



**CASE (783314)  
RACINE, WISCONSIN  
mmWAVE ADDITION  
DX110P-mmW-L-SS: E// B71/B12 / B2 / 2T2R B5 / B46  
158.5' WATER TOWER**

**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

**uscellular**  
U.S. CELLULAR  
8410 W. BRYN MAWR AVE.  
SUITE 700  
CHICAGO, IL 60631

**TITLE SHEET  
CASE (783314)  
RACINE, WISCONSIN**

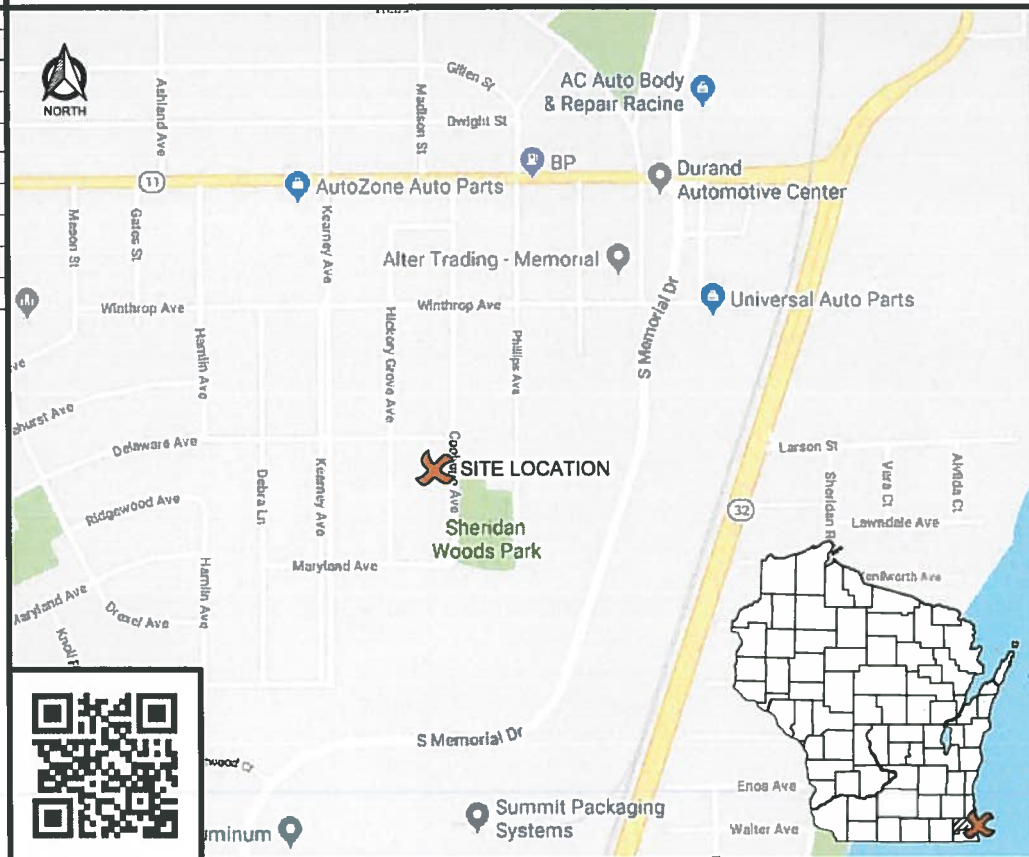
**SCOPE OF WORK**

TOWER SCOPE		
mmWave SCOPE (TO BE INSTALLED)		
ANTENNA(S)/EQUIP.	3	mmWAVE RADIO(S) W/ BUILT-IN ANTENNA(S) TO BE INSTALLED
SHELTER INTERIOR SCOPE		
MODERNIZATION SCOPE (REMAIN/RELOCATE)		
EQUIPMENT:	3	RAYCAP SPD(S) TO REMAIN
MODERNIZATION SCOPE (TO BE INSTALLED)		
AUX RACK:	-	BASE BAND UNIT (BBU) BY OTHERS

\*BRING UP TO U.S. CELLULAR STANDARDS AS NECESSARY

**SPECIAL REQUIREMENTS:**  
PROPOSED mmW RADIO/ANTENNA TO BE PAINTED TO MATCH WATER TOWER. SEE T-201.

**SITE LOCATION MAP**



**DIRECTORY**

**CLIENT:**  
U.S. CELLULAR  
8410 W. BRYN MAWR AVE., SUITE 700  
CHICAGO, IL 60631  
CONTACT: RANDY MATTSON

**ENGINEERING COMPANY:**  
EDGE CONSULTING ENGINEERS, INC.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
PROJECT MANAGER: DAVE LYSHEK

**SITE ACQUISITION:**  
SITE ACQUISITION SOLUTIONS  
19730 BELLBROOK BLVD.  
GRETN, NE 68028  
CONTACT: JENNI KELLIS

**PROJECT INFO**

**SITE LOCATION:**  
3220 COOLIDGE AVENUE  
RACINE, WI 52406

**SITE #:** 783314

**TOWER OWNER:**  
CITY OF RACINE WATER DEPARTMENT  
800 CENTER STREET, ROOM 227  
RACINE, WI 53403  
CONTACT: BOB KAPLAN  
PHONE: 262.636.8438

**SITE COORDINATES (PER 1-A CERTIFICATE):**  
LAT: 42°-41'-33.91"  
LONG: 87°-48'-14.85"  
GROUND ELEVATION (NAVD 88): 632.3'

**SHEET INDEX**

NO.:	SHEET TITLE
G-001	TITLE SHEET
C-101	SITE PLAN
A-101	SHELTER INTERIOR PLAN
T-001	EQUIPMENT SPECIFICATIONS
T-201	SITE ELEVATION
T-301	ANTENNA CONFIGURATION
T-501	CABLE DETAILS
T-502	CABLE BANDING DETAILS
T-503	CABLE ROUTING
T-504	EXISTING PLUMBING DIAGRAM
T-505	FINAL PLUMBING DIAGRAM
E-501	GROUNDING DETAILS

**STRUCTURAL**

**WATER TOWER & MOUNT ANALYSIS:**  
EDGE CONSULTING ENGINEERS, INC.  
REPORT #: 27828 DATED: 10/03/20  
CONCLUSION: STRUCTURALLY ADEQUATE

CONTRACTOR TO REVIEW STRUCTURAL REPORT IN ITS ENTIRETY. ANY DISCREPANCIES OR DISAGREEMENTS BETWEEN THE REPORT AND THESE PLANS SHOULD BE RESOLVED PRIOR TO CONSTRUCTION.

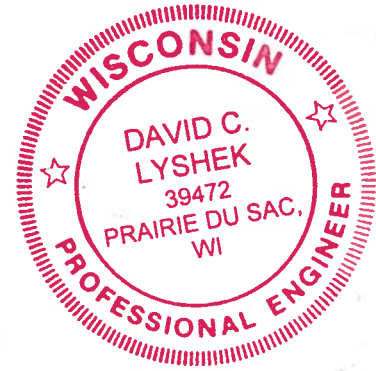


TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN, CALL DIGGERS HOTLINE

TOLL FREE: 1-800-242-8511  
FAX A LOCATE: 1-800-242-5811

WI STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

ENGINEER SEAL:



I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

SIGNATURE:

DATE: 12/10/2020

SUBMITTAL:		
INT.	DATE	DESCRIPTION
ADP	12/02/20	REV. A
DCL	12/10/20	REV. 0

CHECKED BY:	DCL
PLOT DATE:	12/10/2020
PROJECT NUMBER:	27828
SET TYPE:	FINAL
SHEET NUMBER:	<b>G-001</b>

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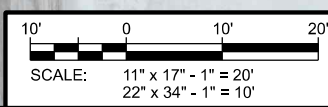
**SITE PLAN**  
**CASE (783314)**  
**RACINE, WISCONSIN**



- NOTES:
1. AERIAL IMAGERY FROM UAS-DRONE FLIGHT CONDUCTED BY EDGE CONSULTING ENGINEERS, INC. ON 02/27/2019.
  2. NORTH ARROW SHOWN AS APPROXIMATE.
  3. SITE PHOTOS PROVIDED BY EDGE CONSULTING ENGINEERS, INC.
  4. NO SURVEY AVAILABLE. SITE LAYOUT BASED ON FIELD MEASUREMENTS, UAS-DRONE PHOTOGRAMMETRY, AND SITE PHOTOS.

