



**SITE NAME: DIAMOND MONOPOLE- MD045**  
**SITE NUMBER: 7WAS617B**

**315 S CHURCH ROAD**  
**UPPER MARLBORO, MD 20774**

**CONFIGURATION: 67D97DB**

**T-Mobile**  
**T-MOBILE NORTHEAST LLC**  
 12050 BALTIMORE AVENUE  
 BELTSVILLE, MD 20705  
 PHONE: (240) 264-8600

**entrex**  
 communication services, inc.  
 6100 Executive Blvd, Suite 350  
 Rockville, MD 20852  
 PHONE: (202) 408-0960  
 FAX: (202) 408-0961

**SITE LINK WIRELESS**  
 Site Link Wireless, LLC  
 3620 Commerce Drive, Suite 707  
 Baltimore, MD 21227  
 www.sitelinkwireless.com  
 410-309-4949

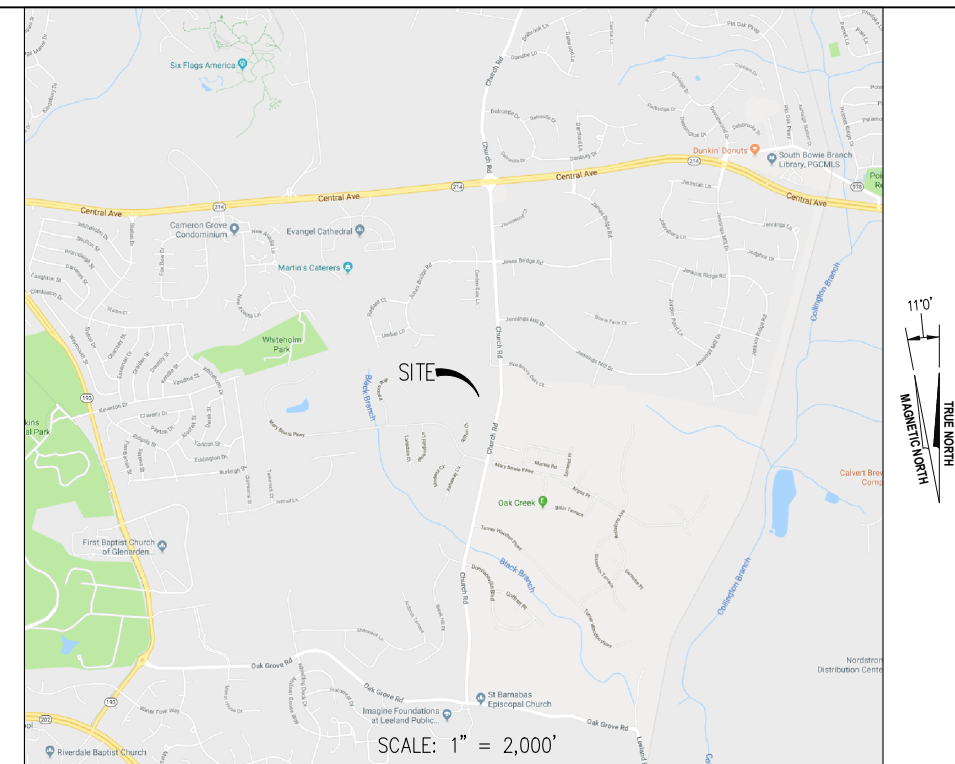
**SITE INFORMATION**

- SCOPE OF WORK:
- (6) PROPOSED ANTENNAS
  - (3) PROPOSED RADIO 4449 B71+12
  - (3) PROPOSED 6X12 HYBRID CABLES
  - (1) PROPOSED ANTENNA SUPPORT PLATFORM
  - (8) PROPOSED ANTENNA SUPPORT PIPES
  - (1) PROPOSED EQUIPMENT CONCRETE PAD
  - (1) PROPOSED METER
  - (1) PROPOSED 6160 EQUIPMENT CABINET
  - (1) PROPOSED B160 EQUIPMENT CABINET
  - (1) PROPOSED PPC CABINET
  - (6) PROPOSED GROUND BARS
  - (1) PROPOSED STAND-BY 25 KW DIESEL GENERATOR

JURISDICTION: PRINCE GEORGE COUNTY  
 TAX ACCOUNT NUMBER: 3882891  
 PARCEL AREA: ±14.67 ACRES  
 PARCEL OWNER: TOLL OAK CREEK GOLF LLC  
 ADDRESS: 600 BOWEVILLE MANOR LN  
 UPPER MARLBORO, MD 20774  
 USE: COUNTRY CLUB  
 GROUND ELEVATION: 116'  
 LATITUDE: N 38° 53' 26.85"  
 LONGITUDE: W 76° 45' 29.03"

**NOTE TO GENERAL CONTRACTOR**  
 NO WORK IS TO BE PERFORMED ON THIS SITE WITHOUT REVIEW OF THE APPROVED STRUCTURAL ANALYSIS. IF ANY DISCREPANCIES ARE FOUND THE GENERAL CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING. AT NO TIME WILL ANY ADDITIONAL ANTENNAS BE INSTALLED WITHOUT WRITTEN CONSENT FROM TOWER ENGINEER.

**VICINITY MAP**



**SHEET INDEX**

- T-1 TITLE SHEET
- N-1 GENERAL NOTES
- C-1 SITE PLAN
- A-1 EQUIPMENT LOCATION PLAN & MONOPOLE ELEVATION
- S-1 RF SYSTEM SCHEDULE AND CABLING SCHEMATIC DIAGRAM
- S-2 ANTENNA AND EQUIPMENT DETAILS
- S-3 ANTENNA LAYOUT PLAN AND DETAILS
- S-4 EQUIPMENT LAYOUT PLAN AND CABINET DETAILS
- E-1 ELECTRICAL PLANS AND PANEL SCHEDULE
- E-2 POWER DIAGRAMS AND DETAILS
- E-3 GROUNDING DIAGRAM, PLAN AND DETAILS



**7WAS617B**  
**DIAMOND MONOPOLE- MD045**  
**315 S CHURCH ROAD**  
**UPPER MARLBORO, MD 20774**



**SUBMITTALS**

DATE	DESCRIPTION	REV.
12-26-18	CONSTRUCTION REVIEW	A
01-16-19	FINAL CONSTRUCTION	0
06-06-19	PERMIT COMMENTS	1
06-26-19	BP ELECTRICAL COMMENTS	2
12-16-20	CHANGE CABINETS	3
01-08-21	REVISE TO AC GENERATOR	4
03-12-21	COUNTY COMMENTS	5
08-09-21	CHANGE TO 3 SECTORS	6

**PROJECT TEAM**

APPLICANT: T-MOBILE NORTHEAST LLC  
 12050 BALTIMORE AVE.  
 BELTSVILLE, MD 20705  
 PHONE: (301) 264-8600

ARCHITECT/ENGINEER: ENTREX COMMUNICATION SERVICES, INC.  
 6100 EXECUTIVE BLVD, SUITE 350  
 ROCKVILLE, MD 20852  
 CAMILLE SHABSHAB (202) 408-0960

PROJECT MANAGEMENT: SITE LINK WIRELESS, LLC  
 3620 COMMERCE DRIVE, STE 707  
 BALTIMORE, MD 21227

**CODE COMPLIANCE**

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

- 2015 INTERNATIONAL BUILDING CODE
- 2014 NATIONAL ELECTRICAL CODE
- 2015 NFPA 101, LIFE SAFETY CODE
- AMERICAN CONCRETE INSTITUTE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION
- MANUAL OF STEEL CONSTRUCTION 13TH EDITION
- ANS/TIA--222-G
- TIA 607
- INSTITUTE FOR ELECTRICAL & ELECTRONICS ENGINEER 81
- IEEE C2 NATIONAL ELECTRIC SAFETY CODE LATEST EDITION
- TELECORDIA GR-1275
- ANS/T 311

**APPROVAL BLOCK**

	DATE	APPROVED	APPROVED AS NOTED	REVISE & RESUBMIT
OWNER REPRESENTATIVE	DATE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SITE ACQUISITION	DATE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CONSTRUCTION MANAGER	DATE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ZONING	DATE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RF ENGINEER	DATE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

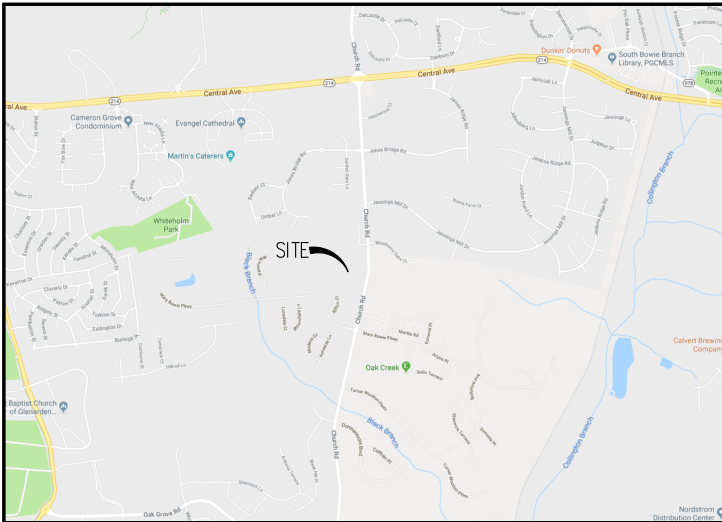
PROJECT NO: 1160.070  
 DESIGNER: M.M.E.  
 ENGINEER: C.S.

THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"x34"  
 0 1/2 1  
 GRAPHIC SCALE IN INCHES

TITLE:  
**TITLE SHEET**

SHEET NUMBER:  
**T-1**





**VICINITY MAP**  
SCALE: 1" = 2,000'

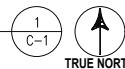


**SITE PLAN NOTES:**

1. SITE NAME: DIAMOND MONOPE-- MD045
2. THIS IS NOT A BOUNDARY SURVEY AND IS NOT TO BE USED FOR THE TRANSFER OF PROPERTY.
3. THE SUBJECT PARCEL INFORMATION;  
OWNER: TOLL OAK CREEK GOLF LLC  
PREMISES ADDRESS: 315 S CHURCH RD  
                          UPPER MARLBORO MD 20774  
MAILING ADDRESS: 600 BOWEVILLE MANOR LN  
                          UPPER MARLBORO MD 20774  
JURISDICTION: PRINCE GEORGE'S COUNTY  
PARCEL ID: 07 3882891  
AREA: 14.6700 AC.



