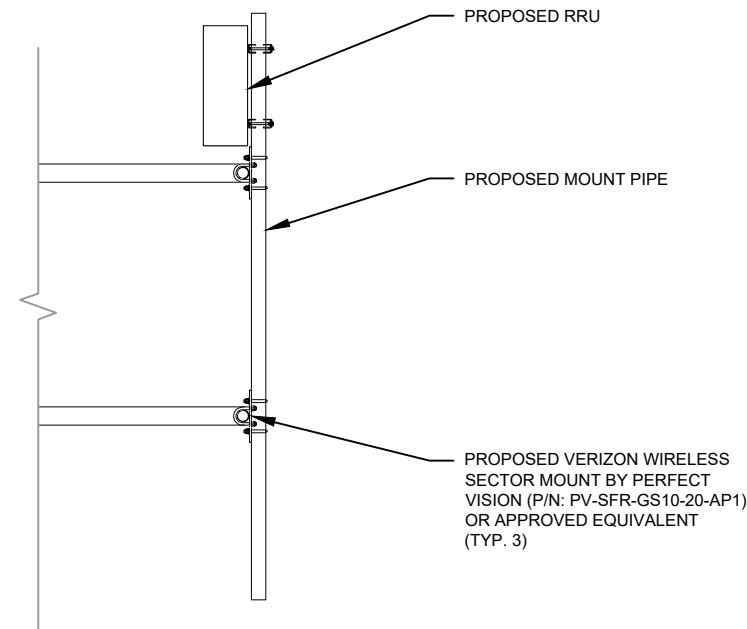
SHEET NUMBER: C-401	REVISION: 0
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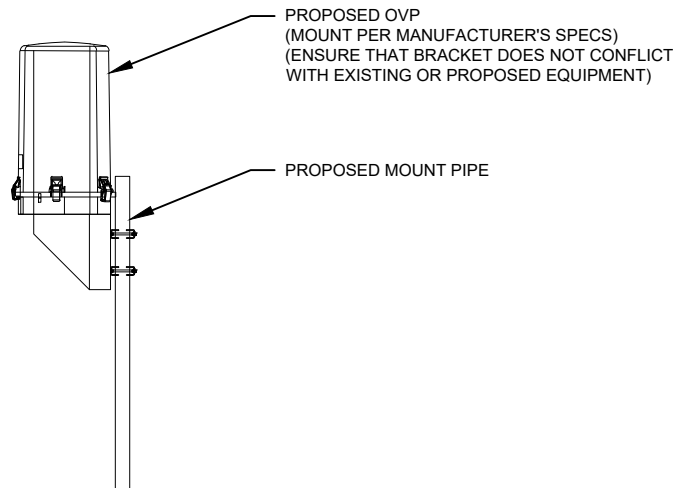
1 PROPOSED ANTENNA MOUNTING DETAIL
SCALE: N.T.S.



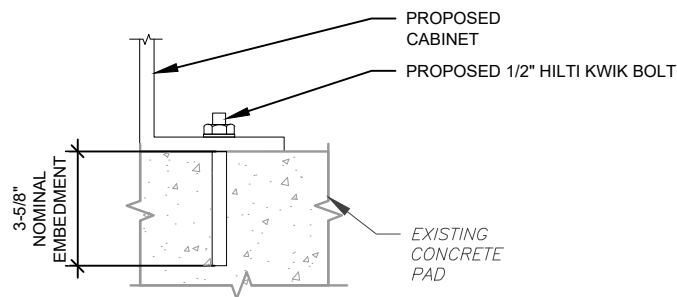
2 PROPOSED 5G ANTENNA MOUNTING DETAIL
SCALE: N.T.S.



3 PROPOSED RRU MOUNTING DETAIL
SCALE: N.T.S.

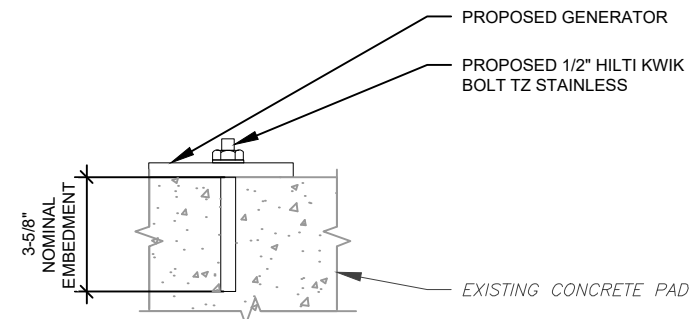


4 PROPOSED OVP MOUNTING DETAIL
SCALE: N.T.S.



NOTE:
INSTALL HILTI KWIK BOLT ANCHORS STRICTLY PER
INSTALLATION INSTRUCTIONS INCLUDED WITH PRODUCT OR
FOUND ONLINE AT WWW.US.HILTI.COM. PROPER
INSTALLATION IS CRITICAL FOR FULL PERFORMANCE.

5 CABINET ATTACHMENT DETAIL
SCALE: NOT TO SCALE



NOTE:
INSTALL HILTI KWIK BOLT ANCHORS STRICTLY PER
INSTALLATION INSTRUCTIONS INCLUDED WITH PRODUCT OR
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6 GENERATOR ATTACHMENT DETAIL
SCALE: NOT TO SCALE



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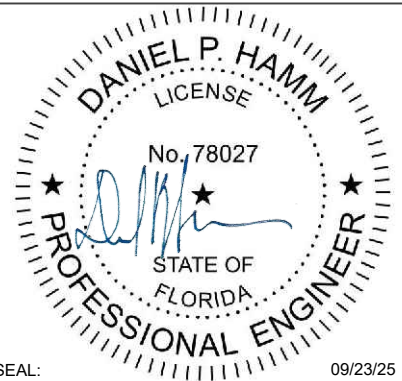
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DATE DRAWN:	09/23/25
ATC JOB NO:	15248584
CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

CONSTRUCTION
DETAILS

SHEET NUMBER: C-501	REVISION: 0
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NOTES:

1. ALL CONDUCTORS ARE TYPE THWN (75%) 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.

200A 120/240V 1Ø 3W VERIZON POWER PANEL SCHEDULE												
LOAD SERVED	UNCOMPENSATED VOLT AMPERES		TRIP	CKT #	PHASE		CKT #	TRIP	UNCOMPENSATED VOLT AMPERES		LOAD SERVED	
	L1	L2							L1	L2		
HVAC #1	1308		35A	1	A		2	40A	1308		HVAC #2	
		1308		3	B		4			1308		
INTERIOR / EXT LIGHTS	500		20A	5	A		6	—	—		SPACE	
DUPLEX RECEPTACLE		180	20A	7	B		8	20A		180	DUPLEX RECEPTACLE	
GFCI RECEPTACLE	180		20A	9	A		10	40A	1920		RECTIFIER #2 SLOT #2, 5	
EXTERIOR LIGHT		500	20A	11	B		12			1920		
*LTE	960		20A	13	A		14	40A	1920		RECTIFIER #4 SLOT #7, 10	
*LTE		960	20A	15	B		16			1920		
*LTE	960		20A	17	A		18	70A	1920		RECTIFIER #6 SLOT #9, 12	
*LTE		960	30A	19	B		20			1920		
RECTIFIER #5 SLOT #8, 11	1920		40A	21	A		22	40A	0		*UNLABELED / OFF	
		1920		23	B		24	20A		500	TOWER LIGHTS	
*LUCENT	4800		100A	25	A		26	80A	0		*UNLABELED / OFF	
		4800		27	B		28			0		
SPACE	—		—	29	A		30	—	—		SPARE	
VOLT AMPS	10628	10628							7068	7748	VOLT AMPS	
L1 VOLT AMPERES				17696		18376		L2 VOLT AMPERES				
L1 AMPS				147.5		153.1		L2 AMPS				
L1 DEMAND AMPS				184.3		191.4		L2 DEMAND AMPS				
				191.4				MAX DEMAND AMPS				

*BREAKER TO BE REMOVED.
**GEN. BATTERY CHARGED LOAD IS 0 VA DURING GENERATOR OPERATION.
***LOADING VALUES BASED ON INFORMATION PROVIDED BY LOCAL UTILITY COMPANY.
****LOADING VALUES BASED ON INFORMATION PROVIDED BY VERIZON WIRELESS.