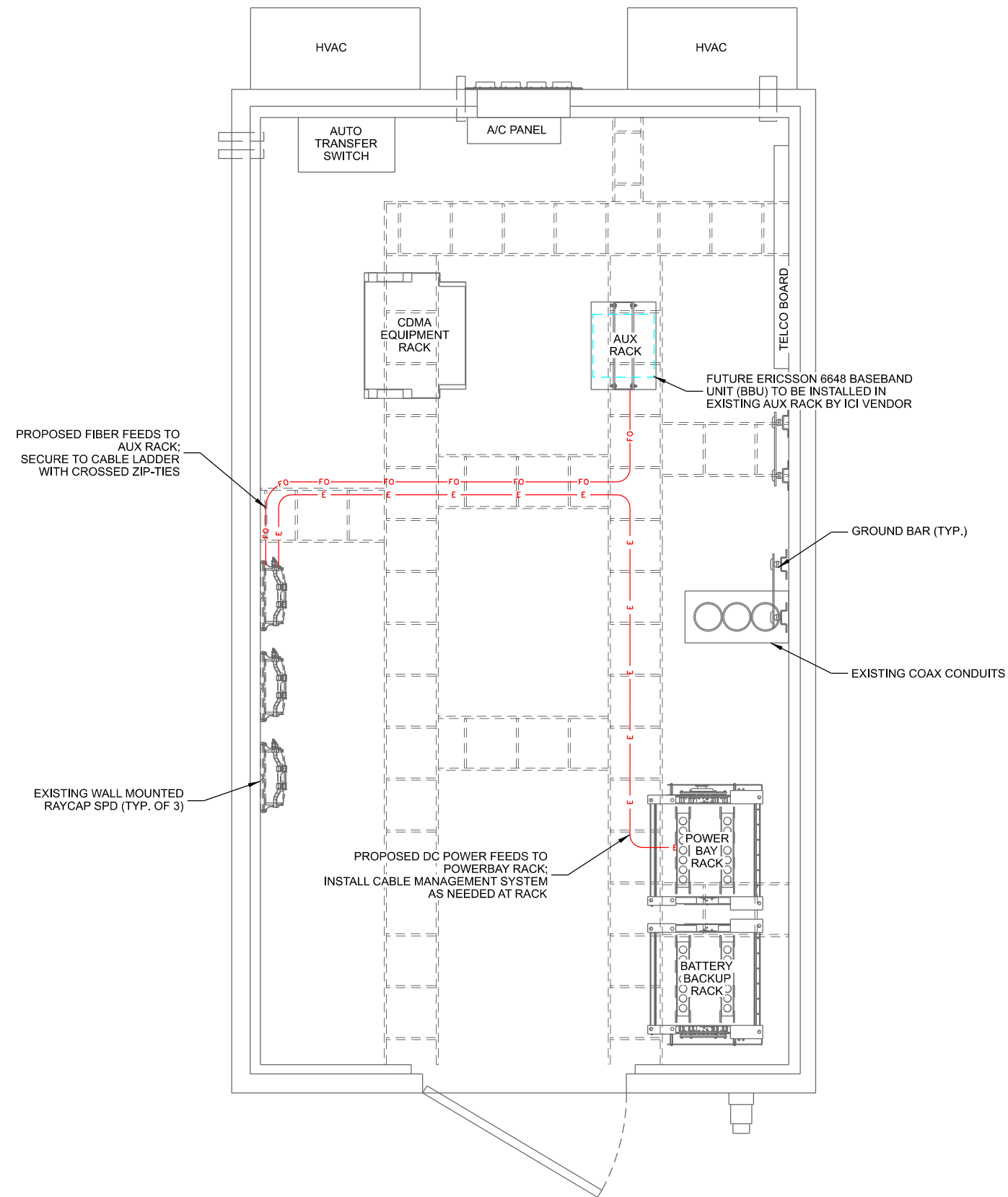
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ADP	11/30/20	REV. A

CHECKED BY:	DCL
PLOT DATE:	12/1/2020
PROJECT NUMBER:	27828
SET TYPE:	DRAFT
SHEET NUMBER:	<b>C-101</b>



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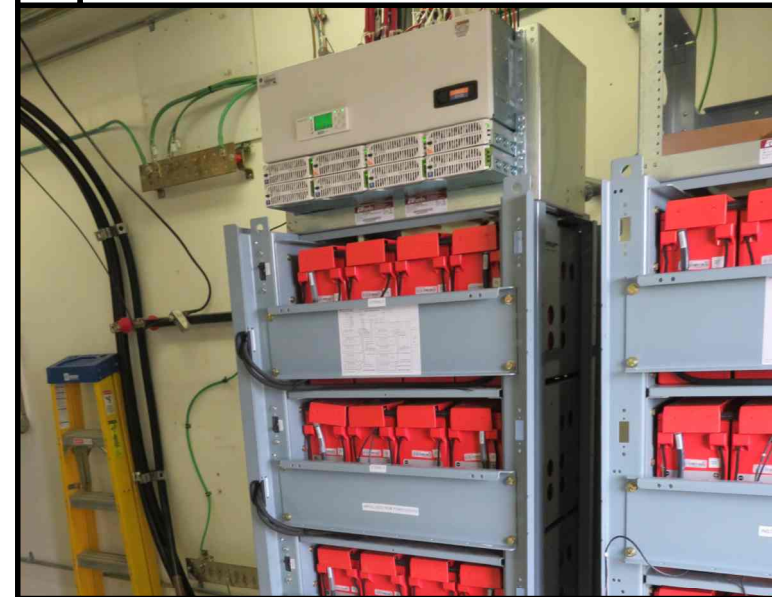
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**A SHELTER INTERIOR LAYOUT**  
 SCALE: 11" x 17" - 3/8" = 1'-0"  
 22" x 34" - 3/4" = 1'-0"



**B EXISTING AUX EQUIPMENT RACK**



**C EXISTING POWER BAY RACK**



**D EXISTING RAYCAP SPD UNITS**

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**SHELTER INTERIOR PLAN**  
 CASE (783314)  
 RACINE, WISCONSIN

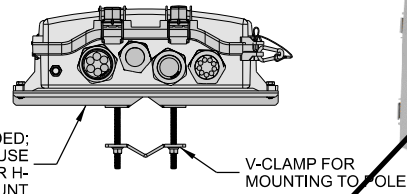
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PLOT DATE:	12/1/2020
PROJECT NUMBER:	27828
SET TYPE:	DRAFT

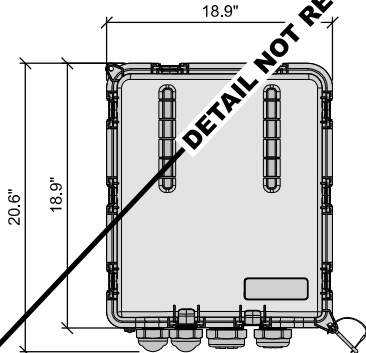
SHEET NUMBER **A-101**

**MANUFACTURER:** RAYCAP  
**MODEL:** RUSDC-6267-PF-48  
**DIMENSIONS:** 20.6" x 18.9" x 5.8" (H x W x D)  
**WEIGHT:** 19.95 LBS

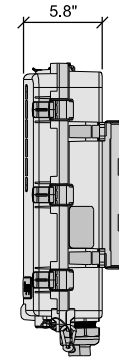
MOUNTING BRACKET INCLUDED:  
 REMOVE BRACKET AND USE  
 ENCLOSURE MOUNTS FOR H-  
 FRAME OR WALL MOUNT



BOTTOM VIEW



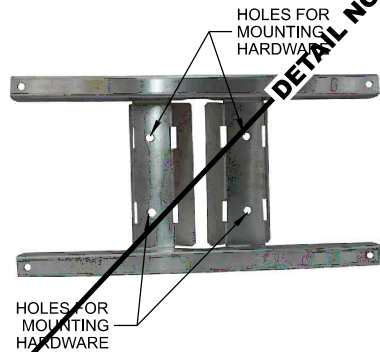
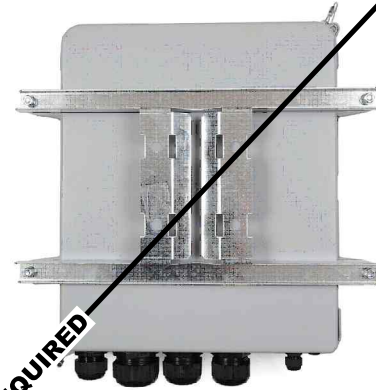
FRONT VIEW



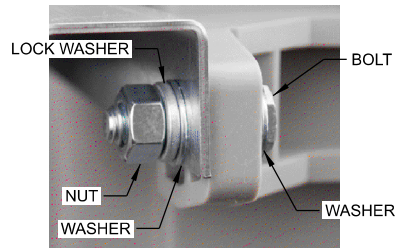
SIDE VIEW

**A RAYCAP SURGE PROTECTOR DEVICE (SPD)**

**MANUFACTURER:** RAYCAP  
**MODEL:** MOUNTING BRACKET  
 INCLUDED WITH RAYCAP SPD.



HOLES FOR MOUNTING HARDWARE



LOCK WASHER

BOLT

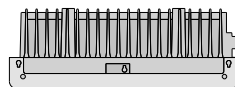
NUT

WASHER

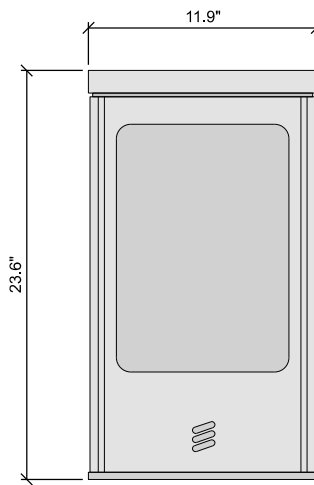
WASHER

**B RAYCAP SURGE PROTECTOR DEVICE (SPD) MOUNT**

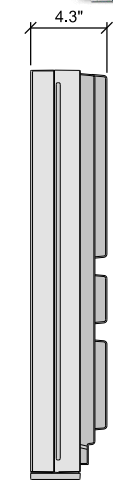
**MANUFACTURER:** ERICSSON  
**MODEL:** AIR5331  
**DIMENSIONS:** APPROX. 23.6" x 11.9" x 4.3" (H x W x D)  
**WEIGHT:** 34.6 LBS.



