



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL

February 15, 2024

Jeffrey Barbadora
Permitting Specialist
Crown Castle
1800 W. Park Drive
Westborough, MA 01581
Jeff.Barbadora@crowncastle.com

RE: **TS-DISH-034-240116** - Dish Wireless, LLC request for an order to approve tower sharing at an existing telecommunications facility located at 41 Padanaram Road, Danbury, Connecticut.
Acknowledgement of Complete Request.

Dear Jeffrey Barbadora:

The Connecticut Siting Council (Council) is in receipt of your correspondence of February 14, 2024 submitted in response to the Council's February 6, 2024 notification of an incomplete request for tower sharing with regard to the above-referenced matter.

The submission renders the request for tower sharing complete and the Council will process the request in accordance with the Federal Communications Commission 60-day timeframe.

Thank you for your attention and cooperation.

Sincerely,

A handwritten signature in dark ink, appearing to read "Melanie Bachman".

Melanie Bachman
Executive Director

MAB/ANM/laf

From: Barbadora, Jeff <Jeff.Barbadora@crowncastle.com>

Sent: Wednesday, February 14, 2024 10:15 AM

To: Fontaine, Lisa <Lisa.Fontaine@ct.gov>

Cc: CSC-DL Siting Council <Siting.Council@ct.gov>

Subject: FW: Council Incomplete Letter - TS-DISH-034-240116 (Padanaram Rd., Danbury; TS-DISH-118-240116 (Ethan Allen Hwy., Ridgefield))

Good morning Lisa,

Please see attached updated construction drawing for Danbury.

One hard copy will be overnighted to your office.

Thanks,

Jeffrey Barbadora

Permitting Specialist

781-970-0053

Crown Castle

1800 W. Park Drive, Suite 250

Westborough, MA 01581



DISH Wireless L.L.C. SITE ID:

NJJER01113B

DISH Wireless L.L.C. SITE ADDRESS:

**41 PADANARAM RD
DANBURY, CT 06811**

SCOPE OF WORK
<p>THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:</p> <p>TOWER SCOPE OF WORK:</p> <ul style="list-style-type: none"> • INSTALL (3) PROPOSED PANEL ANTENNAS (1 PER SECTOR) • INSTALL (1) PROPOSED ANTENNA PLATFORM MOUNT • INSTALL PROPOSED JUMPERS • INSTALL (6) PROPOSED RRUs (2 PER SECTOR) • INSTALL (1) PROPOSED OVER VOLTAGE PROTECTION DEVICE (OVP) • INSTALL (1) PROPOSED HYBRID CABLE <p>GROUND SCOPE OF WORK:</p> <ul style="list-style-type: none"> • INSTALL (1) PROPOSED METAL PLATFORM • INSTALL (1) PROPOSED ICE BRIDGE • INSTALL (1) PROPOSED PPC CABINET • INSTALL (1) PROPOSED EQUIPMENT CABINET • INSTALL (1) PROPOSED POWER CONDUIT • INSTALL (1) PROPOSED TELCO CONDUIT • INSTALL (1) PROPOSED TELCO-FIBER BOX • INSTALL (1) PROPOSED GPS UNIT • INSTALL (1) PROPOSED SAFETY SWITCH (IF REQUIRED) • INSTALL (1) PROPOSED FIBER NID (IF REQUIRED) • DISH WIRELESS TO UTILIZE EXISTING METER SOCKET "A"

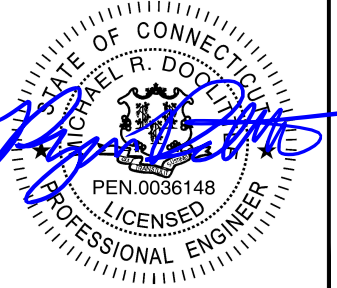
SITE INFORMATION	PROJECT DIRECTORY
<p>PROPERTY OWNER: KAUFMAN ROBERT J ADDRESS: X X</p> <p>TOWER TYPE: MONOPOLE</p> <p>CROWN CASTLE SITE ID: 823531</p> <p>CROWN CASTLE 656359</p> <p>APP NUMBER: COUNTY: FAIRFIELD</p> <p>LATITUDE (NAD 83): 41° 25' 8.52" N 41.419033°</p> <p>LONGITUDE (NAD 83): 73° 27' 43.96" W -73.462211°</p> <p>ZONING JURISDICTION: CITY OF DANBURY</p> <p>ZONING DISTRICT: COMMERCIAL</p> <p>PARCEL NUMBER: 34-H10140</p> <p>OCCUPANCY GROUP: U</p> <p>CONSTRUCTION TYPE: II-B</p> <p>POWER COMPANY: EVERSOURCE</p> <p>TELEPHONE COMPANY: LIGHTOWER</p>	<p>APPLICANT: DISH WIRELESS, LLC. 5701 SOUTH SANTA FE DRIVE LITTLETON, CO 80120</p> <p>TOWER OWNER: CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317 (877) 486-9377</p> <p>SITE DESIGNER: KIMLEY-HORN & ASSOCIATES 3875 EMBASSY PKWY, SUITE 280 AKRON, OH 44333 (216) 505-7771</p> <p>SITE ACQUISITION: DANIEL ANDERSON DANIEL.ANDERSON@CROWNCastle.COM</p> <p>CONSTRUCTION MANAGER: OMAR ZEERBAN OMAR.ZEERBAN@DISH.COM</p> <p>RF ENGINEER: VAISHNAVI VAJJE VAISHNAVI.VAJJE@DISH.COM</p>



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: DMW	CHECKED BY: MCK	APPROVED BY: ---
---------------	-----------------	------------------

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

NJJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

CONNECTICUT CODE OF COMPLIANCE

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

CODE TYPE	CODE
BUILDING	2022 CT STATE BUILDING CODE/2021 IBC W/ CT AMENDMENTS
MECHANICAL	2022 CT STATE BUILDING CODE/2021 IMC W/ CT AMENDMENTS
ELECTRICAL	2022 CT STATE BUILDING CODE/2020 NEC W/ CT AMENDMENTS

SHEET INDEX

SHEET NO.	SHEET TITLE
T-1	TITLE SHEET
A-1	OVERALL AND ENLARGED SITE PLAN
A-2	ELEVATION, ANTENNA LAYOUT AND SCHEDULE
A-3	EQUIPMENT PLATFORM AND H-FRAME DETAILS
A-4	EQUIPMENT DETAILS
A-5	EQUIPMENT DETAILS
A-6	EQUIPMENT DETAILS
E-1	ELECTRICAL/FIBER ROUTE PLAN AND NOTES
E-2	ELECTRICAL DETAILS
E-3	ELECTRICAL ONE-LINE, FAULT CALCS & PANEL SCHEDULE
E-4	PPC NEUTRAL-TO-GROUND SCHEMATIC
G-1	GROUNDING PLANS AND NOTES
G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS
G-4	GROUNDING DETAILS
RF-1	RF CABLE COLOR CODE
GN-1	LEGEND AND ABBREVIATIONS
GN-2	RF SIGNAGE
GN-3	GENERAL NOTES
GN-4	GENERAL NOTES
GN-5	GENERAL NOTES

SITE PHOTO



UNDERGROUND SERVICE ALERT CBYD 811
UTILITY NOTIFICATION CENTER OF CONNECTICUT
(800) 922-4455
WWW.CBYD.COM
CALL 2 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION



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 REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED

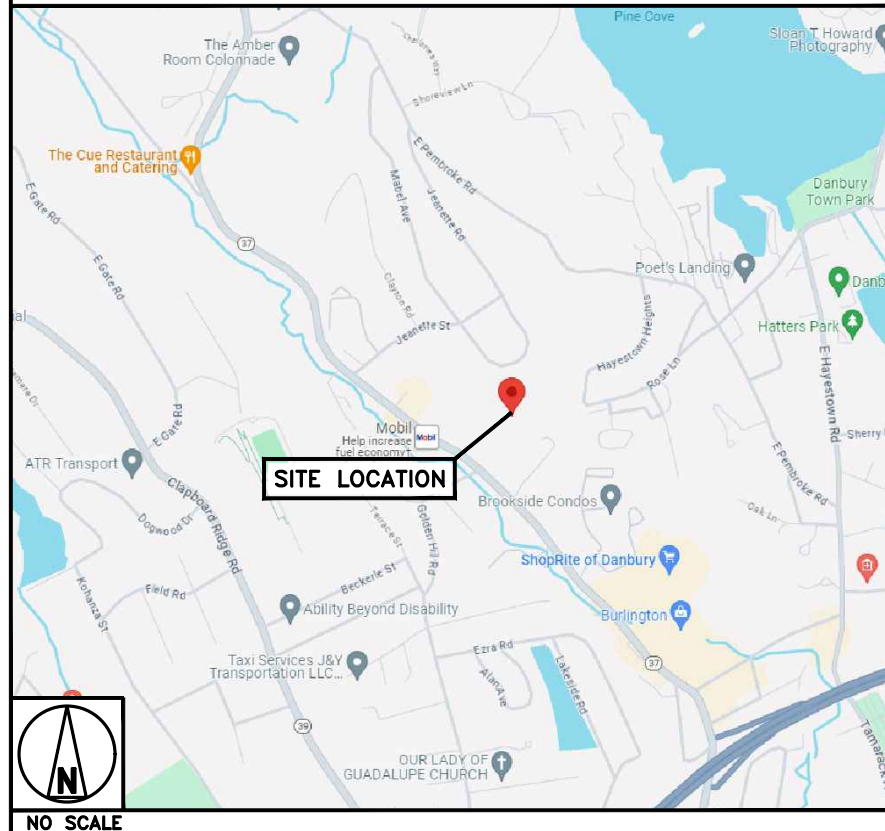
CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON THE JOB SITE, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

DIRECTIONS

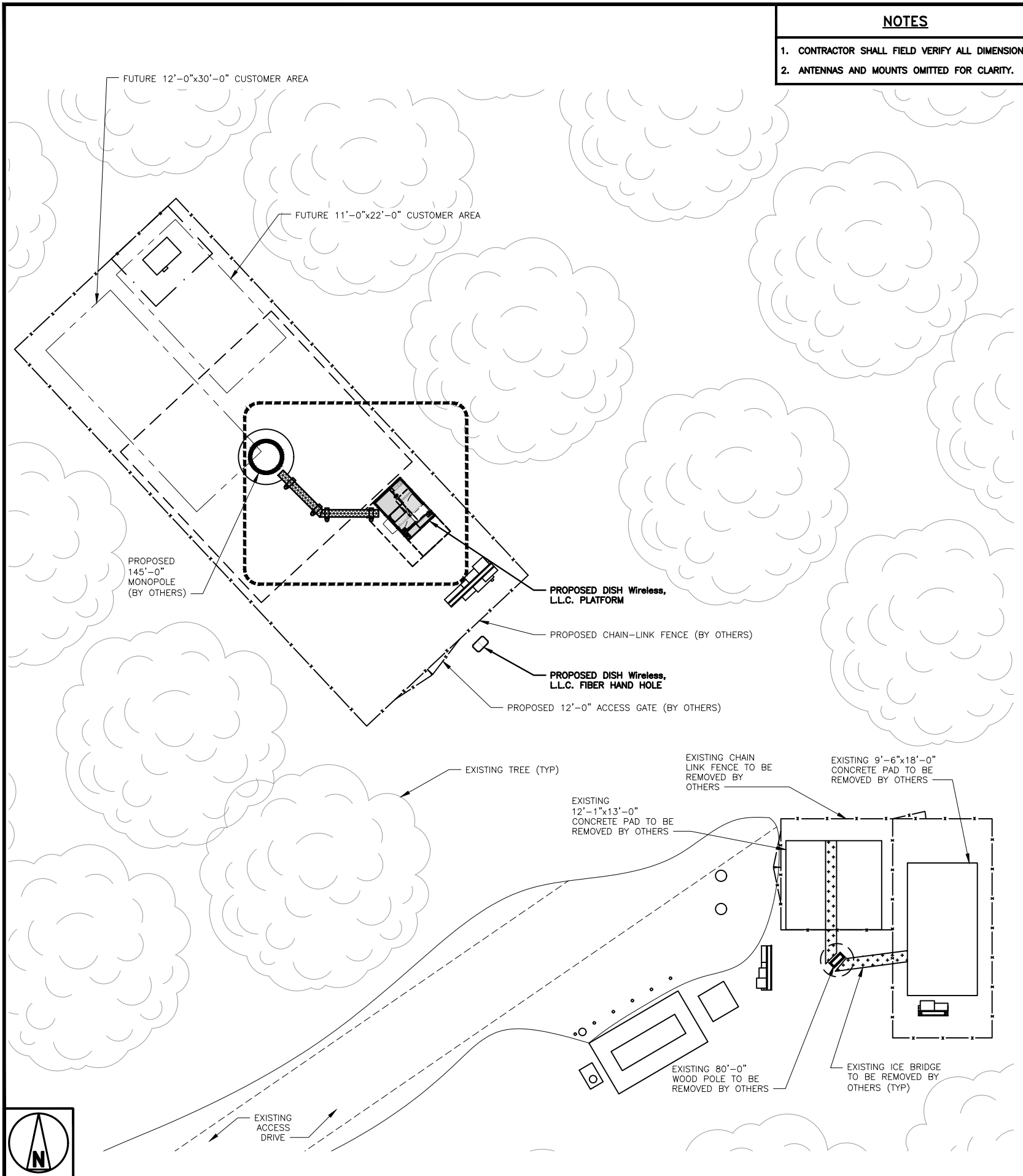
DIRECTIONS FROM JOHN F. KENNEDY INTERNATIONAL AIRPORT:

- TAKE I-678 N, HUTCHINSON RIV PKWY N, I-684 N AND I-84 E TO DOWNS ST IN DANBURY. TAKE EXIT 5 FROM I-84 E
- CONTINUE ONTO DOWNS ST
- CONTINUE ONTO NORTH ST
- CONTINUE ONTO PADANARAM RD
- DESTINATION WILL BE ON THE RIGHT

VICINITY MAP

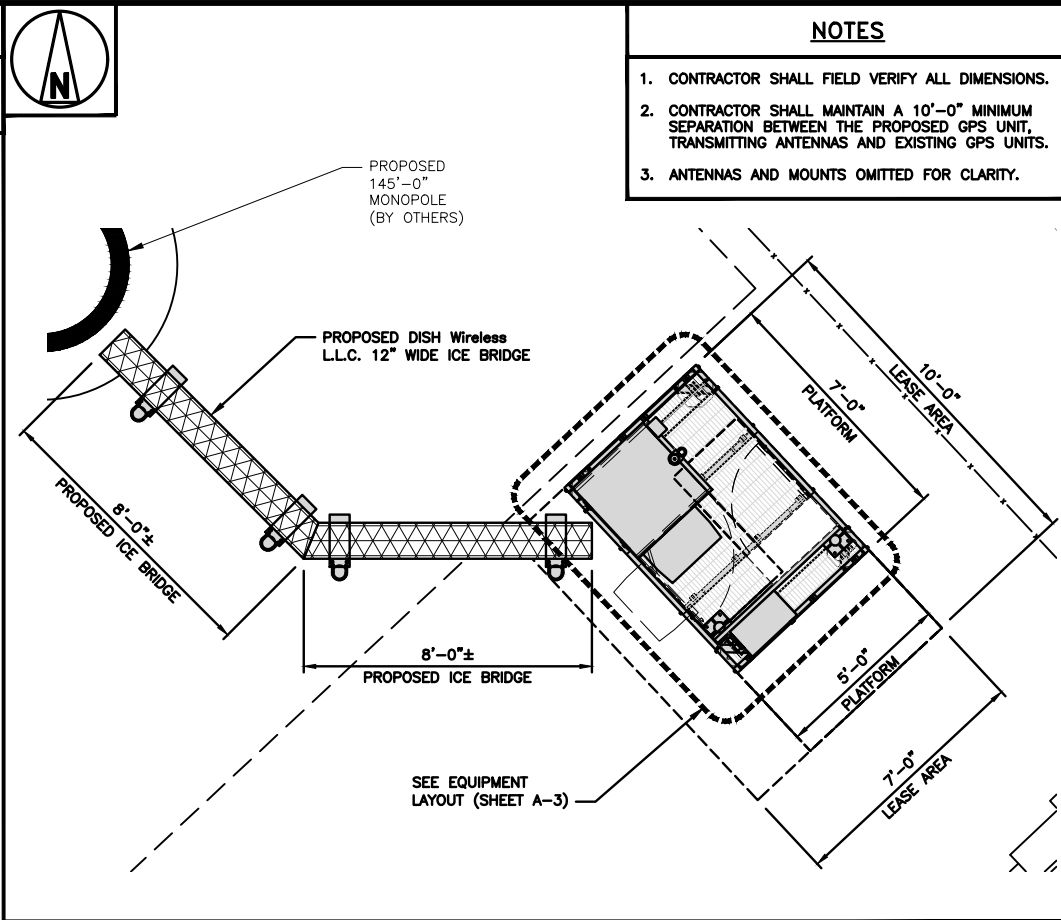


NO SCALE



NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.



ENLARGED SITE PLAN

Scale: 12" = 6'-0", 1", 2", 3", 4", 5", 6", 7"
3/8" = 1'-0"

OVERALL UTILITY ROUTE PLAN

Scale: 8' 4' 0 8' 16'
1/8" = 1'-0"

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. CONTRACTOR SHALL MAINTAIN A 10'-0" MINIMUM SEPARATION BETWEEN THE PROPOSED GPS UNIT, TRANSMITTING ANTENNAS AND EXISTING GPS UNITS.
3. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.

OVERALL UTILITY ROUTE PLAN

NO SCALE

dish wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

Kimley Horn

421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601

STATE OF CONNECTICUT
MICHAEL R. DOUGLASS
PEN.0036148
LICENSED PROFESSIONAL ENGINEER

02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY:	CHECKED BY:	APPROVED BY:
DMW	MCK	---
RFDS REV #:	---	

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

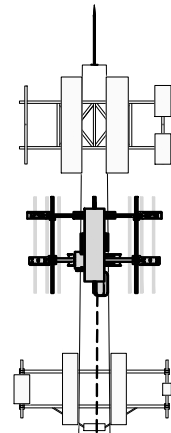
NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
OVERALL AND ENLARGED SITE PLAN

SHEET NUMBER
A-1

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ANTENNA SPECIFICATIONS REFER TO ANTENNA SCHEDULE AND TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS
3. EXISTING EQUIPMENT AND FENCE OMITTED FOR CLARITY.



- PROPOSED LIGHTNING ROD (BY OTHERS)
ELEV. @ 150'-0" AGL
- TOP OF PROPOSED MONOPOLE (BY OTHERS)
ELEV. @ 145'-0" AGL
- PROPOSED PANEL ANTENNAS (BY OTHERS)
RAD CENTER @ 140'-0" AGL
- (3) PROPOSED DISH Wireless L.L.C. ANTENNAS
RAD CENTER @ 130'-0" AGL
- PROPOSED DISH Wireless L.L.C. ENTRY PORT
CENTER @ ±127'-0" AGL
- PROPOSED PANEL ANTENNAS (BY OTHERS)
RAD CENTER @ 118'-0" AGL

(1) PROPOSED DISH Wireless L.L.C. HYBRID CABLE ROUTED INSIDE POLE

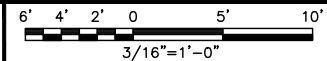
PROPOSED MONOPOLE (BY OTHERS)

PROPOSED DISH Wireless L.L.C. ICE BRIDGE

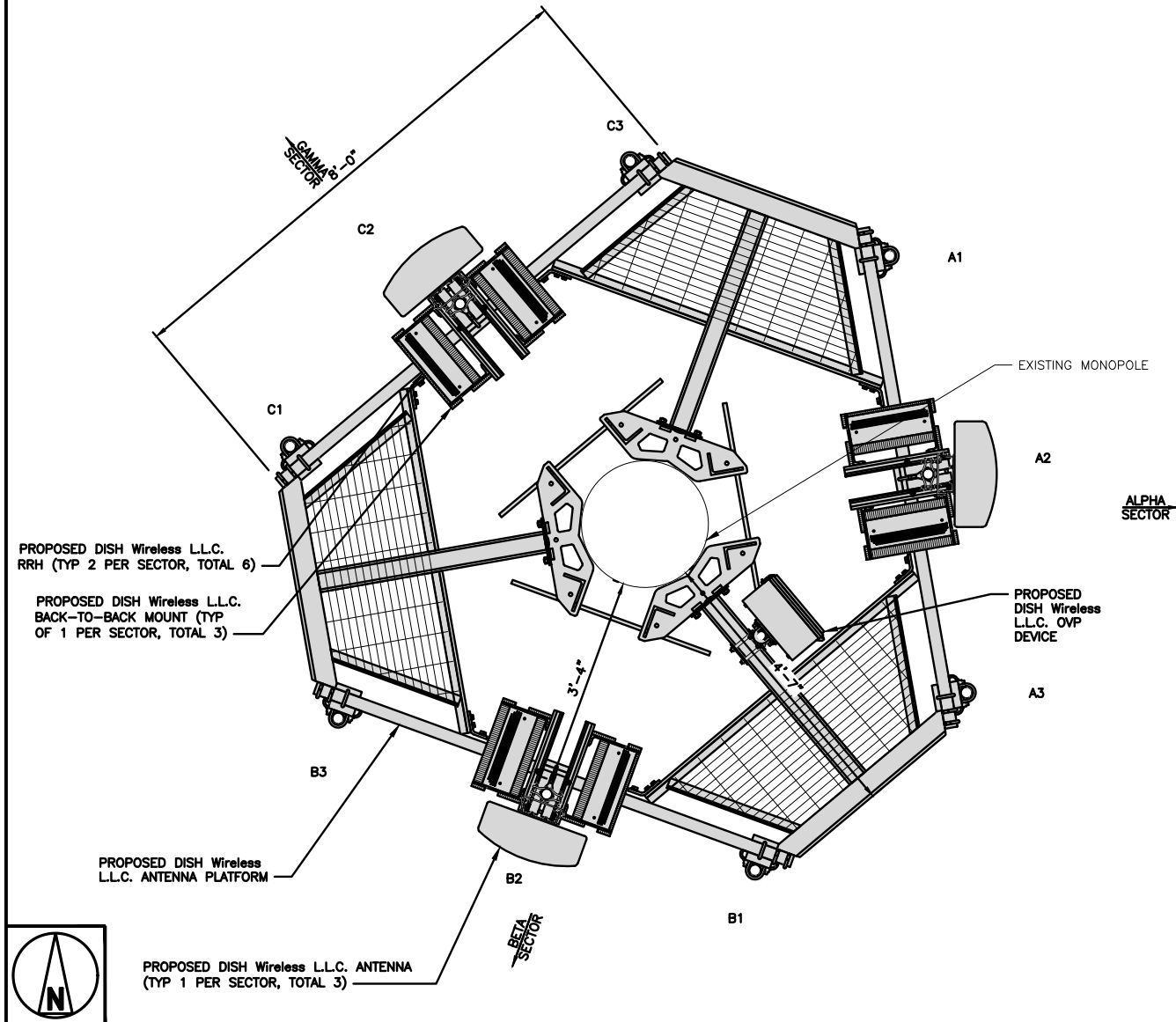
PROPOSED DISH Wireless L.L.C. GPS UNIT

PROPOSED DISH Wireless L.L.C. EQUIPMENT ON PROPOSED STEEL PLATFORM

PROPOSED NORTH ELEVATION

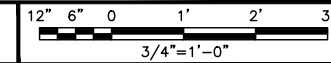


1



PROPOSED DISH Wireless L.L.C. ANTENNA (TYP 1 PER SECTOR, TOTAL 3)

ANTENNA LAYOUT



2

SECTOR POS.	ANTENNA					TRANSMISSION CABLE	RRH			OVP
	EXISTING OR PROPOSED	MANUFACTURER - MODEL NUMBER	TECH	AZIMUTH	RAD CENTER		FEED LINE TYPE AND LENGTH	MANUFACTURER - MODEL NUMBER	TECH	
A1	---	---	---	---	---	(1) HIGH-CAPACITY HYBRID CABLE (170'-0" LONG)	SAMSUNG - RF4450t-71A	5G	A2	RAYCAP RDIC-9181-PF-48
A2	PROPOSED	JMA - MX08FRO665-21	5G	90°	130'-0"		SAMSUNG - RF4451d-70A	5G	A2	
A3	---	---	---	---	---		---	---	---	
B1	---	---	---	---	---	SHARED W/ALPHA	SAMSUNG - RF4450t-71A	5G	B2	SHARED W/ALPHA
B2	PROPOSED	JMA - MX08FRO665-21	5G	200°	130'-0"		SAMSUNG - RF4451d-70A	5G	B2	
B3	---	---	---	---	---		---	---	---	
C1	---	---	---	---	---	SHARED W/ALPHA	SAMSUNG - RF4450t-71A	5G	C2	SHARED W/ALPHA
C2	PROPOSED	JMA - MX08FRO665-21	5G	320°	130'-0"		SAMSUNG - RF4451d-70A	5G	C2	
C3	---	---	---	---	---		---	---	---	

NOTES

1. CONTRACTOR TO REFER TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS.
2. ANTENNA AND RRH MODELS MAY CHANGE DUE TO EQUIPMENT AVAILABILITY. ALL EQUIPMENT CHANGES MUST BE APPROVED AND REMAIN IN COMPLIANCE WITH THE PROPOSED DESIGN AND STRUCTURAL ANALYSES.