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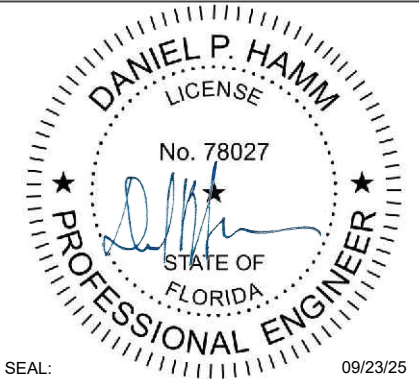
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DATE DRAWN:	09/23/25
ATC JOB NO:	15248584
CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

EXISTING PANEL SCHEDULE

SHEET NUMBER: E-101	REVISION: 0
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NOTES:

1. ALL CONDUCTORS ARE TYPE THWN (75%) 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.

200A 120/240V 1Ø 3W VERIZON POWER PANEL SCHEDULE												
LOAD SERVED	UNCOMPENSATED VOLT AMPERES		TRIP	CKT #	PHASE		CKT #	TRIP	UNCOMPENSATED VOLT AMPERES		LOAD SERVED	
	L1	L2							L1	L2		
HVAC #1	1308		35A	1	A		2	40A	1308		HVAC #2	
		1308		3	B		4			1308		
INTERIOR / EXT LIGHTS	500		20A	5	A		6	—	—		SPACE	
DUPLEX RECEPTACLE		180	20A	7	B		8	20A		180	DUPLEX RECEPTACLE	
GFCI RECEPTACLE	180		20A	9	A		10	40A	1920		RECTIFIER #2 SLOT #2, 5	
EXTERIOR LIGHT		500	20A	11	B		12			1920		
SPACE	—		—	13	A		14	40A	1920		RECTIFIER #4 SLOT #7, 10	
SPACE		—	—	15	B		16			1920		
SPACE	—		—	17	A		18	70A	1920		RECTIFIER #6 SLOT #9, 12	
SPACE		—	—	19	B		20			1920		
RECTIFIER #5 SLOT #8, 11	1920		40A	21	A		22	—	—		SPACE	
		1920		23	B		24	20A		500	TOWER LIGHTS	
SPACE	—		—	25	A		26	—	—		SPACE	
SPACE		—	—	27	B		28	—		—	SPACE	
SPACE	—		—	29	A		30	—	—		SPARE	
VOLT AMPS	3908	3908							7068	7748	VOLT AMPS	
L1 VOLT AMPERES				10976		11656		L2 VOLT AMPERES				
L1 AMPS				91.5		97.1		L2 AMPS				
L1 DEMAND AMPS				114.3		121.4		L2 DEMAND AMPS				
				121.4				MAX DEMAND AMPS				

*GEN. BATTERY CHARGED LOAD IS 0 VA DURING GENERATOR OPERATION.
**LOADING VALUES BASED ON INFORMATION PROVIDED BY LOCAL UTILITY COMPANY.
***LOADING VALUES BASED ON INFORMATION PROVIDED BY VERIZON WIRELESS.



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OFFICE: (919) 661-6351
www.tepgroup.net
FL COA#: 31011

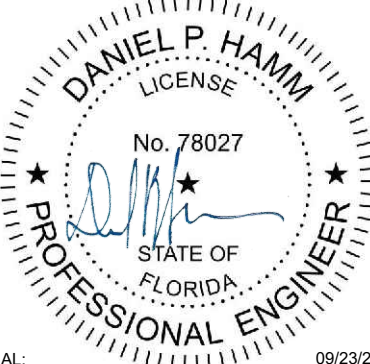
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ATC SITE NUMBER:
417361
ATC SITE NAME:
THOMAS ARP3 RAW LAND FL
VERIZON WIRELESS SITE NAME:
THOMAS
SITE ADDRESS:
744 NW SPRADLEY RD
LAKE CITY, FL 32055

REV.	DESCRIPTION	BY	DATE
0	PRELIMINARY	SSG	08/21/25
0	100% CONSTRUCTION	VDS	09/23/25

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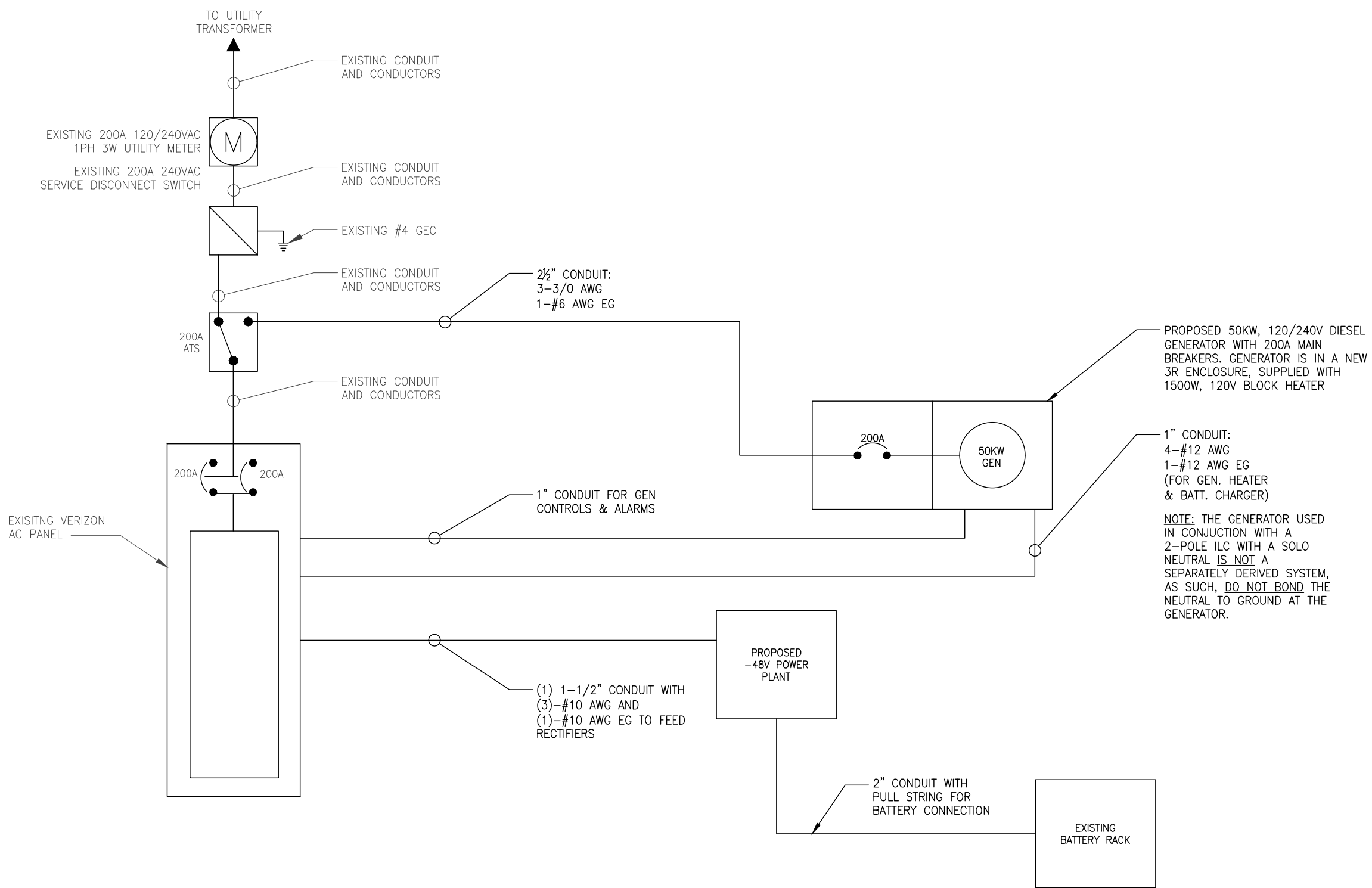


DATE DRAWN:	09/23/25
ATC JOB NO:	15248584
CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

PROPOSED PANEL SCHEDULE

SHEET NUMBER:
E-102

REVISION:
0



1 ONE-LINE DIAGRAM



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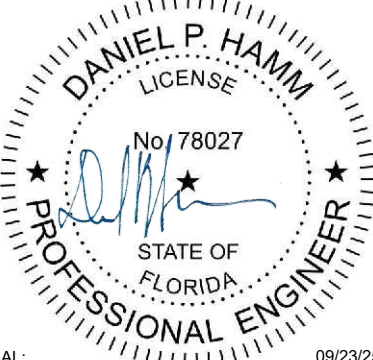
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**744 NW SPRADLEY RD
LAKE CITY, FL 32055**

REV.	DESCRIPTION	BY	DATE
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SEAL: 09/23/25



DATE DRAWN:	09/23/25
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CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