PLAN VIEW



FRONT VIEW

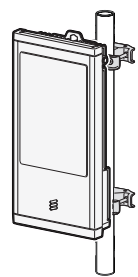


SIDE VIEW

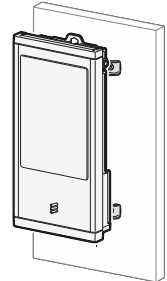
**C ERICSSON AIR5331**

**MANUFACTURER:** ERICSSON  
**MODEL:** SXK 109 2015/1 (SWIVEL ANGLE)  
 SXK 109 2016/1 (SWIVEL ANGLE AND TILT ANGLE)

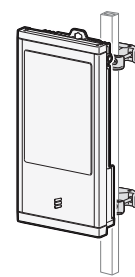
	POLE	CICULAR	SQUARE	90° ANGLE
MIN. OUTER DIMENSION		3" DIA.	2" x 2"	2" x 2"
MAX. OUTER DIMENSION		4.5" DIA.	3.15" x 3.15"	3.15" x 3.15"



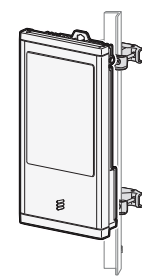
POLE MOUNT (CIRCULAR)



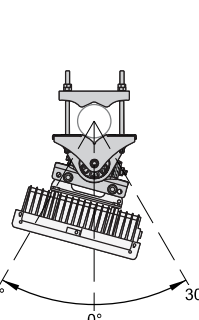
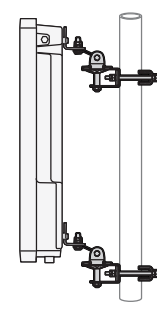
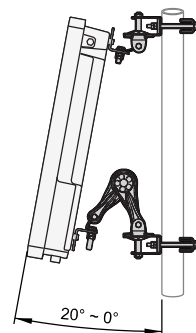
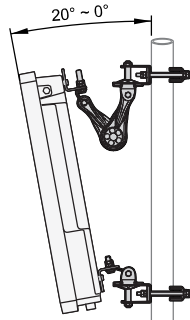
WALL MOUNT



POLE MOUNT (SQUARE)



POLE MOUNT (90° ANGLE)



**D ERICSSON mmWAVE MOUNT**

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 624 WATER STREET  
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 608.644.1449 VOICE  
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**EQUIPMENT SPECIFICATIONS**  
 CASE (783314)  
 RACINE, WISCONSIN

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
ADP	11/30/20	REV. A

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PLOT DATE: 12/1/2020

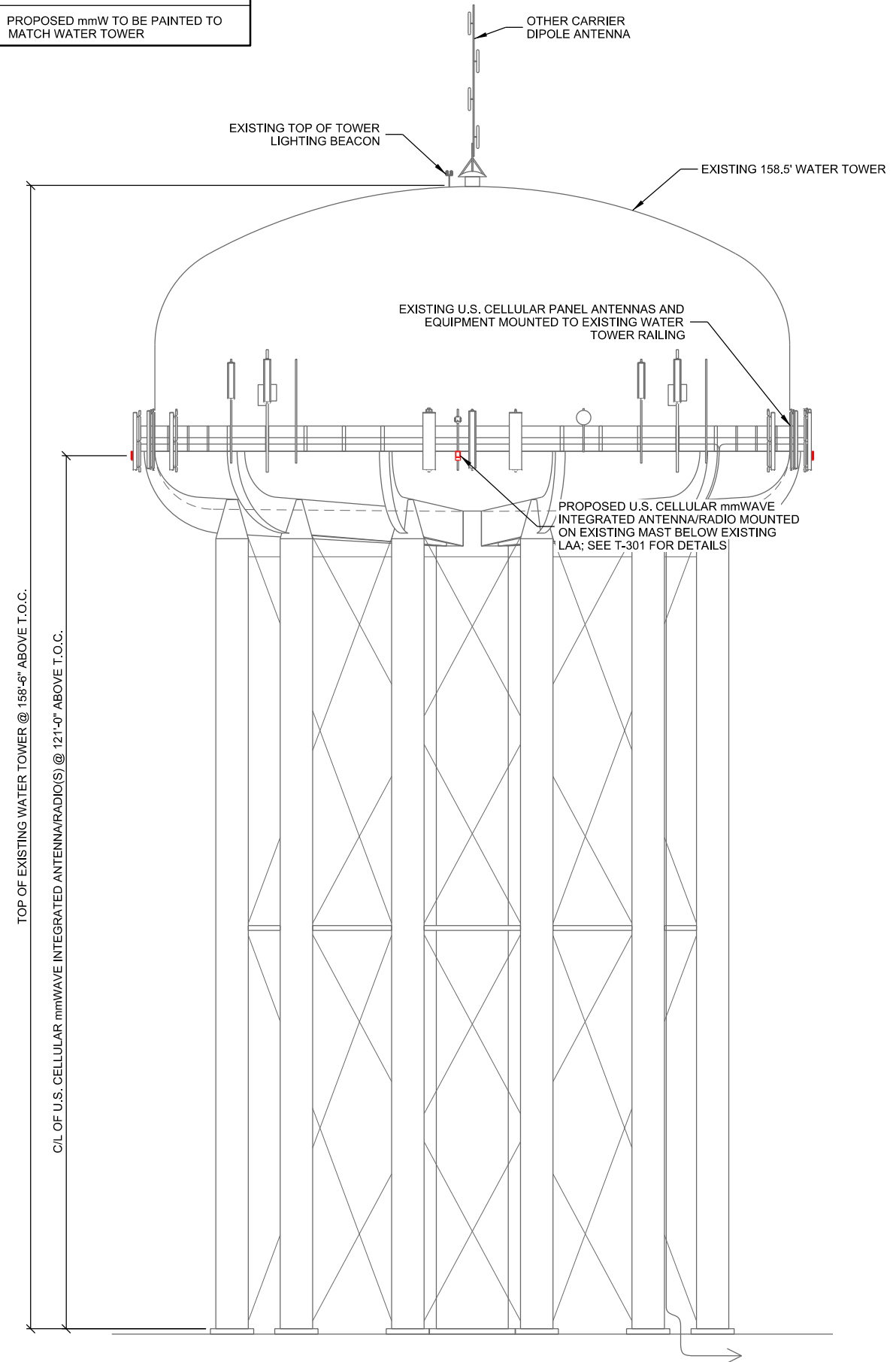
PROJECT NUMBER: 27828

SET TYPE: DRAFT

SHEET NUMBER: **T-001**

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**PAINTING NOTE:**  
 PROPOSED mmW TO BE PAINTED TO  
 MATCH WATER TOWER



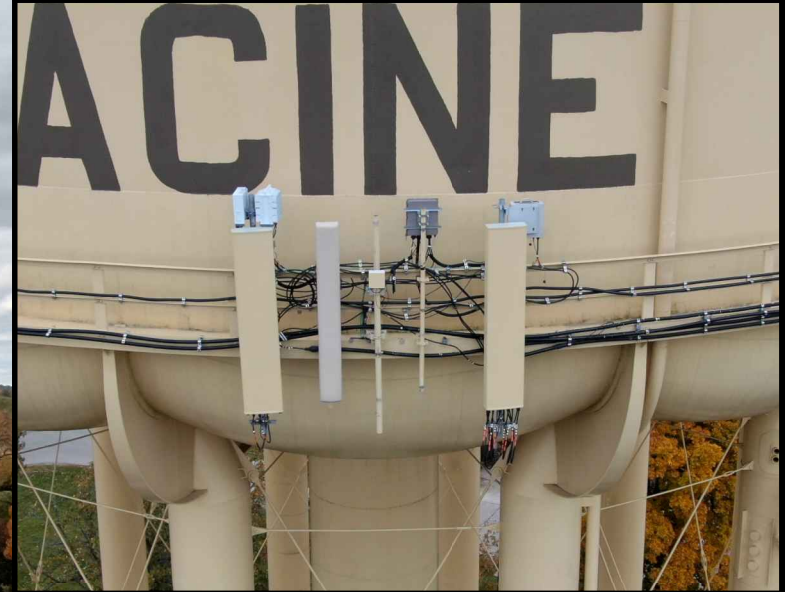
**A SITE ELEVATION**  
 SCALE: 11" x 17" - 1" = 20'-0"  
 22" x 34" - 1" = 10'-0"