**SITE PLAN**  
SCALE: 1" = 10'-0"



**T-Mobile**  
T-MOBILE NORTHEAST LLC  
12050 BALTIMORE AVENUE  
BELTSVILLE, MD 20705  
PHONE: (240) 264-8600

**entrex**  
communication services, inc.  
6100 Executive Blvd, Suite 350  
Rockville, MD 20852  
PHONE: (202) 408-0960  
FAX: (202) 408-0961

**SITE LINK WIRELESS**  
Site Link Wireless, LLC  
3620 Commerce Drive, Suite 707  
Baltimore, MD 21227  
www.sitelinkwireless.com  
410-309-4949

**7WAS617B**  
**DIAMOND MONOPOLE-MD045**  
**315 S CHURCH ROAD**  
**UPPER MARLBORO, MD 20774**



**SUBMITTALS**

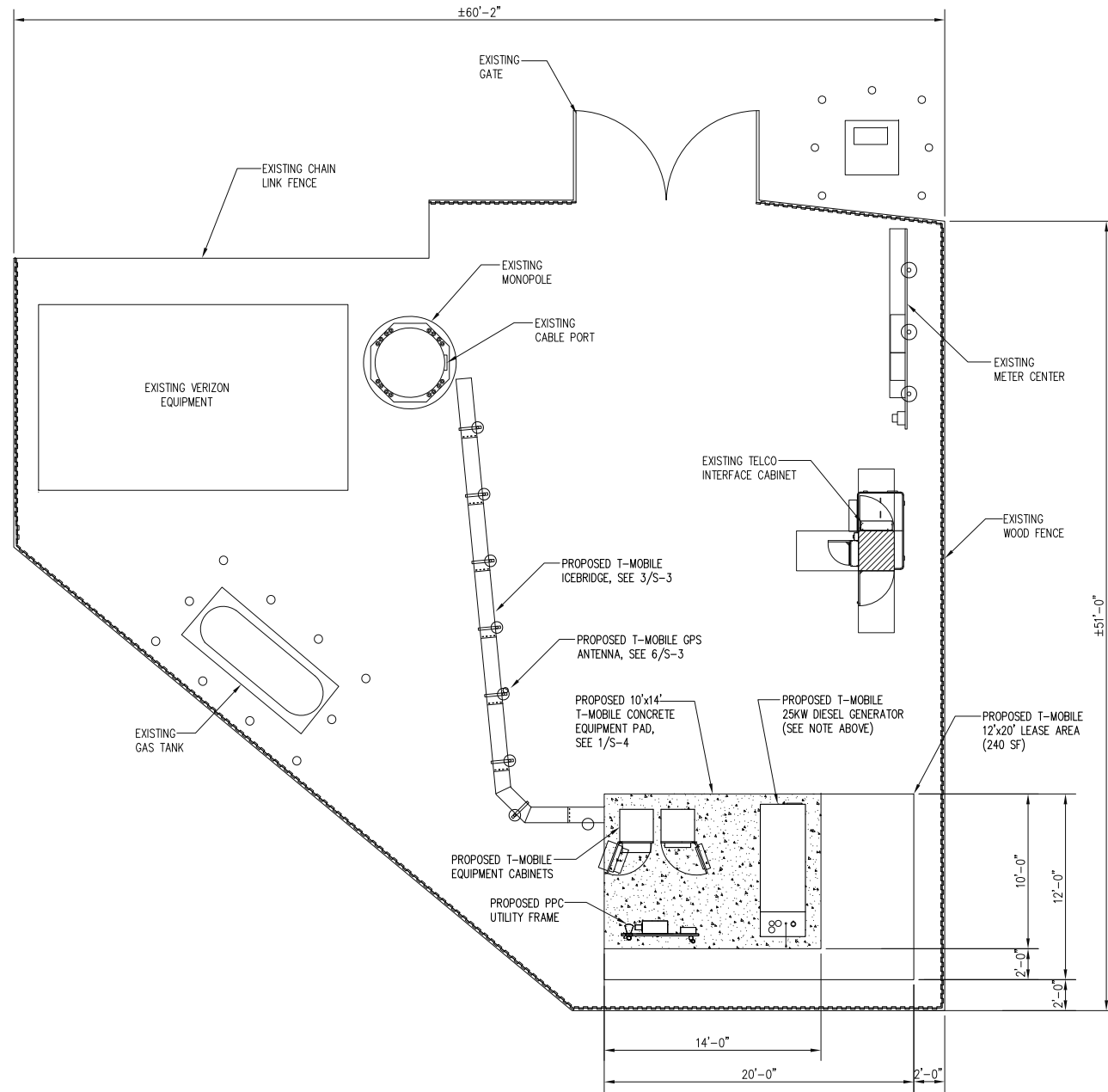
DATE	DESCRIPTION	REV.
12-26-18	CONSTRUCTION REVIEW	A
01-16-19	FINAL CONSTRUCTION	0
06-06-19	PERMIT COMMENTS	1
06-26-19	BP ELECTRICAL COMMENTS	2
12-16-20	CHANGE CABINETS	3
01-08-21	REVISE TO AC GENERATOR	4
03-12-21	COUNTY COMMENTS	5
08-09-21	CHANGE TO 3 SECTORS	6

PROJECT NO: 1160.070  
DESIGNER: M.M.E.  
ENGINEER: C.S.  
THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"x34"  
0 1/2 1  
GRAPHIC SCALE IN INCHES

TITLE:  
**SITE PLAN**

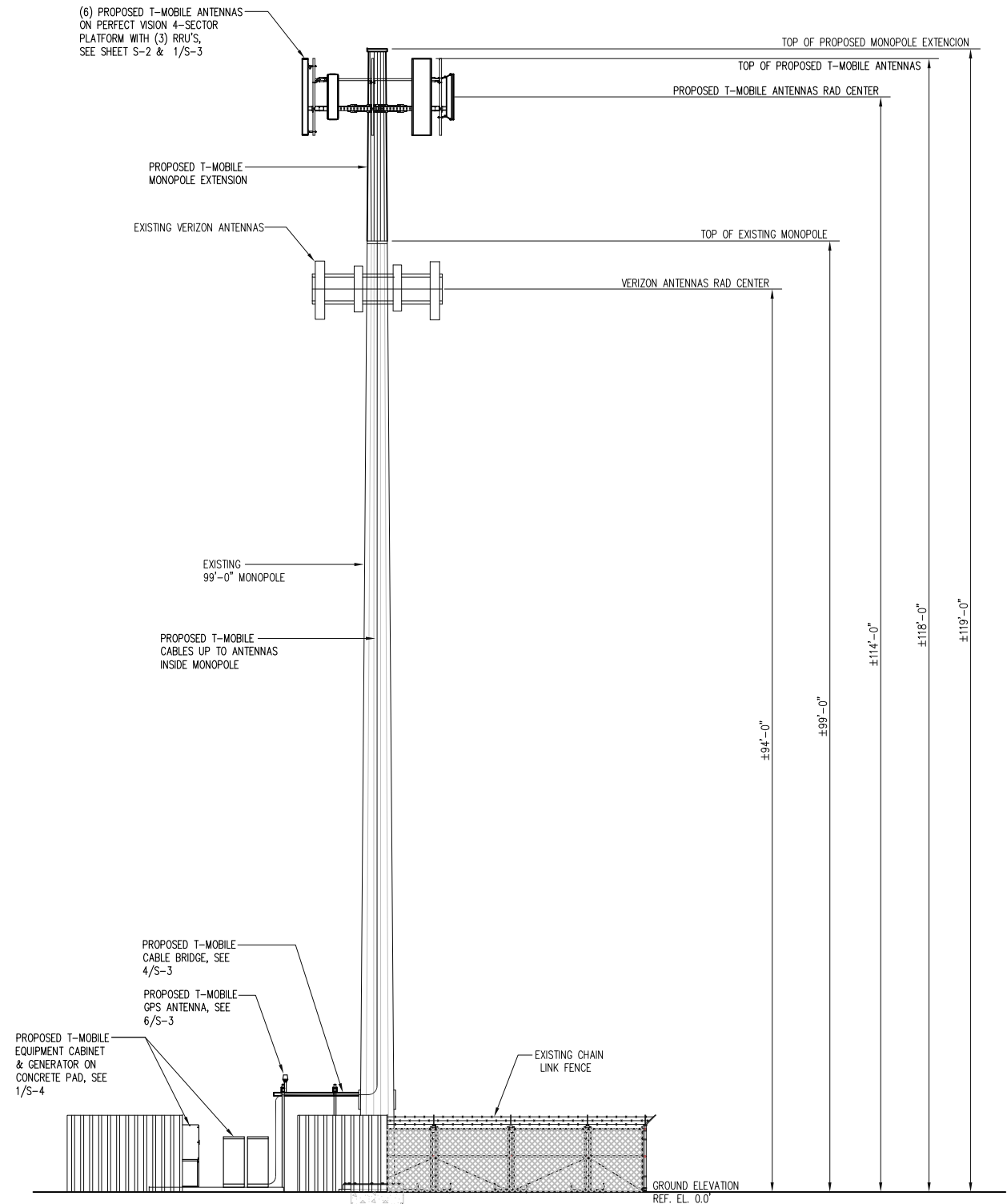
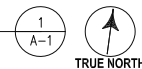
SHEET NUMBER:  
**C-1**

NOTE:  
PROPOSED GENERATOR WILL BE AT LEAST 5' AWAY FROM ANY EXISTING STRUCTURE AND PROPERTY LINE.



**EQUIPMENT LOCATION PLAN**

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



**MONOPOLE ELEVATION**

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



**T-Mobile**

T-MOBILE NORTHEAST LLC

12050 BALTIMORE AVENUE  
BELTSVILLE, MD 20705  
PHONE: (240) 264-8600

**entrex**  
communication services, inc.

6100 Executive Blvd, Suite 350  
Rockville, MD 20852  
PHONE: (202) 408-0960  
FAX: (202) 408-0961

**SITE LINK WIRELESS**

Site Link Wireless, LLC  
3620 Commerce Drive, Suite 707  
Baltimore, MD 21227  
www.sitelinkwireless.com  
410-309-4949

7WAS617B  
DIAMOND MONOPOLE- MD045

315 S CHURCH ROAD  
UPPER MARLBORO, MD 20774

SEAL:

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 17641, Expiration Date: 12/27/2021

**SUBMITTALS**

DATE	DESCRIPTION	REV.
12-26-18	CONSTRUCTION REVIEW	A
01-16-19	FINAL CONSTRUCTION	0
06-06-19	PERMIT COMMENTS	1
06-26-19	BP ELECTRICAL COMMENTS	2
12-16-20	CHANGE CABINETS	3
01-08-21	REVISE TO AC GENERATOR	4
03-12-21	COUNTY COMMENTS	5
08-09-21	CHANGE TO 3 SECTORS	6

PROJECT NO: 1160.070  
DESIGNER: M.M.E.  
ENGINEER: C.S.