ONE-LINE DIAGRAM

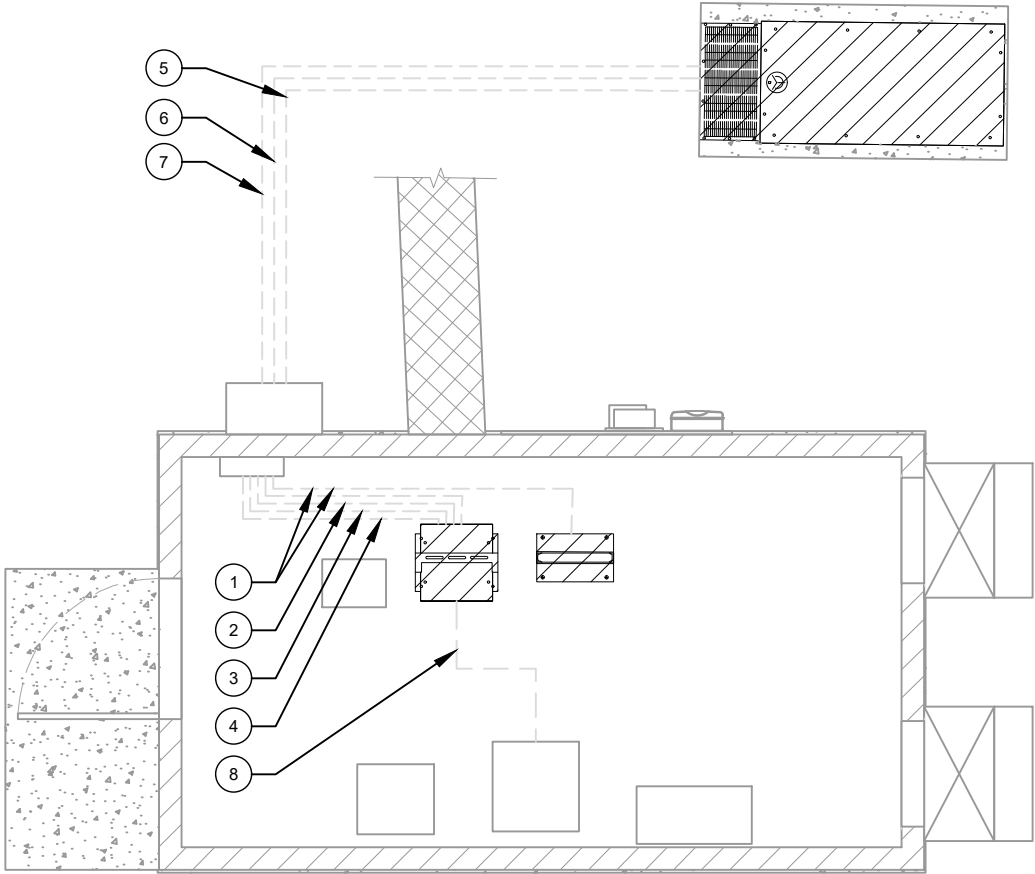
SHEET NUMBER: E-103	REVISION: 0
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LABEL LIST:

1.
- (1)-1½" CONDUIT FOR THE RECTIFIERS IN THE NEW 19" RACK AND POWER CABINET
2.
- (1)-3/4" CONDUIT FOR GFI IN THE NEW POWER PLANT AND POWER CABINET
3.
- (1)-1" CONDUIT FOR GENERATOR AND ATS ALARM FROM PPC TO POWER PLANT
4.
- (1)-1½" CONDUIT FOR PROPOSED EQUIPMENT RACK FROM PPC TO NEW POWER RACK.
5.
- (1)-1" CONDUIT FOR GENERATOR HEATER & BATTERY CHARGER FROM ATS TO GENERATOR
6.
- (1)-1" CONDUIT FOR ALARM AND CONTROL WIRING FROM ATS TO GENERATOR
7.
- (1)-2½" CONDUIT FOR POWER FROM ATS TO GENERATOR
8.
- (1)-2" CONDUIT WITH PULL STRING FOR BATTERY CONNECTION

NOTES:

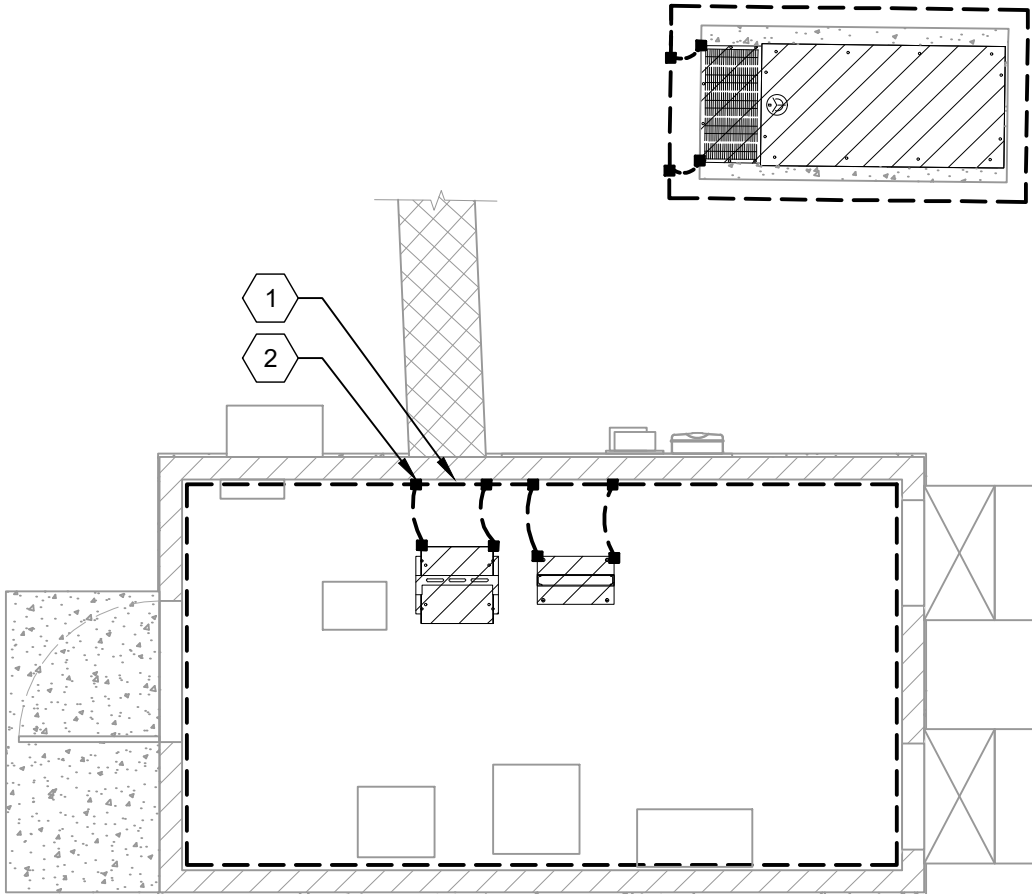
1.
- POWER AND TELCO CONDUITS RECEIVING CONDUCTORS BY OTHERS TO HAVE PULL ROPES.
2.
- ALL TELCO CONDUITS ARE TO BE STUBBED IN D-MARC LOCATION.
3.
- ALL POWER CONDUITS ARE TO BE TERMINATED AT THE METER CENTER.
4.
- THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO TRENCHING. ANY DAMAGE CAUSED TO THE EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS 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.
8.
- WHEN ALL RRU's ARE GROUND MOUNTED, OMIT OVPs AND RUN FIBER/POWER FROM CONSOLIDATED EQUIPMENT AND POWER CABINET DIRECTLY TO RRU's.



1 POWER ROUTING PLAN

GROUNDING KEYED NOTES:

- 1
- SHELTER GROUNDING SYSTEM
- 2
- GROUNDING ELECTRODE (TYP.)