**B EXISTING SITE ELEVATION**



**C U.S. CELLULAR ALPHA SECTOR ANTENNAS**



**D U.S. CELLULAR BETA SECTOR ANTENNAS**



**E U.S. CELLULAR GAMMA SECTOR ANTENNAS**

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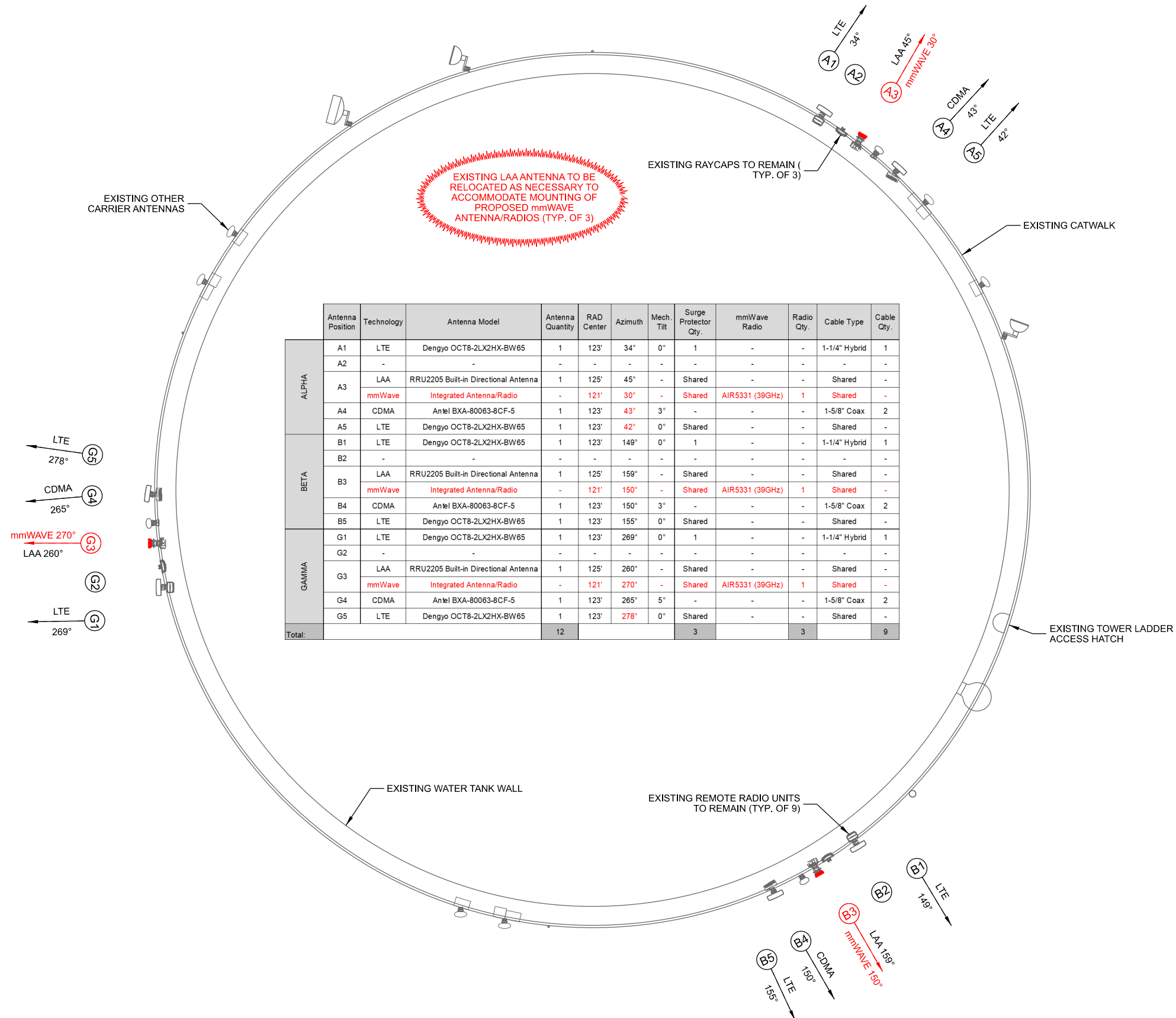
**SITE ELEVATION**  
**CASE (783314)**  
**RACINE, WISCONSIN**

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
ADP	12/02/20	REV. A

CHECKED BY:	DCL
PLOT DATE:	12/2/2020
PROJECT NUMBER:	27828
SET TYPE:	DRAFT
SHEET NUMBER:	<b>T-201</b>

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Antenna Position	Technology	Antenna Model	Antenna Quantity	RAD Center	Azimuth	Mech. Tilt	Surge Protector Qty.	mmWave Radio	Radio Qty.	Cable Type	Cable Qty.	
ALPHA	A1	Dengyo OCT8-2LX2HX-BW65	1	123'	34°	0°	1	-	-	1-1/4" Hybrid	1	
	A2	-	-	-	-	-	-	-	-	-	-	
	A3	LAA	RRU2205 Built-in Directional Antenna	1	125'	45°	-	Shared	-	-	Shared	-
		mmWave	Integrated Antenna/Radio	-	121'	30°	-	Shared	AIR5331 (39GHz)	1	Shared	-
	A4	CDMA	Anel BXA-80063-8CF-5	1	123'	43°	3°	-	-	-	1-5/8" Coax	2
A5	LTE	Dengyo OCT8-2LX2HX-BW65	1	123'	42°	0°	Shared	-	-	Shared	-	
BETA	B1	Dengyo OCT8-2LX2HX-BW65	1	123'	149°	0°	1	-	-	1-1/4" Hybrid	1	
	B2	-	-	-	-	-	-	-	-	-	-	
	B3	LAA	RRU2205 Built-in Directional Antenna	1	125'	159°	-	Shared	-	-	Shared	-
		mmWave	Integrated Antenna/Radio	-	121'	150°	-	Shared	AIR5331 (39GHz)	1	Shared	-
	B4	CDMA	Anel BXA-80063-8CF-5	1	123'	150°	3°	-	-	-	1-5/8" Coax	2
B5	LTE	Dengyo OCT8-2LX2HX-BW65	1	123'	155°	0°	Shared	-	-	Shared	-	
GAMMA	G1	Dengyo OCT8-2LX2HX-BW65	1	123'	269°	0°	1	-	-	1-1/4" Hybrid	1	
	G2	-	-	-	-	-	-	-	-	-	-	
	G3	LAA	RRU2205 Built-in Directional Antenna	1	125'	260°	-	Shared	-	-	Shared	-
		mmWave	Integrated Antenna/Radio	-	121'	270°	-	Shared	AIR5331 (39GHz)	1	Shared	-
	G4	CDMA	Anel BXA-80063-8CF-5	1	123'	265°	5°	-	-	-	1-5/8" Coax	2
G5	LTE	Dengyo OCT8-2LX2HX-BW65	1	123'	278°	0°	Shared	-	-	Shared	-	
<b>Total:</b>			<b>12</b>				<b>3</b>		<b>3</b>		<b>9</b>	

- NOTES:**
- ALL ANTENNA AZIMUTHS TO BE FROM TRUE NORTH.
  - EXISTING RADIO EQUIPMENT NOT INCLUDED.

**A EXISTING ANTENNA LAYOUT**  
 SCALE: 11" x 17" - 1/4" = 1'-0"  
 22" x 34" - 1/2" = 1'-0"

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**ANTENNA CONFIGURATION  
 CASE (783314)  
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SUBMITTAL:

INT.	DATE:	DESCRIPTION:
ADP	11/30/20	REV. A

CHECKED BY:	DCL
PLOT DATE:	12/1/2020
PROJECT NUMBER:	27828
SET TYPE:	DRAFT
SHEET NUMBER:	<b>T-301</b>

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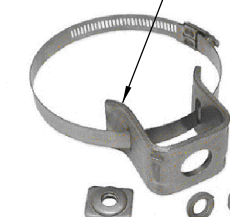
EUPEN CABLE LENGTH	
EXISTING HYBRID CABLE QUANTITY	3
NOTE: EXISTING HYBRID TO REMAIN, SEE ABOVE TEMPLATE	

mmWAVE JUMPER CABLE INFO			
FIBER JUMPER: RAYCAP SPD TO ANTENNA/RADIO (mmW)			
	QUANTITY	LENGTH	
ALPHA SECTOR	4	16.4 FT *	5 m
BETA SECTOR	4	16.4 FT *	5 m
GAMMA SECTOR	4	16.4 FT *	5 m
ALL SECTORS MUST HAVE THE SAME JUMPER LENGTHS			
* PREFERRED FIBER JUMPER LENGTH OF 5m (16.4')			
* MAXIMUM FIBER JUMPER LENGTH OF 6m (19.7')			

**A CABLE LENGTHS: ERICSSON COLO**

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UNIVERSAL STANDOFF KIT,  
SITE PRO 1 PART # STK2-U  
OR APPROVED EQUIVALENT



MANUFACTURER: SITE PRO 1  
  
 MODEL: STK2-U  
 UNIVERSAL TOWER STANDOFF KIT  
 FITS 1-1/2" DIA. TO 3" DIA. ROUND MEMBERS  
  
 MODEL: 78SS-A  
 7/8" STACKABLE SNAP-IN HANGER  
  
 MODEL: BCU78X  
 UNIVERSAL BARREL CUSHION  
 ACCEPTS 0.16" TO 0.55" O.D. CABLES  
 7/8" MATING HANGER

7/8" STACKABLE SNAP-IN HANGER,  
SITE PRO 1 PART # 78SS-A OR  
APPROVED EQUIVALENT



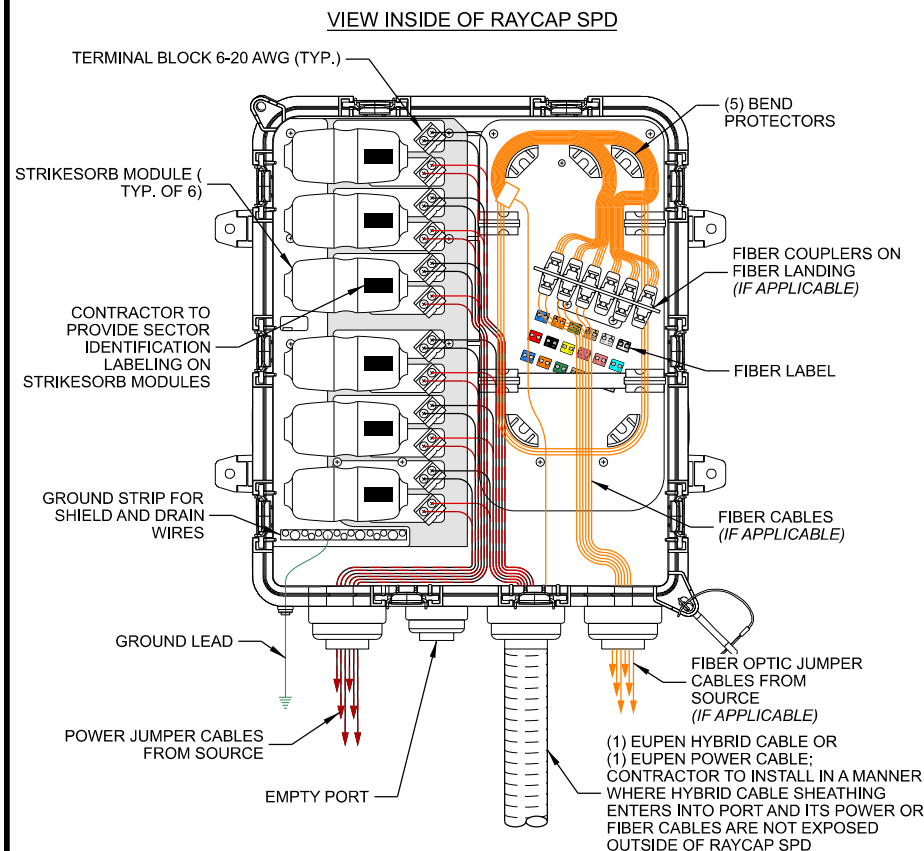
UNIVERSAL BARREL CUSHIONS,  
SITEPRO1 PART # BCU78X;  
ACCEPTS 0.16" TO 0.55" O.D.  
CABLES; MATING HANGER SIZE  
7/8"

**C JUMPER ATTACHMENT**

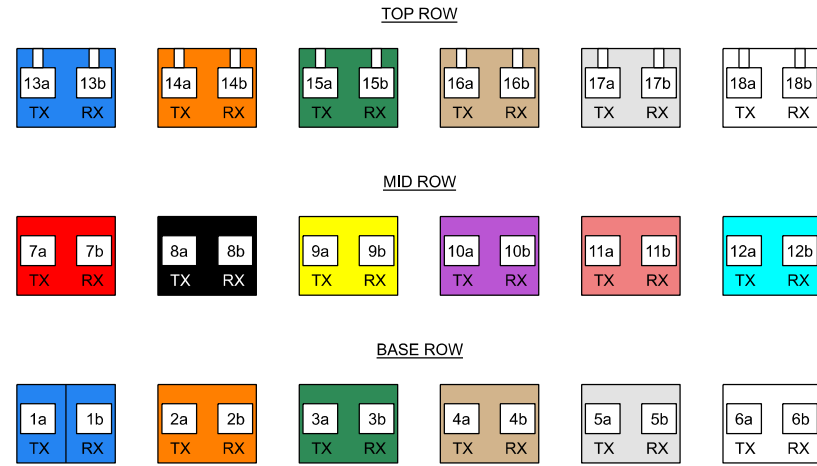
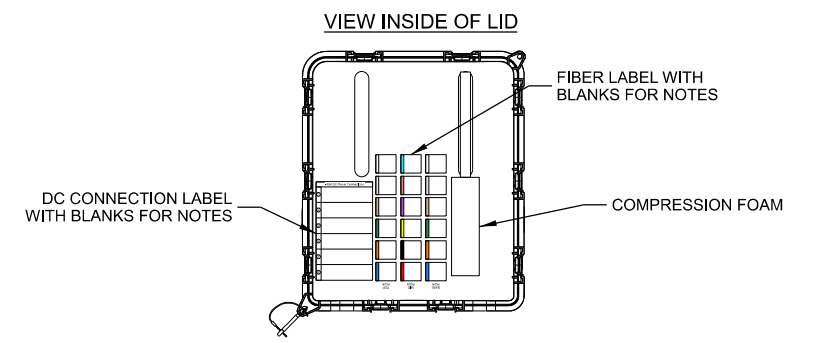
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**CABLE DETAILS  
CASE (783314)  
RACINE, WISCONSIN**



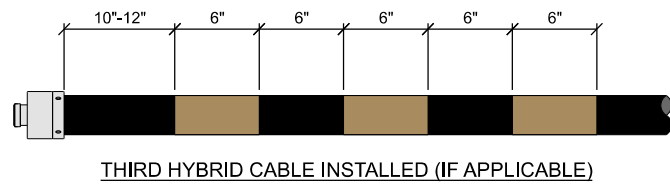
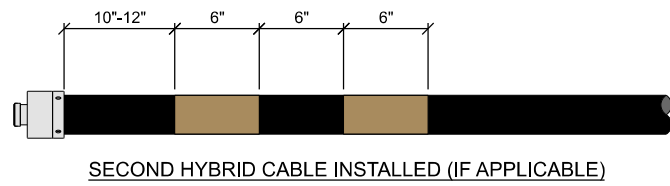
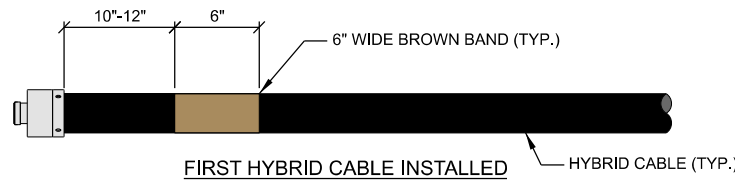
**D RAYCAP SURGE PROTECTOR DEVICE (SPD) CABLING**



**E FIBER LABEL**

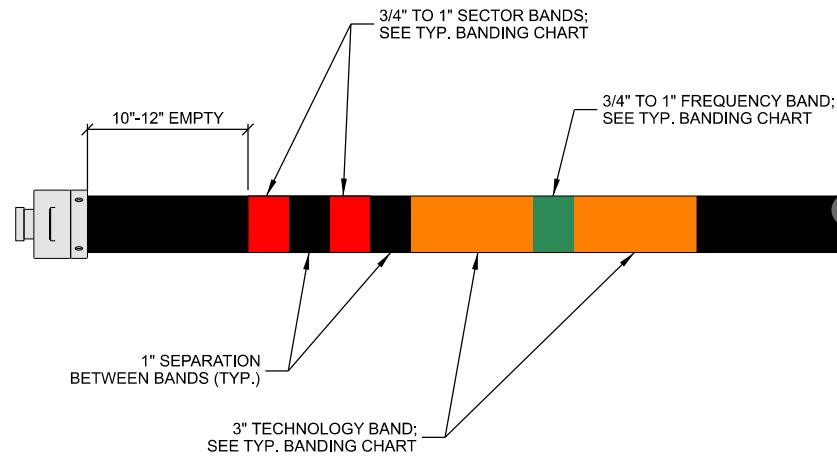
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ADP	11/30/20	REV. A
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PROJECT NUMBER:	27828	
SET TYPE:	DRAFT	
SHEET NUMBER:	<b>T-501</b>	

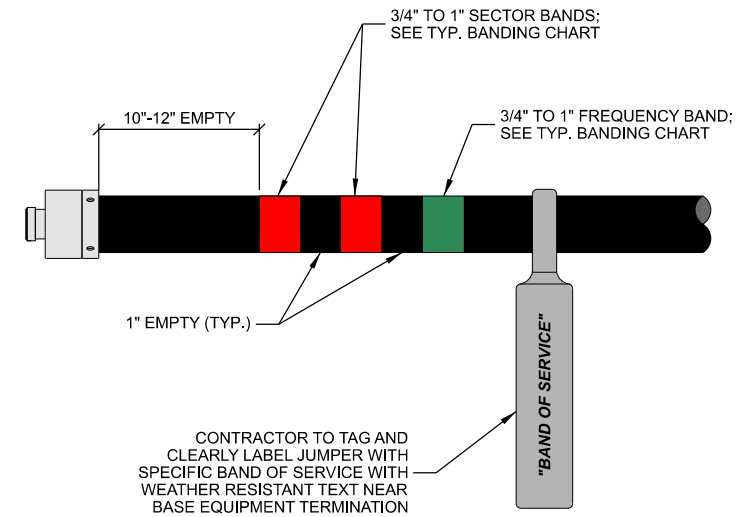


- NOTES:**
1. AT THE TOP OF THE TOWER/BUILDING/WATER TOWER AND AT THE ENTRY POINT OF THE GROUND LEVEL JUNCTION BOX, HYBRID CABLES MUST BE Banded IN ACCORDANCE TO THE ILLUSTRATION ABOVE.
  2. REFER TO LATEST EDITION OF U.S. CELLULAR STANDARD: STD72 TO VERIFY CURRENT COLOR CODING

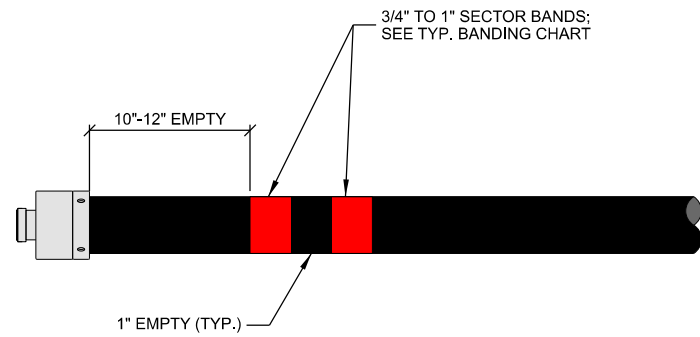
**A TYP. HYBRID COLOR CODE**



**B TYP. COAX JUMPER BANDING**



**C TYP. POWER & FIBER JUMPER BANDING**



RET SECTOR BAND			
SECTOR	ASSIGNED COLOR	LINE 1	LINE 2
ALPHA	RED	(1) RED BAND	(2) RED BANDS
BETA	WHITE	(1) WHITE BAND	(2) WHITE BANDS
GAMMA	BLUE	(1) BLUE BAND	(2) BLUE BANDS

**D TYP. RET CABLE BANDING**

SECTOR BAND (MOST COMMON CASE: SINGLE TECHNOLOGY WITHIN THE SECTOR)					
SECTOR	ASSIGNED COLOR	LINE 1	LINE 2	LINE 3	LINE 4
ALPHA	RED	(1) RED BAND	(2) RED BANDS	(3) RED BANDS	(4) RED BANDS
BETA	WHITE	(1) WHITE BAND	(2) WHITE BANDS	(3) WHITE BANDS	(4) WHITE BANDS
GAMMA	BLUE	(1) BLUE BAND	(2) BLUE BANDS	(3) BLUE BANDS	(4) BLUE BANDS
DELTA (IF APPLICABLE)	GREEN	(1) GREEN BAND	(2) GREEN BANDS	(3) GREEN BANDS	(4) GREEN BANDS
EPSILON (IF APPLICABLE)	VIOLET	(1) VIOLET BAND	(2) VIOLET BANDS	(3) VIOLET BANDS	(4) VIOLET BANDS
ZETA (IF APPLICABLE)	BROWN	(1) BROWN BAND	(2) BROWN BANDS	(3) BROWN BANDS	(4) BROWN BANDS

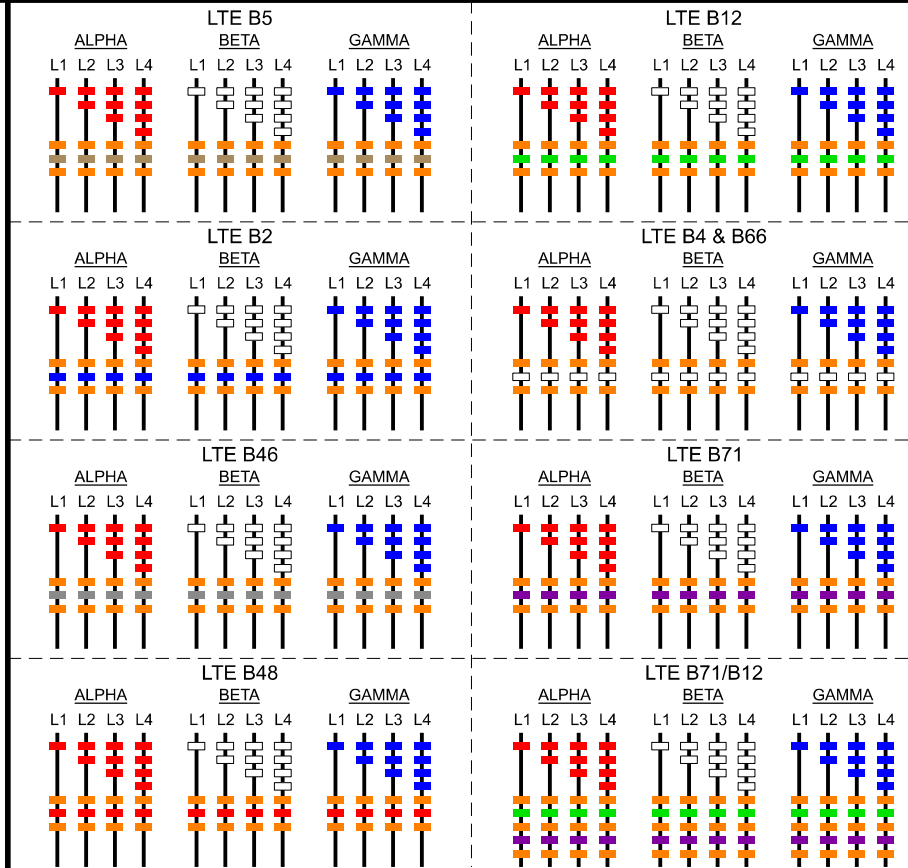
SECTOR BAND (EXCEPTION CASE: ALPHA SECTOR CDMA ON 1 & 4, LTE ON 2 & 3)					
SECTOR	ASSIGNED COLOR	LINE 1 (CDMA)	LINE 2 (LTE)	LINE 3 (LTE)	LINE 4 (CDMA)
ALPHA	RED	(1) RED BAND	(1) RED BAND	(2) RED BANDS	(2) RED BANDS

TECHNOLOGY BAND	
TECHNOLOGY	BANDING
CDMA	YELLOW
GSM	VIOLET
LTE	ORANGE

FREQUENCY BAND		
FREQUENCY	BAND	BANDING
600	B71	VIOLET
700	B12	GREEN
800/850	B5	BROWN
1900	B2	BLUE
2100	B4 & B66	WHITE
3500	B48 - CBRS	RED
5100	B46 - LAA	GREY

- NOTE:**
1. REFER TO LATEST EDITION OF U.S. CELLULAR STANDARD: STD72 TO VERIFY CURRENT COLOR CODING

**E TYP. BANDING CHART**



**F TYP. COAX COLOR CODE STANDARD**

CONSULTANT:  
**Edge**  
 Consulting Engineers, Inc.  
 624 WATER STREET  
 PRAIRIE DU SAC, WI 53578  
 608.644.1449 VOICE  
 608.644.1549 FAX  
 www.edgeconsult.com

CLIENT:  
**uscellular**  
 U.S. CELLULAR  
 8410 W. BRYN MAWR AVE.  
 SUITE 700  
 CHICAGO, IL 60631

**CABLE BANDING DETAILS**  
**CASE (783314)**  
**RACINE, WISCONSIN**

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
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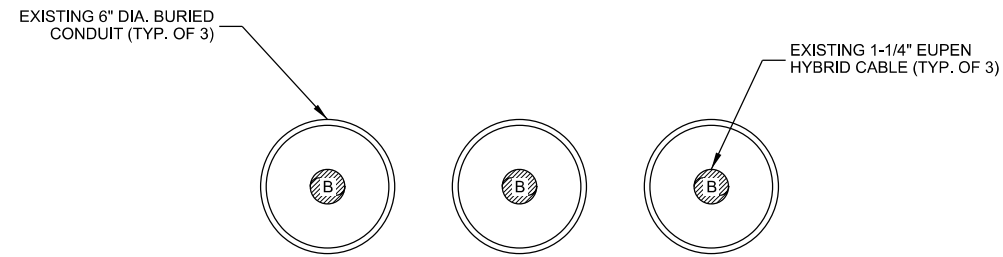
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PROJECT NUMBER: 27828

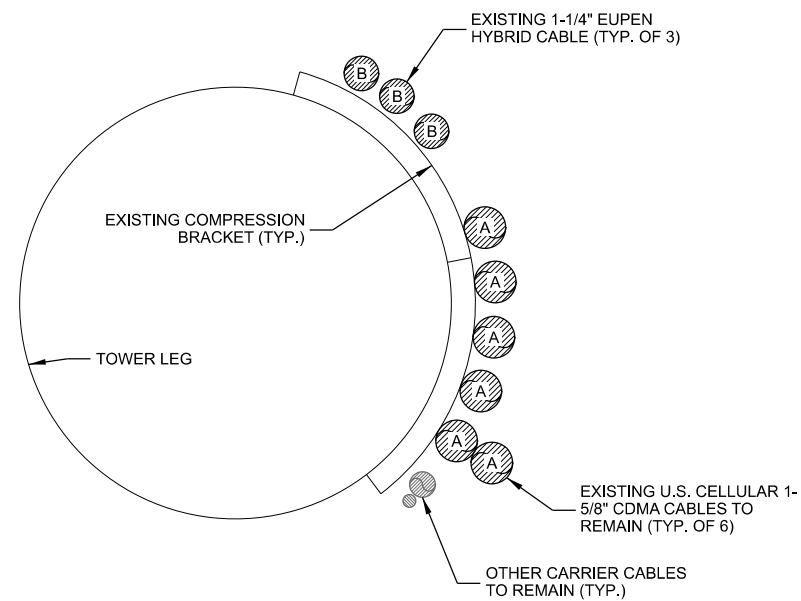
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SHEET NUMBER: **T-502**



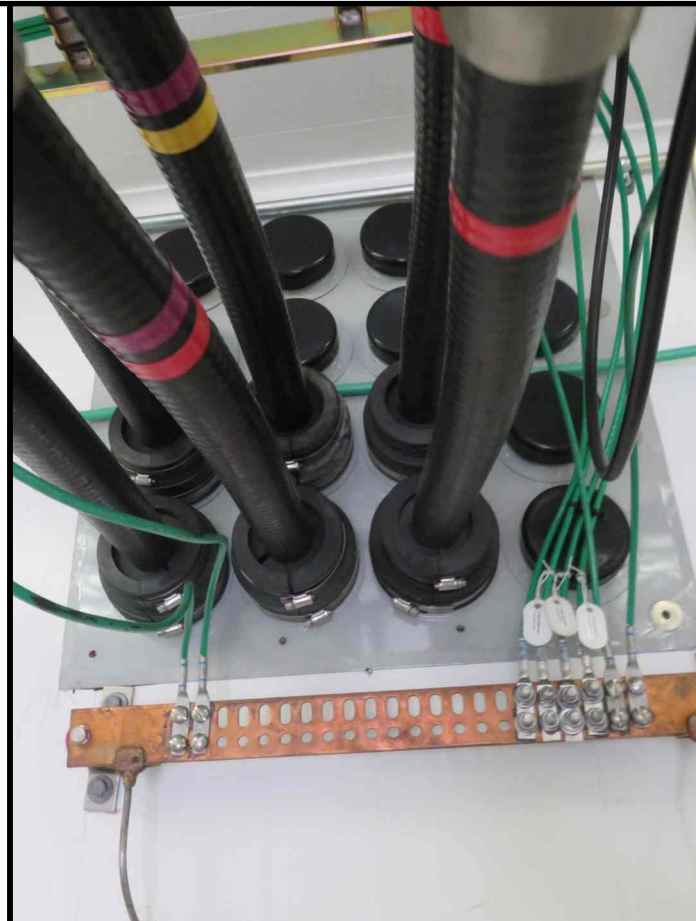


**C** EXISTING SHELTER COAX PORT (INTERIOR VIEW)



**D** EXISTING TOWER CABLE LAYOUT

COAX SYMBOL	(#) SIZE	MOUNTING TYPE	CARRIER / OWNER	TECHNOLOGY
A	(6) 1-5/8"	SNAP-INS	U.S. CELLULAR	CDMA
B	(3) HYBRID	SNAP-INS	U.S. CELLULAR	LTE



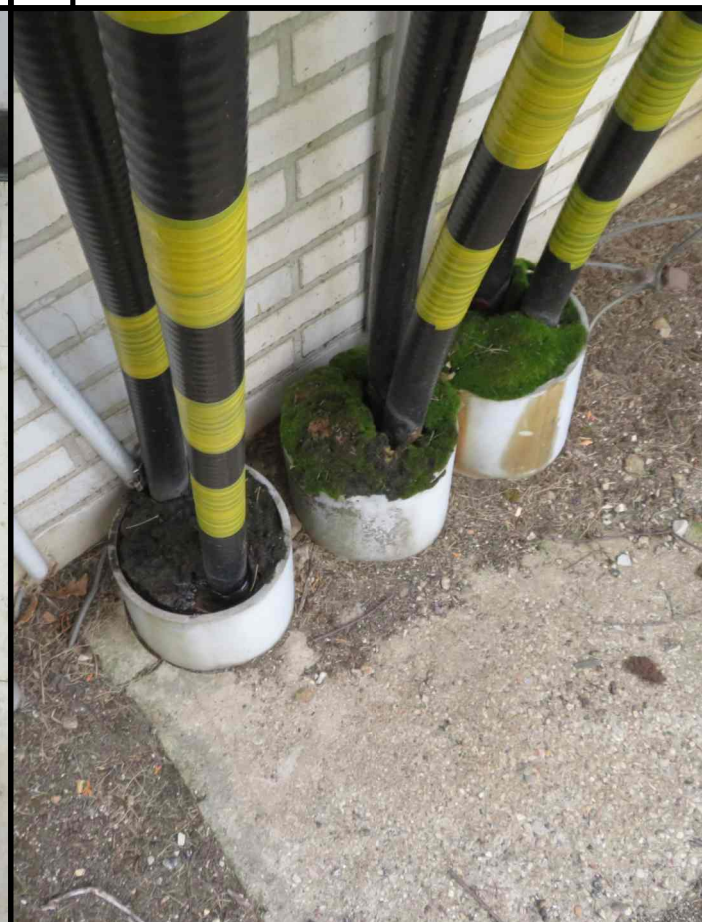
**C** SHELTER COAX PORT (SHELTER INTERIOR)



**D** SHELTER COAX PORT (SHELTER EXTERIOR)



**E** HYBRID CONDUITS (INTERIOR)



**F** CDMA CONDUITS (EXTERIOR)

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**Edge**  
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 PRAIRIE DU SAC, WI 53578  
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 608.644.1549 FAX  
 www.edgeconsult.com

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**CABLE ROUTING  
 CASE (783314)  
 RACINE, WISCONSIN**

SUBMITTAL:

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ADP	11/30/20	REV. A

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PLOT DATE:	12/1/2020
PROJECT NUMBER:	27828
SET TYPE:	DRAFT

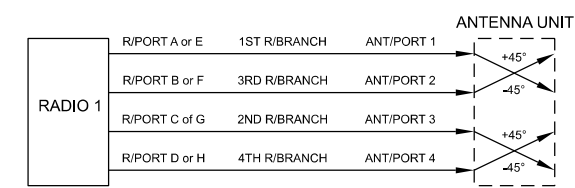
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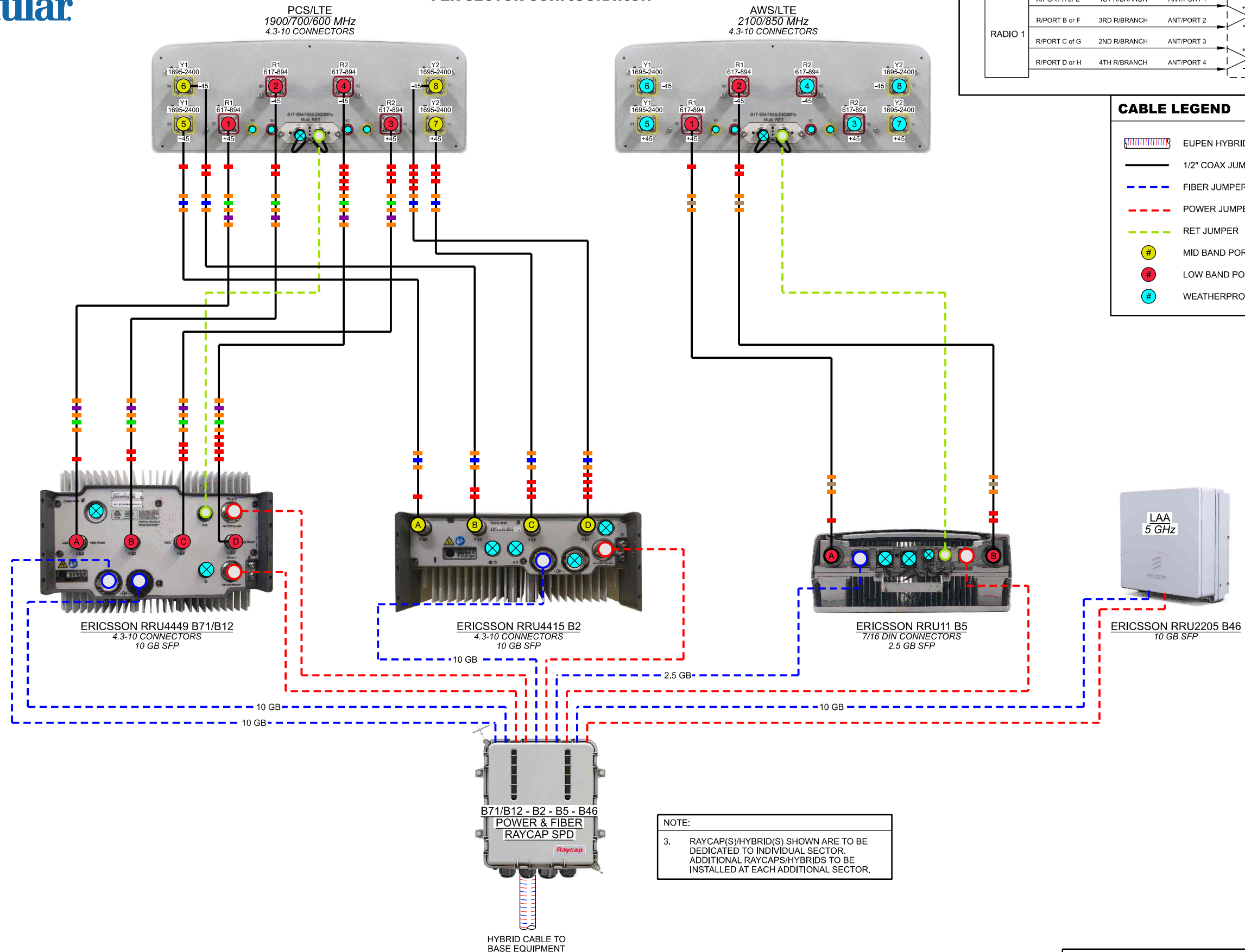
**E// B71/B12 / B2 / 2T2R B5 / B46**  
**PER SECTOR CONFIGURATION**

**CROSS POLE ANT. TO RADIO PORT DIAGRAM**



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**EXISTING PLUMBING DIAGRAM**  
 CASE (783314)  
 RACINE, WISCONSIN

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
ADP	11/30/20	REV. A

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PLOT DATE	12/1/2020
PROJECT NUMBER	27828
SET TYPE	DRAFT
SHEET NUMBER	<b>T-504</b>

- NOTES:
- ALL JUMPERS BETWEEN RADIO UNITS & ANTENNAS MUST BE THE SAME LENGTH.
  - CONTRACTOR TO INSTALL WEATHERPROOF CAP ON ALL UN-USED PORTS.

NOTE:  
 3. RAYCAP(S)/HYBRID(S) SHOWN ARE TO BE DEDICATED TO INDIVIDUAL SECTOR. ADDITIONAL RAYCAPS/HYBRIDS TO BE INSTALLED AT EACH ADDITIONAL SECTOR.

**PLUMBING DIAGRAM: DX110P-L-SS**

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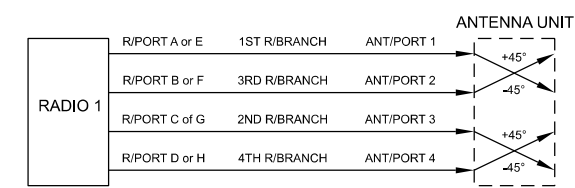
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DATE CREATED: 05/15/2020



