



# AT&T

Mobility



Know what's below.  
Call before you dig.

SITE NAME: NSB-CO.BDN\_ADD\_4591\_COL02148\_Peyton  
 SITE NUMBER: COL02148  
 FA NUMBER: 12871723  
 PROJECT NUMBER: 3755A0HK10  
 USID: 274070  
 PACE NUMBER: MRUTH029076  
 AT&T SITE ADDRESS: 12960 N PEYTON HWY  
 PEYTON, CO 80831  
 STRUCTURE TYPE: 119'-0" MONOPOLE  
 PROJECT TYPE: NEW SITE BUILD  
 PROJECTS: LTE 1C 2C 3C 4C 5C 6C

PREPARED BY:  
**NEXIUS**  
 NEXIUS SOLUTIONS, INC.  
 2595 NORTH DALLAS PARKWAY  
 SUITE 300  
 FRISCO, TX 75034

CLIENT:  
  
 161 INVERNESS DR W, 2ND FLOOR  
 ENGLEWOOD, COLORADO 80112

FOR CONSTRUCTION



*Jordan Phillips*  
 DATE SIGNED: 10/15/20  
 PE LICENSE RENEWAL: 10/31/21



DATE SIGNED: 10/15/20  
 PE LICENSE RENEWAL: 10/31/21

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SITE INFORMATION	
SITE NAME:	NSB-CO.BDN_ADD_4591_COL02148_Peyton
SITE NUMBER:	COL02148
FA LOCATION CODE:	12871723
ADDRESS:	12960 N PEYTON HWY
CITY, STATE ZIP:	PEYTON, CO 80831
COUNTY:	EL PASO
LATITUDE:	39.016900°
LONGITUDE:	-104.482000°
GROUND ELEVATION:	6855' A.M.S.L.
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	99'-0" A.G.L. W/ 20'-0" EXTENSION (119'-0" A.G.L.)
APPLICANT:	AT&T MOBILITY 161 INVERNESS DR W, 2ND FLOOR ENGLEWOOD, COLORADO 80112
SITE ACQUISITION:	NEXIUS SOLUTIONS, INC. 7025 S FULTON ST, SUITE 100 CENTENNIAL, CO 80112
A&E SERVICES:	NEXIUS SOLUTIONS, INC. 2595 DALLAS PKWY FRISCO, TX 75034 (972) 581-9888
POWER PROVIDER:	MVEA
TELCO PROVIDER:	TBD
TOWER OWNER:	AMERICAN TOWER CORPORATION
JURISDICTION:	EL PASO COUNTY
PARCEL #:	3207000007
PARCEL OWNER:	LONGHORN ACRES LAND & CATTLE LLC
ZONING DESIGNATION:	A-35: AGRICULTURAL



### DRIVING DIRECTIONS

FROM AT&T OFFICE:

- GET ON I-25 S IN CENTENNIAL FROM INVERNESS BLVD AND E DRY CREEK RD
- HEAD NORTHEAST TOWARD INVERNESS DR W
- TURN LEFT TOWARD INVERNESS BLVD
- TURN RIGHT ONTO INVERNESS BLVD
- TURN LEFT AT THE 1ST CROSS STREET ONTO INVERNESS DR W
- USE THE LEFT LANE TO TURN LEFT ONTO E DRY CREEK RD
- USE THE LEFT 2 LANES TO TURN LEFT TO MERGE ONTO I-25 S
- FOLLOW I-25 S TO S COUNTY LINE RD/PALMER DIVIDE RD IN DOUGLAS COUNTY. TAKE EXIT 163 FROM I-25 S
- MERGE ONTO I-25 S
- TAKE EXIT 163 FOR COUNTY LINE RD TOWARD PALMER LAKE
- CONTINUE ON S COUNTY LINE RD/PALMER DIVIDE RD TO YOUR DESTINATION IN PEYTON
- TURN LEFT ONTO S COUNTY LINE RD/PALMER DIVIDE RD
- TURN RIGHT ONTO CO-83 S
- TURN LEFT ONTO HODGEN RD
- TURN RIGHT ONTO EASTONVILLE RD
- TURN LEFT ONTO MURPHY RD
- TURN RIGHT ONTO PEYTON HWY
- TURN LEFT TO STAY ON PEYTON HWY
- TURN RIGHT

### CODE COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH CURRENT EDITIONS OF THE FOLLOWING APPLICABLE CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES.

- 2018 INTERNATIONAL BUILDING CODE
- 2020 NATIONAL ELECTRICAL CODE
- ADOPTED CITY/COUNTY ORDINANCES
- ALL CODES SUBJECT TO LOCAL JURISDICTION REQUIREMENTS

THESE DRAWINGS ARE DESIGNED TO THE LATEST CODES. THEY ALSO MEET THE ADOPTED CODE REQUIREMENTS OF THE JURISDICTION.

### SCOPE OF WORK

THE PURPOSE OF THIS PROJECT IS AS FOLLOWS:

<b>TOWER SCOPE OF WORK:</b>	<b>GROUND SCOPE OF WORK:</b>
-INSTALLATION OF (6) PANEL ANTENNAS	-INSTALLATION OF H-FRAME MOUNTED ON FENCE
-INSTALLATION OF (4) SECTOR MOUNTS	-INSTALLATION OF WALK UP TO CABINET (WUC)
-INSTALLATION OF (3) SQUIDS	-INSTALLATION OF (2) DC12s
-INSTALLATION OF (9) RRHs	-INSTALLATION OF (1) PTLC
-INSTALLATION OF (6) DC POWER TRUNKS	-INSTALLATION OF 30KW GENERATOR
-INSTALLATION OF (3) FIBER TRUNKS	-INSTALLATION OF (1) CONCRETE PAD
-20'-0" EXTENSION OF MONOPOLE (BY OTHERS)	-INSTALLATION OF ICE BRIDGE
-INSTALLATION OF (2) EW63 WAVEGUIDES	-INSTALLATION OF (1) WUC PLATFORM
-INSTALLATION OF (1) 6'-0" MICROWAVE DISH @65'-0" AGL	
-INSTALLATION OF (2) RM-DM-6 MONOPOLE MOUNTS	
-INSTALLATION OF (1) 6'-0" ICE SHIELD	

### GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE. POTABLE WATER OR TRASH DISPOSAL IS NOT REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

### SHEET INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
LS-1	LAND SURVEY
LS-2	LAND SURVEY
C-1	SITE PLAN
C-2	ENLARGED SITE PLAN
C-3	ANTENNA PLAN AND MOUNT
C-4	TOWER ELEVATION
C-5	ICE BRIDGE DETAILS
C-6	GENERATOR DETAILS
C-7	WUC DETAILS
C-8	EQUIPMENT DETAILS (1 OF 5)
C-9	EQUIPMENT DETAILS (2 OF 5)
C-10	EQUIPMENT DETAILS (3 OF 5)
C-11	EQUIPMENT DETAILS (4 OF 5)
C-12	EQUIPMENT DETAILS (5 OF 5)
C-13	ICE SHIELD DETAILS (1 OF 2)
C-14	ICE SHIELD DETAILS (2 OF 2)
C-15	WUC PLATFORM DETAILS
S-1	GENERATOR FOUNDATION DETAILS
E-1	ELECTRICAL NOTES
E-2	POWER PANEL SCHEDULE
E-3	ELECTRICAL DETAILS
E-4	SERVICE RACK DETAILS
G-1	GROUNDING PLAN AND DETAILS
G-2	ANTENNA GROUNDING DETAILS
G-3	ANTENNA GROUNDING DETAILS
G-4	GROUNDING DETAILS
GN-1	GENERAL NOTES

### APPROVALS

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS.

NEXIUS LEASING/SITE ACQUISITION:	DATE:
NEXIUS A&E:	DATE:
NEXIUS CM:	DATE:
AT&T CM:	DATE:
AT&T RF:	DATE:

### SUBMITTALS

REV	DATE	DESCRIPTION	BY
C	03/20/20	FOR REVIEW	RA
D	04/16/20	FOR REVIEW	RA
0	04/22/20	FINAL CD	RA
1	08/24/20	REVISED CD	RA
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PROJECTS: LTE 1C 2C 3C 4C 5C 6C

DRAWN BY: RA DATE: 01/02/20

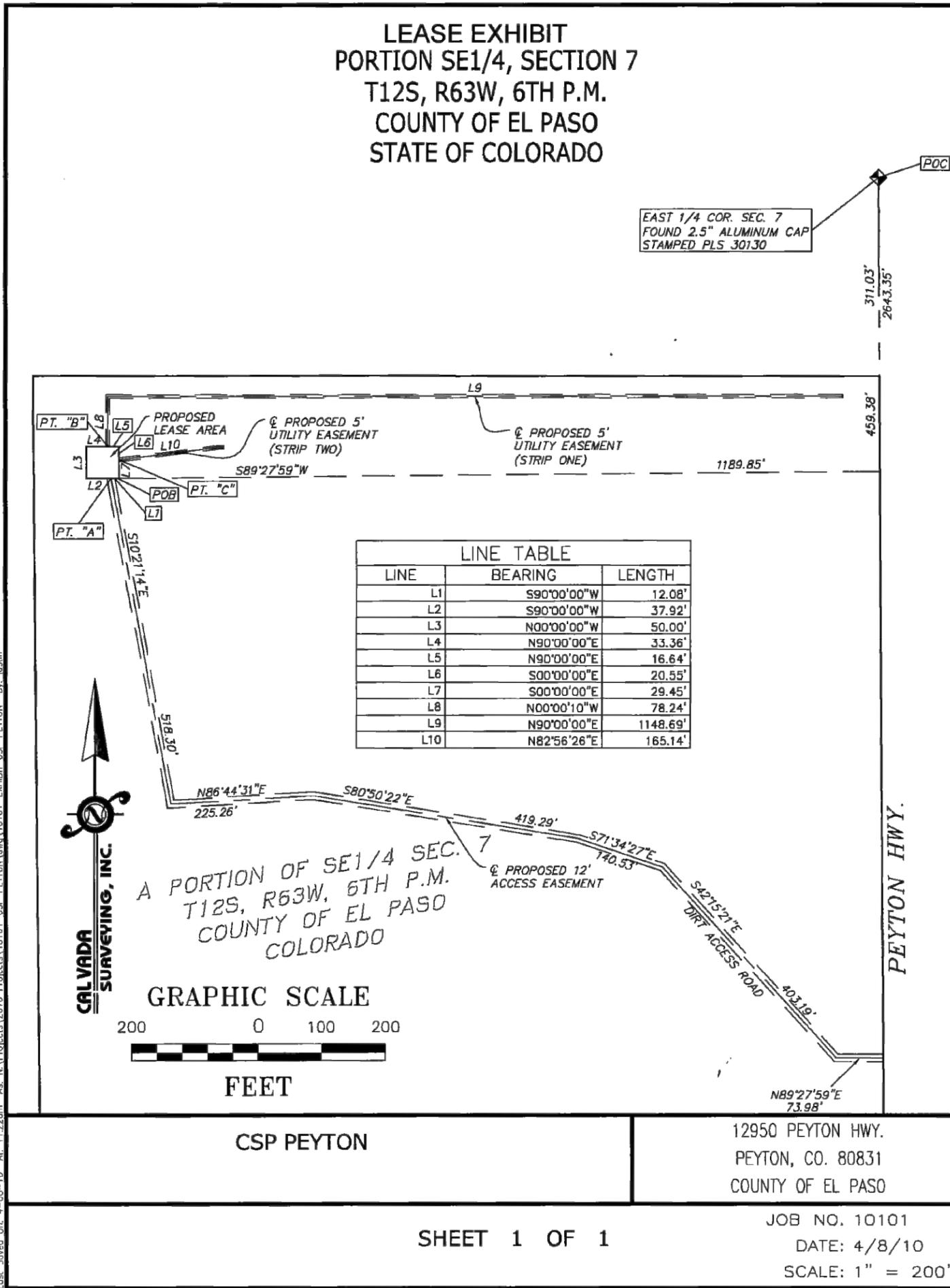
CHECKED BY: RA DATE: 10/15/20

SHEET TITLE: **TITLE SHEET**

SHEET NUMBER: **T-1**



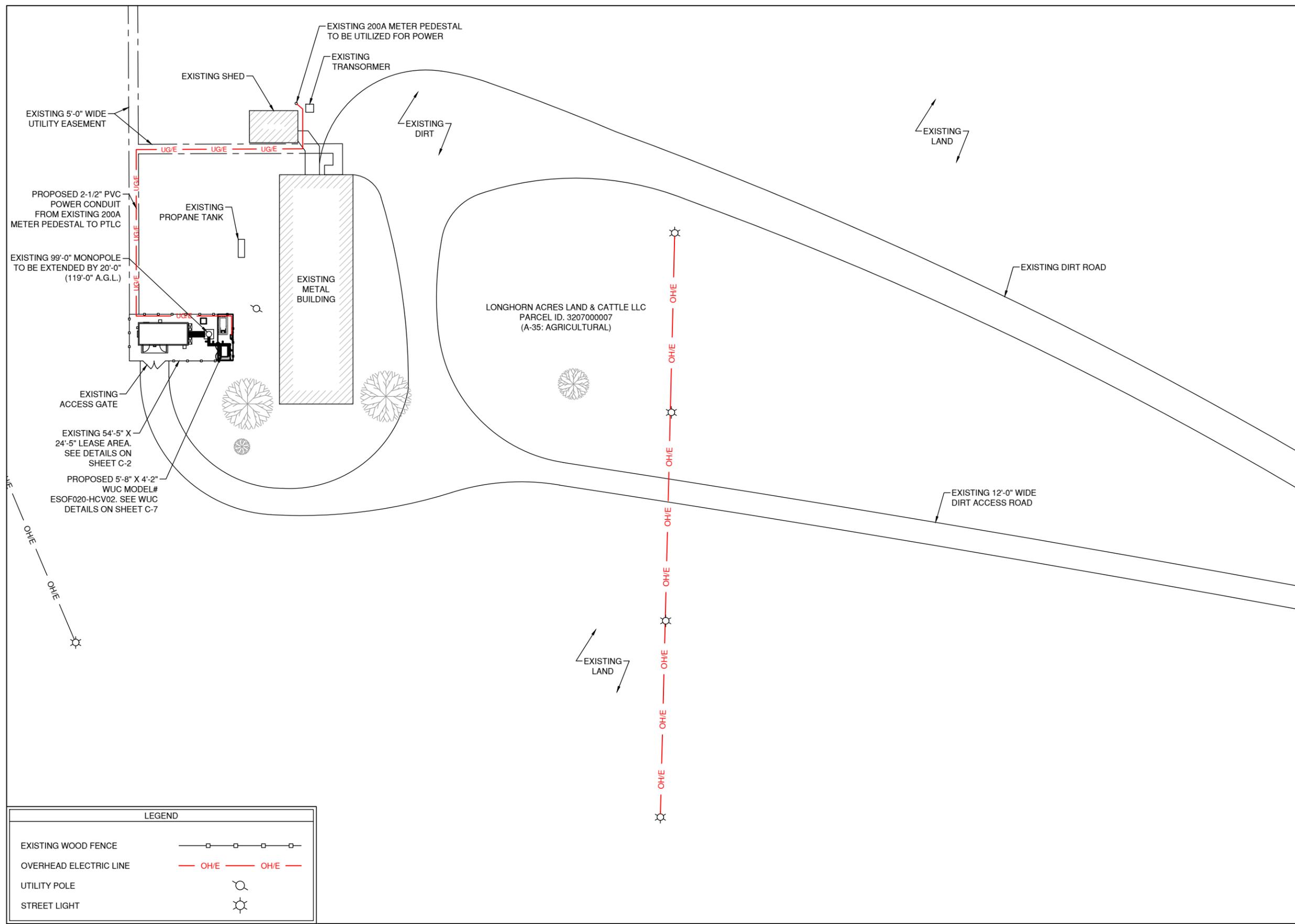
LEASE EXHIBIT  
 PORTION SE1/4, SECTION 7  
 T12S, R63W, 6TH P.M.  
 COUNTY OF EL PASO  
 STATE OF COLORADO



Last Saved On: 4-08-10 At: 11:22am As: N:\Projects\2010 Projects\10101-CSP PEYTON\dwg\10101-EXHIBIT CSP PEYTON Br. Justin

CSP PEYTON

12950 PEYTON HWY.  
 PEYTON, CO. 80831  
 COUNTY OF EL PASO



LEGEND	
EXISTING WOOD FENCE	
OVERHEAD ELECTRIC LINE	
UTILITY POLE	
STREET LIGHT	

**1 SITE PLAN**  
SCALE: 1:50



PREPARED BY:  
**nexus**  
NEXIUS SOLUTIONS, INC.  
2595 NORTH DALLAS PARKWAY  
SUITE 300  
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SHEET TITLE:  
**SITE PLAN**

SHEET NUMBER:  
**C-1**

PREPARED BY:

**nexius**

NEXIUS SOLUTIONS, INC.  
2595 NORTH DALLAS PARKWAY  
SUITE 300  
FRISCO, TX 75034

CLIENT:



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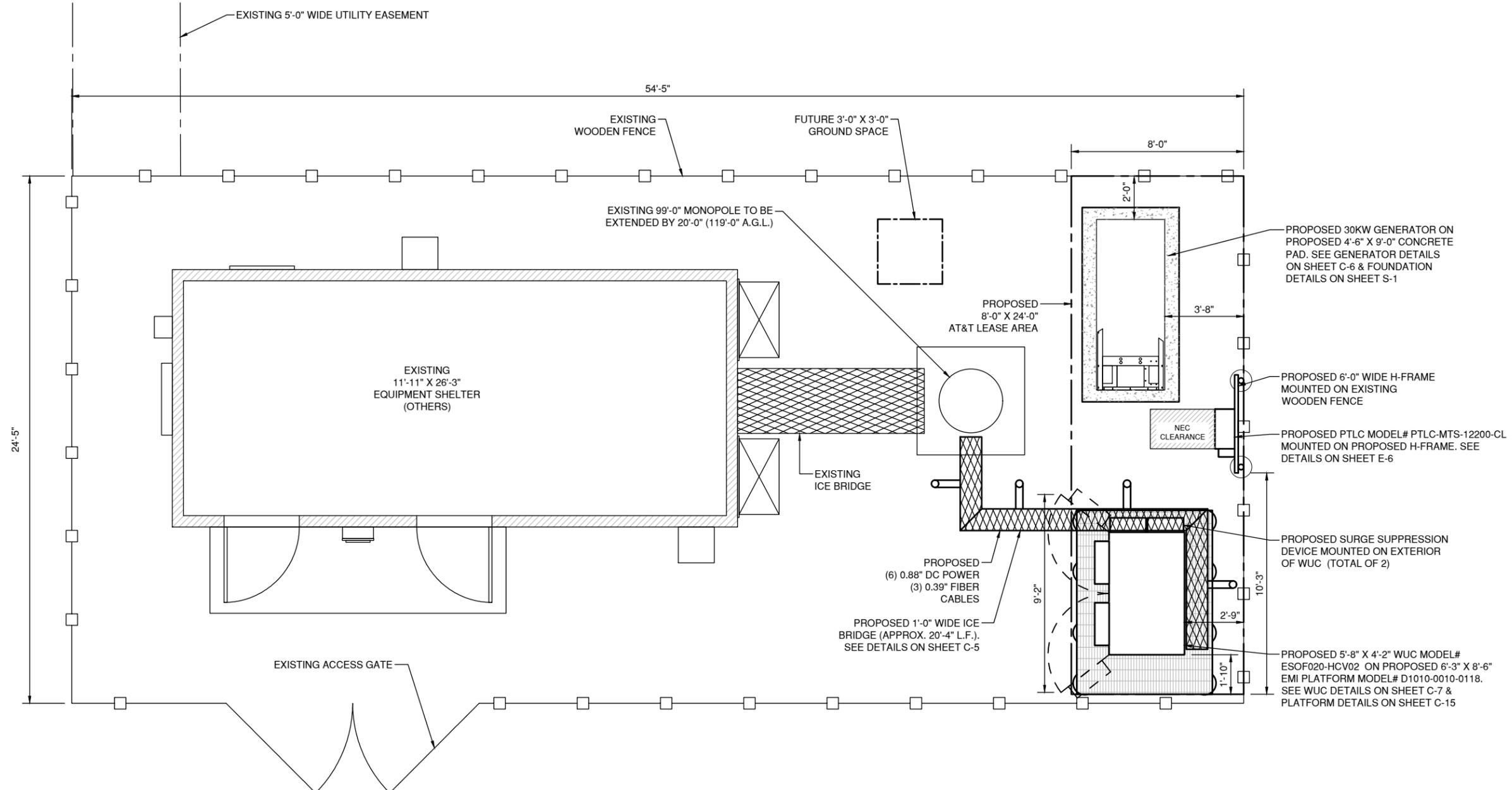
DRAWN BY: RA DATE: 01/02/20

CHECKED BY: RA DATE: 10/15/20

SHEET TITLE:  
**ENLARGED SITE PLAN**

SHEET NUMBER:

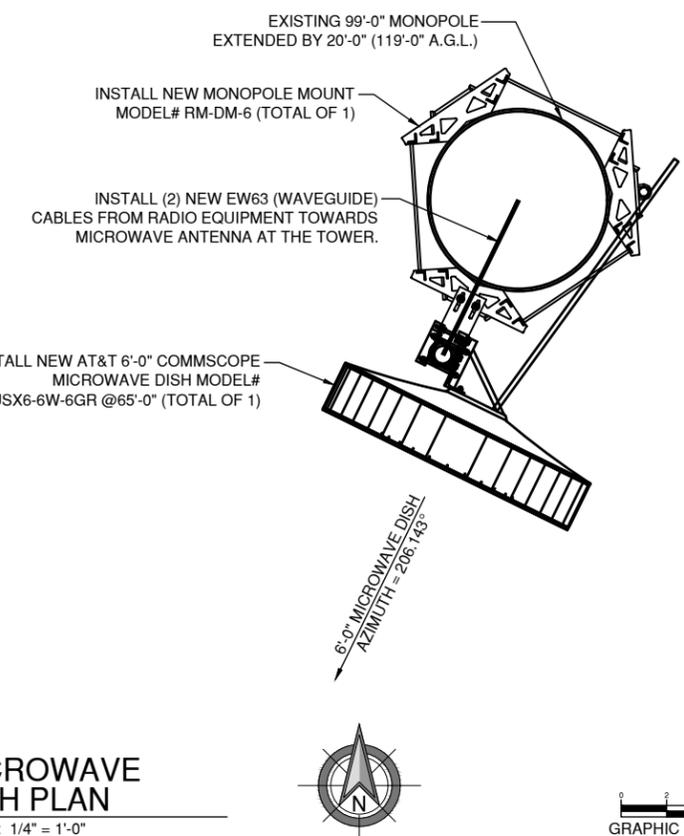
**C-2**



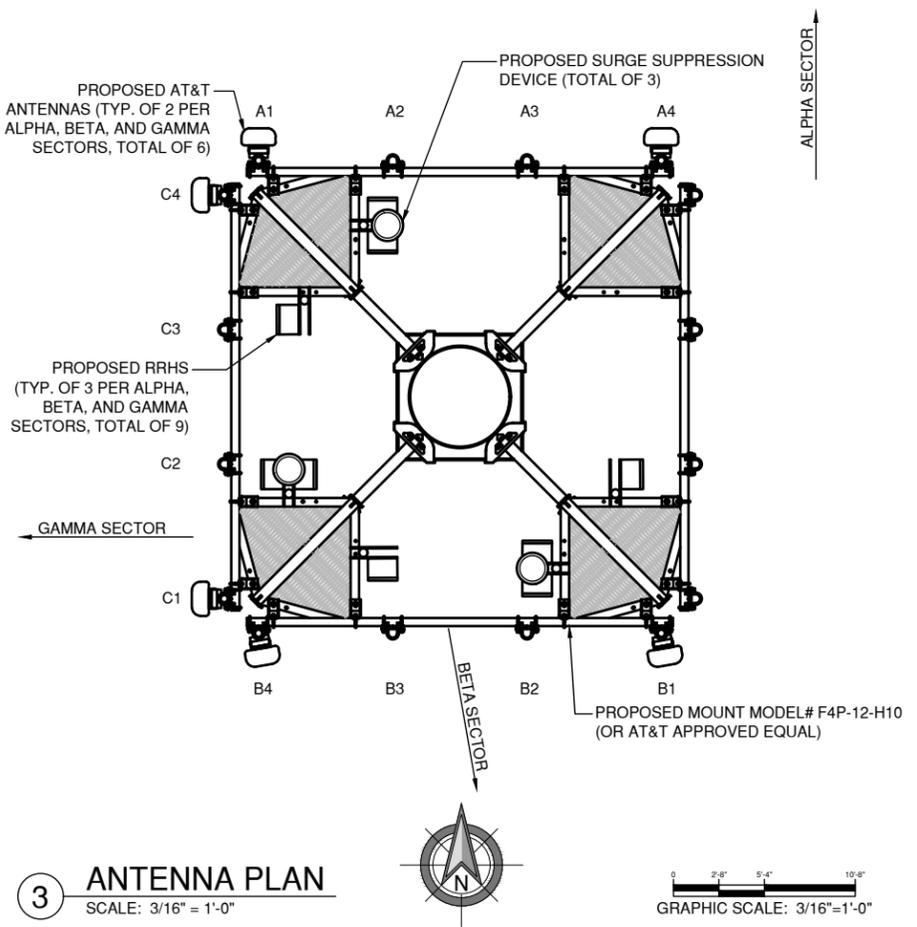
PROPOSED								
SECTOR	ANTENNA POSITION	MODEL	TOP OF ANTENNA (AGL)	AZIMUTH	CABLES	RRH	SQUID	OTHER EQUIPMENT
ALPHA	A1	TPA65R-BU8D *	119'-0"	TBD				
	A2	N/A						
	A3	N/A						
	A4	TPA65R-BU8D *						
BETA	B1	TPA65R-BU8D *	119'-0"	TBD	(6) 0.88" DC POWER (3) 0.39" FIBER (2) EW63		(3) DC9-48-60-24-8C-EV	(1) USX6-6W-6GR @65'-0" AGL (1) RM-DM-6 MONOPOLE MOUNT (1) 6'-0" ICE SHIELD
	B2	N/A						
	B3	N/A						
	B4	TPA65R-BU8D *						
GAMMA	C1	TPA65R-BU8D *	119'-0"	TBD				
	C2	N/A						
	C3	N/A						
	C4	TPA65R-BU8D *						

**NOTE:**  
 \* OR SIMILAR  
**CONSTRUCTION NOTE:**  
 GC TO REFER TO RFDS FOR ANTENNA POSITION, ACCURATE AZIMUTH AND TIP AGL

1 RF SCHEDULE



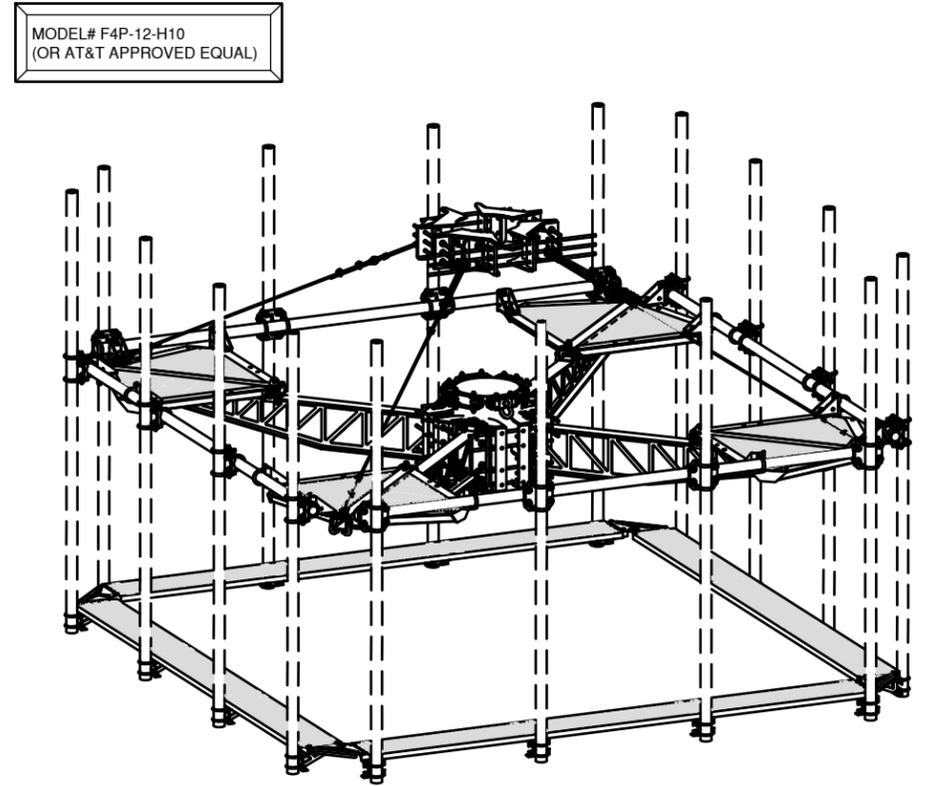
2 MICROWAVE DISH PLAN  
 SCALE: 1/4" = 1'-0"



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

- NOTE:**
- CONTRACTOR TO REFER TO FINAL RFDS FOR ALL RF DETAILS.
  - RET CABLE TO BE RUN TO 1ST CARRIER LTE RRH, AND DAISY CHAINED TO ALL ACTIVE SECTOR ANTENNAS.
  - REFER TO GENERAL NOTES FOR ANTENNA MOUNTING INFORMATION.
  - CONTRACTOR TO REFER TO RFDS FOR CROSS-SECTOR REDUNDANCY REQUIREMENTS.
  - DO NOT EXCEED 15' WIRE LENGTH FROM SURGE SUPPRESSOR TO RRH.
  - MAINTAIN MINIMUM SEPARATION BETWEEN ALL EQUIPMENT.

**NOTE:**  
 PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY THAT A STRUCTURE AND MOUNT ANALYSIS, DEPICTING THE LOADING SHOWN, HAS TO BE PERFORMED AND SHOWS A "PASS" OR "ACCEPTABLE" RATING. UNDER NO CIRCUMSTANCE WHAT SO EVER SHALL THE PROPOSED EQUIPMENT BE INSTALLED WITHOUT SAID STRUCTURAL ANALYSIS. IF SAID STRUCTURAL ANALYSIS REQUIRES THAT THE STRUCTURE AND/OR MOUNT BE MODIFIED, SUCH MODIFICATIONS SHALL BE COMPLETED PRIOR TO INSTALLATION OF THE PROPOSED EQUIPMENT.



4 ANTENNA MOUNT  
 SCALE: N.T.S

PREPARED BY:

**nexus**

NEXIUS SOLUTIONS, INC.  
 2595 NORTH DALLAS PARKWAY  
 SUITE 300  
 FRISCO, TX 75034

CLIENT:

**AT&T** Mobility

161 INVERNESS DR W, 2ND FLOOR  
 ENGLEWOOD, COLORADO 80112

FOR CONSTRUCTION

**COLORADO REGISTERED**  
 JACK T. PHIPPS  
 PE.0054130  
 EXP 10/31/2021  
 PROFESSIONAL ENGINEER

DATE SIGNED: 10/15/20  
 PE LICENSE RENEWAL: 10/31/21

6E2F33FCFCBB41F

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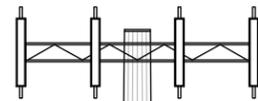
CHECKED BY: RA DATE: 10/15/20

SHEET TITLE: ANTENNA PLAN AND MOUNT  
 SHEET NUMBER:

TOP OF EXISTING ANTENNAS (BY OTHERS)  
ELEV: 100'-0" A.G.L.

TOP OF EXISTING MONOPOLE  
ELEV: 99'-0" A.G.L.

C.L. OF EXISTING MW DISH (BY OTHERS)  
ELEV: 90'-0" A.G.L.



EXISTING 99'-0" MONOPOLE TO BE EXTENDED BY 20'-0" (119'-0" A.G.L.)

TOP OF EXISTING ICE SHIELD (BY OTHERS)  
ELEV: 30'-0" A.G.L.

C.L. OF EXISTING MW DISH (BY OTHERS)  
ELEV: 26'-0" A.G.L.

C.L. OF EXISTING MONOPOLE PORT  
ELEV: 7'-0" A.G.L.

EXISTING GRADE  
ELEV: 0'-0" A.G.L.

1 EXISTING TOWER ELEVATION

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

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

NOTE:  
CRANE HEIGHT: 140'-0" A.G.L.

TOP OF PROPOSED AT&T ANTENNAS  
ELEV: 119'-0" A.G.L.

TOP OF PROPOSED MONOPOLE EXTENSION  
ELEV: 119'-0" A.G.L.

TOP OF EXISTING ANTENNAS (BY OTHERS)  
ELEV: 100'-0" A.G.L.

TOP OF EXISTING MONOPOLE  
ELEV: 99'-0" A.G.L.

C.L. OF EXISTING MW DISH (BY OTHERS)  
ELEV: 90'-0" A.G.L.

C.L. OF PROPOSED AT&T MW DISH  
ELEV: 65'-0" A.G.L.

TOP OF EXISTING ICE SHIELD (BY OTHERS)  
ELEV: 30'-0" A.G.L.

C.L. OF EXISTING MW DISH (BY OTHERS)  
ELEV: 26'-0" A.G.L.

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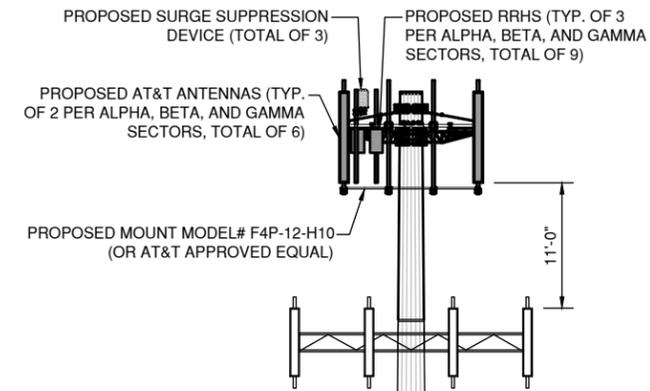
EXISTING GRADE  
ELEV: 0'-0" A.G.L.

2 PROPOSED TOWER ELEVATION

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

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

NOTE:  
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY, PRIOR TO THE ONSET OF CONSTRUCTION, THAT THE SUPPORTING STRUCTURE(S) AND MOUNTING SYSTEM(S) HAVE BEEN DEEMED STRUCTURALLY ADEQUATE BY A LICENSED PROFESSIONAL ENGINEER TO SUPPORT THE EXISTING AND PROPOSED EQUIPMENT AND ASSOCIATED CONSTRUCTION LOADS, INCLUDING BUT NOT LIMITED TO THOSE DEPICTED, HEREIN. THE CONTRACTOR SHALL ASSUME THE FULL-LIABILITY AND RISK ASSOCIATED WITH THE INSTALLATION OF THE PROPOSED EQUIPMENT AND/OR APPURTENANCES IF PERFORMED WITHOUT SAID PASSING STRUCTURAL ANALYSIS OR EVALUATION. IF THE RESULT OF THE ANALYSIS REQUIRES THE STRUCTURE BE STRENGTHENED OR MODIFIED; SUCH MODIFICATIONS SHALL BE PROPERLY INSTALLED AND COMPLETED PRIOR TO THE ONSET OF CONSTRUCTION.



INSTALL (1) NEW ICE SHIELD MODEL# ISMD6 ABOVE PROPOSED AT&T MICROWAVE DISH, ONTO (1) NEW MONOPOLE MOUNT MODEL# RM-DM-6. SEE DETAILS ON SHEET C-11, C-13 & C-14

INSTALL (1) NEW AT&T 6'-0" COMMSCOPE MICROWAVE DISH MODEL# USX6-6W-6GR @65'-0" ON (1) NEW MONOPOLE MOUNT MODEL# RM-DM-6

EXISTING 99'-0" MONOPOLE EXTENDED BY 20'-0" (119'-0" A.G.L.)

PROPOSED (6) 3/4" DC POWER (3) 3/8" FIBER (4) 2 1/4" INNER DUCT CABLES

PROPOSED ICE BRIDGE  
PROPOSED 5'-8" X 4'-2" WUC MODEL# ESOF020-HCV02. SEE WUC DETAILS ON SHEET C-7

EXISTING GRADE  
ELEV: 0'-0" A.G.L.

PREPARED BY:

**nexus**

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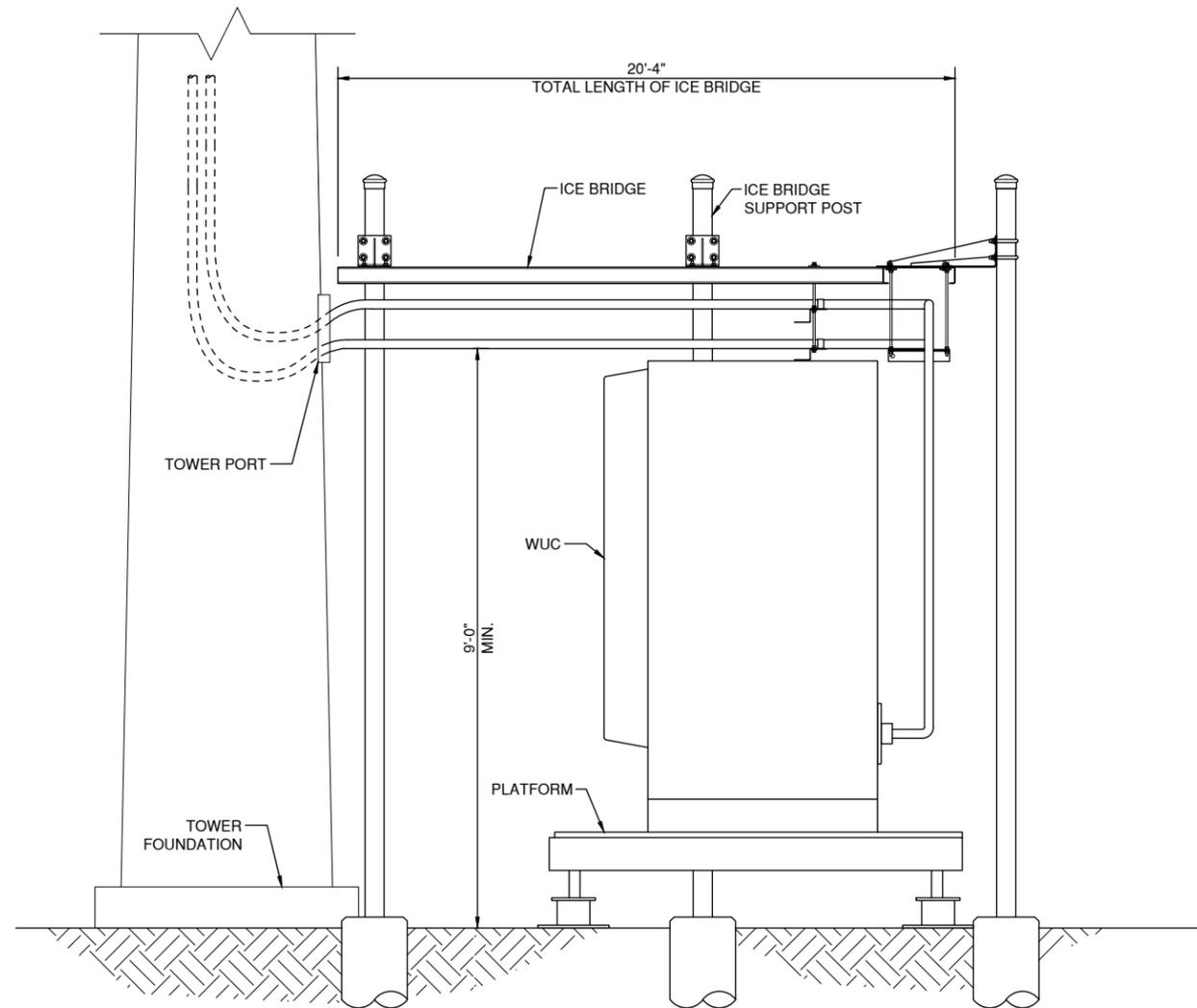
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LTE 1C 2C 3C 4C 5C 6C

DRAWN BY: RA	DATE: 01/02/20
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SHEET TITLE:  
**TOWER ELEVATION**

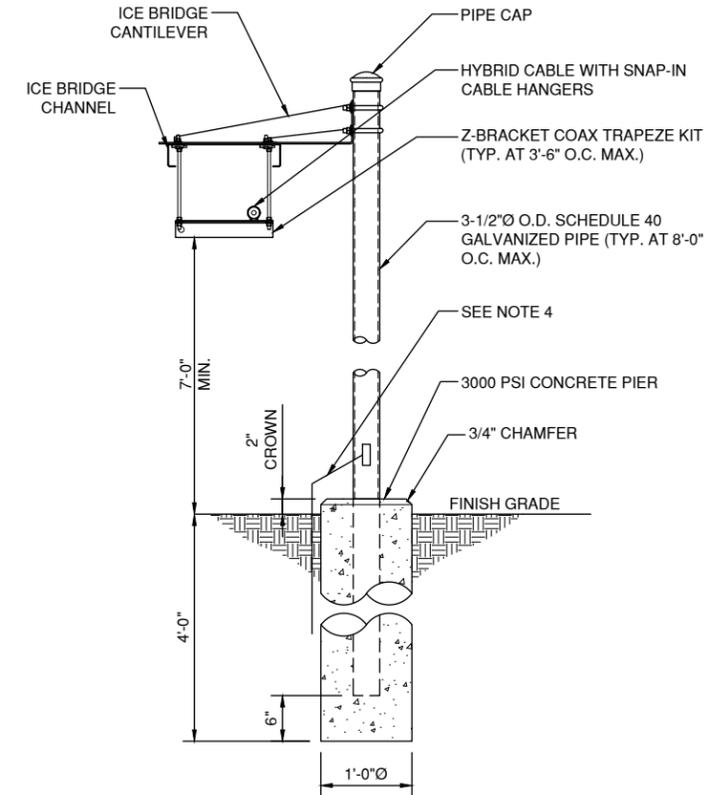
SHEET NUMBER:

**C-4**



1 ICE BRIDGE DETAIL  
SCALE: NTS

- NOTE:**
1. ALL PARTS SHOWN ARE FROM SITE PRO, OR APPROVED EQUAL.
  2. ALL STRUCTURAL STEEL & BOLTS ARE TO BE HOT DIPPED/RIGID GALVANIZED OR STAINLESS STEEL.
  3. ALL BOLTS TO BE FURNISHED W/ WASHERS & NUTS.
  4. #2 AWG SOLID TINNED COPPER WIRE IN 5/16\"/>



2 ICE BRIDGE SUPPORT POST DETAIL  
SCALE: NTS

PREPARED BY:

**nexus**

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<b>DRAWN BY:</b> RA	<b>DATE:</b> 01/02/20
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**SHEET TITLE:**  
ICE BRIDGE DETAILS  
**SHEET NUMBER:**

**C-5**

**SD030 | 2.2L | 30 kW**  
**INDUSTRIAL DIESEL GENERATOR SET**  
 EPA Certified Stationary Emergency



**Standby Power Rating**  
 30 kW, 38 kVA, 60 Hz

**Prime Power Rating\***  
 27 kW, 34 kVA, 60 Hz



Image used for illustration purposes only



\*EPA Certified Prime ratings are not available in the US or its Territories

**Codes and Standards**

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

- UL2200, UL508, UL489, 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

**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.

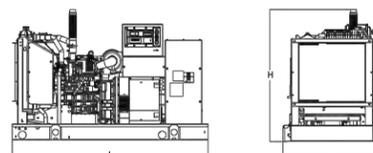
Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

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

**SD030 | 2.2L | 30 kW**  
**INDUSTRIAL DIESEL GENERATOR SET**  
 EPA Certified Stationary Emergency

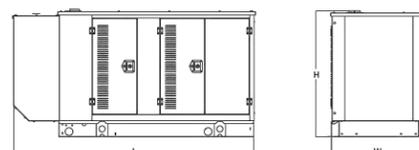


**DIMENSIONS AND WEIGHTS\***



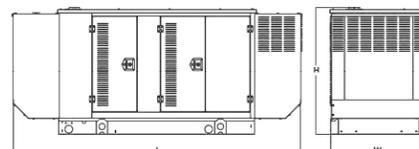
**OPEN SET (Includes Exhaust Flex)**

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)
No Tank	-	76.0 (1,930) x 37.4 (950) x 44.8 (1,138)	1,641 (745)
19	54 (204)	76.0 (1,930) x 37.4 (950) x 57.8 (1,468)	2,121 (963)
47	132 (501)	76.0 (1,930) x 37.4 (950) x 69.8 (1,773)	2,351 (1,067)
75	211 (799)	76.0 (1,930) x 37.4 (950) x 81.8 (2,078)	2,560 (1,162)
107	300 (1,136)	92.9 (2,360) x 37.4 (950) x 81.8 (2,078)	2,623 (1,190)



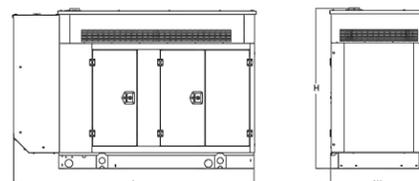
**WEATHER PROTECTED ENCLOSURE**

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only	
			Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)		
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)	372 (170)	241 (110)
47	132 (501)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)		
75	211 (799)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)		
107	300 (1,136)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)		



**LEVEL 1 ACOUSTIC ENCLOSURE**

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only	
			Steel	Aluminum
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)		
19	54 (204)	112.5 (2,857) x 38.0 (965) x 62.5 (1,582)	505 (230)	338 (154)
47	132 (501)	112.5 (2,857) x 38.0 (965) x 74.5 (1,893)		
75	211 (799)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)		
107	300 (1,136)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)		



**LEVEL 2 ACOUSTIC ENCLOSURE**

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only	
			Steel	Aluminum
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)		
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)	510 (232)	341 (155)
47	132 (501)	94.8 (2,407) x 38.0 (965) x 86.1 (2,186)		
75	211 (799)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)		
107	300 (1,136)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)		

\* 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.

PREPARED BY:



NEXIUS SOLUTIONS, INC.  
 2595 NORTH DALLAS PARKWAY  
 SUITE 300  
 FRISCO, TX 75034

CLIENT:



161 INVERNESS DR W, 2ND FLOOR  
 ENGLEWOOD, COLORADO 80112

FOR CONSTRUCTION



DATE SIGNED: 10/15/20  
 PE LICENSE RENEWAL: 10/31/21

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SUBMITTALS			
REV	DATE	DESCRIPTION	BY
C	03/20/20	FOR REVIEW	RA
D	04/16/20	FOR REVIEW	RA
0	04/22/20	FINAL CD	RA
1	08/24/20	REVISED CD	RA
2	10/15/20	REVISED CD	RA

SITE INFORMATION:  
 SITE NAME: NSB-CO.BDN\_ADD\_4591\_COL02148\_Peyton  
 SITE NUMBER: COL02148  
 FA LOCATION CODE: 12871723  
 PACE ID: MRUTH029076  
 ADDRESS: 12960 N PEYTON HWY  
 PEYTON, CO 80831

PROJECTS:  
 LTE 1C 2C 3C 4C 5C 6C

DRAWN BY: RA	DATE: 01/02/20
CHECKED BY: RA	DATE: 10/15/20

SHEET TITLE:  
**GENERATOR DETAILS**  
 SHEET NUMBER:

**C-6**

SPEC SHEET

1 of 6

SPEC SHEET

6 of 6



# ESOF020-HCV02 2-Bay Walk Upto Cabinet (WUC)

## Product Features

- Sealed Multi-bay Equipment and Power Compartment
- Sealed Battery Compartment
- Corrosion Resistant Aluminum enclosure
- Thermo-siphon HEX cooling
- R6 Thermal Insulation Material
- Attachment Rails for AC Load Center
- Rear Access Hatches
- Optional Dual GPS Antenna Mount

www.deltaww.com



## Specifications

**Model** ESOF020-HCV02 Walk Upto Cabinet (WUC)

<b>1. General</b>	
System cooling capacity	2.5kW Equip Heat Load with Equip Inlet <55C @ 46C ambient
Dimensions (W x H x D)	68W" x 42"D (50" including HEX) x 80"H (add 6" plinth)
Protection class	NEMA4
Door latches	3 point latches (can be pad locked)
Ground bar	2ea 10-positions
Lifting Mechanism	4 lifting brackets
Equipment Compartment	Bay 1 – 23", 19RU for DC Power System and PDU Bay 2 – 23", 44RU for equipment
Battery Compartment	Shelves for 3 strings batteries, designed for: GNB Marathon M12V180FT Energys SBS190F Energys SBS170F
Weight	1860 lbs (Batteries, Power System and Load Equipment excluded)
Materials:	Enclosure Aluminum AL5052, Inner frames Galvanized steel
Finish	Powder Paint RAL7032
Safety	cULus LISTED pending
<b>2. Environment</b>	
Operating temperature	-40°C to +50°C (-40°F to +122°F)
Storage temperature	-40°C to +75°C (-40°F to +158°F)
Acoustics	65 dBA @ 40C equipment inlet, 75 dBA @ 55C equipment inlet
Humidity (relative)	95%, non-condensing (Max.)
<b>3. Thermal management</b>	
Cooling system	Equipment compartment: 2 200W/K Thermosiphon HEX
Heating system	Equipment compartment: 2 1500W DC heaters Battery compartment: 1 1500W DC heater
<b>4. Equipment</b>	
Arranged for third-party equipment:	AC Load Center (not provided) DC Power System (not provided) Batteries (not provided)
Cable Entry:	
AC Cable	(2) Trade Size 2" ports
Bottom Cable	Arranged for (3) Roxtec EzEntry 24/24 multi-port (not provided) Arranged for (3) Roxtec EzEntry 16/16 multi-port (not provided)
Lower Rear	(4) Trade Size 3" ports
Upper Rear	Arranged for (1) Valmont E575 port kit (not provided)
<b>5. Optional Items</b>	
Optional items	NEQ.20115 – Dual GPS Antenna Mast Kit (Delta 3798100742-S) NEQ.20114 – Wave Guide Top Plate (Valmont E575)
<b>6. Ordering information</b>	
System	NEQ.20212– Cabinet 2-Bay 2-HEX (Delta ESOF020-HCV02)

\*All specifications are subject to change without prior notice.

Delta Group Website:  
www.deltaww.com

Product Website:  
www.deltapowersolutions.com

United States of America & Canada  
Delta Electronics (USA) Inc.  
2925 E. Plano Parkway  
Plano, Texas 75074

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Bryan.Kearse@deltaww.com

Hari Subramanian  
Cell 214-415-4977  
Hari.Subramanian@deltaww.com

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Field Support  
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(877-335-8208 option 3)  
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PREPARED BY:

**n e x i u s**

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2595 NORTH DALLAS PARKWAY  
SUITE 300  
FRISCO, TX 75034

CLIENT:



161 INVERNESS DR W, 2ND FLOOR  
ENGLEWOOD, COLORADO 80112

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SITE INFORMATION:  
SITE NAME:  
NSB-CO.BDN\_ADD\_4591\_COL02148\_PeyTON  
SITE NUMBER:  
COL02148  
FA LOCATION CODE:  
12871723  
PACE ID:  
MRUTH029076  
ADDRESS:  
12960 N PEYTON HWY  
PEYTON, CO 80831

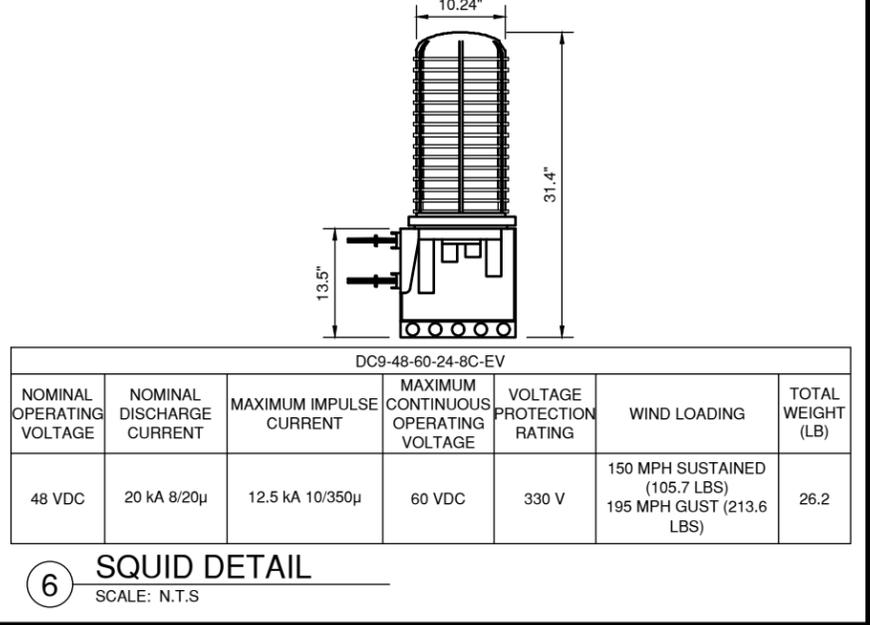
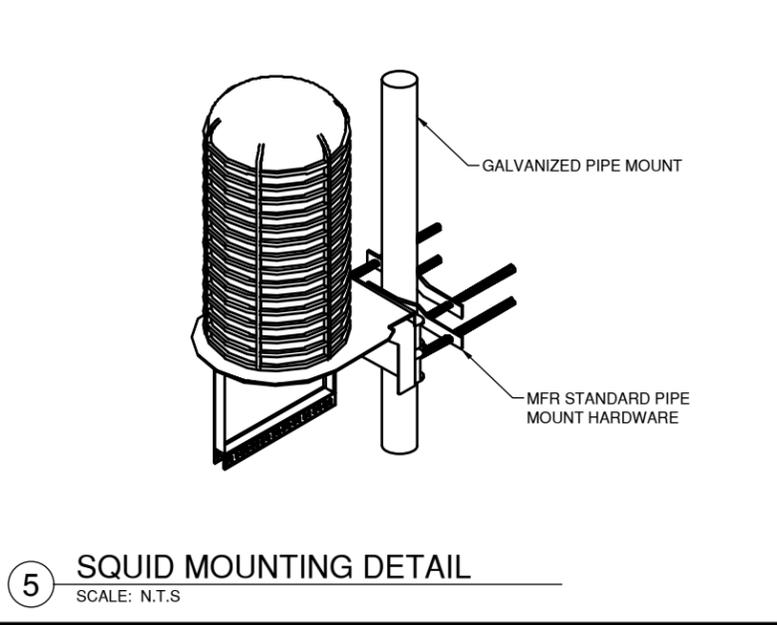
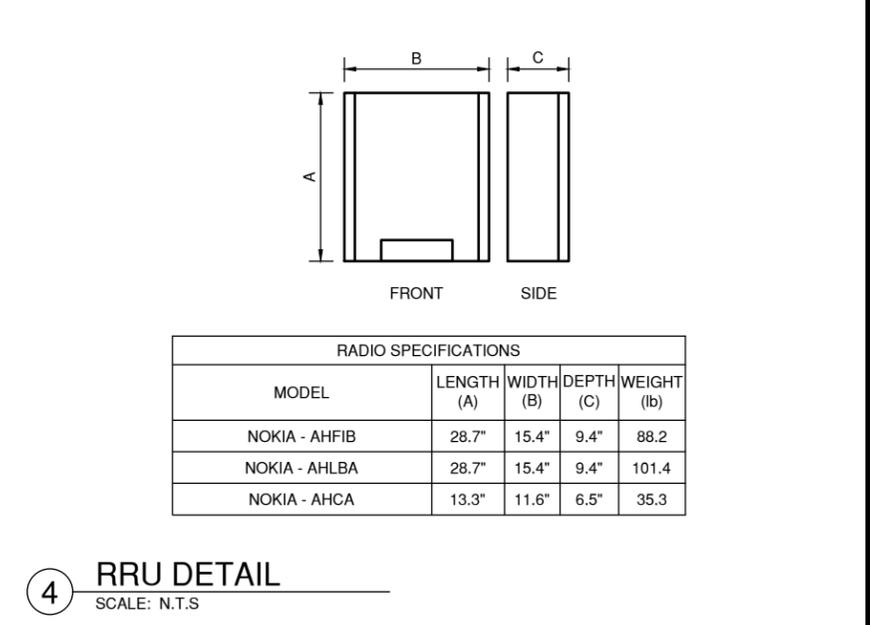
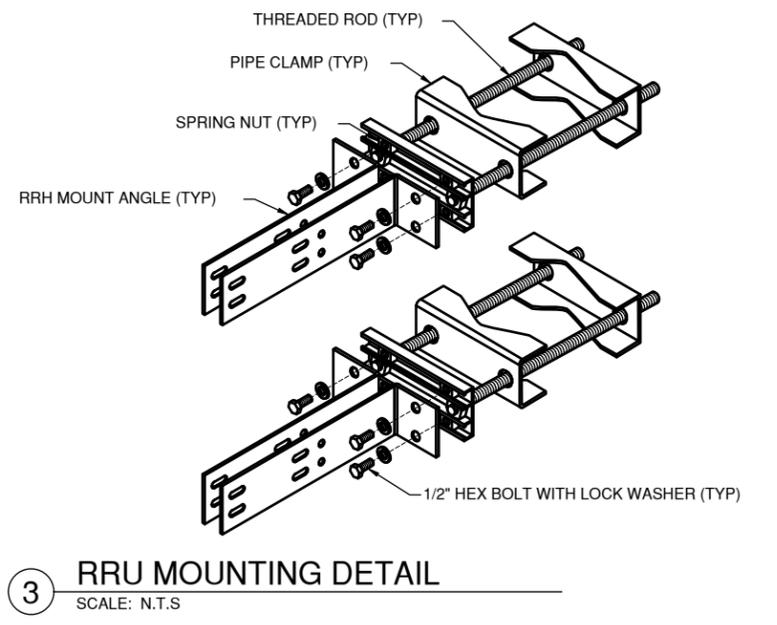
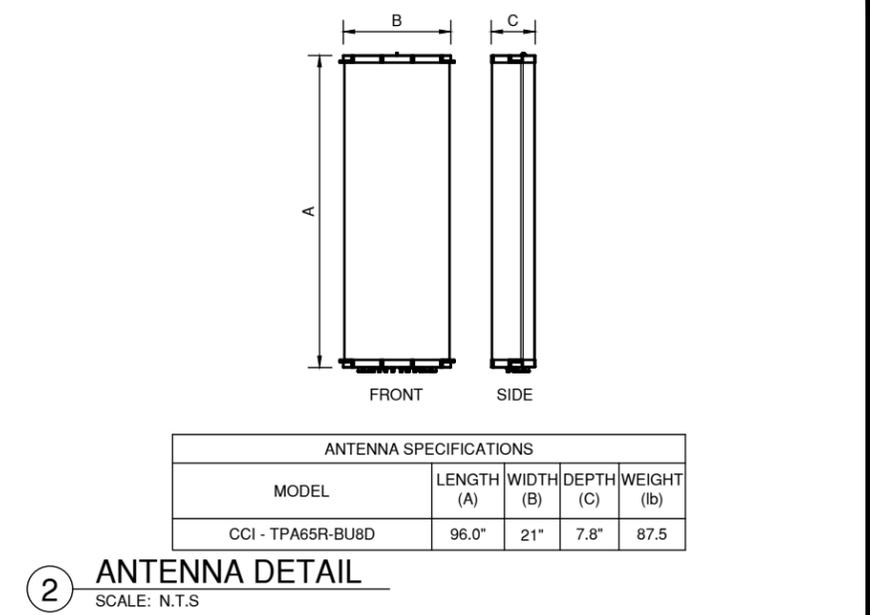
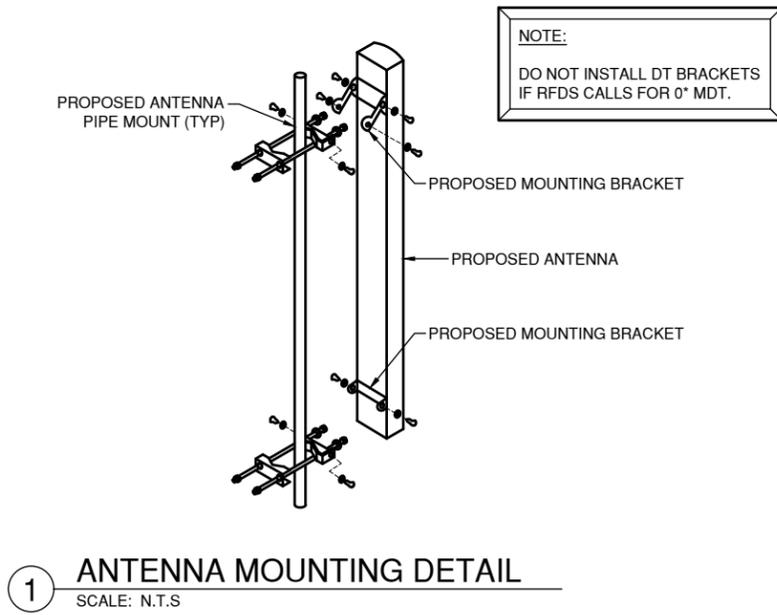
PROJECTS:  
LTE 1C 2C 3C 4C 5C 6C

DRAWN BY: RA	DATE: 01/02/20
CHECKED BY: RA	DATE: 10/15/20

SHEET TITLE:  
**WUC DETAILS**

SHEET NUMBER:

**C-7**



**EW63**

EW63, HELIAX® Standard Elliptical Waveguide, 5.925-7.125 GHz, black PE jacket

**Product Classification**  
Brand: HELIAX®  
Product Type: Elliptical waveguide

**Construction Materials**  
Jacket Material: PE  
Conductor Material: Corrugated copper  
Jacket Color: Black

**Dimensions**  
Cable Volume: 855.0 L/km | 9.2 ft³/kft  
Cable Weight: 0.76 kg/m | 0.51 lb/ft  
Diameter Over Jacket (E Plane): 51.10 mm | 2.01 in  
Diameter Over Jacket (H Plane): 29.50 mm | 1.16 in

**Electrical Specifications**  
Operating Frequency Band: 5.925 - 7.125 GHz  
eTE11 Mode Cutoff: 4.001 GHz  
Group Delay at Frequency: 126 ns/100 ft @ 6.775 GHz | 413 ns/100 m @ 6.775 GHz

**Environmental Specifications**  
Installation Temperature: -40 °C to +60 °C (-40 °F to +140 °F)  
Operating Temperature: -55 °C to +85 °C (-67 °F to +185 °F)  
Storage Temperature: -70 °C to +85 °C (-94 °F to +185 °F)

**Mechanical Specifications**  
Maximum Twist: 3.00 °/m | 1.00 °/ft  
Minimum Bend Radius, Multiple Bends (E Plane): 260.00 mm | 10.00 in  
Minimum Bend Radius, Multiple Bends (H Plane): 740.00 mm | 29.00 in  
Minimum Bend Radius, Single Bend (E Plane): 180.00 mm | 7.00 in  
Minimum Bend Radius, Single Bend (H Plane): 510.00 mm | 20.00 in

**Note**  
Performance Note: Values typical, unless otherwise stated

page 1 of 2  
September 20, 2019

**EW63**

**Standard Conditions**  
Attenuation, Ambient Temperature: 24 °C | 75 °F  
Average Power, Ambient Temperature: 40 °C | 104 °F  
Average Power, Temperature Rise: 42 °C | 76 °F

**Return Loss/VSWR**

Frequency Band	VSWR	Return Loss (dB)
5.925-7.125 GHz	1.15	23.10

\* VSWR/Return Loss indicated is for lengths up to 300 ft (91.4 m)  
\* VSWR/Return Loss is guaranteed for factory-fit and typical for field-fit assemblies  
\* Custom length performance: Call 828-324-2200 or 1-800-982-1708 (toll free), or your local CommScope representative

**Attenuation**

Frequency (GHz)	Attenuation (dB/100 ft)	Attenuation (dB/100 m)	Average Power (kW)	Group Velocity %
5.9	1.487	4.878	4.45	73.8
6.1	1.446	4.745	4.575	75.7
6.3	1.412	4.632	4.687	77.4
6.5	1.383	4.537	4.784	79
6.7	1.359	4.458	4.869	80.3
6.9	1.338	4.39	4.944	81.6
7.1	1.32	4.332	5.011	82.7

**Regulatory Compliance/Certifications**  
Agency: RoHS 2011/65/EU, ISO 9001:2015, China RoHS SJ/T 11364-2014  
Classification: Compliant, Designed, manufactured and/or distributed under this quality management system Below Maximum Concentration Value (MCV)

**7 HELIAX ELLIPTICAL WAVEGUIDE**  
SCALE: N.T.S

PREPARED BY:

**NEXIUS**

NEXIUS SOLUTIONS, INC.  
2595 NORTH DALLAS PARKWAY  
SUITE 300  
FRISCO, TX 75034

CLIENT:

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ADDRESS: 12960 N PEYTON HWY  
PEYTON, CO 80831

PROJECTS:  
LTE 1C 2C 3C 4C 5C 6C

DRAWN BY: RA DATE: 01/02/20

CHECKED BY: RA DATE: 10/15/20

SHEET TITLE:  
EQUIPMENT DETAILS (1 OF 5)

SHEET NUMBER:  
**C-8**

## USX6-6W-6GR



1.8m | 6ft Sentinel® Ultra High Performance, Super High XPD Antenna, dual-polarized, 5.925 – 7.125 GHz, grey, CPR137G flange

## Product Classification

Brand	Sentinel®
Product Type	Microwave antenna

## General Specifications

Antenna Type	USX - Sentinel® Ultra High Performance, Super High XPD Antenna, dual-polarized
Diameter, nominal	1.8 m   6 ft
Packing	Standard pack
Radome Color	Gray
Radome Material	Fabric
Reflector Construction	One-piece reflector
Antenna Input	CPR137G
Antenna Color	Gray
Antenna Type	USX - Sentinel® Ultra High Performance, Super High XPD Antenna, dual-polarized
Diameter, nominal	1.8 m   6 ft
Polarization	Dual

## Electrical Specifications

Operating Frequency Band	5.925 – 7.125 GHz
Beamwidth, Horizontal	1.8 °
Beamwidth, Vertical	1.8 °
Boresite Cross Polarization Discrimination (XPD)	40 dB
Cross Polarization Discrimination (XPD) Electrical Compliance	ETSI EN 302217 XPD Category 3
Electrical Compliance	ACMA FX03_6b, 6p7b   ETSI 302 217 Class 4   IC 3059A   IC 3064A   US FCC Part 101A
Front-to-Back Ratio	76 dB
Gain, Low Band	38.3 dBi
Gain, Mid Band	38.8 dBi
Gain, Top Band	39.3 dBi
Operating Frequency Band	5.925 – 7.125 GHz

page 1 of 6  
September 12, 2019

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COMMSCOPE®

## USX6-6W-6GR

Radiation Pattern Envelope Reference (RPE)	7373
Return Loss	26.0 dB
VSWR	1.10

## Electrical Specifications (Band 2)

Beamwidth, Horizontal	2.0 °
Beamwidth, Vertical	2.0 °
Gain, Mid Band	38.4 dBi
Operating Frequency Band	5.725 – 5.850 GHz

## Mechanical Specifications

Fine Azimuth Adjustment	±15°
Fine Elevation Adjustment	±5°
Mounting Pipe Diameter	115 mm–120 mm   4.5 in–4.7 in
Net Weight	90 kg   198 lb
Side Struts, Included	1
Side Struts, Optional	1
Wind Velocity Operational	180 km/h   112 mph
Wind Velocity Survival Rating	200 km/h   124 mph

## Wind Forces At Wind Velocity Survival Rating

Angle $\alpha$ for MT Max	-130 °
Axial Force (FA)	6960 N   1565 lbf
Force on Inboard Strut Side	6187 N   1391 lbf
Side Force (FS)	2049 N   461 lbf
Twisting Moment (MT)	4948 N-m   3649 ft lb
Weight with 1/2 in (12 mm) Radial Ice	291 kg   642 lb
Zcg with 1/2 in (12 mm) Radial Ice	689 mm   27 in
Zcg without Ice	498 mm   20 in

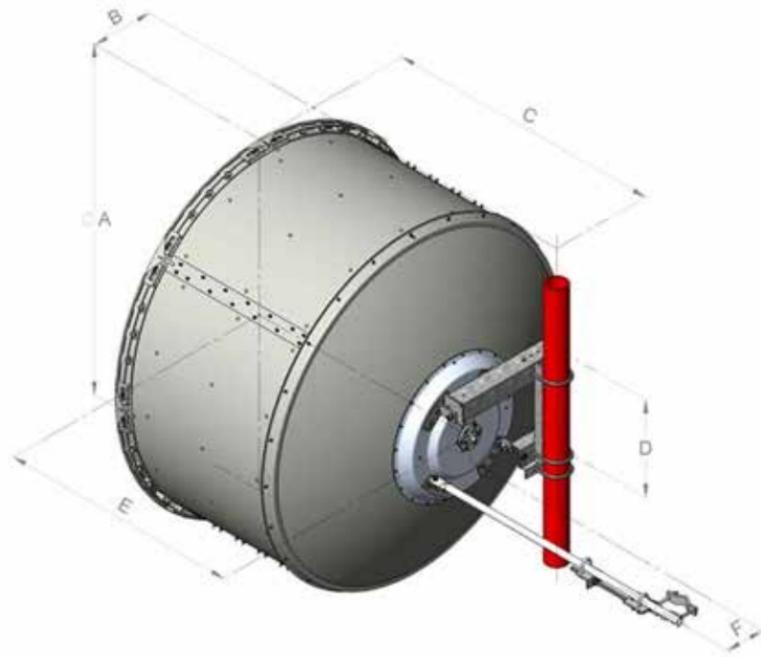
page 2 of 6  
September 12, 2019

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COMMSCOPE®

# USX6-6W-6GR

## Antenna Dimensions And Mounting Information

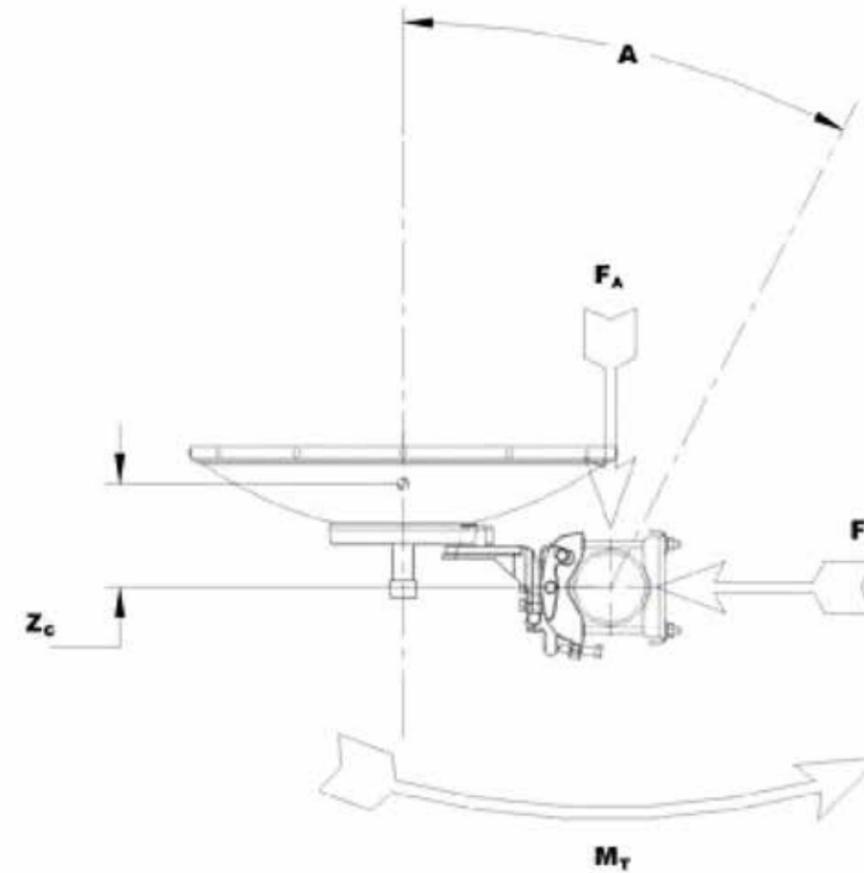


Dimensions in inches (mm)						
Antenna size, ft (m)	A	B	C	D	E	F
6 (1.8)	74.8 (1899)	13.4 (340)	59.8 (1520)	20.9 (530)	51.8 (1315)	8.4 (214)

## Regulatory Compliance/Certifications

# USX6-6W-6GR

## Wind Forces At Wind Velocity Survival Rating Image



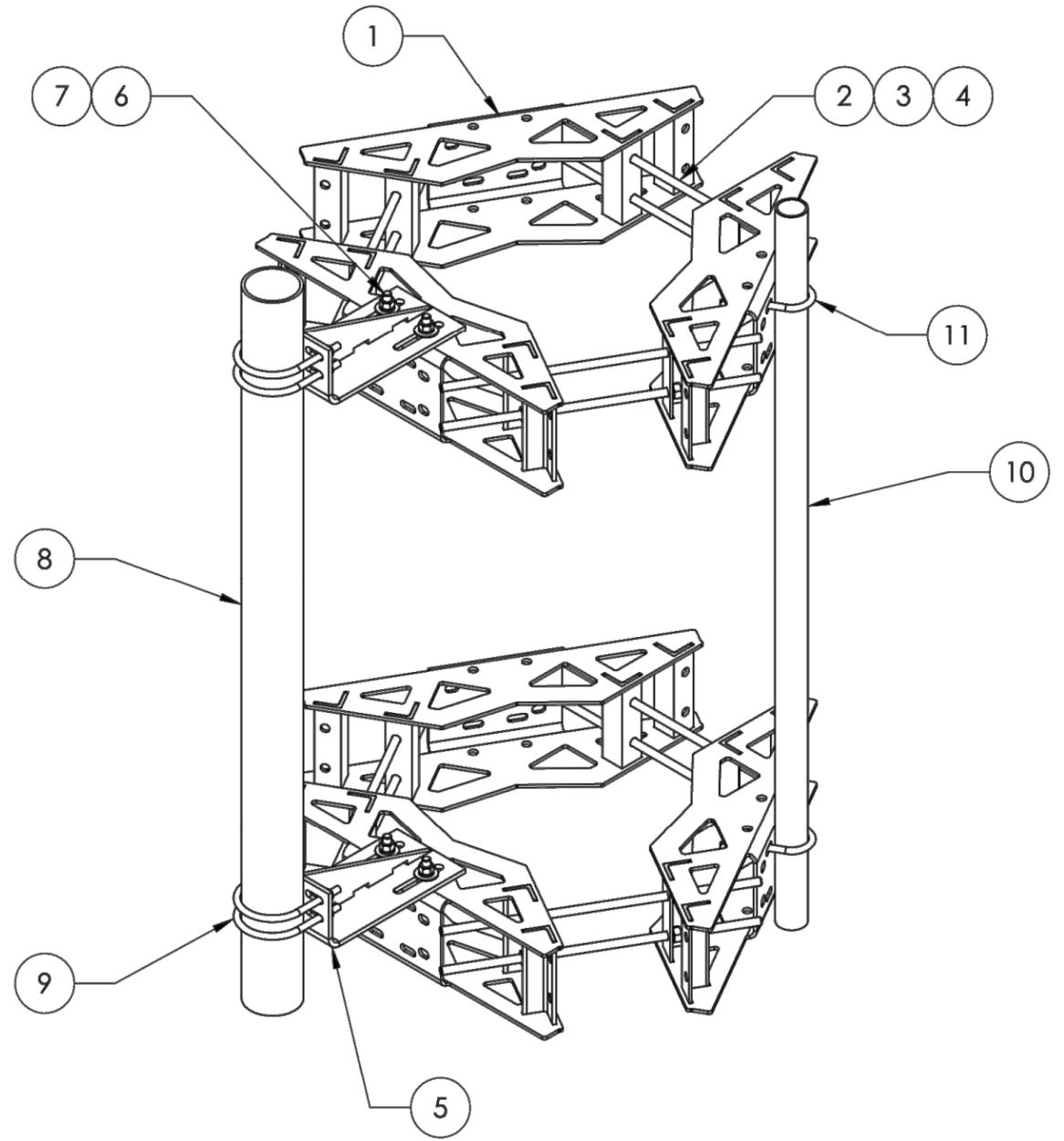
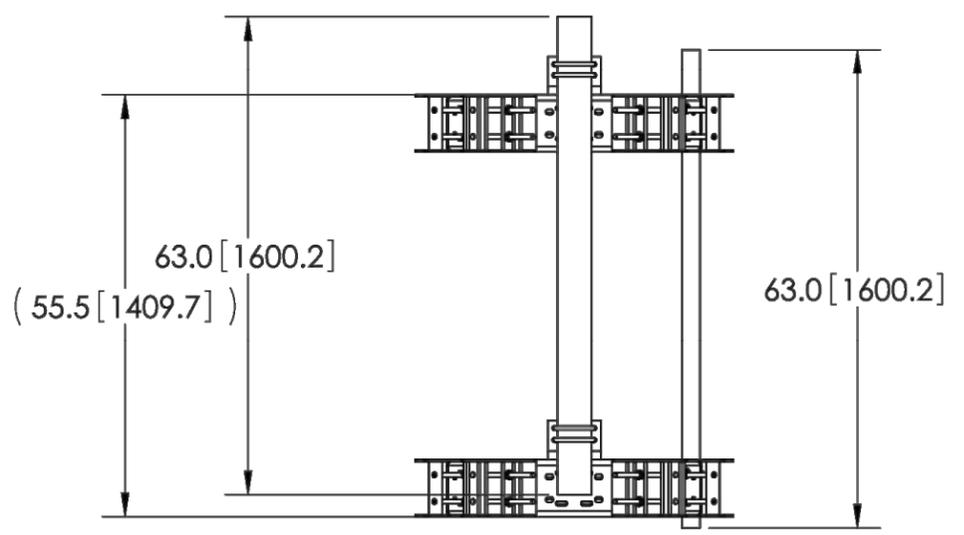
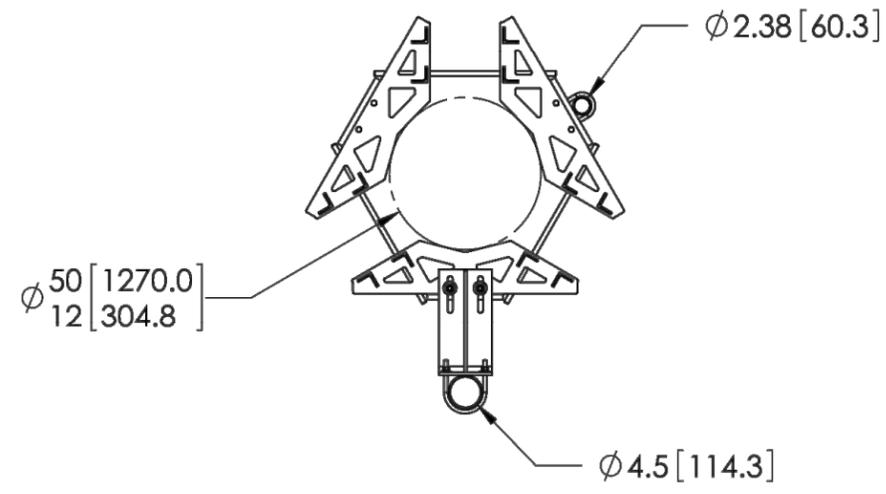
## Packed Dimensions

Gross Weight, Packed Antenna	150.0 kg   330.7 lb
Height	2110.0 mm   83.1 in
Length	2000.0 mm   78.7 in
Volume	2.5 m <sup>3</sup>
Width	600.0 mm   23.6 in

ITEM	PART NO.	DESCRIPTION	QTY.	WEIGHT
1	MTC328601	10-50 RRU Mount Weldment	6	29.99 LBS
2	MT-382-24	5/8" X 24" GALV THREADED ROD	12	2.07 LBS
3	GWL-05	5/8" GALV LOCK WASHER	24	0.03 LBS
4	GN05A	5/8" GALV HEX NUT (A194 2H)	24	0.12 LBS
5	MTC315902	14" L-Bracket	2	15.46 LBS
6	GB-0520A	5/8" X 2" GALV BOLT KIT (A325)	4	0.27 LBS
7	GWF-05	5/8" GALV FLAT WASHER	4	0.03 LBS
8	MT-653-63	4.5" O.D. PLAIN END PIPE	1	56.35 LBS
9	GUB-4456	1/2" X 4-5/8" X 6-1/2" GALV U-BOLT	4	0.91 LBS
10	MT-650-63	Ø 2.375" OD x 63" PIPE	1	19.08 LBS
11	GUB-4240	1/2" X 2-1/2" X 4" GALV U-BOLT	2	0.56 LBS
12	MT38240	5/8" X 40" GALV THREADED ROD	12	3.46 LBS

NOT SHOWN

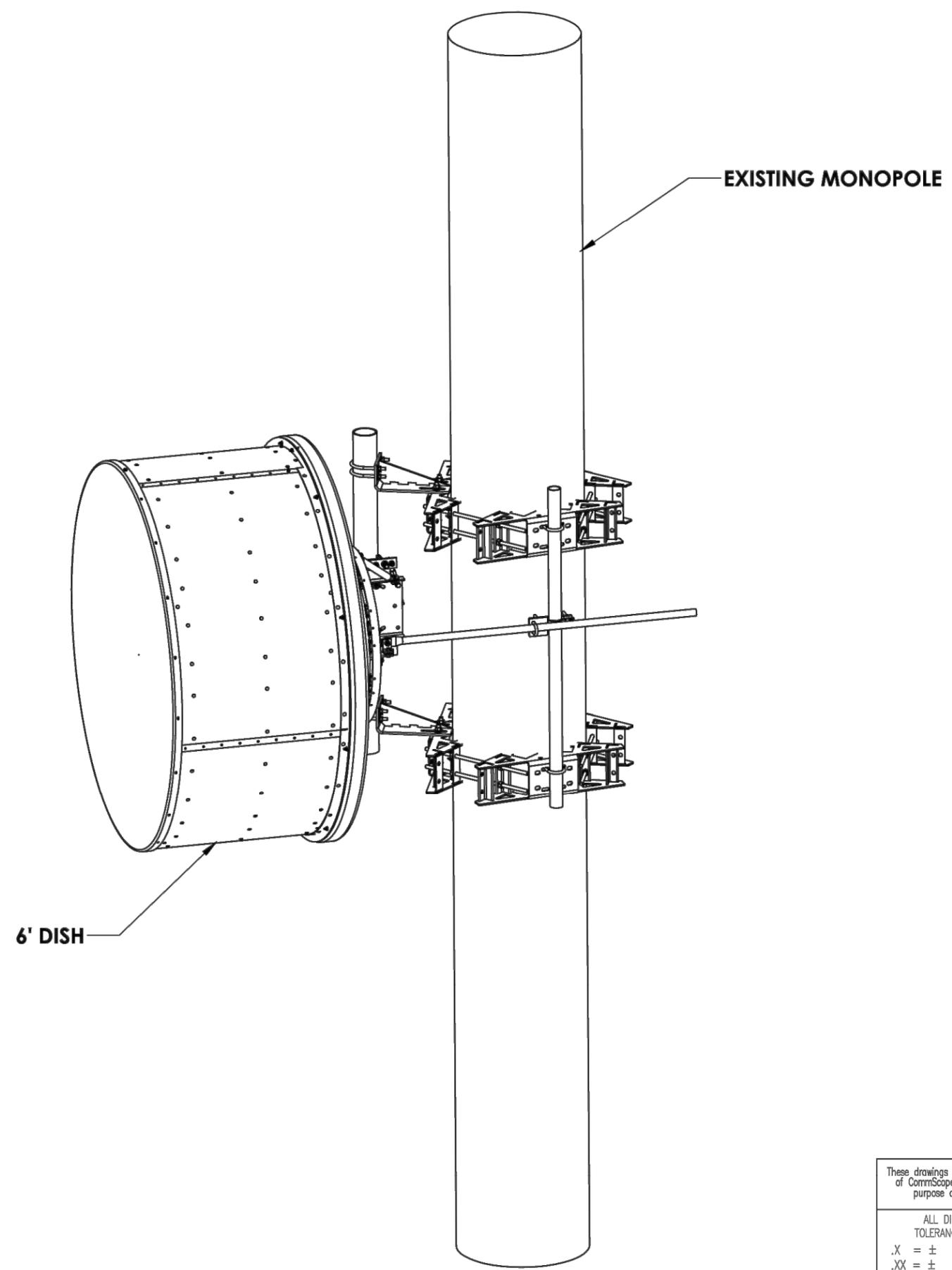
REVISIONS				
REV.	ZONE	DESCRIPTION	BY	DATE
A		INITIAL RELEASE	MSM	10/19/212



C-11

- NOTES:
1. ALL METRIC DIMENSIONS ARE IN BRACKETS.
  2. FITS MONOPOLES 12"-50" OD.
  3. MT38240 USED FOR 30"-50" POLE ODs.

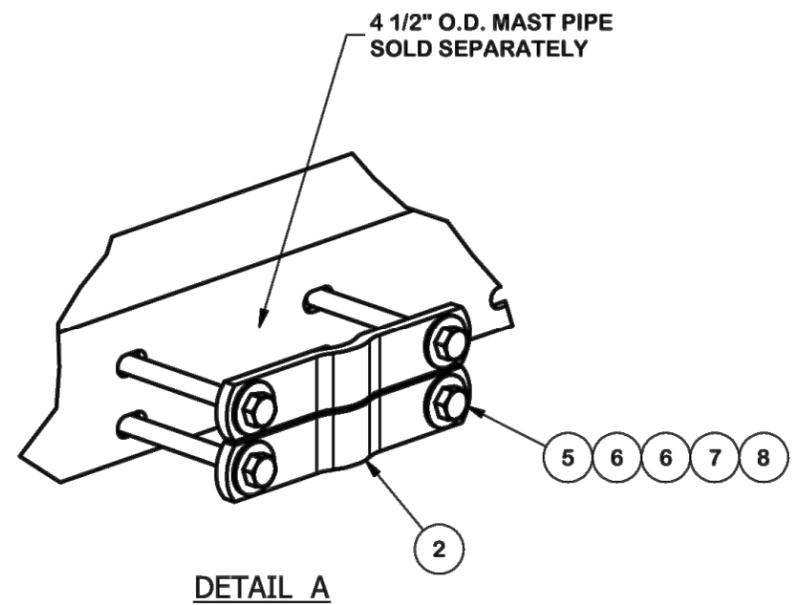
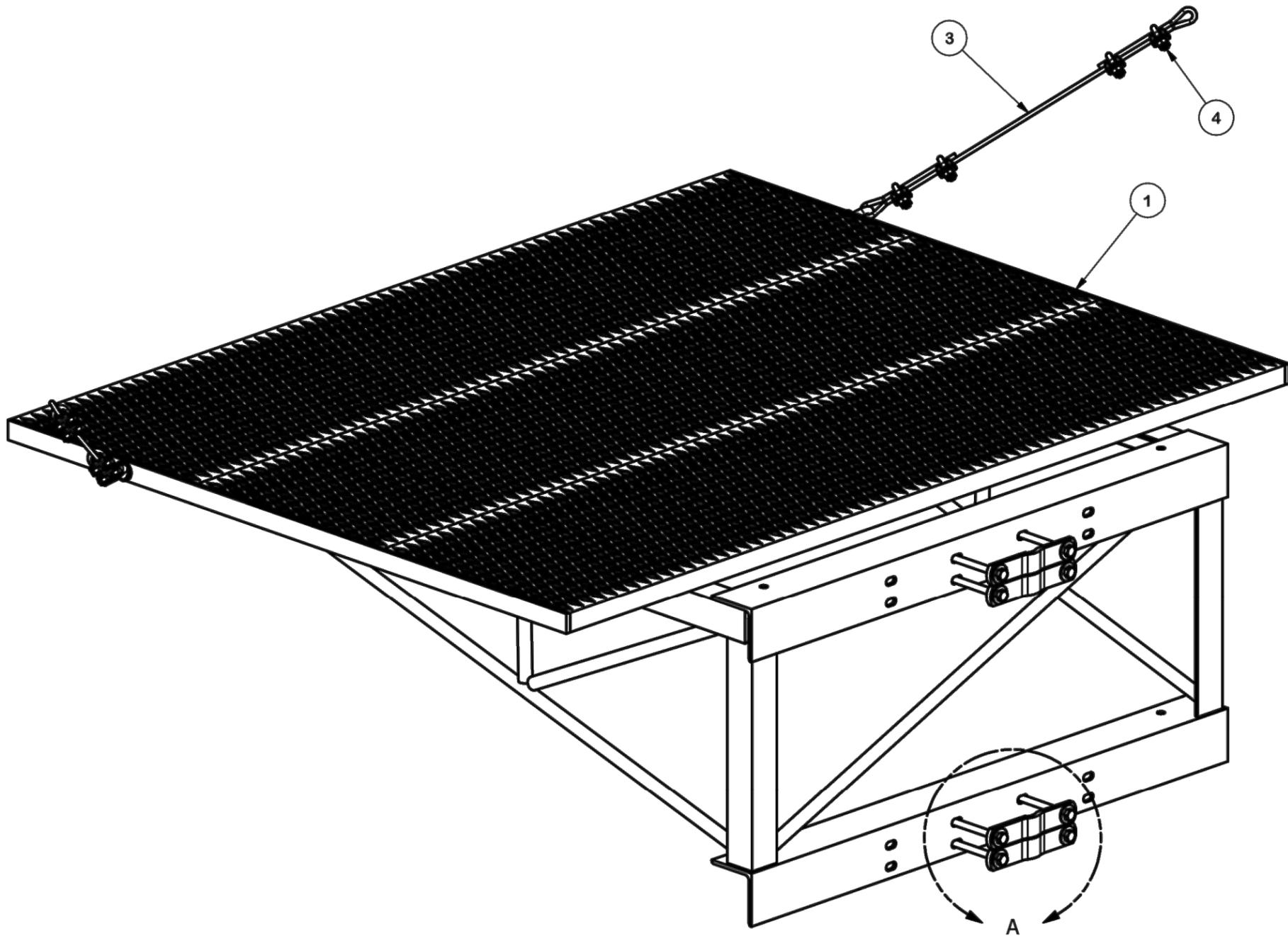
These drawings and specifications are the proprietary property of CommScope Inc. and may be used only for the specific purpose authorized in writing by CommScope Inc.  ALL DIMENSIONS ARE IN INCHES U.O.S. TOLERANCES UNLESS OTHERWISE SPECIFIED: .X = ± .12 ANGLES ±2' .XX = ± .06 FRACTIONS ±1/32 .XXX = ± .03  REMOVE BURRS AND BREAK EDGES .005  DO NOT SCALE THIS PRINT	DRAWN BY: MSM CHECKED BY: TP DATE: 10/19/12 REVISION: A	SHEET: 1 of 2 SCALE: NTS MATERIAL: A36, A500 FINISH: GALV A123 WEIGHT: 363.62 LBS	PART NUMBER: RM-DM-6 DESCRIPTION: 6' Microwave 12"-50" Monopole Mount DRAWING TYPE: ASSEMBLY DRAWING  <b>COMMSCOPE®</b> Hickory, NC 28602 U.S.A.
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C-12

These drawings and specifications are the proprietary property of CommScope Inc. and may be used only for the specific purpose authorized in writing by CommScope Inc.  ALL DIMENSIONS ARE IN INCHES U.O.S. TOLERANCES UNLESS OTHERWISE SPECIFIED: .X = ± .12      ANGLES      ±2° .XX = ± .06      FRACTIONS      ±1/32 .XXX = ± .03  REMOVE BURRS AND BREAK EDGES .005  DO NOT SCALE THIS PRINT	DRAWN BY: MSM	SHEET: 2 of 2	PART NUMBER: RM-DM-6
	CHECKED BY: TP	SCALE: NTS	DESCRIPTION: 6' Microwave 12"-50" Monopole Mount
	DATE: 10/19/12	MATERIAL: A36, A500	DRAWING TYPE: ASSEMBLY DRAWING
	REVISION: <b>A</b>	FINISH: GALV A123	<b>COMMSCOPE®</b> Hickory, NC 28602      U.S.A.
	WEIGHT: 363.62 LBS		

PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	1	X-109302	6' ICE SHIELD FOR DISHES WELDMENT - SITE PRO 1		291.75	291.75
2	4	X-104223	CLAMP (6-5/8" V-CLAMP) GALVANIZED		1.35	5.41
3	1	218751	5/16" GALV. EHS CABLE 7 WIRE (45' LENGTH)		12.00	12.00
4	8	320152-I	5/16" CABLE CLAMP		1.32	10.52
5	8	G12065	1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD		0.41	3.28
6	16	G12FW	1/2" HDG USS FLATWASHER		0.03	0.54
7	8	G12LW	1/2" HDG LOCKWASHER		0.01	0.11
8	8	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	0.57
					TOTAL WT. #	322.43



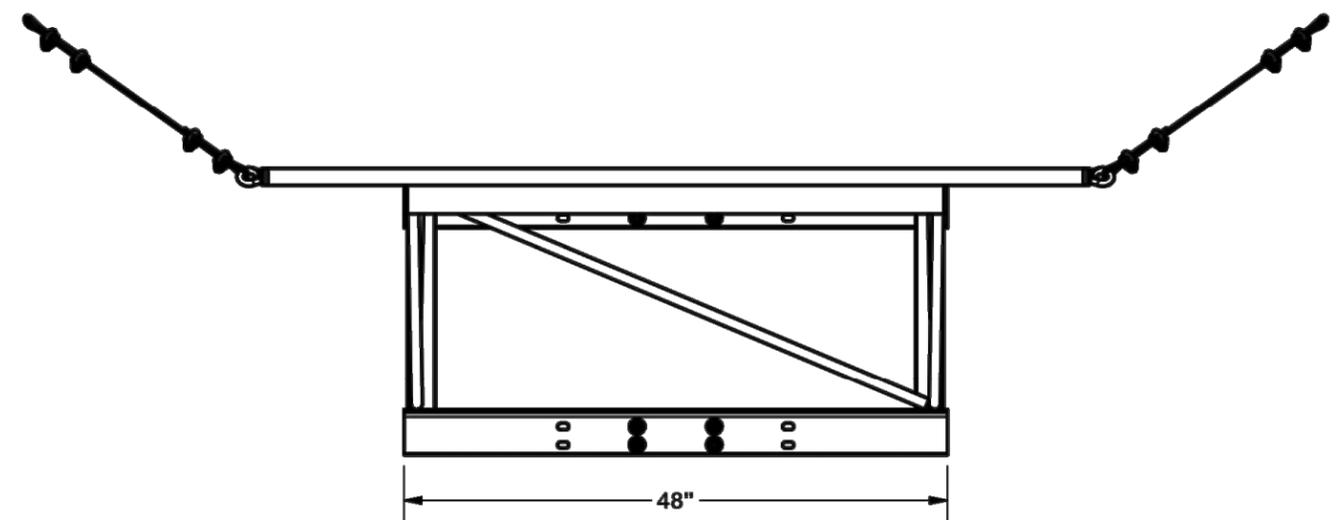
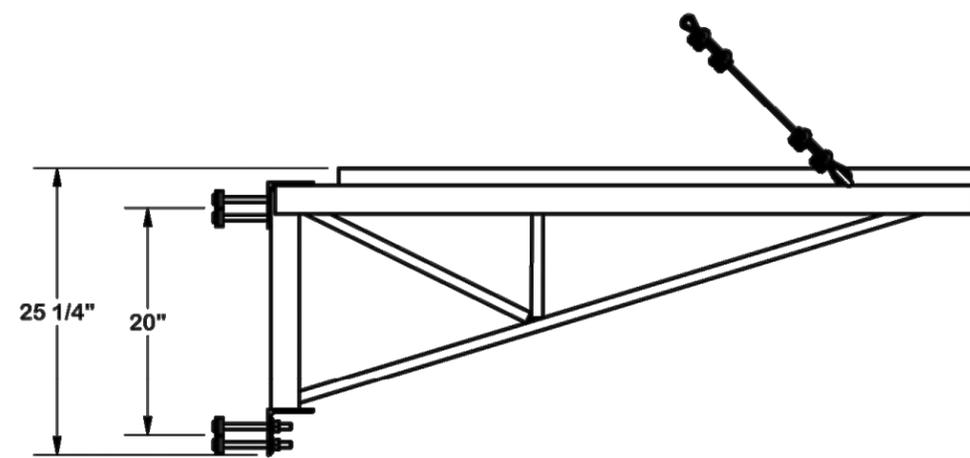
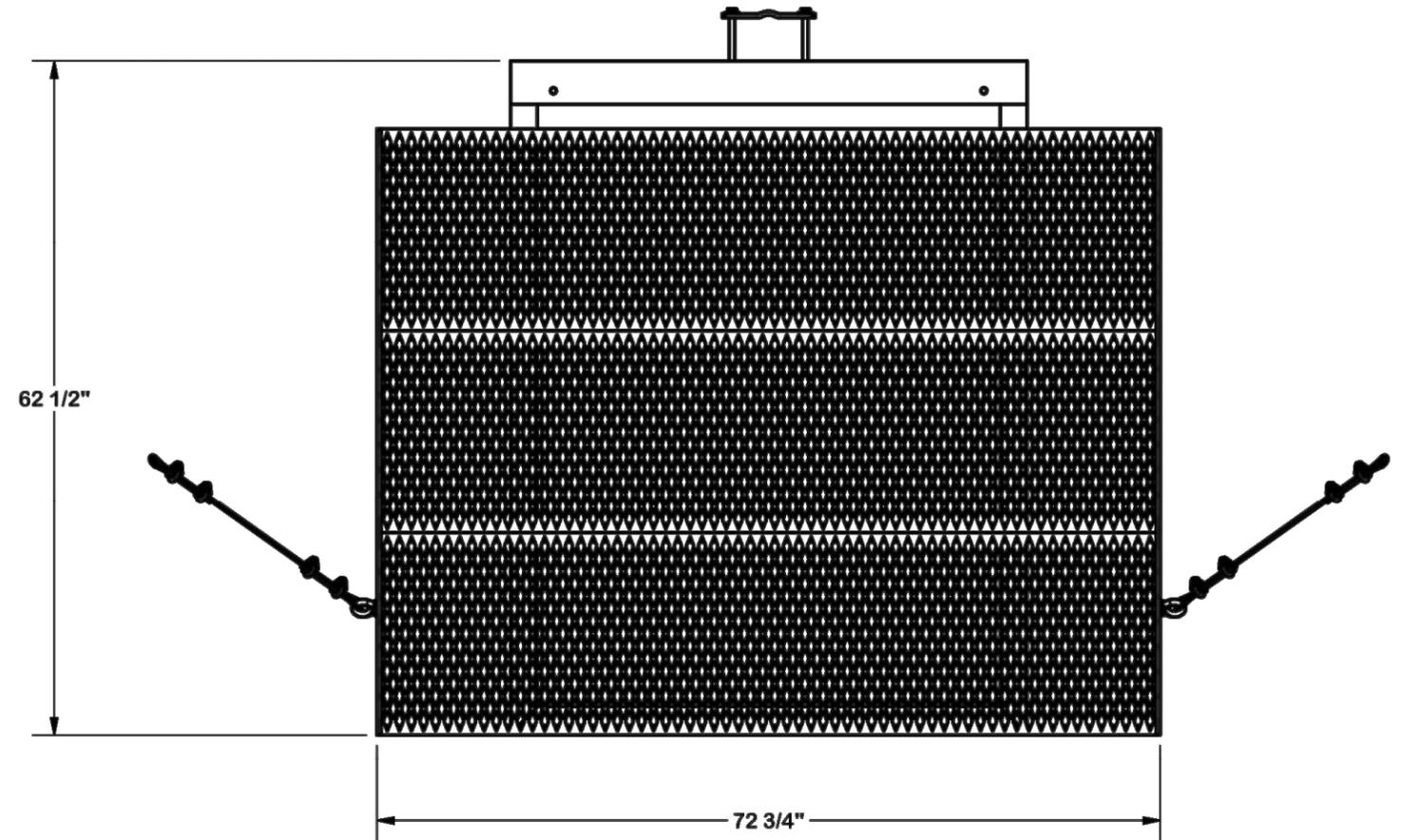
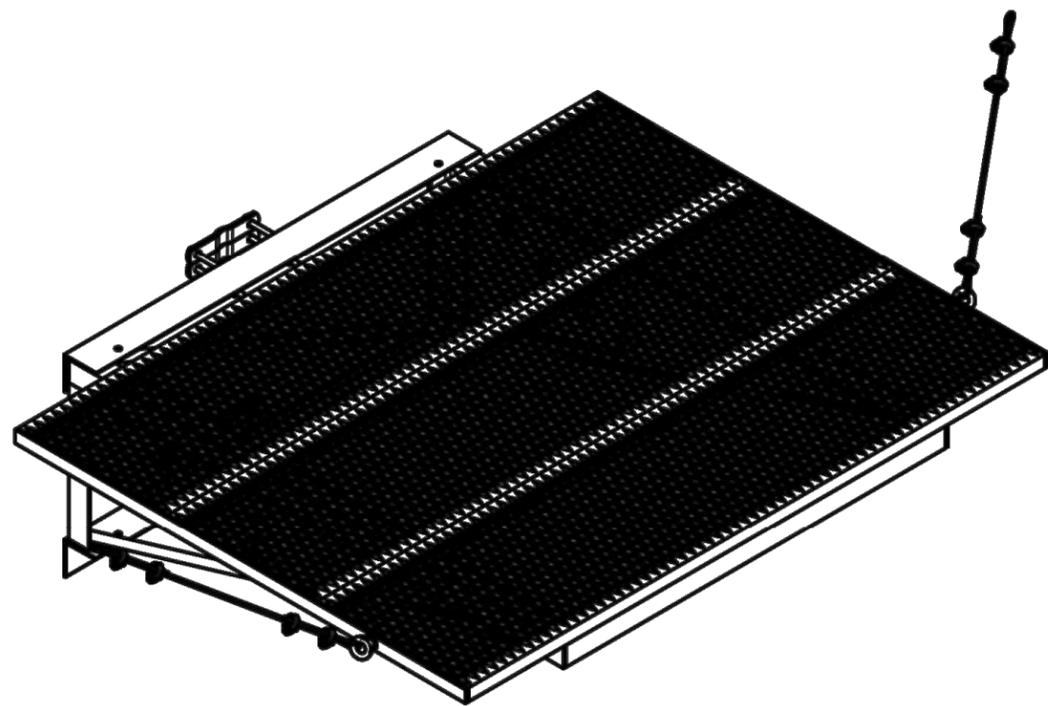
C-13

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

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

DESCRIPTION		6' ICE SHIELD FOR DISHES	
CPD NO.	DRAWN BY	ENG. APPROVAL	
4937	RH18 4/20/2011		
CLASS	SUB	DRAWING USAGE	CHECKED BY
81	01	CUSTOMER	BMC 10/28/2011

 A valmont COMPANY	Engineering Support Team: 1-888-753-7446	Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX
	PART NO.	ISMD6
DWG. NO.	ISMD6	



C-14

**TOLERANCE NOTES**

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

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

DESCRIPTION  
**6' ICE SHIELD FOR DISHES**

**SITE PRO 1**  
 A valmont COMPANY

Engineering Support Team:  
 1-888-753-7446

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

CPD NO. <b>4937</b>	DRAWN BY <b>RH18 4/20/2011</b>	ENG. APPROVAL
CLASS <b>81</b>	SUB <b>01</b>	DRAWING USAGE <b>CUSTOMER</b>
CHECKED BY <b>BMC 10/28/2011</b>		

PART NO. <b>ISMD6</b>	PAGE <b>2 OF 2</b>
DWG. NO. <b>ISMD6</b>	

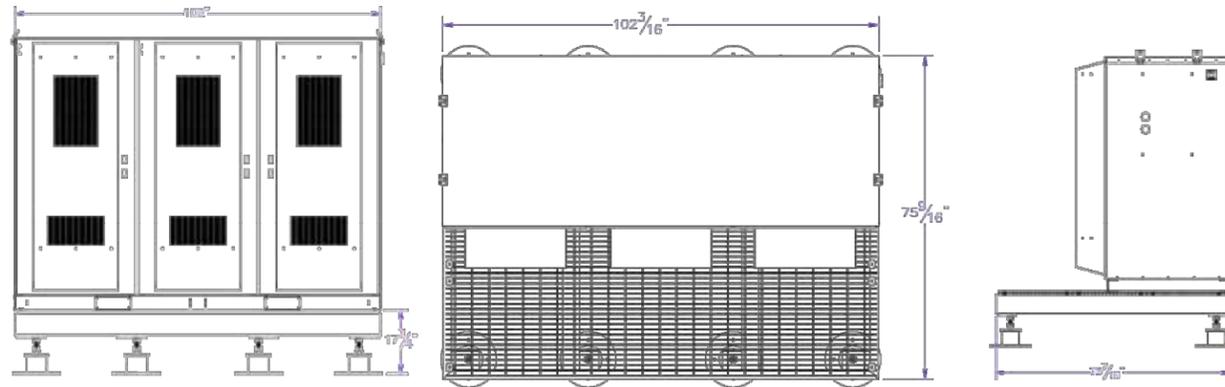
## 2-Bay, 3-Bay Walk Up Cabinet (WUC) for AT&T Issue 2.2

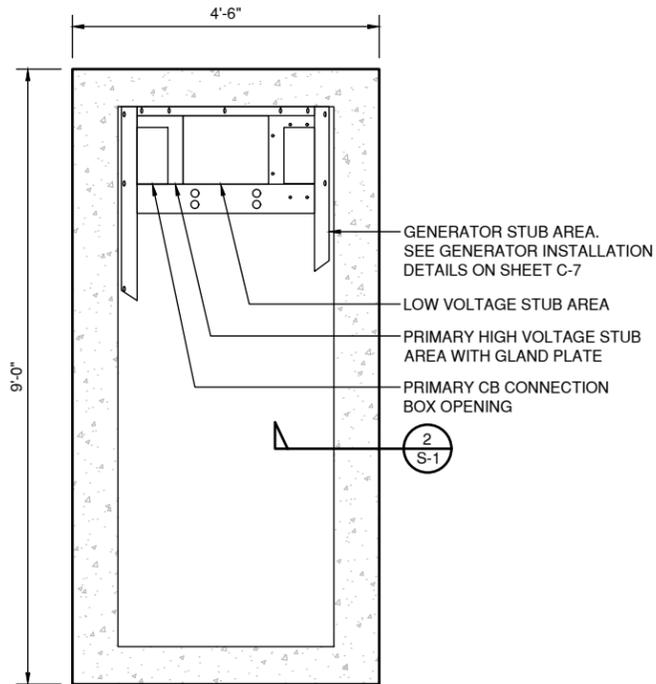


### Step 3. Select Mounting Option

Select part number for mounting options from tables shown below. Please note that the mounting kit part numbers listed in the table below are not ordered from Delta but setup in AT&T's ordering system from a third party supplier (EMI).

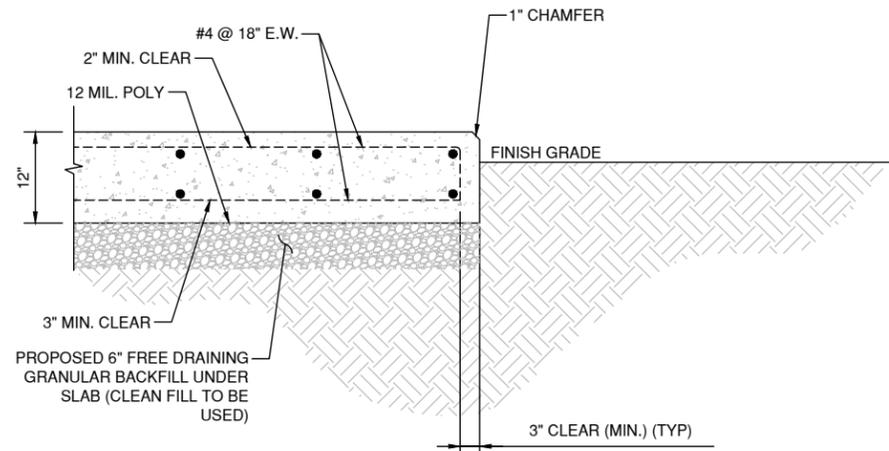
AT&T Part Number	EMI #	Product Picture
NEQ.20262	D1010-0010-0118 (Delta WUC Platform Gravity Mount)	





**GENERATOR FOUNDATION PLAN**

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



**GENERATOR FOUNDATION SECTION DETAILS**

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



**CONCRETE:**

- ALL CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 318-LATEST EDITION "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", EXCEPT AS MODIFIED BY THE SUPPLEMENTAL REQUIREMENTS CONTAINED HEREIN OR SHOWN ON THE DRAWINGS.
- ALL CONCRETE SHALL BE 150 PCF HARDROCK, MIXED PER ASTM C-94 AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28-DAYS.
- THE MAXIMUM SIZE AGGREGATE IN FOUNDATION AND MASS CONCRETE WORK SHALL BE 1-INCH. THE MAXIMUM SIZE AGGREGATE IN SLABS-ON-GRADE, WALLS, AND ALL OTHER CONCRETE SHALL BE 3/4-INCH.
- CEMENT SHALL CONFORM TO ASTM C-150, TYPE II, LOW-ALKALI. AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C-33.
- ADMIXTURES AND COLORS (EXCEPT AS NOTED, HEREIN) SHALL NOT BE USED UNLESS SUBSTANTIATING DATA IS SUBMITTED TO, AND ACCEPTED BY, THE ENGINEER AND ARCHITECT OF RECORD.
- CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY. THE MIX DESIGNS SHALL CONFORM TO IBC SECTION 1905, UNLESS OTHERWISE NOTED.
- ALL EXPOSED CONCRETE SHALL HAVE A SMOOTH FORM FINISH, USING B-B PLY-FORM, CLASS I, EXT-APA PLYWOOD.
- ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS, AND INSERTS SHALL BE WELL-SECURED IN POSITION PRIOR TO PLACING CONCRETE.
- NO CLAY BRICK OR POROUS MATERIAL SHALL BE USED TO SUPPORT FOUNDATION STEEL OFF THE GROUND. CONCRETE "DOBIES" ARE ACCEPTABLE.
- PROVIDE 3/4-INCH CHAMFER ON ALL EXPOSED CONCRETE CORNERS AND EDGES, UNLESS OTHERWISE NOTED.
- ALL REINFORCING BARS SHALL BE PROVIDED WITH THE FOLLOWING CONCRETE MINIMUM COVER:
  - FOOTINGS CAST AGAINST EARTH: 3"
  - FORMED CONCRETE EXPOSED TO EARTH OR WEATHER: 2"
- CONCRETE CURING TYPICALLY REQUIRED FOR 5 DAYS.
- COLD-WEATHER CONCRETE PRACTICES, AS SPECIFIED BY ACI, SHALL BE ADHERED TO (WHEN APPLICABLE).

**REINFORCING STEEL:**

- ALL REINFORCING STEEL SHALL BE PLACED IN CONFORMANCE WITH THE IBC AND THE "MANUAL OF STANDARD PRACTICE" BY THE CRSI, OR AS MODIFIED BY THE CONSTRUCTION DOCUMENTS.
- REINFORCING BARS SHALL CONFORM TO ASTM A-615, DEFORMED GRADE 60, EXCEPT #3 BARS MAY BE GRADE 40. REINFORCING BARS THAT ARE TO BE WELDED SHALL CONFORM TO ASTM A-706, DEFORMED GRADE 60.
- WELDING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH ASTM A-706 WITH LOW HYDROGEN ELECTRODES AND SHALL CONFORM TO IBC STANDARD 1901 AND STRUCTURAL WELDING CODE REINFORCING STEEL BY ANSI/AWS D1.4. MINIMUM TENSILE STRENGTH OF WELD METAL SHALL BE 90 KSI. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
- ALL REINFORCING BAR BENDS SHALL BE MADE "COLD", UNLESS OTHERWISE PERMITTED BY THE BUILDING OFFICIAL.
- PROVIDE #3 SPACER TIES AT 2'-6" ON CENTER IN ALL BEAMS AND FOOTINGS TO SECURE REINFORCING BARS IN-PLACE, UNLESS OTHERWISE NOTED.
- PIPING AND CONDUIT SHALL BE SO FABRICATED AND INSTALLED THAT CUTTING, BENDING, OR DISPLACEMENT OF REINFORCEMENT FROM ITS PROPER LOCATION WILL NOT BE REQUIRED.

**FOUNDATION:**

- SOIL REMOVAL AND RE-COMPACTION SHALL BE 90% COMPACTION (STANDARD PROCTOR).
- DESIGN SOIL PRESSURE:
 

FOOTING TYPE:	ALLOWABLE NET BEARING PRESSURE:
SPREAD FOOTING	2000 PSF
- NO PIPES OR DUCTS SHALL BE PLACED IN FOUNDATIONS UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE ENGINEER.
- ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
- THE CONTRACTOR SHALL DETERMINE THE LOCATION OF UTILITY SERVICES IN AREAS TO BE EXCAVATED BEFORE BEGINNING EXCAVATION. EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING. DAMAGE CAUSED AS A RESULT OF FAILING TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

PREPARED BY:

**nexus**

NEXIUS SOLUTIONS, INC.  
2595 NORTH DALLAS PARKWAY  
SUITE 300  
FRISCO, TX 75034

CLIENT:



FOR CONSTRUCTION



DATE SIGNED: 10/15/20  
PE LICENSE RENEWAL: 10/31/21

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SUBMITTALS			
REV	DATE	DESCRIPTION	BY
C	03/20/20	FOR REVIEW	RA
D	04/16/20	FOR REVIEW	RA
0	04/22/20	FINAL CD	RA
1	08/24/20	REVISED CD	RA
2	10/15/20	REVISED CD	RA

**SITE INFORMATION:**  
 SITE NAME: NSB-CO.BDN\_ADD\_4591\_COL02148\_Peyton  
 SITE NUMBER: COL02148  
 FA LOCATION CODE: 12871723  
 PACE ID: MRUTH029076  
 ADDRESS: 12960 N PEYTON HWY, PEYTON, CO 80831

**PROJECTS:**  
LTE 1C 2C 3C 4C 5C 6C

<b>DRAWN BY:</b> RA	<b>DATE:</b> 01/02/20
<b>CHECKED BY:</b> RA	<b>DATE:</b> 10/15/20

**SHEET TITLE:**  
GENERATOR FOUNDATION DETAILS

**SHEET NUMBER:**

**S-1**

# ELECTRICAL NOTES:

**SCOPE:**

1. SHALL INCLUDE ALL LABOR, MATERIALS AND APPLIANCES REQUIRED FOR THE FURNISHING, INSTALLING AND TESTING, COMPLETE AND READY FOR OPERATION OF ALL WORK SHOWN ON THE DRAWING AS SPECIFIED HEREIN:

- |                          |                                |
|--------------------------|--------------------------------|
| 1.1. ELECTRIC SERVICE    | 1.4 MISCELLANEOUS MATERIALS    |
| 1.2. CONDUIT AND RACEWAY | 1.5 TELEPHONE CONDUITS         |
| 1.3. CONDUCTORS          | 1.6 LIGHTNING ARRESTING SYSTEM |

**CODES:**

1. THE INSTALLATION SHALL COMPLY WITH ALL LAWS APPLYING TO ELECTRICAL INSTALLATION IN EFFECT WITH THE REGULATIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE AND THE ICC 2006, ADMINISTRATIVE RULES WITH THE NATIONAL ELECTRIC CODE, AND ALL LOCAL GOVERNING CODES AND ORDINANCES WITH THE REGULATION OF THE SERVING UTILITY COMPANY. ALL PERMITS REQUIRED SHALL BE OBTAINED AND, AFTER COMPLETION OF WORK, THE OWNER SHALL BE FURNISHED A CERTIFICATE OF FINAL INSPECTION AND APPROVAL.

**MATERIALS:**

1. MATERIALS TO BE NEW. USE OF USED OR SUB STANDARD MATERIAL IS NOT ACCEPTABLE. IN THE CASE OF EXISTING METERING EQUIPMENT OR PANELS, REQUIRED COMPONENTS SHALL BE NEW.

**TESTING:**

1. UPON COMPLETION OF THE INSTALLATION, OPERATE AND ADJUST ALL EQUIPMENT AND SYSTEMS TO MEET SPECIFIED PERFORMANCE REQUIREMENTS. ALL TESTING SHALL BE DONE BY QUALIFIED PERSONNEL.

**GUARANTEE:**

1. IN ADDITION TO THE GUARANTEE OF THE EQUIPMENT BY THE MANUFACTURER, EACH PIECE OF EQUIPMENT SPECIFIED HEREIN SHALL ALSO BE GUARANTEED FOR DEFECTS OF MATERIAL OR WORKMANSHIP OCCURRING DURING A PERIOD OF ONE (1) YEAR FROM FINAL ACCEPTANCE OF THE WORK BY THE OWNER. WITHOUT EXPENSE TO THE OWNER ALL WARRANTY CERTIFICATES & GUARANTEES FURNISHED BY THE MANUFACTURERS SHALL BE TURNED OVER TO THE OWNER.

**COORDINATION:**

1. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE POWER AND TELEPHONE COMPANIES AND SHALL COMPLY WITH ALL SERVICE REQUIREMENTS OF EACH UTILITY COMPANY.

**EXAMINATION OF SITE:**

1. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE JOB AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED ELECTRICAL INSTALLATION AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. FAILURE TO COMPLY WITH THE INTENT OF THIS PARAGRAPH WILL IN NO WAY RELIEVE THE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM OR SYSTEMS.

**CUTTING, PATCHING AND EXCAVATION:**

- COORDINATION OF ALL SLEEVES, CHASES, ETC., WILL BE REQUIRED PRIOR TO THE CONSTRUCTION OF ANY PORTION OF THE WORK. ALL CUTTING AND PATCHING OF WALLS, PARTITIONS, FLOORS, AND CHASES IN CONCRETE, WOOD, STEEL OR MASONRY SHALL BE DONE AS PROVIDED ON THE DRAWINGS.
- ALL NECESSARY EXCAVATIONS AND BACKFILLING INCIDENTAL TO THE WORK UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWING SHALL BE PROVIDED BY THIS CONTRACTOR.
- SEAL ALL PENETRATION THROUGH WALL AND FLOORS WITH APPROVED GROUT.

**EXTERIOR CONDUIT:**

1. ALL EXPOSED CONDUIT SHALL BE NEATLY INSTALLED AND RUN PARALLEL OR PERPENDICULAR TO STRUCTURAL ELEMENTS. SUPPORTS AND MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL.

2. ALL EXTERIOR PVC CONDUITS SHALL BE INSTALLED WITH FROST SLEEVES (8" OVERLAP)

**RACEWAYS**

- ALL CONDUCTORS SHALL BE INSTALLED IN CONDUIT. ALL CONDUIT SHALL BE RIGID STEEL EMT, OR SCH40 PVC. AS INDICATED ON THE DRAWINGS.
- WHERE INSTALLED ON EXTERIORS AND EXPOSED TO DAMAGE, ALL CONDUIT SHALL BE RIGID STEEL. ALUMINUM CONDUIT SHALL NOT BE ALLOWED.
- CONCEALED CONDUIT IN WALLS OR INTERIOR SPACES ABOVE GRADE MAY BE EMT OR PVC.
- UNDERGROUND CONDUITS SHALL BE RIGID STEEL OR SCHEDULE 80 PVC AS INDICATED ON THE DRAWINGS.
- ALL CONDUIT RUNS SHALL USE APPROVED COUPLINGS AND CONNECTORS. PROVIDE INSULATED BUSHINGS FOR ALL CONDUIT TERMINATIONS. ALL CONDUIT RUNS IN A WET LOCATION SHALL HAVE WATERPROOF FITTINGS.
- PROVIDE SUPPORTS FOR ALL CONDUITS IN ACCORDANCE WITH NEC REQUIREMENTS. ALL CONDUITS SHALL BE SIZED AS REQUIRED BY NEC.
- BURIAL DEPTH OF ALL CONDUITS SHALL BE AS REQUIRED BY CODE FOR EACH SPECIFIC CONDUIT TYPE AND APPLICATION.
- CONDUIT ROUTES ARE SCHEMATIC. CONTRACTOR SHALL FIELD VERIFY BEFORE BID. COORDINATE ROUTE WITH WIRELESS CARRIER AND BUILDING OWNER.

**EQUIPMENT:**

- ALL DISCONNECT SWITCHES SHALL BE BREAKER TYPE.
- CIRCUIT BREAKERS SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT AS DETERMINED BY THE LOCAL UTILITY. CONTRACTOR SHALL VERIFY MAXIMUM AVAILABLE FAULT CURRENT, AND COORDINATE INSTALLATION WITH THE LOCAL UTILITY BEFORE STARTING WORK.

**CONDUCTORS:**

- FURNISH AND INSTALL CONDUCTORS CALLED FOR IN THE DRAWINGS. ALL CONDUCTORS SHALL HAVE TYPE THWN (MIN) (75 °C) INSULATION, RATED FOR 600 VOLTS.
- ALL CONDUCTORS SHALL BE COPPER, THE USE OF ALUMINUM CONDUCTORS SHALL NOT BE ALLOWED. ALL CONDUCTORS SHALL BE UL LISTED AND SHALL BE PROVIDED AND INSTALLED AS FOLLOWS:
  - MINIMUM WIRE SIZE SHALL BE #12 AWG.
  - ALL CONDUCTORS SIZE #8 AND LARGER SHALL BE STRANDED. CONDUCTORS SIZED #10 AND SMALLER MAY BE SOLID OR STRANDED.
  - CONNECTION FOR #10 AWG AND SMALLER SHALL BE BY TWISTING TIGHT AND INSTALLING INSULATED PRESSURE OR WIRE NUT CONNECTIONS.
  - CONNECTION FOR #8 AWG AND LARGER SHALL BE BY USE OF STEEL CRIMP-ON SLEEVES WITH NYLON INSULATOR.
- ALL CONDUCTORS SHALL BE CODED IN ACCORDANCE WITH NEC STANDARDS.
- THE RACEWAY SYSTEM SHALL BE COMPLETE BEFORE INSTALLING CONDUCTORS.

**PENETRATIONS:**

- CONTRACTOR SHALL COMPLY WITH UL PENETRATION DETAILS FOR PENETRATIONS OF ALL RATED WALLS, ROOF, ETC.

**GROUNDING:**

- ALL ELECTRICAL NEUTRALS, RACEWAYS AND NON-CURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT AND ASSOCIATED ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC ARTICLE 250. THIS SHALL INCLUDE NEUTRAL CONDUCTORS, CONDUITS, SUPPORTS, CABINETS, BOXES, GROUND BUSSES, ETC. THE NEUTRAL CONDUCTOR FOR EACH SYSTEM SHALL BE GROUNDED BY ONE POINT ONLY.
- PROVIDE GROUND CONDUCTOR IN ALL RACEWAYS.
- PROVIDE BONDING AND GROUND TO MEET NFPA 780 - LIGHTNING PROTECTION AS A MINIMUM.
- PROVIDE GROUNDING SYSTEM AS INDICATED ON THE DRAWINGS, AS REQUIRED BY THE NATIONAL ELECTRIC CODE AND RADIO EQUIPMENT MANUFACTURER.

**ABBREVIATIONS**

- A - AMPERE
- AFG - ABOVE FINISHED GRADE
- ATS - AUTOMATIC TRANSFER SWITCH
- AWG - AMERICAN WIRE GAUGE
- BCW - BARE COPPER WIRE
- BFG - BELOW FINISHED GRADE
- BKR - BREAKER
- c - CONDUIT
- CKT - CIRCUIT
- DISC - DISCONNECT
- EGR - EXTERNAL GROUND RING
- EMT - ELECTRIC METALLIC TUBING
- FSC - FLEXIBLE STEEL CONDUIT
- GEN - GENERATOR
- GPS - GLOBAL POSITIONING SYSTEM
- GRD - GROUND
- IGB - ISOLATED GROUND BAR
- IGR - INTERIOR GROUND RING (HALO)
- KW - KILOWATTS
- NEC - NATIONAL ELECTRIC CODE 0 GROUND ROD
- PCS - PERSONAL COMMUNICATION SYSTEM
- PH - PHASE CAD WELD
- PNL - PANEL
- PNLBD - PANELBOARD
- PVC - SCH40 RIGID NON-METALLIC CONDUIT
- RGS - RIGID GAL VAN I ZED STEEL CONDUIT
- SW - SWITCH
- TGB - TOWER GROUND BAR
- UL - UNDERWRITERS LABORATORIES
- V - VOLTAGE
- W - WATTS
- XFMR - TRANSFORMER
- XMTR - TRANSMITTER

LEGEND		
OVERHEAD ELECTRIC LINE	— OH/E —	— OH/E —
UNDERGROUND ELECTRIC LINE	— UG/E —	— UG/E —
OVERHEAD FIBER LINE	— OH/F —	— OH/F —
UNDERGROUND FIBER LINE	— UG/F —	— UG/F —
OVERHEAD TELEPHONE LINE	— OH/T —	— OH/T —
UNDERGROUND TELEPHONE LINE	— UG/T —	— UG/T —
ELECTRIC MANHOLE		ⓔ
UTILITY POLE		Ⓜ
STREET LIGHT		☀

PREPARED BY:

**n e x i u s**

NEXIUS SOLUTIONS, INC.  
2595 NORTH DALLAS PARKWAY  
SUITE 300  
FRISCO, TX 75034

CLIENT:



161 INVERNESS DR W, 2ND FLOOR  
ENGLEWOOD, COLORADO 80112

FOR CONSTRUCTION



DATE SIGNED: 10/15/20  
PE LICENSE RENEWAL: 10/31/21

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SUBMITTALS			
REV	DATE	DESCRIPTION	BY
C	03/20/20	FOR REVIEW	RA
D	04/16/20	FOR REVIEW	RA
0	04/22/20	FINAL CD	RA
1	08/24/20	REVISED CD	RA
2	10/15/20	REVISED CD	RA

**SITE INFORMATION:**  
SITE NAME:  
NSB-CO.BDN\_ADD\_4591\_COL02148\_PeyTON  
SITE NUMBER:  
COL02148  
FA LOCATION CODE:  
12871723  
PACE ID:  
MRUTH029076  
ADDRESS:  
12960 N PEYTON HWY  
PEYTON, CO 80831

**PROJECTS:**  
LTE 1C 2C 3C 4C 5C 6C

**DRAWN BY:** RA      **DATE:** 01/02/20

**CHECKED BY:** RA      **DATE:** 10/15/20

**SHEET TITLE:**  
**ELECTRICAL NOTES**

**SHEET NUMBER:**

**E-1**

### PANEL SCHEDULE

Incoming Voltage 120/240V, 1Ø, 60 HZ  
 200A, COPPER BUS, 10KAIC  
 1 PHASE 3 WIRE

Circuit#	Description	Circuit Breaker		LOAD AMPS	CONTINUOUS	PANEL LOAD			CONTINUOUS	LOAD AMPS	Circuit Breaker		Description	Circuit#		
		SIZE	Poles			A	B	KVA			A	B			SIZE	Poles
1	RECTIFIER #1	30	2	14.4	Y	2.2		4.3	2.2		Y	14.4	2	30	RECTIFIER #2	2
3				14.4	Y		2.2	4.3		2.2	Y	14.4				4
5	RECTIFIER #3	30	2	14.4	Y	2.2		4.3	2.2		Y	14.4	2	30	RECTIFIER #4	6
7				14.4	Y		2.2	4.3		2.2	Y	14.4				8
9	RECTIFIER #5	30	2	14.4	Y	2.2		4.3	2.2		Y	14.4	2	30	RECTIFIER #6	10
11				14.4	Y		2.2	4.3		2.2	Y	14.4				12
13	RECTIFIER #7	30	2	14.4	Y	2.2		2.2	0.0			0.0	2	30	RECTIFIER #8 / SPARE	14
15				14.4	Y		2.2	2.2		0.0		0.0				16
17	RECTIFIER #9 / SPARE	30	2			0.0		0.0	0.0			0.0	2	30	RECTIFIER #10 / SPARE	18
19							0.0	0.0		0.0		0.0				20
21	HEATER 1	20	1	12.5	N	1.5		1.5	0.0			0.0	1	20	EXTERIOR LIGHT	22
23	HEATER 2	20	1	12.5	N		1.5	1.5		0.0		0.0	1	20	DUPLEX RECPT	24
25	HEATER 1	20	1	12.5	N	1.5		1.7	0.2		N	1.7	1	20	THERMOSIPHON HEX 1	26
27	SPARE		1		N		0.0	0.2		0.2	N	1.7	1	20	THERMOSIPHON HEX 2	28
29	GFCI	20	1	3.0	N	0.4		0.6	0.2		Y	1.5	1	20	GENERATOR BLOCK HTR	30

TOTAL PHASE LOAD:	L1	18.9	KVA
	L2	16.8	KVA
TOTAL PANEL LOAD:		35.7	KVA
TOTAL PANEL LOAD:		148.6	AMPS

- NOTES:
- ELECTRICAL SERVICE SHALL BE 200A, 120/240V, 1Ø 3 WIRE.
  - FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT, REFER TO VENDOR PRINTS PROVIDED BY EQUIPMENT SHELTER MANUFACTURER.
  - SINGLE METER PROVIDED AND INSTALLED BY ELECTRIC UTILITY.
  - POWER PANEL SCHEDULE FOR REFERENCE ONLY. CONTRACTOR TO REFER TO SHELTER SPECIFICATIONS FOR EXACT POWER LOADING.

PREPARED BY:

**nexus**

NEXIUS SOLUTIONS, INC.  
 2595 NORTH DALLAS PARKWAY  
 SUITE 300  
 FRISCO, TX 75034

CLIENT:



161 INVERNESS DR W, 2ND FLOOR  
 ENGLEWOOD, COLORADO 80112

FOR CONSTRUCTION



DATE SIGNED: 10/15/20  
 PE LICENSE RENEWAL: 10/31/21

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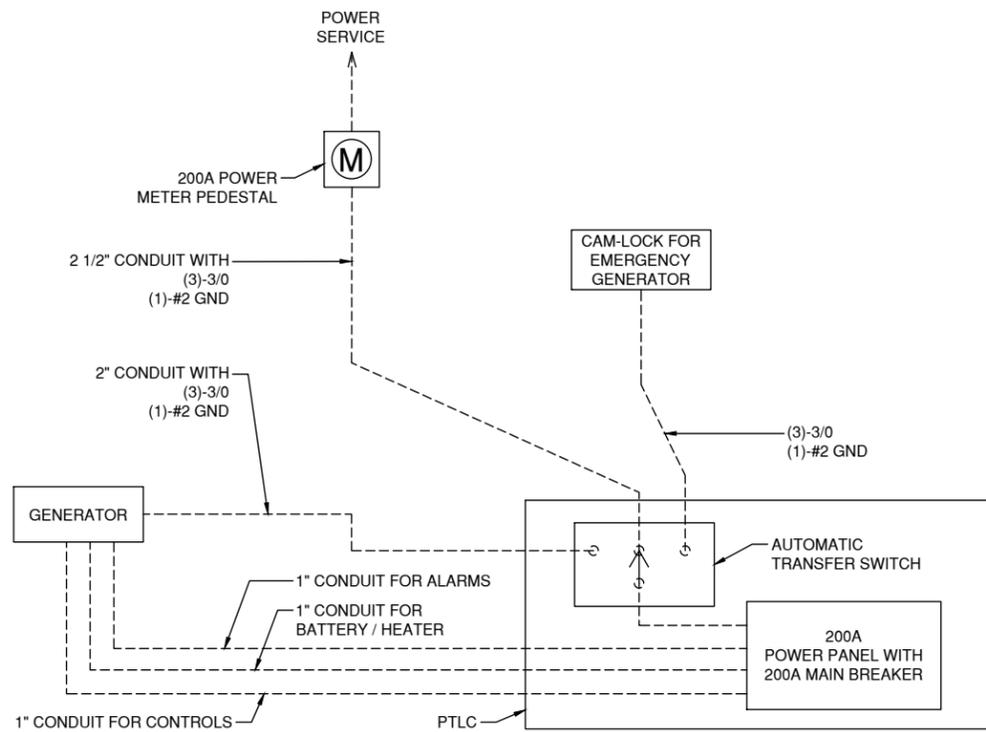
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 NSB-CO.BDN\_ADD\_4591\_COL02148\_PeyTON  
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 COL02148  
 FA LOCATION CODE:  
 12871723  
 PACE ID:  
 MRUTH029076  
 ADDRESS:  
 12960 N PEYTON HWY  
 PEYTON, CO 80831

PROJECTS: LTE 1C 2C 3C 4C 5C 6C	
DRAWN BY: RA	DATE: 01/02/20
CHECKED BY: RA	DATE: 10/15/20

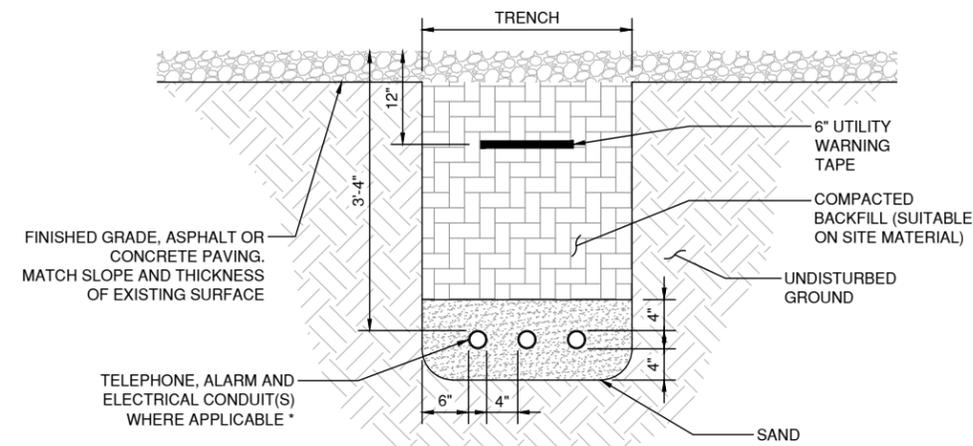
SHEET TITLE:  
**POWER PANEL SCHEDULE**  
 SHEET NUMBER:

**E-2**



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

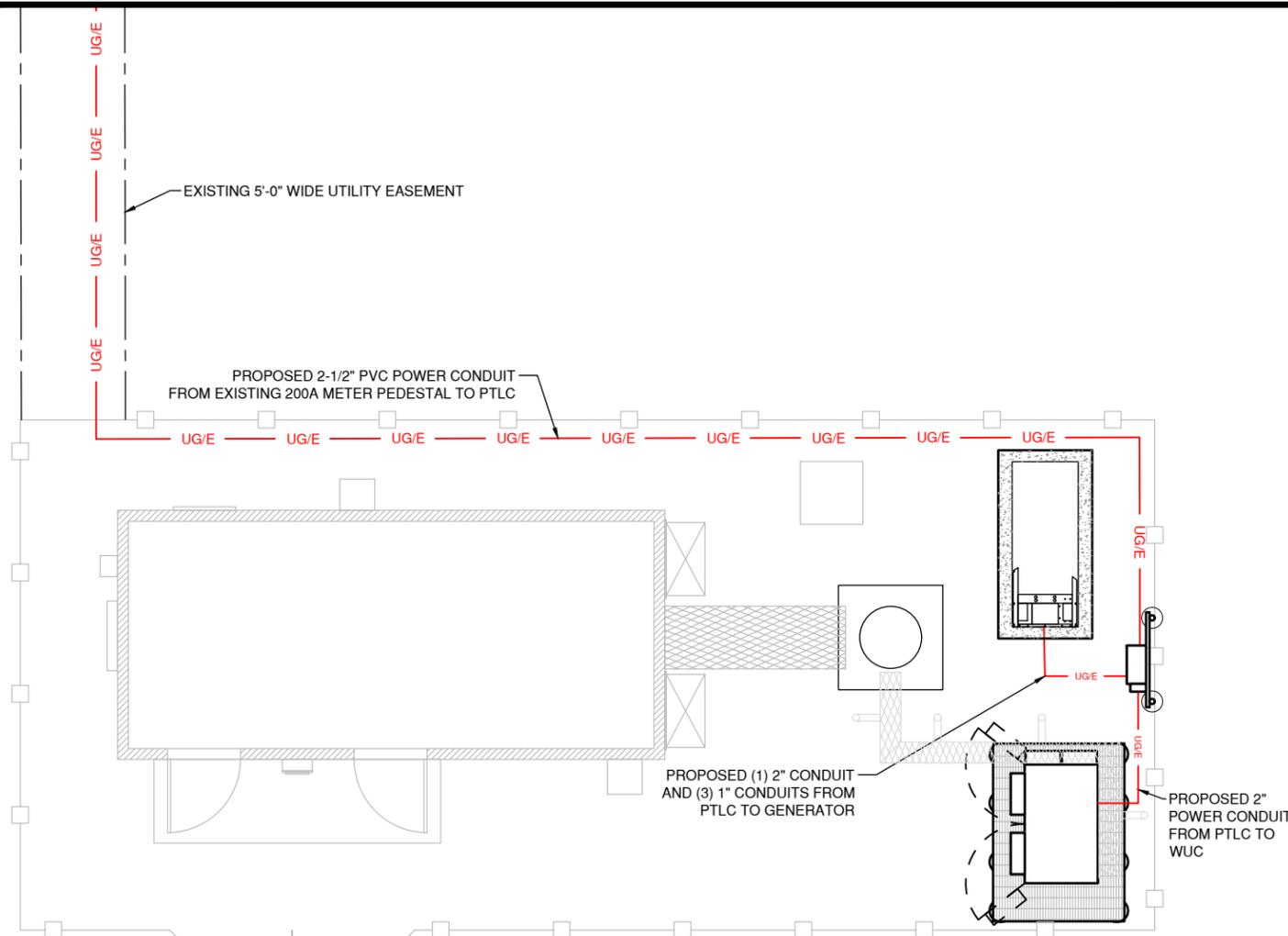
- NOTES:
1. ACTUAL SEPARATION OF CONDUITS TO BE DETERMINED BY SITE SPECIFIC REQUIREMENTS.
  2. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.
  3. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLES, EQUIPMENT, ETC...)
  4. PROVIDE RGS CONDUIT FOR INSTALLATIONS BELOW PARKING LOTS AND ROADWAYS.
  5. SEPARATION DIMENSIONS TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS.



\* SEPARATION DIMENSIONS TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS.

**2 UNDERGROUND CONDUIT TRENCH DETAIL**  
SCALE: N.T.S

- NOTES:
1. ALL TELCO CONDUITS ARE TO BE STUBBED IN D-MARC LOCATION. ALL POWER CONDUITS ARE TO BE TERMINATED AT THE METER CENTER.
  2. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO TRENCHING.
  3. ANY DAMAGE CAUSED TO THE EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
  4. ALL CONDUITS SHALL BE INSTALLED PRIOR TO FINISH GRADING, GEOFABRIC, AND STONE INSTALLATION.
  5. CONTRACTOR SHALL INSTALL SWEEPS AT ALL CONDUIT DIRECTION CHANGES.



**3 POWER AND TELCO PLAN**  
SCALE: 1/8" = 1'-0"

PREPARED BY:

**nexus**

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COL02148

FA LOCATION CODE:  
12871723

PAGE ID:  
MRUTH029076

ADDRESS:  
12960 N PEYTON HWY  
PEYTON, CO 80831

PROJECTS:  
LTE 1C 2C 3C 4C 5C 6C

DRAWN BY: RA	DATE: 01/02/20
CHECKED BY: RA	DATE: 10/15/20

SHEET TITLE:  
**ELECTRICAL DETAILS**

SHEET NUMBER:

**E-3**

- NOTES:
- REFER TO THE SITE LAYOUT PLAN FOR THE EXACT LOCATION OF THE H-FRAME
  - CONTRACTOR TO COORDINATE WITH ELECTRIC UTILITY FOR METER, METER CANISTER, METERING DEVICE AND WHO IS TO PROVIDE AND INSTALL EACH.
  - CONTRACTOR TO ENSURE METER RACK WORKING SPACES REQUIRED BY THE NEC (ART. 110.26), STATE, AND LOCAL CODES ARE MAINTAINED ON THE H-FRAME PRIOR TO INSTALLATION.
  - SHOW LOCATION (INCLUDING DIMENSIONS OF ALL CAPPED UNDERGROUND CONDUIT ON FINAL AS-BUILT DRAWINGS SUBMITTED TO OWNER.
  - COORDINATE EXACT LOCATION OF UNDERGROUND FEEDERS AND CIRCUITRY WITH THE OWNER.
  - CONTRACTOR SHALL COORDINATE EFFORTS WITH (LOCAL, ELECTRICAL) AUTHORITY HAVING JURISDICTION (AHJ) AND OTHER TRADES TO DETERMINE "FROST" LINE, AND TYPE(S) OF RACEWAYS REQUIRED FOR INSTALLATION.
  - BOND ALL ELECTRICAL EQUIPMENT TO RACK.
  - DIMENSIONS SHOWN ARE APPROXIMATE AND MAY BE ALTERED IN THE FIELD AS APPROVED BY OWNER TO BETTER SUIT ACTUAL CONDITIONS OR EQUIPMENT RECEIVED.

PREPARED BY:

**nexus**

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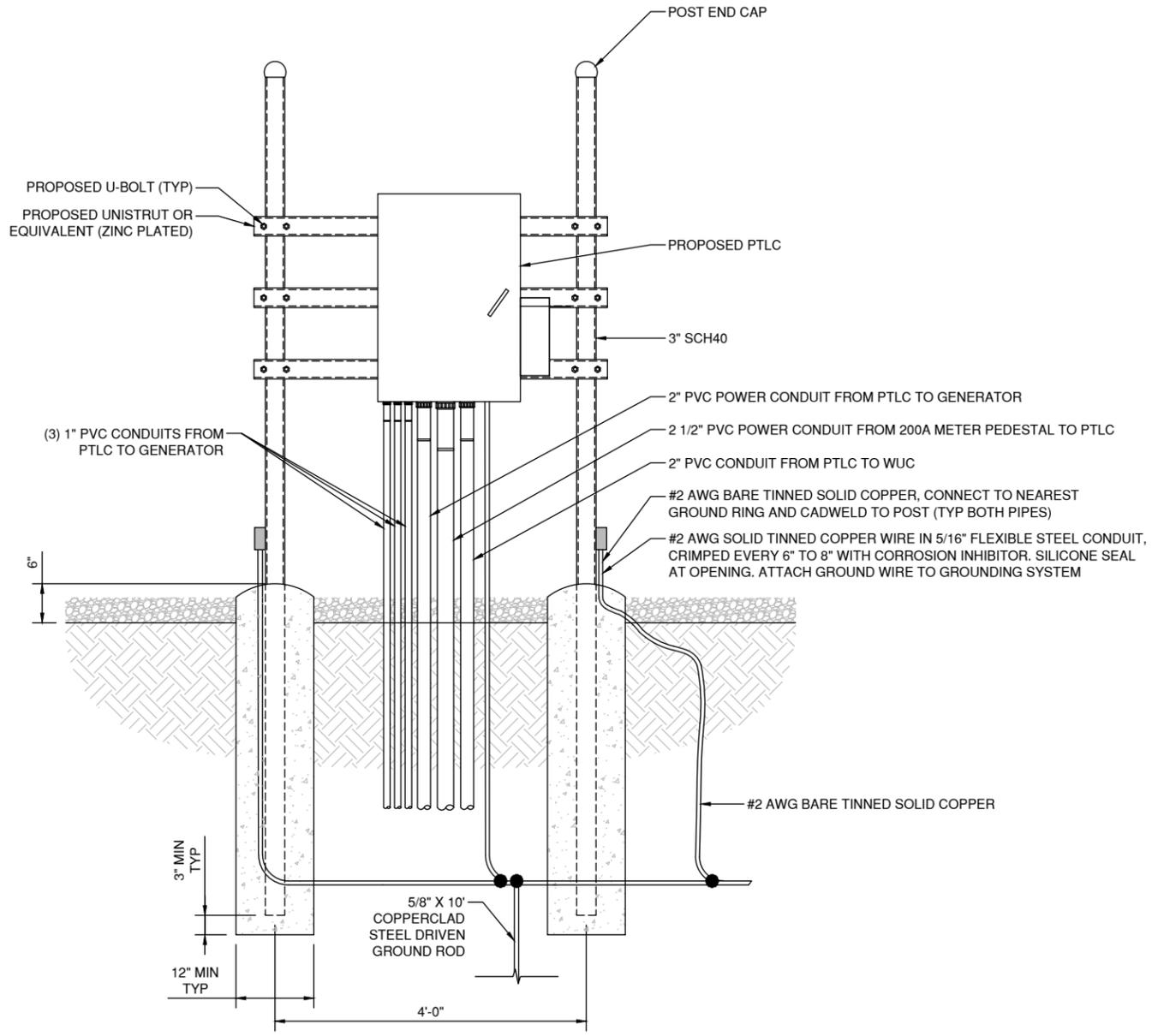
ADDRESS:  
12960 N PEYTON HWY  
PEYTON, CO 80831

PROJECTS:  
LTE 1C 2C 3C 4C 5C 6C

DRAWN BY: RA	DATE: 01/02/20
CHECKED BY: RA	DATE: 10/15/20

SHEET TITLE: SERVICE RACK DETAILS

SHEET NUMBER:



**DRAWING NOTES:**

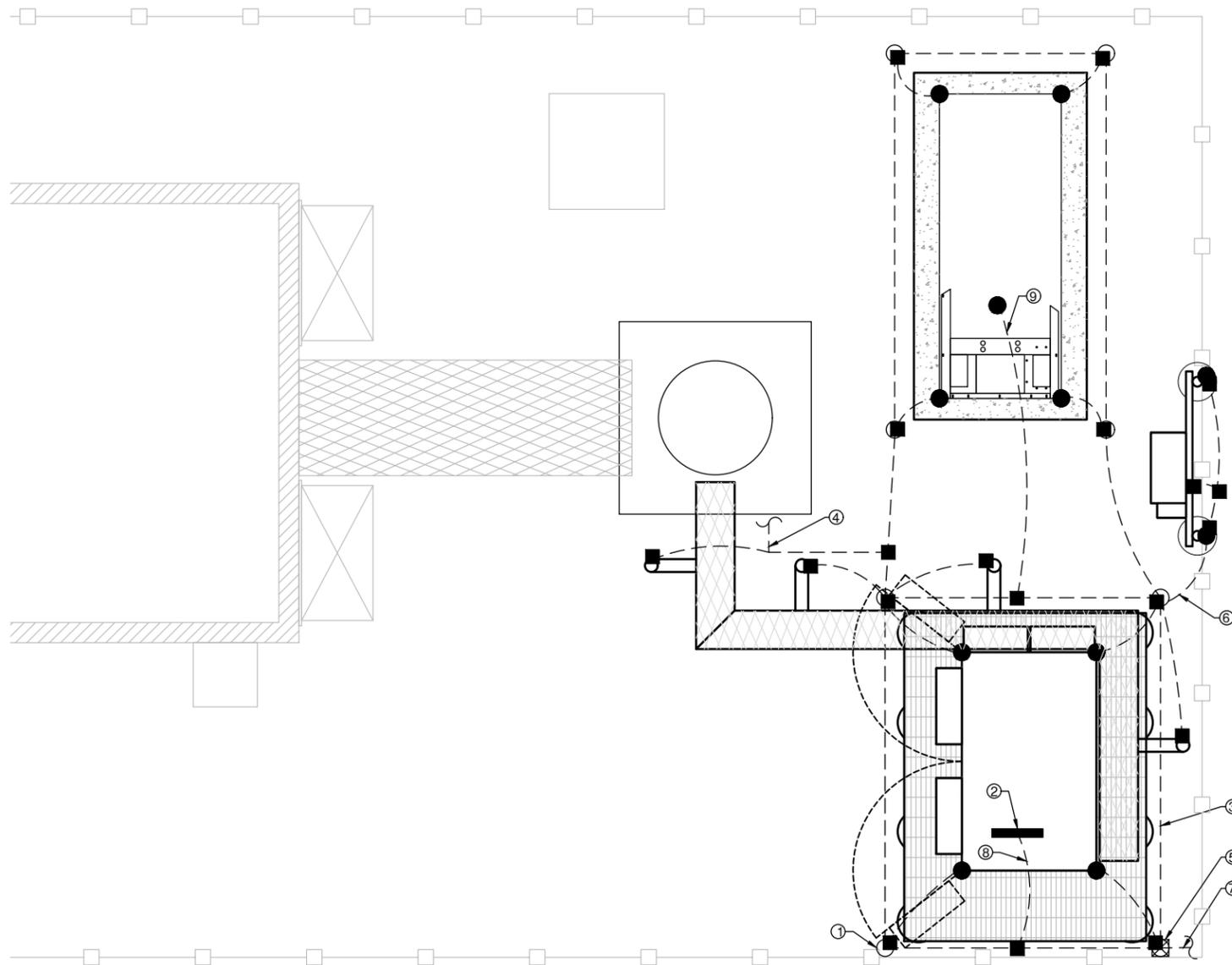
1. 5/8" x 8'-0" COPPER GROUND ROD (TYP).
2. CIGBE GROUND BAR.
3. PROPOSED SHELTER GROUND RING. #2 COPPER CONDUCTOR-BARE TINNED BURIED.
4. CAD WELD #2 BARE TINNED COPPER CONDUCTOR FROM ICE BRIDGE TO EXISTING TOWER GROUND RING. TOWER GROUND RING TO BE FIELD LOCATED.
5. PROPOSED INSPECTION WELL. SEE DETAIL ON THIS SHEET.
6. PROPOSED METER GROUNDED TO NEAREST GROUNDING ROD.
7. CAD WELD #2 BARE TINNED COPPER CONDUCTOR TO NEAREST FENCE GROUND ROD. FENCE GROUND ROD TO BE FIELD LOCATED.
8. CAD WELD FROM SHELTER GROUND RING TO SHELTER GROUND BAR
9. CAD WELD FROM SHELTER GROUND RING TO GENERATOR

**GROUNDING NOTES:**

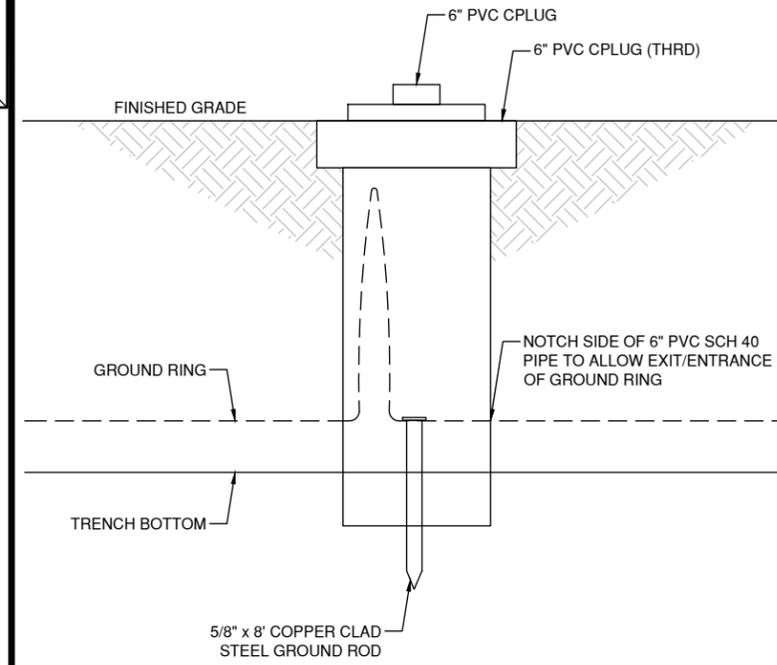
1. GROUNDING ELECTRODES SHALL BE CONNECTED IN A RING USING #2 SOLID CONDUCTOR. THE TOP OF THE GROUND RODS AND THE RING CONDUCTOR SHALL BE 50" (MIN) BELOW FINISHED GRADE. GROUNDING ELECTRODES SHALL BE DRIVEN ON 10'-0" CENTERS. (6'-0" MINIMUM; 16'-0" MAXIMUM).
2. BONDING OF THE GROUNDED CONDUCTOR (NEUTRAL) AND THE GROUNDING CONDUCTOR SHALL BE AT THE SERVICE DISCONNECTING MEANS. BONDING JUMPER SHALL BE INSTALLED PER NATIONAL ELECTRIC CODE, ARTICLE 250.30.
3. INTERIOR GROUND BARS ARE TO BE BARE COPPER. EXTERIOR GROUND BARS ARE TO BE TINNED OR GALVANIZED COPPER.

**GROUNDING LEGEND:**

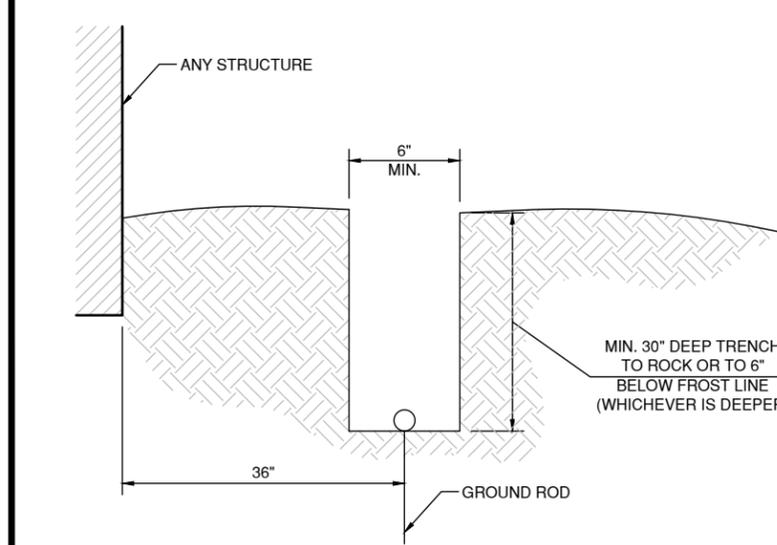
- GROUND ROD
- GROUNDING CONDUCTOR
- ⊗ GROUND ROD WITH INSPECTION WELL
- GROUND BAR
- COMPRESSION FITTING CONNECTION
- EXOTHERMIC WELD CONNECTION



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



**3** INSPECTION WELL DETAIL  
SCALE: N.T.S



**2** TRENCH DETAIL  
SCALE: N.T.S

PREPARED BY:

**nexus**

NEXIUS SOLUTIONS, INC.  
2595 NORTH DALLAS PARKWAY  
SUITE 300  
FRISCO, TX 75034

CLIENT:



161 INVERNESS DR W, 2ND FLOOR  
ENGLEWOOD, COLORADO 80112

FOR CONSTRUCTION



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FA LOCATION CODE:  
12871723

PACE ID:  
MRUTH029076

ADDRESS:  
12960 N PEYTON HWY  
PEYTON, CO 80831

PROJECTS:  
LTE 1C 2C 3C 4C 5C 6C

DRAWN BY: RA	DATE: 01/02/20
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SHEET TITLE: GROUNDING  
PLAN AND DETAILS

SHEET NUMBER:

**G-1**

GROUNDING NOTES:

1. GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRIC CODE.
2. ALL GROUNDING SERVICES SHALL BE UL APPROVED OR LISTED FOR THEIR INTENDED USE.
3. ALL WIRES SHALL BE AWG THHN/THWN COPPER UNLESS NOTED OTHERWISE.
4. GROUNDING CONNECTION TO GROUND RODS, GROUND RING WIRE, TOWER BASE, AND FENCE POSTS SHALL BE EXOTHERMIC (CADWELDS) UNLESS NOTED OTHERWISE. CLEAN SURFACES TO SHINY METAL. WHERE GROUND WIRES ARE CADWELDED TO GALVANIZED SURFACES, SPRAY CADWELD WITH GALVANIZING PAINT.
5. GROUNDING CONNECTIONS TO GROUND BARS ARE TO BE TWO-HOLE BRASS MECHANICAL CONNECTORS WITH STAINLESS STEEL HARDWARE (INCLUDING SCREW SET) CLEAN GROUND BAR TO SHINY METAL. AFTER MECHANICAL CONNECTION, TREAT WITH PROTECTIVE ANTIOXIDANT COATING.
6. GROUND COAXIAL CABLE SHIELDS AT BOTH ENDS WITH MANUFACTURER'S GROUNDING KITS.
7. ROUTE GROUNDING CONDUCTORS THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 12" RADIUS.
8. INSTALL #2 AWG GREEN-INSULATED STRANDED WIRE FOR ABOVE GRADE GROUNDING AND #2 BARE TINNED COPPER INSTALL WIRE FOR BELOW GRADE GROUNDING UNLESS OTHERWISE NOTED.
9. REFER TO GROUNDING PLAN FOR GROUND BAR LOCATIONS. GROUNDING CONNECTIONS SHALL BE EXOTHERMIC TYPE (CADWELDS) TO ANTENNA MOUNTS AND GROUND TRAIN, REMAINING GROUNDING CONNECTIONS SHALL BE COMPRESSION FITTINGS. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO-HOLE LUGS.
10. THE GROUND ELECTRODE SYSTEM SHALL CONSIST OF DRIVEN GROUND RODS POSITION ACCORDING TO GROUND PLAN THE GROUND RODS SHALL BE 5/8"X10'-0" COPPER CLAD STEEL INTERCONNECTION WITH #2 BARE TINNED COPPER WIRE BURIED 36" BELOW GRADE. BURY GROUND RODS A MAXIMUM OF 15' APART, AND A MINIMUM OF 8' APART.
11. IF ROCK IS ENCOUNTERED GROUND RODS SHALL BE PLACED AT AN OBLIQUE ANGLE NOT TO EXCEED 45DEG.
12. EXOTHERMIC WELDS SHALL BE MADE IN ACCORDANCE WITH ERICO PRODUCTS BULLETIN A-AT.
13. CONSTRUCTION OF GROUND RING AND CONNECTIONS TO EXISTING GROUND RING SYSTEM SHALL BE DOCUMENTED WITH PHOTOGRAPHS PRIOR TO BACKFILLING SITE, PROVIDE PHOTOS TO THE CONSTRUCTION MANAGER.
14. ALL GROUND LEADS EXCEPT THOSE TO THE EQUIPMENT ARE TO BE #2 BARE TINNED COPPER WIRE. ALL EXTERIOR GROUND BARS WILL BE TINNED COPPER.
15. PRIOR TO INSTALLING LUGS ON GROUND WIRES, APPLY THOMAS & BETTS KOPR-SHIELD (TM OF JET LUBE INC.), PRIOR TO BOLTING GROUND WIRE LUGS TO GROUND BARS, APPLY KOPR-SHIELD OR EQUAL.
16. ENGAGE AN INDEPENDENT ELECTRICAL TESTING FIRM TO TEST AND VERIFY THAT IMPEDANCE DOES NOT EXCEED FIVE OHMS TO GROUND BY MEANS OF "FALL OF POTENTIAL TEST". TEST SHALL BE WITNESSED BY AN AT&T REPRESENTATIVE AND RECORDED ON THE "GROUND RESISTANCE TEST" FORM.
17. WHERE BARE COPPER GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO GROUND RING, WIRE IN 3/4" PVC SLEEVE, FROM 1" BELOW GRADE AND SEAL TOP WITH SILICONE MATERIAL.
18. PREPARE ALL BONDING SURFACES FOR GROUNDING CONNECTIONS BY REMOVING ALL PAINT AND CORROSION DOWN SHINY METAL FOLLOWING CONNECTION, APPLY APPROPRIATE ANTI-OXIDATION PAINT.
19. ANY SITE WHERE THE EQUIPMENT (BTS, CABLE BRIDGE, PPC, GENERATOR, ETC.) IS LOCATED WITHIN 6 FEET OF METAL FENCING, THE GROUND RING SHALL BE BONDED TO THE NEAREST FENCE POST USING (3) RUNS OF #2 BARE TINNED COPPER WIRE.

PREPARED BY:

**nexus**

NEXIUS SOLUTIONS, INC.  
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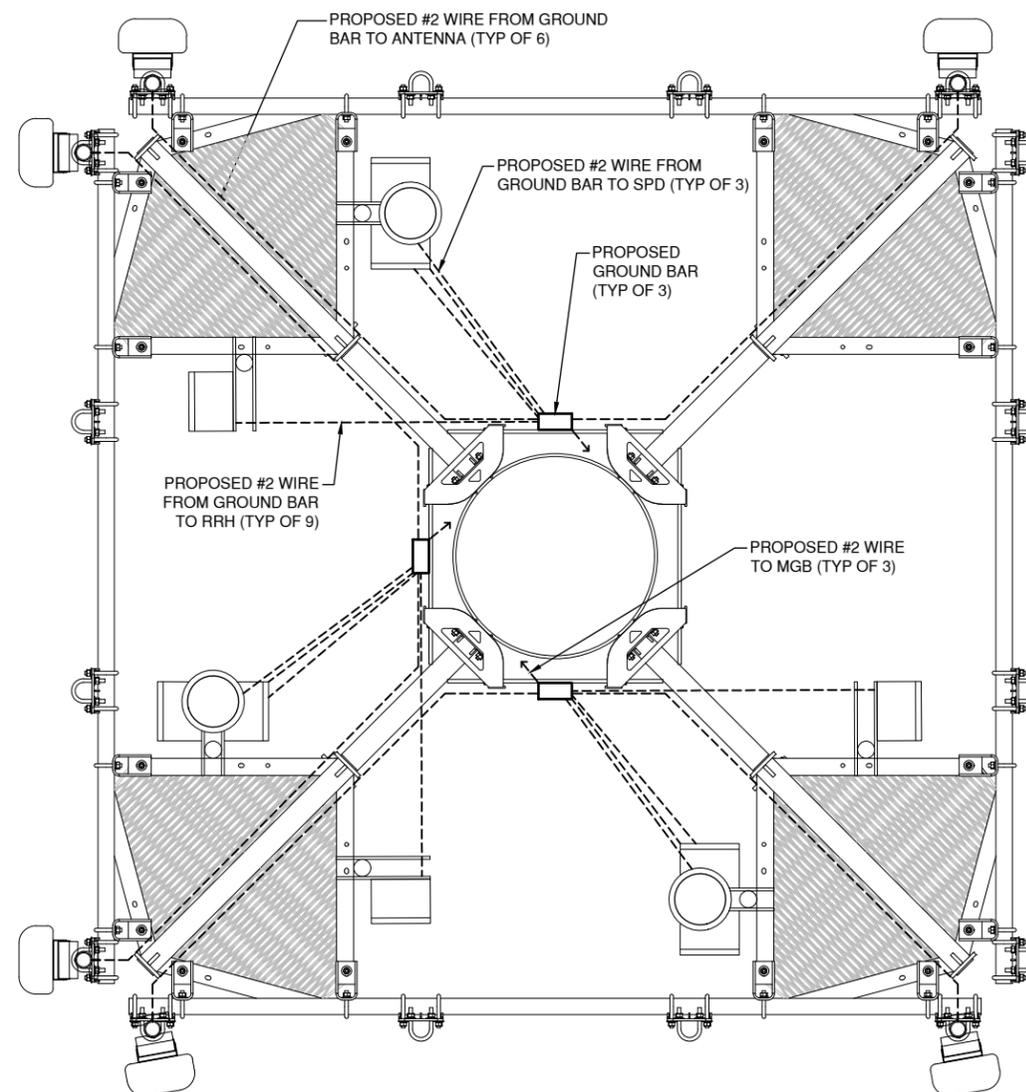
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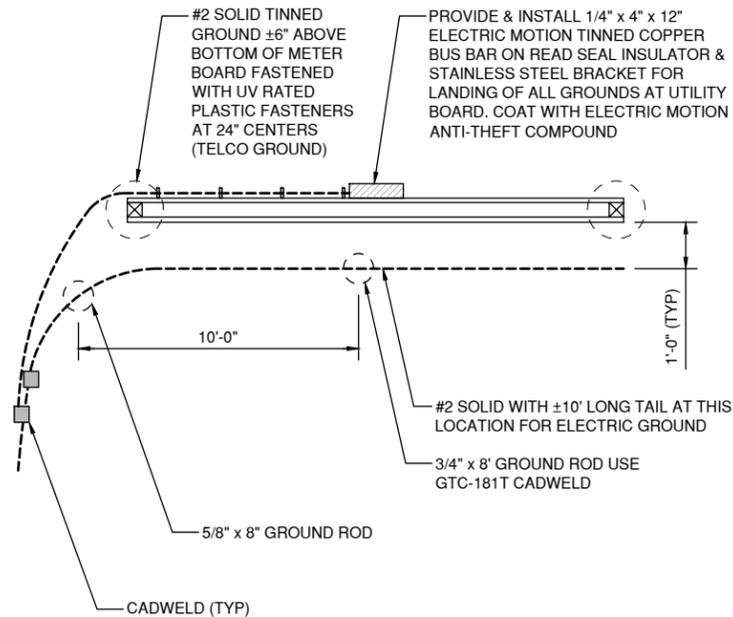
DRAWN BY: RA	DATE: 01/02/20
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SHEET TITLE: ANTENNA  
GROUNDING DETAILS

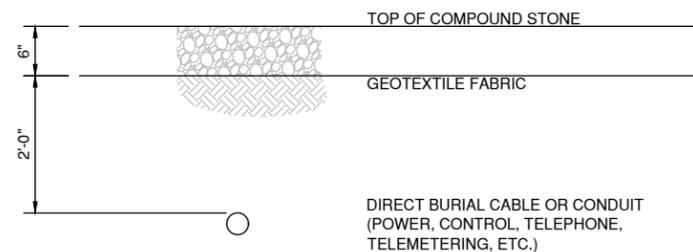
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**G-2**





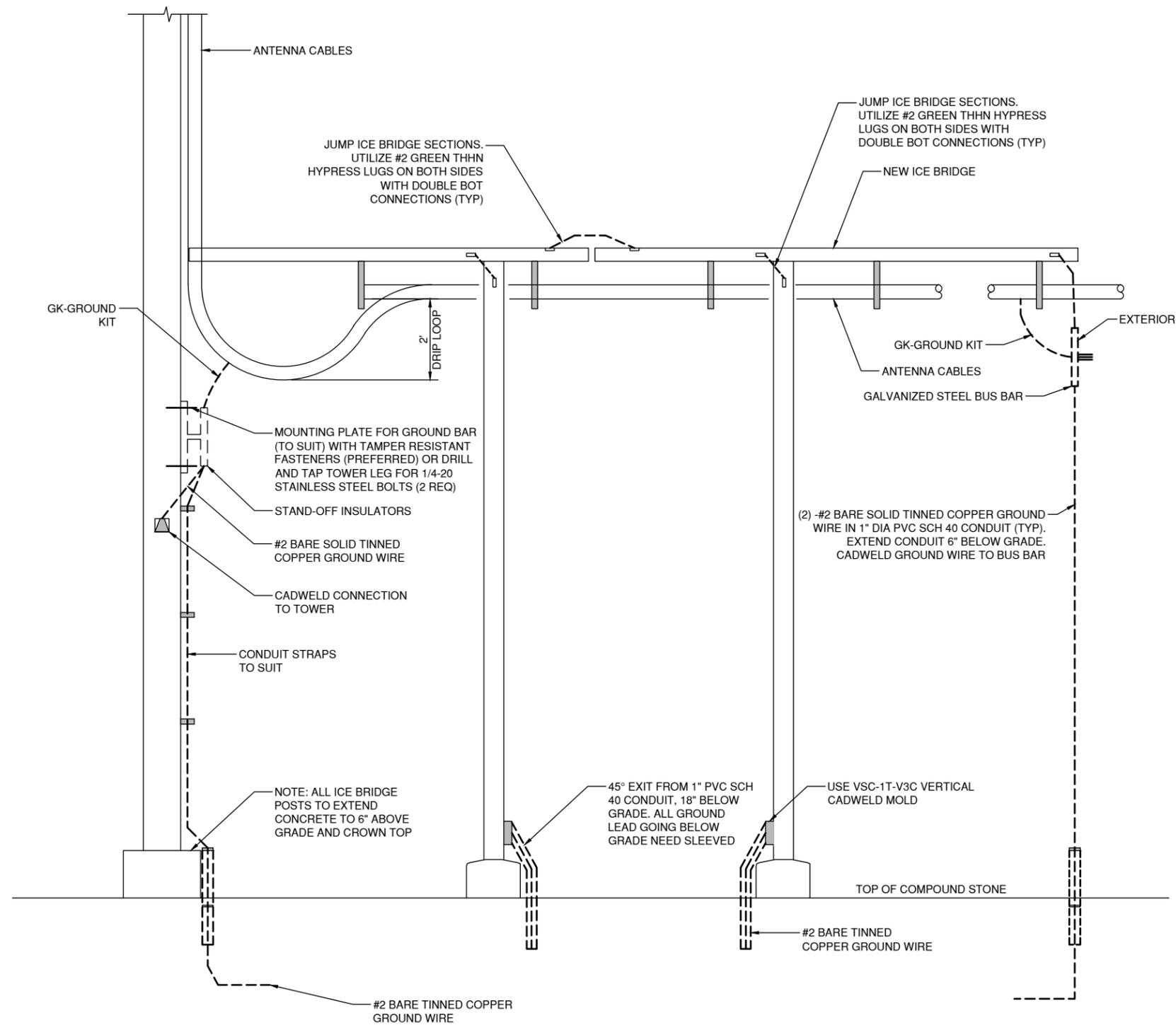
**1 SERVICE RACK GROUNDING**  
SCALE: N.T.S



- INSTALLATION:**
1. THE TAPE SHALL BE LAID DIRECTLY ABOVE THE CABLE OR CONDUIT UNDER RIGID TYPE AND OIL MAT PAVEMENTS, AND DIRECTLY ON TOP OF THE COMPACTED EARTH SUB-GRADE IMMEDIATELY BEFORE RESTORING THE PAVEMENT.
  2. IN OPEN AREAS, THE TAPE SHALL BE LAID DURING THE BACKFILLING OPERATION ON SMOOTH, COMPACTED BACKFILL AT A DISTANCE OF 8' BELOW THE SURFACE OF THE AREA.
  3. THE ENDS OF THE TAPE SHALL BE LAPPED APPROX. 6 INCHES.
  4. TAPE SHALL BE THE COLOR AS INDICATED AND HAVE THE FOLLOWING MARKINGS:

RED	CAUTION
	BURIED ELECTRIC LINE BELOW
ORANGE	CAUTION
	BURIED TELEPHONE LINE BELOW

**2 MARKER TAPE DETAIL**  
SCALE: N.T.S



**3 ICE BRIDGE GROUNDING**  
SCALE: N.T.S

PREPARED BY:

**nexus**

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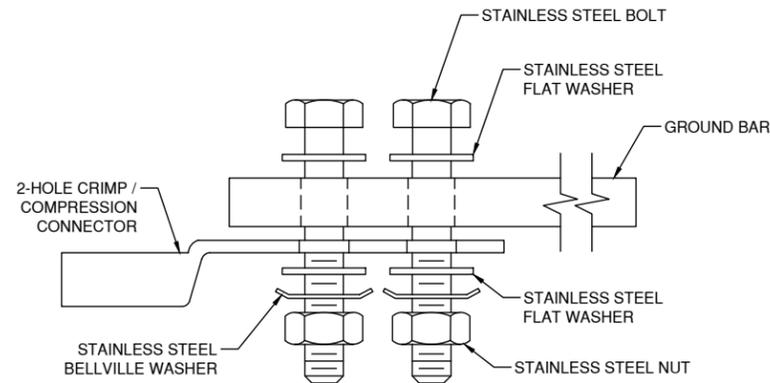
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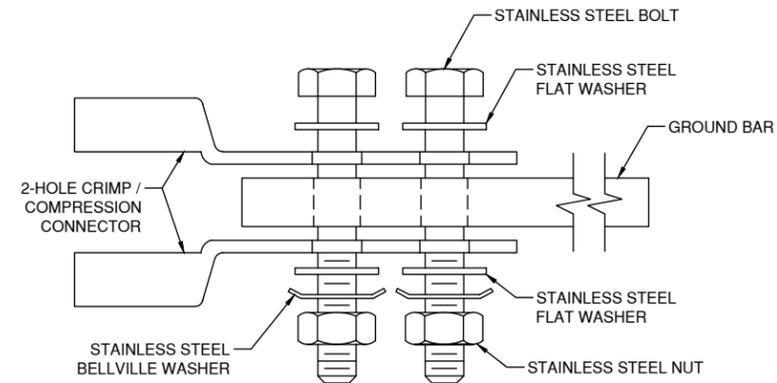
PROJECTS:  
LTE 1C 2C 3C 4C 5C 6C

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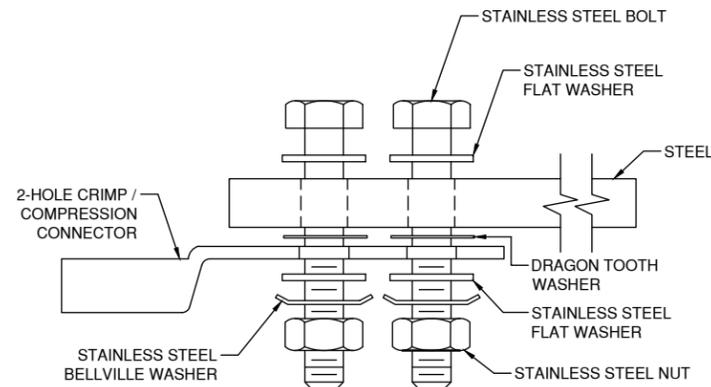
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SHEET NUMBER:



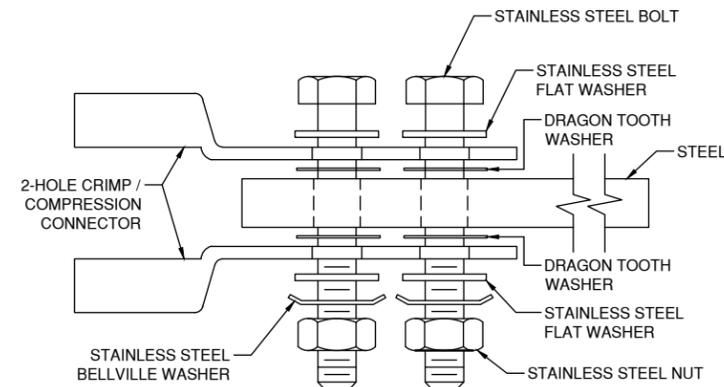
**SINGLE CONNECTOR AT GROUND BARS**



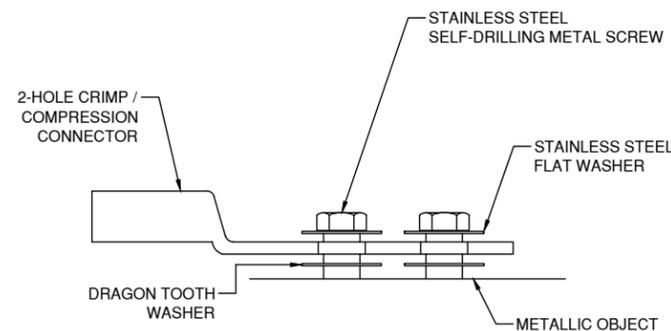
**BACK TO BACK CONNECTOR AT GROUND BARS**



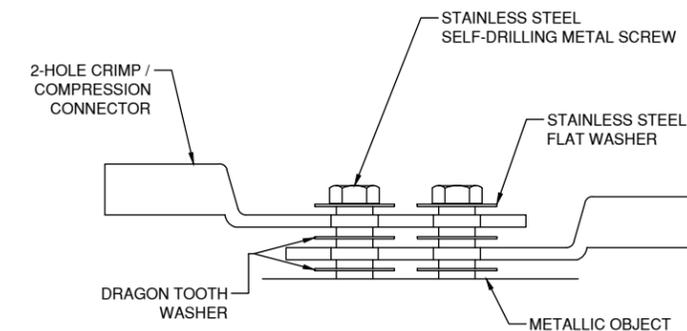
**SINGLE CONNECTOR AT STEEL OBJECTS**



**BACK TO BACK CONNECTOR AT STEEL OBJECTS**



**SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS**



**BACK TO BACK CONNECTOR AT METALLIC/STEEL OBJECTS**

- NOTES**
1. CHOOSE BOLT LENGTH TO ALLOW A MIN. OF THREE THREADS EXPOSED.
  2. BURNISH MOUNTING SURFACE TO REMOVE PAINT IN THE AREA OF THE CONNECTOR.
  3. APPLY ANTI-OXIDANT COMPOUND TO MATING SURFACE OF CONNECTOR AND WIPE OFF EXCESS COMPOUND.
  4. APPLY CLEAR HEAT SHRINK OVER ENTIRE LENGTH OF LABEL FOR PROTECTION. (REFER TO CONDUCTOR LABELS SECTION).
  5. INTERIOR GROUND BARS ARE TO BE BARE COPPER. EXTERIOR GROUND BARS ARE TO BE TINNED OR GALVANIZED COPPER.

PREPARED BY:

**nexius**

NEXIUS SOLUTIONS, INC.  
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COL02148  
FA LOCATION CODE:  
12871723  
PACE ID:  
MRUTH029076  
ADDRESS:  
12960 N PEYTON HWY  
PEYTON, CO 80831

**PROJECTS:**  
LTE 1C 2C 3C 4C 5C 6C

<b>DRAWN BY:</b> RA	<b>DATE:</b> 01/02/20
<b>CHECKED BY:</b> RA	<b>DATE:</b> 10/15/20

**SHEET TITLE:**  
**GROUNDING DETAILS**  
**SHEET NUMBER:**

**G-4**

## GENERAL NOTES:

- ALL REFERENCES TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED AT&T TOWERS, OR ITS DESIGNATED REPRESENTATIVE.
- ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE OF COLORADO.
- STRUCTURE IS DESIGNED IN ACCORDANCE WITH ANSL/TIA/EIA-222-G, 2005, FOR A 90 MPH 3-SECOND GUST WIND LOAD. THIS CONFORMS TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE, 2012 EDITION.
- WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2012 EDITION.
- UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
- ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED.
- IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
- ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATIONS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES.
- ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
- ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE RESIDENT LEASING AGENT FOR APPROVAL.
- BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR. CONTRACTOR SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
- ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
- 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.
- THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUB-GRADE IN ITS PRESENT STATE. AFTER REWORKING, IF THE MATERIAL REMAINS UNSUITABLE, THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL. ALL SUB-GRADES SHALL BE PROOF ROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFTER MATERIAL SHALL BE REWORKED OR REPLACED.
- THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL PIPES, DITCHES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURE IN OPERABLE CONDITION.
- ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.
- ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE PLANS (LATEST REVISION) PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE DISCOVERED. THE OWNER SHALL ALWAYS HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.

## STRUCTURAL NOTES:

- THE FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS AND MANUAL OF STEEL CONSTRUCTION, 14TH EDITION.
- UNLESS OTHERWISE NOTED, ALL STRUCTURAL ELEMENTS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
  - STRUCTURAL STEEL, ASTM DESIGNATION A36 OR A992 GR50.
  - ALL BOLTS, ASTM A325 TYPE ASTM GALVANIZED HIGH STRENGTH BOLTS.
  - ALL NUTS, ASTM A563 CARBON AND ALLOY STEEL NUTS.
  - ALL WASHERS, ASTM F436 HARDENED STEEL WASHERS.
- ALL CONNECTIONS NOT FULLY DETAILED ON THESE PLANS SHALL BE DETAILED BY THE STEEL FABRICATOR IN ACCORDANCE WITH AISC SPECIFICATIONS AND MANUAL OF STEEL CONSTRUCTION, 14TH EDITION.
- HOLES SHALL NOT BE FLAME CUT THRU STEEL UNLESS APPROVED BY THE ENGINEER.
- HOT-DIP GALVANIZE ALL ITEMS UNLESS OTHERWISE NOTED, AFTER FABRICATION WHERE PRACTICABLE. GALVANIZING: ASTM A123, ASTM A153/A153M OR ASTM A653/A653M, G90, AS APPLICABLE.
- REPAIR DAMAGED SURFACES WITH GALVANIZING REPAIR METHOD AND PAINT CONFORMING TO ASTM A780 OR BY APPLICATION OF STICK OR THICK PASTE MATERIAL SPECIFICALLY DESIGNED FOR REPAIR OF GALVANIZING. CLEAN AREAS TO BE REPAIRED AND REMOVE SLAG FROM WELDS. HEAT SURFACES TO WHICH STICK OR PASTE MATERIAL IS APPLIED, WITH A TORCH TO A TEMPERATURE SUFFICIENT TO MELT THE METALLICS IN STICK OR PASTED; SPREAD MOLTEN MATERIAL UNIFORMLY OVER SURFACES TO BE COATED AND WIPE OFF EXCESS MATERIAL.
- A NUT LOCKING DEVICE SHALL BE INSTALLED ON ALL PROPOSED AND/OR REPLACED BOLTS.
- ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH TO EXCLUDE THE THREADS FROM THE SHEAR PLANE.
- ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
- ALL ASSEMBLY BOLTS ARE TO BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED IN SECTION 8.1 OF THE AISC, "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", DATED JUNE 30, 2004.
- FLAT WASHERS ARE TO BE INSTALLED WITH BOLTS OVER SLOTTED HOLES.
- DO NOT OVER TORQUE ASSEMBLY BOLTS. GALVANIZING ON BOLTS, NUTS, AND STEEL PARTS; MAY ACT AS A LUBRICANT, THUS OVER TIGHTENING MAY OCCUR AND MAY CAUSE BOLTS TO CRACK AND SNAP OFF.
- PAL NUTS ARE TO BE INSTALLED AFTER NUTS ARE TIGHT AND WITH EDGE LIP OUT. PAL NUTS ARE NOT REQUIRED WHEN SELF-LOCKING NUTS ARE PROVIDED.
- GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-2010 STRUCTURAL WELDING CODE - STEEL.

PREPARED BY:

**n e x i u s**

NEXIUS SOLUTIONS, INC.  
2595 NORTH DALLAS PARKWAY  
SUITE 300  
FRISCO, TX 75034

CLIENT:



161 INVERNESS DR W, 2ND FLOOR  
ENGLEWOOD, COLORADO 80112

FOR CONSTRUCTION



Designed by

*Jordan Phillips*

8718DC9510554AE... 10/15/20  
DATE SIGNED: 10/15/20  
PE LICENSE RENEWAL: 10/31/21

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## SUBMITTALS

REV	DATE	DESCRIPTION	BY
C	03/20/20	FOR REVIEW	RA
D	04/16/20	FOR REVIEW	RA
0	04/22/20	FINAL CD	RA
1	08/24/20	REVISED CD	RA
2	10/15/20	REVISED CD	RA

## SITE INFORMATION:

SITE NAME:  
NSB-CO.BDN\_ADD\_4591\_COL02148\_PeyTON  
SITE NUMBER:  
COL02148  
FA LOCATION CODE:  
12871723  
PACE ID:  
MRUTH029076  
ADDRESS:  
12960 N PEYTON HWY  
PEYTON, CO 80831

## PROJECTS:

LTE 1C 2C 3C 4C 5C 6C

DRAWN BY: RA	DATE: 01/02/20
CHECKED BY: RA	DATE: 10/15/20

## SHEET TITLE:

**GENERAL NOTES**

## SHEET NUMBER:

**GN-1**