2 GROUNDING PLAN



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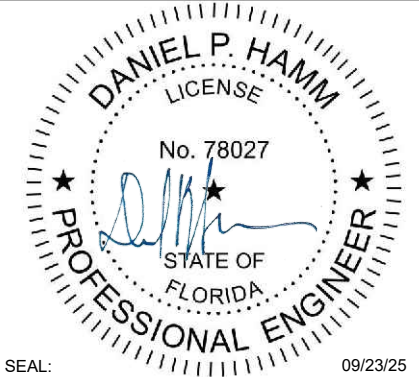
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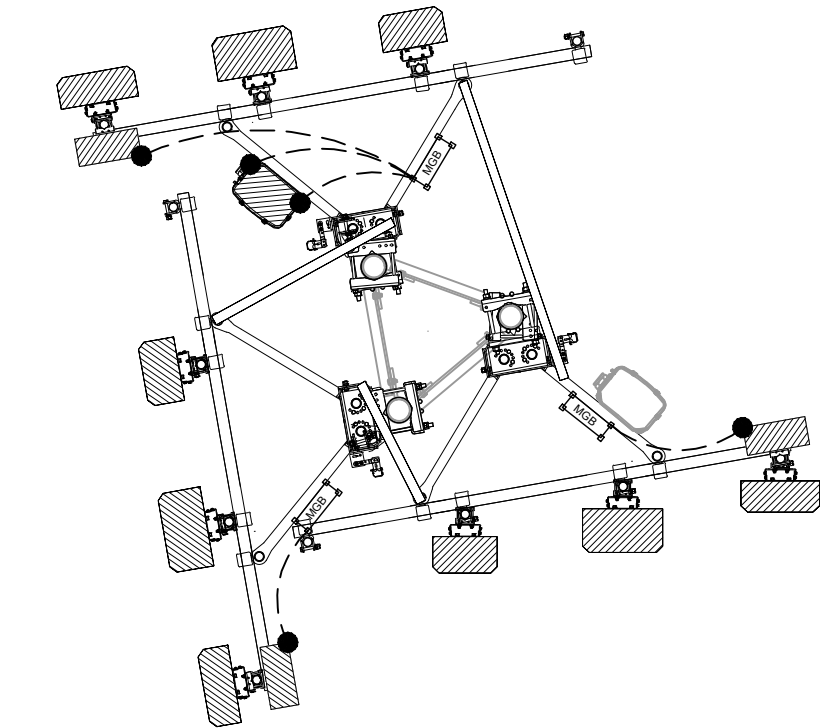
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CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

GROUNDING PLAN & SCHEMATIC

SHEET NUMBER: E-104	REVISION: 0
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LEGEND

●

MECHANICAL CONNECTION

MGB

MASTER GROUND BAR

1

FINAL ANTENNA GROUNDING PLAN

SCALE: 1" = 4'



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DANIEL P. HAMM

LICENSE

No. 78027

STATE OF FLORIDA

PROFESSIONAL ENGINEER

SEAL: 09/23/25



DATE DRAWN:	09/23/25
ATC JOB NO:	15248584
CUSTOMER NAME:	THOMAS
CUSTOMER ID:	228810

ANTENNA GROUNDING PLAN

SHEET NUMBER: E-105	REVISION: 0
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- ## 1 TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: N.T.S.



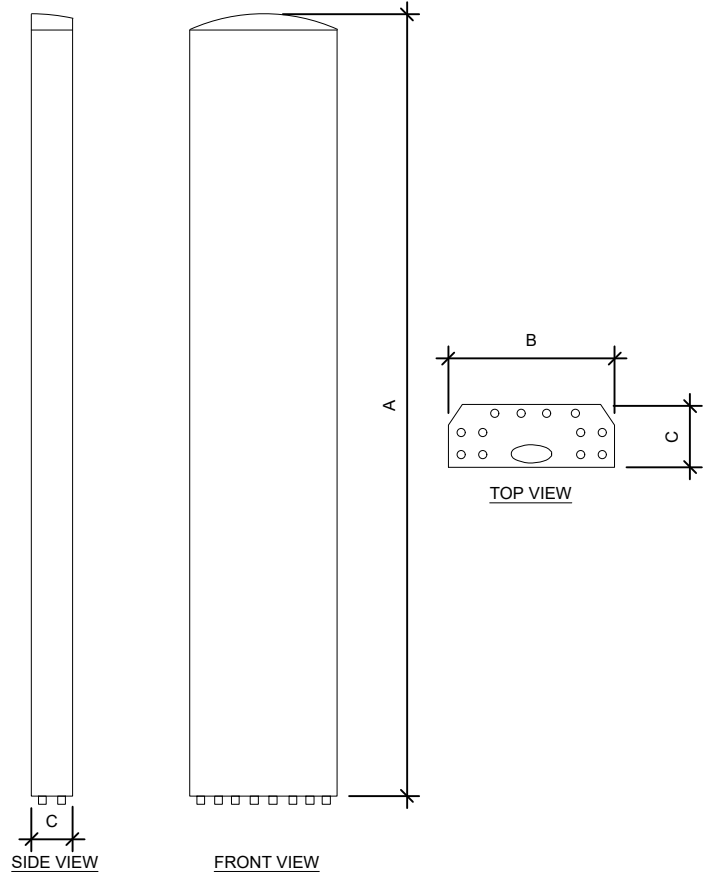
- ## 2 CABLE GROUND KIT CONNECTION DETAIL

SCALE: N.T.S.

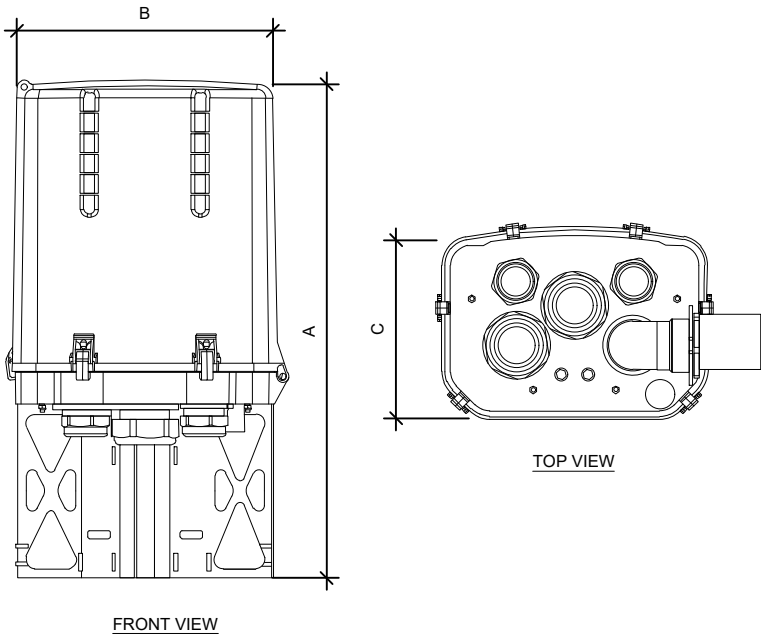


- 2 TOWER GROUND BAR DETAIL

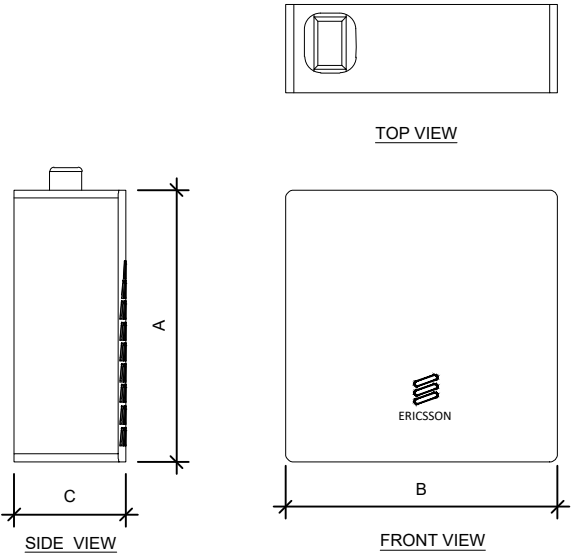
SCALE: N.T.S.



ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
AIR 6419 B77D	31.2"	16.1"	9.1"	63.1
NNSS-65C-HG-R2B	96.0"	19.6"	7.8"	83.8
AIR 3283 B25 B66	47.2"	20.0"	10.9"	108.0



OVP SPECIFICATIONS				
RAYCAP MODEL	A	B	C	WEIGHT (LBS)
RC2DC-3315-PF-48	28.9"	15.7"	10.3"	32.0



RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
RRUS 4490	20.6"	15.7"	7.0"	68.4

SD050 | 3.4L | 50 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency



Standby Power Rating
50 kW, 63 kVA, 60 Hz

Prime Power Rating*
45 kW, 56 kVA, 60 Hz



Image used for illustration purposes only

Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.

- UL2200, UL6200, UL1236, UL142
- CSA C22.2
- BS5514 and DIN 6271
- SAE J1349
- NFPA 37, 70, 99, 110
- NEC700, 701, 702, 708
- ISO 3046, 7637, 8528, 9001
- NEMA ICS10, MG1, 250, ICS6, AB1
- ANSI C62.41
- IBC 2009, CBC 2010, IBC 2012, ASCE 7-05, ASCE 7-10, ICC-ES AC-156 (2012)

Powering Ahead

For over 50 years, Generac has provided innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

Generac is committed to ensuring our customers’ service support continues after their generator purchase.