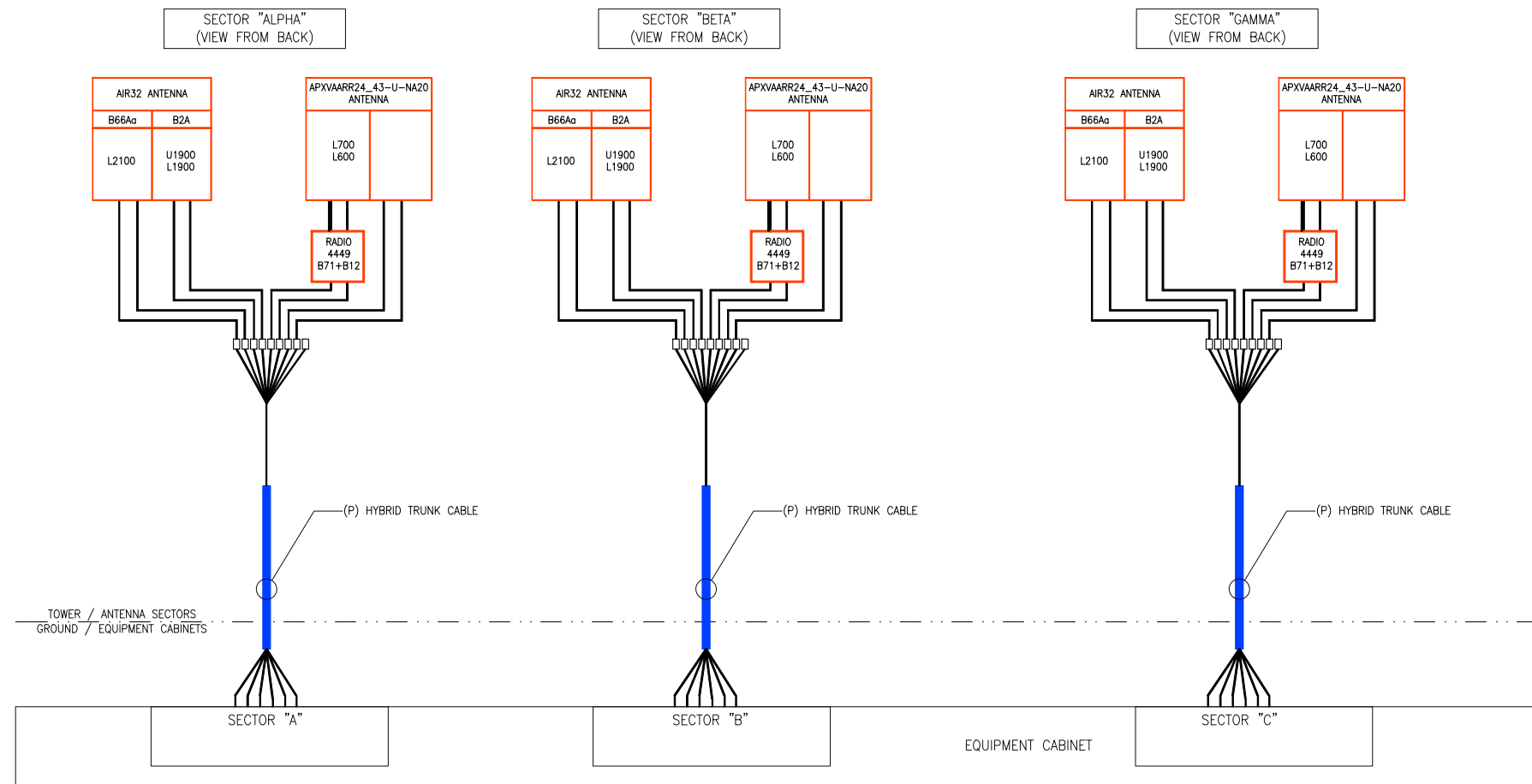
THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"x34"

0 1/2 1  
GRAPHIC SCALE IN INCHES

TITLE:  
**EQUIPMENT LOCATION PLAN & MONOPOLE ELEVATION**

SHEET NUMBER:  
**A-1**

RF SYSTEM SCHEDULE										
SECTOR	ANTENNA	TECHNOLOGY	ANTENNA MODEL	VENDOR	AZIMUTH	E-TILT	ANTENNA CENTERLINE	TMA/RRU MODEL	CABLE TYPE & LENGTH	JUMPER TYPE
ALPHA	A-1 (NEW)	L2100	AIR3208	ERICSSON	45°	2°	114'-0"	-	NEW ±160' 6x12 HYBRID CABLE (4 SHARED FOR ENTIRE SITE)	4 FIBER
		L2100				2°				
	L1900/U1900	2°								
A-2 (FUTURE)										
ALPHA	A-3 (NEW)	L700/L600	APXVAARR24_43-U-NA20	RFS	45°	2°	114'-0"	RADIO 4449 B71+B12	NEW ±160' 6x12 HYBRID CABLE (4 SHARED FOR ENTIRE SITE)	4 COAX
		L700/L600				2°				
	-	-								
BETA										
BETA	B-1 (NEW)	L2100	AIR3208	ERICSSON	130°	2°	114'-0"	-	NEW ±160' 6x12 HYBRID CABLE (4 SHARED FOR ENTIRE SITE)	4 FIBER
		L2100				2°				
	L1900/U1900	2°								
B-2 (FUTURE)										
BETA	B-3 (NEW)	L700/L600	APXVAARR24_43-U-NA20	RFS	130°	2°	114'-0"	RADIO 4449 B71+B12	NEW ±160' 6x12 HYBRID CABLE (4 SHARED FOR ENTIRE SITE)	4 COAX
		L700/L600				2°				
	-	-								
GAMMA										
GAMMA	C-1 (NEW)	L2100	AIR3208	ERICSSON	250°	2°	114'-0"	-	NEW ±160' 6x12 HYBRID CABLE (4 SHARED FOR ENTIRE SITE)	4 FIBER
		L2100				2°				
	L1900/U1900	2°								
C-2 (FUTURE)										
GAMMA	C-3 (NEW)	L700/L600	APXVAARR24_43-U-NA20	RFS	250°	2°	114'-0"	RADIO 4449 B71+B12	NEW ±160' 6x12 HYBRID CABLE (4 SHARED FOR ENTIRE SITE)	4 COAX
		L700/L600				2°				
	-	-								



**ANTENNA, RF & CABLING SCHEMATIC DIAGRAM**  
SCALE: N.T.S.

1  
S-1

**T-Mobile**  
T-MOBILE NORTHEAST LLC  
12050 BALTIMORE AVENUE  
BELTSVILLE, MD 20705  
PHONE: (240) 264-8600

**entrex**  
communication services, inc.  
6100 Executive Blvd, Suite 350  
Rockville, MD 20852  
PHONE: (202) 408-0960  
FAX: (202) 408-0961

**SITE LINK WIRELESS**  
Site Link Wireless, LLC  
3620 Commerce Drive, Suite 707  
Baltimore, MD 21227  
www.sitelinkwireless.com  
410-309-4949

**7WAS617B**  
**DIAMOND MONOPOLE-MD045**  
315 S CHURCH ROAD  
UPPER MARLBORO, MD 20774



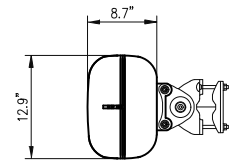
SUBMITTALS		
DATE	DESCRIPTION	REV.
12-26-18	CONSTRUCTION REVIEW	A
01-16-19	FINAL CONSTRUCTION	0
06-06-19	PERMIT COMMENTS	1
06-26-19	BP ELECTRICAL COMMENTS	2
12-16-20	CHANGE CABINETS	3
01-08-21	REVISE TO AC GENERATOR	4
03-12-21	COUNTY COMMENTS	5
08-09-21	CHANGE TO 3 SECTORS	6

PROJECT NO: 1160.070  
DESIGNER: M.M.E.  
ENGINEER: C.S.

THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"x34"  
0 1/2 1  
GRAPHIC SCALE IN INCHES

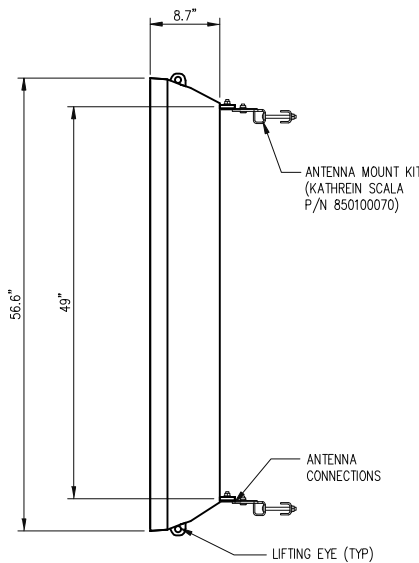
TITLE:  
**RF SYSTEM SCHEDULE & CABLING SCHEMATIC DIAGRAM**

SHEET NUMBER:  
**S-1**

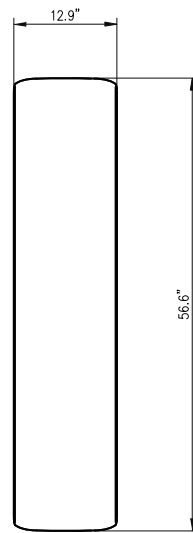


**PLAN VIEW**

ANTENNA MODEL:  
ERICSSON AIR-32  
SIZE: (56.6"H x 12.9"W x 8.7"D)  
WEIGHT: 132.2 LBS.



**SIDE VIEW**

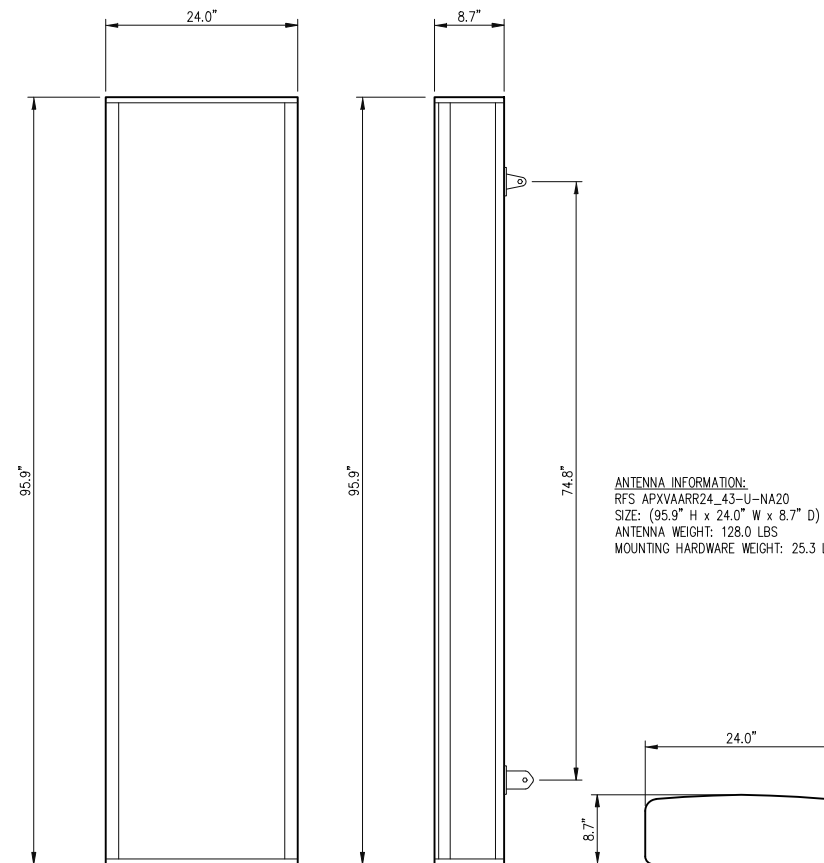


**FRONT VIEW**

**AIR32 "ANTENNA INTEGRATED RADIO" DETAIL**

SCALE: 1"=1'-0"

1  
S-2



**FRONT VIEW**

**SIDE VIEW**

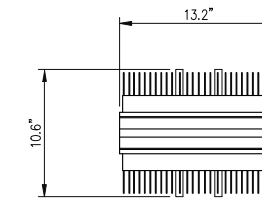
**TOP VIEW**

ANTENNA INFORMATION:  
RFS APXVAARR24\_43-U-NA20  
SIZE: (95.9" H x 24.0" W x 8.7" D)  
ANTENNA WEIGHT: 128.0 LBS  
MOUNTING HARDWARE WEIGHT: 25.3 LBS

**RFS APXVAARR24\_43-U-NA20 ANTENNA DETAIL**

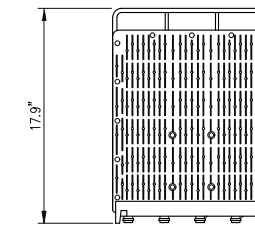
SCALE: 1"=1'-0"

2  
S-2

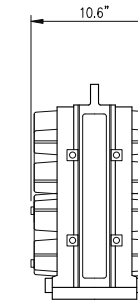


**PLAN VIEW**

RADIO INFORMATION:  
WEIGHT: 75.0 LBS  
(W/O MOUNTING HARDWARE)