ANTENNA SCHEDULE

NO SCALE

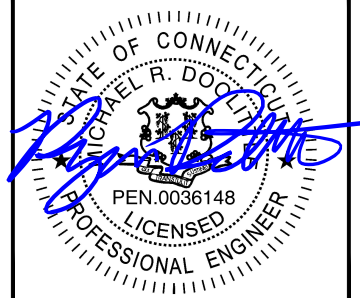
3



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:

DMW MCK ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

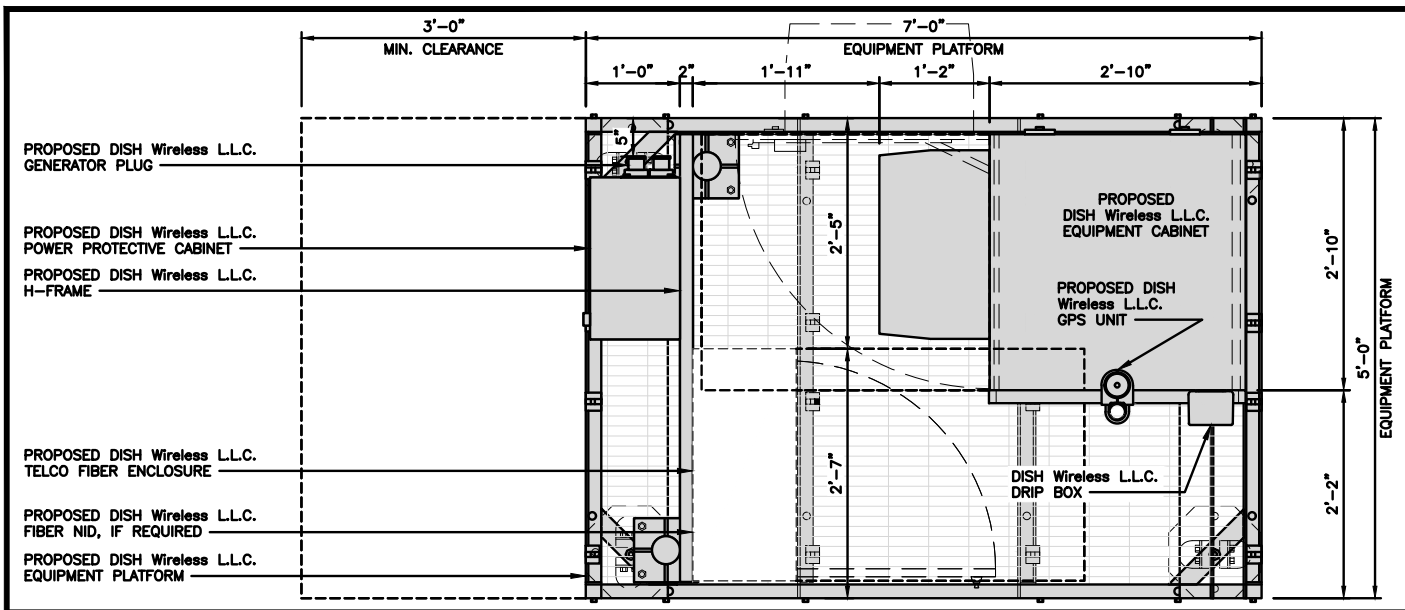
DISH Wireless L.L.C. PROJECT INFORMATION

NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
ELEVATION, ANTENNA LAYOUT AND SCHEDULE

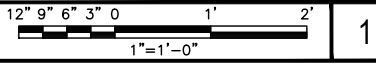
SHEET NUMBER

A-2



- NOTES**
1. INSTALL POSTS BASES TO GRATING JUST INSIDE PLATFORM FRAME. NO DRILLING REQUIRED.
 2. GPS MAY BE MOVED TO ICE BRIDGE.
 3. ALL CONDUIT TO BE ROUTED THROUGH PLATFORM GRATING USING PVC COUPLERS. CONDUIT QUANTITY AND SIZES ARE PER ONE-LINE DIAGRAM ON E-3 SHEET OF CDS. (DC PLANT DEPENDENT.)
 4. CONTRACTOR MAY FIELD INSTALL CONDUIT HOLES IN BOTTOM OF PPC CABINET TO MATCH CONDUIT SIZES.
 5. PROPER SEALING IS REQUIRED FOR ALL CABINET PENETRATIONS
 6. H-FRAME POSTS ARE STAGGERED TO ALLOW FIBER NID BOXES TO BE INSTALLED CLOSE TO PERIMETER FRAME OF PLATFORM
 7. CONDUITS FROM PPC/FIBER DEMARK CABINETS TO EQUIPMENT CABINET (BBU) SHALL BE INSTALLED INSIDE PERIMETER OF PLATFORM AND UNDER GRATING

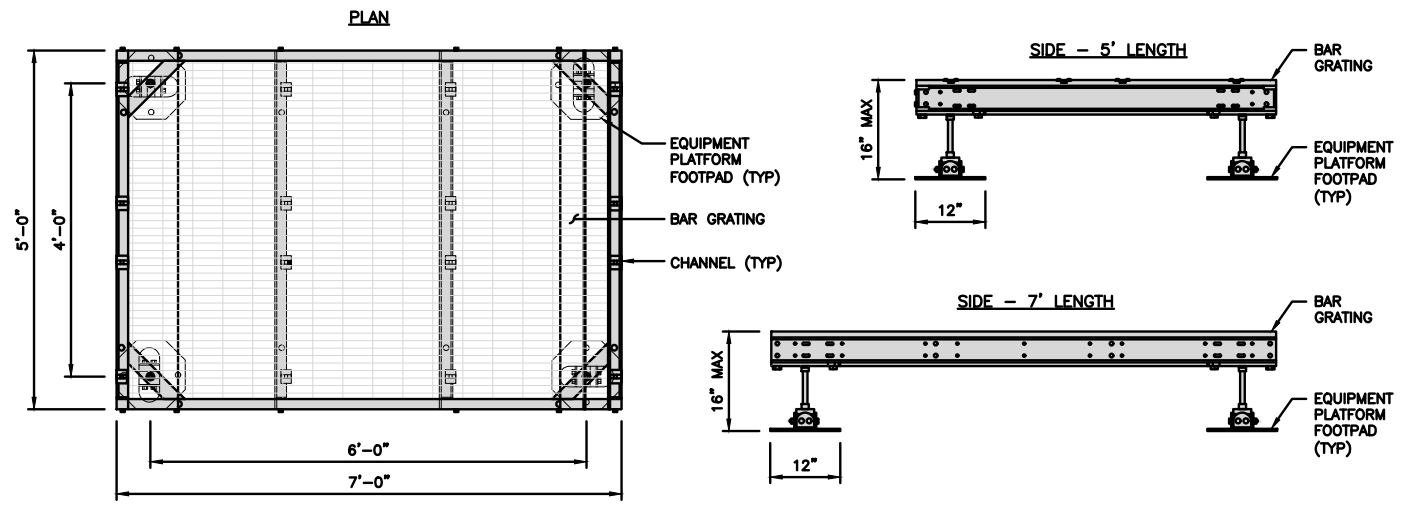
PLATFORM EQUIPMENT PLAN



COMMSCOPE MTC4045LP 5X7 PLATFORM

DIMENSIONS (HxWxD)	16"x84"x60"
TOTAL WEIGHT	423 LBS

- NOTE:**
1. GC TO PROVIDE EXTENDED THREAD FOR PLATFORM IF REQUIRED HEIGHT EXCEEDS 16"
 2. PLATFORM TO BE LEVEL WITHIN 1"



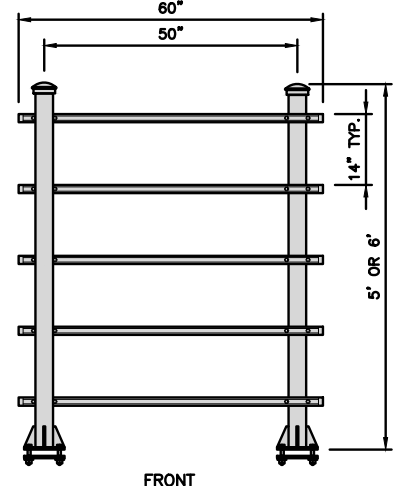
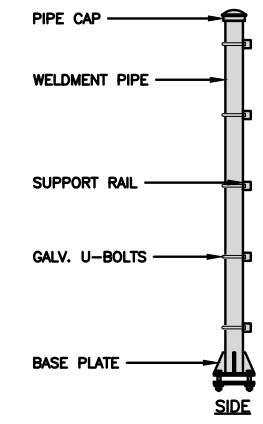
PLATFORM DETAIL

NO SCALE 2

COMMSCOPE MTC4045HFLD H-FRAME

UNISTRUT/SUPPORT RAILS QTY	5
WEIGHT	59.74 lbs

- NOTE:**
OR DISH Wireless L.L.C. APPROVED EQUIVALENT



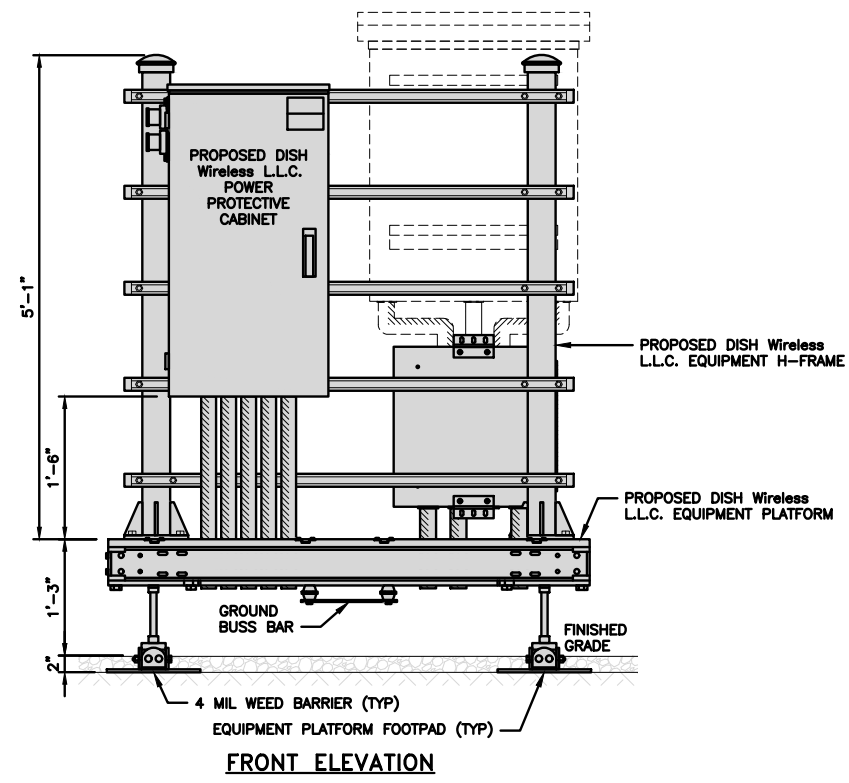
H-FRAME DETAIL

NO SCALE 3

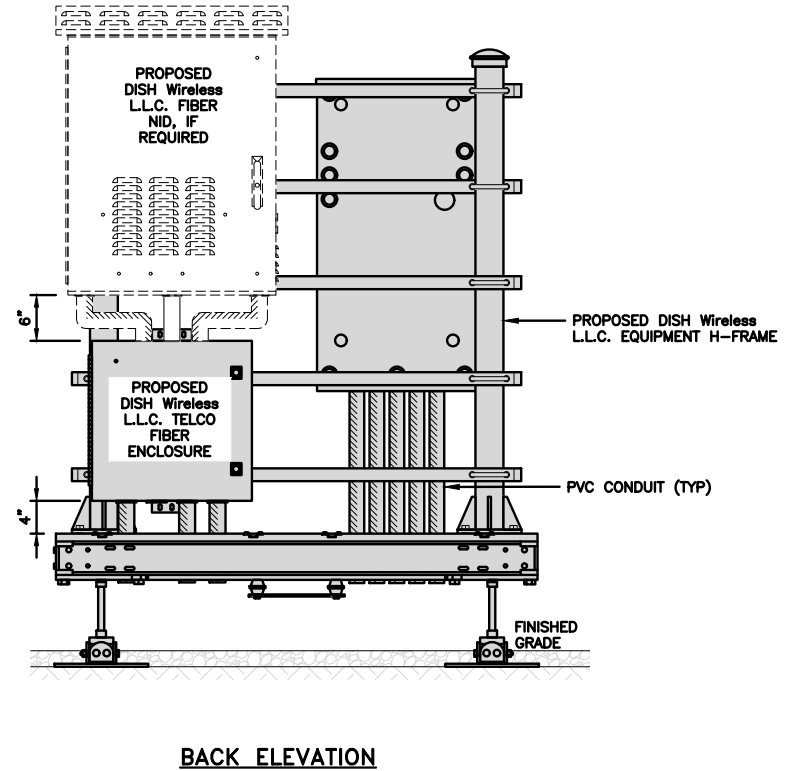
NOT USED

NO SCALE 4

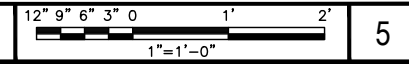
- NOTES**
1. CONTRACTOR TO BURY PLATFORM FEET WITH A MINIMUM OF 2" OF FILL PER EXISTING SITE SURFACE
 2. WEED BARRIER FABRIC TO BE ADDED AT DISCRETION OF DISH Wireless L.L.C. CONSTRUCTION MANAGER AT TIME OF CONSTRUCTION. ONE SHEET 8'x8' INSTALLED UNDER ALL FOUR FEET OF THE PLATFORM (4 MIL BLACK PLASTIC)
 3. EQUIPMENT CABINET OMITTED FOR CLARITY



FRONT ELEVATION



BACK ELEVATION



H-FRAME EQUIPMENT ELEVATION

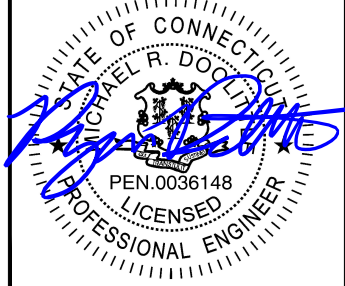
NO SCALE 5



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:
DMW MCK ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

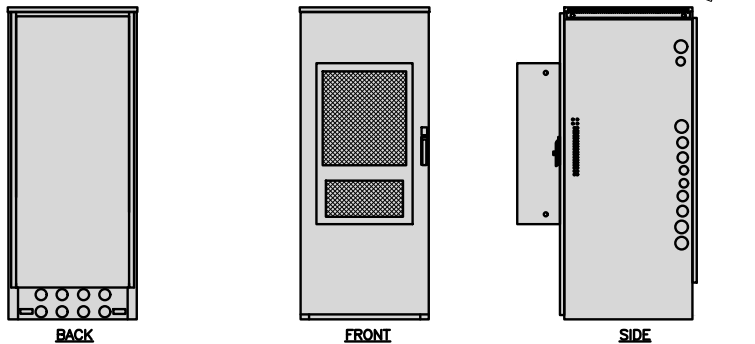
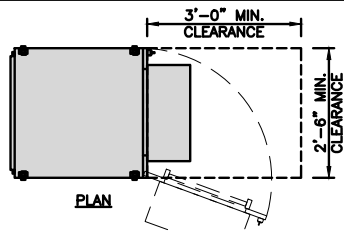
A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C. PROJECT INFORMATION
NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
EQUIPMENT PLATFORM AND H-FRAME DETAILS

SHEET NUMBER
A-3

ENERSYS HEX CABINET 2000005996	
DIMENSIONS (HxWxD):	73"x30"x32"
WEIGHT EMPTY:	376 lbs
HEATER	800W
POWER SYSTEM	-48V ALPHA/600A

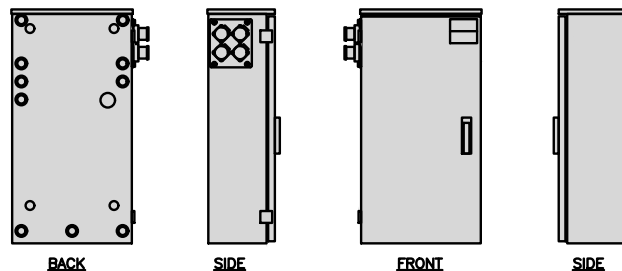
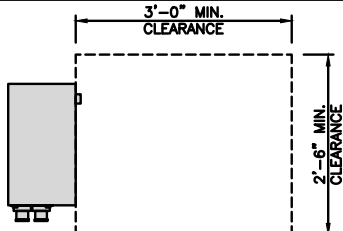


CABINET DETAIL

NO SCALE

1

RAYCAP PPC RDIAC-2465-P-240-MTS	
ENCLOSURE DIMENSIONS (HxWxD):	39"x22.855"x12.593
WEIGHT:	80 lbs
OPERATING AC VOLTAGE	240/120 1 PHASE 3W+G



POWER PROTECTION CABINET (PPC) DETAIL

NO SCALE

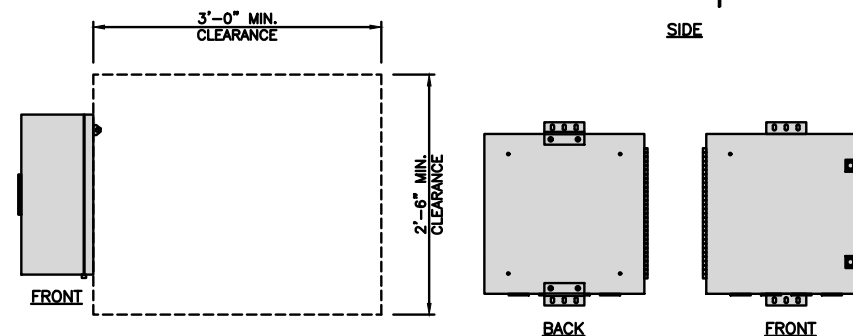
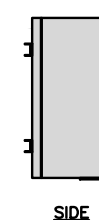
2

NOT USED

NO SCALE

3

CHARLES CFIT-PF2020DSH1 FIBER TELCO ENCLOSURE	
ENCLOSURE DIMS (HxWxD)	20"x20"x9"
ENCLOSURE WEIGHT	20 lbs
MOUNTING	WALL
COMPLIANCE	TYPE 4

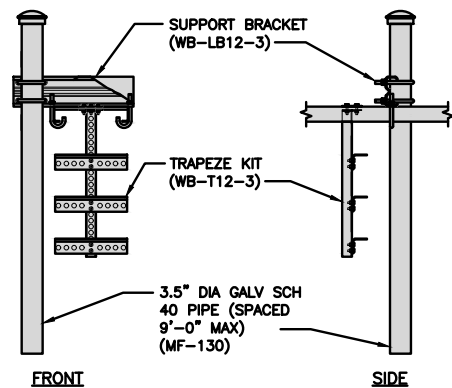
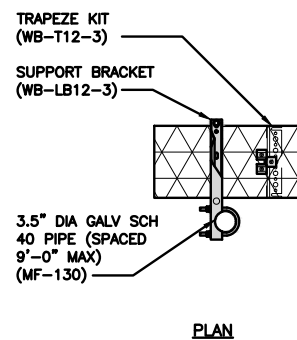


FIBER TELCO ENCLOSURE DETAIL

NO SCALE

6

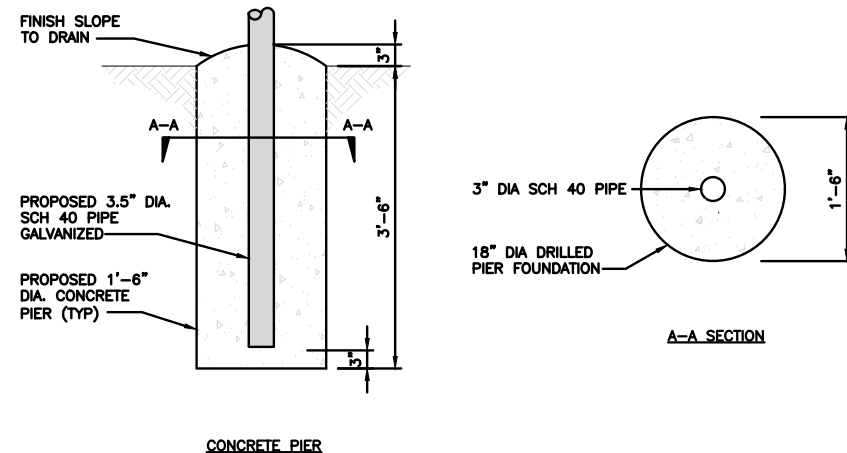
COMMSCOPE WB-K110-B WAVEGUIDE BRIDGE KIT		INCLUDED PRODUCTS:	WB-T12-3 TRAPEZE KIT, 3 RUNGS
DIMENSIONS (HxL)	160"x10'	WB-LB12-3 SUPPORT BRACKET	MF-130 DIRECT BURIAL PIPE COLUMN, 13'-4"
WEIGHT/ VOLUME	325.0 LBS		
CABLE RUN (QTY)	12		