SD050 | 3.4L | 50 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency



STANDARD FEATURES

ENGINE SYSTEM

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)
- Critical Silencer (Enclosed Units Only)

Fuel System

- Fuel Lockoff Solenoid
- Primary Fuel Filter

Cooling System

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene Glycol Antifreeze
- 120 VAC Coolant Heater

Electrical System

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 Leads (3-Phase, Non 600V)
- Class H Insulation Material
- Vented Rotor
- 2/3 Pitch
- Skewed Stator
- Auxiliary Voltage Regulator Power Winding
- Brushless Excitation
- Sealed Bearing
- Automated Manufacturing (Winding, Insertion, Lacing, Varnishing)
- Rotor Dynamically Spin Balanced
- Full Load Capacity Alternator
- Protective Thermal Switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Separation of Circuits - Multiple Breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Only)
- Silencer of Heat Shield

ENCLOSURE (If Selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuated Enclosures)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat Paint

FUEL TANKS (If Selected)

- UL 142/ULC S-601
- Double Wall Construction
- Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested - 2 psi
- Rupture Basin Alarm
- Fuel Level
- Check Valve In Supply and Return Lines
- RhinoCoat™ - Textured Polyester Powder Coat Paint
- Stainless Steel Hardware

CONTROL SYSTEM



Digital H Control Panel- Dual 4x20 Display

Program Functions

- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- All Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors

- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus® Protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

Full System Status Display

- Power Output (kW)
- Power Factor
- kW Hours, Total, and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency

Alarms and Warnings

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Overspeed
- Battery Voltage
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)

SPEC SHEET

1 of 6

SPEC SHEET

2 of 6

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-602	-

SD050 | 3.4L | 50 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency



CONFIGURABLE OPTIONS

ENGINE SYSTEM

- Engine Coolant Heater
- Oil Heater
- Industrial Silencer (Open Set)
- Air Filter Restriction Indicator
- Fan and Belt Guards (Enclosed Units Only)

FUEL SYSTEM

- Flexible Fuel Lines
- Primary Fuel Filter

ELECTRICAL SYSTEM

- 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating
- Permanent Magnet Excitation

GENERATOR SET

- 8 Position Load Center

ENGINEERED OPTIONS

ENGINE SYSTEM

- Coolant Heater Ball Valves
- Fluid Containment Pan

CONTROL SYSTEM

- Spare Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

ENCLOSURE

- Weather Protected Enclosure
- Level 1 Sound Attenuated
- Level 2 Sound Attenuated
- Level 2 Sound Attenuated with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Door Open Alarm Switch
- Pad Vibration Isolator
- Enclosure Heater

WARRANTY (Standby Gensets Only)

- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

CONTROL SYSTEM

- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Oil Temperature Sender with Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- Remote Communication - Modem
- 10A Engine Run Relay
- Ground Fault Indication and Protection Functions
- 100 dB Alarm Horn
- 120V GFCI and 240V Outlets

FUEL TANKS (Size On Last Page)

- 8 in (203.2 mm) Fill Extension
- 13 in (330.2 mm) Fill Extension
- 19 in (482.6 mm) Fill Extension
- Overfill Protection Valve
- Vent Extensions
- Tank Risers
- Fuel Drop Tube
- Return Hose
- 90% Fuel Level Alarm

SD050 | 3.4L | 50 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency



APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Type	In-Line
Displacement - in³ (L)	207.48 (3.4)
Bore - in (mm)	3.86 (98)
Stroke - in (mm)	4.45 (113)
Compression Ratio	18.5:1
Intake Air Method	Turbocharged/Aftercooled
Cylinder Head	Cast Iron OHV
Piston Type	Aluminum
Crankshaft Type	Forged Steel

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	±0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow Cartridge
Crankcase Capacity - qt (L)	7.4 (7)

Cooling System

Cooling System Type	Closed Recovery
Water Pump Type	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed - rpm	2,250
Fan Diameter - in (mm)	560 (22)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel #2
Fuel Specifications	ASTM
Fuel Filtering (microns)	10
Fuel Inject Pump	Bosch (VE)
Fuel Pump Type	Engine Driven Gear
Injector Type	Pintel - 2,100 psi (14,479 kPa)
Fuel Supply Line - in (mm)	0.312 (7.92) NPT
Fuel Return Line - in (mm)	0.312 (7.92) NPT

Engine Electrical System

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	K0050124Y21
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5% (3-Phase)
Telephone Interference Factor (TIF)	< 50

Standard Excitation	Synchronous Brushless
Bearings	Single Sealed Cartridge
Coupling	Direct via Flexible Disc
Load Capacity - Standby	100%
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.25%

SPEC SHEET

3 of 6

SPEC SHEET

4 of 6

SD050 | 3.4L | 50 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency



OPERATING DATA

POWER RATINGS

Standby		
Single-Phase 120/240 VAC @1.0pf	50 kW	Amps: 208
Three-Phase 120/208 VAC @0.8pf	50 kW	Amps: 173
Three-Phase 120/240 VAC @0.8pf	50 kW	Amps: 150
Three-Phase 277/480 VAC @0.8pf	50 kW	Amps: 75
Three-Phase 346/600 VAC @0.8pf	50 kW	Amps: 60

MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip			
277/480 VAC	30%	208/240 VAC	30%
K0050124Y21	98	K0050124Y21	75
K0060124Y21	124	K0060124Y21	95

FUEL CONSUMPTION RATES*

Diesel - gph (Lph)	
Fuel Pump Lift - ft (m)	Percent Load
3 (1)	25%
	50%
	75%
	100%
Total Fuel Pump Flow (Combustion + Return) - gph (Lph)	
3.6 (13.5)	4.3 (16.4)

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

Standby		
Coolant Flow	gpm (Lpm)	12.2 (46)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr (kW)	135,900 (39.8)
Inlet Air	scfm (m³/hr)	7,500 (212)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Ambient Temperature (Before Derate)	See Bulletin No. 0199280SSD	
Maximum Radiator Backpressure	in H ₂ O (kPa)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

Standby
Flow at Rated Power - scfm (m³/min)
166 (4.7)

ENGINE

Standby		
Rated Engine Speed	RPM	1,800
Horsepower at Rated KW**	hp	86
Piston Speed	ft/min (m/min)	1,335 (406.9)
BMEP	psi (kPa)	169 (1,165)

** Refer to “Emissions Data Sheet” for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards.
Standby - See Bulletin 0187500SSB
Prime - See Bulletin 0187510SSB

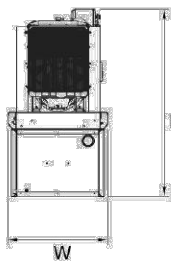
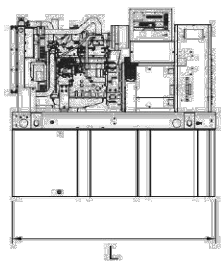
EXHAUST

Standby		
Exhaust Flow (Rated Output)	scfm (m³/min)	448 (12.7)
Max. Allowable Backpressure	inHg (kPa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	1,044 (562)

SD050 | 3.4L | 50 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency

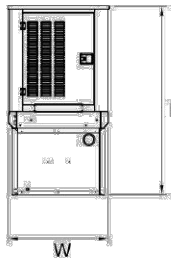
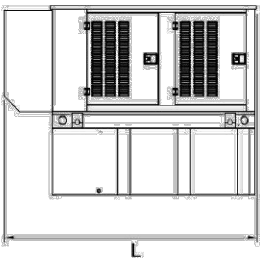


DIMENSIONS AND WEIGHTS*



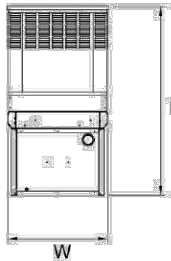
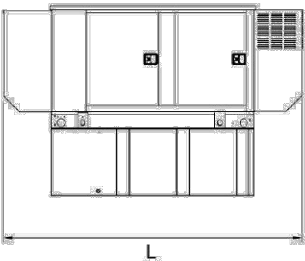
OPEN SET (Includes Exhaust Flex)

Run Time Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Minimum Weight - lbs (kg)	Maximum Weight - lbs (kg)
No Tank	-	76.7 (1,948) x 37.4 (950) x 45.2 (1,147)	1,710 (776)	1,836 (833)
12	54 (204)	76.7 (1,948) x 37.4 (950) x 58.2 (1,477)	2,190 (983)	2,316 (832)
30	132 (499)	76.7 (1,948) x 37.4 (950) x 70.2 (1,782)	2,420 (1,098)	2,546 (879)
44	190 (719)	76.7 (1,948) x 37.4 (950) x 82.2 (2,087)	2,629 (1,192)	2,755 (1,022)
49	211 (799)	106.0 (2,692) x 37.4 (950) x 71.2 (1,807)	2,634 (1,192)	2,760 (1,023)
69	300 (1,136)	92.9 (2,360) x 37.4 (950) x 85.7 (2,176)	2,692 (1,221)	2,818 (1,035)