**FRONT VIEW**



**SIDE VIEW**

**ERICSSON DUAL BAND RADIO 4449 B12 B71**

**REMOTE RADIO UNIT DETAILS**

SCALE: 1-1/2"=1'-0"

3  
S-2

**T-Mobile**  
T-MOBILE NORTHEAST LLC  
12050 BALTIMORE AVENUE  
BELTSVILLE, MD 20705  
PHONE: (240) 264-8600

**entrex**  
communication services, inc.  
6100 Executive Blvd, Suite 350  
Rockville, MD 20852  
PHONE: (202) 408-0960  
FAX: (202) 408-0961

**SITE LINK WIRELESS**  
Site Link Wireless, LLC  
3620 Commerce Drive, Suite 707  
Baltimore, MD 21227  
www.sitelinkwireless.com  
410-309-4949

**7WAS617B**  
**DIAMOND MONOPOLE-MD045**  
315 S CHURCH ROAD  
UPPER MARLBORO, MD 20774

SEAL:  
  
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 17641, Expiration Date: 12/27/2021

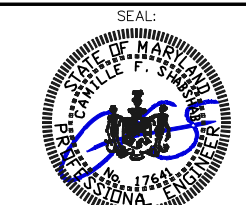
**SUBMITTALS**

DATE	DESCRIPTION	REV.
12-26-18	CONSTRUCTION REVIEW	A
01-16-19	FINAL CONSTRUCTION	0
06-06-19	PERMIT COMMENTS	1
06-26-19	BP ELECTRICAL COMMENTS	2
12-16-20	CHANGE CABINETS	3
01-08-21	REVISE TO AC GENERATOR	4
03-12-21	COUNTY COMMENTS	5
08-09-21	CHANGE TO 3 SECTORS	6

PROJECT NO: 1160.070  
DESIGNER: M.M.E.  
ENGINEER: C.S.  
THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"x34"  
0 1/2 1  
GRAPHIC SCALE IN INCHES

TITLE:  
**ANTENNA AND EQUIPMENT DETAILS**

SHEET NUMBER:  
**S-2**



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 17641, Expiration Date: 12/27/2021

SUBMITTALS

DATE	DESCRIPTION	REV.
12-26-18	CONSTRUCTION REVIEW	A
01-16-19	FINAL CONSTRUCTION	0
06-06-19	PERMIT COMMENTS	1
06-26-19	BP ELECTRICAL COMMENTS	2
12-16-20	CHANGE CABINETS	3
01-08-21	REVISE TO AC GENERATOR	4
03-12-21	COUNTY COMMENTS	5
08-09-21	CHANGE TO 3 SECTORS	6

PROJECT NO: 1160.070  
DESIGNER: L.P.  
ENGINEER: C.S.

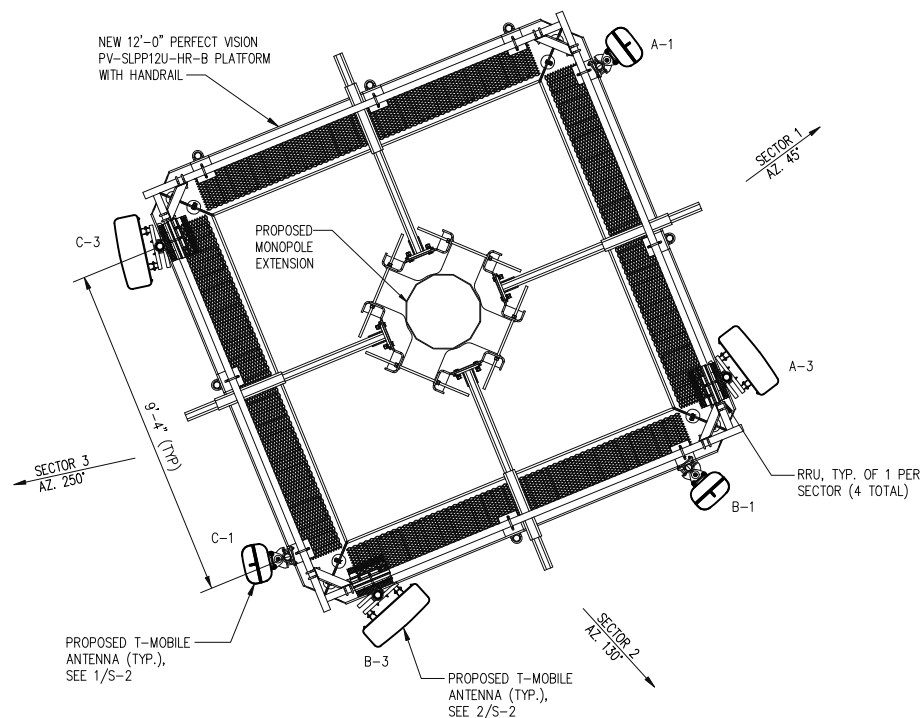
THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"x34"  
0 1/2 1  
GRAPHIC SCALE IN INCHES

TITLE:

ANTENNA LAYOUT PLAN AND DETAILS

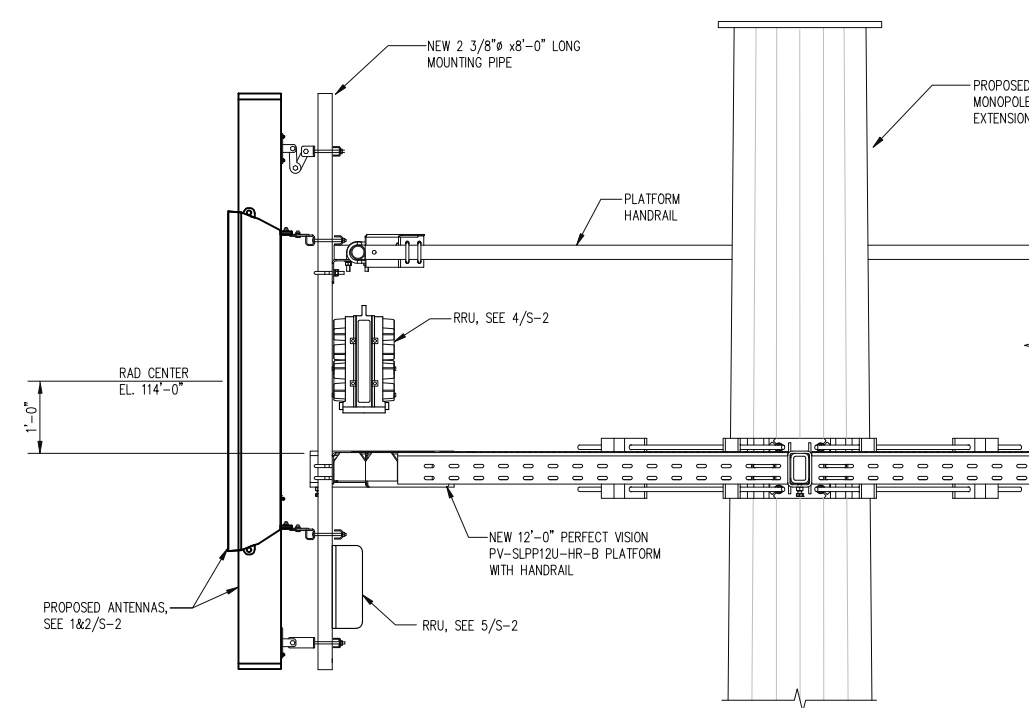
SHEET NUMBER:

S-3



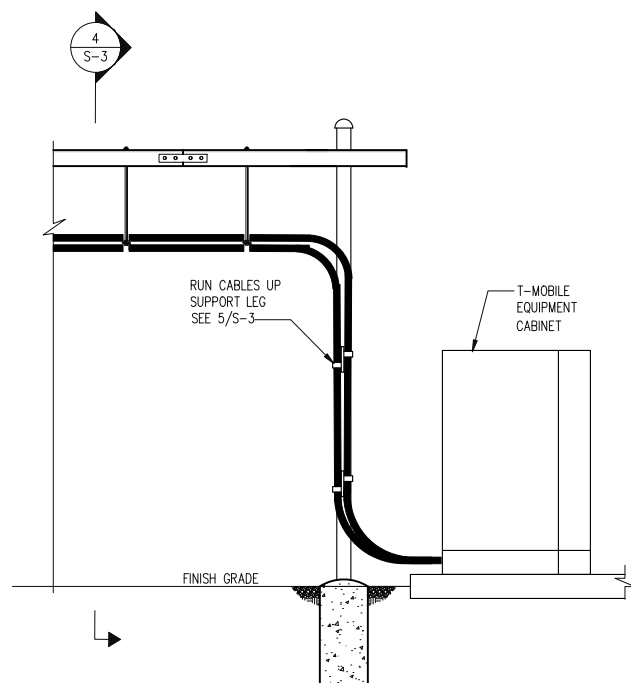
ANTENNA LAYOUT PLAN

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



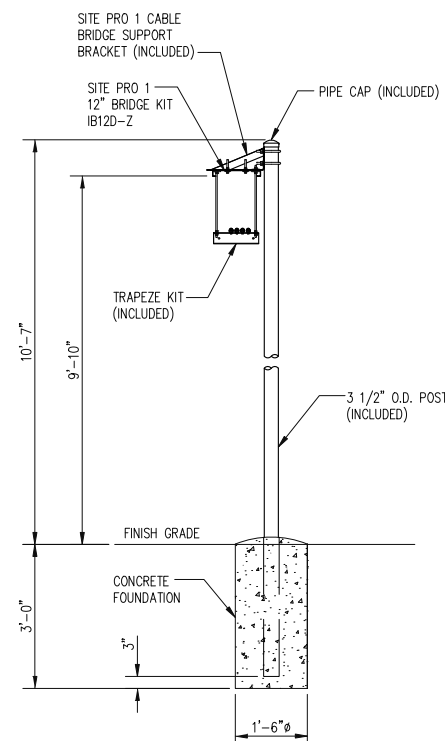
ANTENNA SECTION

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



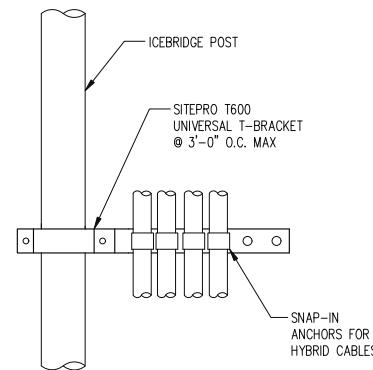
SECTION

SCALE: 1/2"=1'-0"



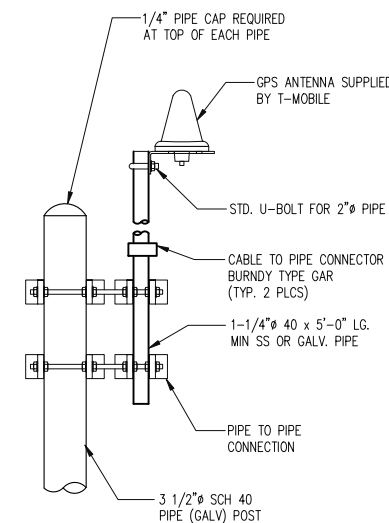
SECTION

SCALE: 1/2"=1'-0"