ICE BRIDGE DETAIL

NO SCALE

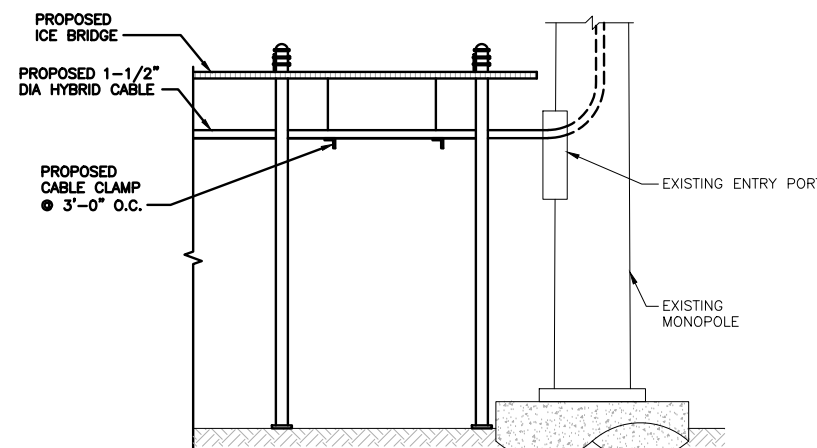
7



TYPICAL ICE BRIDGE CONCRETE PIER DETAIL

NO SCALE

8



HYBRID CABLE RUN

NO SCALE

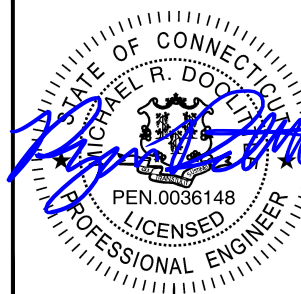
9



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:
DMW MCK ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

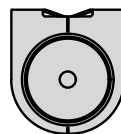
NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
EQUIPMENT DETAILS

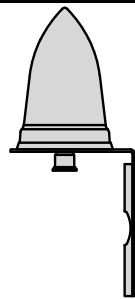
SHEET NUMBER

A-4

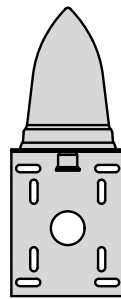
PCTEL GPSGL-TMG-SPI-40NCB	
DIMENSIONS (DiaxH) MM/INCH	81x184mm 3.2"x7.25"
WEIGHT W/ACCESSORIES	0.75 lbs
CONNECTOR	N-FEMALE
FREQUENCY RANGE	1590 ± 30MHz



TOP



BACK

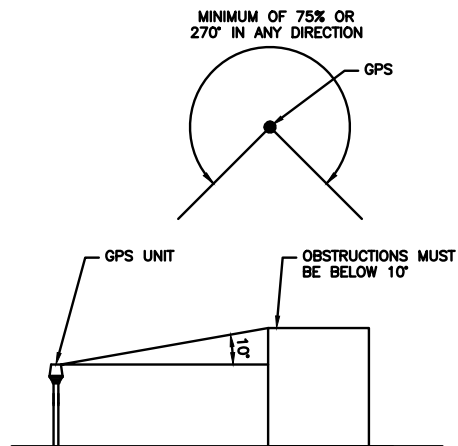


SIDE

GPS DETAIL

NO SCALE

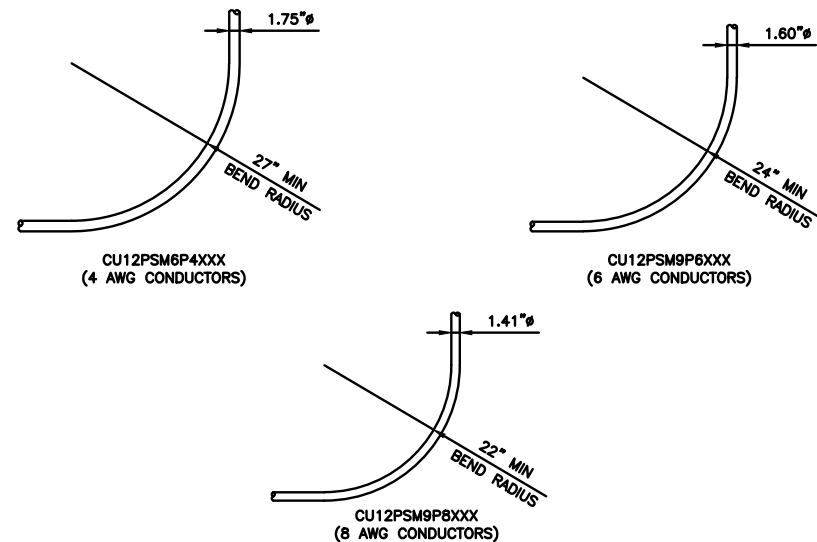
1



GPS MINIMUM SKY VIEW REQUIREMENTS

NO SCALE

2



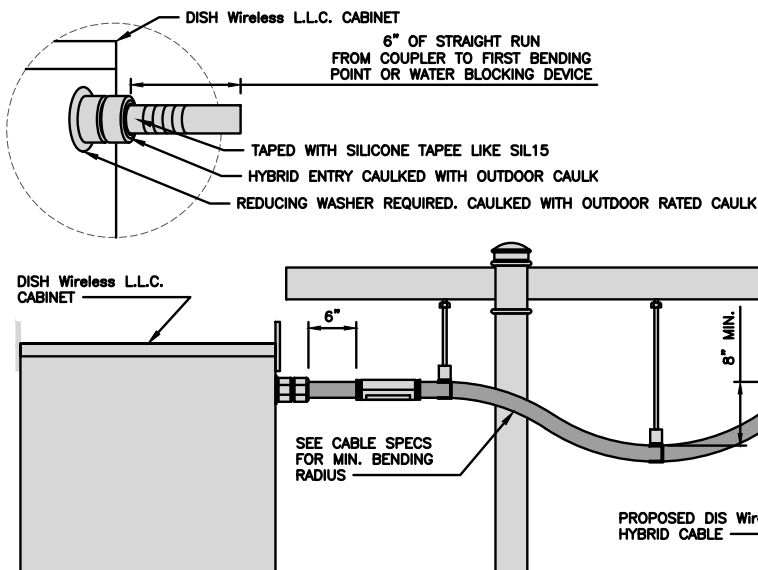
CABLES UNLIMITED HYBRID CABLE
MINIMUM BEND RADIUS

NO SCALE

3

NOTE:

CONTRACTOR SHALL NOT LOOP EXCESS HYBRID OUTSIDE CABINET. EXCESS HYBRID LENGTH IS TO BE ADJUSTED BY STRIPPING JACKET AND SHIELDING AND TERMINATING DC CABLE TO LENGTH. FIBER EXCESS IS TO BE COILED IN FIBER SLACK TRAY INSIDE NETWORK CABINET.



HYBRID CABLE INSTALLATION DETAIL

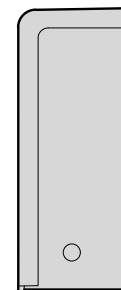
NO SCALE

5

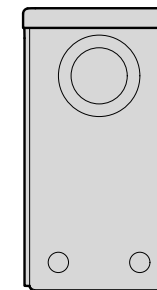
DISH Wireless L.L.C. DRIP BOX	
DIMENSIONS (HxWxD)	10-1/4" x 5-5/8" x 4-3/8"
ESTIMATED WEIGHT	<5 lbs



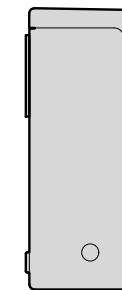
PLAN



SIDE



BACK



SIDE

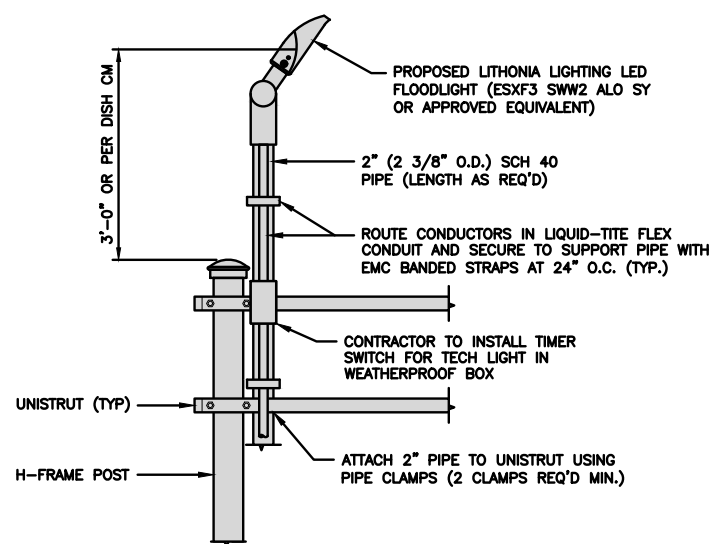


FRONT

DISH Wireless L.L.C. DRIP BOX DETAIL

NO SCALE

6



TECH LIGHT DETAIL

NO SCALE

7

NOT USED

NO SCALE

8

NOT USED

NO SCALE

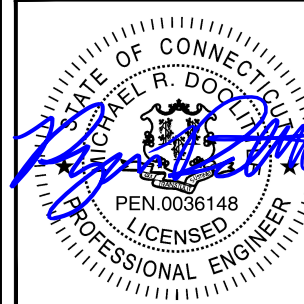
9

dish
wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

Kimley»Horn

421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:

DMW MCK ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

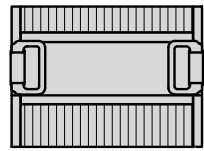
NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
EQUIPMENT DETAILS

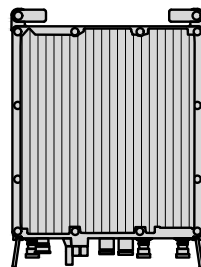
SHEET NUMBER

A-5

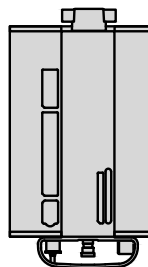
SAMSUNG – LOW BAND RF4450T-71A	
DIMENSIONS (HxWxD)	15"x16.5"x11"
WEIGHT	94.6 lbs
CONNECTOR TYPE	4.3-10 RF CONNECTOR -48VDC
INPUT VOLTAGE	(-36 to 58 VDC)



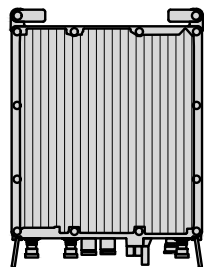
PLAN



BACK



SIDE



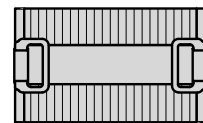
FRONT

RRH DETAIL

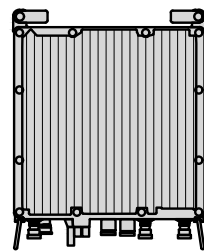
NO SCALE

1

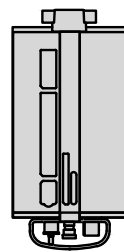
SAMSUNG – MID BAND RF4451D-70A	
DIMENSIONS (HxWxD)	15"x15"x8.9"
WEIGHT	61.3 lbs
CONNECTOR TYPE	4.3-10 RF CONNECTOR -48VDC
INPUT VOLTAGE	(-36 to 58 VDC)



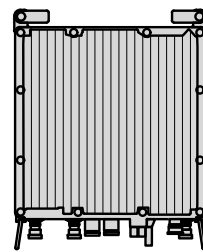
PLAN



BACK



SIDE



FRONT

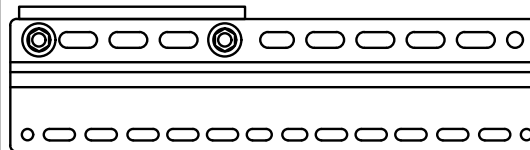
RRH DETAIL

NO SCALE

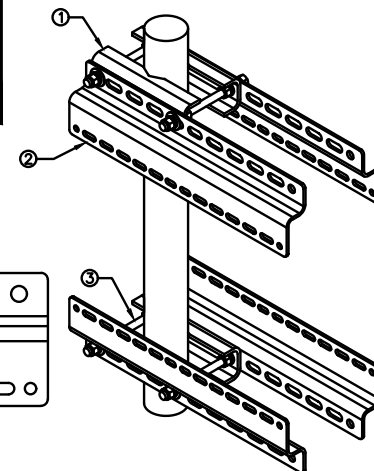
2

SABRE DOUBLE Z-BRACKET C10123155	
DIMENSIONS (HxWxD) (1 BRACKET)	5"x20"x1-13/16"
WEIGHT (FULL ASSEMBLY)	35.79 lbs
PACKAGE QUANTITY	4

#	DESCRIPTION
1	PLATE, CHANNEL BRACKET
2	RRH Z BRACKET, 3/16"
3	THREADED ROD ASSEMBLY 1/2"x12"



NOTE:
OR DISH Wireless L.L.C.
APPROVED EQUIVALENT



RRH MOUNT DETAIL

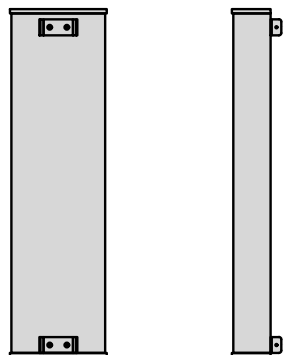
NO SCALE

3

JMA WIRELESS MX08FRO665-21 ANTENNA	
DIMENSIONS (HxWxD)	72.0"x20.0"x8.0"
TOTAL WEIGHT	82.5 LB
RF PORTS, CONNECTOR TYPE	8 x 4.3-10 FEMALE



PLAN



BACK

SIDE



FRONT

ANTENNA DETAIL

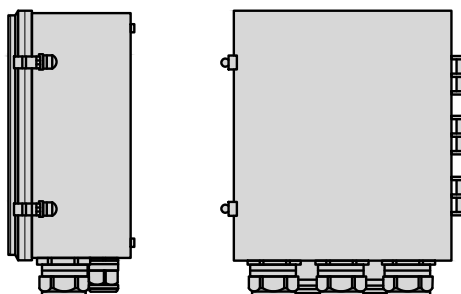
NO SCALE

4

RAYCAP RDIC-9181-PF-48 DC SURGE PROTECTION (OVP)	
DIMENSIONS (HxWxD)	18.98"x14.39"x8.15"
WEIGHT	21.82 LBS

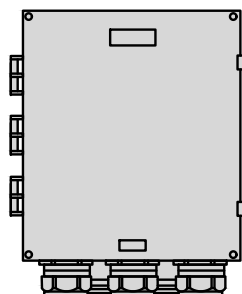


PLAN



SIDE

BACK



FRONT

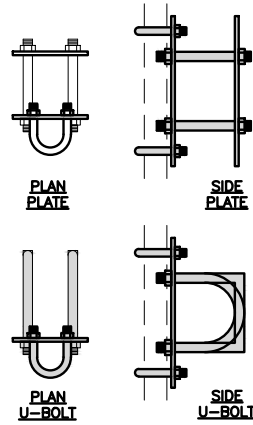
SURGE SUPPRESSION DETAIL (OVP)

NO SCALE

7

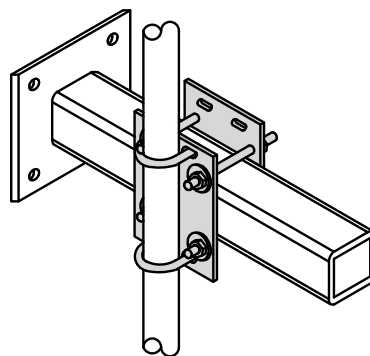
COMMSCOPE XP-2040 CROSSOVER PLATE	
DIMENSIONS (HxW)	10"x12"
WEIGHT	11 lbs

NOTE:
OR DISH Wireless L.L.C.
APPROVED EQUIVALENT



PLAN
U-BOLT

SIDE
U-BOLT



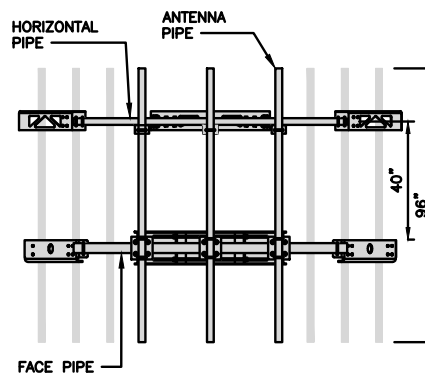
RRH/OVP MOUNT DETAIL

NO SCALE

8

COMMSCOPE MC-PK8-DSH	
FACE WIDTH	96"
WEIGHT	1373.08 lbs
NOTE: 15" TO 38" O.D.	

NOTE:
OR DISH Wireless L.L.C.
APPROVED EQUIVALENT



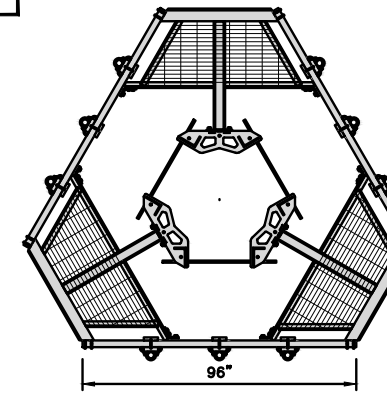
FACE PIPE

HORIZONTAL
PIPE

ANTENNA
PIPE

40"

96"



ANTENNA PLATFORM DETAIL

NO SCALE

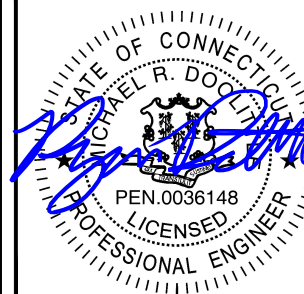
9



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:

DMW MCK ---

RFDS REV #: ---

CONSTRUCTION
DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER

KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

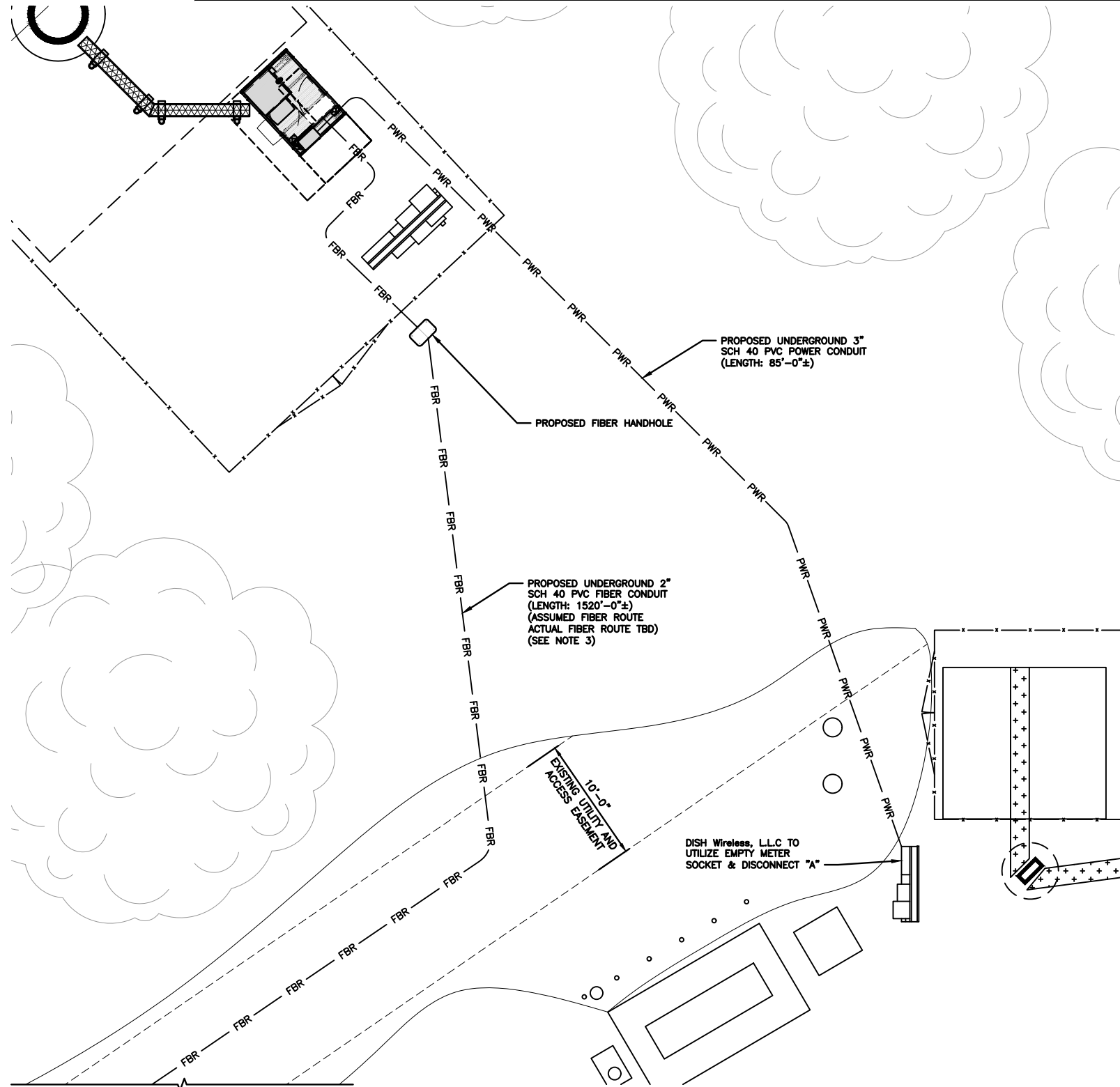
SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER

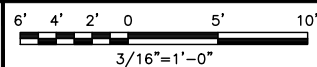
A-6

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED UNDERGROUND UTILITY CONDUIT ROUTE.
2. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.
3. DUE TO UTILITY EASEMENT RIGHTS SPECIFIED IN THE GROUND LEASE, CUSTOMER MAY INSTALL EQUIPMENT WITHIN SPECIFIED UTILITY EASEMENT AREA. "PWR" AND "FBR" PATH DEPICTED ON A-1 AND E-1 REPRESENT PLANNED ROUTING BASED ON BEST AVAILABLE INFORMATION INCLUDING BUT NOT LIMITED TO A SURVEY, EXHIBITS, METES AND BOUNDS OF THE UTILITY EASEMENT, FIELD VERIFICATION, PRIOR PROJECT DOCUMENTATION AND OTHER REAL PROPERTY RIGHTS DOCUMENTS. WHEN INSTALLING THE UTILITIES PLEASE LOCATE AND FOLLOW EXISTING PATH, IF EXISTING PATH IS MATERIALLY INCONSISTENT WITH "PWR" AND "FBR" PATH DEPICTED ON A-1 AND E-1 AND SAID VARIANCE IS NOT NOTED ON CDs, PLEASE NOTIFY TOWER OWNER AS FURTHER COORDINATION MAY BE NEEDED.