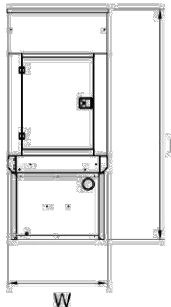
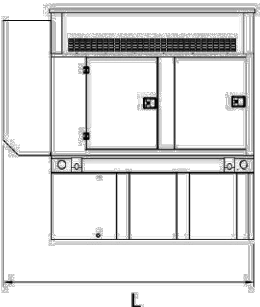
WEATHER PROTECTED ENCLOSURE

Run Time Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Steel Weight Minimum - lbs (kg)	Steel Weight Maximum - lbs (kg)	Aluminum Weight Minimum - lbs (kg)	Aluminum Weight Maximum - lbs (kg)
No Tank	-	94.8 (2,408) x 38.0 (965) x 48.5 (1,258)	2,158 (979)	2,286 (1,037)	1,935 (878)	2,965 (1,345)
12	54 (204)	94.8 (2,408) x 38.0 (965) x 62.5 (1,588)	2,638 (1,197)	2,766 (1,256)	2,415 (1,096)	3,445 (1,563)
30	132 (499)	94.8 (2,408) x 38.0 (965) x 74.5 (1,893)	2,868 (1,301)	2,996 (1,358)	2,645 (1,200)	3,675 (1,667)
44	190 (719)	94.8 (2,408) x 38.0 (965) x 86.5 (2,198)	3,077 (1,396)	3,205 (1,454)	2,854 (1,295)	3,884 (1,762)
49	211 (799)	106.0 (2,692) x 38.0 (965) x 98.0 (2,516)	4,316 (1,958)	4,572 (2,074)	3,870 (1,755)	5,930 (2,690)
69	300 (1,136)	94.8 (2,408) x 38.0 (965) x 90.0 (2,287)	3,140 (1,424)	3,268 (1,482)	2,917 (1,323)	3,947 (1,790)



LEVEL 1 SOUND ATTENUATED ENCLOSURE

Run Time Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Steel Weight Minimum - lbs (kg)	Steel Weight Maximum - lbs (kg)	Aluminum Weight Minimum - lbs (kg)	Aluminum Weight Maximum - lbs (kg)
No Tank	-	94.8 (2,408) x 38.0 (965) x 48.5 (1,258)	2,158 (979)	2,286 (1,037)	1,935 (878)	2,965 (1,345)
12	54 (204)	94.8 (2,408) x 38.0 (965) x 62.5 (1,588)	2,638 (1,197)	2,766 (1,256)	2,415 (1,096)	3,445 (1,563)
30	132 (499)	94.8 (2,408) x 38.0 (965) x 74.5 (1,893)	2,868 (1,301)	2,996 (1,358)	2,645 (1,200)	3,675 (1,667)
44	190 (719)	94.8 (2,408) x 38.0 (965) x 86.5 (2,198)	3,077 (1,396)	3,205 (1,454)	2,854 (1,295)	3,884 (1,762)
49	211 (799)	106.0 (2,692) x 38.0 (965) x 98.0 (2,516)	4,316 (1,958)	4,572 (2,074)	3,870 (1,755)	5,930 (2,690)
69	300 (1,136)	94.8 (2,408) x 38.0 (965) x 90.0 (2,287)	3,140 (1,424)	3,268 (1,482)	2,917 (1,323)	3,947 (1,790)



LEVEL 2 SOUND ATTENUATED ENCLOSURE

Run Time Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Steel Weight Minimum - lbs (kg)	Steel Weight Maximum - lbs (kg)	Aluminum Weight Minimum - lbs (kg)	Aluminum Weight Maximum - lbs (kg)
No Tank	-	94.8 (2,408) x 38 (965) x 70.1 (1,780)	2,388 (1,084)	2,517 (1,142)	2,035 (923)	2,163 (981)
12	54 (204)	94.8 (2,408) x 38 (965) x 82.5 (1,588)	2,638 (1,197)	2,766 (1,256)	2,415 (1,096)	3,445 (1,563)
30	132 (499)	94.8 (2,408) x 38 (965) x 74.5 (1,893)	2,868 (1,301)	2,996 (1,358)	2,645 (1,200)	3,675 (1,667)
44	190 (719)	94.8 (2,408) x 38 (965) x 86.5 (2,198)	3,077 (1,396)	3,205 (1,454)	2,854 (1,295)	3,884 (1,762)
49	211 (799)	106.0 (2,692) x 38 (965) x 99 (2,516)	4,316 (1,958)	4,572 (2,074)	3,870 (1,755)	5,930 (2,690)
69	300 (1,136)	94.8 (2,408) x 38 (965) x 110.6 (2,809)	3,371 (1,529)	3,499 (1,587)	3,017 (1,368)	3,145 (1,427)

* All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.

Generac Power Systems, Inc. | P.O. Box 8 | Waukesha, WI 53189
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Part No 0K5090
Rev. D 08/16/19

SPEC SHEET

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SPEC SHEET

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SUPPLEMENTAL

SHEET NUMBER:

R-604

REVISION:

-



GPS 4827 Infinity Power System

-48V DC Medium Power Plant

Overview

The 4827 capitalizes on the product strengths found in the GPS4848 and Infinity product families by infusing the highly efficient Infinity TEZ rectifier platform and the time tested distribution found in the GPS4848 to create the GPS 4827 Infinity Power System. Utilizing the 1RU 50A or 75A 48v rectifiers; a fully equipped bay equipped with 9 rectifier shelves allows for as much as 2700A of rectifiers and 48 inches of distribution. With this increased density, a single bay GPS4827 system provides ampacity and distribution for most small and medium applications while retaining all the features found with the larger GSP4848.

Bay Options

The 4827 system can be deployed with capacity of up to 2700 amps in a single cabinet or expanded over multiple cabinets to 5400 amps. Designed for either internal input AC breakers or terminal strip terminations, rectifier shelves can be spread across multiple bays or concentrated to a single bay. For greater flexibility and working space, the 4827 may be equipped with a larger 36 inch wide distribution bay to accommodate large cable termination and egress.

Unique to the GPS4827, rectifier AC terminations can be collected in pairs to reduce input AC circuit breakers by 50%. Additionally, the GPS4827 can accept 3ph input by supplying L-N across the rectifier shelf inputs at 277Vac.

Infinity Rectifier

The Infinity TEZ rectifier series offers modules for use in -48V applications.

Rectifier:

- NE050AC48ATEZ Rectifier, 50A/48V Output
- NE075AC48ATEZ Rectifier, 75A/48V Output

Galaxy Millennium II & Pulsar Plus Controllers

The Galaxy Millennium II controller combines sophisticated power monitoring and remote management. This flagship controller simplifies operations and maintenance while lowering administrative costs supporting up to 72 rectifiers. Remote peripheral modules can support over 500 monitoring points for GE Critical Power or third party devices. Ethernet, SNMP, Modbus RTU, and TL1 provide integration with power engineering and NOC workflow.

As an economical alternative with similar remote monitoring capabilities, the 4827 can be equipped with the Pulsar Controller. Designed to monitor and control system components including rectifiers, converters and distribution modules via a multi-drop RS485 digital communications bus. System status, parameters settings and alarm thresholds can be viewed and configured from the controller's front panel or local/remote PC interface.



Advantages

- Now available with either 50 or 75 Amp high efficient rectifiers
- Up to 2700 Amp capacity per bay w/75A rectifiers
- System Capacity of 5400A
- Galaxy Pulsar Plus or Galaxy Millennium II controller options
- Multiple AC input choices including 1 Φ 240Vac, 3 Φ 240Vac and 277Vac phase to neutral operation or 3 Φ 208, 480v dual bulk AC

Infinity TEZ Rectifiers: NE050AC48ATEZ & NE075AC48ATEZ

- Compact - 1RU x 4 across form factor providing high power density
- Plug and Play with automatic ID - installation of the rectifier in a shelf connected to a compatible system controller initializes all set up parameters and IDs shelf position automatically. No adjustments are needed. Product identifications, serial numbers and software versions are provided in the embedded inventory report page.
- Extended service life – parallel operation with automatic digital load sharing ensures that parallel units are not unduly stressed even when a unit fails or is removed.
- Monitoring / control – the built in microprocessor controls and monitors all critical rectifier functions and communicates with the system controller using the built in Galaxy Protocol serial interface.
- Fail safe performance – hot insertion capabilities allow for rectifier replacement without system shutdown; soft start and inrush current protection prevent nuisance tripping of upstream breakers. Equipped with true 48V back-bias, full communications are retained when AC is removed.