CABLE DETAIL

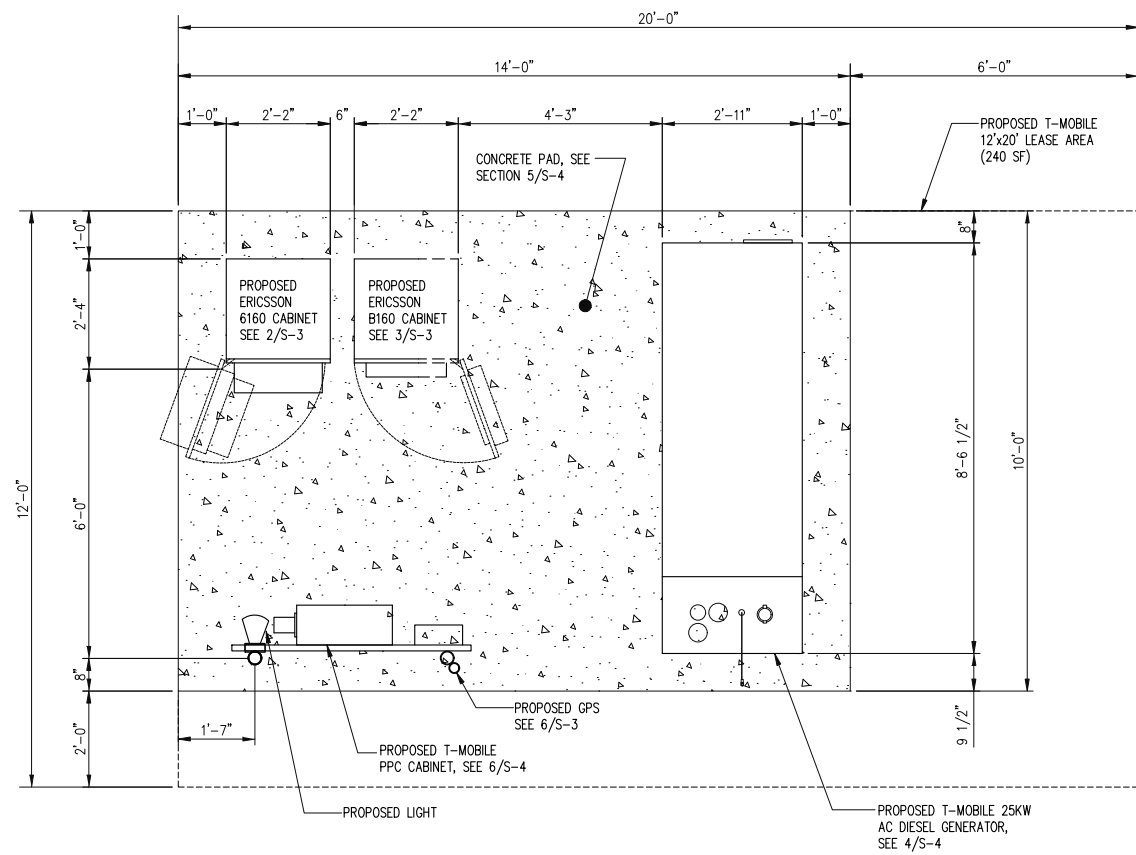
SCALE: 1 1/2"=1'-0"



GPS MOUNTING DETAIL

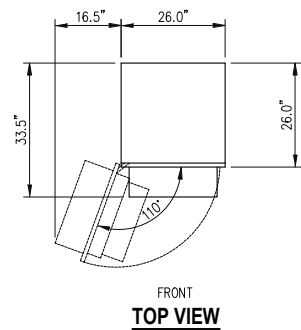
SCALE: 1-1/2"=1'-0"



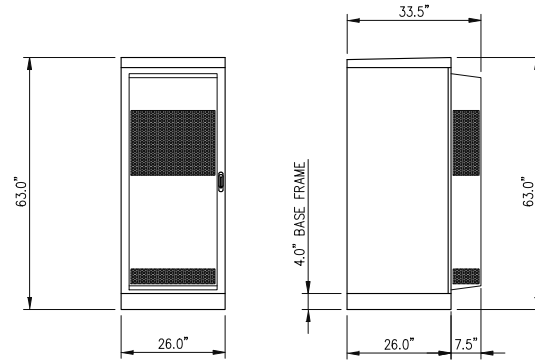


**EQUIPMENT LAYOUT PLAN**

SCALE: 1/2"=1'-0"



**FRONT TOP VIEW**



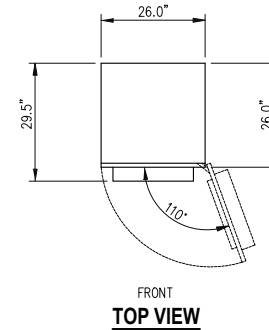
**FRONT VIEW**

**SIDE VIEW**

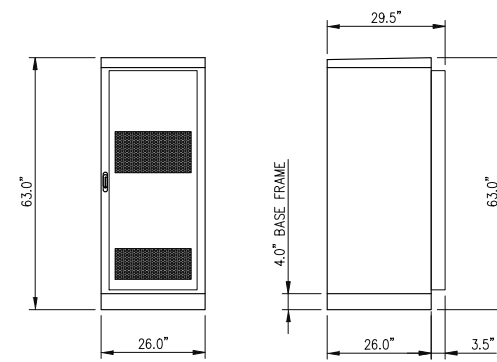
NOTE: CABINET WEIGHT: 320 LBS (EMPTY)  
CABINET WEIGHT: 1,500 LBS (FULLY LOADED)

**ERICSSON 6160 CABINET DETAIL**

SCALE: 1/2"=1'-0"



**FRONT TOP VIEW**



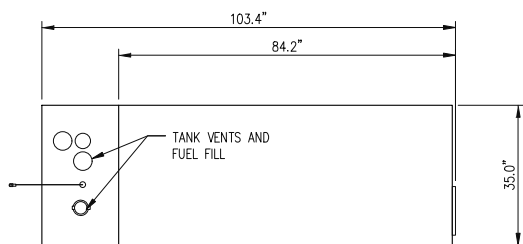
**FRONT VIEW**

**SIDE VIEW**

NOTE: CABINET WEIGHT: 295 LBS (EMPTY)  
CABINET WEIGHT: 2,000 LBS (FULLY LOADED)

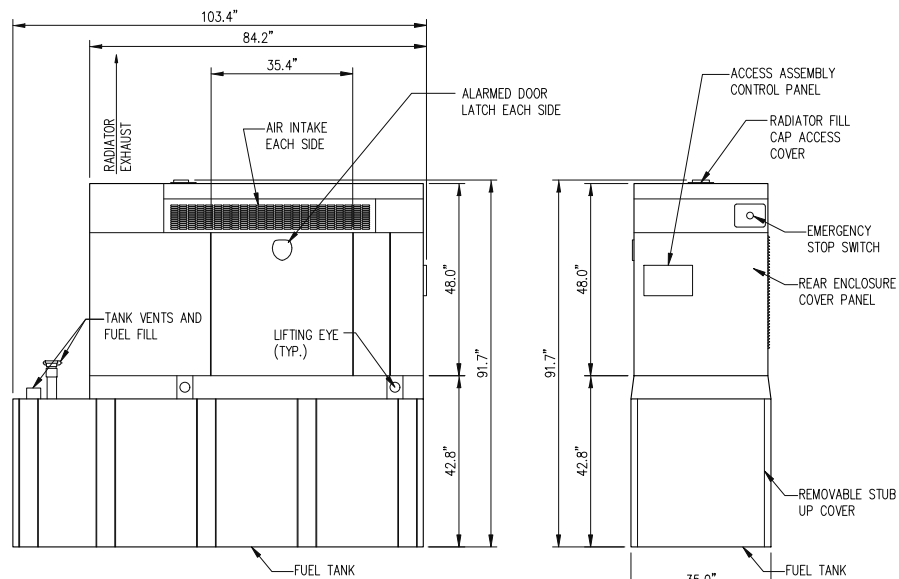
**ERICSSON B160 CABINET DETAIL**

SCALE: 1/2"=1'-0"



**PLAN VIEW**

SPECIFICATIONS:  
CONSTRUCTION: GENERAC, 25 KW STANDARD: G0071920  
2.2L, 25KW AC DIESEL GENERATOR  
DIMENSION: 103.4"Wx91.7"Hx35"D  
WEIGHT: TO BE DETERMINED

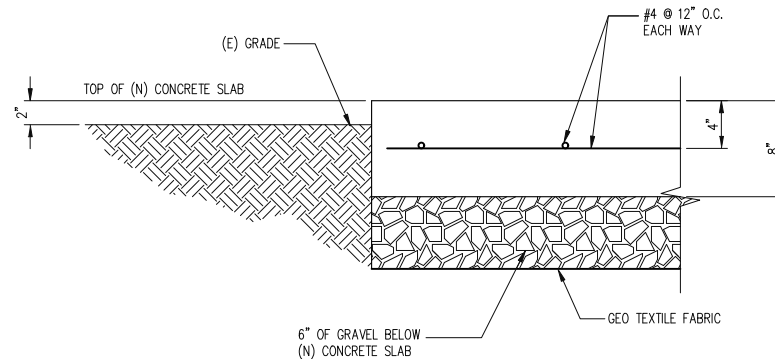


**LEFT SIDE VIEW**

**REAR VIEW**

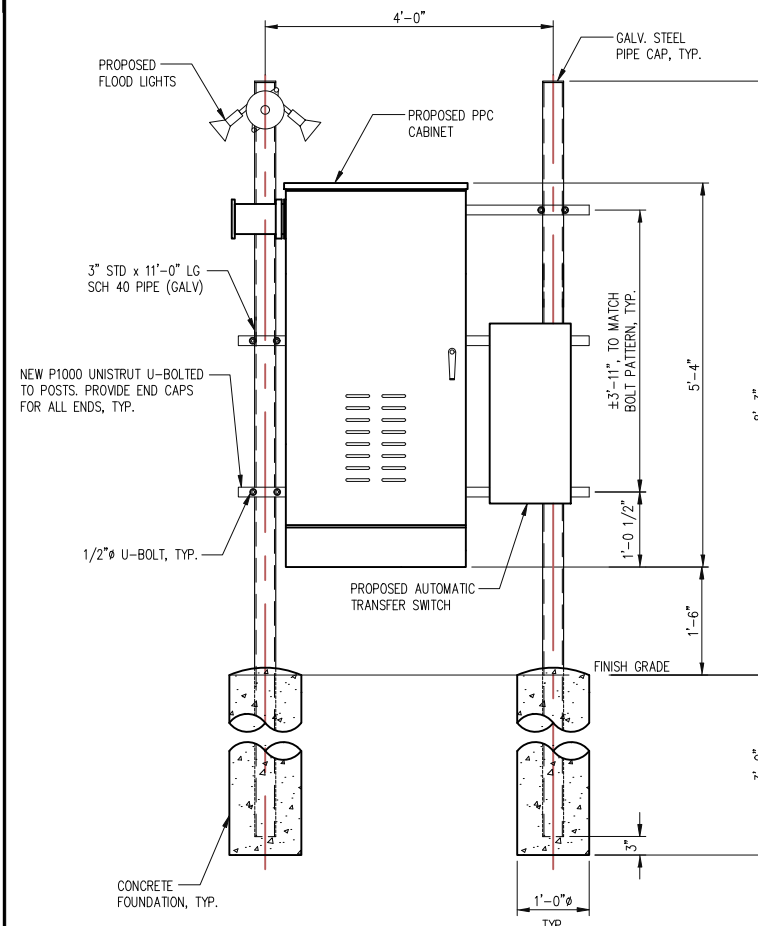
**GENERAC 2.2L, 25KW DIESEL AC GENERATOR DETAIL**

SCALE: 1/2" = 1'-0"



**CONCRETE PAD DETAIL**

SCALE: 1-1/2" = 1'-0"



**PPC SUPPORT FRAME ELEVATION**

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

**T-Mobile**  
T-MOBILE NORTHEAST LLC  
12050 BALTIMORE AVENUE  
BELTSVILLE, MD 20705  
PHONE: (240) 264-8600

**entrex**  
communication services, inc.  
6100 Executive Blvd, Suite 350  
Rockville, MD 20852  
PHONE: (202) 408-0960  
FAX: (202) 408-0961

**SITE LINK WIRELESS**  
Site Link Wireless, LLC  
3620 Commerce Drive, Suite 707  
Baltimore, MD 21227  
www.sitelinkwireless.com  
410-309-4949

**7WAS617B**  
DIAMOND MONOPOLE-MD045  
315 S CHURCH ROAD  
UPPER MARLBORO, MD 20774

SEAL:  
  
Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 17641, Expiration Date: 12/27/2021

**SUBMITTALS**

DATE	DESCRIPTION	REV.
12-26-18	CONSTRUCTION REVIEW	A
01-16-19	FINAL CONSTRUCTION	0
06-06-19	PERMIT COMMENTS	1
06-26-19	BP ELECTRICAL COMMENTS	2
12-16-20	CHANGE CABINETS	3
01-08-21	REVISE TO AC GENERATOR	4
03-12-21	COUNTY COMMENTS	5
08-09-21	CHANGE TO 3 SECTORS	6

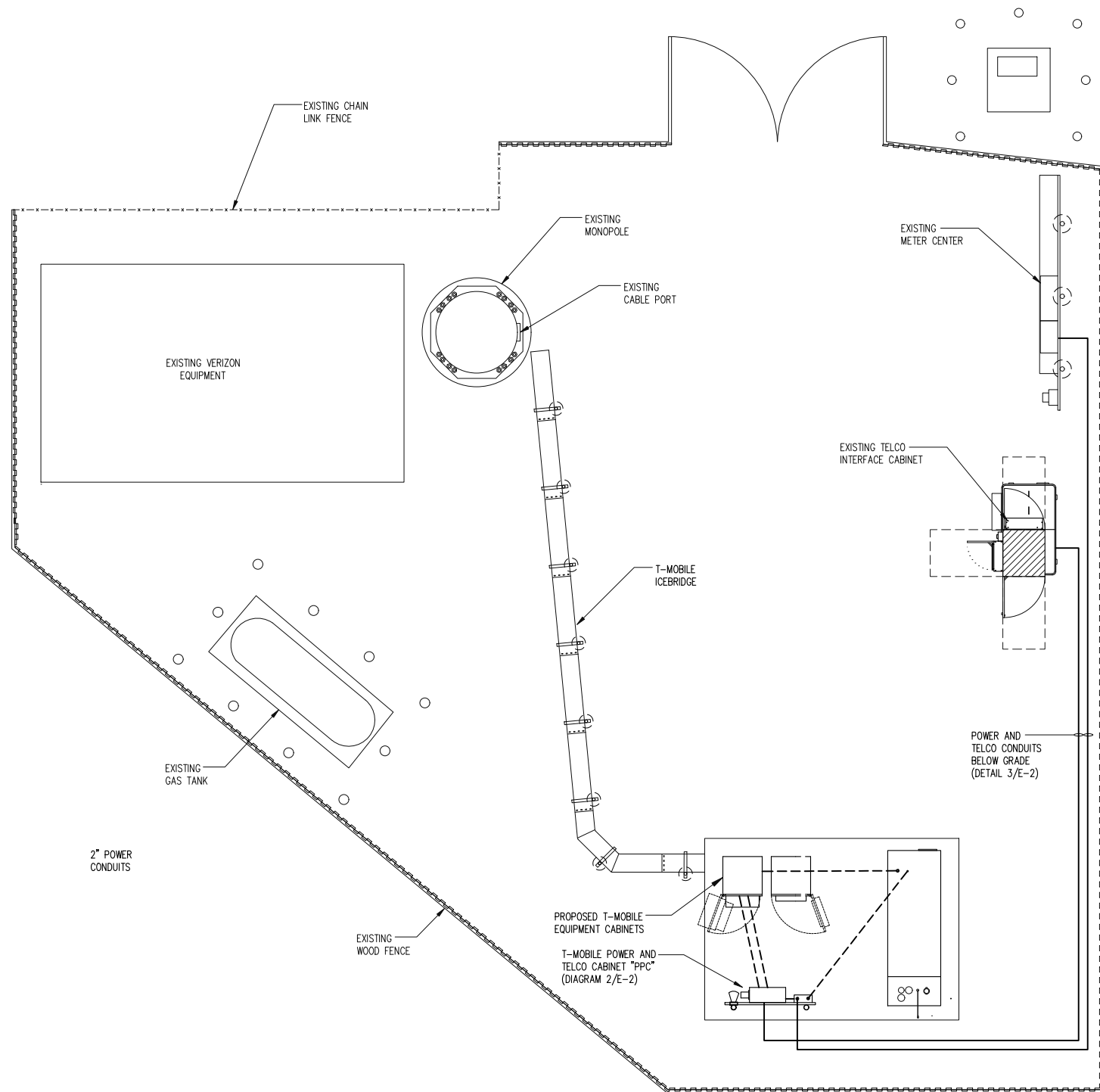
PROJECT NO: 1160.070  
DESIGNER: M.M.E.  
ENGINEER: C.S.  
THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"x34"  
0 1/2 1  
GRAPHIC SCALE IN INCHES

TITLE:  
**EQUIPMENT LAYOUT PLAN AND CABINET DETAILS**

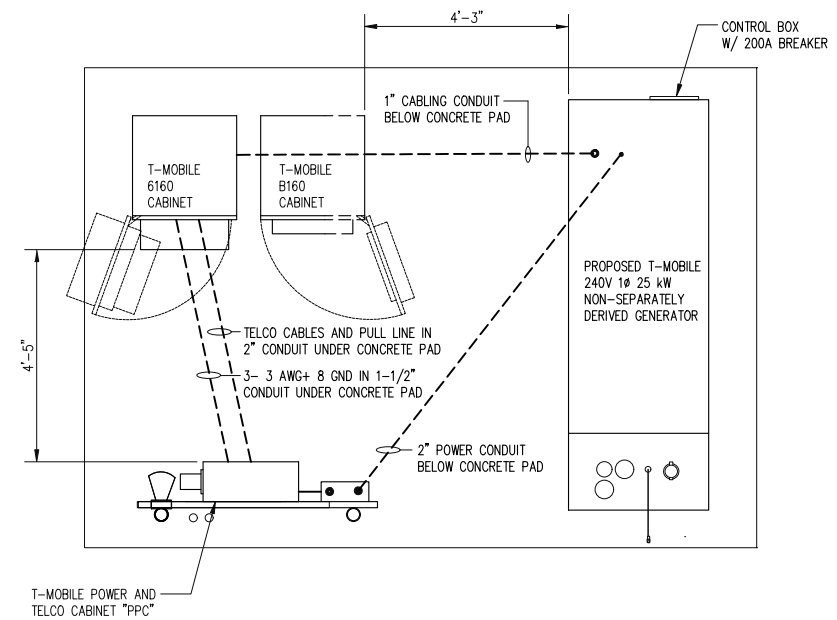
SHEET NUMBER:

**S-4**





**ELECTRICAL PLAN**  
SCALE: 1/4"=1'-0"  
1  
E-1



**CONDUIT ROUTING PLAN**  
SCALE: 1/2"=1'-0"  
2  
E-1

T-MOBILE PANEL PPC									
VOLTAGE: 120/240 1 PHASE 3 WIRE 200 AMP M.C.B. A.I.C. RATING: 65 kA									
LOAD DESCRIPTION	VA	B K R	C K T	L1	L2	C K T	B K R	VA	LOAD DESCRIPTION
T-MOBILE EQUIPMENT CABINET 6160	8400	100	1	8400	2	8400	60	8400	SURGE PROTECTIVE DEVICE
SPACE			3		4				
SPACE			5	180	6	20	180		PPC RECEPTACLE
SPACE			7		8	20	380		LIGHT AND RECEPT.
SPACE			9		10				SPACE
SPACE			11		12				SPACE
SPACE			13		14				SPACE
SPACE			15		16				SPACE
SPACE			17		18				SPACE
SPACE			19		20				SPACE
SPACE			21		22				SPACE
GENERATOR GFI RECEPT.	960	20	23	960	24				SPACE
				8580	9740				
									TOTAL kVA: 18.32

T-MOBILE PANEL CAPACITY: 48 kVA; PANEL PPC CONNECTED LOAD: 18.32 kVA  
18.32 kVA x 1.25 (CONTINUOUS LOAD FACTOR) = 22.9 kVA  
THE CONNECTED LOAD DOES NOT EXCEED THE PANEL'S CAPACITY.

5

**T-Mobile**  
T-MOBILE NORTHEAST LLC  
12050 BALTIMORE AVENUE  
BELTSVILLE, MD 20705  
PHONE: (240) 264-8600

**entrex**  
communication services, inc.  
6100 Executive Blvd, Suite 350  
Rockville, MD 20852  
PHONE: (202) 408-0960  
FAX: (202) 408-0961

**SITE LINK WIRELESS**  
Site Link Wireless, LLC  
3620 Commerce Drive, Suite 707  
Baltimore, MD 21227  
www.sitelinkwireless.com  
410-309-4949

7WAS617B  
DIAMOND MONOPOLE-MD045  
315 S CHURCH ROAD  
UPPER MARLBORO, MD 20774

SEAL:  
  
Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 17641, Expiration Date: 12/27/2021

SUBMITTALS		
DATE	DESCRIPTION	REV.
12-26-18	CONSTRUCTION REVIEW	A
01-16-19	FINAL CONSTRUCTION	0
06-06-19	PERMIT COMMENTS	1
06-26-19	BP ELECTRICAL COMMENTS	2
12-16-20	CHANGE CABINETS	3
01-08-21	REVISE TO AC GENERATOR	4
03-12-21	COUNTY COMMENTS	5
08-09-21	CHANGE TO 3 SECTORS	6

PROJECT NO: 1160.070  
DESIGNER: N.B.  
ENGINEER: C.S.  
THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"x34"  
0 1/2 1  
GRAPHIC SCALE IN INCHES

TITLE:  
**ELECTRICAL PLANS AND PANEL SCHEDULE**

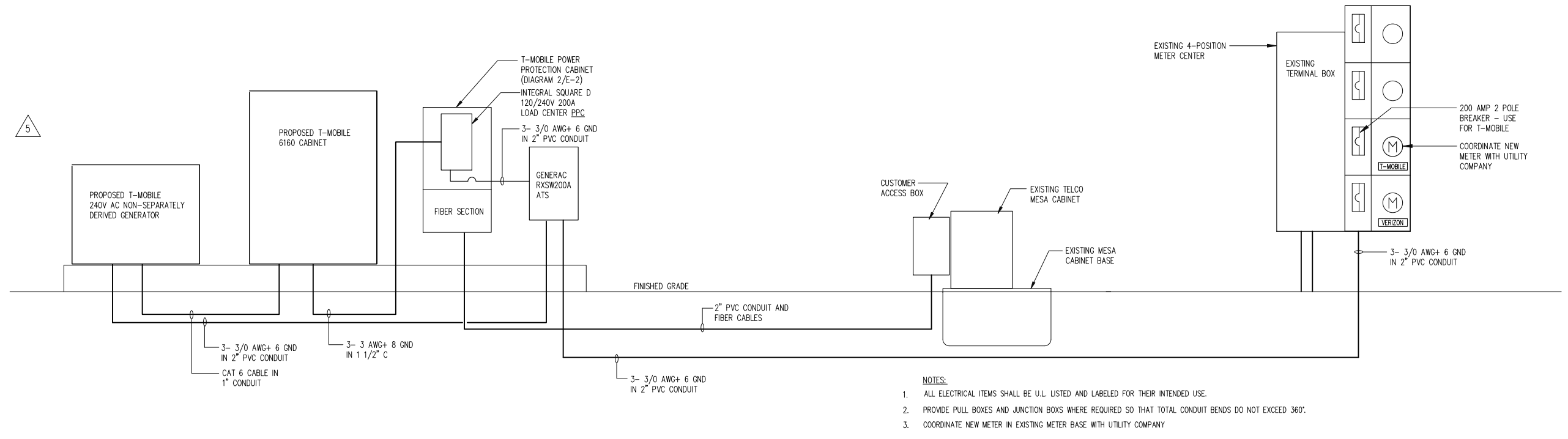
SHEET NUMBER:  
**E-1**

**SUBMITTALS**

DATE	DESCRIPTION	REV.
12-26-18	CONSTRUCTION REVIEW	A
01-16-19	FINAL CONSTRUCTION	0
06-06-19	PERMIT COMMENTS	1
06-26-19	BP ELECTRICAL COMMENTS	2
12-16-20	CHANGE CABINETS	3
01-08-21	REVISE TO AC GENERATOR	4
03-12-21	COUNTY COMMENTS	5
08-09-21	CHANGE TO 3 SECTORS	6

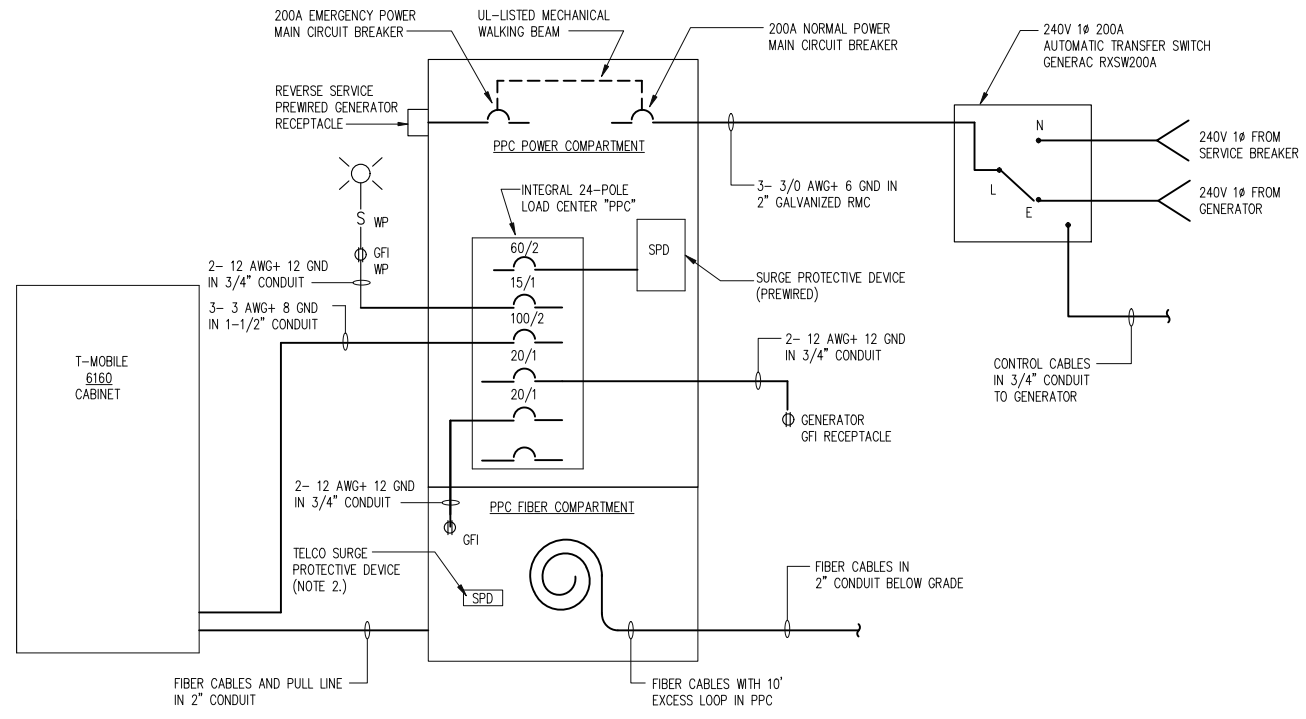
PROJECT NO: 1160.070  
 DESIGNER: N.B.  
 ENGINEER: C.S.  
 THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"x34"  
 0 1/2 1  
 GRAPHIC SCALE IN INCHES

TITLE:  
**POWER DIAGRAMS AND DETAIL**  
 SHEET NUMBER:  
**E-2**



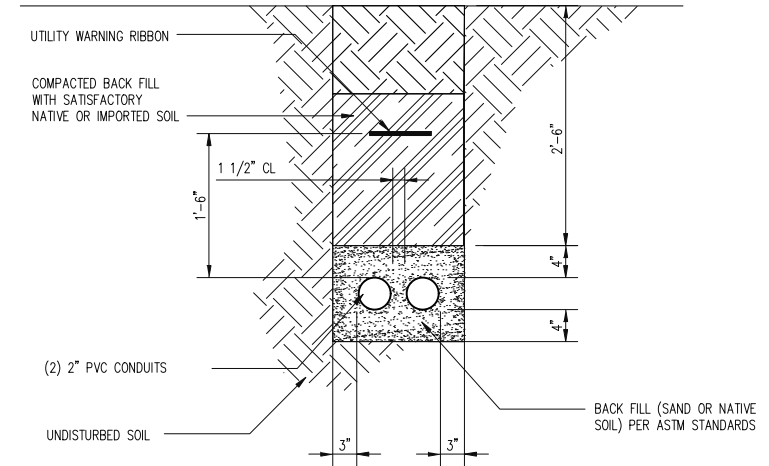
- NOTES:**
- ALL ELECTRICAL ITEMS SHALL BE U.L. LISTED AND LABELED FOR THEIR INTENDED USE.
  - PROVIDE PULL BOXES AND JUNCTION BOXES WHERE REQUIRED SO THAT TOTAL CONDUIT BENDS DO NOT EXCEED 360°.
  - COORDINATE NEW METER IN EXISTING METER BASE WITH UTILITY COMPANY

**UTILITY RISER DIAGRAM**  
 SCALE: N.T.S.



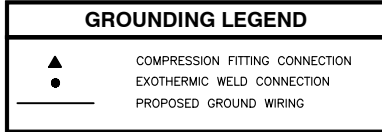
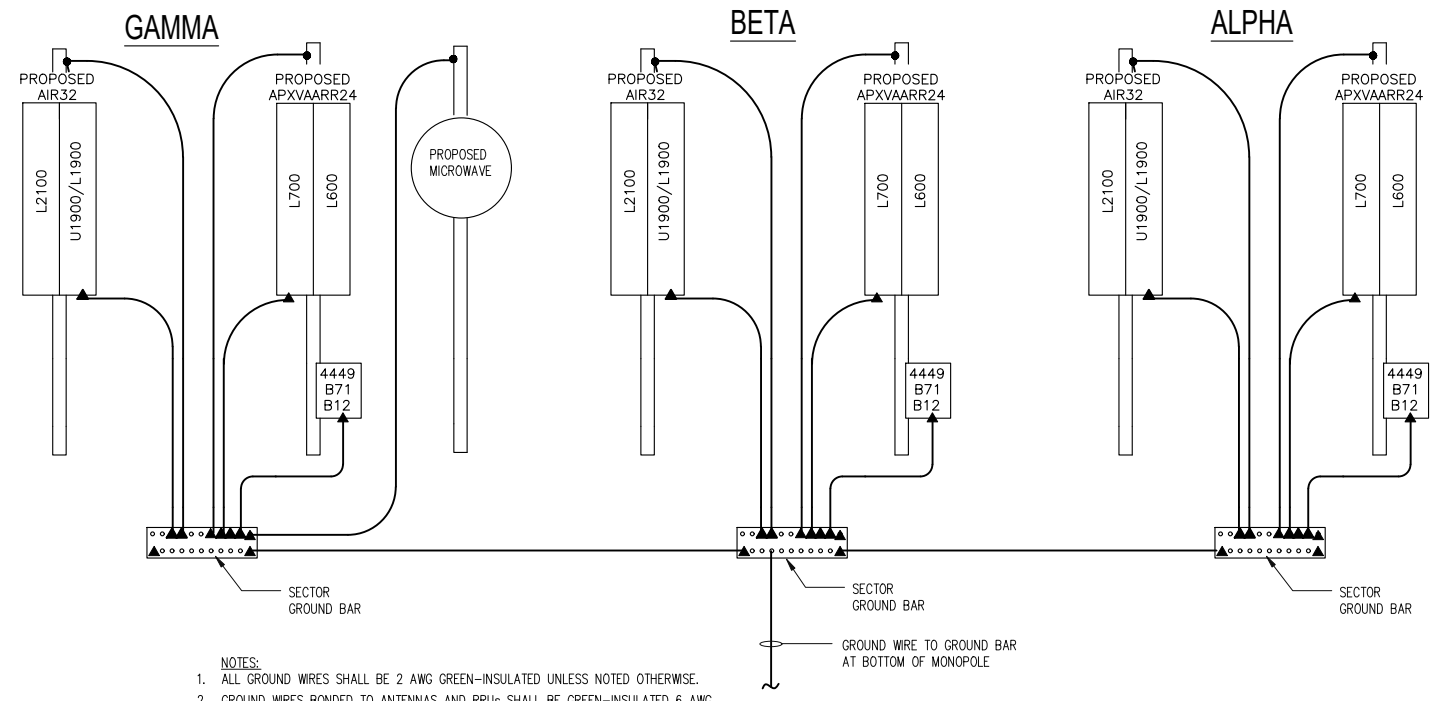
- NOTES:**
- PPC ENCLOSURE, A.T.S. AND NFSS ARE RATED NEMA 3R.
  - BOND TELCO SURGE PROTECTIVE DEVICE TO TELCO GROUND BUSS WITH 2 AWG GREEN-INSULATED WIRE.

**POWER ONE-LINE DIAGRAM**  
 SCALE: N.T.S.



- NOTES:**
- EACH CONDUIT SHALL HAVE ONE "POLYOLEFIN", 1000 POUNDS STRESS PULL LINE INSTALLED, TO ACCOMMODATE THE PULLING CABLE.

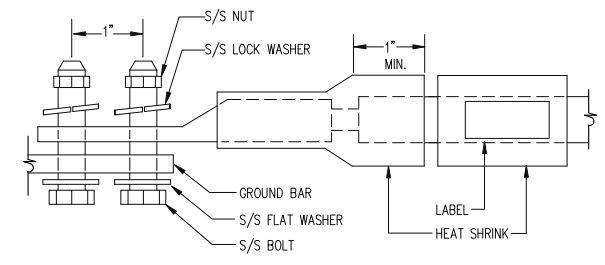
**CONDUIT BURIAL DETAIL**  
 SCALE: 1" = 1'-0"



- NOTES:
1. ALL GROUND WIRES SHALL BE 2 AWG GREEN-INSULATED UNLESS NOTED OTHERWISE.
  2. GROUND WIRES BONDED TO ANTENNAS AND RRU'S SHALL BE GREEN-INSULATED 6 AWG.

**ANTENNA GROUNDING DIAGRAM**  
SCALE: N.T.S.

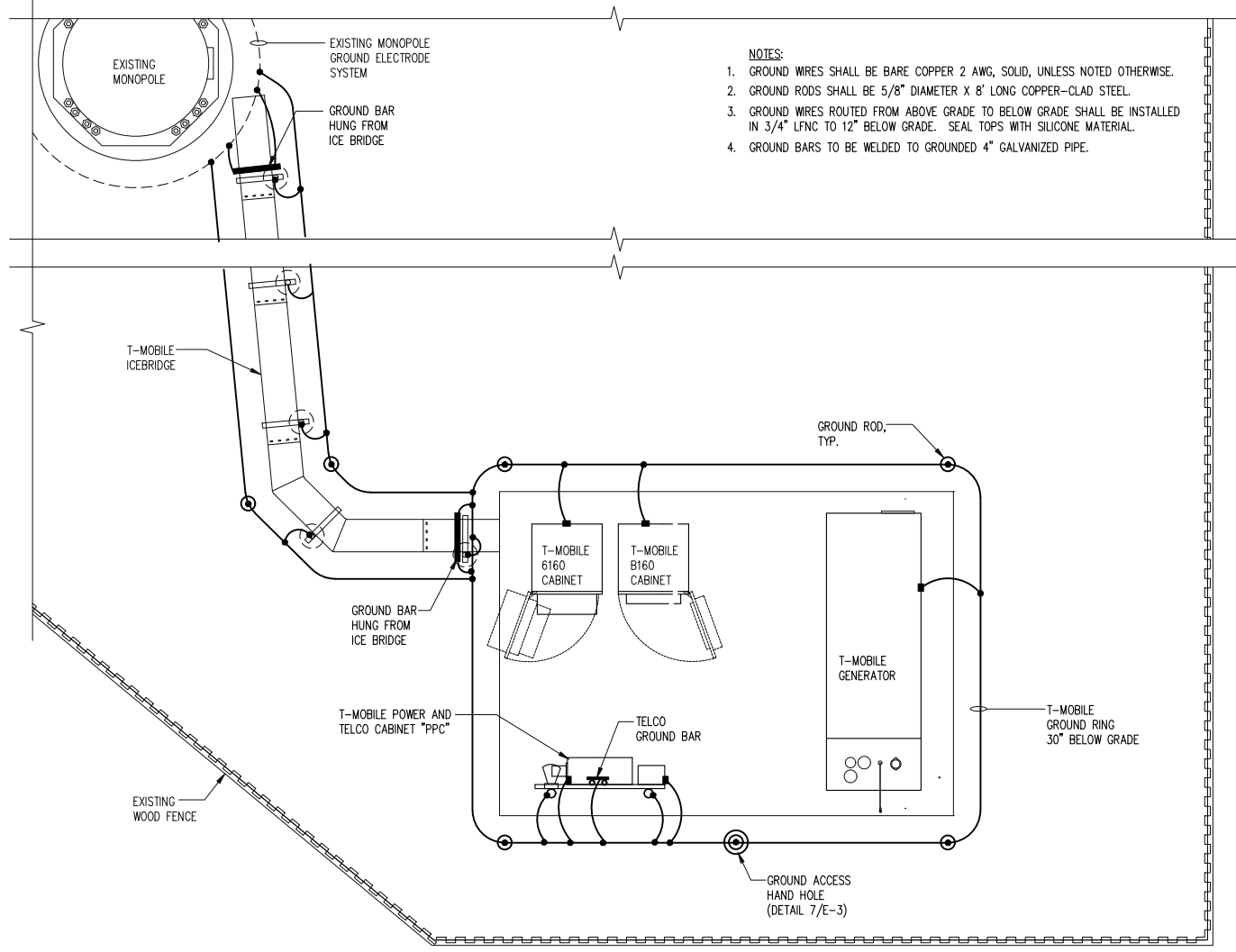
1  
E-3



- LUG NOTES:
1. ALL HARDWARE IS 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS.
  2. ALL HARDWARE SHALL BE S/S 3/8-INCH DIAMETER OR LARGER.
  3. FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON-TOOTH WASHER BETWEEN LUG AND STEEL AND COAT ALL SURFACES WITH ANTI-OXIDIZATION COMPOUND PRIOR TO MATING.

**LUG DETAIL**  
SCALE: TO SCALE

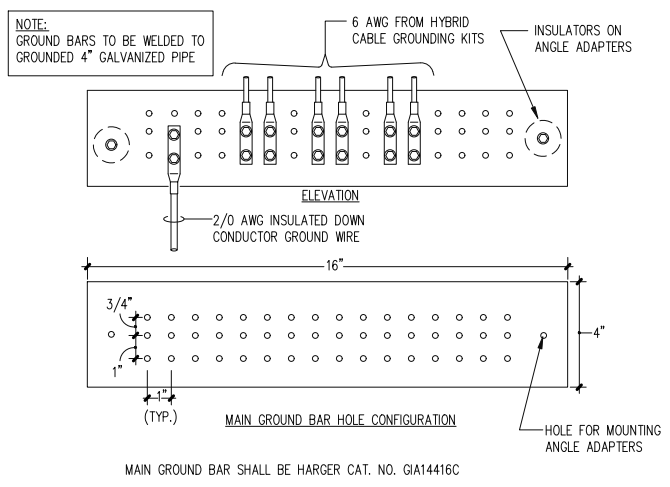
5  
E-3



- NOTES:
1. GROUND WIRES SHALL BE BARE COPPER 2 AWG, SOLID, UNLESS NOTED OTHERWISE.
  2. GROUND RODS SHALL BE 5/8" DIAMETER X 8' LONG COPPER-CLAD STEEL.
  3. GROUND WIRES ROUTED FROM ABOVE GRADE TO BELOW GRADE SHALL BE INSTALLED IN 3/4" LFNC TO 12" BELOW GRADE. SEAL TOPS WITH SILICONE MATERIAL.
  4. GROUND BARS TO BE WELDED TO GROUNDED 4" GALVANIZED PIPE.

**COMPOUND PLAN - GROUNDING**  
SCALE: 3/8"=1'-0"

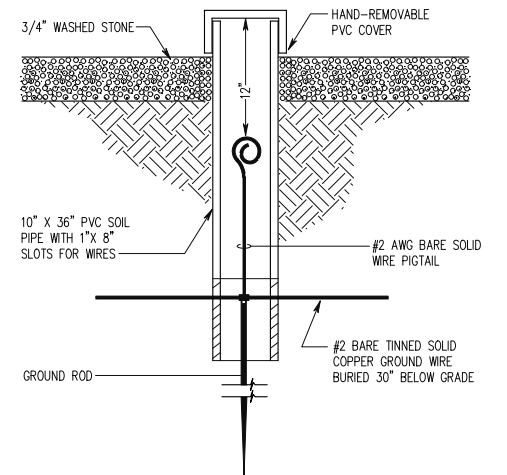
2  
E-3



- NOTE: GROUND BARS TO BE WELDED TO GROUNDED 4" GALVANIZED PIPE

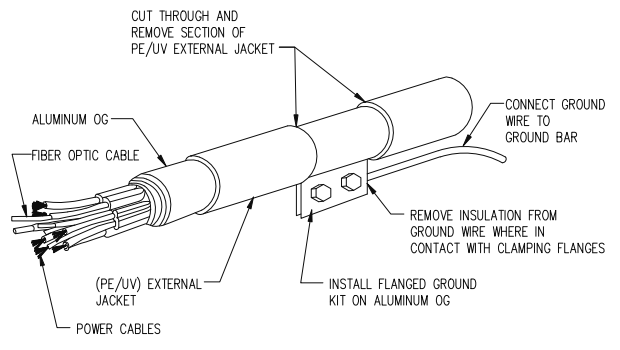
**MAIN GROUND BAR DETAILS**  
SCALE: N.T.S.

3  
E-3



**GROUND ACCESS HANDHOLE**  
SCALE: N.T.S.

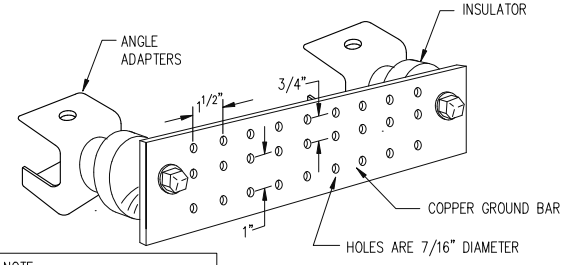
7  
E-3



- NOTES:
1. CLAMP #6 GROUND WIRE BETWEEN FLANGES AND FORM BOND WITH COMPRESSION HARDWARE PROVIDED WITH KIT.
  2. FOLLOWING INSTALLATION OF GROUND KIT, WATERPROOF ASSEMBLY WITH WATERPROOFING KIT AND TAPE.

**HYBRID GROUNDING KIT DETAIL**  
SCALE: N.T.S.

4  
E-3



- NOTE: GROUND BARS TO BE WELDED TO GROUNDED 4" GALVANIZED PIPE

- LEGEND
1. COPPER GROUND BAR, MANUFACTURED BY HARGER
  2. MAIN GROUND BARS SHALL BE CAT. NO. GBIA-14420-J GBIA INDICATES GROUND BAR INCLUDING ANGLE ADAPTERS AND INSULATORS 14420 INDICATES DIMENSIONS OF 1/4" THICK X 4" HIGH X 20" LONG J INDICATES FACTORY-DRILLED HOLE PATTERN SHOWN ABOVE
  3. SECTOR GROUND BARS SHALL BE CAT. NO. GBIA-14412-J (12" LENGTH)

**GROUND BAR ISOMETRIC**  
SCALE: N.T.S.

8  
E-3

**T-Mobile**

T-MOBILE NORTHEAST LLC  
12050 BALTIMORE AVENUE  
BELTSVILLE, MD 20705  
PHONE: (240) 264-8600

**entrex**  
communication services, inc.  
6100 Executive Blvd, Suite 350  
Rockville, MD 20852  
PHONE: (202) 408-0960  
FAX: (202) 408-0961

**SITE LINK WIRELESS**

Site Link Wireless, LLC  
3620 Commerce Drive, Suite 707  
Baltimore, MD 21227  
www.sitelinkwireless.com  
410-309-4949

7WAS617B  
DIAMOND MONOPOLE-MD045  
315 S CHURCH ROAD  
UPPER MARLBORO, MD 20774

SEAL:

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 17641, Expiration Date: 12/27/2021

**SUBMITTALS**

DATE	DESCRIPTION	REV.
12-26-18	CONSTRUCTION REVIEW	A
01-16-19	FINAL CONSTRUCTION	0
06-06-19	PERMIT COMMENTS	1
06-26-19	BP ELECTRICAL COMMENTS	2
12-16-20	CHANGE CABINETS	3
01-08-21	REVISE TO AC GENERATOR	4
03-12-21	COUNTY COMMENTS	5
08-09-21	CHANGE TO 3 SECTORS	6

PROJECT NO: 1160.070  
DESIGNER: N.B.  
ENGINEER: C.S.

THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"x34"

0 1/2 1  
GRAPHIC SCALE IN INCHES

**GROUNDING DIAGRAM, PLAN AND DETAILS**

SHEET NUMBER:  
**E-3**