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

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

SCOPE OF WORK

THE PURPOSE OF THIS PROJECT IS AS FOLLOWS:

TOWER SCOPE OF WORK:

-INSTALLATION OF (6) PANEL ANTENNAS
-INSTALLATION OF (4) SECTOR MOUNTS
-INSTALLATION OF (3) SQUIDS
-INSTALLATION OF (9) RRHs
-INSTALLATION OF (6) DC POWER TRUNKS
-INSTALLATION OF (3) FIBER TRUNKS
-20'-0" EXTENSION OF MONOPOLE

GROUND SCOPE OF WORK:

-INSTALLATION OF H-FRAME
-INSTALLATION OF WALK UPTO CABINET (WUC)
-INSTALLATION OF (2) DC12s
-INSTALLATION OF (1) PTLC
-INSTALLATION OF 30KW GENERATOR
-INSTALLATION OF (2) CONCRETE PADS
-INSTALLATION OF ICE BRIDGE

GENERAL NOTES

THE FACILITY IN 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.

VICINITY MAP

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
- 2017 NATIONAL ELECTRICAL CODE
- ADOPTED CITY/COUNTY ORDINANCES
- ALL CODES SUBJECT TO LOCAL JURISDICTION REQUIREMENTS

SHEET INDEX

PROJECTS

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

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:

PREPARED BY:
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 LICENSED
JORDAN D. PHILLIPS
55270
PROFESSIONAL ENGINEER

DocuSigned by:
Jordan Phillips
9510554AE...

DATE SIGNED: 04/22/20
PE LICENSE RENEWAL: 10/31/21

COLORADO REGISTERED
JACKT. PHIPPS
PE.0054130
EXP 10/31/2021
PROFESSIONAL ENGINEER

DocuSigned by:
...
6F2F33FCFCBB415...

DATE SIGNED: 04/22/20
PE LICENSE RENEWAL: 10/31/21

SUBMITTALS

REV	DATE	DESCRIPTION	BY
A	01/02/20	FOR REVIEW	RA
B	02/14/20	FOR REVIEW	RA
C	03/20/20	FOR REVIEW	RA
D	04/16/20	FOR REVIEW	RA
0	04/22/20	FINAL CD	RA

SITE INFORMATION:
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PACE ID:
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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: 04/22/20

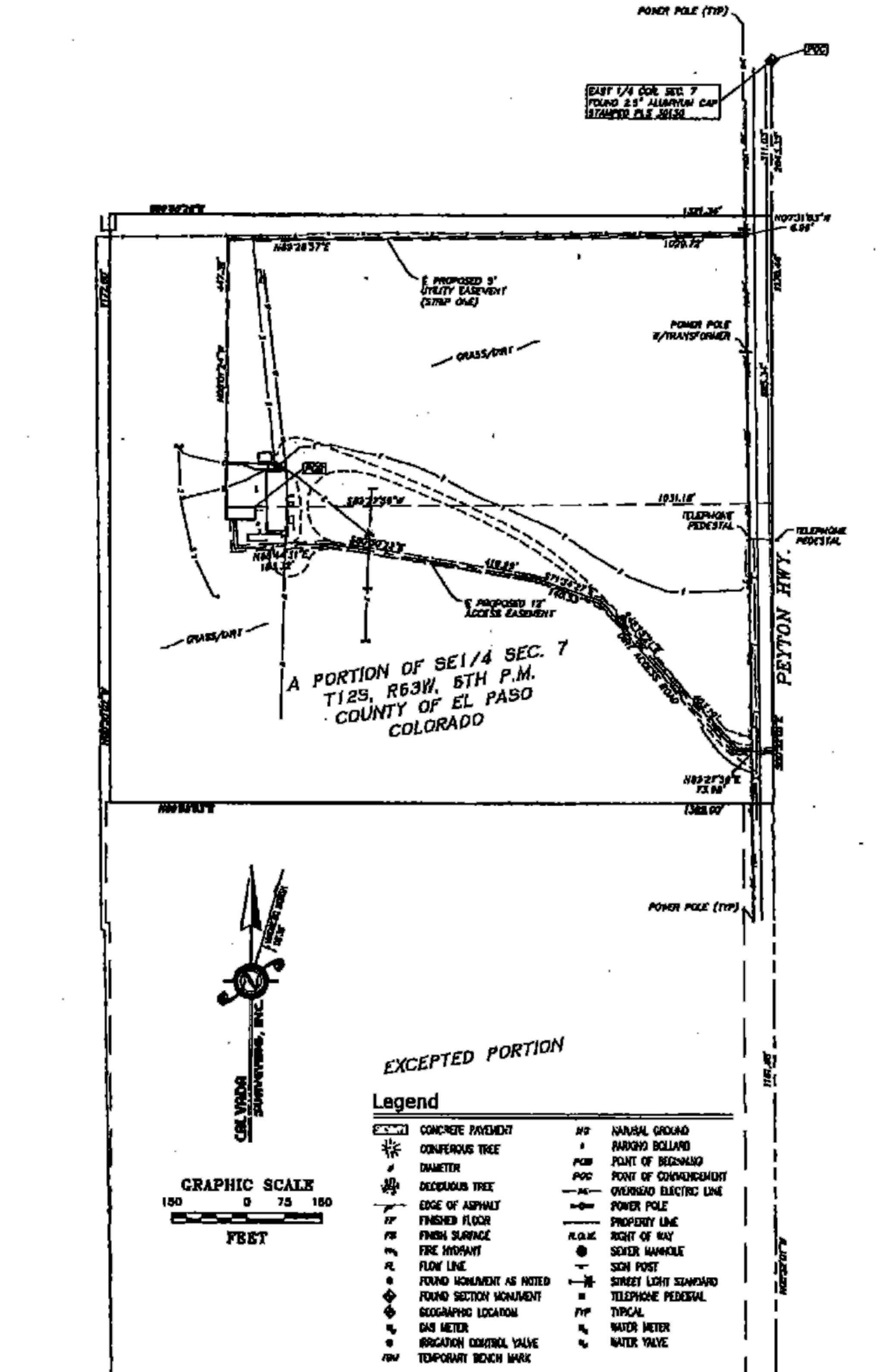
SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1

EXHIBIT "A"

CSP Peyton Alt. 1

Boundary Detail
Scale: 1" = 150'



Geographic Coordinates as Shown
1983 DATUM: LATITUDE 39°01'00.69"N LONGITUDE 104°28'55.37"W

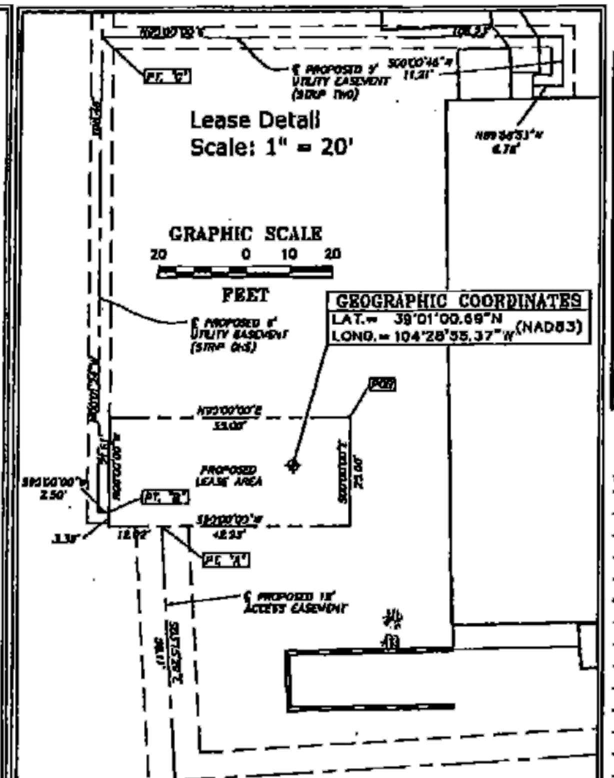
Date of Survey
MARCH 30, 2010

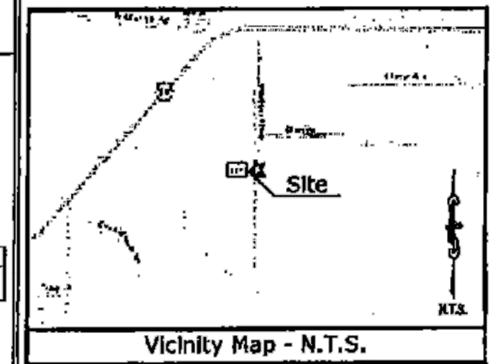
Basis of Bearings
THE COLORADO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE (NAD83).

CLASSIFICATION	MINIMUM GEOMETRIC ACCURACY STANDARD
THIRD	5.0 cm + 1: 10,000

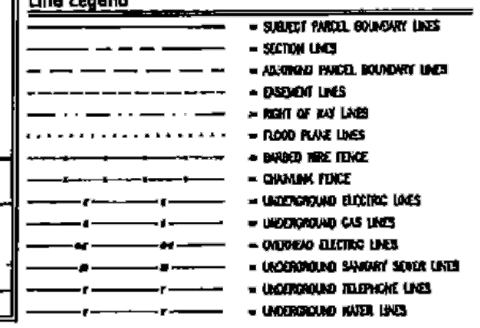
Bench Mark
NGS CONTROL POINT "CRAMER", ELEVATION = 7138 FEET (NAVD 88)

Lease Detail
Scale: 1" = 20'

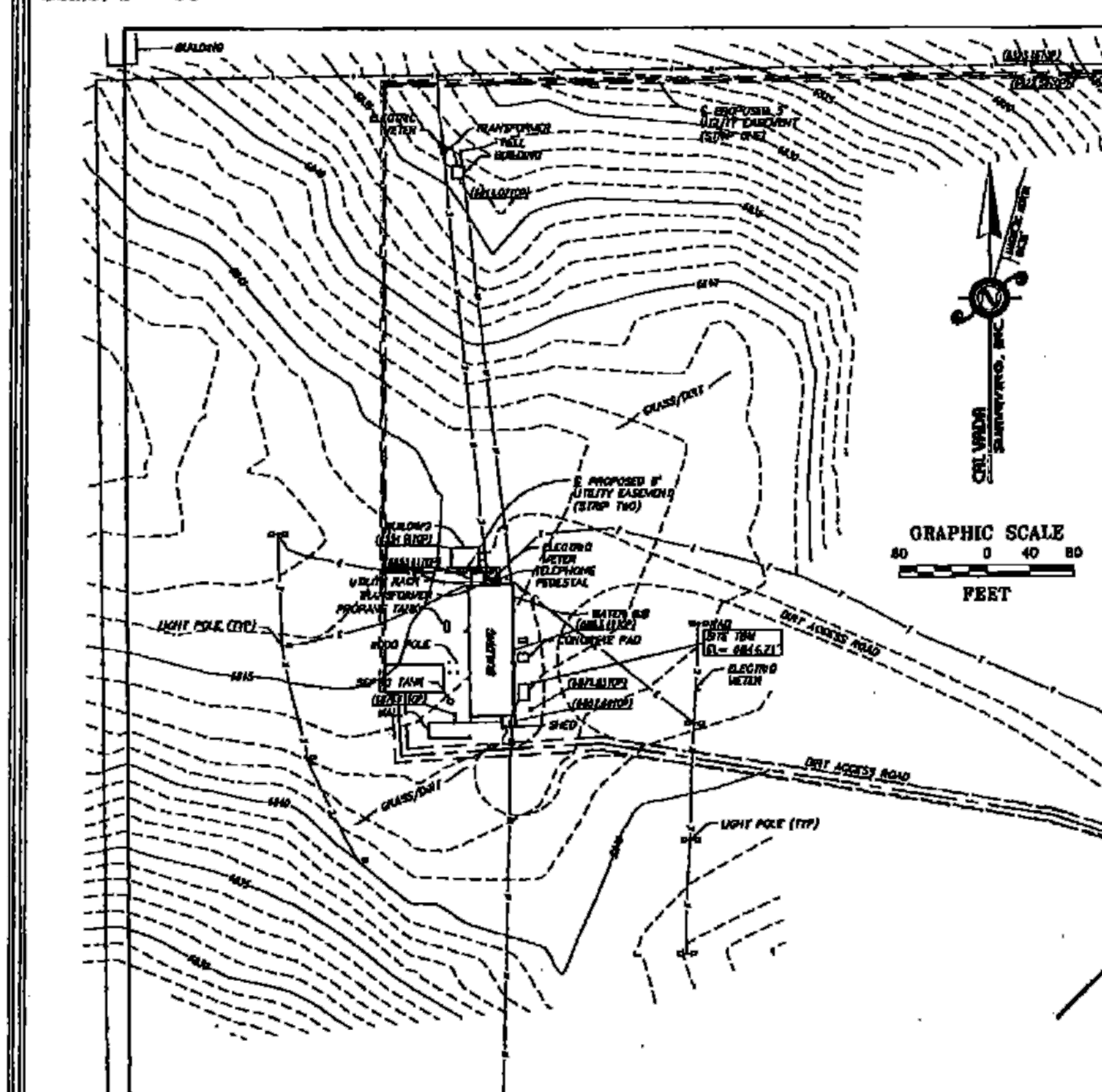




Line Legend



Site Detail
Scale: 1" = 80'



Title Report
PREPARED BY: FRONT RANGE TITLE, LLC
ORDER NO.: NF01098
EFFECTIVE DATE: OCTOBER 19, 2011

Legal Description
A PORTION OF THE SOUTH HALF OF SECTION 7, TOWNSHIP 12 SOUTH, RANGE 63 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO ALSO BEING A PORTION OF THAT TRACT RECORDED MAY 13, 1970 IN BOOK 2820 AT PAGE 198 OF THE RECORDS OF SAID COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 7, SAID POINT OF BEGINNING ALSO BEING THE MOST EASTERLY, NORTHEAST CORNER OF "LAUNCH PAD ESTATES" AS RECORDED IN PLAT BOOK S-5 AT PAGE 98 OF THE RECORDS OF SAID COUNTY, (THE FOLLOWING TWO (2) COURSES ARE ALONG THE NORTHERLY AND EASTERLY BOUNDARY OF SAID "LAUNCH PAD ESTATES"): (1) THENCE NORTH 88 DEGREES 40 MINUTES 02 SECONDS WEST, A DISTANCE OF 1323.06 FEET, (2) THENCE NORTH 00 DEGREES 07 MINUTES 20 SECONDS WEST, A DISTANCE OF 2312.81 FEET, THENCE SOUTH 89 DEGREES 32 MINUTES 40 SECONDS EAST, A DISTANCE OF 1321.34 FEET, THENCE SOUTH 00 DEGREES 08 MINUTES 21 SECONDS EAST, A DISTANCE OF 2312.81 FEET ALONG THE EAST LINE OF SAID SECTION 7 TO THE POINT OF BEGINNING, EXCEPT THAT PORTION PLATTED TO LONGHORN ACRES SUBDIVISION, COUNTY OF EL PASO, STATE OF COLORADO.

Assessor's Parcel No.
3207000007

Easements
10. MEMORANDUM OF OPTION AND LAND LEASE AGREEMENT BY AND BETWEEN LONGHORN ACRES LAND & CATTLE LLC, A COLORADO LIMITED LIABILITY COMPANY AND VERIZON WIRELESS (VAW) LLC D/B/A/ VERIZON WIRELESS, RECORDED JULY 21, 2010 AT RECEPTION NO. 210059304. (AFFECTS SUBJECT PROPERTY AND IS BLANKET IN NATURE).

Lease Area/Access & Utility Easements
LEASE AREA

BEING A LEASE AREA WITHIN A PORTION OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP 12 SOUTH, RANGE 63 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 7; THENCE ALONG THE EAST LINE OF SAID SECTION, S00°32'01"E, 826.34 FEET; THENCE S89°27'59"W, 1031.18 FEET TO THE POINT OF BEGINNING; THENCE S00°00'00"E, 25.00 FEET; THENCE S90°00'00"W, 42.98 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "A"; THENCE CONTINUING S90°00'00"W, 12.02 FEET; THENCE N00°00'00"W, 3.38 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "B"; THENCE CONTINUING N00°00'00"W, 21.61 FEET; THENCE N90°00'00"E, 55.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 1375 SQ. FT. OR 0.031 ACRES MORE OR LESS.

ACCESS EASEMENT

BEING A STRIP OF LAND 12.00 FEET IN WIDTH WITHIN A PORTION OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP 12 SOUTH, RANGE 63 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO, LYING 6.00 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

BEGINNING AT POINT "A" AS DESCRIBED ABOVE; THENCE S03°16'29"E, 58.11 FEET; THENCE N55°44'31"E, 183.32 FEET; THENCE S80°50'22"E, 419.29 FEET; THENCE S71°34'27"E, 140.53 FEET; THENCE S62°18'21"E, 403.19 FEET; THENCE N89°27'59"E, 73.98 FEET TO THE END OF SAID STRIP OF LAND.

UTILITY EASEMENTS

BEING TWO STRIPS OF LAND 5.00 FEET IN WIDTH WITHIN A PORTION OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP 12 SOUTH, RANGE 63 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO, LYING 2.50 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINES:

(STRIP ONE)

BEGINNING AT POINT "B" AS DESCRIBED ABOVE; THENCE N00°01'24"W, 108.49 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "C"; THENCE CONTINUING N00°01'24"W, 447.32 FEET; THENCE N89°28'37"E, 1029.72 FEET; THENCE N00°31'03"W, 6.95 FEET TO THE END OF SAID STRIP OF LAND.

(STRIP TWO)

BEGINNING AT POINT "C" AS DESCRIBED ABOVE; THENCE N90°00'00"E, 108.23 FEET; THENCE S00°00'46"W, 11.21 FEET; THENCE N89°58'53"W, 6.78 FEET TO THE END OF SAID STRIP OF LAND.

SIDELINES OF SAID STRIPS OF LAND ARE TO BE LENGTHENED AND/OR SHORTENED TO PREVENT GAPS AND/OR OVERLAPS.

Certificate of Survey
THIS IS TO CERTIFY THAT THIS TOPOGRAPHIC MAP AND IMPROVEMENTS SHOWN ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

JESUS A. LUGO 10/3/11 No. 38081 PROFESSIONAL LAND SURVEYOR

JESUS A. LUGO, PLS 38081

THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
REFERENCE IS MADE TO A COMMITMENT FOR TITLE INSURANCE, NUMBER NF01098, ISSUED BY FRONT RANGE TITLE, LLC, AND HAVING AN EFFECTIVE DATE OF OCTOBER 19, 2011. THIS SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. THE LESSOR'S LEGAL DESCRIPTION AND RECORD BOUNDARY ARE SHOWN HEREON FOR REFERENCE ONLY.
THIS SURVEY DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE LESSOR'S PROPERTY.

DEPT	APPROVED	DATE
A&C		
RE		
RF		
INT		
EE\IN		
OPS		
EE\OUT		

CAL VADA SURVEYING, INC.
Drawn By: JT
Job No.: 10101

TowerCom Technologies

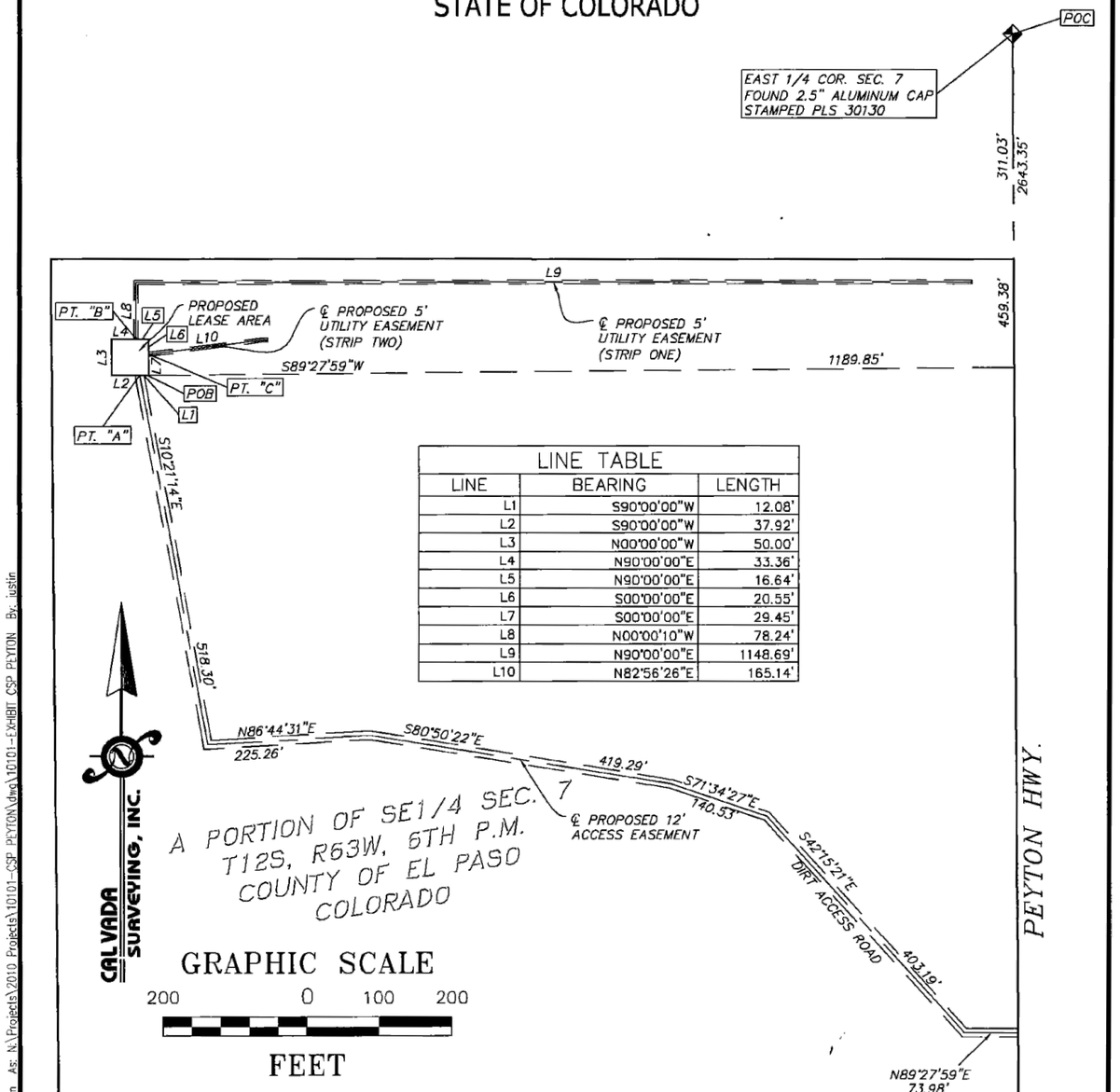
verizon wireless
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO. 80014 PH: (303) 503-6700

CSP PEYTON
12950 PEYTON HWY.
PEYTON, CO. 80831
COUNTY OF EL PASO
TOPOGRAPHIC SURVEY

Sheet: LS1

Site Name: CSP Peyton Alt. 1
09600.1316/First Amendment to Option and Land Lease Agreement
Last Saved On: 11-03-11 At: 11:07am As: N:\Projects\2010 Projects\10101-CSP PEYTON\dwg\10101-R4 CSP PEYTON By: justin

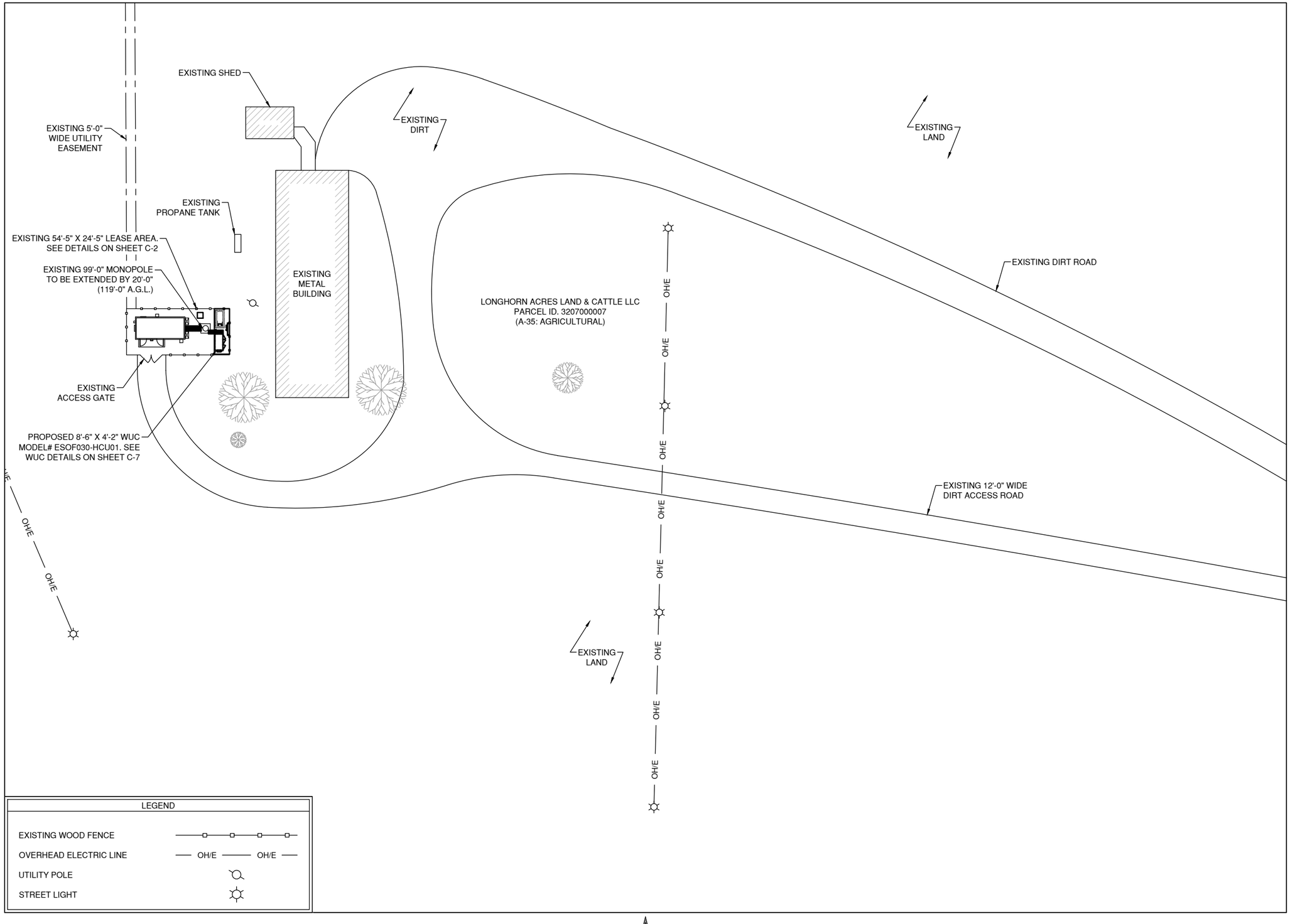
LEASE EXHIBIT
PORTION SE1/4, SECTION 7
T12S, R63W, 6TH P.M.
COUNTY OF EL PASO
STATE OF COLORADO



LINE TABLE		
LINE	BEARING	LENGTH
L1	S90°00'00"W	12.08'
L2	S90°00'00"W	37.92'
L3	N00°00'00"W	50.00'
L4	N90°00'00"E	33.36'
L5	N90°00'00"E	16.64'
L6	S00°00'00"E	20.55'
L7	S00°00'00"E	29.45'
L8	N00°00'10"W	78.24'
L9	N90°00'00"E	1148.69'
L10	N82°56'26"E	165.14'

CSP PEYTON	12950 PEYTON HWY. PEYTON, CO. 80831 COUNTY OF EL PASO
SHEET 1 OF 1	JOB NO. 10101 DATE: 4/8/10 SCALE: 1" = 200'

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



1 SITE PLAN
SCALE: 1:50

GRAPHIC SCALE: 1:50 (IN FEET)

PREPARED BY:

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

DocuSigned by:
6E2F33FCFCBB41E...

DATE SIGNED: 04/22/20
PE LICENSE RENEWAL: 10/31/21

SUBMITTALS

REV	DATE	DESCRIPTION	BY
A	01/02/20	FOR REVIEW	RA
B	02/14/20	FOR REVIEW	RA
C	03/20/20	FOR REVIEW	RA
D	04/16/20	FOR REVIEW	RA
0	04/22/20	FINAL CD	RA

SITE INFORMATION:

SITE NAME:
NSB-CO.BDN_ADD_4591_COL02148_PEYTON

SITE NUMBER:
COL02148

FA LOCATION CODE:
12871723

PACE ID:
MRUTH029076

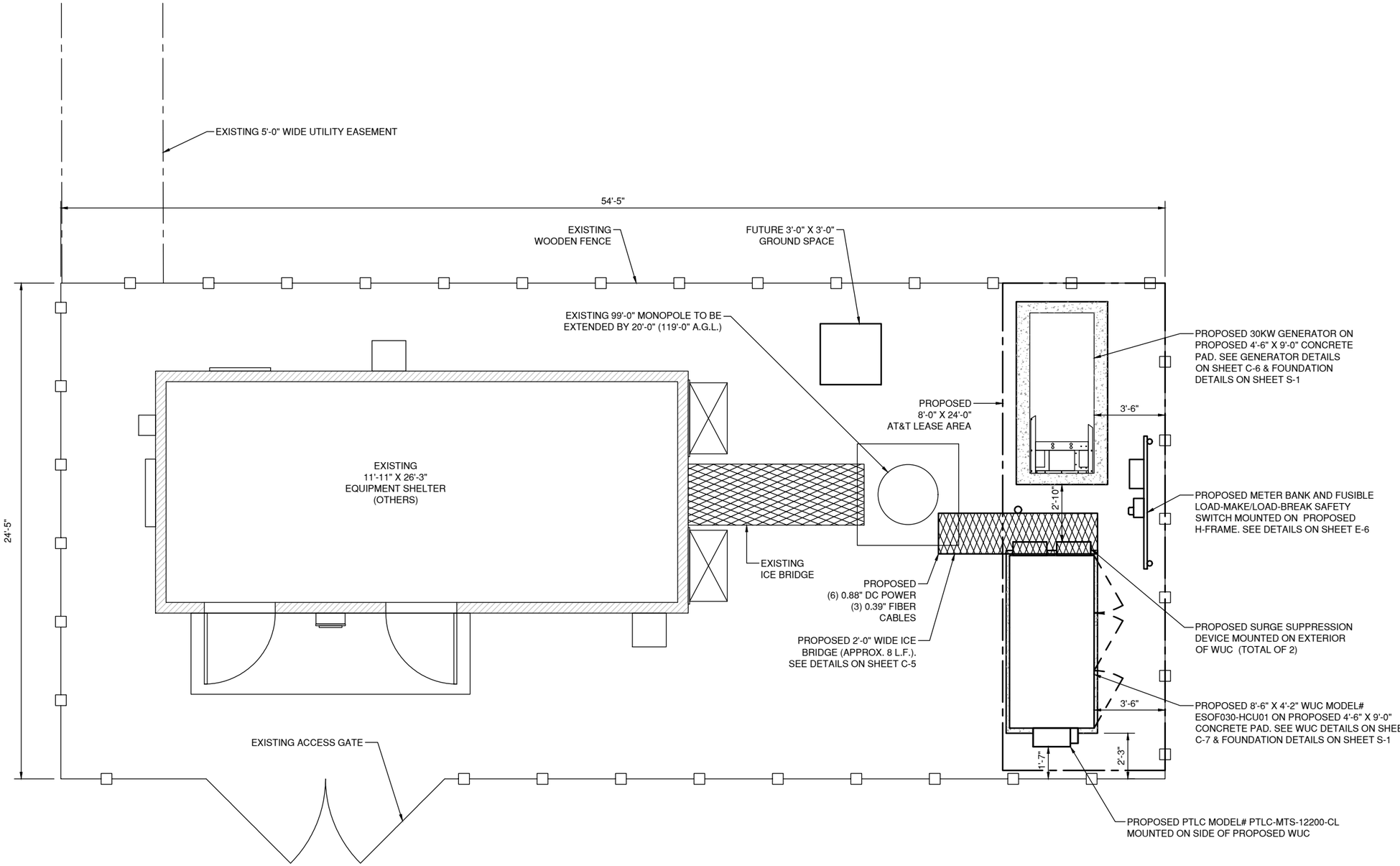
ADDRESS:
12960 N PEYTON HWY
PEYTON, CO 80831

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

DRAWN BY:	DATE:
RA	01/02/20
CHECKED BY:	DATE:
RA	04/22/20

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
C-1



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

N

0 2'-8" 5'-4" 10'-8"
GRAPHIC SCALE: 3/16"=1'-0"

PREPARED BY:

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

DocuSigned by:
6E2F33FCFCBB44F...

DATE SIGNED: 04/22/20
PE LICENSE RENEWAL: 10/31/21

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12960 N PEYTON HWY
PEYTON, CO 80831

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

DRAWN BY:	DATE:
RA	01/02/20

CHECKED BY:	DATE:
RA	04/22/20

SHEET TITLE:
ENLARGED SITE PLAN

SHEET NUMBER:
C-2

PROPOSED							
SECTOR	ANTENNA POSITION	MODEL	TOP OF ANTENNA (AGL)	AZIMUTH	CABLES	RRH	SQUID
ALPHA	A1	TPA65R-BU8D *	119'-0"	TBD	(6) 0.88" DC POWER (3) 0.39" FIBER	(1) NOKIA AHFIB * (1) NOKIA AHCA * (1) NOKIA AHLBA *	(3) DC9-48-60-24-8C-EV
	A2	N/A					
	A3	N/A					
	A4	TPA65R-BU8D *					
BETA	B1	N/A	N/A	N/A		N/A	
	B2	N/A					
	B3	N/A					
	B4	N/A					
GAMMA	C1	TPA65R-BU8D *	119'-0"	TBD		(1) NOKIA AHFIB * (1) NOKIA AHCA * (1) NOKIA AHLBA *	
	C2	N/A					
	C3	N/A					
	C4	TPA65R-BU8D *					
DELTA	D1	TPA65R-BU8D *	119'-0"	TBD		(1) NOKIA AHFIB * (1) NOKIA AHCA * (1) NOKIA AHLBA *	
	D2	N/A					
	D3	N/A					
	D4	TPA65R-BU8D *					

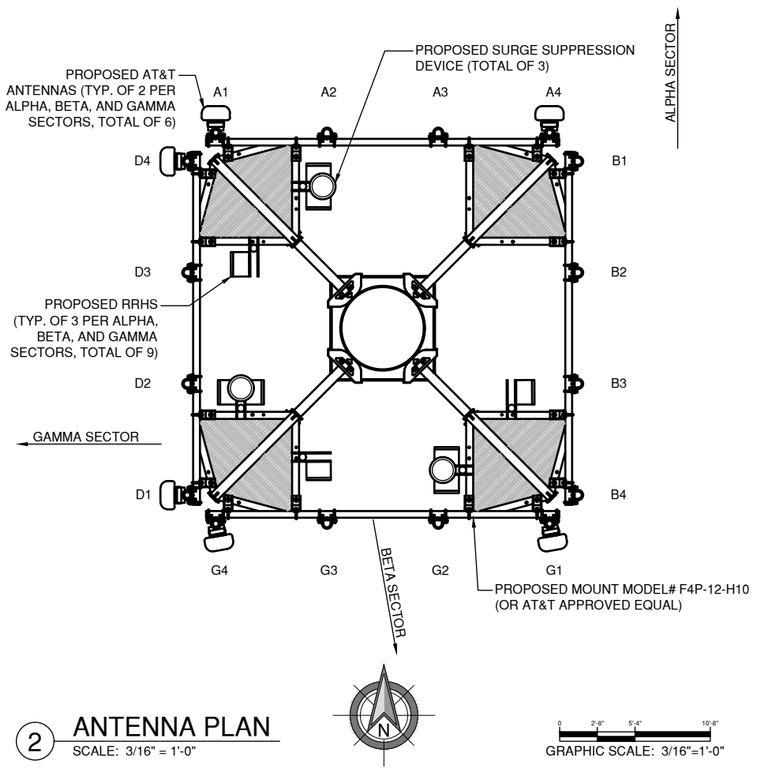
NOTE:

* OR SIMILAR

NOTES:

1. CONTRACTOR TO REFER TO FINAL RFDS FOR ALL RF DETAILS.
2. GC TO REFER TO RFDS FOR ANTENNA POSITION, ACCURATE AZIMUTH AND TIP A.G.L.

1 RF SCHEDULE



2 ANTENNA PLAN

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

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

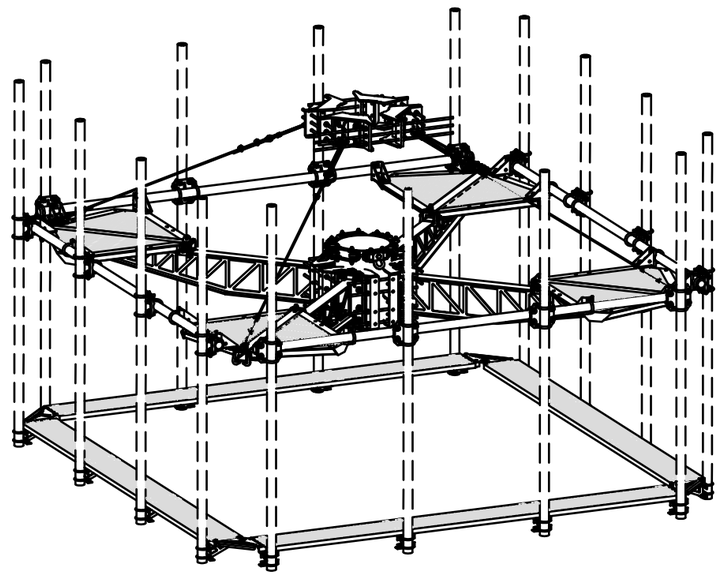
NOTE:

1. CONTRACTOR TO REFER TO FINAL RFDS FOR ALL RF DETAILS.
2. RET CABLE TO BE RUN TO 1ST CARRIER LTE RRH, AND DAISY CHAINED TO ALL ACTIVE SECTOR ANTENNAS.
3. REFER TO GENERAL NOTES FOR ANTENNA MOUNTING INFORMATION.
4. CONTRACTOR TO REFER TO RFDS FOR CROSS-SECTOR REDUNDANCY REQUIREMENTS.
5. DO NOT EXCEED 15' WIRE LENGTH FROM SURGE SUPPRESSOR TO RRH.
6. 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.

MODEL# F4P-12-H10
(OR AT&T APPROVED EQUAL)



3 ANTENNA MOUNT

SCALE: N.T.S

PREPARED BY:

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

DocuSigned by: JackTPhipps 6E2F33FCFCBB445...

DATE SIGNED: 04/22/20
PE LICENSE RENEWAL: 10/31/21

SUBMITTALS

REV	DATE	DESCRIPTION	BY
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D	04/16/20	FOR REVIEW	RA
0	04/22/20	FINAL CD	RA

SITE INFORMATION:

SITE NAME:
NSB-CO.BDN_ADD_4591_COL02148_PEYTON

SITE NUMBER:
COL02148

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12960 N PEYTON HWY
PEYTON, CO 80831

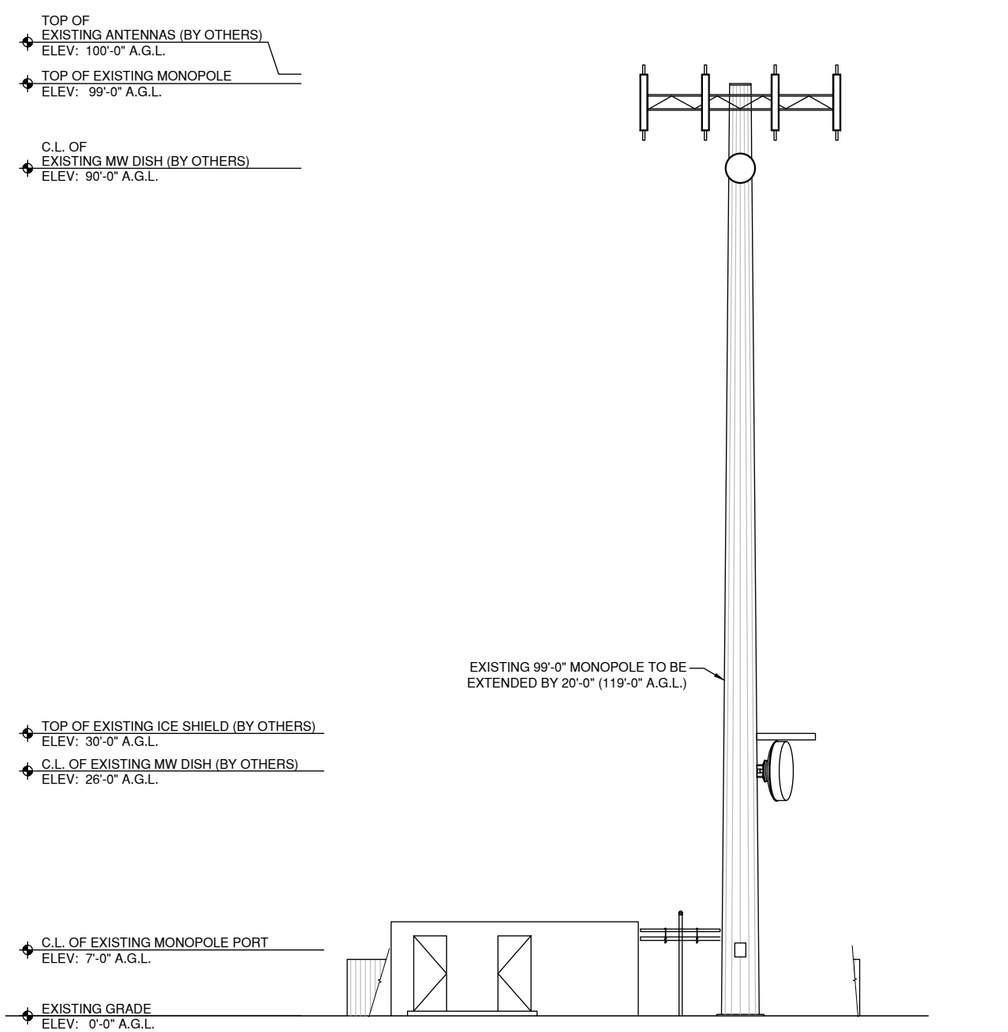
PROJECTS:
LTE 1C 2C 3C 4C 5C 6C

DRAWN BY:	DATE:
RA	01/02/20
CHECKED BY:	DATE:
RA	04/22/20

SHEET TITLE: ANTENNA PLAN AND MOUNT

SHEET NUMBER:

C-3



1 EXISTING TOWER ELEVATION
SCALE: 1/16" = 1'-0"

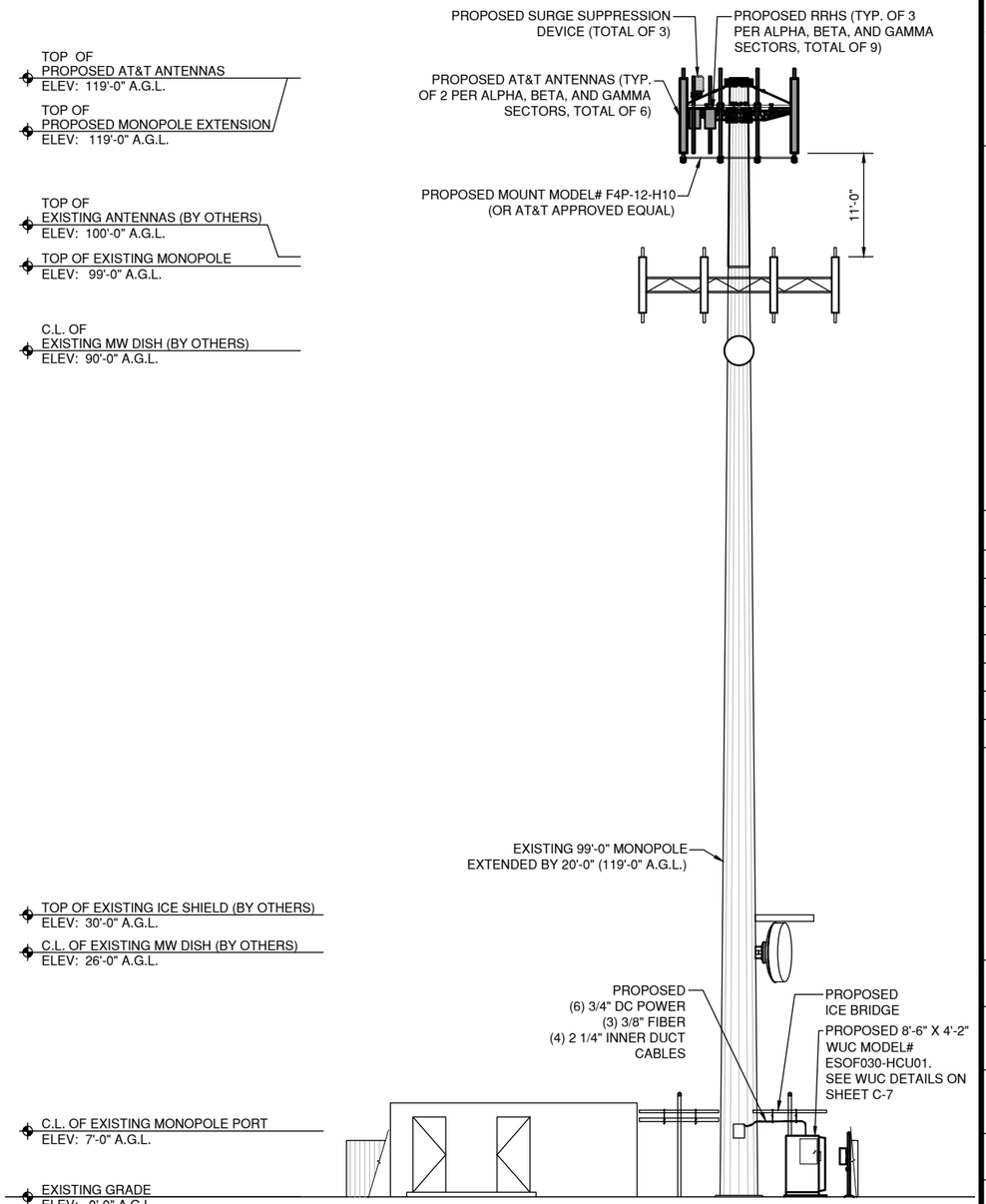
GRAPHIC SCALE: 1/16"=1'-0"

NOTE:

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

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.



2 PROPOSED TOWER ELEVATION
SCALE: 1/16" = 1'-0"

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

PREPARED BY:

nexius

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

DocuSigned by:
6E2F33FCFCBB445...

DATE SIGNED: 04/22/20
PE LICENSE RENEWAL: 10/31/21

SUBMITTALS

REV	DATE	DESCRIPTION	BY
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0	04/22/20	FINAL 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:	DATE:
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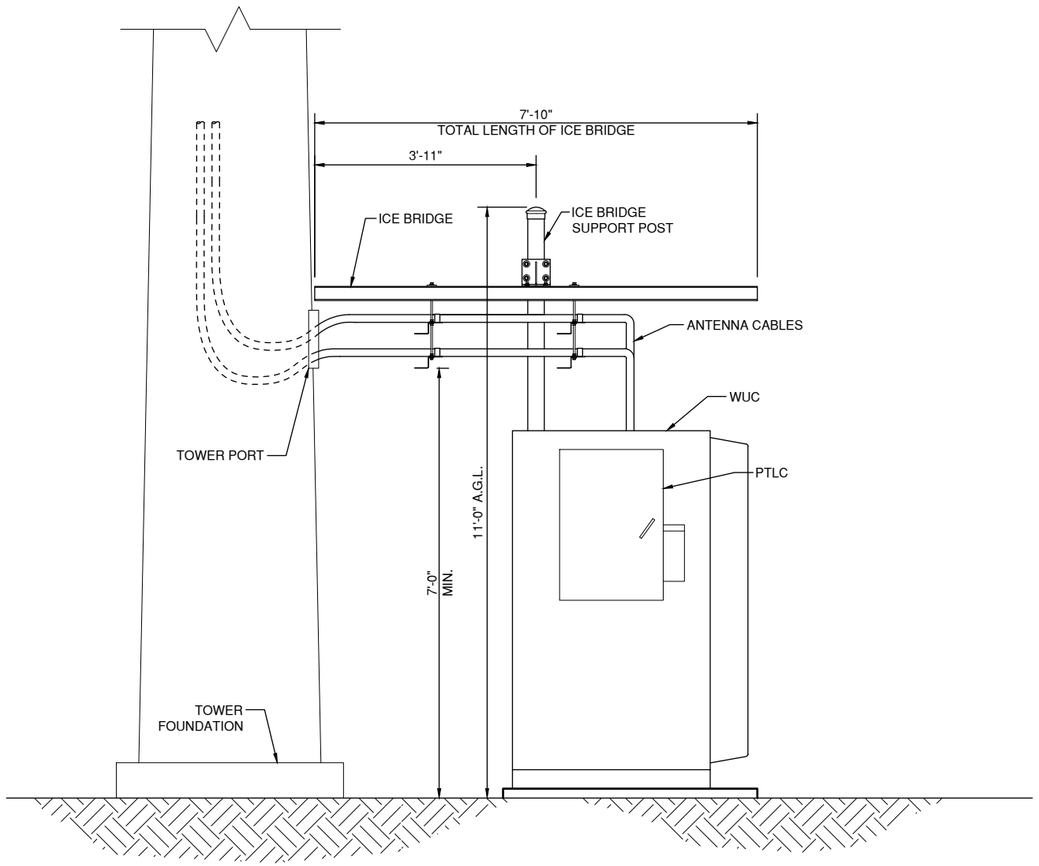
SHEET TITLE:
TOWER ELEVATION

SHEET NUMBER:
C-4

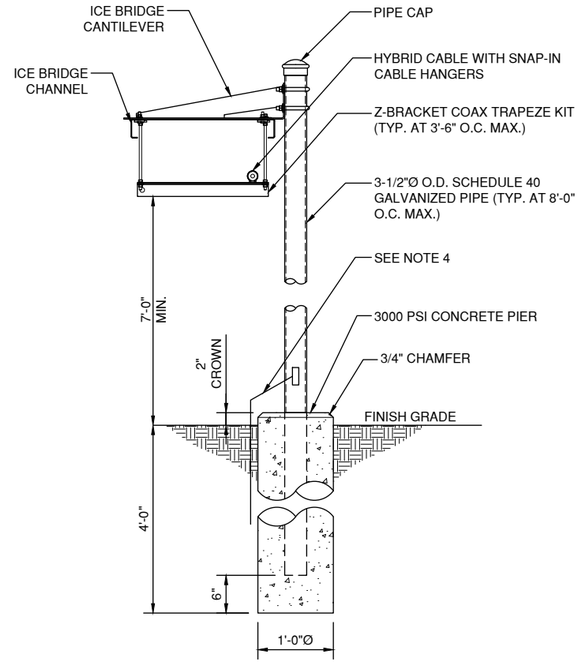


1 ICE BRIDGE DETAIL
SCALE: 3/8" = 1'-0"

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

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" FLEXIBLE STEEL CONDUIT, CRIMPED EVERY 6" TO 8" WITH CORROSION INHIBITOR. SILICONE SEAL AT OPENING. ATTACH GROUND WIRE TO GROUNDING SYSTEM.



2 ICE BRIDGE
SUPPORT POST DETAIL
SCALE: 1/2" = 1'-0"

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

PREPARED BY:

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

CLIENT:

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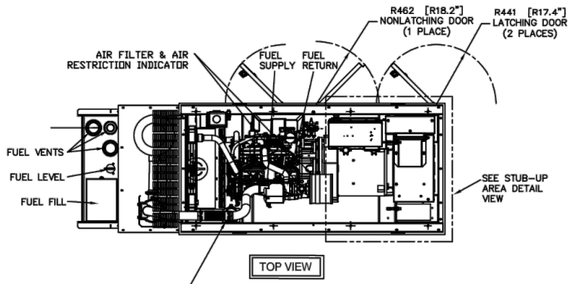
RA	04/22/20

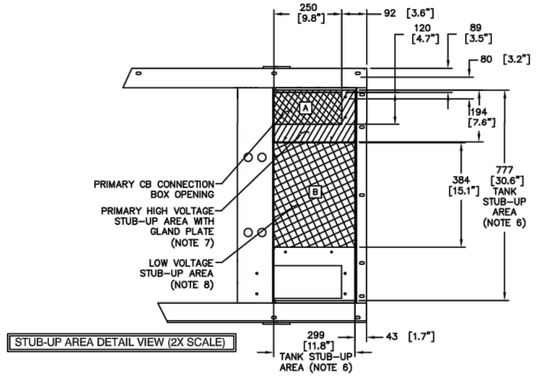
SHEET TITLE:
ICE BRIDGE DETAILS

SHEET NUMBER:
C-5

0J7500D-ATT

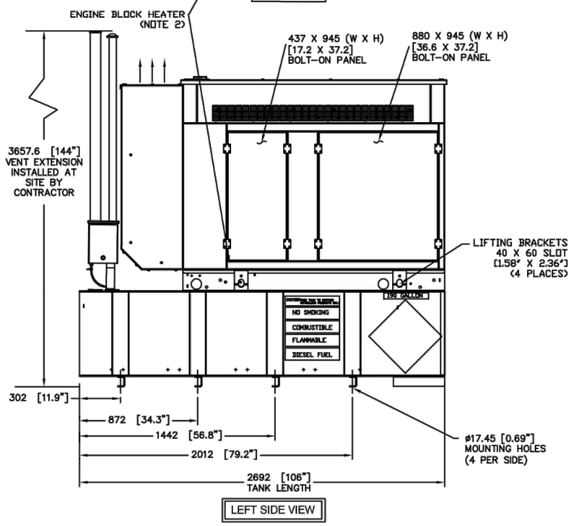


TOP VIEW

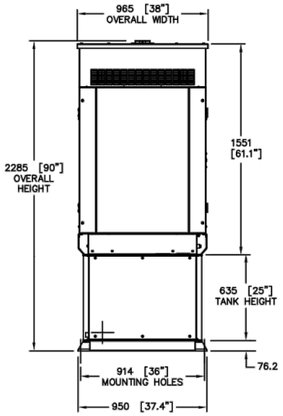


STUB-UP AREA DETAIL VIEW (2X SCALE)

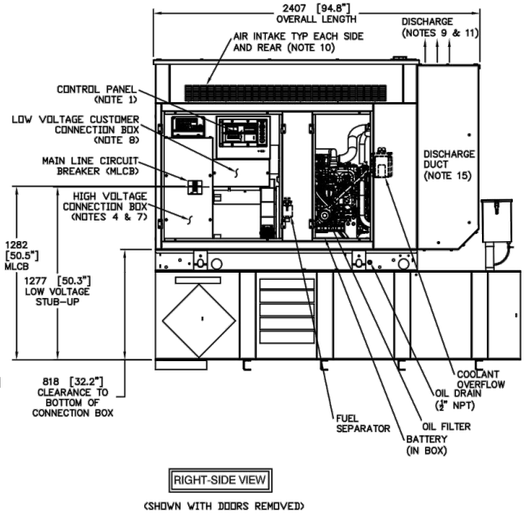
RECOMMENDED ELECTRICAL STUB-UPS (SEE DETAILED VIEW & TOP VIEW)	
DESCRIPTION	INSIDE BASE
HIGH VOLTAGE STUB-UP AREA 1) AC LOAD LEAD CONDUIT AREA. 2) 120/240 VAC FROM UTILITY (BY OTHERS) (GLAND PLATE INCLUDED)	A
LOW VOLTAGE STUB-UP AREA 1) TRANSFER SWITCH/ COMMUNICATION CONDUITS. COMMUNICATIONS AND 2-WIRE START MUST NOT BE RUN IN CONDUIT WITH AC WIRING. (SEE NOTE 8)	B



LEFT SIDE VIEW



REAR VIEW



RIGHT-SIDE VIEW
(SHOWN WITH DOORS REMOVED)

NOTES:

1. CONTROL PANEL INCLUDES BATTERY CHARGER WITH THREE PRONG CORD.
2. 1500W 120VAC ENGINE BLOCK HEATER WITH THREE PRONG CORD.
3. 12 VOLT NEGATIVE GROUND SYSTEM.
4. GENERATOR MUST BE GROUNDED.
5. CENTER OF GRAVITY & WEIGHT MAY SHIFT SLIGHTLY DUE TO UNIT OPTIONS.
6. STUB-UPS: BASE TANK REQUIRES ALL STUB-UPS TO BE IN THE REAR TANK STUB-UP AREA.
7. HIGH VOLTAGE STUB-UP AREA INCLUDES THE AC LOAD LEAD CONNECTION TO THE MAIN LINE CIRCUIT BREAKER, THE NEUTRAL CONNECTION, AND AUXILIARY 120/240V CONNECTION.
8. CONNECTION POINTS FOR CONTROL WIRES. BOTTOM OF LOW VOLTAGE CUSTOMER CONNECTION BOX HAS KNOCKOUTS FOR 1/2" AND 3/4" CONDUIT FITTINGS.
9. MUST ALLOW FREE FLOW OF DISCHARGE AIR AND EXHAUST. SEE SPEC SHEET FOR MINIMUM AIR FLOW AND MAXIMUM RESTRICTION REQUIREMENTS.
10. MUST ALLOW FREE FLOW OF INTAKE AIR. SEE SPEC SHEET FOR MINIMUM AIR FLOW AND MAXIMUM RESTRICTION REQUIREMENTS.
11. GENERATOR MUST BE INSTALLED SUCH THAT FRESH COOLING AIR IS AVAILABLE AND THAT DISCHARGE AIR FROM THE RADIATOR IS NOT RECIRCULATED.
12. IT IS THE RESPONSIBILITY OF THE INSTALLATION TECHNICIAN TO ENSURE THAT THE GENERATOR INSTALLATION COMPLIES WITH ALL APPLICABLE CODES, STANDARDS, AND REGULATIONS.
13. 190 GALLON USEABLE CAPACITY BASETANK IS INCLUDED WITH GENERATOR.
14. UNIT IS SHIPPED WITH FUEL SUPPLY AND RETURN LINES DISCONNECTED AND PLUGGED BETWEEN ENGINE AND FUEL TANK. THIS HAS BEEN DONE TO FACILITATE PRESSURE TESTING OF THE TANK IN THE FIELD. FOR INFORMATION REGARDING CONNECTING THE FUEL SUPPLY AND RETURN LINES PRIOR TO START UP, SEE THE FUEL TANK FIELD TESTING PROCEDURE (0E5082) SUPPLIED IN THE TANK LOOSE VENTS KIT, WHICH IS SHIPPED WITH THIS GENERATOR.
15. SEE DRAWING 0C3850 FOR DISCHARGE DUCT REMOVAL. REMOVAL OF DUCT WILL PROVIDE ACCESS TO MUFFLER FOR SERVICING.

WEIGHT DATA: (INCLUDES EMPTY FUEL TANK)
GENERATOR: 1409 KG (3106 LBS)
GENERATOR WITH WOODEN SHIPPING SKID: 1474 KG (3250 LBS)

UNITS: mm [INCHES]

INSTALLATION DRAWING

INSTALL SD030
DIESEL 2.4L G16
L2A Y02 SSM
190 GAL EXT VNT/FILL BASETANK

GENERAC POWER SYSTEMS
Waukesha
P.O. BOX 8
WAUKESHA, WIS. 53187

FILE NAME | SIZE B
SCALE | FIRST USE CALIFORNIA
DWG NO. 0J7500D | REV A

1 GENERATOR DETAILS
SCALE: N.T.S

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

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

FOR CONSTRUCTION

COLORADO REGISTERED JACK T. PHIPPS PE.0054130 EXP 10/31/2021 PROFESSIONAL ENGINEER
DocuSigned by: 6E2F33FCFCBB445...

DATE SIGNED: 04/22/20
PE LICENSE RENEWAL: 10/31/21

SUBMITTALS

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SITE INFORMATION:
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SITE NUMBER: COL02148
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ADDRESS: 12960 N PEYTON HWY
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PROJECTS: LTE 1C 2C 3C 4C 5C 6C

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SHEET TITLE: GENERATOR DETAILS
SHEET NUMBER: C-6

ESOF030-HCU01
3-Bay Walk Upto Cabinet (WUC)

Product Features

- Sealed Multi-bay Equipment and Power Compartment
- Sealed Battery Compartment
- Corrosion Resistant Aluminum enclosure
- Thermosiphon HEX cooling
- R6 Thermal Insulation
- Attachment Rails for AC Load Center
- Rear Access Hatches
- Optional Dual GPS Antenna Mount
- Low profile for height restricted applications

www.deltaww.com

Smarter. Greener. Together.

Specifications

Model	ESOF030-HCU01 Walk Upto Cabinet (WUC)
1. General	
System cooling capacity	5.0kW Equip Heat Load with Equip Inlet <55C @ 46C ambient 2.6kW Equip Heat Load with Equip Inlet <55C @ 50C ambient
Dimensions (W x H x D)	102W" x 42"D (50" including HEX) x 72"H (add 4" plinth)
Protection class	NEMA4
Door latches	3 point latches (pad lock compatible)
Ground bar	3ea 10-positions
Lifting Mechanism	4 lifting brackets
Equipment Compartment	Bay 1 – 23", 14RU for DC Power System and PDU Bay 2 – 23", 39RU for equipment Bay 3 – 23", 39RU for equipment
Battery Compartment	Shelves for 3 strings batteries, designed for: GNB Marathon M12V180FT Enersys SBS170F or SBS190F
Weight	2270 lbs (Batteries, Power System and Load Equipment excluded)
Materials:	Enclosure Aluminum AL5052, Inner frames Galvanized steel
Finish	Powder Paint RAL7032
Safety	cULus LISTED pending
2. Environment	
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.)
3. Thermal management	
Cooling system	Equipment compartment: 3 200W/°K Thermosiphon HEX
Heating system	Equipment compartment: 3 1500W DC heaters Battery compartment: 1 1500W DC heater
4. Equipment	
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 (7) Roxtec EzEntry 16/16 multi-port (not provided)
Lower Rear	(8) Trade Size 3" ports
Upper Rear	Arranged for (2) Valmont E575 port kits (not provided)
5. Optional Items	
Optional items	NEQ.20115 – Dual GPS Antenna Mast Kit (Delta 3798100742-S) NEQ.20114 – Wave Guide Top Plate (Delta 3317789400) NEQ.20113 – Spare Thermosiphon Door (Delta EX-S04 A-S)
6. Ordering information	
System	NEQ.20111– Cabinet 3-Bay 3-HEX (Delta ESOF030-HCU01)
NOKIA Delta-Walk-Upto-Cabinet(WUC) Fully Configured at WWT (NSN RAN)	NODELTAWUCAB - Delta WUC - FSM4 ABAU Indoor w/ Ancillary 1 ASIA and 1 ABIA - SIAD
Ericsson Delta-Walk-Upto-Cabinet(WUC) Fully Configured at WWT (NSN RAN)	ERDELTAWUCAB-01 (ERICSSON DELTA-WUC LIGHTWEIGHT CAB) - Delta WUC - Ericsson RAN 5216 - SIAD

*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

Sales
Bryan Kearse
Office 919-767-3836
Cell 919-800-7107
Bryan.Kearse@deltaww.com

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

Support
Field Support
1-877-DELTA-08 option 3
(877-335-8208 option 3)
DEUSTPS.Support@deltaww.com

Installation Services
DEUSTPS.Services@deltaww.com

Orders
DEUSTPS.Orders@deltaww.com

Sales
DEUSTPS.Sales@deltaww.com

RMA
DEUSTPS.RMA@deltaww.com

EN_V1.0 / VB 08082018

PREPARED BY:

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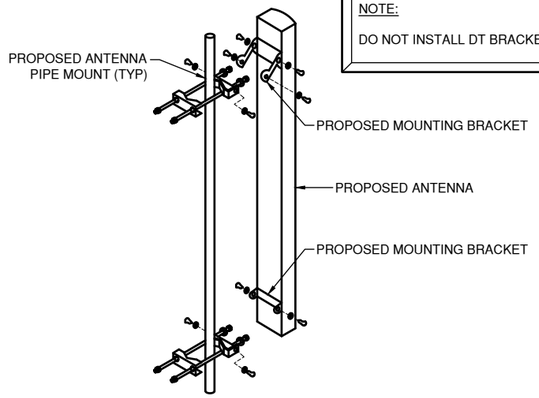
SHEET TITLE:
WUC DETAILS

SHEET NUMBER:
C-7

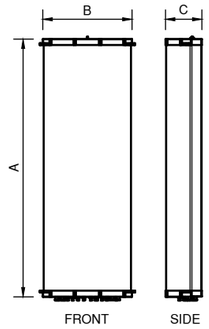


NOTE:

DO NOT INSTALL DT BRACKETS IF RFDS CALLS FOR 0° MDT.

1 ANTENNA MOUNTING DETAIL

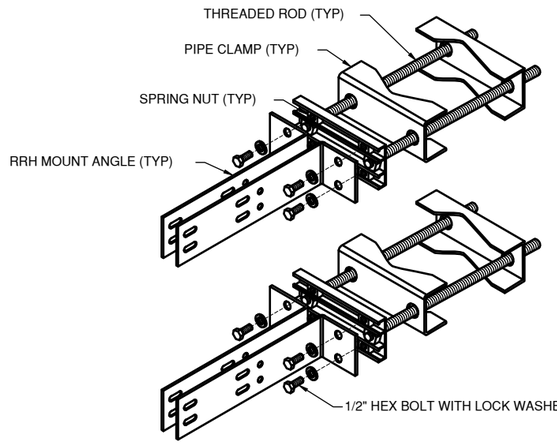
SCALE: N.T.S



ANTENNA SPECIFICATIONS				
MODEL	LENGTH (A)	WIDTH (B)	DEPTH (C)	WEIGHT (lb)
CCI - TPA65R-BU8D	96.0"	21"	7.8"	87.5

2 ANTENNA DETAIL

SCALE: N.T.S



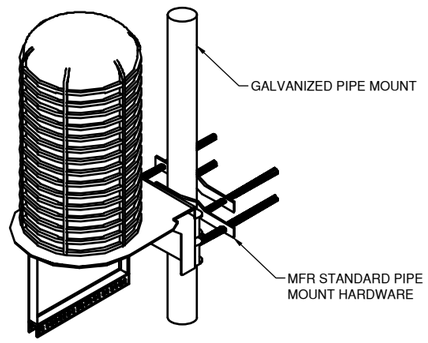
3 RRU MOUNTING DETAIL

SCALE: N.T.S

RADIO SPECIFICATIONS				
MODEL	LENGTH (A)	WIDTH (B)	DEPTH (C)	WEIGHT (lb)
NOKIA - AHFIB	28.7"	15.4"	9.4"	88.2
NOKIA - AHLBA	28.7"	15.4"	9.4"	101.4
NOKIA - AHCA	13.3"	11.6"	6.5"	35.3

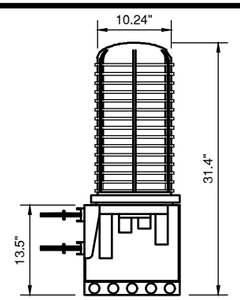
4 RRU DETAIL

SCALE: N.T.S



5 SQUID MOUNTING DETAIL

SCALE: N.T.S



DC9-48-60-24-8C-EV						
NOMINAL OPERATING VOLTAGE	NOMINAL DISCHARGE CURRENT	MAXIMUM IMPULSE CURRENT	MAXIMUM CONTINUOUS OPERATING VOLTAGE	VOLTAGE PROTECTION RATING	WIND LOADING	TOTAL WEIGHT (LB)
48 VDC	20 kA 8/20µ	12.5 kA 10/350µ	60 VDC	330 V	150 MPH SUSTAINED (105.7 LBS) 195 MPH GUST (213.6 LBS)	26.2

6 SQUID DETAIL

SCALE: N.T.S

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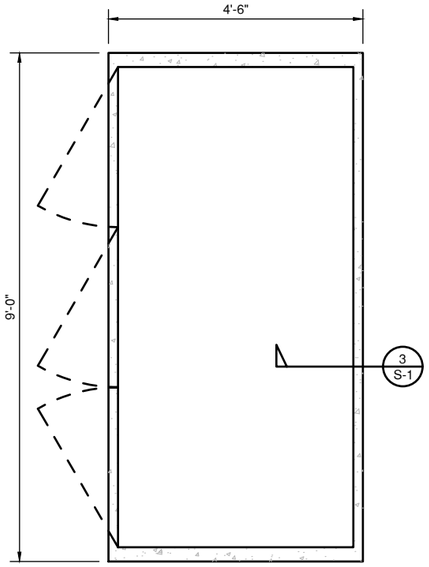
SHEET TITLE:
EQUIPMENT DETAILS

SHEET NUMBER:

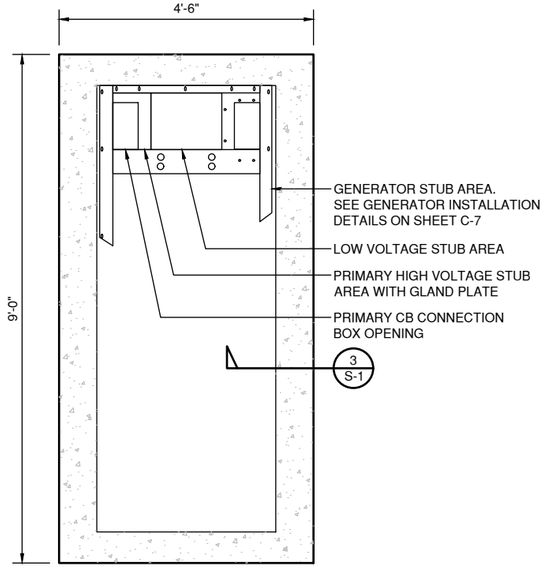
C-8



1 WUC FOUNDATION PLAN

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

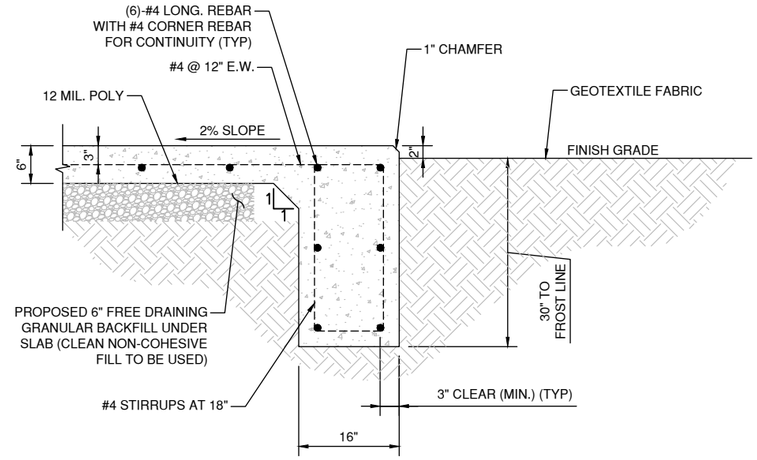
GRAPHIC SCALE: 3/8"=1'-0"



2 GENERATOR FOUNDATION PLAN

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

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



3 WUC & GENERATOR FOUNDATION SECTION DETAILS

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

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

CONCRETE:

1. 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.
2. 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.
3. 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.
4. CEMENT SHALL CONFORM TO ASTM C-150, TYPE II, LOW-ALKALI. AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C-33.
5. 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.
6. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY. THE MIX DESIGNS SHALL CONFORM TO IBC SECTION 1905, UNLESS OTHERWISE NOTED.
7. ALL EXPOSED CONCRETE SHALL HAVE A SMOOTH FORM FINISH, USING B-B PLY-FORM, CLASS I, EXT-APA PLYWOOD.
8. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS, AND INSERTS SHALL BE WELL-SECURED IN POSITION PRIOR TO PLACING CONCRETE.
9. NO CLAY BRICK OR POROUS MATERIAL SHALL BE USED TO SUPPORT FOUNDATION STEEL OFF THE GROUND. CONCRETE "DOBIES" ARE ACCEPTABLE.
10. PROVIDE 3/4-INCH CHAMFER ON ALL EXPOSED CONCRETE CORNERS AND EDGES, UNLESS OTHERWISE NOTED.
11. 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"
12. CONCRETE CURING TYPICALLY REQUIRED FOR 5 DAYS.
13. COLD-WEATHER CONCRETE PRACTICES, AS SPECIFIED BY ACI, SHALL BE ADHERED TO (WHEN APPLICABLE).

REINFORCING STEEL:

1. 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.
2. 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.
3. 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.
4. ALL REINFORCING BAR BENDS SHALL BE MADE "COLD", UNLESS OTHERWISE PERMITTED BY THE BUILDING OFFICIAL.
5. PROVIDE #3 SPACER TIES AT 2'-6" ON CENTER IN ALL BEAMS AND FOOTINGS TO SECURE REINFORCING BARS IN-PLACE, UNLESS OTHERWISE NOTED.
6. 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:

1. SOIL REMOVAL AND RE-COMPACTION SHALL BE 90% COMPACTION (STANDARD PROCTOR).
2. SHALLOW FOOTING SYSTEM MINIMUM EMBEDMENT SHALL MEET (OR EXCEED) LOCAL FROST DEPTH AT LOWEST ADJACENT GRADE.
3. DESIGN SOIL PRESSURE:

FOOTING TYPE:	ALLOWABLE NET BEARING PRESSURE:
SPREAD FOOTING	2000 PSF

4. NO PIPES OR DUCTS SHALL BE PLACED IN FOUNDATIONS UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE ENGINEER.
5. ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
6. 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:

nexius

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 LICENSED
JORDAN D. PHILLIPS
55270
PROFESSIONAL ENGINEER

Date Signed By:
Jordan Phillips
8718DC9510554AE...

DATE SIGNED: 04/22/20
PE LICENSE RENEWAL: 10/31/21

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

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SHEET TITLE:
WUC AND 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 WARRANTEE 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:

1. 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.

2. ALL NECESSARY EXCAVATIONS AND BACKFILLING INCIDENTAL TO THE WORK UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWING SHALL BE PROVIDED BY THIS CONTRACTOR.

3. 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

1. ALL CONDUCTORS SHALL BE INSTALLED IN CONDUIT. ALL CONDUIT SHALL BE RIGID STEEL EMT, OR SCH40 PVC. AS INDICATED ON THE DRAWINGS.

2. WHERE INSTALLED ON EXTERIORS AND EXPOSED TO DAMAGE, ALL CONDUIT SHALL BE RIGID STEEL. ALUMINUM CONDUIT SHALL NOT BE ALLOWED.

3. CONCEALED CONDUIT IN WALLS OR INTERIOR SPACES ABOVE GRADE MAY BE EMT OR PVC.

4. UNDERGROUND CONDUITS SHALL BE RIGID STEEL OR SCHEDULE 80 PVC AS INDICATED ON THE DRAWINGS.

5. 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.

6. PROVIDE SUPPORTS FOR ALL CONDUITS IN ACCORDANCE WITH NEC REQUIREMENTS. ALL CONDUITS SHALL BE SIZED AS REQUIRED BY NEC.

7. BURIAL DEPTH OF ALL CONDUITS SHALL BE AS REQUIRED BY CODE FOR EACH SPECIFIC CONDUIT TYPE AND APPLICATION.

8. CONDUIT ROUTES ARE SCHEMATIC. CONTRACTOR SHALL FIELD VERIFY BEFORE BID. COORDINATE ROUTE WITH WIRELESS CARRIER AND BUILDING OWNER.

EQUIPMENT:

1. ALL DISCONNECT SWITCHES SHALL BE BREAKER TYPE.

2. 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:

1. FURNISH AND INSTALL CONDUCTORS CALLED FOR IN THE DRAWINGS. ALL CONDUCTORS SHALL HAVE TYPE THWN (MIN) (75 °C) INSULATION, RATED FOR 600 VOLTS.

2. 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:

   A. MINIMUM WIRE SIZE SHALL BE #12 AWG.

   B. ALL CONDUCTORS SIZE #8 AND LARGER SHALL BE STRANDED. CONDUCTORS SIZED #10 AND SMALLER MAY BE SOLID OR STRANDED.

   C. CONNECTION FOR #10 AWG AND SMALLER SHALL BE BY TWISTING TIGHT AND INSTALLING INSULATED PRESSURE OR WIRE NUT CONNECTIONS.

   D. CONNECTION FOR #8 AWG AND LARGER SHALL BE BY USE OF STEEL CRIMP-ON SLEEVES WITH NYLON INSULATOR.

3. ALL CONDUCTORS SHALL BE CODED IN ACCORDANCE WITH NEC STANDARDS.

4. THE RACEWAY SYSTEM SHALL BE COMPLETE BEFORE INSTALLING CONDUCTORS.

PENETRATIONS:

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

GROUNDING:

1. 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.

2. PROVIDE GROUND CONDUCTOR IN ALL RACEWAYS.

3. PROVIDE BONDING AND GROUND TO MEET NFPA 780 - LIGHTNING PROTECTION AS A MINIMUM.

4. PROVIDE GROUNDING SYSTEM AS INDICATED ON THE DRAWINGS, AS REQUIRED BY THE NATIONAL ELECTRIC CODE 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:

nexius

NEXIUS SOLUTIONS, INC.
2595 NORTH DALLAS PARKWAY
SUITE 300
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FOR CONSTRUCTION

COLORADO REGISTERED
JACK T. PHIPPS
PE.0054130
EXP 10/31/2021
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SHEET NUMBER:

E-1

POWER PANEL SCHEDULE

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

		CIRCUIT BREAKER		LOAD	CONTINUOUS	PANEL LOAD					CONTINUOUS	LOAD	CIRCUIT BREAKER			
CIRCUIT#	DESCRIPTION	SIZE	POLES	AMPS		A	B	KVA	A	B		AMPS	POLES	SIZE	DESCRIPTION	CIRCUIT#
1	RECTIFIER #1	30	2	14.38	Y	2.156		4.313	2.156		Y	14.38	2	30	RECTIFIER #4	2
3				14.38	Y		2.156	4.313		2.156	Y	14.38				4
5	RECTIFIER #2	30	2	14.38	Y	2.156		4.313	2.156		Y	14.38	2	30	RECTIFIER #5	6
7				14.38	Y		2.156	4.313		2.156	Y	14.38				8
9	RECTIFIER #3	30	2	14.38	Y	2.156		4.313	2.156		Y	14.38	2	30	RECTIFIER #6	10
11				14.38	Y		2.156	4.313		2.156	Y	14.38				12
13	RECTIFIER #7	30	2	14.38	Y	2.156		2.156	0			0	2	30	RECTIFIER #10 / SPARE	14
15				14.38	Y		2.156	2.156		0		0				16
17	RECTIFIER #8 / SPARE	30	2			0		0	0			0	2	30	RECTIFIER #11 / SPARE	18
19							0	0		0		0				20
21	RECTIFIER #9 / SPARE	30	2			0		0	0			0	2	30	RECTIFIER #12 / SPARE	22
23							0	0		0		0				24
25	HVAC	25	2	17.68	Y	2.122		2.482	0.360			3	1	20	EXTERIOR LIGHT	26
27				17.68	Y		2.122	2.482		0.360	N	3	1	20	DUPLEX RECPT	28
29	GFCI	20	1	3	N	0.36		0.585	0.225		Y	1.5	1	20	GENERATOR BLOCK HTR	30
						11.11	10.75	35.74	7.054	6.829						

TOTAL PHASE LOAD:	PHASE A	18.16 KVA
	PHASE B	17.58 KVA
TOTAL PANEL LOAD:		35.74 KVA
TOTAL PANEL LOAD:		148.9 AMPS

NOTES:

1. ELECTRICAL SERVICE SHALL BE 200A, 120/240V, 10 3 WIRE.
2. SERVICE SHALL BE INSTALLED WITH A BREAKER TYPE DISCONNECT.
3. FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT, REFER TO VENDOR PRINTS PROVIDED BY EQUIPMENT SHELTER MANUFACTURER.
4. (1) SINGLE METER SOCKET PROVIDED AND INSTALLED BY ELECTRIC UTILITY.
5. WHEN UTILITY COMPANY REQUIRES A SERVICE DISCONNECT OTHER THAN THE MAIN BREAKER IN POWER PANEL OF THE UTILITY CABINET, REMOVE BONDING JUMPER IN EQUIPMENT SHELTER AND BOND SERVICE DISCONNECT PER NEC REQUIREMENTS.
6. POWER PANEL SCHEDULE FOR REFERENCE ONLY. CONTRACTOR TO REFER TO SHELTER SPECIFICATIONS FOR EXACT POWER LOADING.

PREPARED BY:

nexius

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

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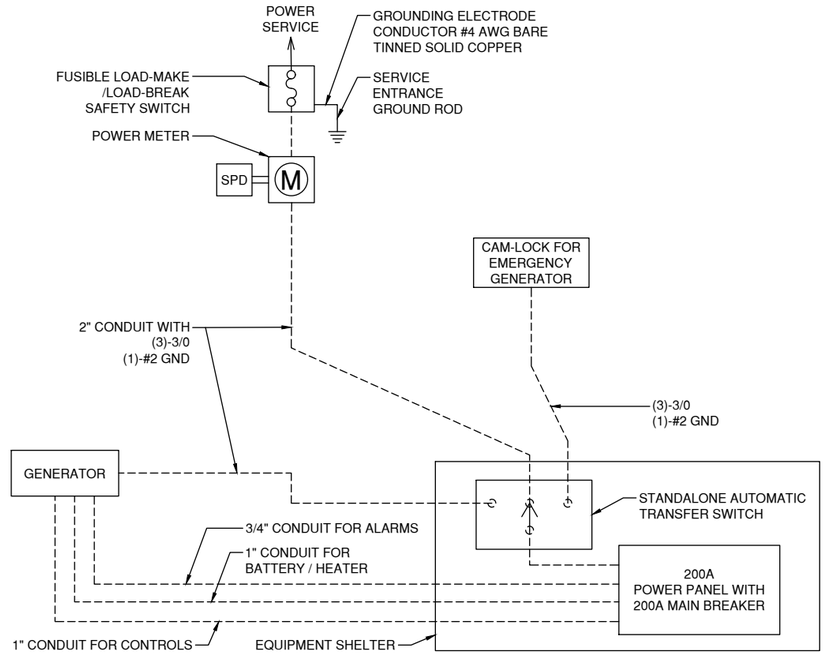
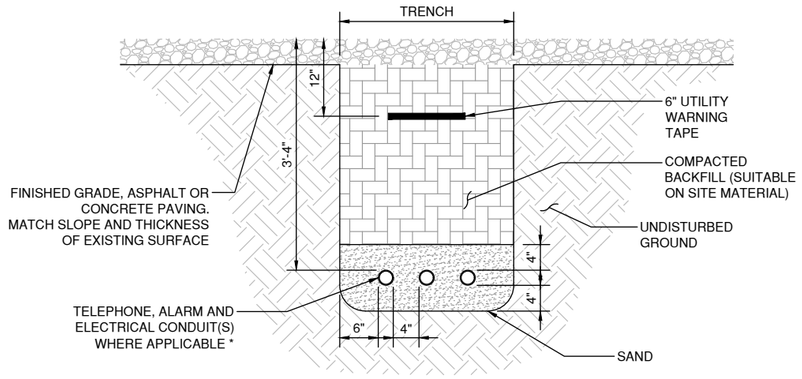
E-2



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.

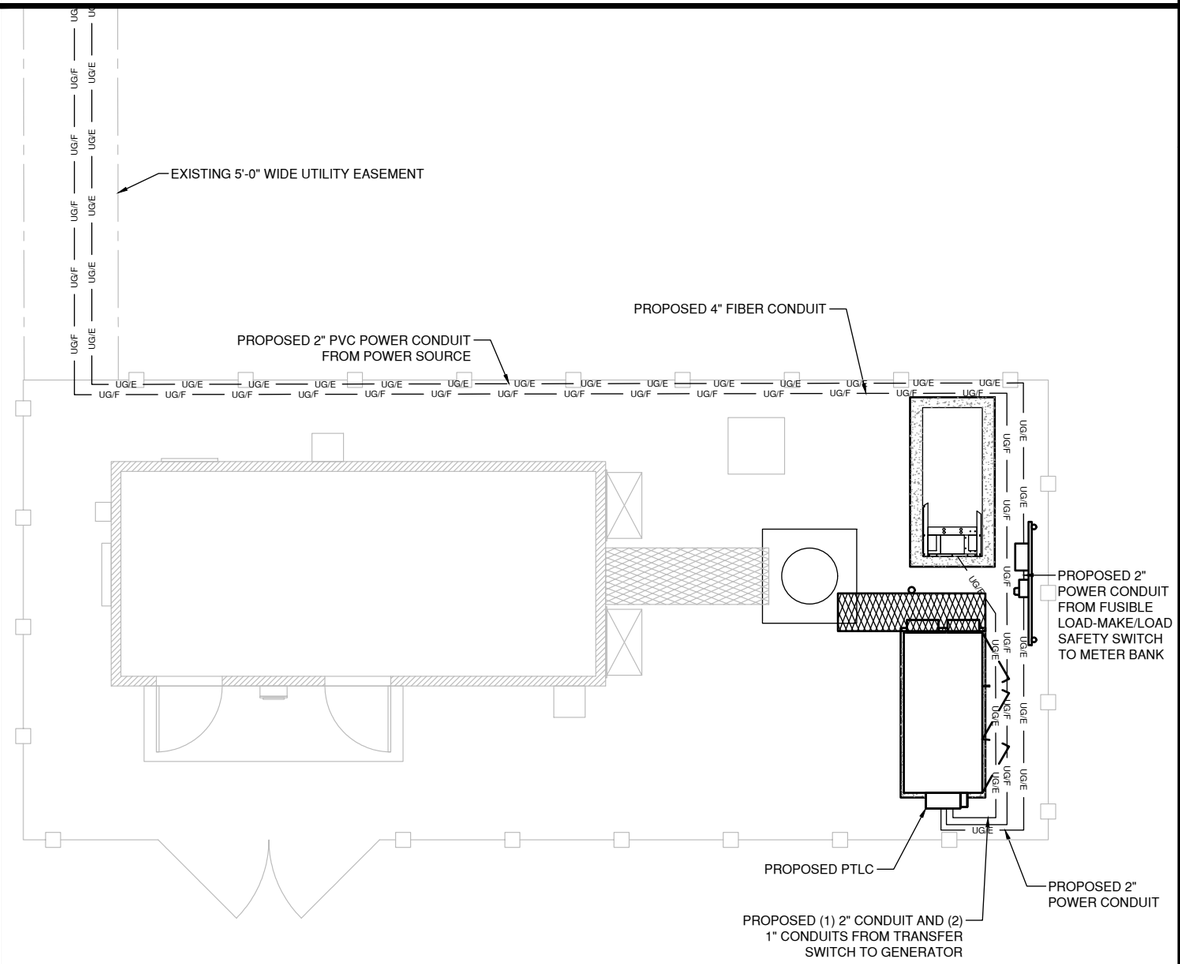


* SEPARATION DIMENSIONS TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS.

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 CASED 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"

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

PREPARED BY:

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2595 NORTH DALLAS PARKWAY
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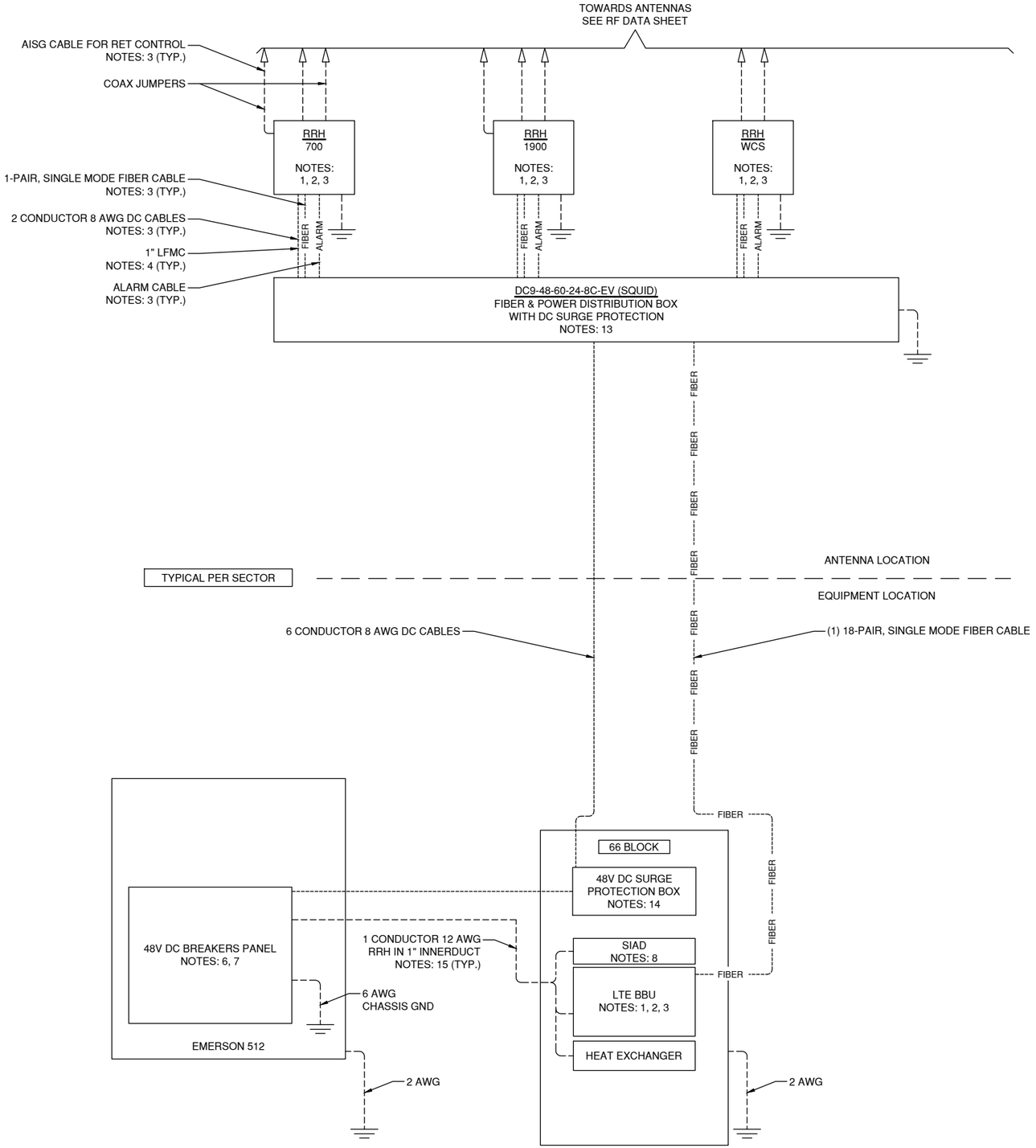

1 DC/FIBER SYSTEM
SCALE: N.T.S

NOTES:

1. FURNISHED BY OEM/AT&T.
2. INSTALLED BY OEM OR AS SCOPED BY MARKET.
3. FINAL CONNECTION BY OEM OR AS SCOPED BY MARKET.
4. OPEN END OF LFMC TO BE LEFT WEATHERPROOFED UNTIL TERMINATED.
5. BREAKERS SPECIFIED SOLD SEPARATELY.
6. BREAKERS TO BE TAGGED AND LOCKED OUT.
7. SIAD IS FURNISHED AND INSTALLED BY OTHERS AND INCLUDES POWER CONNECTIONS AND FIBER TO THE UNIT OR AS SCOPED BY MARKET. INSTALL 10 AWG CHASSIS GROUND, PROVIDE (2) 10A BREAKERS FROM A 24V DC POWER SOURCE OF (2) 5A BREAKERS FROM A 48V DC POWER SOURCE AND CONNECT USING MANUFACTURED POWER CABLE WITH SPECIAL CONNECTOR.
8. FIBER MANAGEMENT BOX IS J-SOURCE MODEL 12126FM4SEC.
9. LEC TO FURNISH AND INSTALL NETWORK INTERFACE DEVICE.
10. LEAVE COILED AND PROTECTED UNTIL TERMINATED.
11. FIBER AND POWER DISTRIBUTION BOX 4/48V SURGE SHALL BE RAYCAP MODEL DC12-48-60-0-25E.
12. FIBER AND POWER DISTRIBUTION BOX 4/48V SURGE SHALL BE RAYCAP MODEL DC9-48-60-24-8C-EV.
13. POWER DISTRIBUTION W/DC SURGE PROTECTION BOX SHALL BE RAYCAP MODEL DC9-48-60-24-8C-EV.
14. SINGLE-CONDUCTOR DC POWER CABLES SHALL BE TELCOFLEX OR KS24194, COPPER. UL LISTED RHH NON-HALOGEN, LOW SMOKE WITH BRAIDED COVER, TYPE TC (J6 AND LARGER). UNLESS OTHERWISE NOTES, STANDING SHALL BE CLASS 1 (TYPE IV) FOR SIZES 8 AWG AND LARGER, CABLES SHALL BE COLOR CODED RED FOR +24V, BLUE FOR -48V AND GRAY FOR 24V AND 48V RETURN CONDUCTORS, MULTI-CONDUCTOR DC POWER CABLES SHALL BE COPPER, CLASS BE STRANDED WITH FLAME RETARDANT PVC JACKET, TYPE TC, UL LISTED FOR 90°C DRY /75°C WET INSTALLATION.
15. 10A FUSE FOR HEAT EXCHANGER FURNISHED AND INSTALLED BY OTHERS.
16. GROUNDING WIRES SHALL BE COPPER, GREEN THHN/THWN UL LISTED FOR 90°C DRY /75°C WET INSTALLATION, MINIMUM SIZE IS 6 AWG UNLESS NOTED OTHERWISE.
17. RET CONTROL FROM THE RRH IS AN OPTIONAL METHOD OF CONNECTION. REFER TO RF DATA SHEET FOR APPLICABILITY.
18. FIBER AND POWER DISTRIBUTION BOX 4/48V SURGE SHALL BE RAYCAP MODEL DC9-48-60-24-8C-EV.
19. FIBER MANAGEMENT BOX IS COMMSCOPE MODEL FB 18188.

PREPARED BY:

nexius

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

DocuSigned by:
6E2F33FCFCBB44F...

DATE SIGNED: 04/22/20
PE LICENSE RENEWAL: 10/31/21

SUBMITTALS

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SITE INFORMATION:

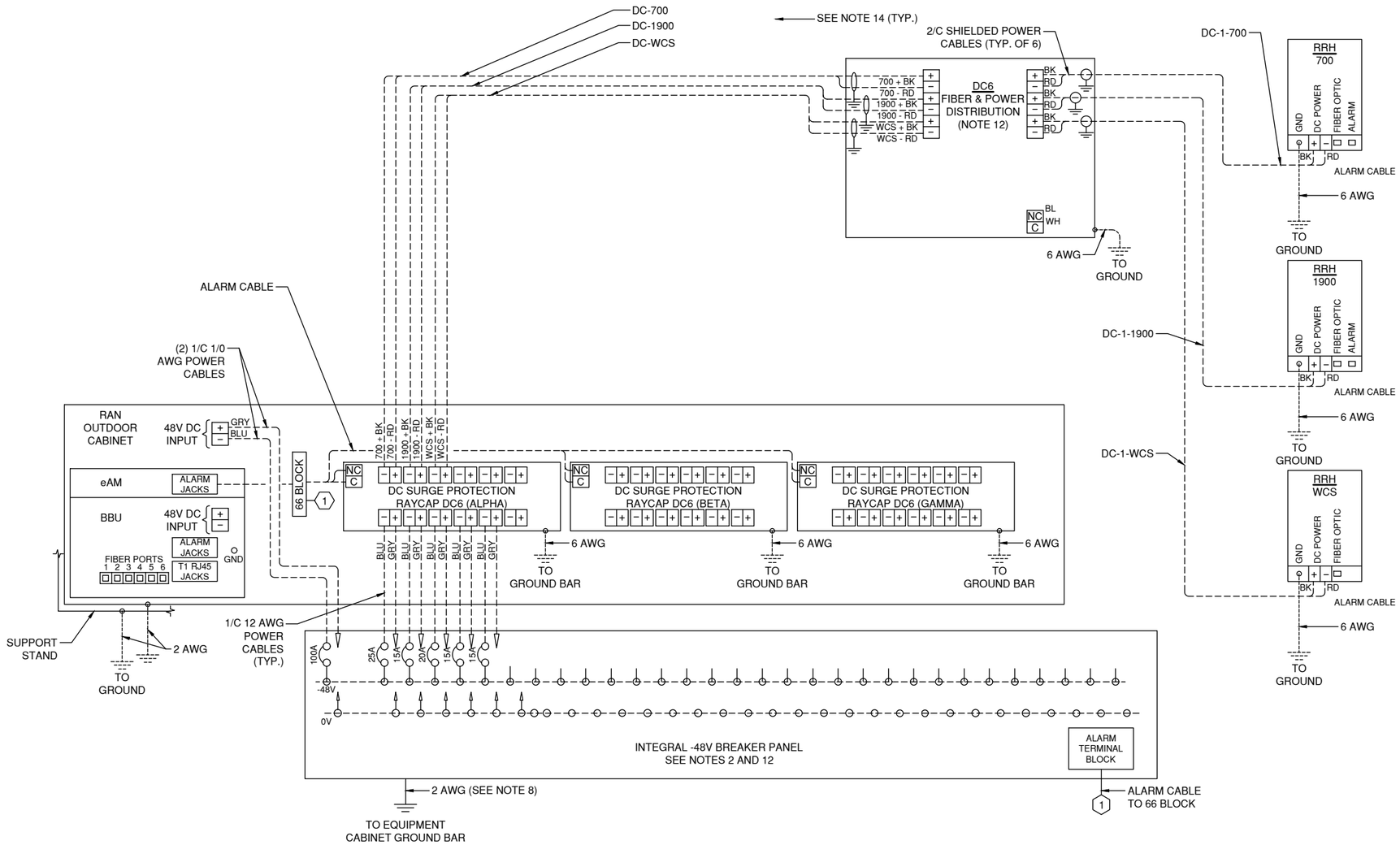
SITE NAME:
NSB-CO.BDN_ADD_4591_COL02148_PEYTON
SITE NUMBER:
COL02148
FA LOCATION CODE:
12871723
PACE ID:
MRUTH029076
ADDRESS:
12960 N PEYTON HWY
PEYTON, CO 80831

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

DRAWN BY:	DATE:
RA	01/02/20
CHECKED BY:	DATE:
RA	04/22/20

SHEET TITLE:
DC/FIBER SYSTEM

SHEET NUMBER:
E-4



NOTES:

1. LABEL THE DC POWER CABLES AT BOTH ENDS OF EVERY WIRE AND IN ANY PULL BOX IF USED. LABEL SHALL BE DURABLE, SELF ADHESIVE, WRAPPED LONGITUDINALLY ALONG THE CABLE AND STATE THE SECTOR, FREQUENCY BAND AND POLARITY; I.E. A-AWS+.
2. INSTALL ON IN AUXILIARY EQUIPMENT CABINET.
3. CABLE TERMINALS FOR +24V INPUT FEED A, AND FEED B AND REFERENCE GROUND SHALL BE 2-HOLE: 3/8" ON 1" CENTER.
4. INSTALL CABLE TERMINALS FOR FEED A AND FEED B RETURN BACK TO BACK ON OPPOSITE SIDES OF PAD USING 1-HOLE 3/8" TERMINALS.
5. CABLE TERMINALS FOR CHASSIS GROUND SHALL BE 2-HOLE, 1/4" ON 5/8" CENTER.
6. WHEN DISTRIBUTION BOX IS NOT USED, INSTALL 3 RUNS OF (2) 2/C CABLES IN CONDUIT, 1 EACH FROM DC SURGE SHELF TO SQUIDS MODEL# DC9-48-60-24-8C-EV.
7. A JUNCTION BOX IS REQUIRED WHEN FIBER OPTIC CABLES ARE INSTALLED IN CONDUIT AS SCOPED BY MARKET.
8. CONVERTER REFERENCE GROUND IS NOT REQUIRED WHEN CONVERTER AND 24V DC POWER PLANT ARE ON THE SAME RACK OF ENCLOSURE.
9. THE BARE GROUND WIRE OF EACH MULTI-CONDUCTOR CABLE AND DRAIN WIRE WHEN A SHIELDED CABLE IS USED, SHALL BE CONNECTED TO THE EQUIPMENT CABINET GROUND BAR.
10. SEE ALARM BLOCK ASSIGNMENT DETAIL FOR ALARM CABLE CONNECTIONS.
11. PROVIDE A JUNCTION BOX, AS SCOPED BY MARKET, TO COIL EXCESS DC POWER AND OPTICAL FIBER CABLES (FIBER CABLES NOT SHOWN FOR CLARITY).
12. NOTED EQUIPMENT MAY BE COMMON TO LTE AND UMTS SYSTEMS.
13. CABLE GROUND WIRE AND SHIELD DRAIN WIRE TO BE LEFT UN-TERMINATED AT RRH.
14. WHEN AN RRH IS USED INSTEAD OF AN AWS RRH CABLE, LABELS SHOULD REFLECT CORRECT FREQUENCY BAND.

1 DC/FIBER SYSTEM DIAGRAM

SCALE: N.T.S

PREPARED BY:

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

CLIENT:

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161 INVERNESS DR W, 2ND FLOOR
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PROJECTS:
LTE 1C 2C 3C 4C 5C 6C

DRAWN BY:	DATE:
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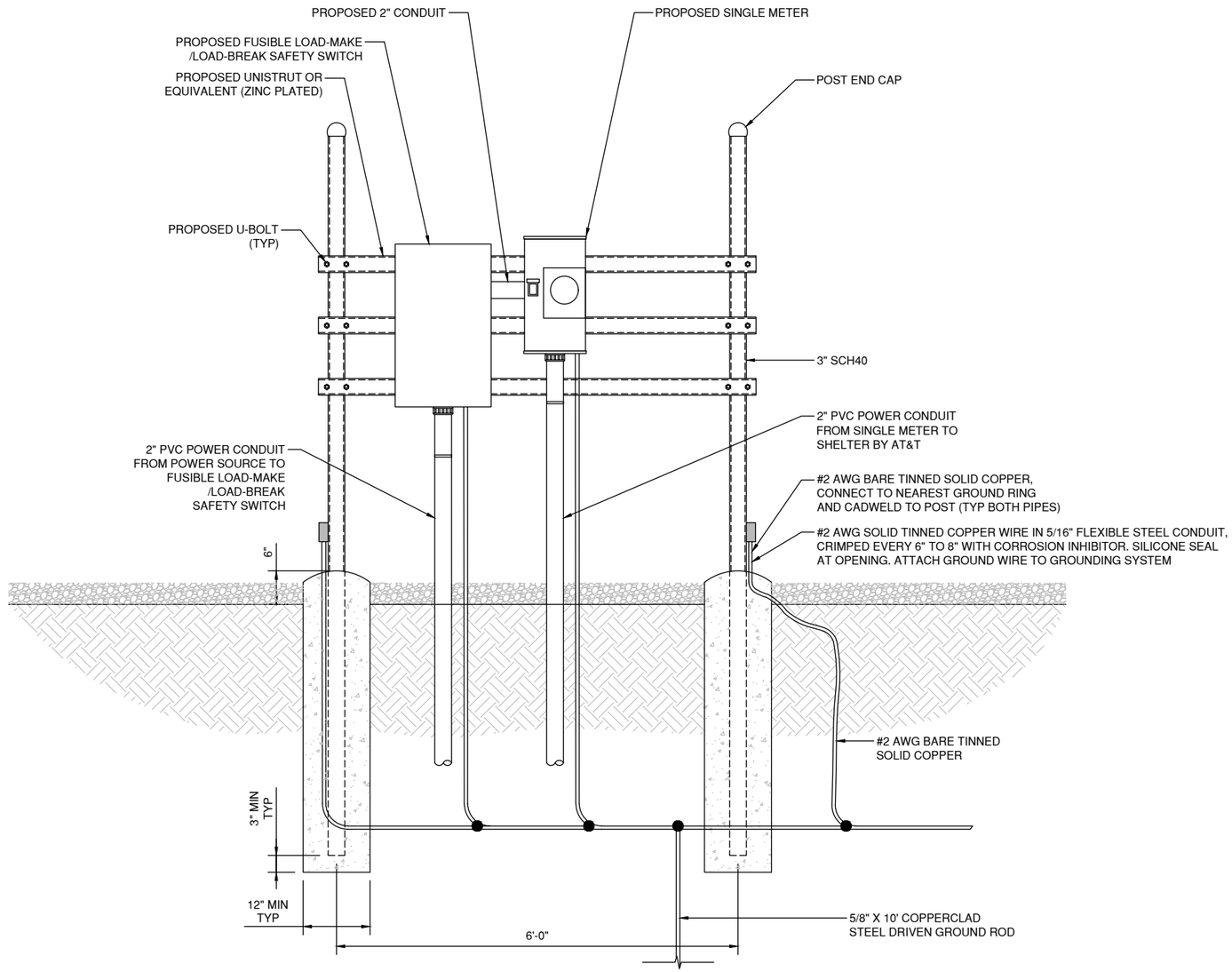
SHEET TITLE: DC/FIBER SYSTEM DIAGRAM

SHEET NUMBER:

E-5

NOTES:

1. REFER TO THE SITE LAYOUT PLAN FOR THE EXACT LOCATION OF THE H-FRAME
2. CONTRACTOR TO COORDINATE WITH ELECTRIC UTILITY FOR METER, METER CANISTER, METERING DEVICE AND WHO IS TO PROVIDE AND INSTALL EACH.
3. CONTRACTOR TO ENSURE METER RACK WORKING SPACES REQUIRED BY THE NEC (ART. 110.26), STATE, AND LOCAL CODES ARE MAINTAINED BOTH ON THE FRONT SIDE AND THE BACK SIDE OF THE H-FRAME PRIOR TO INSTALLATION.
4. SHOW LOCATION (INCLUDING DIMENSIONS OF ALL CAPPED UNDERGROUND CONDUIT ON FINAL AS-BUILT DRAWINGS SUBMITTED TO OWNER.
5. COORDINATE EXACT LOCATION OF UNDERGROUND FEEDERS AND CIRCUITRY WITH THE OWNER.
6. 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.
7. BOND ALL ELECTRICAL EQUIPMENT TO RACK.
8. DIMENSIONS SHOWN ARE APPROXIMATE AND MAY BE ALTERED IN THE FIELD AS APPROVED BY OWNER TO BETTER SUIT ACTUAL CONDITIONS OR EQUIPMENT RECEIVED.



1 SERVICE RACK DETAILS
SCALE: 1/2" = 1'-0"

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

PREPARED BY:
nexius
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
DocuSigned by: JackPhipps 6E2F33FCFCBB445...

DATE SIGNED: 04/22/20
PE LICENSE RENEWAL: 10/31/21

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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:	DATE:
RA	01/02/20
CHECKED BY:	DATE:
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SHEET TITLE: SERVICE RACK DETAILS

SHEET NUMBER: E-6

DRAWING NOTES:

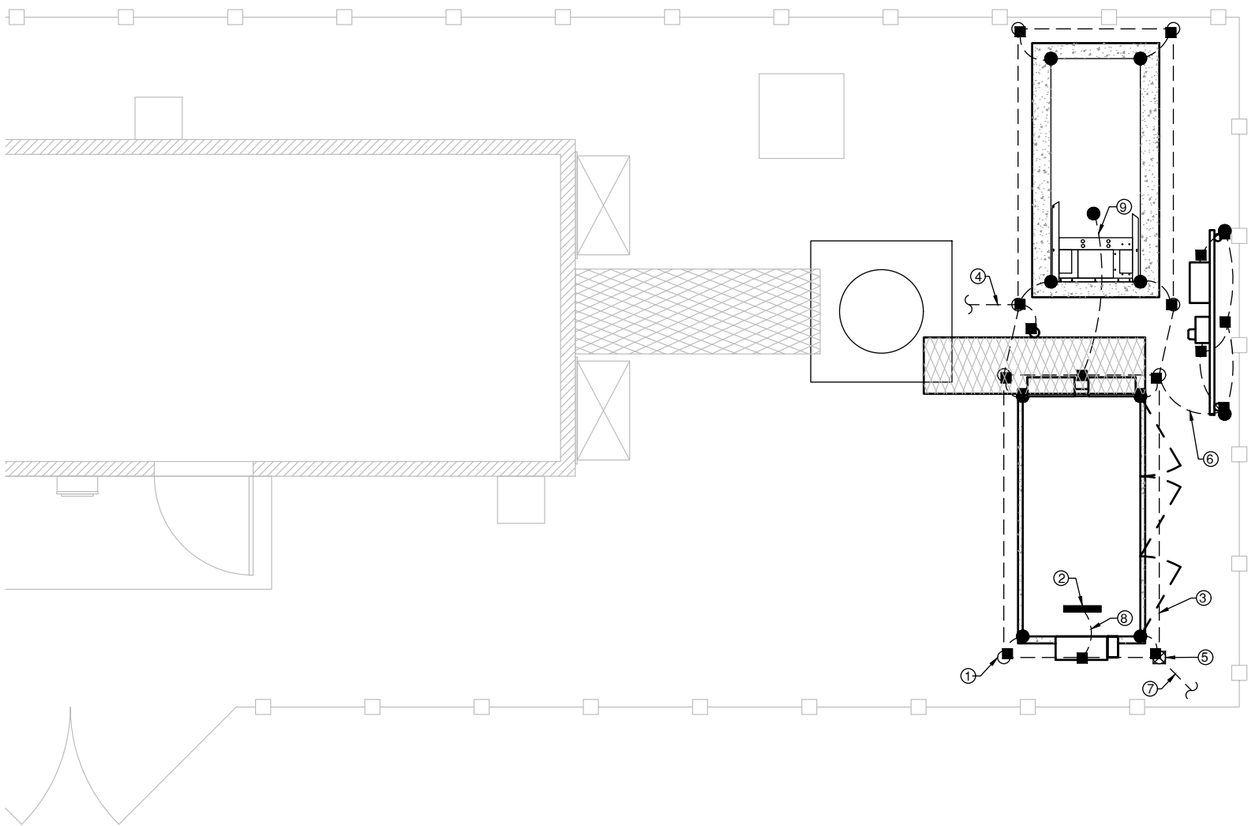
1. 5/8" x 8'-0" COPPER GROUND ROD (TYP).
2. CIGBE GROUND BAR.
3. PROPOSED SHELTER GROUND RING. #2 COPPER CONDUCTOR-BARE TINNED BURIED.
4. CAD WELD #2 BARE TINNED COPPER CONDUCTOR FROM ICE BRIDGE TO EXISTING TOWER GROUND RING. TOWER GROUND RING TO BE FIELD LOCATED.
5. PROPOSED INSPECTION WELL. SEE DETAIL 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.

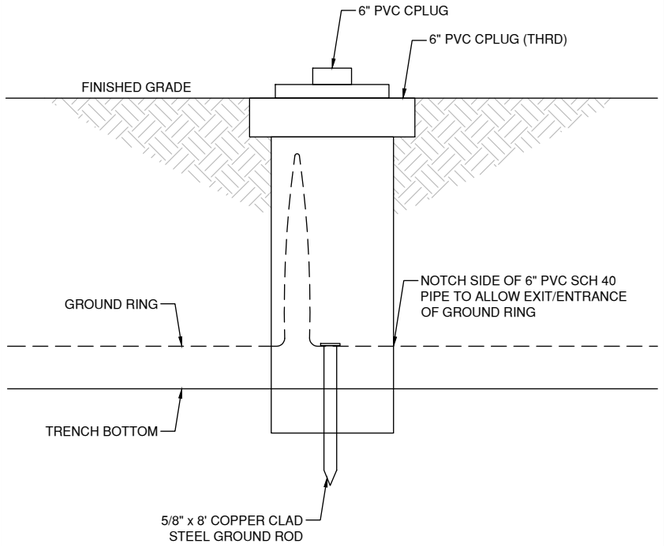
GROUNDING LEGEND:

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

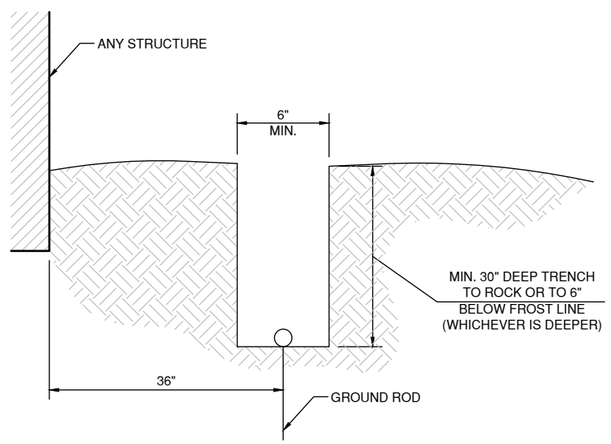


1 GROUNDING PLAN
SCALE: 3/16" = 1'-0"

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



3 INSPECTION WELL DETAIL
SCALE: N.T.S



2 TRENCH DETAIL
SCALE: N.T.S

PREPARED BY:

nexius

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

CLIENT:

AT&T Mobility

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ENGLEWOOD, COLORADO 80112

FOR CONSTRUCTION

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JACK T. PHIPPS
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PROJECTS:
LTE 1C 2C 3C 4C 5C 6C

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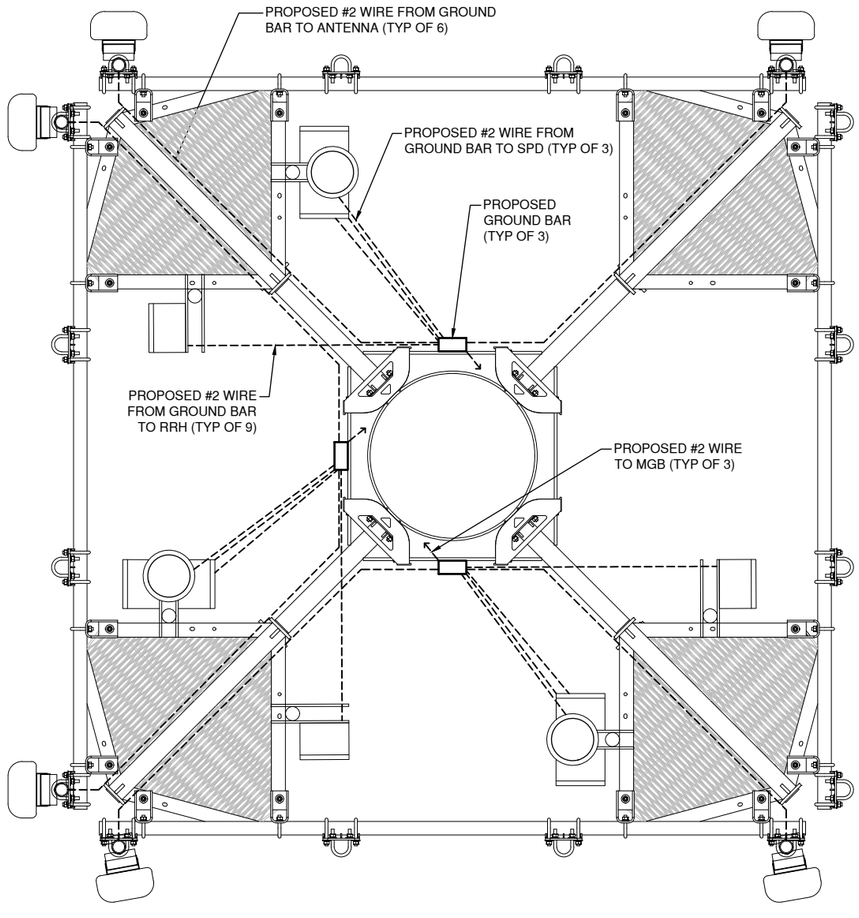
SHEET TITLE: GROUNDING PLAN AND DETAILS

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 GRAD 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, GENERA TOR, 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.



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

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

PREPARED BY:

NEXIUS SOLUTIONS, INC.
2595 NORTH DALLAS PARKWAY
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PROJECTS:
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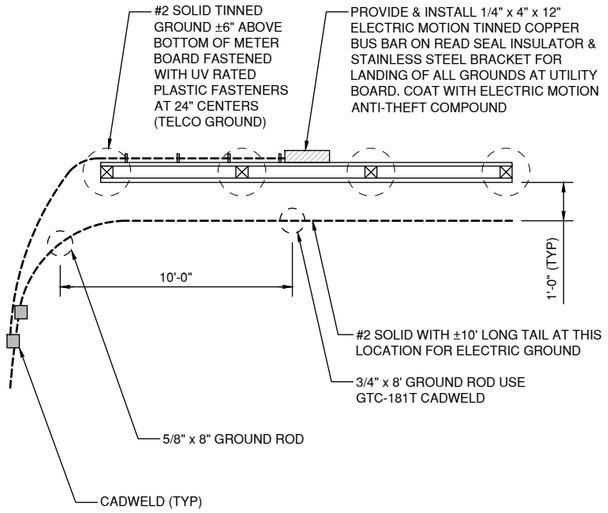
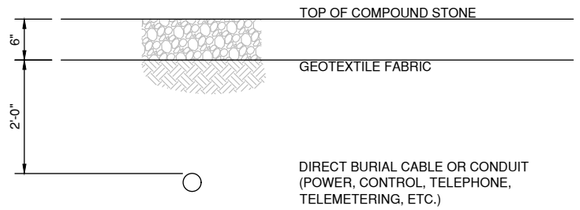
SHEET TITLE: ANTENNA GROUNDING DETAILS

SHEET NUMBER:

G-2



1 SERVICE RACK GROUNDING
SCALE: N.T.S

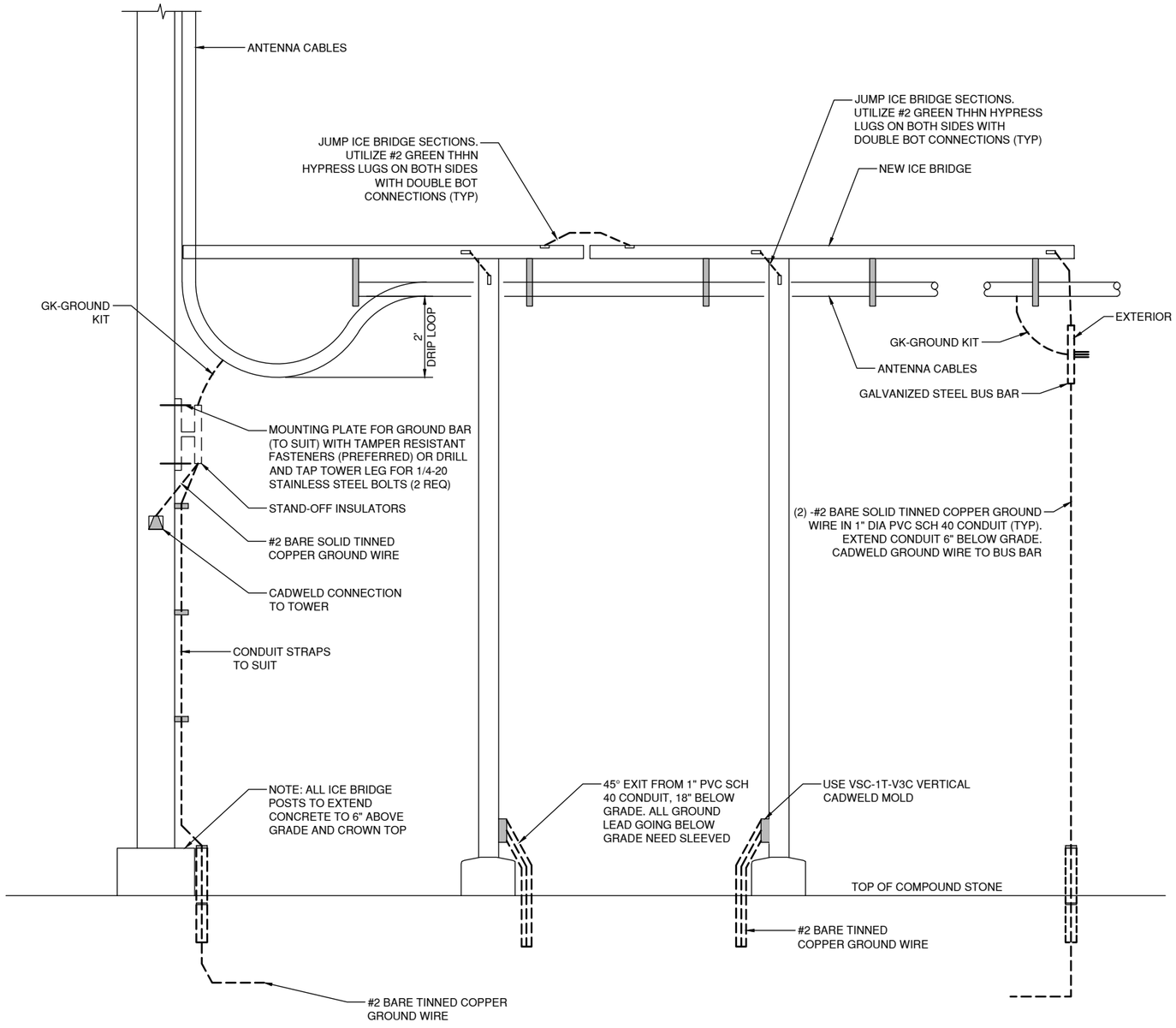


INSTALLATION:

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:

NEXIUS SOLUTIONS, INC.
2595 NORTH DALLAS PARKWAY
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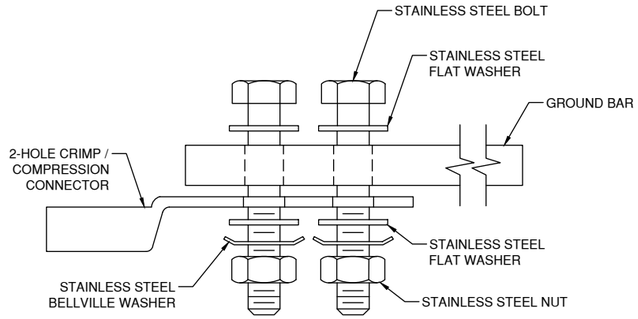
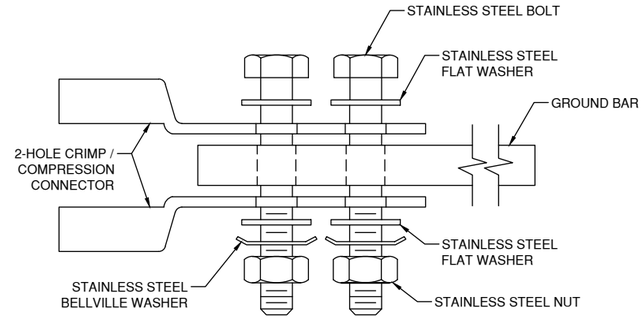
SHEET TITLE:
GROUNDING DETAILS

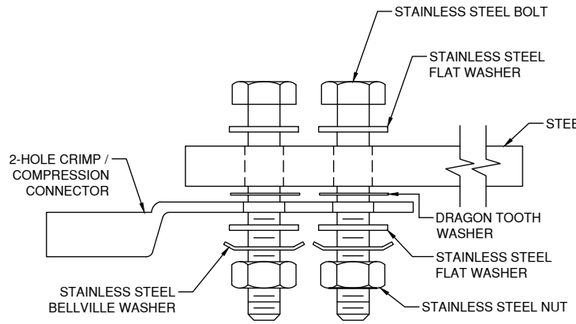
SHEET NUMBER:
G-3



SINGLE CONNECTOR AT GROUND BARS



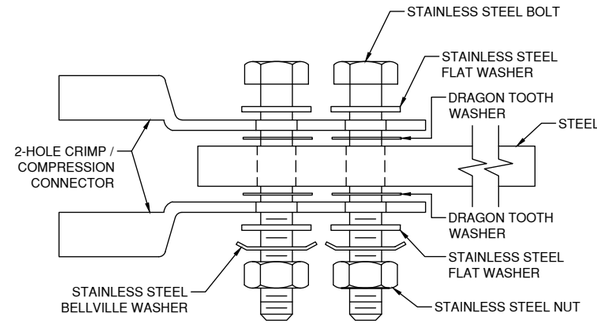
BACK TO BACK CONNECTOR AT GROUND BARS



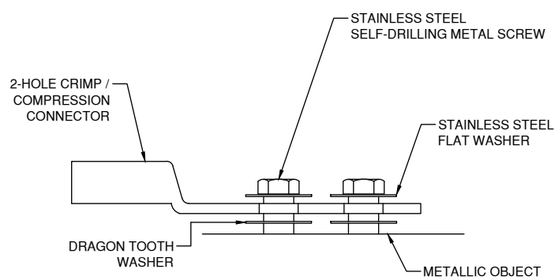
SINGLE CONNECTOR AT STEEL OBJECTS

NOTES

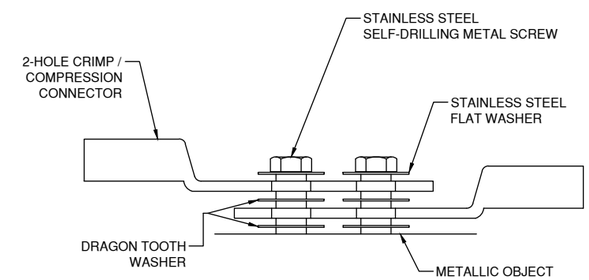
1. CHOOSE BOLT LENGTH TO ALLOW A MIN. OF THREE THREADS EXPOSED.
2. BURNISH MOUNTING SURFACE TO REMOVE PAINT IN THE AREA OF THE CONNECTOR.
3. APPLY ANTI-OXIDANT COMPOUND TO MATING SURFACE OF CONNECTOR AND WIPE OFF EXCESS COMPOUND.
4. APPLY CLEAR HEAT SHRINK OVER ENTIRE LENGTH OF LABEL FOR PROTECTION.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



BACK TO BACK CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS



BACK TO BACK CONNECTOR AT METALLIC/STEEL OBJECTS

1 CONNECTOR AND HARDWARE DETAILS

SCALE: N.T.S

PREPARED BY:

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

DocuSigned by:
6E2F33FCFCBB41F...

DATE SIGNED: 04/22/20
PE LICENSE RENEWAL: 10/31/21

SUBMITTALS

REV	DATE	DESCRIPTION	BY
A	01/02/20	FOR REVIEW	RA
B	02/14/20	FOR REVIEW	RA
C	03/20/20	FOR REVIEW	RA
D	04/16/20	FOR REVIEW	RA
0	04/22/20	FINAL 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:	DATE:
RA	01/02/20
CHECKED BY:	DATE:
RA	04/22/20

SHEET TITLE:
GROUNDING DETAILS

SHEET NUMBER:
G-4

GENERAL NOTES:

1. ALL REFERENCES TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED AT&T TOWERS, OR ITS DESIGNATED REPRESENTATIVE.

2. 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.

3. 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.

4. WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2012 EDITION.

5. 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.

6. ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED.

7. 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.

8. 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.

9. 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.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERV1SING 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.

11. 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.

12. 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.

13. 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.

14. 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.

15. 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.

16. 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.

17. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.

18. ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH THE PLANS (LATEST REV1SION) 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:

1. THE FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS AND MANUAL OF STEEL CONSTRUCTION, 14TH EDITION.

2. UNLESS OTHERWISE NOTED, ALL STRUCTURAL ELEMENTS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
   2.1. STRUCTURAL STEEL, ASTM DESIGNATION A36 OR A992 GR50.
   2.2. ALL BOLTS, ASTM A325 TYPE ASTM GALVANIZED HIGH STRENGTH BOLTS.
   2.3. ALL NUTS, ASTM A563 CARBON AND ALLOY STEEL NUTS.
   2.4. ALL WASHERS, ASTM F436 HARDENED STEEL WASHERS.

3. 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.

4. HOLES SHALL NOT BE FLAME CUT THRU STEEL UNLESS APPROVED BY THE ENGINEER.

5. 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.

6. 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.

7. A NUT LOCKING DEVICE SHALL BE INSTALLED ON ALL PROPOSED AND/OR REPLACED BOLTS.

8. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH TO EXCLUDE THE THREADS FROM THE SHEAR PLANE.

9. 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.

10. 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.

11. FLAT WASHERS ARE TO BE INSTALLED WITH BOLTS OVER SLOTTED HOLES.

12. 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.

13. 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.

14. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.

15. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-2010 STRUCTURAL WELDING CODE - STEEL.

PREPARED BY:

nexius

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

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ADDRESS:
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PEYTON, CO 80831

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

DRAWN BY:	DATE:
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SHEET TITLE:
GENERAL NOTES

SHEET NUMBER:
GN-1