Applications

- Telecommunications Networks
- Digital Subscriber Line (DSL)
- Indoor/Outdoor Wireless
- Routers/Switches
- Fiber in the Loop
- Transmission
- Data Networks
- PBX

Key Features

- Developed for Extended temperature range
- Redundant fan cooling
- 1U height, hi power density
- Front panel LED indicators
- Wide range AC input
- 48V back bias
- Hot pluggable
- Digital load sharing over robust RS485 communications
- RoHS compliant

Specifications

INPUT	NE050AC48ATEZ	NE075AC48ATEZ
Voltage Range	95-275Vac	95-305Vac
Input Current	15-12A @ 100-120Vac 15-12A @ 200-240Vac	15 @ 100-120Vac 22A @ 200-277Vac
Input Frequency	45 – 66Hz	45 – 66Hz
Power Factor	0.98 at>50% load	0.98 at>50% load
Efficiency	> 96% (Peak 96.9%)	> 96% (Peak 96.9%)
Total Harmonic Distortion	<5% @loads over 50%	<5% @loads over 50%

OUTPUT	NE050AC48ATEZ	NE075AC48ATEZ
Voltage Adjust Range	42-58Vdc	42-58Vdc
Voltage Nominal	54.5V	54.5V
Regulation (with controller)	±0.05% typical	±0.05% typical
Ripple	100mVrms	100mVrms
Output Current		
- High-Line	50A @ 54.5V (57A @ 48V)	75A @ 54.5V (82A @ 48V)
- Low-Line	22A @ 54.5V	22A @ 54.5V
- High-Line in legacy shelf	50A @ 54.5V	
Heat Dissipation @ max out ¹	158W / 539 BTU/hr	249W/850 btu @ max out
Watts per cubic inch	24W	34W

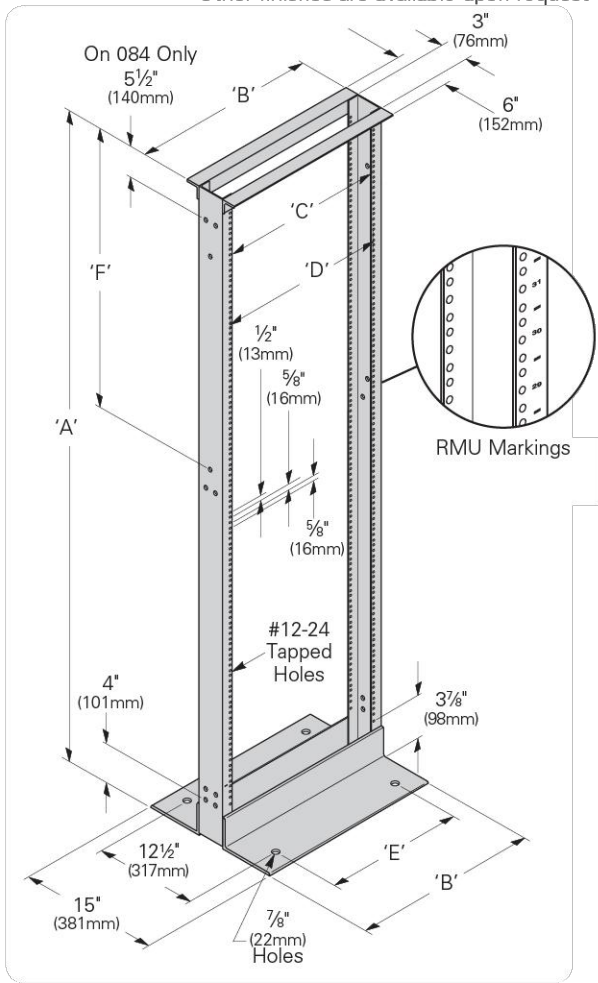
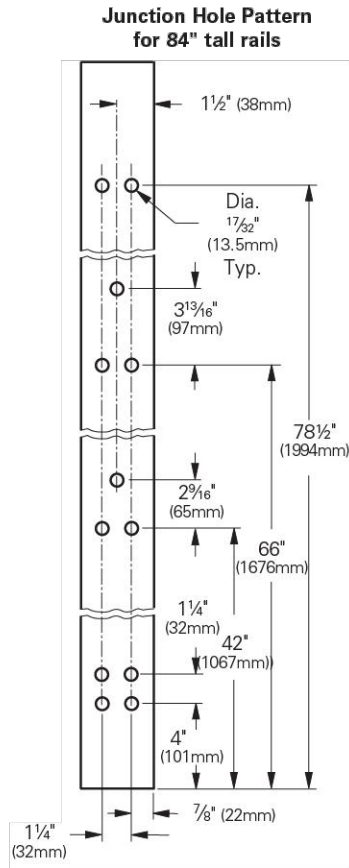
¹Special room cooling may be required.

Network Equipment Racks & Accessories

Two-Post Rack

Two-Post Network Equipment Rack
3" Uprights, 19" & 23" Panel Mounting, Customer Premise

- Universal junction hole pattern matches most manufacturers racks
- #12-24 panel mounting holes
- Conformance to EIA/ECA-310-E
- Load Rating: 1200 lbs. (544kg) for up to 84" (2133mm) height or 1000 lbs. (453kg) for 96" (2438mm) and 108" (2743mm) weight capacity when evenly distributed along the height of the rack
- Permanently stamped rack mount unit (RMU) markings included
- Packaged unassembled in protective carton suitable for parcel shipment
- Assembles in about ten (10) minutes using standard hand tools
- Includes thirty (30) dog point combo head (Phillips and flat blade) mounting screws
- Double sided universal [5/8" (16mm), 5/8" (16mm), 1/2" (13mm)] mounting spacing
- Twin 1 1/2" (58mm) x 1 1/4" (50mm) top angles for rigidity
- Tapped assembly holes eliminate the need for nuts and simplifies assembly and squaring
- UL Listed (File No. E171936) as a communications circuit accessory
- Material: Aluminum uprights with steel top/bottom angles
- See page ii for link to OPM approvals
- See SB588A page 44 for anchor kits
- Finish __: Aluminum - brushed (AL) uprights with silver powder coated top & bottom angles
Flat black powder coat (FB)
Telco gray powder coat (TG)
Other finishes are available upon request



Network Equipment Racks & Accessories

Two-Post Rack

Two-Post Network Equipment Rack
3" Uprights, 19" & 23" Panel Mounting, Customer Premise

	Dimensions			
	19" (482mm) Rack Width		23" (594mm) Rack Width	
	In.	(mm)	In.	(mm)
'A' Overall Height	36" - 108"	(914 - 2743)	36" - 108"	(914 - 2743)
'B' Overall Width	20 5/16"	(516)	24 5/16"	(617)
'C' Panel Mounting	18 5/16"	(465)	22 5/16"	(567)
'D' Usable Inside Width	17 3/4"	(451)	21 3/4"	(552)
'E' Base Anchor Spacing	16"	(406)	20"	(508)

Universal Spacing [5/8" (16mm), 5/8" (16mm), 1/2" (13mm)]

Part Number	'A' Height		'F' Spacing		Mounting Spaces	Shipping Weight	
	In.	(mm)	In.	(mm)		Lbs.	(kg)
19" (482mm) Rack Width							
SB556036XU__	36"	(914)	6"	(152)	17	22.0	(10.0)
SB556048XU__	48"	(1219)	3 7/16"	(87)	24	24.0	(10.9)
SB556072XU__	72"	(1829)	27 7/16"	(697)	38	27.5	(12.5)
SB556084XU__	84"	(2133)	39 7/16"	(1001)	45	30.0	(13.6)
SB556096XU__	96"	(2438)	51 7/16"	(1306)	51	31.5	(14.3)
SB556108XU__	108"	(2743)	54 3/16"	(1376)	58	33.5	(15.2)
23" (584mm) Rack Width							
SB558036XU__	36"	(914)	6"	(152)	17	24.5	(11.1)
SB558048XU__	48"	(1219)	3 7/16"	(87)	24	26.5	(12.0)
SB558072XU__	72"	(1829)	27 7/16"	(697)	38	30.0	(13.6)
SB558084XU__	84"	(2133)	39 7/16"	(1001)	45	32.0	(14.5)
SB558096XU__	96"	(2438)	51 7/16"	(1306)	51	34.0	(15.4)
SB558108XU__	108"	(2743)	54 3/16"	(1376)	58	36.0	(16.3)

Specify part number and finish when ordering.