UTILITY ROUTE PLAN



1

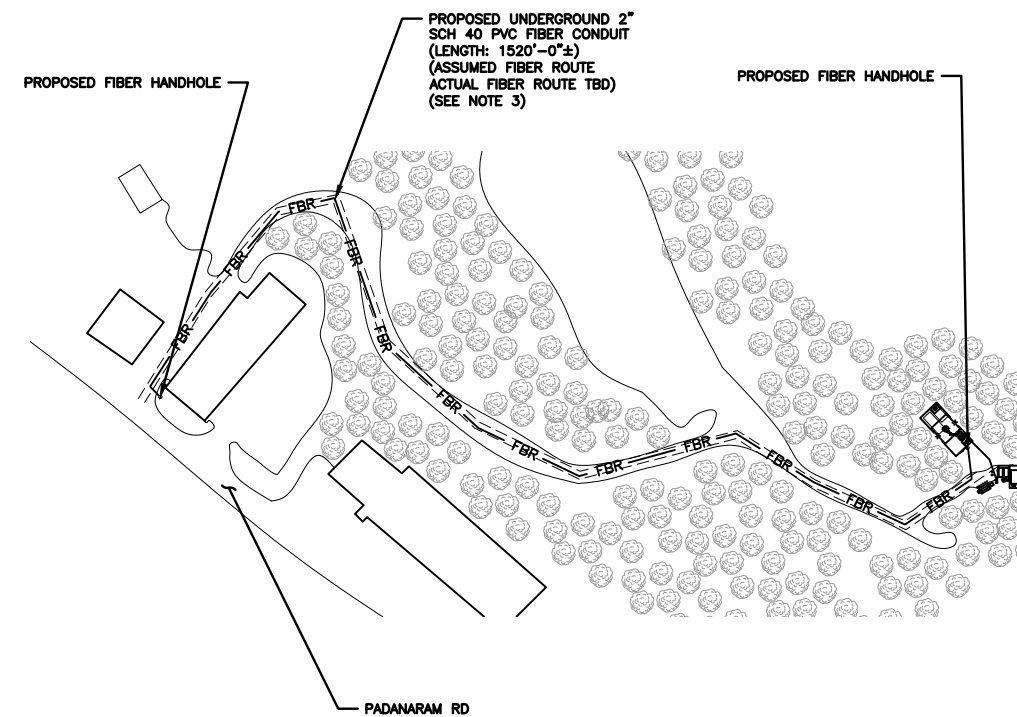
DC POWER WIRING SHALL BE COLOR CODED AT EACH END FOR IDENTIFYING +24V AND -48V CONDUCTORS. RED MARKINGS SHALL IDENTIFY +24V AND BLUE MARKINGS SHALL IDENTIFY -48V.

1. CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTOR'S FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
2. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODES AND ALL STATE AND LOCAL CODES, LAWS, AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC STANDARDS.
3. LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO CONSTRUCTION.
4. CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. VERIFY WITH THE MECHANICAL EQUIPMENT CONTRACTOR AND COMPLY AS REQUIRED.
5. CONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETE SYSTEM.
6. CONTRACTOR SHALL PROVIDE PULL BOXES AND JUNCTION BOXES AS REQUIRED BY THE NEC ARTICLE 314.
7. CONTRACTOR SHALL PROVIDE ALL STRAIN RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
8. ALL DISCONNECTS AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED PHENOLIC NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM.
9. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC 250. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULL BOXES, AND ALL DISCONNECT SWITCHES, AND EQUIPMENT CABINETS.
10. ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
11. PANEL SCHEDULE LOADING AND CIRCUIT ARRANGEMENTS REFLECT POST-CONSTRUCTION EQUIPMENT.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT PANEL SCHEDULE AND SITE DRAWINGS.
13. ALL TRENCHES IN COMPOUND TO BE HAND DUG

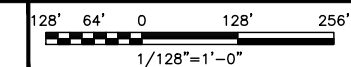
ELECTRICAL NOTES

NO SCALE

2



OVERALL UTILITY ROUTE PLAN



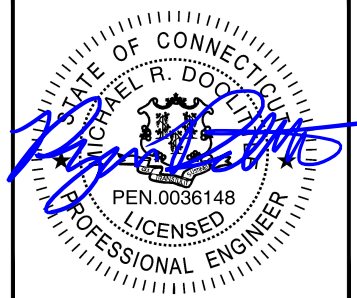
3



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY:	CHECKED BY:	APPROVED BY:
DMW	MCK	---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless, L.L.C.
PROJECT INFORMATION

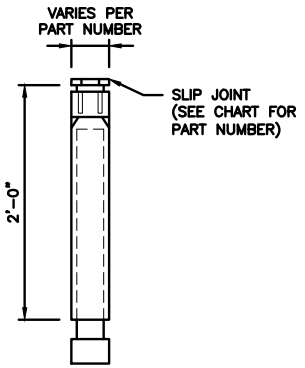
NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
ELECTRICAL/FIBER ROUTE
PLAN AND NOTES

SHEET NUMBER

E-1

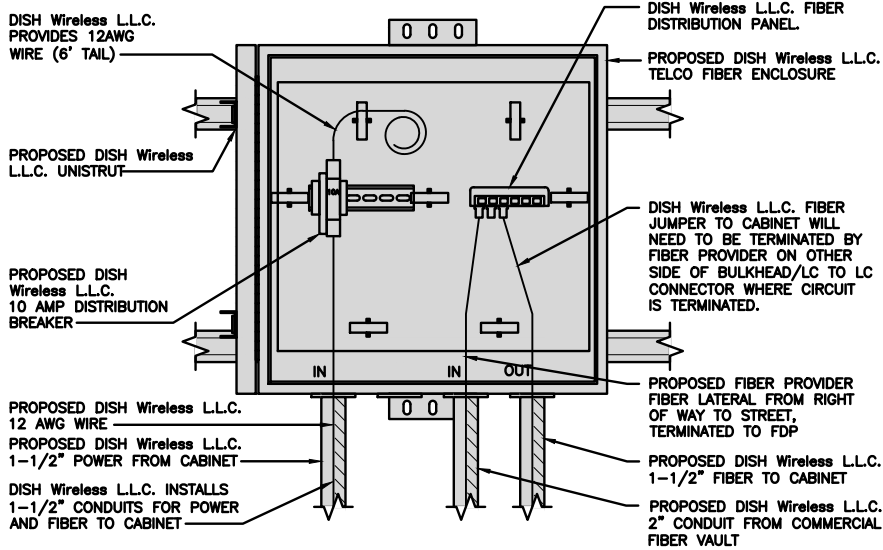
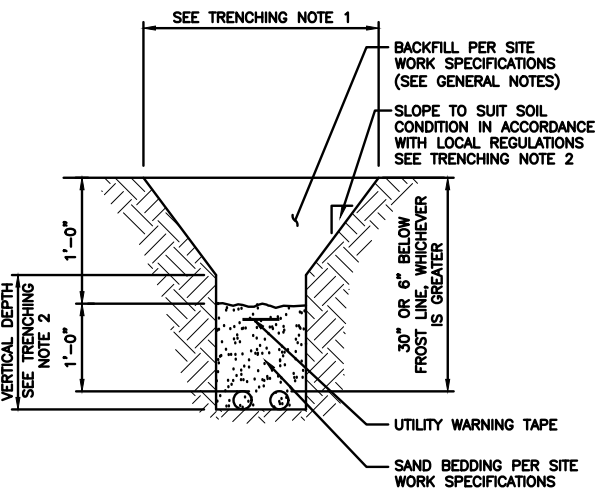
CARLON EXPANSION FITTINGS				
COUPLING END PART#	MALE TERMINAL ADAPTER END PART#	SIZE	STD CTN QTY.	TRAVEL LENGTH
E945D	E945DX	1/2"	20	4"
E945E	E945EX	3/4"	15	4"
E945F	E945FX	1"	10	4"
E945G	E945GX	1 1/4"	5	4"
E945H	E945HX	1 1/2"	5	4"
E945J	E945JX	2"	15	8"
E945K	E945KX	2 1/2"	10	8"
E945L	E945LX	3"	10	8"
E945M	E945MX	3 1/2"	5	8"
E945N	E945NX	4"	5	8"
E945P	E945PX	5"	1	8"
E945R	E945RX	6"	1	8"



NOTE: CONTRACTOR TO INSTALL EXPANSION FITTING SLIP JOINT AT METER CENTER CONDUIT TERMINATION, AS PER LOCAL UTILITY POLICY, ORDINANCE AND/OR SPECIFIED REQUIREMENT.

TRENCHING NOTES

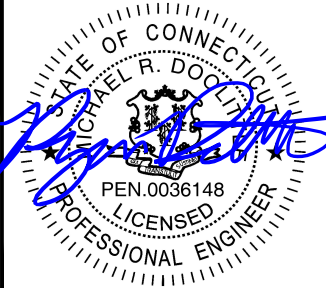
- CONTRACTOR SHALL RESTORE THE TRENCH TO ITS ORIGINAL CONDITIONS BY EITHER SEEDING OR SODDING GRASS AREAS, OR REPLACING ASPHALT OR CONCRETE AREAS TO ITS ORIGINAL CROSS SECTION.
- TRENCHING SAFETY; INCLUDING, BUT NOT LIMITED TO SOIL CLASSIFICATION, SLOPING, AND SHORING, SHALL BE GOVERNED BY THE CURRENT OSHA TRENCHING AND EXCAVATION SAFETY STANDARDS.
- ALL CONDUITS SHALL BE INSTALLED IN COMPLIANCE WITH THE CURRENT NATIONAL ELECTRIC CODE (NEC) OR AS REQUIRED BY THE LOCAL JURISDICTION, WHICHEVER IS THE MOST STRINGENT.



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:

DMW MCK ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION
NJJER01113B
41 PADANARAM RD
DANBURY, CT 06811

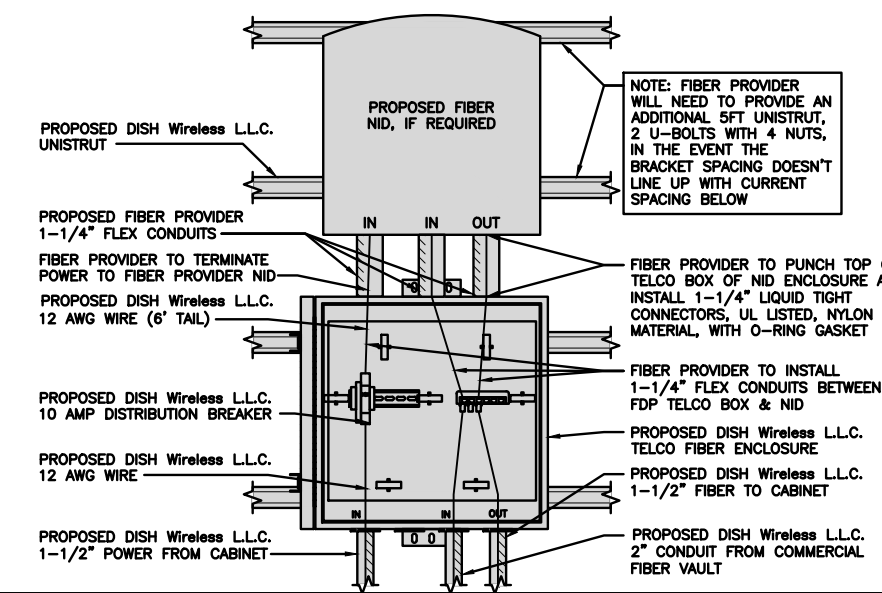
SHEET TITLE
ELECTRICAL
DETAILS

SHEET NUMBER
E-2

EXPANSION JOINT DETAIL NO SCALE 1

TYPICAL UNDERGROUND TRENCH DETAIL NO SCALE 2

DARK TELCO BOX - INTERIOR WIRING LAYOUT NO SCALE 3



LIT TELCO BOX - INTERIOR WIRING LAYOUT (OPTIONAL) NO SCALE 4

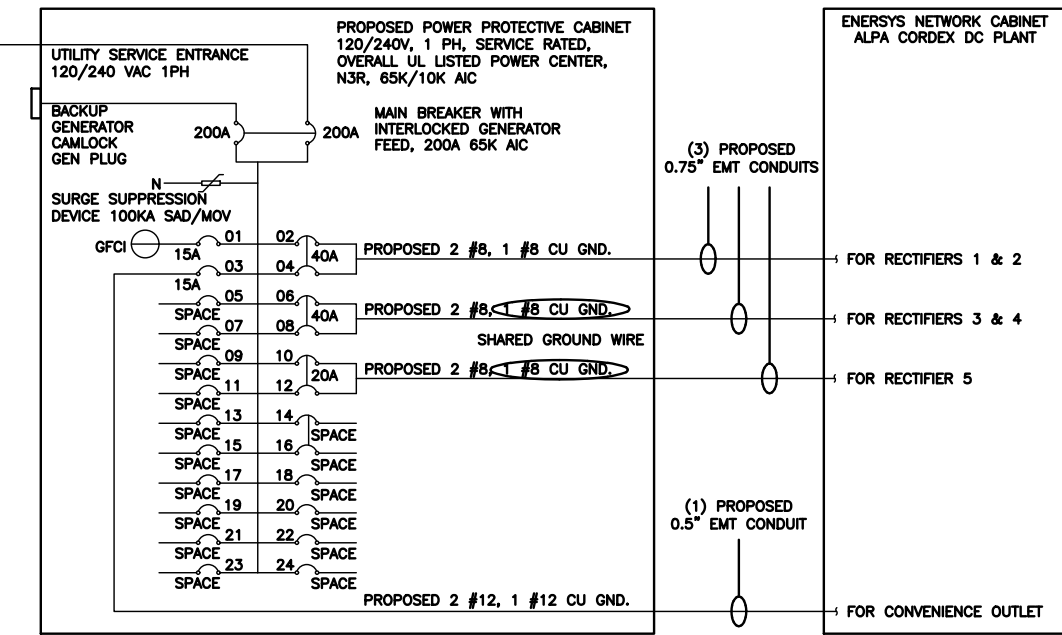
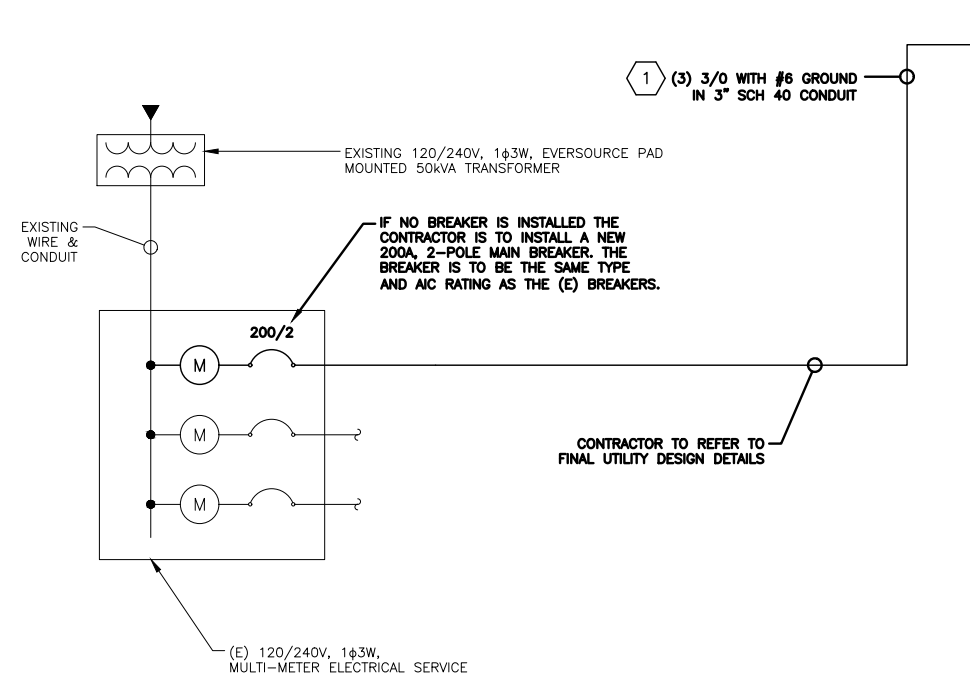
NOT USED NO SCALE 5

NOT USED NO SCALE 6

NOT USED NO SCALE 7

NOT USED NO SCALE 8

NOT USED NO SCALE 9



SERVICE/FEEDER CONDUCTOR LENGTH TABLE
(BASED ON INDUSTRY STANDARD 3% VOLTAGE DROP AND 5% NEC ALLOWABLE LIMIT)

DESIGN LOADS	CONDUCTOR SIZES					
	250 kcmil AL	300 kcmil AL	3/0 CU	4/0 CU	250 kcmil CU	300 kcmil CU
DISH Wireless L.L.C. MAXIMUM CONTINUOUS LOAD (160A) (NEC ARTICLE 220 & 230 3% VOLTAGE DROP)	130'	155'	145'	180'	215'	255'
DISH Wireless L.L.C. MAXIMUM CONTINUOUS LOAD (160A) (NEC ARTICLE 220 & 230 5% VOLTAGE DROP)	220'	260'	240'	300'	360'	425'

- NOTES:
- 250 MCM/KCMIL AL + #2 AL GRD MAY BE USED AS A REPLACEMENT FOR 3/0 CU + #6 CU GRD SERVICE CONDUCTOR FROM THE DISH Wireless L.L.C. FIRST MEANS OF DISCONNECT/UTILITY COMPANY MEET-ME POINT. REFER TO VALUES ABOVE TO LIMIT VOLTAGE DROP TO 3%.
 - ALUMINUM/COPPER CONDUCTORS MUST BE RATED 75°C.
 - ALUMINUM TO COPPER BUSS CONNECTIONS MUST MEET AND CONFORM TO ANSI AND BE UL LISTED. USE ANTI CORROSION CONDUCTIVE LUBRICANT ON CONNECTIONS
 - PPC MAIN DISCONNECT CIRCUIT BREAKERS ACCEPT #4 - 300KCMIL AL OR CU CONDUCTORS.
 - VOLTAGE DROP FOR SINGLE METER ENCLOSURE FED FROM TRANSFORMER WITH MULTIPLE CUSTOMERS IS CALCULATED FROM THE TRANSFORMER TO PPC. (SERVICE AND FEEDER CONDUCTOR LENGTH)
 - VOLTAGE DROP FOR MULTI-METER ENCLOSURE IS CALCULATED FROM THE METER TO PPC. (FEEDER CONDUCTOR LENGTH)
 - VOLTAGE DROP CALCULATIONS ARE BASED ON A POWER FACTOR OF 1, A LINE TO GROUND VOLTAGE PER CONDUCTOR OF 120V, NO CORRECTION FACTOR FOR AMBIENT TEMPERATURE OR ADJUSTMENT FACTOR FOR MORE THAN THREE CURRENT-CARRYING CONDUCTORS IN A SINGLE CONDUIT OR RACEWAY. A POWER FACTOR LESS THAN 1 OR VOLTAGE LESS THAN 120 WILL RESULT IN SHORTER DISTANCES THAN SHOWN IN TABLE.

NOTE:
BRANCH CIRCUIT WIRING SUPPLYING RECTIFIERS ARE TO BE RATED UL1015, 105°C, 600V, AND PVC INSULATED, IN THE SIZES SHOWN IN THE ONE-LINE DIAGRAM. CONTRACTOR MAY SUBSTITUTE UL1015 WIRE FOR THWN-2 FOR CONVENIENCE OUTLET BRANCH CIRCUIT.

BREAKERS REQUIRED: (OR EQUIVALENT MANUFACTURER)

- (2) 40A, 2P BREAKER - SQUARE D P/N:Q0240
- (1) 20A, 2P BREAKER - SQUARE D P/N:Q0220
- (2) 215A, 1P BREAKER - SQUARE D P/N:Q0115

NOTES

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED SHORT CIRCUIT CALCULATIONS AND THE AIC RATINGS FOR EACH DEVICE IS ADEQUATE TO PROTECT THE EQUIPMENT AND THE ELECTRICAL SYSTEM.

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED VOLTAGE DROP CALCULATIONS AND ALL BRANCH CIRCUIT AND FEEDERS COMPLY WITH THE NEC (LISTED ON T-1) ARTICLE 210.19(A)(1) FPN NO. 4.

CONDUIT SIZING: AT 40% FILL PER NEC CHAPTER 9, TABLE 4, ARTICLE 358.

0.5" CONDUIT - 0.122 SQ. IN AREA
0.75" CONDUIT - 0.213 SQ. IN AREA
2.0" CONDUIT - 1.316 SQ. IN AREA
3.0" CONDUIT - 2.907 SQ. IN AREA

CABINET CONVENIENCE OUTLET CONDUCTORS (1 CONDUIT): USING THWN-2, CU.

#12 - 0.0050 SQ. IN X 2 = 0.0100 SQ. IN
#12 - 0.0050 SQ. IN X 1 = 0.0050 SQ. IN <GROUND
TOTAL = 0.0150 SQ. IN

0.5" EMT CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (3) WIRES, INCLUDING GROUND WIRE, AS INDICATED ABOVE.

RECTIFIER CONDUCTORS (3 CONDUITS): USING UL1015, CU.

#8 - 0.0552 SQ. IN X 2 = 0.1103 SQ. IN
#8 - 0.0131 SQ. IN X 1 = 0.0131 SQ. IN <BARE GROUND
TOTAL = 0.1234 SQ. IN

0.75" EMT CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (3) WIRES, INCLUDING GROUND WIRE, AS INDICATED ABOVE.

PPC FEED CONDUCTORS (1 CONDUIT): USING THWN, CU.

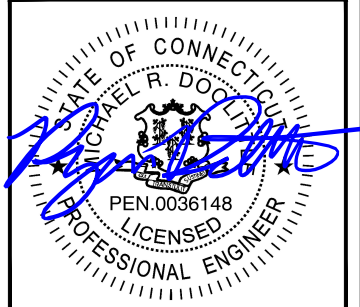
3/0 - 0.2679 SQ. IN X 3 = 0.8037 SQ. IN
#6 - 0.0507 SQ. IN X 1 = 0.0507 SQ. IN <GROUND
TOTAL = 0.8544 SQ. IN

3.0" SCH 40 PVC CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (4) WIRES, INCLUDING GROUND WIRE, AS INDICATED ABOVE.

PPC FEED CONDUCTORS (1 CONDUIT): USING THWN, AL.

250kcmil AL - 0.3970 SQ. IN X 3 = 1.191 SQ. IN
#4 AL - 0.0824 SQ. IN X 1 = 0.0824 SQ. IN <GROUND
TOTAL = 1.2734 SQ. IN

3.0" SCH 40 PVC CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (4) WIRES, INCLUDING GROUND WIRE, AS INDICATED ABOVE.



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: DMW
CHECKED BY: MCK
APPROVED BY: ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCL-52603

DISH Wireless L.L.C.
PROJECT INFORMATION
NJJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
ELECTRICAL ONE-LINE, FAULT
CALCS & PANEL SCHEDULE

SHEET NUMBER
E-3

PPC ONE-LINE DIAGRAM NO SCALE 1

PROPOSED ENERSYS PANEL SCHEDULE

LOAD SERVED	VOLT AMPS (WATTS)		TRIP	CKT #	PHASE	CKT #	TRIP	VOLT AMPS (WATTS)		LOAD SERVED	
	L1	L2						L1	L2		
PPC GFCI OUTLET	180	180	15A	1	A	2	40A	3840	3840	ENERSYS ALPHA CORDEX RECTIFIERS 1 & 2	
ENERSYS GFCI OUTLET			15A	3	B	4	40A	3840	3840	ENERSYS ALPHA CORDEX RECTIFIER 3 & 4	
-SPACE-				5	A	8	40A	3840	3840	ENERSYS ALPHA CORDEX RECTIFIER 3 & 4	
-SPACE-				7	B	8	40A	3840	3840	ENERSYS ALPHA CORDEX RECTIFIER 3 & 4	
-SPACE-				9	A	10	20A	1920	1920	ENERSYS ALPHA CORDEX RECTIFIER 5	
-SPACE-				11	B	12	20A	1920	1920	ENERSYS ALPHA CORDEX RECTIFIER 5	
-SPACE-				13	A	14				-SPACE-	
-SPACE-				15	B	16				-SPACE-	
-SPACE-				17	A	18				-SPACE-	
-SPACE-				19	B	20				-SPACE-	
-SPACE-				21	A	22				-SPACE-	
-SPACE-				23	B	24				-SPACE-	
VOLTAGE AMPS			180	180			9500	9500			
200A MCB, 1 ϕ , 24 SPACE, 120/240V			L1	L2			9680	9680	VOLTAGE AMPS		
MB RATING: 65,000 AIC			81	81			81	81	AMPS		
			81	81					MAX AMPS		
			102	102					MAX 125%		

PANEL SCHEDULE

NO SCALE 2

NOT USED

NO SCALE 3

NOTES:

- HAZARD OF ELECTRICAL SHOCK OR BURN. TURN OFF POWER SUPPLYING THIS EQUIPMENT BEFORE WORKING INSIDE.
- 100 OR 200 AMP, 240 VOLTS, SINGLE PHASE ALTERNATING CURRENT CIRCUIT ONLY
- GENERATOR SHORT CIRCUIT RATING: 10,000 / 20,000 AMPS RMS SYMMETRICAL, AMPERES AT 240 VOLTS
- UTILITY SHORT CIRCUIT RATING: 65,000 AMPS RMS SYMMETRICAL, AMPERES AT 240 VOLTS
- SUITABLE FOR USE AS SERVICE EQUIPMENT
- SUITABLE FOR USE IN ACCORDANCE WITH ARTICLE 702 OF THE NATIONAL ELECTRIC CODE ANSI/NFPA 70
- BONDED NEUTRAL WHEN INSTALLED AS SHOWN IN WIRING DIAGRAM
- RAIN PROOF TYPE 3R
- USE CU-AL WIRE 60-75 °C
- EQUIPPED WITH SLIDE BAR MECHANICAL INTERLOCK
- INTERLOCK PROHIBITS BOTH POWER SOURCES FROM BEING IN THE ON POSITION SIMULTANEOUSLY
- EQUIPPED WITH SQUARE D BREAKERS OR ALTERNATIVE MANUFACTURER EQUIVALENT
- WHEN REPLACE LOAD CENTER BREAKERS, USE ONLY SQUARE D (QO TYPE) OF THE SAME RATING OR EQUIVALENT
- WHEN RESETTING BREAKERS TURN TO OFF POSITION, THEN TO ON POSITION
- WARNING: MAKE CONTINUITY CHECK WITH OHM METER TO VERIFY CORRECT PHASING AND GROUNDING CONNECTIONS BEFORE POWER UP
- VERIFY PIN OUT CONFIGURATION OF GENERATOR PRIOR TO USE.
- RISK OF ELECTRIC SHOCK, BOTH ENDS OF DISCONNECTING MEANS MAY BE ENERGIZED. TEST BEFORE SERVICING
- THIS SWITCH BOARD MAY CONTAIN A TAP ON THE SERVICE SIDE OF THE MAIN POWER DISCONNECT FOR REMOTE MONITORING OF UTILITY/STANDBY POWER
- THE NORMAL AC POWER MONITORING CIRCUIT MUST UTILIZE A DISCONNECTING MEANS WITH A SHORT CIRCUIT RATING GREATER THAN THE AVAILABLE INTERRUPTING CURRENT
- A RED PUSH-TO-TRIP BUTTON PROVIDES A MEANS TO MECHANICALLY TRIP THE CIRCUIT BREAKER. THIS ACTION EXERCISES THE TRIPPING PORTION OF THE MECHANISM AND ALLOWS MAINTENANCE CHECK ON THE BREAKER

SUITABLE FOR USE AS SERVICE EQUIPMENT

ELECTRICAL RATING 120/240 VOLTS SINGLE PHASE 60 Hz	
NORMAL AC POWER	GENERATOR POWER
100A	100A
200A	200A

CAUTION:

- THE OPERATING HANDLE ASSUMES A CENTER POSITION WHEN THE CIRCUIT BREAKER IS TRIPPED
- THE BREAKER CAN BE RESET BY OPERATING THE HANDLE TO THE EXTREME OFF POSITION AND THEN TO ON
- SLIDE BAR MECHANICAL INTERLOCK TRANSFERS NORMAL AC POWER TO GENERATOR POWER. THE SLIDE BAR MECHANICAL INTERLOCK PROHIBITS BOTH POWER SOURCES FROM BEING IN THE ON POSITION SIMULTANEOUSLY
- TO TRANSFER FROM ON POWER SOURCE TO THE OTHER POWER SOURCE, SWITCH ON BREAKER TO THE OFF POSITION, MOVE THE SLIDE BAR TO THE OTHER SIDE AND THE SWITCH THE OTHER BREAKER TO THE ON POSITION

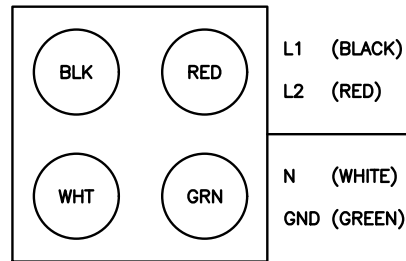
THIS SWITCHBOARD UTILITY MAIN BREAKER IS SUITABLE FOR USE ON CIRCUIT CAPABLE OF DELIVERING NOT MORE THAN 65,000 RMS SYMMETRICAL AMPS, 240 VOLTS MAXIMUM.

200A UTILITY FEED									
LOAD SIZE CIRCUIT BREAKERS				LINE SIDE MAIN CIRCUIT BREAKER					
MFR.	TYPE	POLES	AMP RATING	MFR.	TYPE	AMP RATING	SYMMET. AMP RMS	VOLTS AC	PHASES
SQ-D	QO	1/2	15-100A	SQ-D	QGL	200A	65,000A	240V	2

THIS SWITCHBOARD GENERATOR POWER CIRCUIT IS SUITABLE FOR USE ON A CIRCUIT CAPABLE OF DELIVERING NOT MORE THAN 10,000 RMS SYMMETRICAL AMPS, 240 VOLTS MAXIMUM.

200A GENERATOR FEED									
LOAD SIZE CIRCUIT BREAKERS				LINE SIDE MAIN CIRCUIT BREAKER					
MFR.	TYPE	POLES	AMP RATING	MFR.	TYPE	AMP RATING	SYMMET. AMP RMS	VOLTS AC	PHASES
SQ-D	QO	1/2	15-100A	SQ-D	QGL	200A	65,000A	240V	2

MAXIMUM CONTINUOUS LOADS NOT TO EXCEED 80% OF THE OVER-CURRENT PROTECTIVE DEVICE (CIRCUIT BREAKER AND FUSES) RATINGS EMPLOYED IN OTHER THAN MOTOR CIRCUITS, EXCEPT FOR THOSE CIRCUITS EMPLOYING CIRCUIT BREAKERS MARKED AS SUITABLE FOR CONTINUOUS OPERATION AT 100% OF THEIR RATINGS. CONDUCTORS ARE NOT TO ENTER OR LEAVE THE ENCLOSURE DIRECTLY OPPOSITE THE WIRING TERMINAL

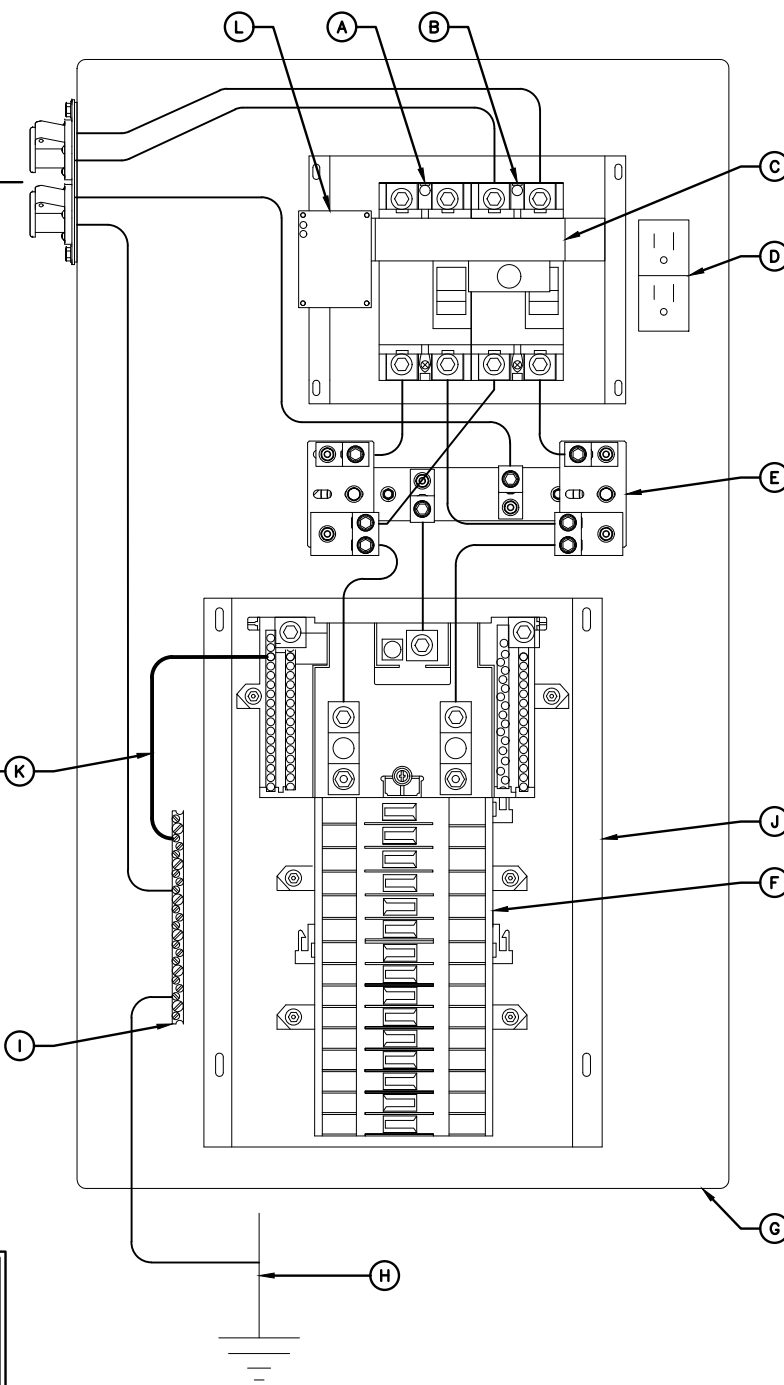


CAM-LOCK GENERATOR RECEPTACLE
(AS VIEWED FROM OUTSIDE OF ENCLOSURE)
USE LINE UP PIN AS REFERENCE

REFER TO RECEPTACLE FOR MODEL NUMBER

DANGER:
HAZARD OF ELECTRICAL SHOCK OR BURN.
TURN OFF POWER SUPPLYING THIS EQUIPMENT BEFORE WORKING INSIDE.

RAYCAP CUSTOMER SERVICE
(800) 890-2569



NEUTRAL-TO-GROUND NOTES:

- WHEN THE PPC IS USED AS THE SERVICE ENTRANCE DEVICE, THE NEUTRAL TO GROUND BOND NEEDS TO BE ESTABLISHED IN THE PPC.
- WHEN THE SERVICE ENTRY DEVICE IS A MULTI-METER CENTER OR A PRE-PPC DISCONNECT IS USED AND HAS "NEUTRAL TO GROUND" ACCOMMODATIONS, THE NEUTRAL TO GROUND WIRE IN THE PPC IS NOT REQUIRED.
- THE GREEN #6 WIRE IS PROVIDED WITH THE PPC CABINET AS A SEPARATE UNINSTALLED PART TO BE INSTALLED BY CONTRACTOR IF NEEDED.

NEUTRAL-TO-GROUND BONDING JUMPER

INSTALLATION INSTRUCTIONS:

- IF REQUIRED, THE N-G BONDING KIT SHOULD BE INSTALLED BY QUALIFIED PERSONNEL
- ENSURE THE MAIN BREAKERS ARE OFF
- USE THE GREEN #6 WIRE PROVIDED WITH THE PPC
- INSTALL THE JUMPER AS SHOWN IN THE WIRING DIAGRAM
- TIGHTEN TERMINALS TO TORQUE VALUE SHOWN IN TORQUE TABLE
- PLACE THE PROVIDED "SERVICE" LABEL IN THE SPACE BELOW THE WORDS "AC POWER" LOCATED ABOVE THE MAIN CIRCUIT BREAKER IN THE UPPER PORTION OF THE DEAD FRONT

LEGEND:

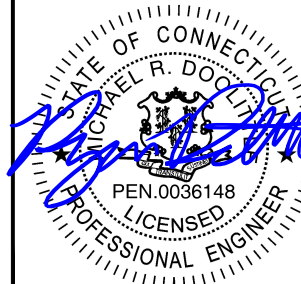
- A. UTILITY DISCONNECT (SERVICE RATED)
- B. GENERATOR DISCONNECT
- C. MAIN DISCONNECT CIRCUIT BREAKERS W/ MECHANICAL INTERLOCK
- D. GFCI RECEPTACLE 15A
- E. SPD STRIKESORB KELVIN CONNECTION (TYP OF 2)
- F. BREAKER PANEL - 24 POSITION (CONTRACTOR TO ADD APPROPRIATE BREAKER PER ONE-LINE DIAGRAM PANEL SCHEDULE)
- G. POWER PROTECTION CABINET (PPC) (FULLY ASSEMBLED FROM MANUFACTURER)
- H. CONTRACTOR TO ATTACH TO UNDERGROUND GROUNDING HALO OR INSTALL GROUND ROD WHEN REQUIRED BY CODE
- I. GROUND BAR
- J. SQUARE D Q SERIES LOAD CENTER
- K. NEUTRAL-TO-GROUND (N-G) BONDING JUMPER (CONTRACTOR INSTALLED IF REQUIRED)
- L. OPTIONAL SPD STATUS INDICATORS



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:
DMW MCK ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

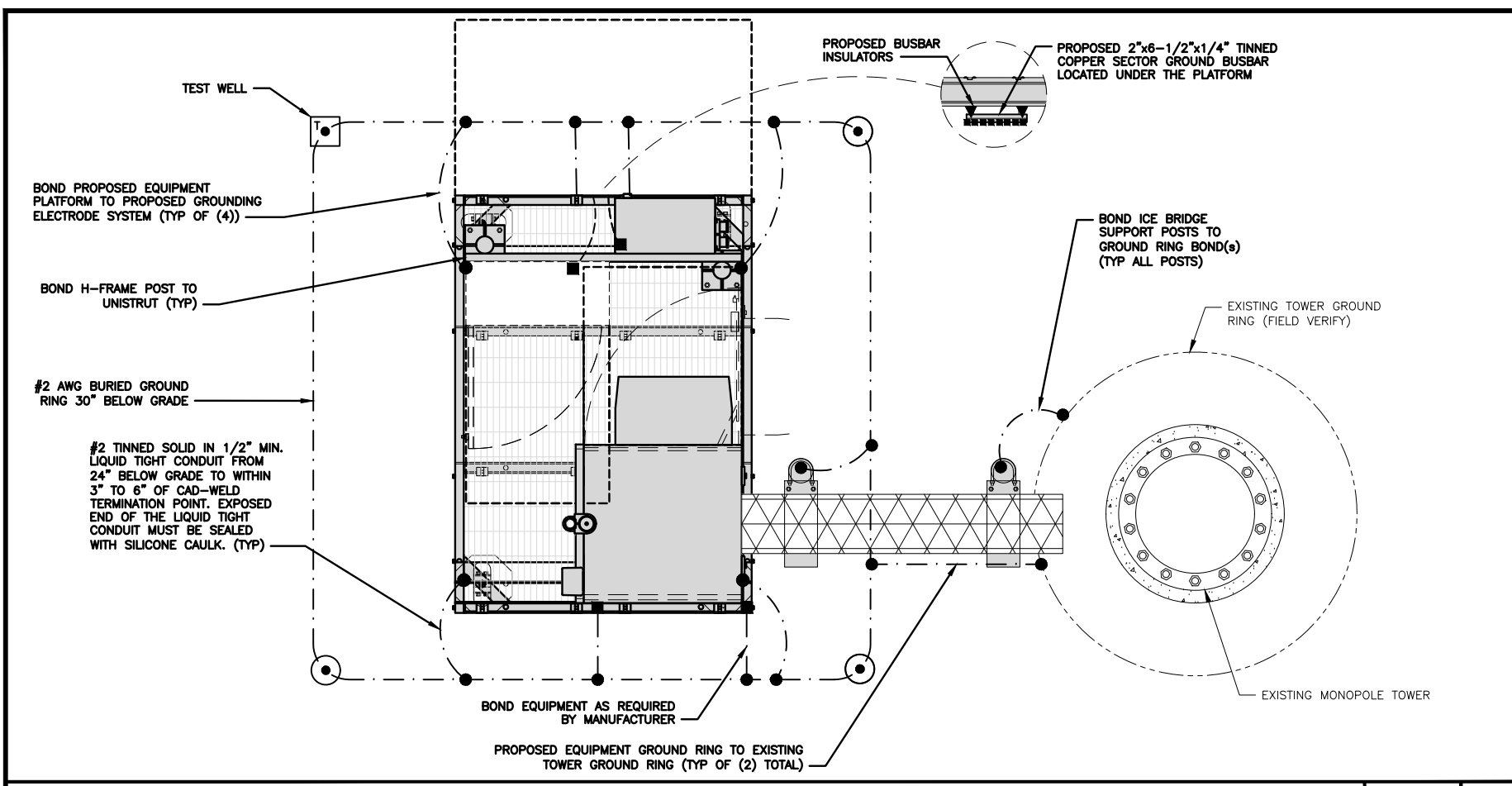
DISH Wireless L.L.C.
PROJECT INFORMATION

NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
ELECTRICAL ONE-LINE, FAULT
CALCS & PANEL SCHEDULE

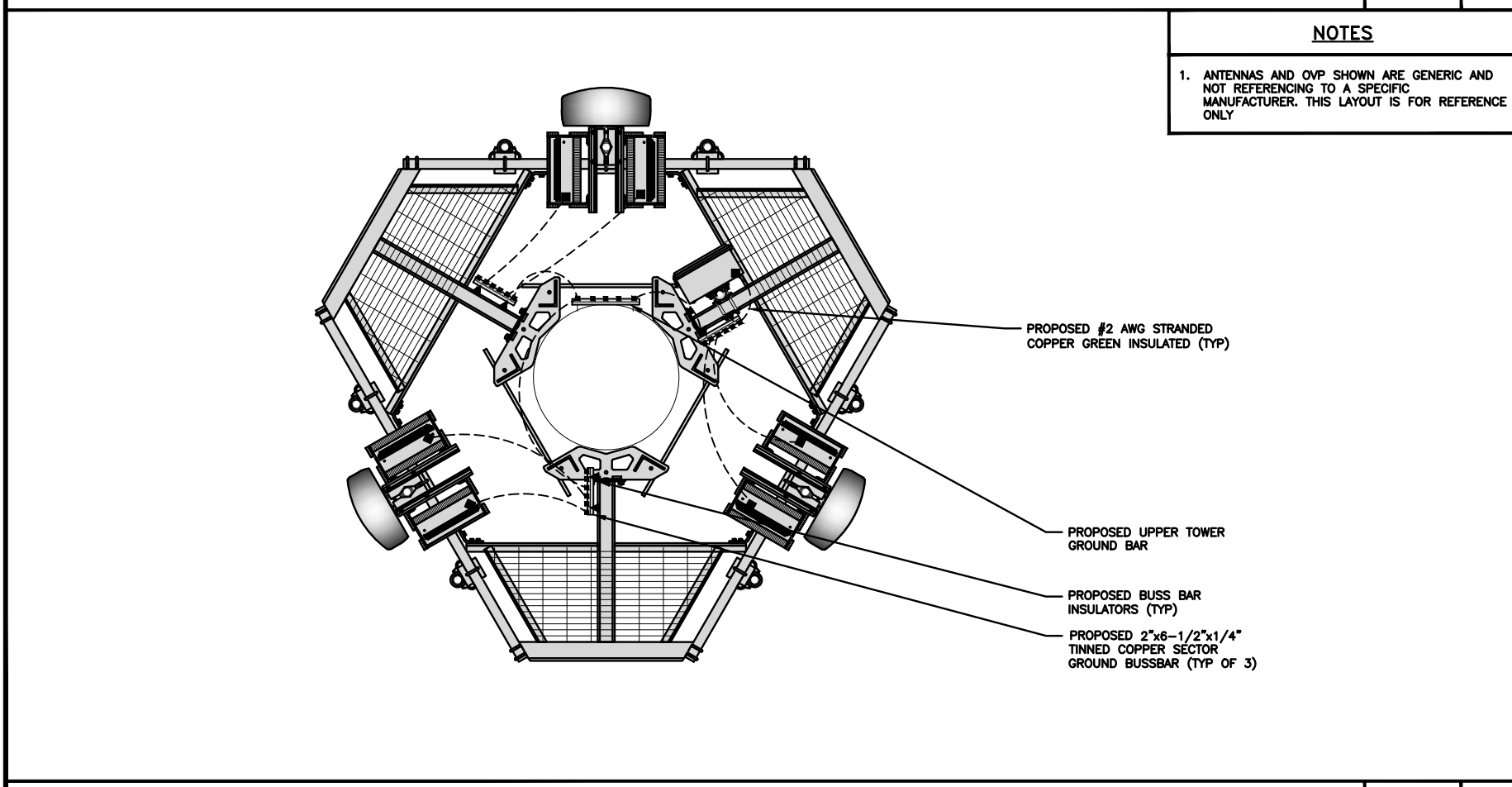
SHEET NUMBER

E-4



TYPICAL EQUIPMENT GROUNDING PLAN

NO SCALE 1



TYPICAL ANTENNA GROUNDING PLAN

NO SCALE 2

- EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION
- ▬ GROUND BUS BAR
- GROUND ROD
- TEST GROUND ROD WITH INSPECTION SLEEVE
- #6 AWG STRANDED & INSULATED
- - - #2 AWG SOLID COPPER TINNED
- ▲ BUSS BAR INSULATOR

GROUNDING LEGEND

- GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY.
- CONTRACTOR SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM. GROUNDING SHALL BE IN COMPLIANCE WITH NEC SECTION 250 AND DISH Wireless L.L.C. GROUNDING AND BONDING REQUIREMENTS AND MANUFACTURER'S SPECIFICATIONS.
- ALL GROUND CONDUCTORS SHALL BE COPPER; NO ALUMINUM CONDUCTORS SHALL BE USED.

GROUNDING KEY NOTES

- (A) EXTERIOR GROUND RING: #2 AWG SOLID COPPER, BURIED AT A DEPTH OF AT LEAST 30 INCHES BELOW GRADE, OR 6 INCHES BELOW THE FROST LINE AND APPROXIMATELY 24 INCHES FROM THE EXTERIOR WALL OR FOOTING.
- (B) TOWER GROUND RING: THE GROUND RING SYSTEM SHALL BE INSTALLED AROUND AN ANTENNA TOWER'S LEGS, AND/OR GUY ANCHORS. WHERE SEPARATE SYSTEMS HAVE BEEN PROVIDED FOR THE TOWER AND THE BUILDING, AT LEAST TWO BONDS SHALL BE MADE BETWEEN THE TOWER RING GROUND SYSTEM AND THE BUILDING RING GROUND SYSTEM USING MINIMUM #2 AWG SOLID COPPER CONDUCTORS.
- (C) INTERIOR GROUND RING: #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR EXTENDED AROUND THE PERIMETER OF THE EQUIPMENT AREA. ALL NON-TELECOMMUNICATIONS RELATED METALLIC OBJECTS FOUND WITHIN A SITE SHALL BE GROUNDED TO THE INTERIOR GROUND RING WITH #6 AWG STRANDED GREEN INSULATED CONDUCTOR.
- (D) BOND TO INTERIOR GROUND RING: #2 AWG SOLID TINNED COPPER WIRE PRIMARY BONDS SHALL BE PROVIDED AT LEAST AT FOUR POINTS ON THE INTERIOR GROUND RING, LOCATED AT THE CORNERS OF THE BUILDING.
- (E) GROUND ROD: UL LISTED COPPER CLAD STEEL, MINIMUM 1/2" DIAMETER BY EIGHT FEET LONG. GROUND RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES. GROUND RODS SHALL BE DRIVEN TO THE DEPTH OF GROUND RING CONDUCTOR.
- (F) CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 AWG UNLESS NOTED OTHERWISE. STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUCTORS.
- (G) HATCH PLATE GROUND BAR: BOND TO THE INTERIOR GROUND RING WITH TWO #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS. WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR ARE BOTH PRESENT, THE CRGB MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR GROUND RING USING (2) TWO #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS EACH.
- (H) EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL SITE BUILDING. BOND TO GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE.
- (I) TELCO GROUND BAR: BOND TO BOTH CELL REFERENCE GROUND BAR OR EXTERIOR GROUND RING.
- (J) FRAME BONDING: THE BONDING POINT FOR TELECOM EQUIPMENT FRAMES SHALL BE THE GROUND BUS THAT IS NOT ISOLATED FROM THE EQUIPMENTS METAL FRAMEWORK.
- (K) INTERIOR UNIT BONDS: METAL FRAMES, CABINETS AND INDIVIDUAL METALLIC UNITS LOCATED WITH THE AREA OF THE INTERIOR GROUND RING REQUIRE A #6 AWG STRANDED GREEN INSULATED COPPER BOND TO THE INTERIOR GROUND RING.
- (L) FENCE AND GATE GROUNDING: METAL FENCES WITHIN 7 FEET OF THE EXTERIOR GROUND RING OR OBJECTS BONDED TO THE EXTERIOR GROUND RING SHALL BE BONDED TO THE GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTOR AT AN INTERVAL NOT EXCEEDING 25 FEET. BONDS SHALL BE MADE AT EACH GATE POST AND ACROSS GATE OPENINGS.
- (M) EXTERIOR UNIT BONDS: METALLIC OBJECTS, EXTERNAL TO OR MOUNTED TO THE BUILDING, SHALL BE BONDED TO THE EXTERIOR GROUND RING. USING #2 TINNED SOLID COPPER WIRE.
- (N) ICE BRIDGE SUPPORTS: EACH ICE BRIDGE LEG SHALL BE BONDED TO THE GROUND RING WITH #2 AWG BARE TINNED COPPER CONDUCTOR. PROVIDE EXOTHERMIC WELDS AT BOTH THE ICE BRIDGE LEG AND BURIED GROUND RING.
- (O) DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICE CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH A MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR.
- (P) TOWER TOP COLLECTOR BUSS BAR IS TO BE MECHANICALLY BONDED TO PROPOSED ANTENNA MOUNT COLLAR. REFER TO DISH Wireless L.L.C. GROUNDING NOTES.

GROUNDING KEY NOTES

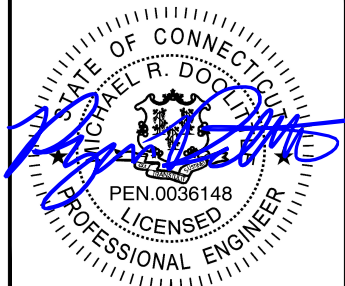
NO SCALE 3



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: DMW
CHECKED BY: MCK
APPROVED BY: ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

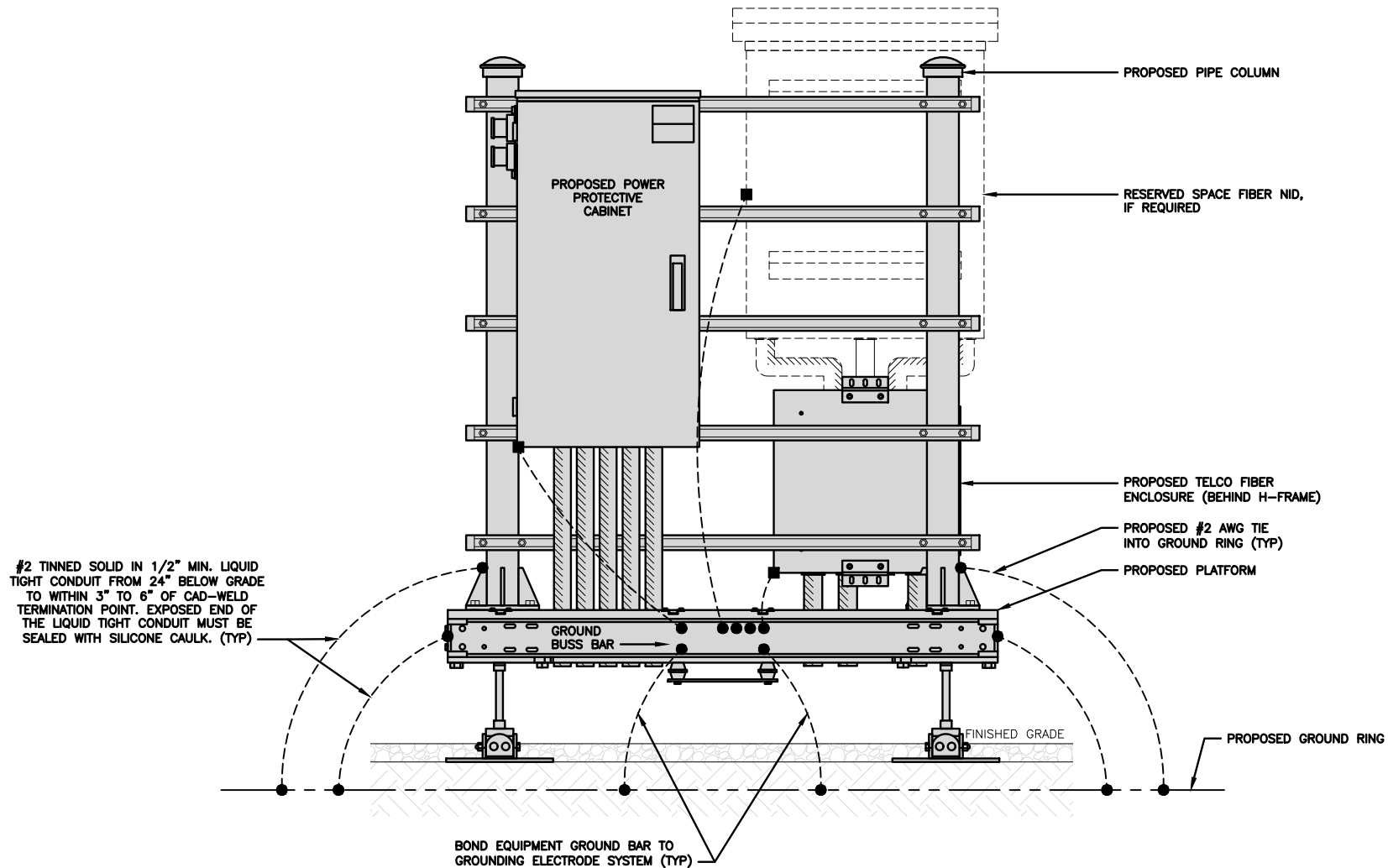
NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
GROUNDING PLANS
AND NOTES

SHEET NUMBER

G-1

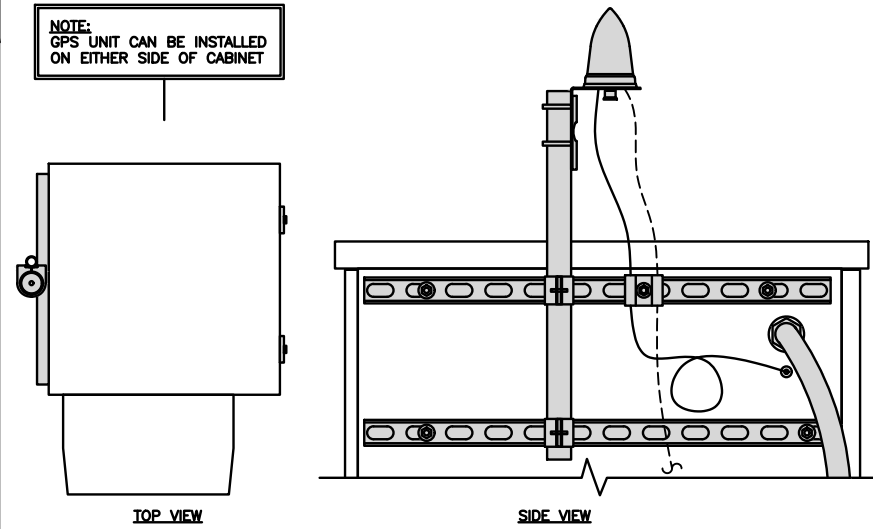
NOTES
EQUIPMENT CABINET OMITTED FOR CLARITY



H-FRAME GROUNDING DETAIL

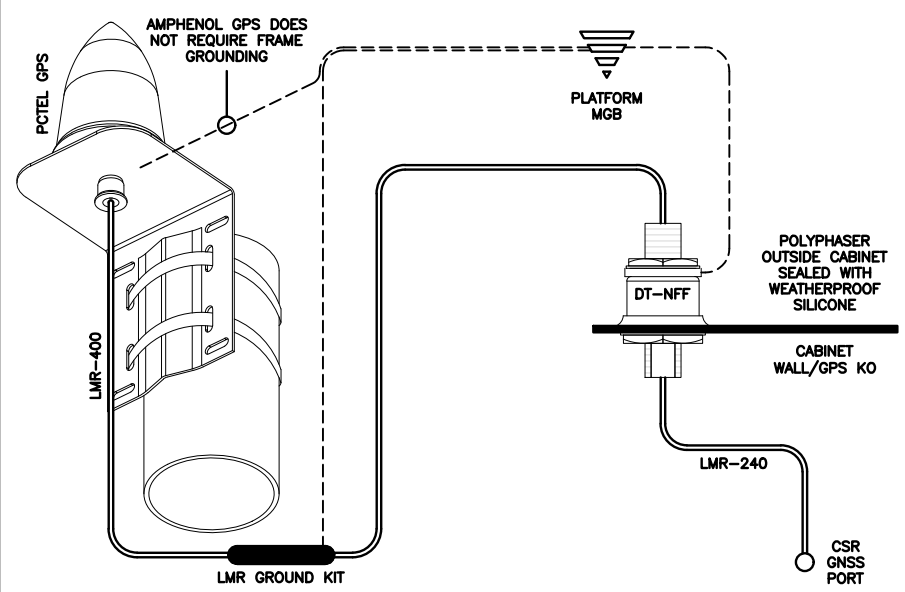
NO SCALE 1

NOTE:
GPS UNIT CAN BE INSTALLED ON EITHER SIDE OF CABINET



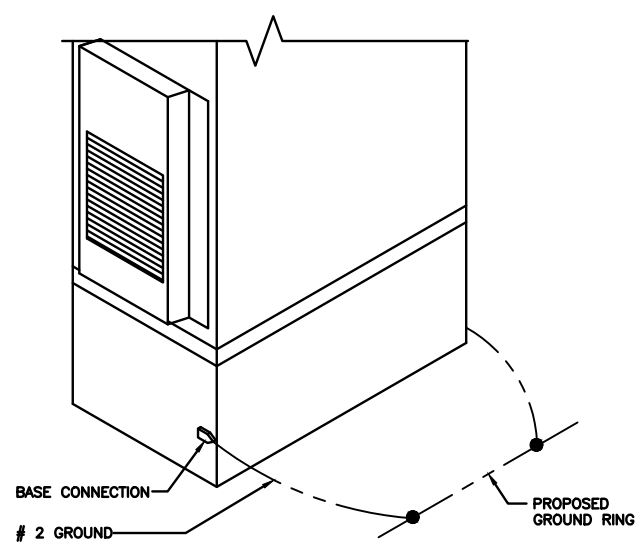
TYPICAL PCTEL GPS UNIT GROUNDING

NO SCALE 2



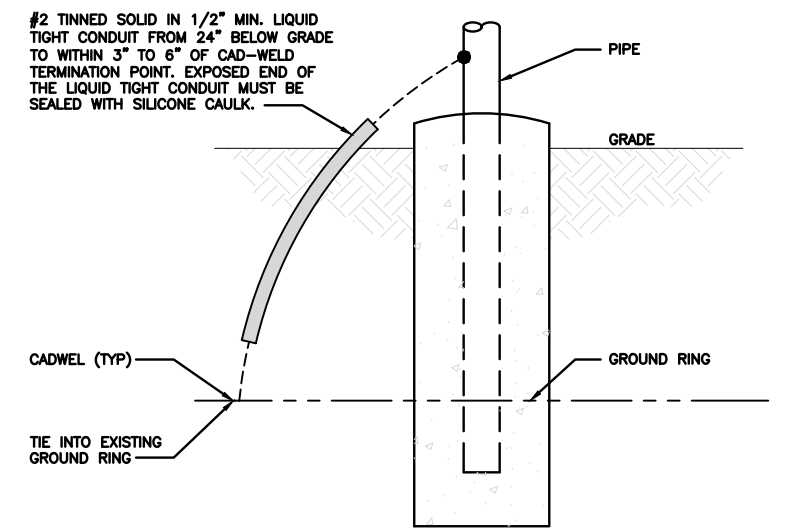
TYPICAL PCTEL GPS UNIT GROUNDING DIAGRAM

NO SCALE 3



OUTDOOR CABINET GROUNDING

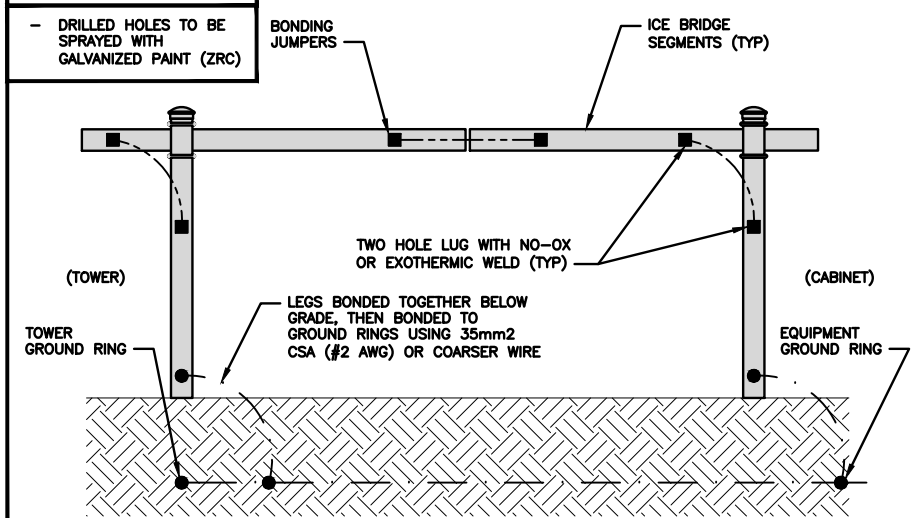
NO SCALE 4



TRANSITIONING GROUND DETAIL

NO SCALE 5

NOTES



ICE BRIDGE GROUNDING DETAIL

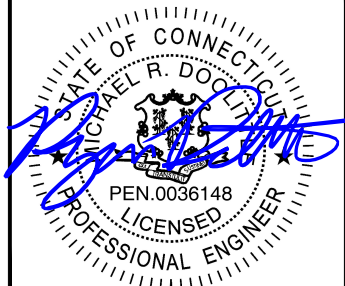
NO SCALE 6

dish wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

Kimley Horn

421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:
DMW MCK ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

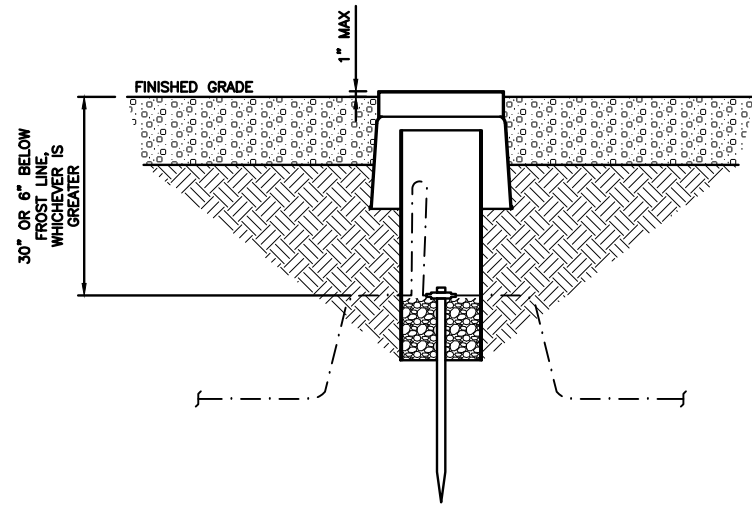
DISH Wireless L.L.C.
PROJECT INFORMATION

NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER

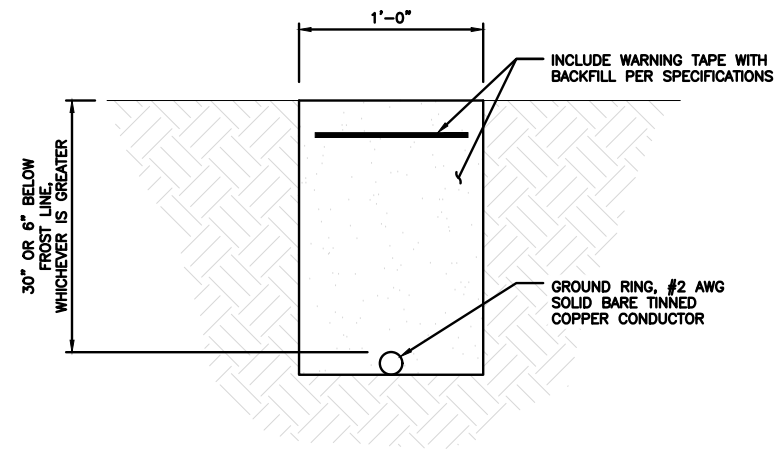
G-2



TYPICAL TEST GROUND ROD WITH INSPECTION SLEEVE

NO SCALE

1



TYPICAL GROUND RING TRENCH

NO SCALE

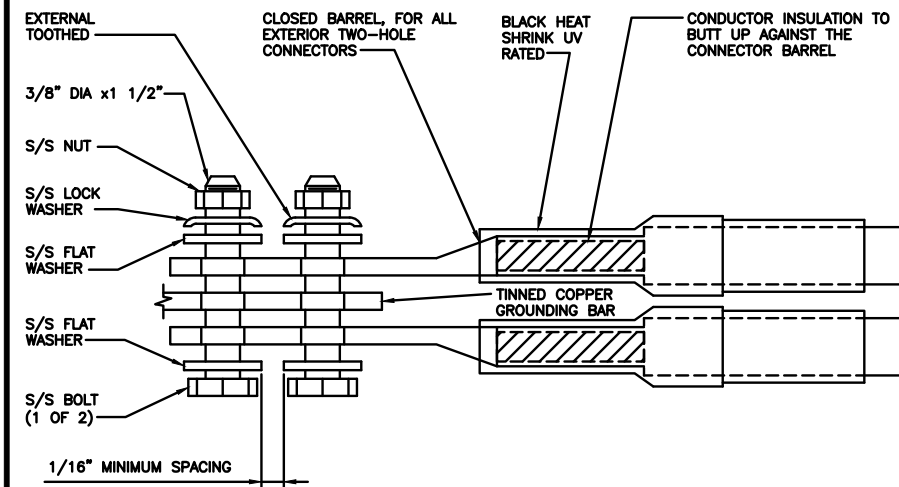
2

1. EXOTHERMIC WELD (2) TWO, #2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUND BAR. ROUTE CONDUCTORS TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
2. ALL EXTERIOR GROUNDING HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
3. FOR GROUND BOND TO STEEL ONLY: COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
4. DO NOT INSTALL CABLE GROUNDING KIT AT A BEND AND ALWAYS DIRECT GROUND CONDUCTOR DOWN TO GROUNDING BUS.
5. NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUND BAR AND BOLTED ON THE BACK SIDE.
6. ALL GROUNDING PARTS AND EQUIPMENT TO BE SUPPLIED AND INSTALLED BY CONTRACTOR.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUND BAR AS REQUIRED.
8. ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS).

TYPICAL GROUNDING NOTES

NO SCALE

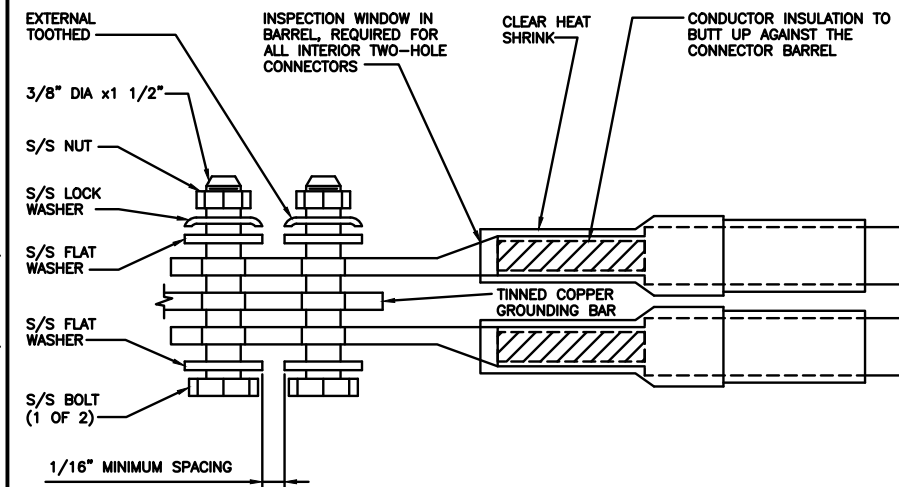
3



TYPICAL EXTERIOR TWO HOLE LUG

NO SCALE

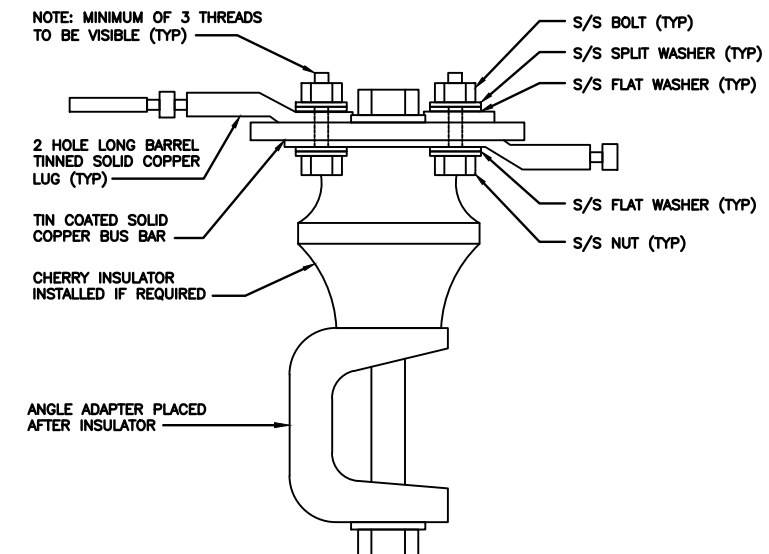
4



TYPICAL INTERIOR TWO HOLE LUG

NO SCALE

5



LUG DETAIL

NO SCALE

6

NOT USED

NO SCALE

7

NOT USED

NO SCALE

8

NOT USED

NO SCALE

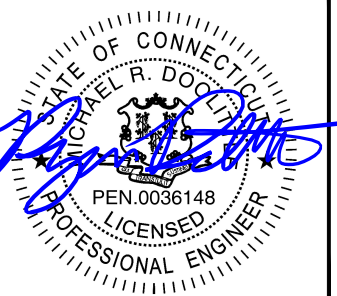
9

dish
wireless.

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

Kimley»Horn

421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:

DMW MCK ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

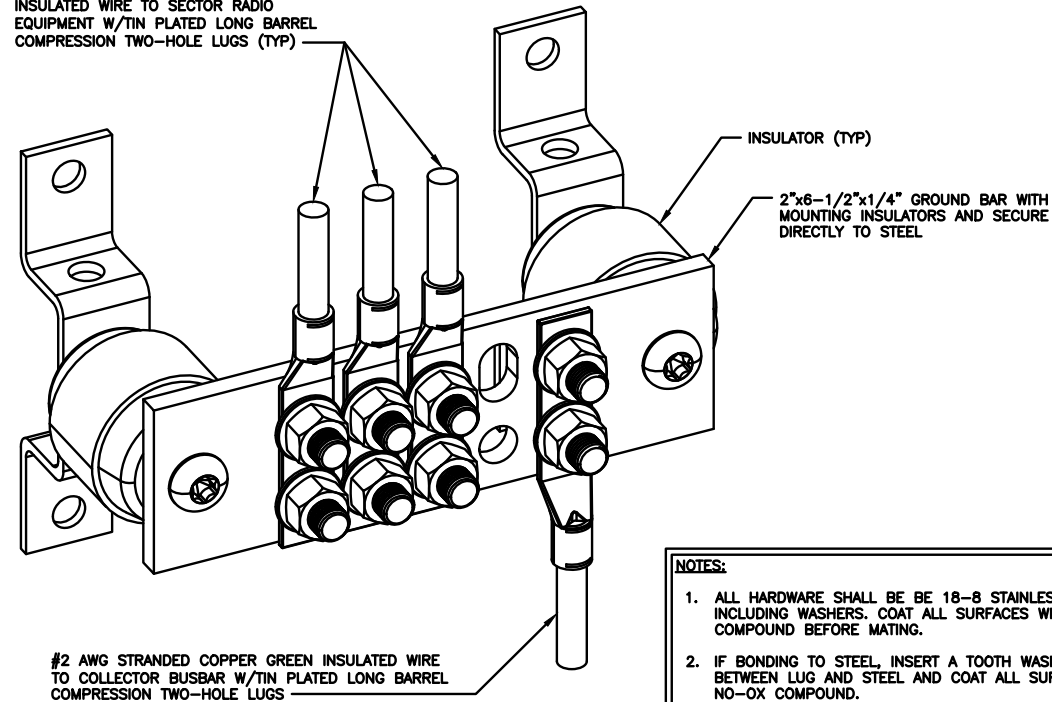
NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER

G-3

#6 AWG STRANDED COPPER GREEN INSULATED WIRE TO SECTOR RADIO EQUIPMENT W/TIN PLATED LONG BARREL COMPRESSION TWO-HOLE LUGS (TYP)



- NOTES:
1. ALL HARDWARE SHALL BE BE 18-8 STAINLESS STEEL INCLUDING WASHERS. COAT ALL SURFACES WITH NO-OX COMPOUND BEFORE MATING.
 2. IF BONDING TO STEEL, INSERT A TOOTH WASHER BETWEEN LUG AND STEEL AND COAT ALL SURFACE WITH NO-OX COMPOUND.
 3. USE A THIN COAT OF NO-OX OR UL LISTED ANTIOXIDANT COMPOUND BETWEEN GROUNDING CONNECTIONS.

SECTOR GROUND BUSBAR DETAIL

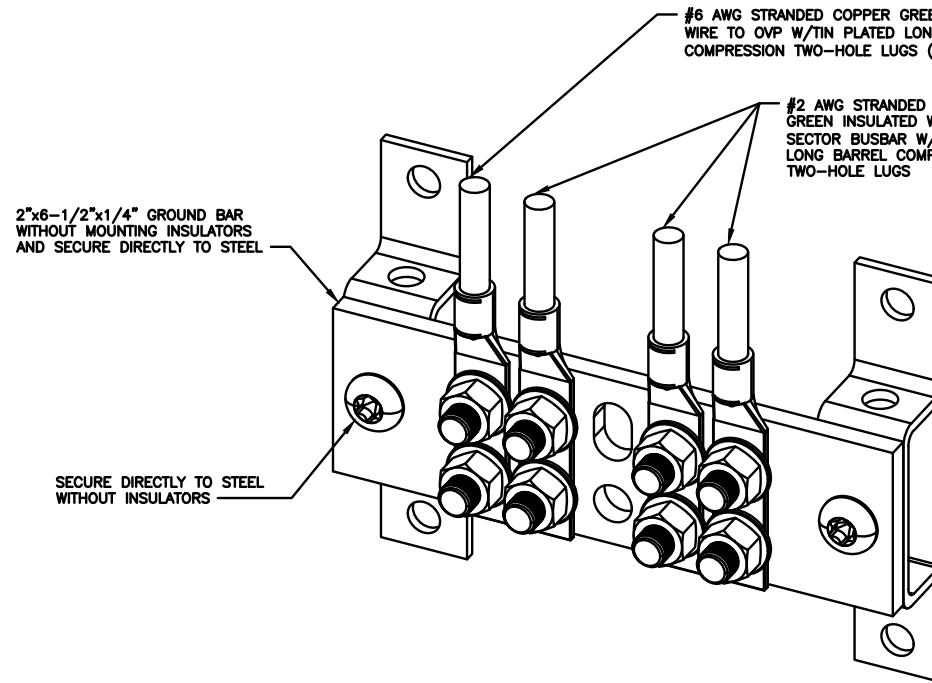
NO SCALE 1

#6 AWG STRANDED COPPER GREEN INSULATED WIRE TO OVP W/TIN PLATED LONG BARREL COMPRESSION TWO-HOLE LUGS (TYP)

2"x6-1/2"x1/4" GROUND BAR WITHOUT MOUNTING INSULATORS AND SECURE DIRECTLY TO STEEL

#2 AWG STRANDED COPPER GREEN INSULATED WIRE TO SECTOR BUSBAR W/TIN PLATED LONG BARREL COMPRESSION TWO-HOLE LUGS

SECURE DIRECTLY TO STEEL WITHOUT INSULATORS



UPPER TOWER GROUND BUSBAR DETAIL

NO SCALE 2

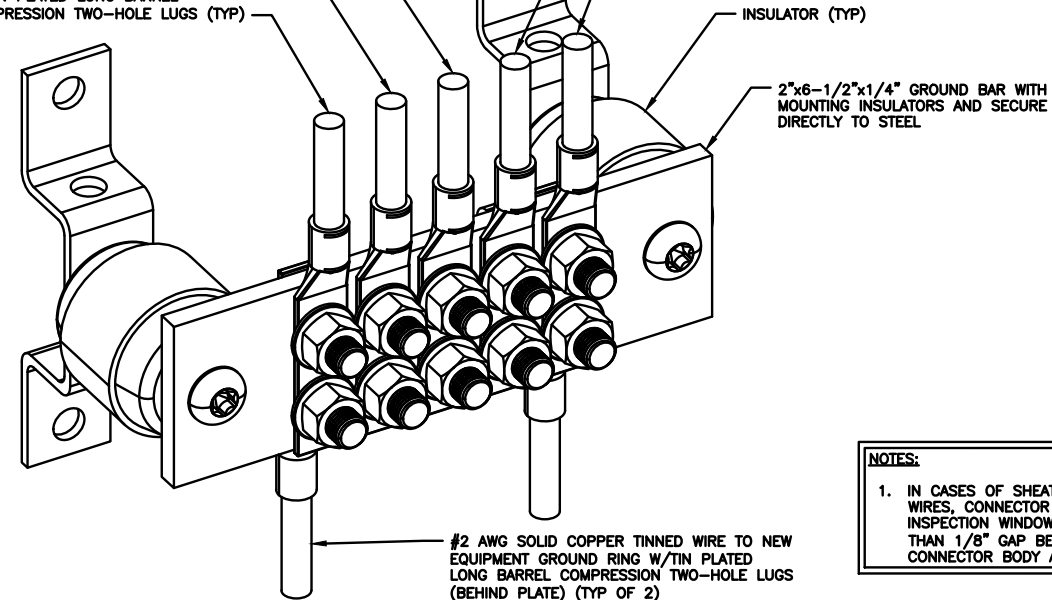
#6 AWG STRANDED COPPER GREEN INSULATED WIRE TO POWER METER SOCKET W/TIN PLATED LONG BARREL COMPRESSION TWO-HOLE LUGS (TYP)

#6 AWG STRANDED COPPER GREEN INSULATED WIRE TO FIBER CARRIER CABINET W/TIN PLATED LONG BARREL COMPRESSION TWO-HOLE LUGS (TYP)

#6 AWG STRANDED COPPER GREEN INSULATED WIRE TO PPC CABINET W/TIN PLATED LONG BARREL COMPRESSION TWO-HOLE LUGS (TYP)

#6 AWG STRANDED COPPER GREEN INSULATED WIRE TO ELECTRICAL DISCONNECT W/TIN PLATED LONG BARREL COMPRESSION TWO-HOLE LUGS (TYP)

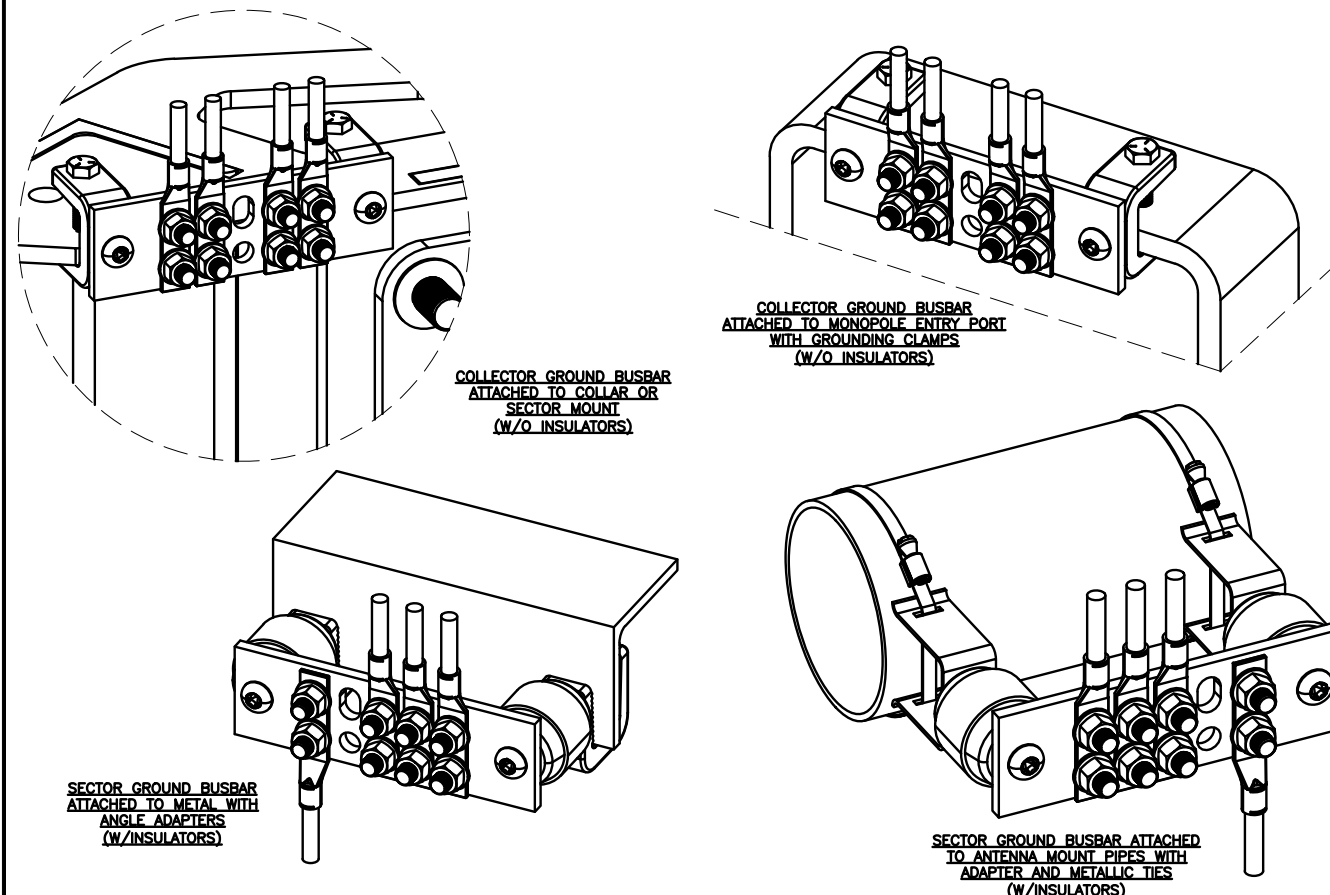
#6 AWG STRANDED COPPER GREEN INSULATED WIRE TO TELCO FIBER ENCLOSURE W/TIN PLATED LONG BARREL COMPRESSION TWO-HOLE LUGS (TYP)



- NOTES:
1. IN CASES OF SHEATHED STRANDED WIRES, CONNECTOR SHALL HAVE INSPECTION WINDOW AND NO MORE THAN 1/8" GAP BETWEEN CONNECTOR BODY AND SHEATH.

EQUIPMENT GROUND BUSBAR DETAIL

NO SCALE 3



GROUND BUSBAR ATTACHMENT OPTIONS

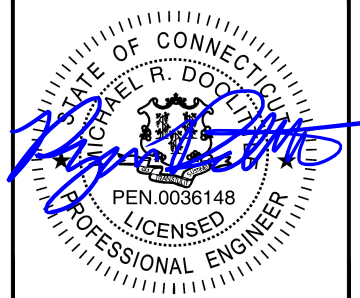
NO SCALE 4



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:
DMW MCK ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

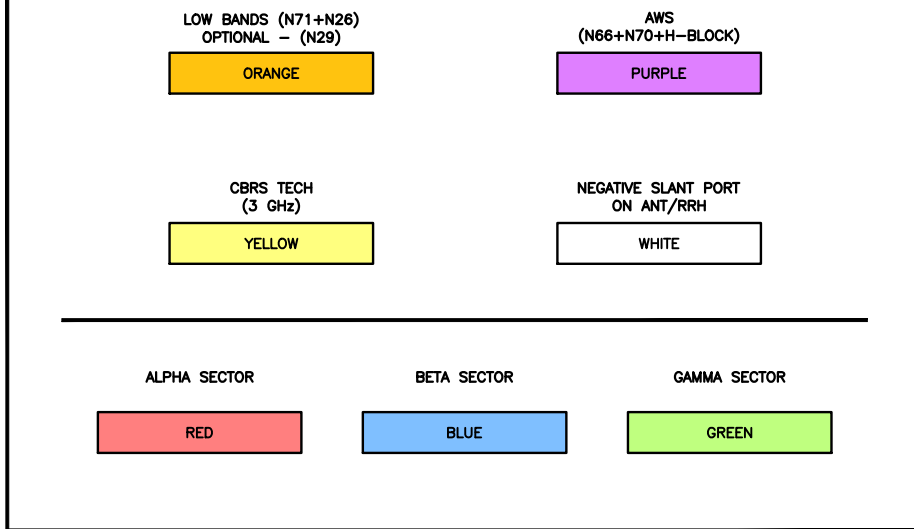
NJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER

G-4

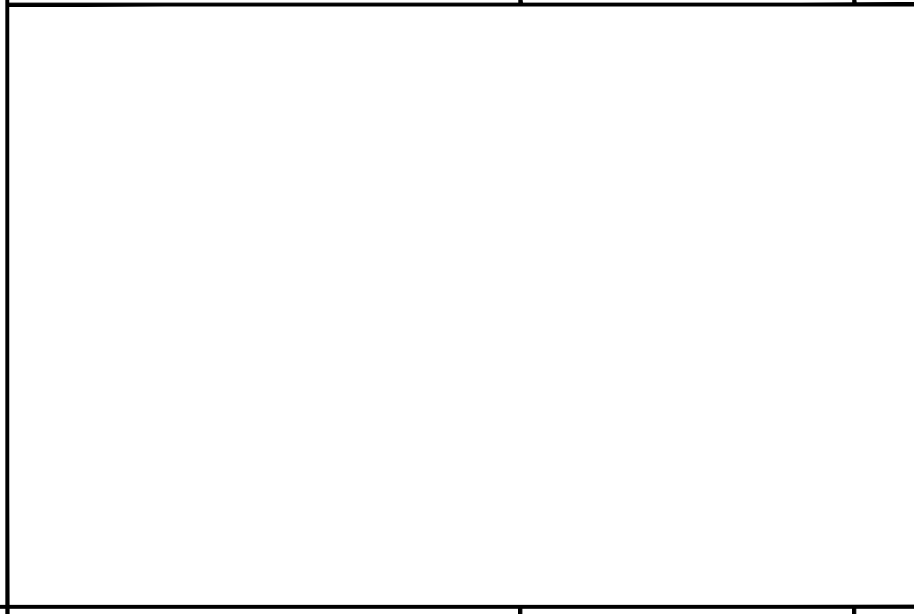
HYBRID/DISCREET CABLES												3/4" TAPE WIDTHS WITH 3/4" SPACING																															
LOW-BAND RRH (600 MHz N71 BASEBAND) + (850 MHz N26 BAND) + (700 MHz N29 BAND) - OPTIONAL PER MARKET ADD FREQUENCY COLOR TO SECTOR BAND (CBRS WILL USE YELLOW BAND)												ALPHA RRH				BETA RRH				GAMMA RRH				ALPHA RRH				BETA RRH				GAMMA RRH											
												PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT
												RED	RED	RED	RED	BLUE	BLUE	BLUE	BLUE	GREEN	GREEN	GREEN	GREEN	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE	ORANGE
MID-BAND RRH (AWS BANDS N66+N70) ADD FREQUENCY COLOR TO SECTOR BAND (CBRS WILL USE YELLOW BANDS)												ALPHA RRH				BETA RRH				GAMMA RRH				ALPHA RRH				BETA RRH				GAMMA RRH											
												PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT	PORT 1 + SLANT	PORT 2 - SLANT	PORT 3 + SLANT	PORT 4 - SLANT
												RED	RED	RED	RED	BLUE	BLUE	BLUE	BLUE	GREEN	GREEN	GREEN	GREEN	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE	PURPLE
HYBRID/DISCREET CABLES INCLUDE SECTOR BANDS BEING SUPPORTED ALONG WITH FREQUENCY BANDS. EXAMPLE 1 - HYBRID, OR DISCREET, SUPPORTS ALL SECTORS, BOTH LOW-BANDS AND MID-BANDS. EXAMPLE 2 - HYBRID, OR DISCREET, SUPPORTS CBRS ONLY, ALL SECTORS. EXAMPLE 3 - MAIN COAX WITH GROUND MOUNTED RRHs.												EXAMPLE 1	EXAMPLE 2	EXAMPLE 3	CANISTER COAX #1 (ALPHA)	CANISTER COAX #2 (ALPHA)	EXAMPLE 1	EXAMPLE 2	EXAMPLE 3	CANISTER COAX #1 (ALPHA)	CANISTER COAX #2 (ALPHA)	EXAMPLE 1	EXAMPLE 2	EXAMPLE 3	CANISTER COAX #1 (ALPHA)	CANISTER COAX #2 (ALPHA)	EXAMPLE 1	EXAMPLE 2	EXAMPLE 3	CANISTER COAX #1 (ALPHA)	CANISTER COAX #2 (ALPHA)	EXAMPLE 1	EXAMPLE 2	EXAMPLE 3	CANISTER COAX #1 (ALPHA)	CANISTER COAX #2 (ALPHA)	EXAMPLE 1	EXAMPLE 2	EXAMPLE 3	CANISTER COAX #1 (ALPHA)	CANISTER COAX #2 (ALPHA)		
FIBER JUMPERS TO RRHs LOW-BAND HHR FIBER CABLES HAVE SECTOR STRIPE ONLY.												LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH		
POWER CABLES TO RRHs LOW-BAND RRH POWER CABLES HAVE SECTOR STRIPE ONLY.												LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH	LOW BAND RRH	MID BAND RRH		
RET MOTORS AT ANTENNAS RET CONTROL IS HANDLED BY THE MID-BAND RRH WHEN ONE SET OF RET PORTS EXIST ON ANTENNA. SEPARATE RET CABLES ARE USED WHEN ANTENNA PORTS PROVIDE INPUTS FOR BOTH LOW AND MID BANDS.												ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND	ANTENNA 1 MID BAND	ANTENNA 1 LOW BAND		
MICROWAVE RADIO LINKS LINKS WILL HAVE A 1.5-2 INCH WHITE WRAP WITH THE AZIMUTH COLOR OVERLAPPING IN THE MIDDLE. ADD ADDITIONAL SECTOR COLOR BANDS FOR EACH ADDITIONAL MW RADIO. MICROWAVE CABLES WILL REQUIRE P-TOUCH LABELS INSIDE THE CABINET TO IDENTIFY THE LOCAL AND REMOTE SITE ID'S.												FORWARD AZIMUTH OF 0-120 DEGREES		FORWARD AZIMUTH OF 120-240 DEGREES		FORWARD AZIMUTH OF 240-359 DEGREES		FORWARD AZIMUTH OF 0-120 DEGREES		FORWARD AZIMUTH OF 120-240 DEGREES		FORWARD AZIMUTH OF 240-359 DEGREES		FORWARD AZIMUTH OF 0-120 DEGREES		FORWARD AZIMUTH OF 120-240 DEGREES		FORWARD AZIMUTH OF 240-359 DEGREES		FORWARD AZIMUTH OF 0-120 DEGREES		FORWARD AZIMUTH OF 120-240 DEGREES		FORWARD AZIMUTH OF 240-359 DEGREES		FORWARD AZIMUTH OF 0-120 DEGREES		FORWARD AZIMUTH OF 120-240 DEGREES		FORWARD AZIMUTH OF 240-359 DEGREES			
												PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY	PRIMARY	SECONDARY		
												WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE		
												RED	RED	BLUE	BLUE	GREEN	GREEN	RED	RED	BLUE	BLUE	GREEN	GREEN	RED	RED	BLUE	BLUE	GREEN	GREEN	RED	RED	BLUE	BLUE	GREEN	GREEN	RED	RED	BLUE	BLUE	GREEN	GREEN		
												WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE		
												RED	WHITE	BLUE	WHITE	GREEN	WHITE	RED	WHITE	BLUE	WHITE	GREEN	WHITE	RED	WHITE	BLUE	WHITE	GREEN	WHITE	RED	WHITE	BLUE	WHITE	GREEN	WHITE	RED	WHITE	BLUE	WHITE	GREEN	WHITE		
												WHITE	RED	WHITE	BLUE	WHITE	GREEN	WHITE	RED	WHITE	BLUE	WHITE	GREEN	WHITE	RED	WHITE	BLUE	WHITE	GREEN	WHITE	RED	WHITE	BLUE	WHITE	GREEN	WHITE	RED	WHITE	BLUE	WHITE	GREEN		
												WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE		



COLOR IDENTIFIER 2



NOT USED 3



NOT USED 4

RF CABLE COLOR CODES

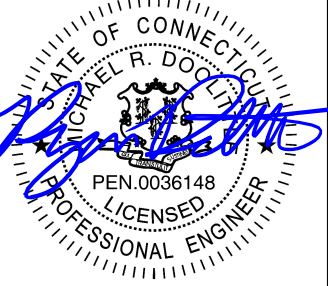
1



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:
DMW MCK ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

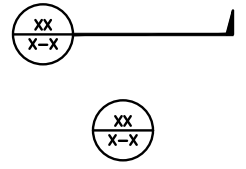
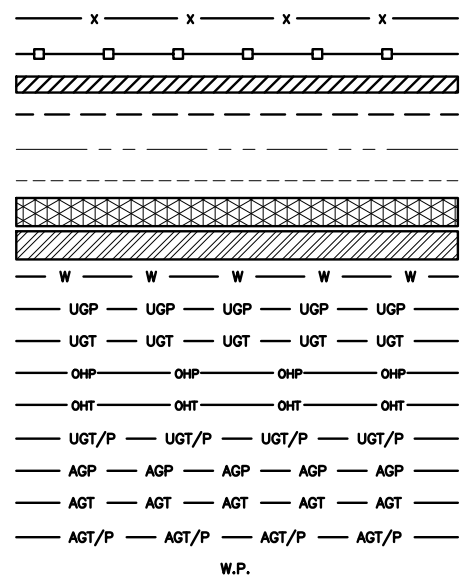
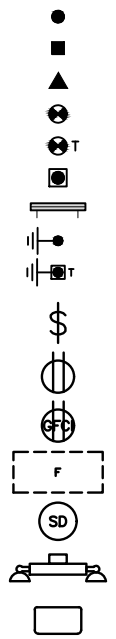
DISH Wireless L.L.C.
PROJECT INFORMATION

NJJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
RF
CABLE COLOR CODE

SHEET NUMBER
RF-1

EXOTHERMIC CONNECTION
 MECHANICAL CONNECTION
 BUSS BAR INSULATOR
 CHEMICAL ELECTROLYTIC GROUNDING SYSTEM
 TEST CHEMICAL ELECTROLYTIC GROUNDING SYSTEM
 EXOTHERMIC WITH INSPECTION SLEEVE
 GROUNDING BAR
 GROUND ROD
 TEST GROUND ROD WITH INSPECTION SLEEVE
 SINGLE POLE SWITCH
 DUPLEX RECEPTACLE
 DUPLEX GFCI RECEPTACLE
 FLUORESCENT LIGHTING FIXTURE (2) TWO LAMPS 48-T8
 SMOKE DETECTION (DC)
 EMERGENCY LIGHTING (DC)
 SECURITY LIGHT W/PHOTOCELL LITHONIA ALXW
 LED-1-25A400/51K-SR4-120-PE-DBBTXD
 CHAIN LINK FENCE
 WOOD/WROUGHT IRON FENCE
 WALL STRUCTURE
 LEASE AREA
 PROPERTY LINE (PL)
 SETBACKS
 ICE BRIDGE
 CABLE TRAY
 WATER LINE
 UNDERGROUND POWER
 UNDERGROUND TELCO
 OVERHEAD POWER
 OVERHEAD TELCO
 UNDERGROUND TELCO/POWER
 ABOVE GROUND POWER
 ABOVE GROUND TELCO
 ABOVE GROUND TELCO/POWER
 WORKPOINT



SECTION REFERENCE
 DETAIL REFERENCE

LEGEND

AB	ANCHOR BOLT	IN	INCH	INT	INTERIOR
ABV	ABOVE	LB(S)	POUND(S)	LF	LINEAR FEET
AC	ALTERNATING CURRENT	LTE	LONG TERM EVOLUTION	MAS	MASONRY
ADDL	ADDITIONAL	MAX	MAXIMUM	MB	MACHINE BOLT
AFF	ABOVE FINISHED FLOOR	MECH	MECHANICAL	MFR	MANUFACTURER
AFG	ABOVE FINISHED GRADE	MGB	MASTER GROUND BAR	MIN	MINIMUM
AGL	ABOVE GROUND LEVEL	MISC	MISCELLANEOUS	MTL	METAL
AIC	AMPERAGE INTERRUPTION CAPACITY	MTS	MANUAL TRANSFER SWITCH	MW	MICROWAVE
ALUM	ALUMINUM	NEC	NATIONAL ELECTRIC CODE	NM	NEWTON METERS
ALT	ALTERNATE	NO.	NUMBER	#	NUMBER
ANT	ANTENNA	NTS	NOT TO SCALE	OC	ON-CENTER
APPROX	APPROXIMATE	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION	OPNG	OPENING
ARCH	ARCHITECTURAL	P/C	PRECAST CONCRETE	PCS	PERSONAL COMMUNICATION SERVICES
ATS	AUTOMATIC TRANSFER SWITCH	PCU	PRIMARY CONTROL UNIT	PP	POLARIZING PRESERVING
AWG	AMERICAN WIRE GAUGE	PRC	PRIMARY RADIO CABINET	PSF	POUNDS PER SQUARE FOOT
BATT	BATTERY	PP	POLARIZING PRESERVING	PSI	POUNDS PER SQUARE INCH
BLDG	BUILDING	PT	PRESSURE TREATED	PWR	POWER CABINET
BLK	BLOCK	QTY	QUANTITY	RAD	RADIUS
BLKG	BLOCKING	RECT	RECTIFIER	REF	REFERENCE
BM	BEAM	REINF	REINFORCEMENT	REQ'D	REQUIRED
BTC	BARE TINNED COPPER CONDUCTOR	RET	REMOTE ELECTRIC TILT	RF	RADIO FREQUENCY
BOF	BOTTOM OF FOOTING	RMC	RIGID METALLIC CONDUIT	RRH	REMOTE RADIO HEAD
CAB	CABINET	RRU	REMOTE RADIO UNIT	RWY	RACEWAY
CANT	CANTILEVERED	SCH	SCHEDULE	SHT	SHEET
CHG	CHARGING	SIAD	SMART INTEGRATED ACCESS DEVICE	SIM	SIMILAR
CLG	CEILING	SPEC	SPECIFICATION	SQ	SQUARE
CLR	CLEAR	SS	STAINLESS STEEL	STD	STANDARD
COL	COLUMN	STL	STEEL	TEMP	TEMPORARY
COMM	COMMON	THK	THICKNESS	TMA	TOWER MOUNTED AMPLIFIER
CONC	CONCRETE	TN	TOE NAIL	TOA	TOP OF ANTENNA
CONSTR	CONSTRUCTION	TOC	TOP OF CURB	TOF	TOP OF FOUNDATION
DBL	DOUBLE	TOP	TOP OF PLATE (PARAPET)	TOS	TOP OF STEEL
DC	DIRECT CURRENT	TOW	TOP OF WALL	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
DEPT	DEPARTMENT	TYP	TYPICAL	UG	UNDERGROUND
DF	DOUGLAS FIR	UL	UNDERWRITERS LABORATORY	UNO	UNLESS NOTED OTHERWISE
DIA	DIAMETER	UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM	UPS	UNINTERRUPTIBLE POWER SYSTEM (DC POWER PLANT)
DIAG	DIAGONAL	VIF	VERIFIED IN FIELD	W	WIDE
DIM	DIMENSION	W/	WITH	WD	WOOD
DWG	DRAWING	WP	WEATHERPROOF	WT	WEIGHT
DWL	DOWEL				
EA	EACH				
EC	ELECTRICAL CONDUCTOR				
EL	ELEVATION				
ELEC	ELECTRICAL				
EMT	ELECTRICAL METALLIC TUBING				
ENG	ENGINEER				
EQ	EQUAL				
EXP	EXPANSION				
EXT	EXTERIOR				
EW	EACH WAY				
FAB	FABRICATION				
FF	FINISH FLOOR				
FG	FINISH GRADE				
FIF	FACILITY INTERFACE FRAME				
FIN	FINISH(ED)				
FLR	FLOOR				
FDN	FOUNDATION				
FOC	FACE OF CONCRETE				
FOM	FACE OF MASONRY				
FOS	FACE OF STUD				
FOW	FACE OF WALL				
FS	FINISH SURFACE				
FT	FOOT				
FTG	FOOTING				
GA	GAUGE				
GEN	GENERATOR				
GFCI	GROUND FAULT CIRCUIT INTERRUPTER				
GLB	GLUE LAMINATED BEAM				
GLV	GALVANIZED				
GPS	GLOBAL POSITIONING SYSTEM				
GND	GROUND				
GSM	GLOBAL SYSTEM FOR MOBILE				
HDG	HOT DIPPED GALVANIZED				
HDR	HEADER				
HGR	HANGER				
HVAC	HEAT/VENTILATION/AIR CONDITIONING				
HT	HEIGHT				
IGR	INTERIOR GROUND RING				

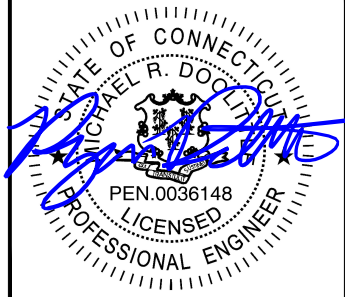
ABBREVIATIONS



5701 SOUTH SANTA FE DRIVE
 LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
 RALEIGH, NC 27601



02/13/24
 Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON,
 UNLESS THEY ARE ACTING UNDER THE DIRECTION
 OF A LICENSED PROFESSIONAL ENGINEER,
 TO ALTER THIS DOCUMENT.

DRAWN BY:	CHECKED BY:	APPROVED BY:
DMW	MCK	---
RFDS REV #:	---	

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
 KHCLC-52603

DISH Wireless L.L.C.
 PROJECT INFORMATION
 NJJER01113B
 41 PADANARAM RD
 DANBURY, CT 06811

SHEET TITLE
 LEGEND AND ABBREVIATIONS

SHEET NUMBER
GN-1

SIGN TYPES		
TYPE	COLOR	COLOR CODE PURPOSE
INFORMATION	GREEN	"INFORMATIONAL SIGN" TO NOTIFY OTHERS OF SITE OWNERSHIP & CONTACT NUMBER AND POTENTIAL RF EXPOSURE.
NOTICE	BLUE	"NOTICE BEYOND THIS POINT" RF FIELDS BEYOND THIS POINT MAY EXCEED THE FCC GENERAL PUBLIC EXPOSURE LIMIT. OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RF ENVIRONMENTS. IN ACCORDANCE WITH FEDERAL COMMUNICATIONS COMMISSION RULES ON RADIO FREQUENCY EMISSIONS 47 CFR-1.1307(b)
CAUTION	YELLOW	"CAUTION BEYOND THIS POINT" RF FIELDS BEYOND THIS POINT MAY EXCEED THE FCC GENERAL PUBLIC EXPOSURE LIMIT. OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RF ENVIRONMENTS. IN ACCORDANCE WITH FEDERAL COMMUNICATIONS COMMISSION RULES ON RADIO FREQUENCY EMISSIONS 47 CFR-1.1307(b)
WARNING	ORANGE/RED	"WARNING BEYOND THIS POINT" RF FIELDS AT THIS SITE EXCEED FCC RULES FOR HUMAN EXPOSURE. FAILURE TO OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RF ENVIRONMENTS COULD RESULT IN SERIOUS INJURY. IN ACCORDANCE WITH FEDERAL COMMUNICATIONS COMMISSION RULES ON RADIO FREQUENCY EMISSIONS 47 CFR-1.1307(b)

SIGN PLACEMENT:

- RF SIGNAGE PLACEMENT SHALL FOLLOW THE RECOMMENDATIONS OF AN EXISTING EME REPORT, CREATED BY A THIRD PARTY PREVIOUSLY AUTHORIZED BY DISH Wireless L.L.C.
- INFORMATION SIGN (GREEN) SHALL BE LOCATED ON EXISTING DISH Wireless L.L.C. EQUIPMENT.
A) IF THE INFORMATION SIGN IS A STICKER, IT SHALL BE PLACED ON EXISTING DISH Wireless L.L.C. EQUIPMENT CABINET.
B) IF THE INFORMATION SIGN IS A METAL SIGN IT SHALL BE PLACED ON EXISTING DISH Wireless L.L.C. H-FRAME WITH A SECURE ATTACH METHOD.
- IF EME REPORT IS NOT AVAILABLE AT THE TIME OF CREATION OF CONSTRUCTION DOCUMENTS; PLEASE CONTACT DISH Wireless L.L.C. CONSTRUCTION MANAGER FOR FURTHER INSTRUCTION ON HOW TO PROCEED.

NOTES:

1. FOR DISH Wireless L.L.C. LOGO, SEE DISH Wireless L.L.C. DESIGN SPECIFICATIONS (PROVIDED BY DISH Wireless L.L.C.)
2. SITE ID SHALL BE APPLIED TO SIGNS USING "LASER ENGRAVING" OR ANY OTHER WEATHER RESISTANT METHOD (DISH Wireless L.L.C. APPROVAL REQUIRED)
3. TEXT FOR SIGNAGE SHALL INDICATE CORRECT SITE NAME AND NUMBER AS PER DISH Wireless L.L.C. CONSTRUCTION MANAGER RECOMMENDATIONS.
4. CABINET/SHELTER MOUNTING APPLICATION REQUIRES ANOTHER PLATE APPLIED TO THE FACE OF THE CABINET WITH WATER PROOF POLYURETHANE ADHESIVE
5. ALL SIGNS WILL BE SECURED WITH EITHER STAINLESS STEEL ZIP TIES OR STAINLESS STEEL TECH SCREWS
6. ALL SIGNS TO BE 8.5"x11" AND MADE WITH 0.04" OF ALUMINUM MATERIAL

INFORMATION

This is an access point to an area with transmitting antennas.

Obey all signs and barriers beyond this point.
Call the DISH Wireless L.L.C. NOC at 1-866-624-6874

Site ID: NJJER01113B



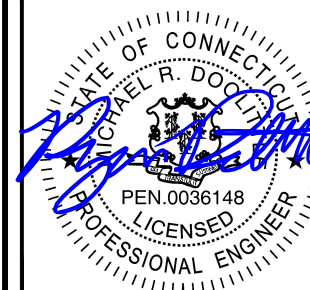
THIS SIGN IS FOR REFERENCE PURPOSES ONLY



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY:	CHECKED BY:	APPROVED BY:
DMW	MCK	---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

NJJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
RF SIGNAGE

SHEET NUMBER
GN-2

NOTICE

Transmitting Antenna(s)

Radio frequency fields beyond this point **MAY EXCEED** the FCC Occupational exposure limit.

Obey all posted signs and site guidelines for working in radio frequency environments.

Call the DISH Wireless L.L.C. NOC at 1-866-624-6874 prior to working beyond this point.

Site ID: NJJER01113B

dish

THIS SIGN IS FOR REFERENCE PURPOSES ONLY

CAUTION

Transmitting Antenna(s)

Radio frequency fields beyond this point **MAY EXCEED** the FCC Occupational exposure limit.

Obey all posted signs and site guidelines for working in radio frequency environments.

Call the DISH Wireless L.L.C. NOC at 1-866-624-6874 prior to working beyond this point.

Site ID: NJJER01113B

dish

THIS SIGN IS FOR REFERENCE PURPOSES ONLY

WARNING

Transmitting Antenna(s)

Radio frequency fields beyond this point **EXCEED** the FCC Occupational exposure limit.

Obey all posted signs and site guidelines for working in radio frequency environments.

Call the DISH Wireless L.L.C. NOC at 1-866-624-6874 prior to working beyond this point.

Site ID: NJJER01113B

dish

THIS SIGN IS FOR REFERENCE PURPOSES ONLY

RF SIGNAGE

SITE ACTIVITY REQUIREMENTS:

- NOTICE TO PROCEED – NO WORK SHALL COMMENCE PRIOR TO CONTRACTOR RECEIVING A WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE DISH Wireless L.L.C. AND TOWER OWNER NOC & THE DISH Wireless L.L.C. AND TOWER OWNER CONSTRUCTION MANAGER.
- "LOOK UP" – DISH Wireless L.L.C. AND TOWER OWNER SAFETY CLIMB REQUIREMENT:
THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR DISH Wireless L.L.C. AND DISH Wireless L.L.C. AND TOWER OWNER POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
- PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
- ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND DISH Wireless L.L.C. AND TOWER OWNER STANDARDS, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA-322 (LATEST EDITION).
- ALL SITE WORK TO COMPLY WITH DISH Wireless L.L.C. AND TOWER OWNER INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON DISH Wireless L.L.C. AND TOWER OWNER TOWER SITE AND LATEST VERSION OF ANSI/TIA-1019-A-2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
- IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY DISH Wireless L.L.C. AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES INCLUDING PRIVATE LOCATES SERVICES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
- ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND DISH PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
- CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF DISH Wireless L.L.C. AND TOWER OWNER, AND/OR LOCAL UTILITIES.
- THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS AND RADIOS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GENERAL NOTES:

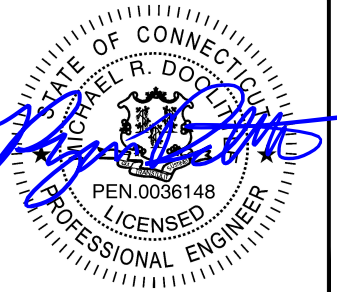
- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION
CARRIER: DISH Wireless L.L.C.
TOWER OWNER: TOWER OWNER
- THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
- THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
- NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
- SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CARRIER POC AND TOWER OWNER.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- CONTRACTOR IS TO PERFORM A SITE INVESTIGATION, BEFORE SUBMITTING BIDS, TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF DISH Wireless L.L.C. AND TOWER OWNER
- CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY: CHECKED BY: APPROVED BY:

DMW MCK ---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

NJGER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-3

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90°f AT TIME OF PLACEMENT.
4. CONCRETE EXPOSED TO FREEZE-THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER-TO-CEMENT RATIO (W/C) OF 0.45.
5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:
 - #4 BARS AND SMALLER 40 ksi
 - #5 BARS AND LARGER 60 ksi
6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
 - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
 - CONCRETE EXPOSED TO EARTH OR WEATHER:
 - #6 BARS AND LARGER 2"
 - #5 BARS AND SMALLER 1-1/2"
 - CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
 - SLAB AND WALLS 3/4"
 - BEAMS AND COLUMNS 1-1/2"
7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
 - 4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
 - 4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
5. EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
8. TIE WRAPS ARE NOT ALLOWED.
9. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

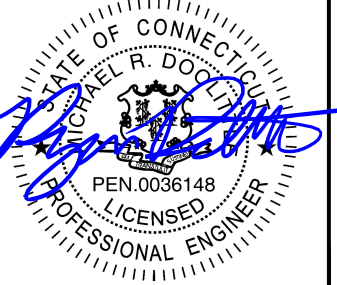
17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.
21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECIMATE WIREWAY).
22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER-ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3 (OR BETTER) FOR EXTERIOR LOCATIONS.
25. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR DISH Wireless L.L.C. AND TOWER OWNER BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "DISH Wireless L.L.C.".
30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY:	CHECKED BY:	APPROVED BY:
DMW	MCK	---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

NJJER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-4

GROUNDING NOTES:

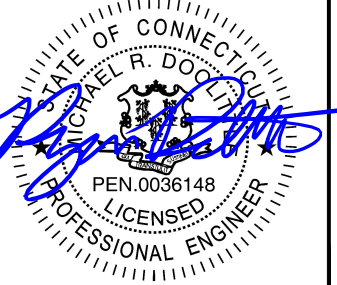
1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUND AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). DO NOT ATTACH GROUNDING TO FIRE SPRINKLER SYSTEM PIPES.



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



421 FAYETTEVILLE ST, SUITE 600
RALEIGH, NC 27601



02/13/24
Exp. 01/31/25

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY:	CHECKED BY:	APPROVED BY:
DMW	MCK	---

RFDS REV #: ---

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
0	12/21/2023	ISSUED FOR CONSTRUCTION
1	02/08/2024	REVISED PER CLIENT

A&E PROJECT NUMBER
KHCLC-52603

DISH Wireless L.L.C.
PROJECT INFORMATION

NJGER01113B
41 PADANARAM RD
DANBURY, CT 06811

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-5