**E// B71/B12 / B2 / 2T2R B5 / B46 / mmWAVE**  
**PER SECTOR CONFIGURATION**

**CROSS POLE ANT. TO RADIO PORT DIAGRAM**



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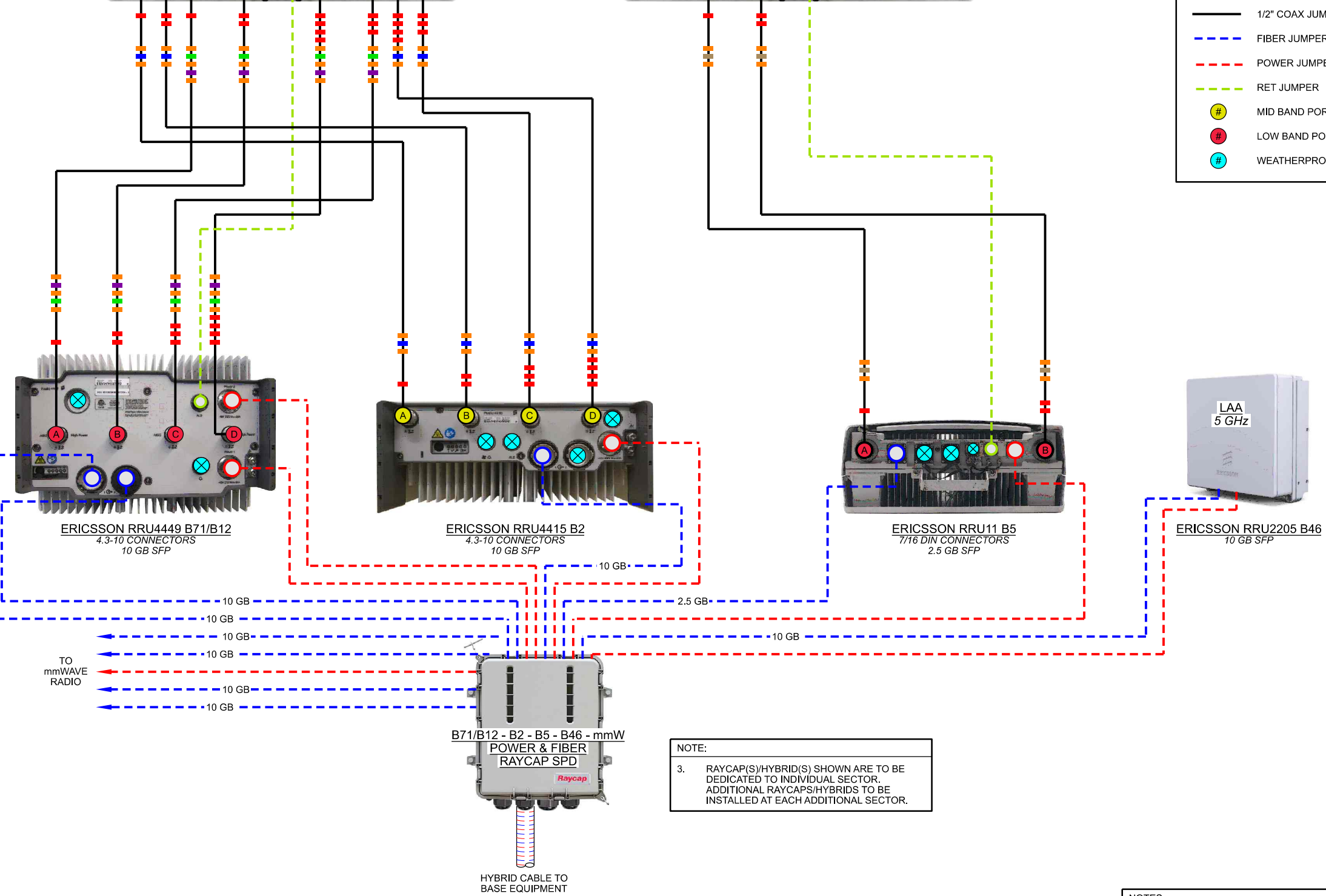
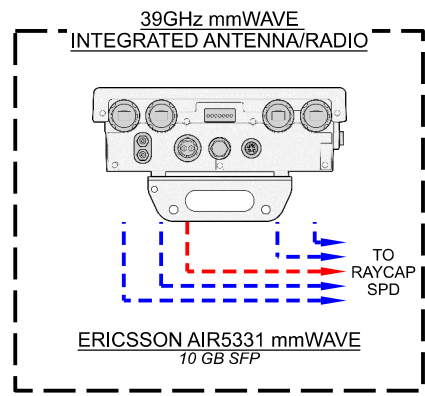
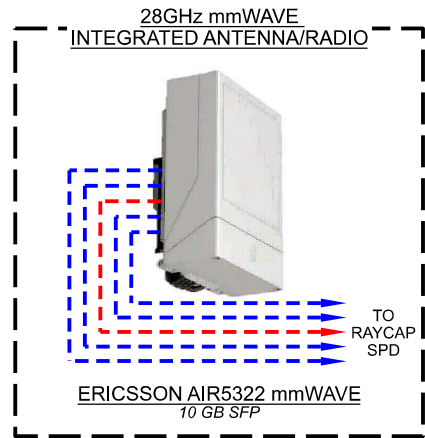
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**FINAL PLUMBING DIAGRAM**  
 CASE (783314)  
 RACINE, WISCONSIN



**CABLE LEGEND**

- EUPEN HYBRID CABLE
- 1/2" COAX JUMPER
- FIBER JUMPER
- POWER JUMPER
- RET JUMPER
- MID BAND PORT
- LOW BAND PORT
- WEATHERPROOF CAP



NOTE:  
 3. RAYCAP(S)/HYBRID(S) SHOWN ARE TO BE DEDICATED TO INDIVIDUAL SECTOR. ADDITIONAL RAYCAPS/HYBRIDS TO BE INSTALLED AT EACH ADDITIONAL SECTOR.

**PLUMBING DIAGRAM: DX110P-L-mmW-SS**

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- NOTES:
- ALL JUMPERS BETWEEN RADIO UNITS & ANTENNAS MUST BE THE SAME LENGTH.
  - CONTRACTOR TO INSTALL WEATHERPROOF CAP ON ALL UN-USED PORTS.

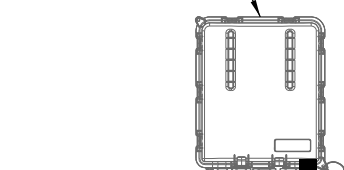
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ADP	11/30/20	REV. A

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PLOT DATE:	12/11/2020
PROJECT NUMBER:	27828
SET TYPE:	DRAFT
SHEET NUMBER:	<b>T-505</b>

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DATE CREATED: 11/21/2020

RAYCAP SPD;  
SEE T-001 FOR DETAIL



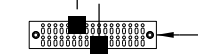
WEATHERPROOF  
CABLE GROUND KIT

PROPOSED HYBRID CABLE

ROUTE TO  
BASE EQUIPMENT

**DETAIL NOT REQUIRED**

RAYCAP SPD GROUND KIT  
#6 AWG THHN GREEN  
INSULATED STRANDED CU  
WIRE CONNECTION TO  
GROUND BAR WITH 2 HOLE  
LONG BARREL LUG

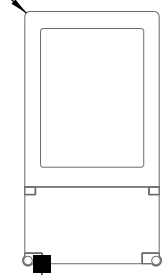


EQUIPMENT GROUND BAR FOR  
CONNECTION OF MULTIPLE  
GROUND KITS AT ONE LEVEL  
MOUNT TO TOWER STEEL

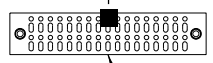
CABLE GROUND KIT  
#6 AWG INSULATED STRANDED CU WIRE  
CONNECTION TO GROUND BAR WITH 2  
HOLE LONG BARREL LUG

**A** TYPICAL UPPER RAYCAP SPD GROUNDING

INTEGRATED  
ANTENNA/RADIO (TYP.);  
SEE T-001 FOR DETAIL



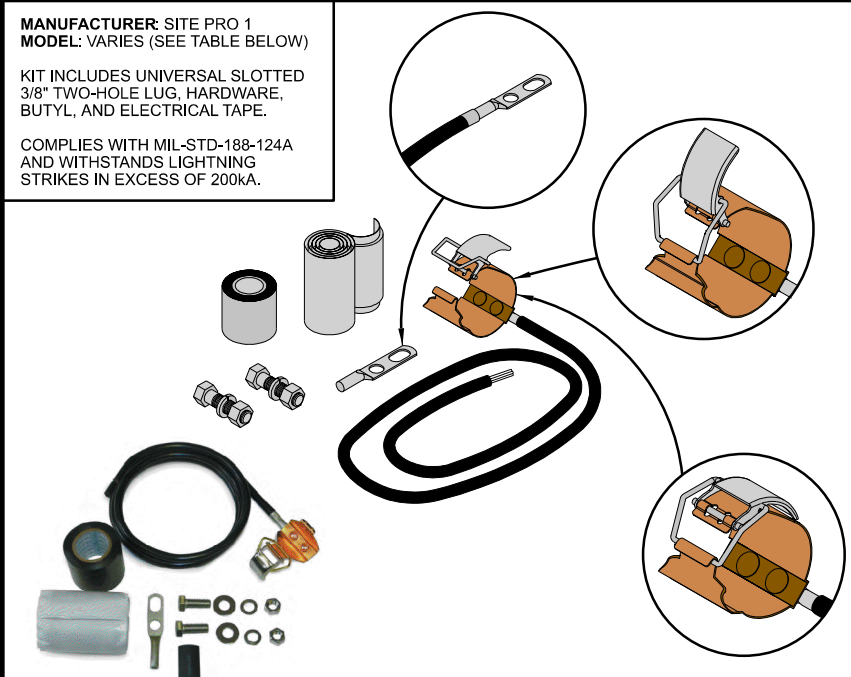
ANTENNA/RADIO GROUND KIT  
#6 AWG THHN GREEN  
INSULATED STRANDED CU WIRE  
CONNECTION TO GROUND BAR  
WITH 2 HOLE LONG BARREL  
LUG (TYP.)



SECTOR GROUND BAR FOR  
CONNECTION OF MULTIPLE  
GROUND KITS AT ONE LEVEL  
MOUNT TO TOWER STEEL

**B** TYPICAL UPPER ANTENNA/RADIO GROUNDING

MANUFACTURER: SITE PRO 1  
MODEL: VARIES (SEE TABLE BELOW)  
  
KIT INCLUDES UNIVERSAL SLOTTED  
3/8" TWO-HOLE LUG, HARDWARE,  
BUTYL, AND ELECTRICAL TAPE.  
  
COMPLIES WITH MIL-STD-188-124A  
AND WITHSTANDS LIGHTNING  
STRIKES IN EXCESS OF 200kA.



PART #	CABLE SIZE & TYPE	LENGTH	LUG	WEIGHT
GK-C12	1/2" CORRUGATED	5'	UNATTACHED	1.50 LB.
GK-C78	7/8" CORRUGATED	5'	UNATTACHED	1.65 LB.
GK-C114	1-1/4" CORRUGATED	5'	UNATTACHED	1.70 LB.
GK-C158	1-5/8" CORRUGATED	5'	UNATTACHED	1.70 LB.
GK-C214	2-1/4" CORRUGATED	5'	UNATTACHED	1.80 LB.

**C** CLIP ON GROUND KIT

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**GROUNDING DETAILS**  
CASE (783314)  
RACINE, WISCONSIN

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