GUARDIAN SECTOR FRAME

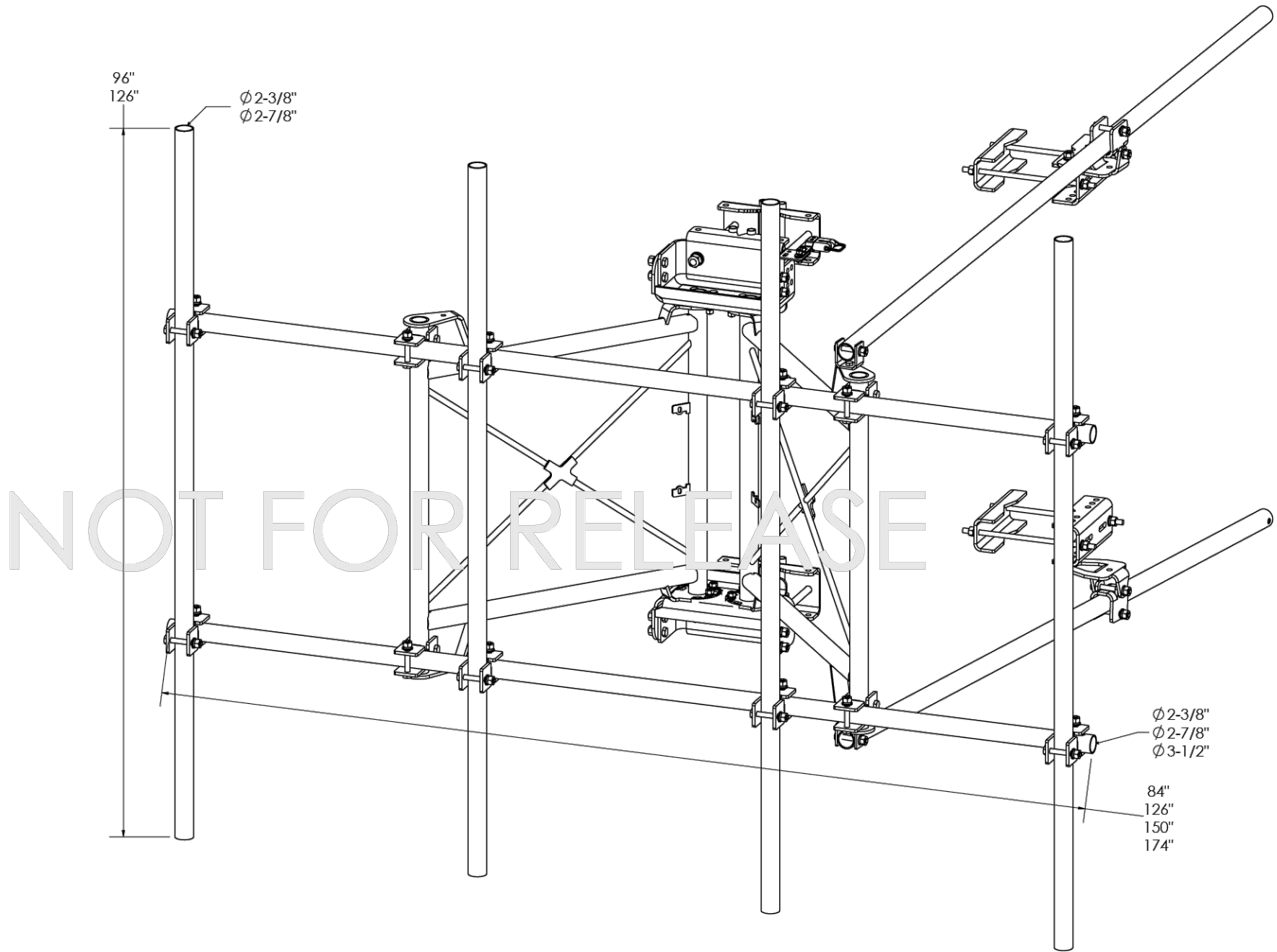


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SHEET	THIRD ANGLE PROJECTION	CATEGORY	01_Lattice Tower	4			
1 OF 24		SERIES	01_V-Frames	3			
11/29/2022	SCALE 1:14	TYPE	PV-SFR-GS_Guardian	2			
DIMENSIONS ARE IN INCHES TOLERANCES U.N.O. HOLES: +1/16", -1/32" ANGULAR: PROFILE ±1/4°, BEND ±2° ALL OTHERS: ±1/16"		BY	DJN	1	GROUND BAR	11/10/22	GUARDIAN SECTOR FRAME
		CHECKED	SJS	0	INITIAL RELEASE	2/15/21	DOCUMENT NUMBER
		STATUS	NOT FOR RELEASE	REV	DESCRIPTION	DATE	SFR-ENG-01-R1
							1



C:\PVA\SteelCatalog\SW Working Files\Engineering Details\

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1 PROPOSED SECTOR MOUNT DETAIL
SCALE: N.T.S.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-607	-



Colliers Engineering & Design
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Brentwood, TN 37027
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Mount Structural Analysis Report
(3) 10.50-Ft Sector Frames

August 7, 2025
Site ID: 5000025813-VZW / THOMAS
Page | 5

Replacement Antenna Mount Analysis Report and PMI Requirements

Mount Analysis-R
SMART Tool Project #: 10316998
Colliers Engineering & Design Project #: 21941232 (Rev. 1)

August 7, 2025

Site Information

Site ID: 5000025813-VZW / THOMAS
Site Name: THOMAS
Carrier Name: Verizon Wireless
Address: 744 NW Spradley Road
Lake City, Florida 32055
Columbia County
Latitude: 30.366228°
Longitude: -82.629419°

Structure Information

Tower Type: 300-Ft Guyed
Mount Type: 10.50-Ft Sector Frame

FUZE ID # 16276345

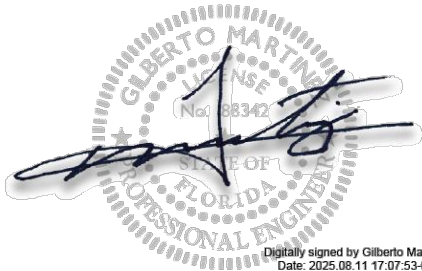
Analysis Results

Sector Frame: 40.0% Pass w/ Mount Replacement*
(3) Perfect Vision – PV-SFR-GS10-20-AP1

*Antennas and equipment to be installed in compliance with PMI Requirements of this mount analysis.

***Contractor PMI Requirements:
Included at the end of this MA report
Available & Submitted via portal at <https://pmi.vzwsmart.com>
For additional questions and support, please reach out to:
pmisupport@colliersengineering.com

Report Prepared By: Andy Hanes



This item has been digitally signed and sealed by Gilberto Martinez 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.

Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	13.9	9.6	23.0	18.7
0.5	21.3	15.5	34.2	28.4
1	28.1	20.6	44.9	37.4

Notes:
- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 1 sector(s).
- Ka factors included in (EPA)a calculations

Requirements:

The proposed antenna mounts are SUFFICIENT for the final loading configuration (attachment 2) upon completion of the mount replacement (attachment 3) and requirements below.

Refer to document at the end of this form for special instructions. Contact EOR if special instructions are not available.

ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

Attachments:

1. Contractor Required Post Installation Inspection (PMI) Report Deliverables
2. Antenna Placement Diagrams
3. Mount Manufacturer Drawings
4. Existing Mount Photos
5. Analysis Calculations
6. Mount-Tower Interaction Check

PMI INSTRUCTIONS:

Contractor shall remove existing mount and associated hardware. Contractor shall restore any degradation in galvanization on tower due to removed mount and protect with two (2) coats of Zinga or Zinc Kote.

Contractor shall install the proposed Perfect Vision – PV-SFR-GS10-20-AP1 mounts in accordance with manufacturer specifications and the Mount Replacement Sketch. Contact EOR if these documents are not available.

Contractor shall install mount pipes with vertical offsets as shown in the Mount Replacement Sketch.

Contractor shall install tiebacks on right side of mount, refer to Mount Replacement Sketch. Attach tiebacks to adjacent tower legs. Proposed tieback shall extend no more than 12" beyond the plane of the tower face. Contractor shall trim as required and protect cut end with two (2) coats of Zinga or Zinc Kote.

Contractor shall install proposed OVP to the top left standoff horizontal in alpha sector. Install existing OVP to the top left standoff horizontal in beta sector.

Contractor shall inspect climbing facilities and safety climb and ensure they are in good condition. Contractor shall install safety climb wire rope guides in locations where wire rope is contacting the mount or mount-to-tower connection steel. Wire brush clean any observed corrosion and protect with two (2) coats of Zinga or Zinc Kote. Contractor shall provide photos of wire rope guide installation as part of PMI documents. Contact EOR if additional guidance is required.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. PLEASE REFERENCE THE MOUNT ANALYSIS REPORT FOR COMPLETE MOUNT ANALYSIS CALCULATIONS AND DETAILS. SUPPLEMENTAL PAGES INCLUDED IN THE CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO VERIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONSTRUCTION.