







BIRCH ST

4TH AVE

BROADWAY ST

3RD AVE

EXISTING  
PENTHOUSE

EXISTING U.S. CELLULAR EQUIPMENT  
ON ROOFTOP-MOUNTED PLATFORM;  
SEE A-101 FOR DETAILS

EXISTING U.S. CELLULAR BETA &  
GAMMA SECTOR ANTENNAS;  
SEE C-102 FOR DETAILS

EXISTING U.S. CELLULAR ALPHA  
SECTOR ANTENNAS;  
SEE C-102 FOR DETAILS

NOTES:

1. AERIAL IMAGE FROM GOOGLE EARTH CAPTURED ON 09/26/2019.
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 AND SITE PHOTOS.

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:

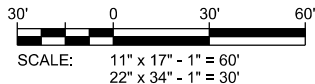
**U.S. Cellular**  
U.S. CELLULAR  
8410 W. BRYN MAWR AVE.  
SUITE 700  
CHICAGO, IL 60631

**SITE PLAN**  
**BARABOO DT (785430)**  
**BARABOO, WISCONSIN**

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	10/16/2019	REV. A

CHECKED BY:	KCB
PLOT DATE:	10/16/2019
PROJECT NUMBER:	21206
SET TYPE:	DRAFT
SHEET NUMBER:	<b>C-101</b>







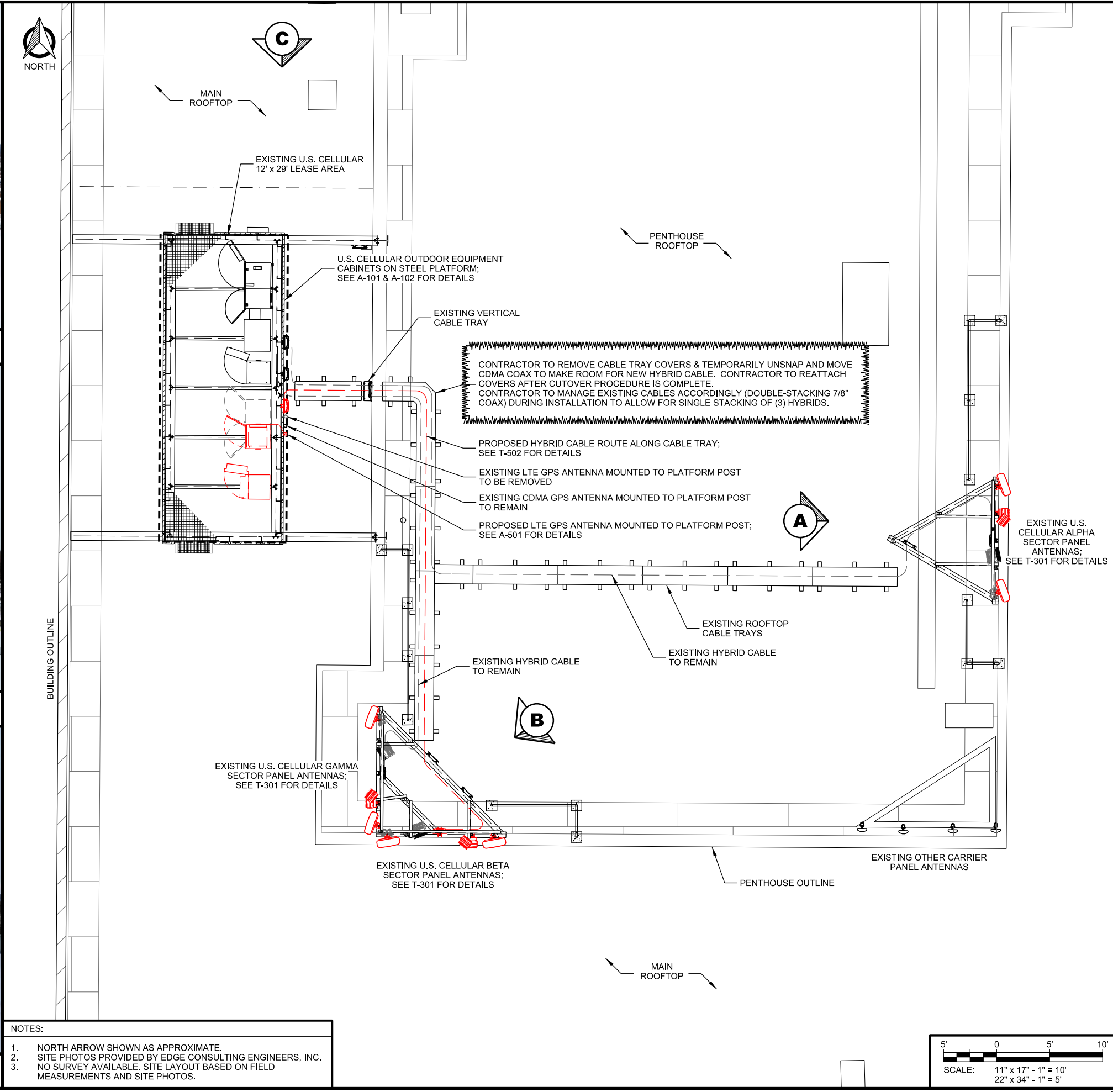
**A** U.S. CELLULAR ALPHA SECTOR



**B** U.S. CELLULAR BETA & GAMMA SECTOR



**C** EQUIPMENT PLATFORM



- NOTES:
1. NORTH ARROW SHOWN AS APPROXIMATE.
  2. SITE PHOTOS PROVIDED BY EDGE CONSULTING ENGINEERS, INC.
  3. NO SURVEY AVAILABLE. SITE LAYOUT BASED ON FIELD MEASUREMENTS AND SITE PHOTOS.

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U.S. CELLULAR  
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SUITE 700  
CHICAGO, IL 60631

**ENLARGED SITE PLAN**  
**BARABOO DT (785430)**  
**BARABOO, WISCONSIN**

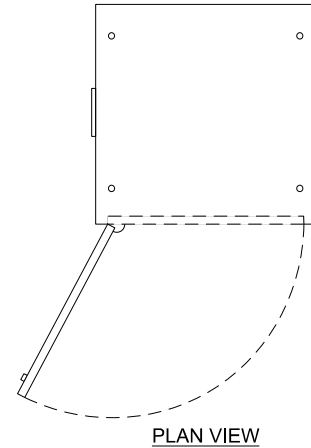
SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	10/16/2019	REV. A

CHECKED BY:	KCB
PLOT DATE:	10/16/2019
PROJECT NUMBER:	21206
SET TYPE:	DRAFT
SHEET NUMBER:	<b>C-102</b>

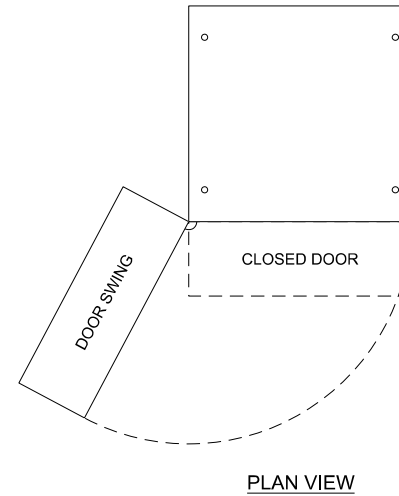


**CLEARANCE REQUIREMENTS:**  
FRONT: 47.24" (1200 mm)  
REAR: 7.87" (200 mm)  
LEFT: 3.94" (100 mm)  
RIGHT: 3.94" (100 mm)

**DESCRIPTION:** GLOBAL BASE FRAME (GBF)  
**MANUFACTURER:** ERICSSON  
**MODEL:** 5/BYB 701 01  
**DIMENSIONS:** 10.38" x 27.09" x 27.56" (H x W x D)  
**WEIGHT:** 80.5 LBS



**CLEARANCE REQUIREMENTS:**  
FRONT: 28" (700 mm)  
REAR: 8" (200 mm)  
LEFT: 39" (1000 mm)  
RIGHT: 10" (250 mm)



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CLIENT:

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**EQUIPMENT CABINET DETAILS**  
**BARABOO DT (785430)**  
**BARABOO, WISCONSIN**

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INT.	DATE:	DESCRIPTION:
TJT	10/16/2019	REV. A
CHECKED BY	KCB	
PLOT DATE	10/16/2019	
PROJECT NUMBER	21206	
SET TYPE	DRAFT	
SHEET NUMBER	<b>A-001</b>	

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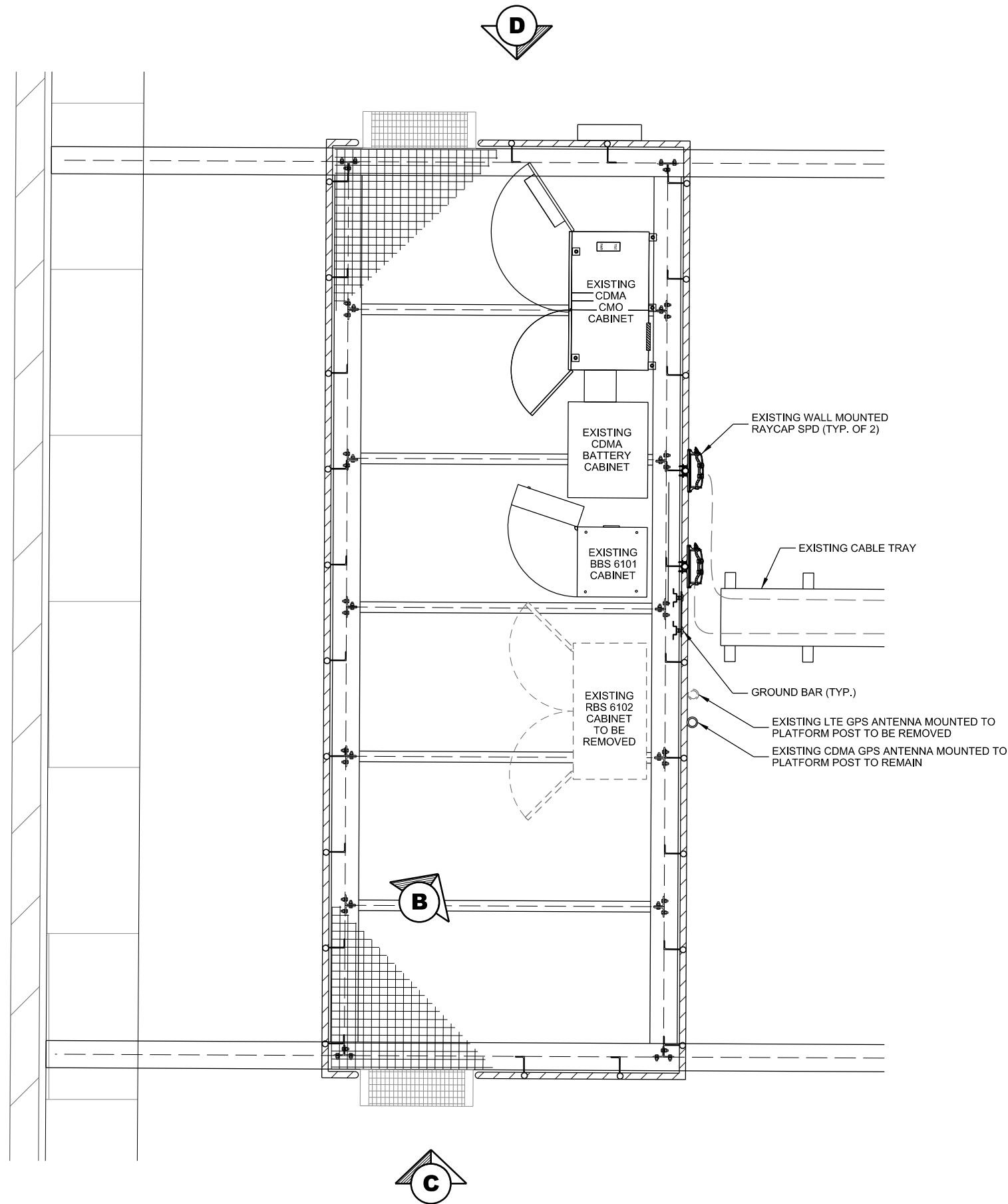
## **A** EQUIPMENT CABINET

## B BATTERY BACKUP SYSTEM

NOTES:	
1.	CONTRACTOR TO INSTALL 1/2" THICK SKIRTBOARD RUBBER MAT BENEATH CABINET; PAD TO HAVE A 1/2" SMALLER FOOTPRINT THAN THE CABINET. PERIMETER OF PAD TO BE SEALED WITH OUTDOOR GRADE 100% SILICONE CAULK.
2.	ERICSSON IS RESPONSIBLE FOR FINAL INSTALLATION OF PROPOSED BBS 6101 BATTERY SYSTEM WITH ASSOCIATED PLUMBING AND EQUIPMENT.
3.	CONTRACTOR TO VERIFY EQUIPMENT REQUIREMENTS WITH ERICSSON PRIOR TO INSTALLATION.



R:\2100\21206\CAD\CDD\Plan\A-101.dgn



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



**B EXISTING OUTDOOR EQUIPMENT CABINETS**



**C EXISTING U.S. CELLULAR EQUIPMENT PLATFORM**



**D EXISTING U.S. CELLULAR EQUIPMENT PLATFORM**

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**EQUIPMENT PLATFORM PLAN  
BARABOO DT (785430)  
BARABOO, WISCONSIN**

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TJT	10/16/2019	REV. A

CHECKED BY:	KCB
PLOT DATE:	10/16/2019
PROJECT NUMBER:	21206
SET TYPE:	DRAFT
SHEET NUMBER:	<b>A-101</b>

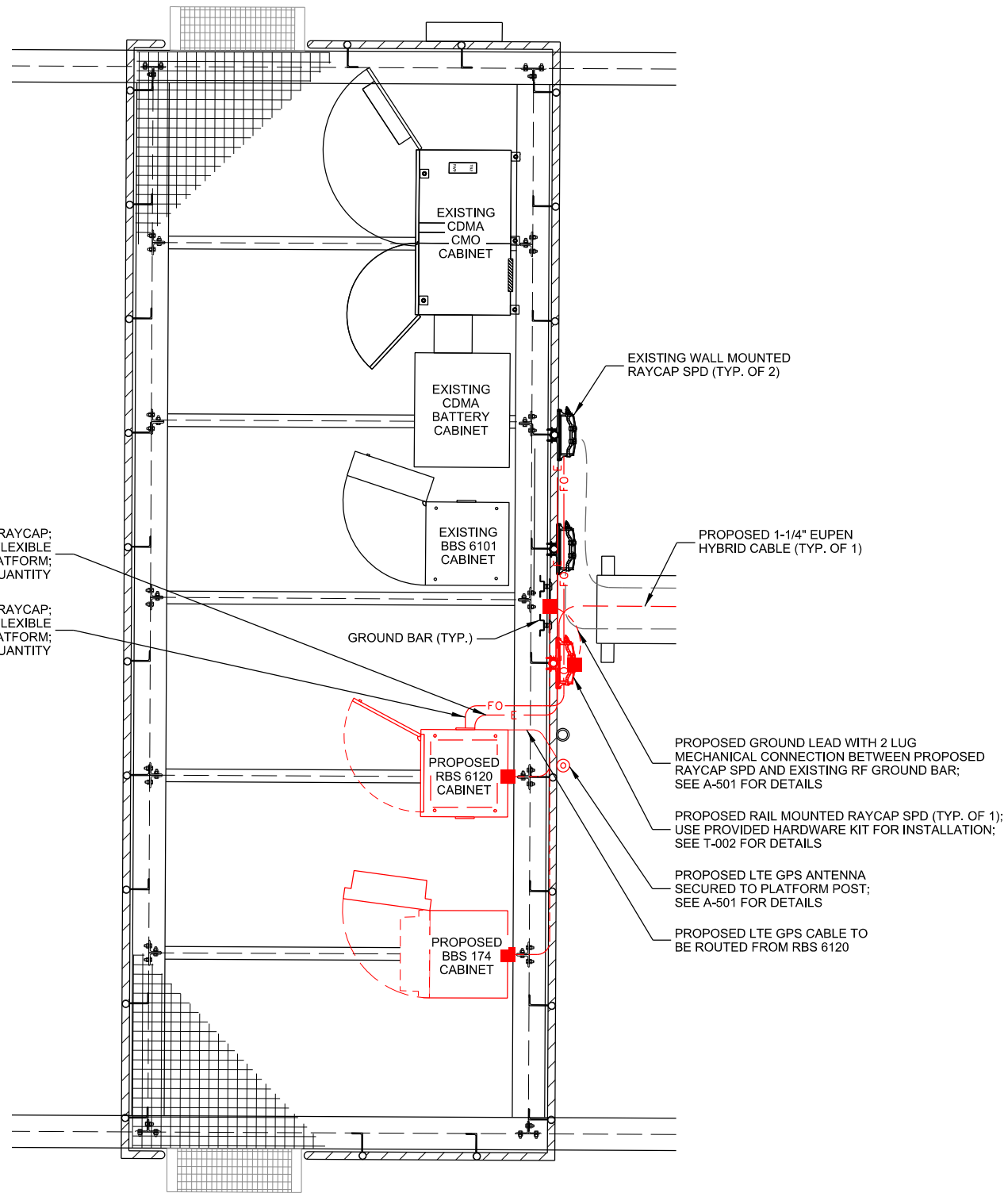


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NOTE:  
ABILITY OF PLATFORM TO ACCOMMODATE PROPOSED CHANGES TO BATTERY AND LTE CABINETS WERE NOT EVALUATED AS PART OF THIS PROJECT. STRUCTURAL CHECK BY OTHERS.

PROPOSED DC POWER JUMPERS FROM RBS 6120 CABINET TO RAYCAP;  
ROUTE JUMPERS INSIDE 2" LIQUID-TIGHT FLEXIBLE  
METALLIC CONDUIT ALONGSIDE PLATFORM;  
SEE T-502 FOR QUANTITY

PROPOSED FIBER JUMPERS FROM RBS 6120 CABINET TO RAYCAP;  
ROUTE JUMPERS INSIDE 2" LIQUID-TIGHT FLEXIBLE  
METALLIC CONDUIT ALONGSIDE PLATFORM;  
SEE T-502 FOR QUANTITY



**A** **PLATFORM EQUIPMENT LAYOUT (PROPOSED)**  
SCALE: 11" x 17" - 1/4" = 1'-0"  
22" x 34" - 1/2" = 1'-0"

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**EQUIPMENT PLATFORM PLAN**  
**BARABOO DT (785430)**  
**BARABOO, WISCONSIN**

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	10/16/2019	REV. A

CHECKED BY: KCB

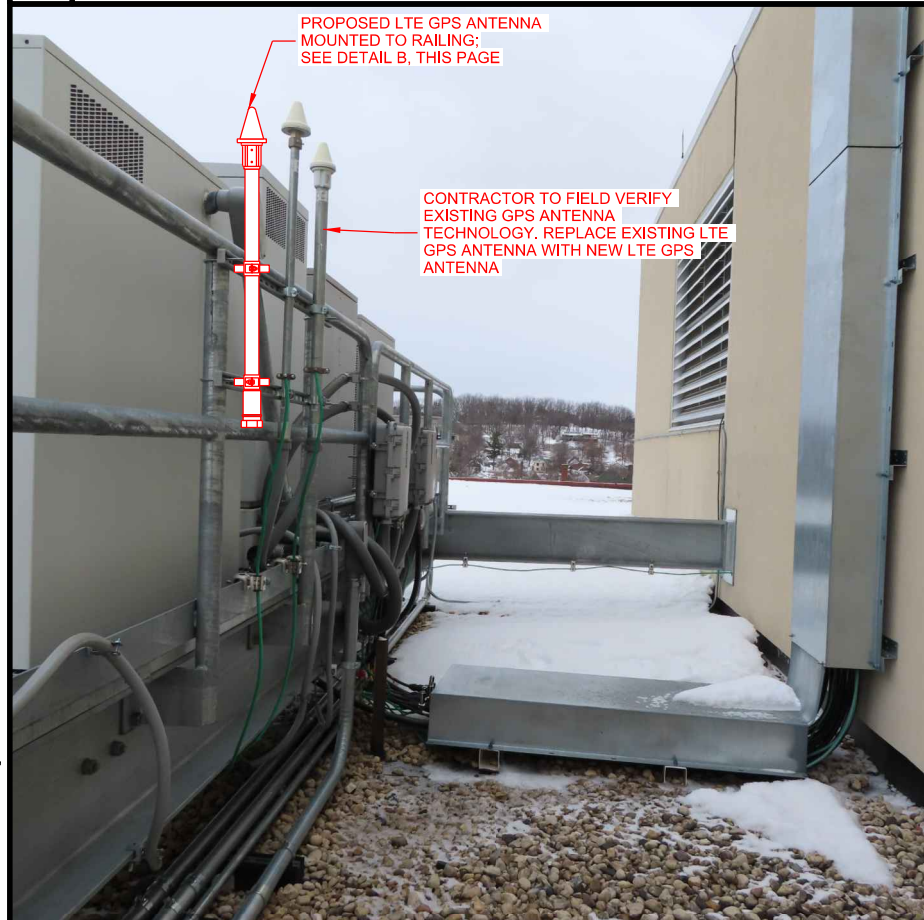
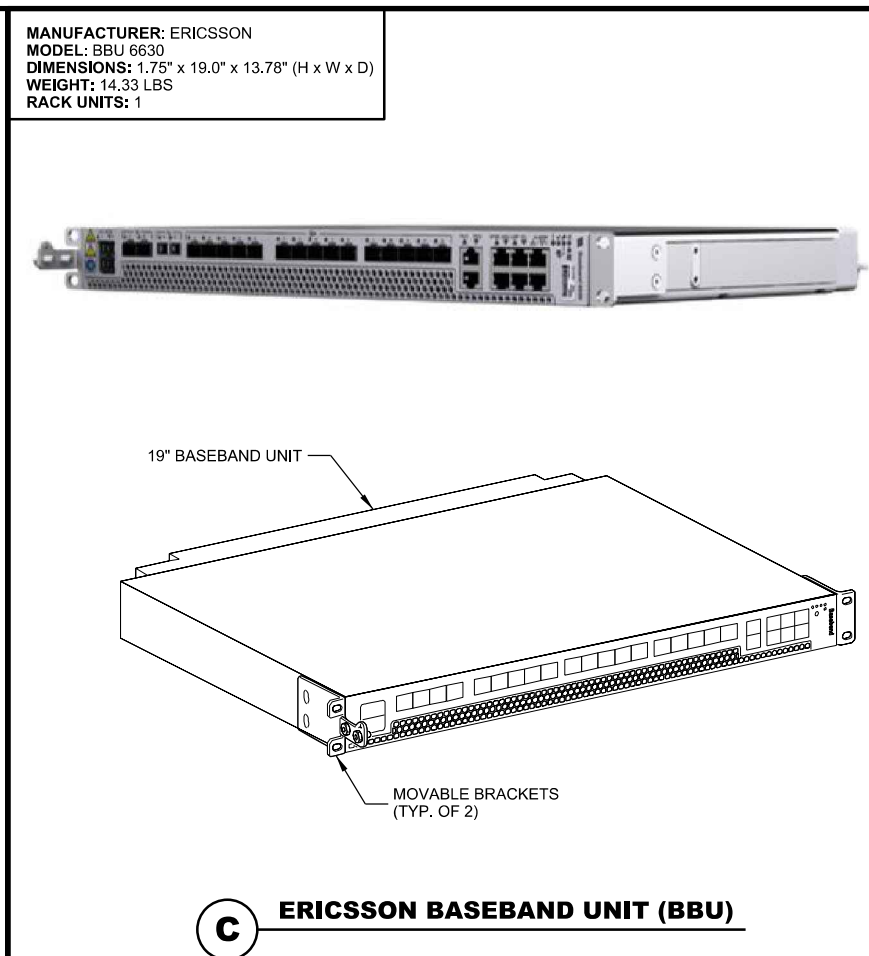
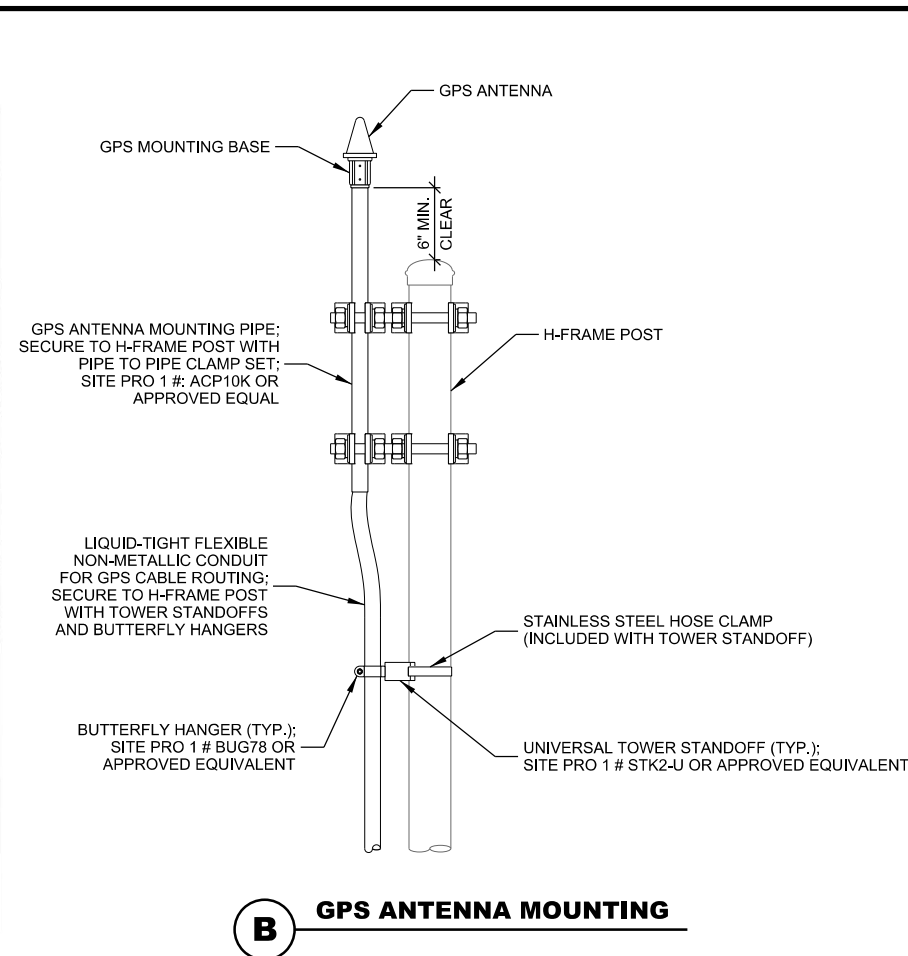
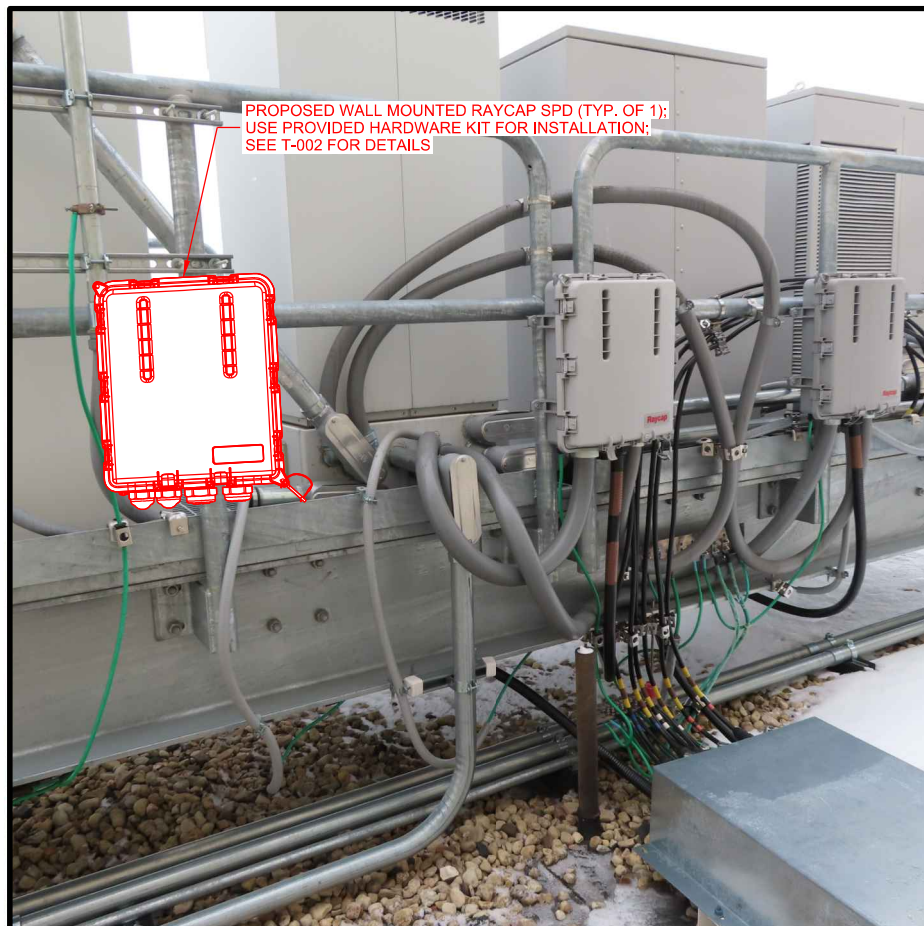
PLOT DATE: 10/16/2019

PROJECT NUMBER: 21206

SET TYPE: DRAFT

SHEET NUMBER: **A-102**





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CONSULTANT:



**CLIENT:**



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

**EQUIPMENT PLATFORM DETAILS**  
**BARABOO DT (785430)**  
**BARABOO, WISCONSIN**

SUBMITTAL:

[illegible]

CHECKED  
BY

KCB

PLOT  
DATE

10/16/2019

PROJECT  
NUMBER

21206

SET  
TYPE

DRAFT

SHEET  
NUMBER

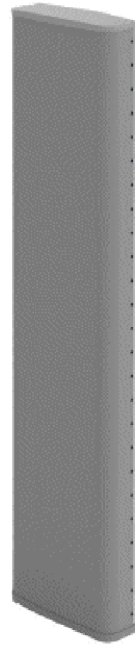
**A-501**



TWIN658LU000G-T

TWIN DUAL BAND | 8-PORT PANEL | XPOL | 65° | 2449 MM (96.4 IN)

PRODUCT OVERVIEW	Frequency Range (MHz)	617-906	617-906	1695-2700	1695-2700
	Array	■ R1	■ R2	■ Y1	■ Y2
	Connector	1-2	3-4	5-6	7-8
	Connector Type	4.3-10 Female Long Neck	4.3-10 Female Long Neck	4.3-10 Female Long Neck	4.3-10 Female Long Neck
	Polarization	XPOL	XPOL	XPOL	XPOL
	Azimuth Beamwidth (avg)	65°	65°	65°	65°
	Electrical Downtilt	0-10°	0-10°	2-10°	2-10°
	Dimensions	2449 x 666 x 216 mm (96.4 x 26.2 x 8.5 in)			



ELECTRICAL SPECIFICATIONS Low Band

■ R1 ■ R2

Frequency Range		MHz	(2x) 617-906		
Frequency Sub-Range		MHz	617-698	698-798	800-906
Polarization		---	(2x) ±45°		
Gain	Low Tilt	dBi	15.6	15.9	15.3
	Mid Tilt	dBi	15.5	15.9	15.3
	High Tilt	dBi	15.4	15.8	15.1
	Over all Tilts	dBi	15.5 ± 0.8	15.9 ± 0.5	15.3 ± 0.5
	Max Gain	dBi	16.3	16.4	15.8
Azimuth Beamwidth (3 dB)		degrees	73.1 ± 5.8	73.0 ± 5.7	69.6 ± 6.4
Elevation Beamwidth (3 dB)		degrees	11.5 ± 1.0	9.9 ± 0.7	8.7 ± 0.7
Electrical Downtilt		degrees	0-10		
Impedance		Ohms	50		
VSWR		---	1.5:1		
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBm (dBo)	< -110 (< -153)		
Front-to-Back Ratio ± 30° @ 180° from boresite		dB	> 32	> 32	> 32
Upper Sidelobe Rejection 20° Sector Above Main Beam		dB	> 20	> 21	> 19
Cross Polar Discrimination at Mechanical Boresight (0°)		dB	> 22	> 21	> 18
Maximum Power Per Port		Watts	500		
Interband/Intraband Isolation		dB	25/30	25/30	25/30

Standard values based on NGMN-P-BASTA version 9.6 recommendation.

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

REV081219NA

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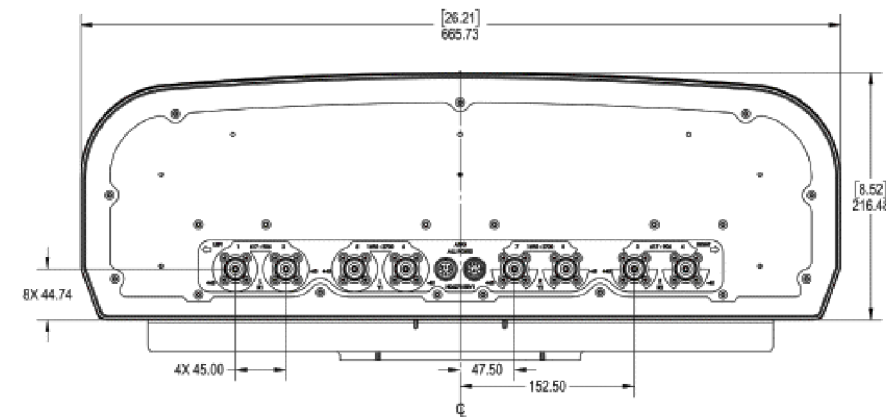
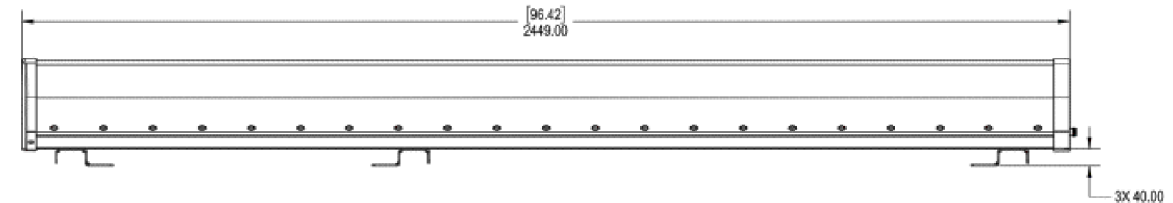
1 of 6

TWIN658LU000G-T

TWIN DUAL BAND | 8-PORT PANEL | XPOL | 65° | 2449 MM (96.4 IN)

MECHANICAL SPECIFICATIONS

Antenna	Length	mm (in)	2449 (96.4)
	Width	mm (in)	666 (26.2)
	Depth	mm (in)	216 (8.5)
	Net Weight - Antenna Only	kg (lbs)	44 (98)
Windload	Calculation	km/h (mph)	161 (100)
	Frontal	N (lbf)	1364 (308)
	Lateral	N (lbf)	240 (54)
Survival Wind Speed		km/h (mph)	241 (150)
Connector	Type	---	4.3-10 Female
	Quantity	---	8
	Position	---	Bottom
Radome Color		---	ANSI 70 Gray
Radome Material		---	UV Stabilized ABS or Hips
Lightning Protection (Grounding Type)		---	Direct Ground



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REV081219NA

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5 of 6

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ANTENNA SPECIFICATIONS  
BARABOO DT (785430)  
BARABOO, WISCONSIN

SUBMITTAL:

INT.	DATE	DESCRIPTION:
TJT	10/16/2019	REV. A

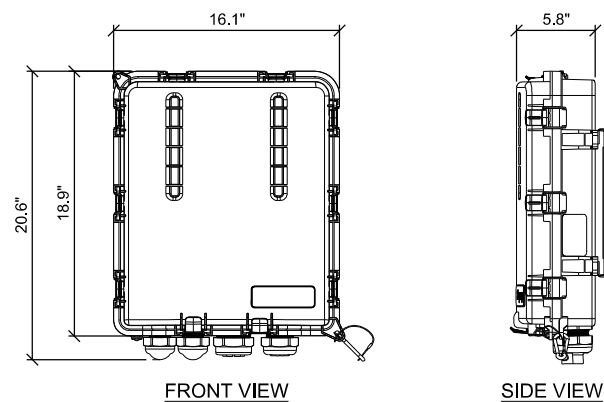
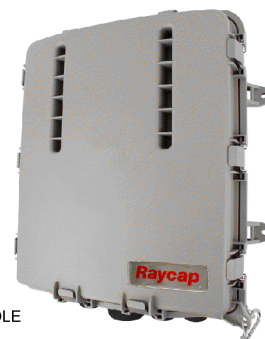
CHECKED BY	KCB
PLOT DATE	10/16/2019
PROJECT NUMBER	21206
SET TYPE	DRAFT
SHEET NUMBER	T-001



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

V-CLAMP FOR  
MOUNTING TO POLE

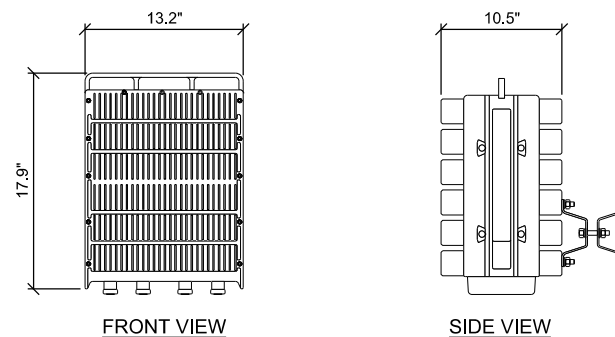
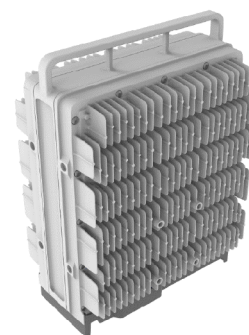
**BOTTOM VIEW**



## A RAYCAP SURGE PROTECTOR DEVICE (SPD)

DUAL ERS BRACKET

PLAN VIEW

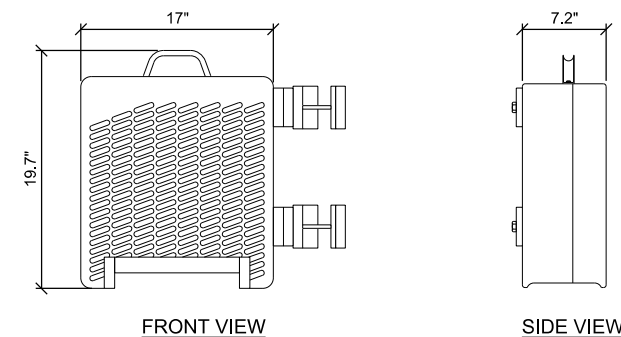


NOTES:
1. REMOTE RADIO UNITS MUST BE POWERED UP WITHIN 48 HOURS OF INSTALLATION.

**B REMOTE RADIO UNIT (RRU)**

RRU SUPPORT KIT

PLAN VIEW

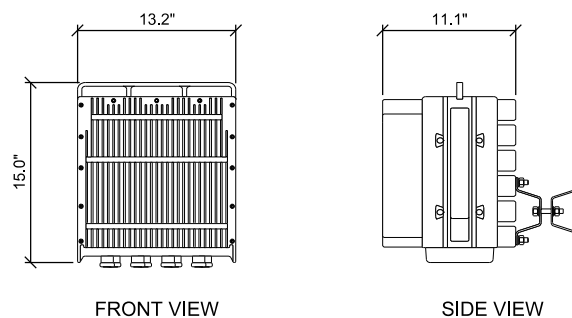
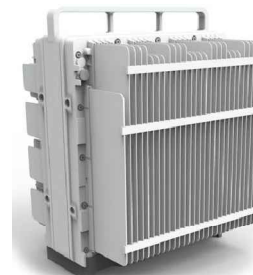


NOTES:
1. REMOTE RADIO UNITS MUST BE POWERED UP WITHIN 48 HOURS OF INSTALLATION.

**C REMOTE RADIO UNIT (RRU)**

DUAL ERS BRACKET

PLAN VIEW



NOTES:
1. REMOTE RADIO UNITS MUST BE POWERED UP WITHIN 48 HOURS OF INSTALLATION.

**D REMOTE RADIO UNIT (RRU)**

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## EQUIPMENT SPECIFICATIONS

INT.	DATE:	DESCRIPTION:
TJT	10/16/2019	REV. A

CHECKED BY	KCB
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PLOT DATE	10/16/2019
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PROJECT NUMBER	21206
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SET TYPE	DRAFT
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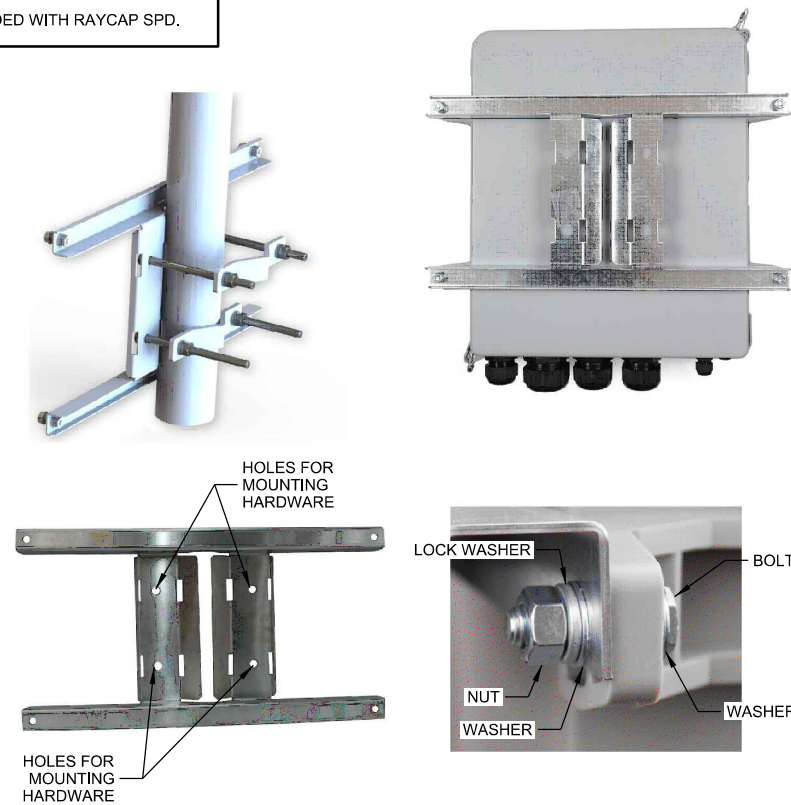
SHEET NUMBER	<b>T-002</b>
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**MANUFACTURER:** RAYCAP  
**MODEL:** MOUNTING BRACKET  
**INCLUDED WITH RAYCAP SPD.**

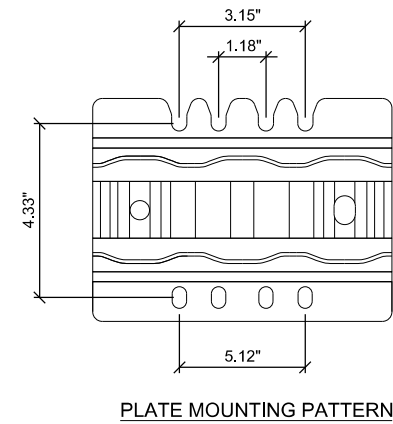


## A RAYCAP SURGE PROTECTOR DEVICE (SPD) MOUNT

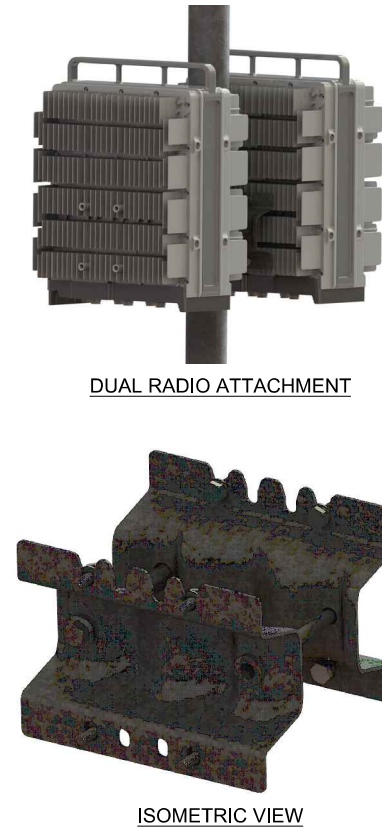
**MANUFACTURER:** ERICSSON  
**MODEL:** SXK 109 1973/2  
**WEIGHT:** 3.75 LBS

**BRACKET FOR ATTACHING TWO STANDARD OR HEAVY ERS UNITS WITH A HOLE PATTERN OF CC 30 MM AND/OR CC 80 MM., EITHER TO A POLE, WALL, ANGLE TOWER OR SQUARE TUBE.**

**BOLTS FOR ATTACHING TWO ERS UNITS ARE SUPPLIED IN THE PACKAGE.**



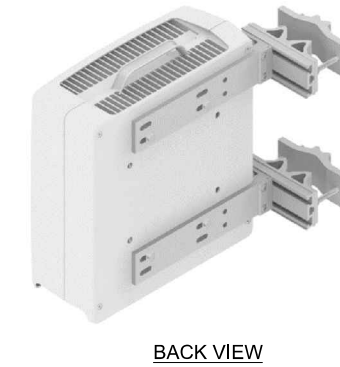
## **B** DUAL ERS BRACKET



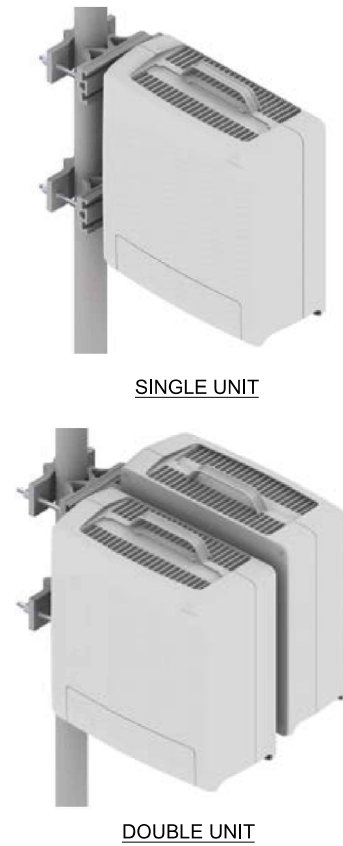
**MANUFACTURER:** ERICSSON  
**MODEL:** SXK 107 2839/1  
**WEIGHT:** 11 LBS

EXPANSION KIT ORDERED IN ADDITION TO  
SINGLE SUPPORT KIT FOR DUAL MOUNT  
**MANUFACTURER:** ERICSSON  
**MODEL:** SXK 107 2839/2  
**WEIGHT:** 4LBS. 6.5 OZ.

ALL HARDWARE INCLUDED



## C REMOTE RADIO UNIT (RRU) SUPPORT KIT



CONSULTANT:



**CLIENT:**

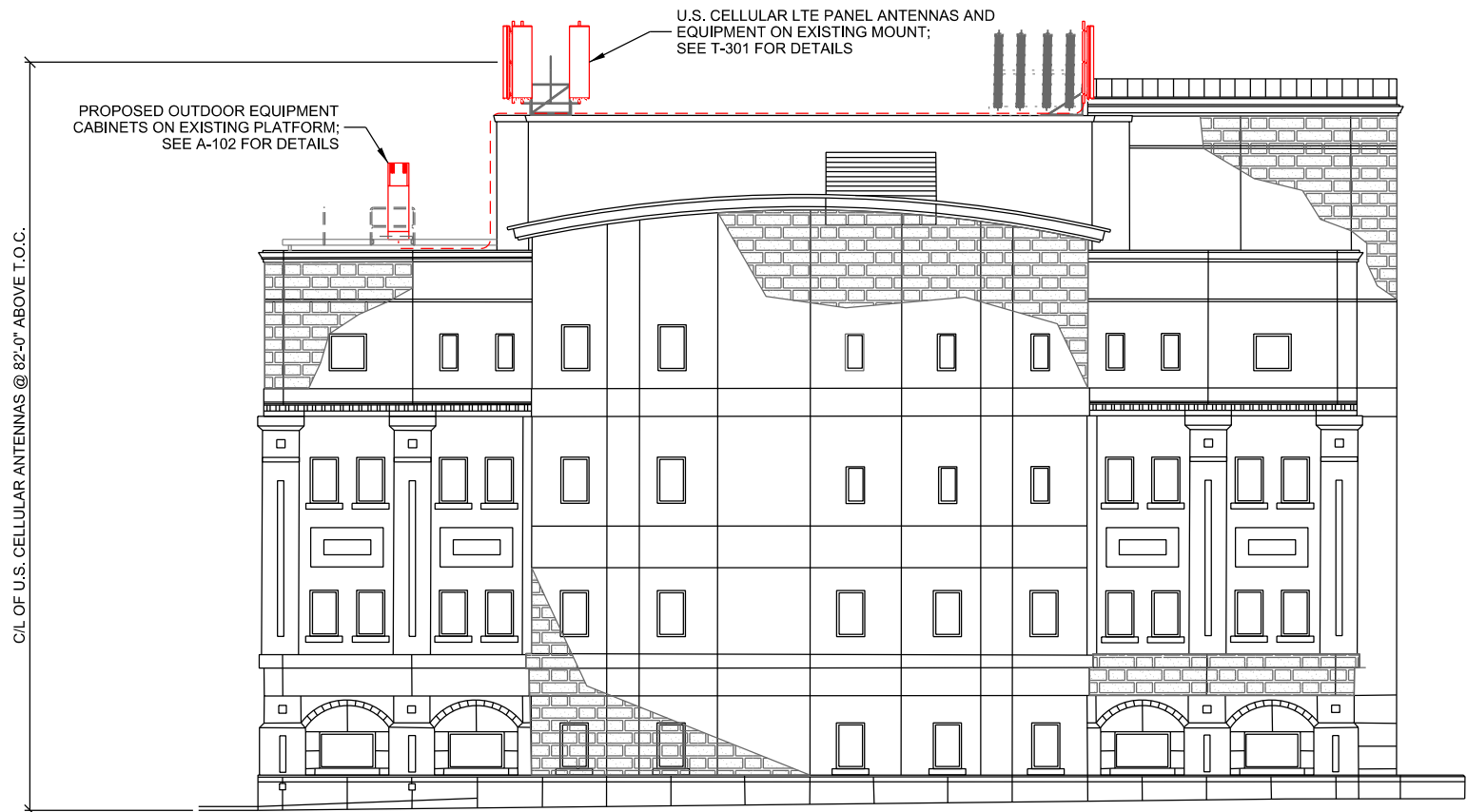


## MOUNTING SPECIFICATIONS

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PLOT DATE	10/16/2019	
PROJECT NUMBER	21206	
SET TYPE	DRAFT	
SHEET NUMBER	<b>T-003</b>	





**A SITE ELEVATION**

SCALE: 11" x 17" - 1" = 20'-0"  
22" x 34" - 1" = 10'-0"

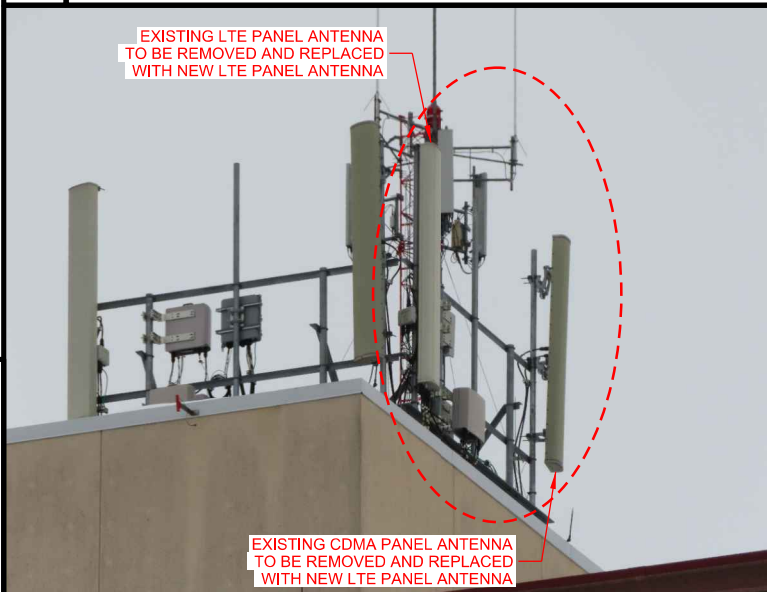
**NOTES:**

1. CONTRACTOR TO VERIFY HEIGHT AND DIRECTION OF ANTENNAS WITH PROJECT MANAGER.
2. CONTRACTOR TO VERIFY LIGHTNING ROD EXTENDS 2' MIN. ABOVE ALL ANTENNAS & EQUIPMENT.



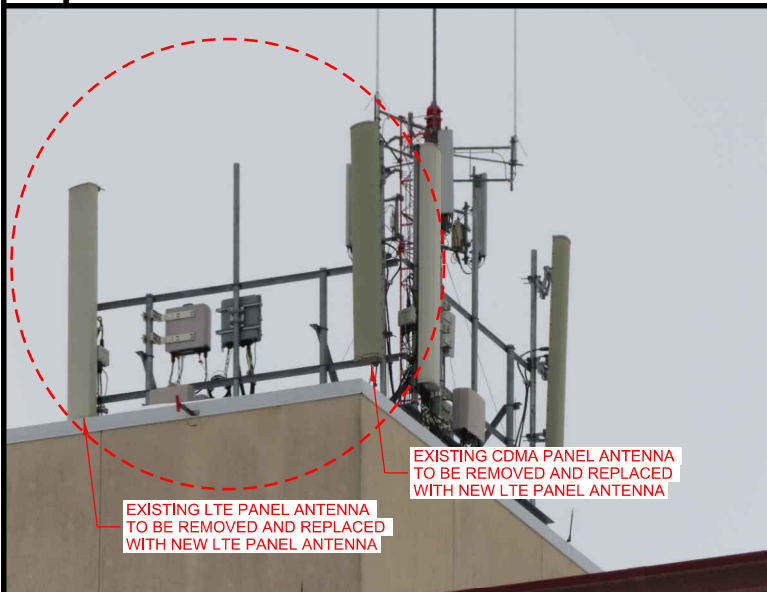
**C**

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



**D**

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



**E**

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

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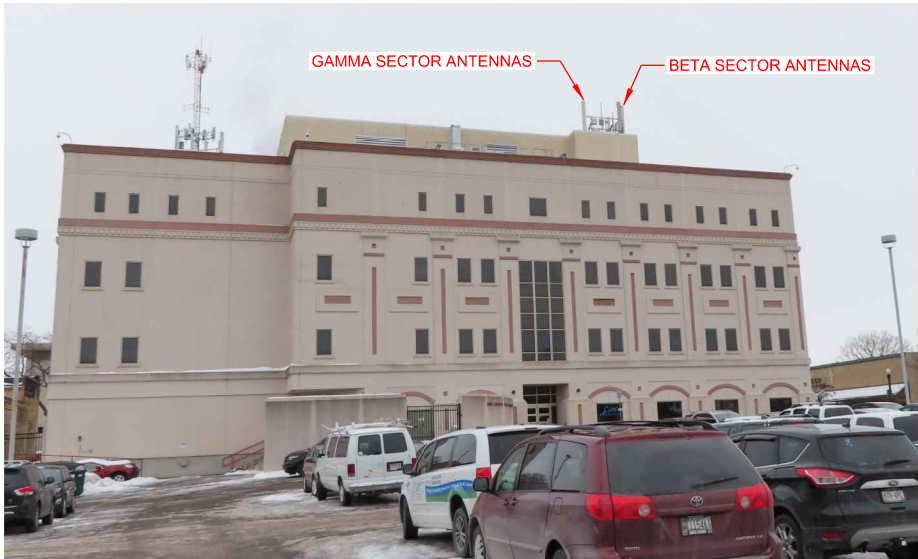
**SITE ELEVATION  
BARABOO DT (785430)  
BARABOO, WISCONSIN**

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PROJECT NUMBER:	21206
SET TYPE:	DRAFT

SHEET NUMBER	<b>T-201</b>
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BUILDING ELEVATION (LOOKING EAST)

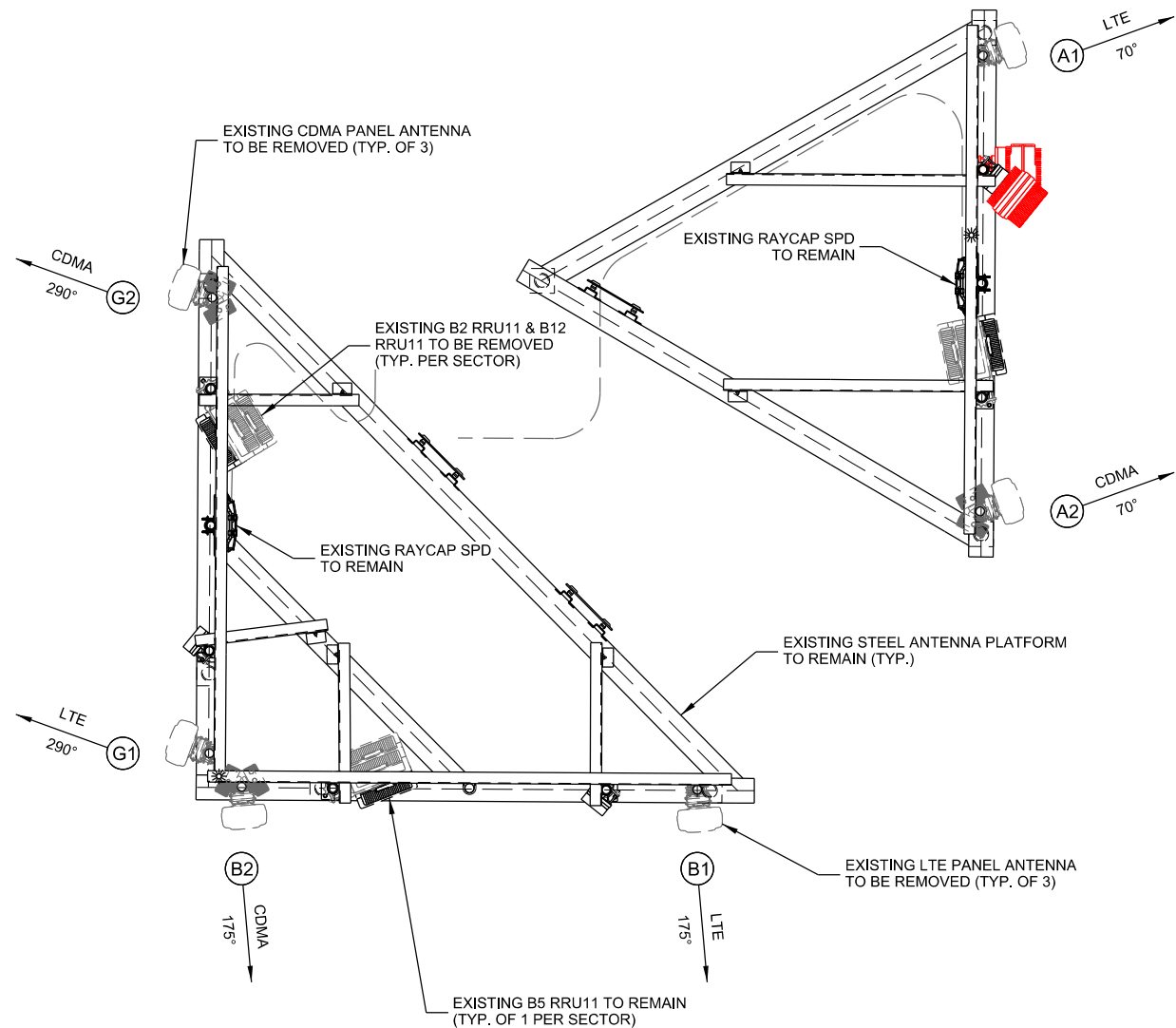


BUILDING ELEVATION (LOOKING WEST)

**B**

**EXISTING SITE ELEVATION**

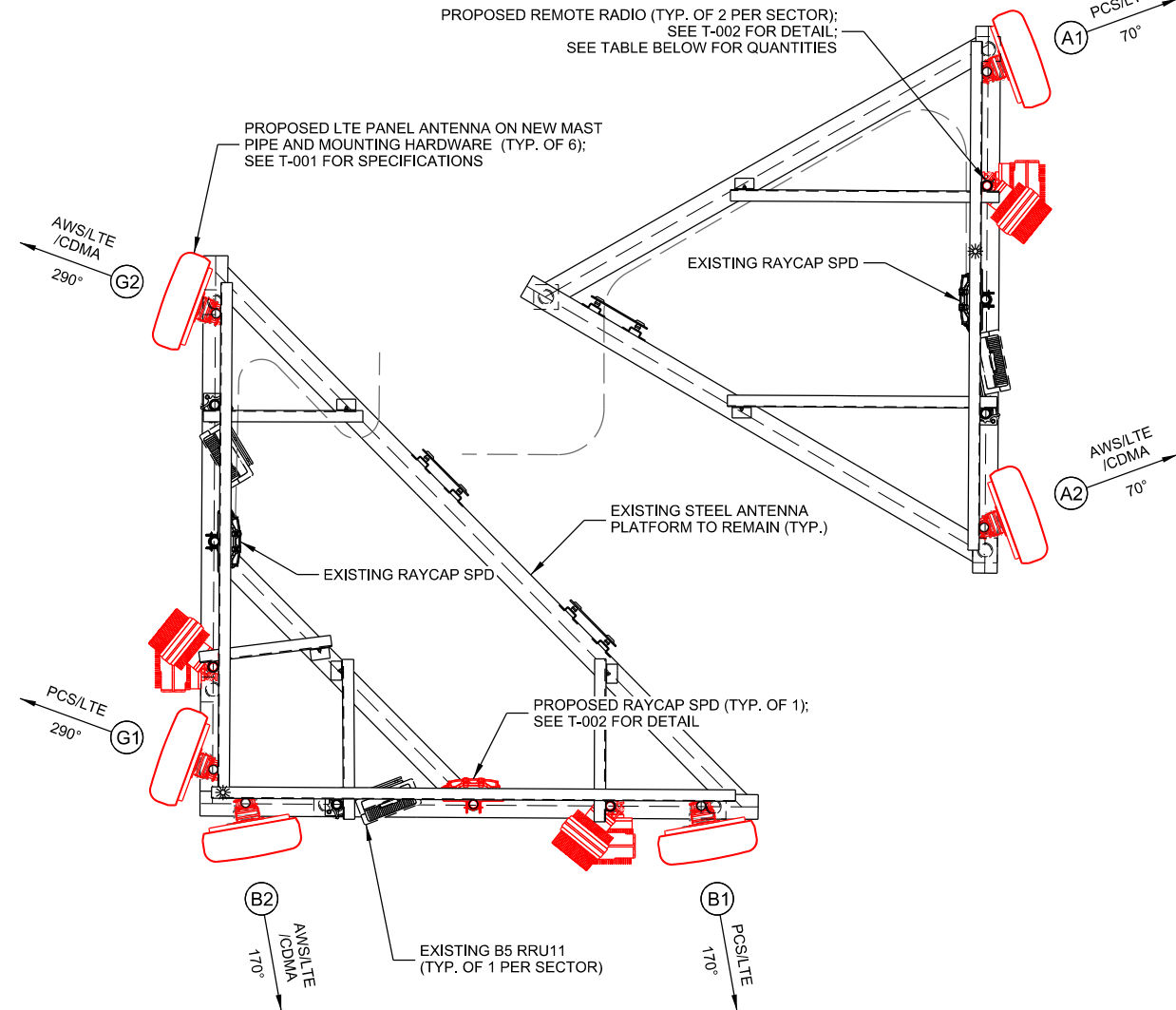




	Antenna Position	Technology	Antenna Model	Antenna Quantity	RAD Center	Azimuth	Surge Protector Qty.	Radio Model	Radio Qty.	Diplexer Qty.	Bias-T Qty.	Cable Type	Cable Qty.
ALPHA	A1	LTE	Kathrein 800 10766	1	82°	70°	1	B5 RRU11	1	-	-	1-1/4" Hybrid	1
	-	-	-	-	-	-	-	B2 RRU11	1	-	-	-	-
	-	-	-	-	-	-	-	B12 RRU11	1	-	-	-	-
BETA	A2	CDMA	Antel BXA-70063-8CF-EDIN	1	82°	70°	-	-	-	-	-	7/8" Coax	2
	B1	LTE	Kathrein 800 10766	1	82°	175°	Shared	B5 RRU11	1	-	-	Shared	-
	-	-	-	-	-	-	-	B2 RRU11	1	-	-	-	-
GAMMA	B2	CDMA	Antel BXA-70063-8CF-EDIN	1	82°	175°	-	-	-	-	-	7/8" Coax	2
	G1	LTE	Kathrein 800 10766	1	82°	290°	1	B5 RRU11	1	-	-	1-1/4" Hybrid	1
	-	-	-	-	-	-	-	B2 RRU11	1	-	-	-	-
Total:				6			2		9		0		8

NOTE:  
1. ALL ANTENNA AZIMUTHS TO BE FROM TRUE NORTH.

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



	Antenna Position	Technology	Antenna Model	Antenna Quantity	RAD Center	Azimuth	Mech. Tilt	Surge Protector Qty.	B71/B12 Radio	Radio Qty.	B2/B4 Radio	Radio Qty.	B5 Radio	Radio Qty.	B46 Radio	Radio Qty.	Cable Type	Cable Qty.
ALPHA	A1	PCS/LTE	Amphenol TWIN658LU000G-T	1	82°	70°	0°	1	RRU4449	1	RRU8843	1	-	-	-	-	1-1/4" Hybrid	1
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A2	AWS/LTE/CDMA	Amphenol TWIN658LU000G-T	1	82°	70°	0°	Shared	-	-	Shared	-	RRU11	1	-	-	Shared	-
BETA	B1	PCS/LTE	Amphenol TWIN658LU000G-T	1	82°	170°	0°	1	RRU4449	1	RRU8843	1	-	-	-	-	1-1/4" Hybrid	1
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	B2	AWS/LTE/CDMA	Amphenol TWIN658LU000G-T	1	82°	170°	0°	Shared	-	-	Shared	-	RRU11	1	-	-	Shared	-
GAMMA	G1	PCS/LTE	Amphenol TWIN658LU000G-T	1	82°	290°	0°	1	RRU4449	1	RRU8843	1	-	-	-	-	1-1/4" Hybrid	1
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	G2	AWS/LTE/CDMA	Amphenol TWIN658LU000G-T	1	82°	290°	0°	Shared	-	-	Shared	-	RRU11	1	-	-	Shared	-
Total:				6				3		3		3		3		0		9

\*X110-SS-CDMA

NOTES:  
1. ALL ANTENNA AZIMUTHS TO BE FROM TRUE NORTH.  
2. CONTRACTOR MAY NEED ADDITIONAL 9'-0" LONG MAST PIPES FOR TEMPORARY RELOCATION OF LTE ANTENNAS.

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

CONSULTANT:

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

CLIENT:

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

**ANTENNA CONFIGURATION**  
**BARABOO DT (785430)**  
**BARABOO, WISCONSIN**

SUBMITTAL:

INT. DATE: DESCRIPTION:  
TJT 10/16/2019 REV. A

CHECKED BY: KCB

PLOT DATE: 10/16/2019

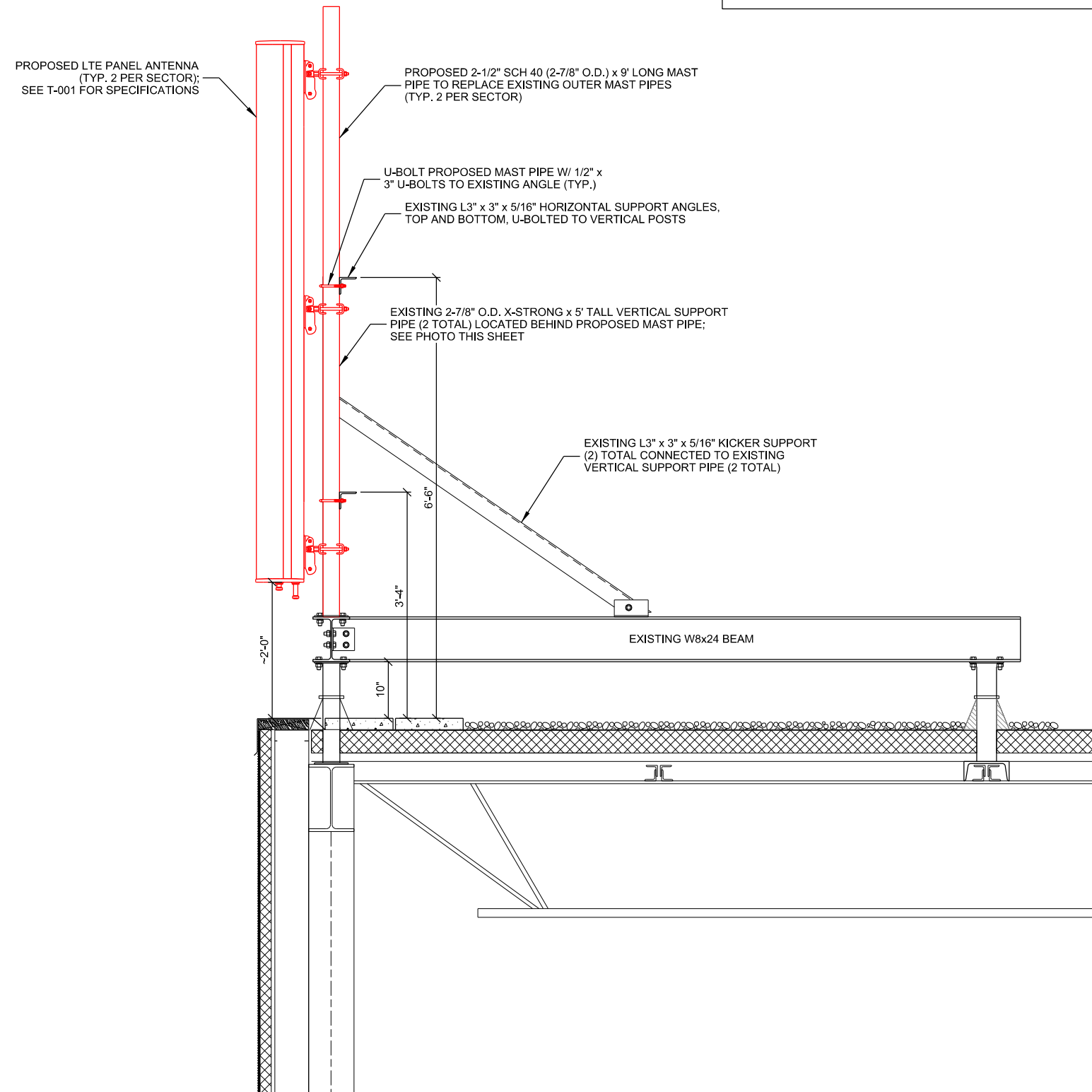
PROJECT NUMBER: 21206

SET TYPE: DRAFT

SHEET NUMBER: **T-301**



ALPHA SECTOR ANTENNA PLATFORM SHOWN THIS SHEET FOR CLARITY. BETA/GAMMA SECTOR MOUNTING SIMILAR TO ALPHA.



## **A ANTENNA MOUNTING DETAIL**

SCALE: 11" x 17" - 1/2" = 1'-0"  
22" x 34" - 1" = 1'-0"



## B EXISTING (ALPHA SECTOR) ANTENNA PLATFORM

**THIS SPACE INTENTIONALLY LEFT BLANK**



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

**INSTALLATION DETAILS**  
**BARABOO DT (785430)**  
**BARABOO, WISCONSIN**

INT.	DATE:	DESCRIPTION:
TJT	10/16/2019	REV. A

CHECKED BY	KCB
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PLOT DATE	10/16/2019
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PROJECT NUMBER	21206
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SET TYPE	DRAFT
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SHEET NUMBER	<b>T-501</b>
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RET CABLE INFO			
ANTENNA TO REMOTE RADIO			
	QUANTITY	LENGTH	
ALPHA SECTOR	2	32.8 FT	10 m
BETA SECTOR	2	32.8 FT	10 m
GAMMA SECTOR	2	32.8 FT	10 m

\* STANDARD RET CABLE LENGTH OF 10 METERS;  
 RF APPROVAL REQ'D FOR ADDITIONAL RET CABLE LENGTH

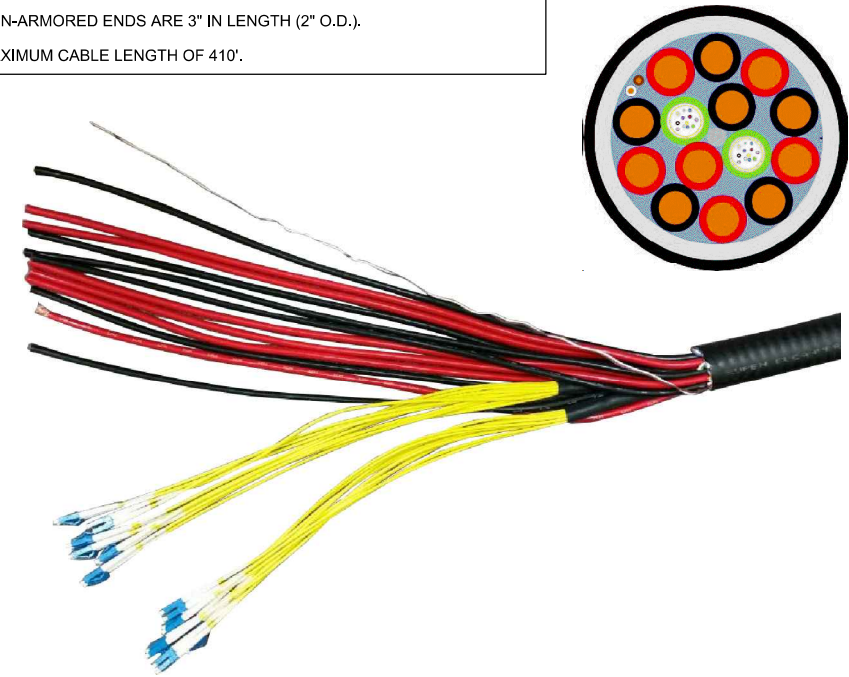
POWER JUMPER CABLE INFO (LAA)			
RAYCAP SPD TO REMOTE RADIO (B46)			
	QUANTITY	LENGTH	
ALPHA SECTOR	1	32.8 FT	10 m
BETA SECTOR	1	32.8 FT	10 m
GAMMA SECTOR	1	32.8 FT	10 m
ALL SECTORS MUST HAVE THE SAME JUMPER LENGTHS			

**A CABLE LENGTHS: \*X110-SS-CDMA**

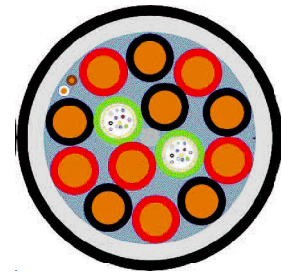
FIBER JUMPER CABLE INFO (LAA)			
RAYCAP SPD TO COMMUNITY		RADIO (B46)	
SECTOR		LENGTH	
BETA SECTOR	1	32.8 FT	10 m
BETA SECTOR	1	32.8 FT	10 m
GAMMA SECTOR	1	32.8 FT	10 m
ALL SECTORS MUST HAVE THE SAME JUMPER LENGTHS			

<b>COAX JUMPER CABLE INFO</b>		
<b>REMOTE RADIO TO ANTENNA (B71/B12)</b>		
	<b>QUANTITY</b>	<b>LENGTH</b>
ALPHA SECTOR	4	25 FT *
BETA SECTOR	4	25 FT *
GAMMA SECTOR	4	25 FT *
<b>REMOTE RADIO TO ANTENNAS (B2/B4)</b>		
	<b>QUANTITY</b>	<b>LENGTH</b>
ALPHA SECTOR	8	25 FT *
BETA SECTOR	8	25 FT *
GAMMA SECTOR	8	25 FT *
<b>REMOTE RADIO TO ANTENNA (B5)</b>		
	<b>QUANTITY</b>	<b>LENGTH</b>
ALPHA SECTOR	2	25 FT *
BETA SECTOR	2	25 FT *
GAMMA SECTOR	2	25 FT *
ALL SECTORS SHOULD HAVE THE SAME JUMPER LENGTHS *		
* APPROVED JUMPER LENGTH 25 FT.		
* U.S. CELLULAR PRE-ORDERED JUMPER LENGTHS.		

MAXIMUM CABLE LENGTH OF 410'.



## **B** EUPEN HYBRID CABLE



U.S. CELLULAR  
3410 W. BRYN MAWR AVE.  
SUITE 700  
CHICAGO, IL 60631

**CABLE DETAILS**  
**BARABOO DT (785430)**  
**BARABOO, WISCONSIN**

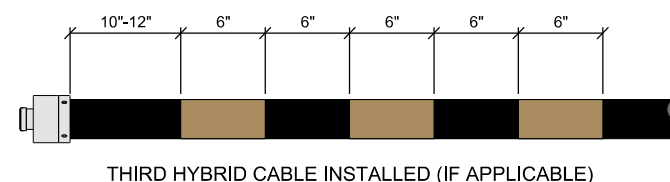
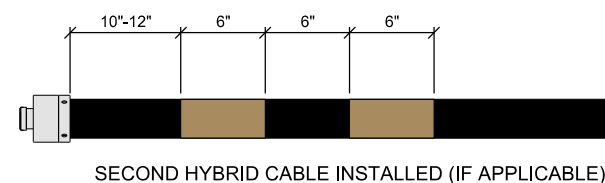
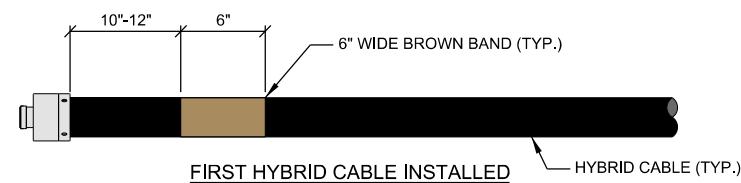


UNIVERSAL BARREL CUSHIONS,  
SITEPRO1 PART # BCU78X;  
ACCEPTS 0.16" TO 0.55" O.D.  
CABLES; MATING HANGER SIZE  
7/8"



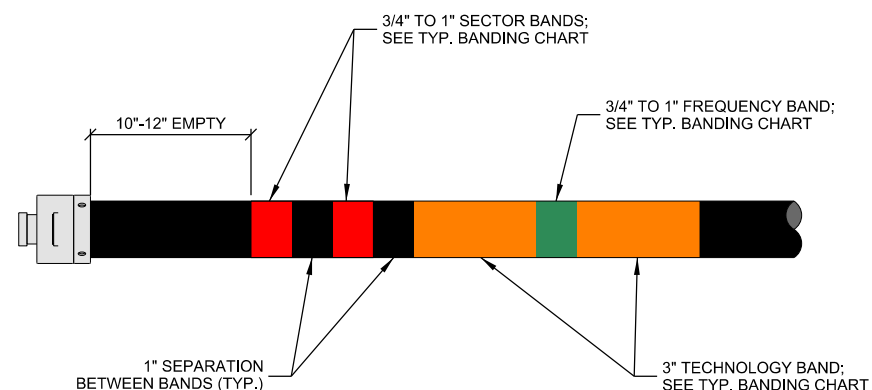
SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	10/16/2019	REV. A
CHECKED BY	KCB	
PLOT DATE	10/16/2019	
PROJECT NUMBER	21206	
SET TYPE	DRAFT	
SHEET NUMBER	<b>T-502</b>	



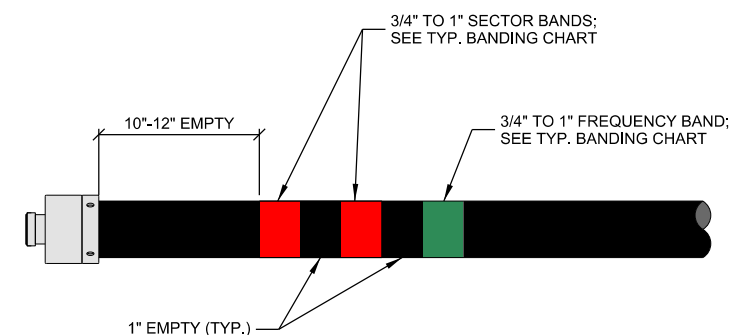


- |        |                                                                                                                                                                             |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                     |

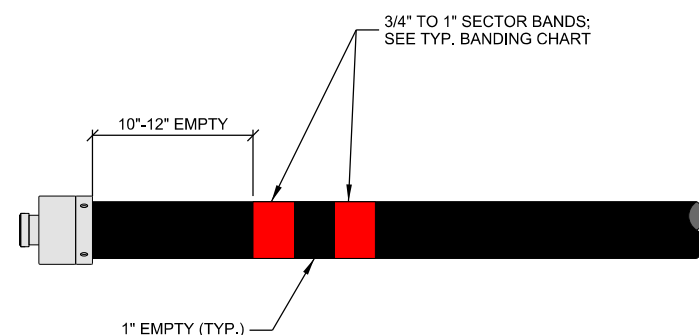
**A TYP. HYBRID COLOR CODE**



**B** TYP. COAX JUMPER BANDING



### C TYP. POWER JUMPER BANDING



**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

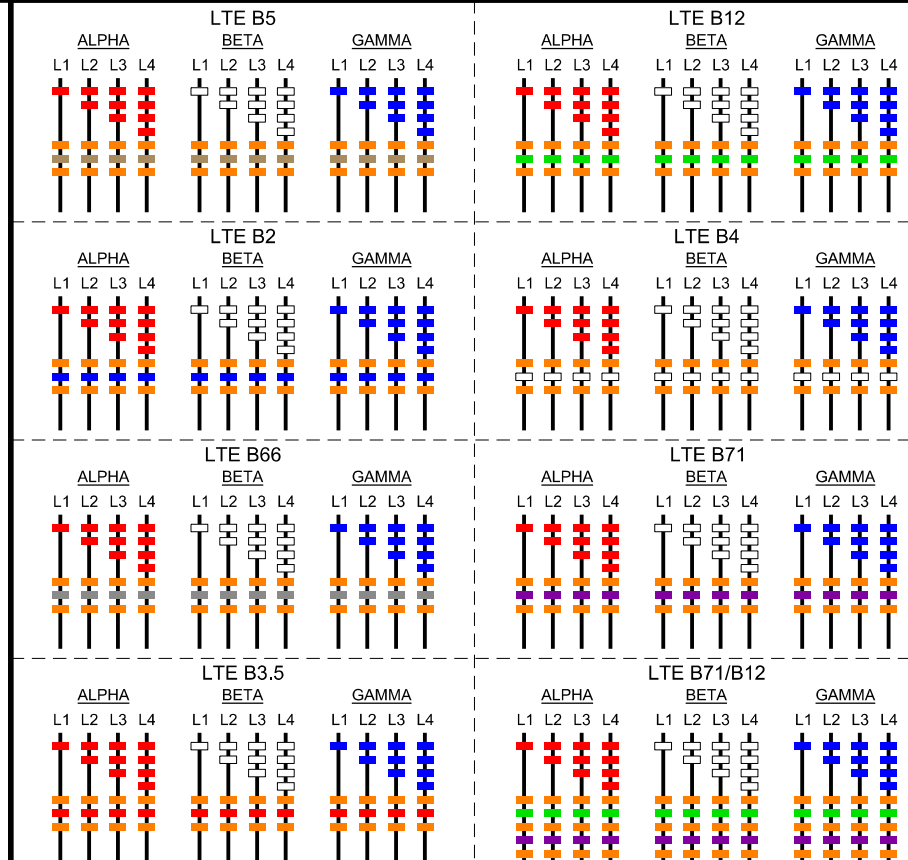
SECTOR BAND (EXCEPTION CASE: ALPHA SECTOR CDMA ON 1 & 4, LTE ON 2 & 3)					
SECTOR	ASSIGNED COLOR	LINE 1 (CDMA)	LINE 2 (LTE)	LINE 3 (LTE)	LINE 4 (CDMA)
ALPHA	RED	(1) RED BAND	(1) RED BAND	(2) RED BANDS	(2) RED BANDS

TECHNOLOGY BAND	
TECHNOLOGY	BANDING
CDMA	YELLOW
GSM	VIOLET
LTE	ORANGE

FREQUENCY BAND		
FREQUENCY	BAND	BANDING
700	B12	GREEN
800/850	B5	BROWN
1900	B2	BLUE
2100	B4	WHITE
2100	B66	GREY
600	B71	VIOLET
3.5 GHz	-	RED

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

**TYP. BANDING CHART**



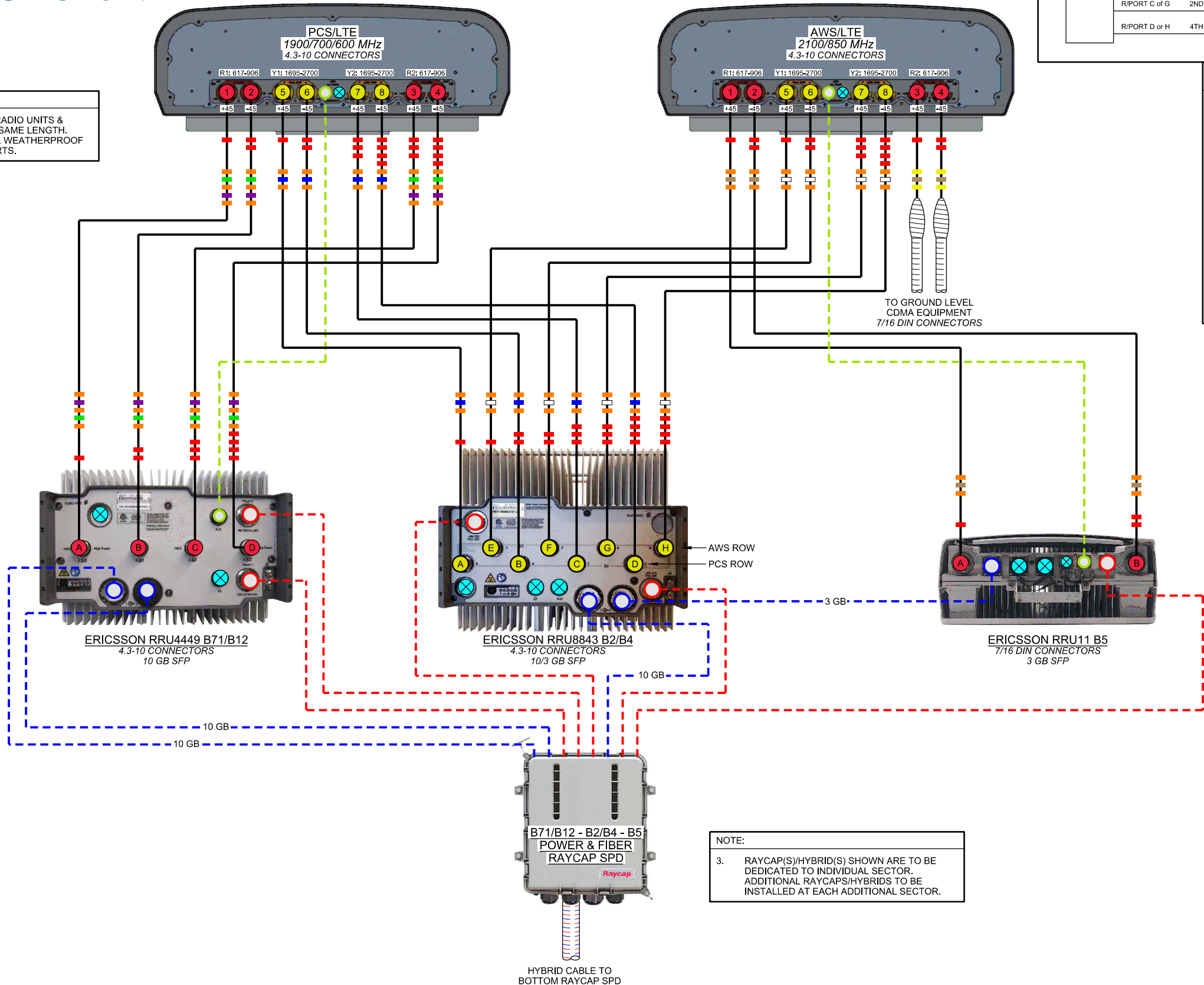
**TYP. COAX COLOR CODE STANDARD**



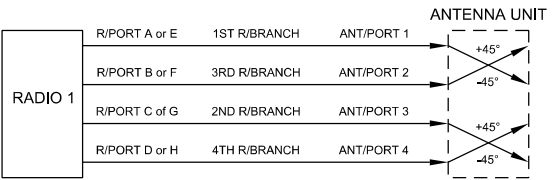


E// B71/B12 / B2/B4 / 2T2R B5  
PER SECTOR CONFIGURATION

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



CROSS POLE ANT. TO RADIO PORT DIAGRAM



CABLE LEGEND

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

CONSULTANT:  
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8410 W. BRYN MAWR AVE.  
SUITE 700  
CHICAGO, IL 60631

PLUMBING DIAGRAM  
BARABOO DT (785430)  
BARABOO, WISCONSIN

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	10/16/2019	REV. A

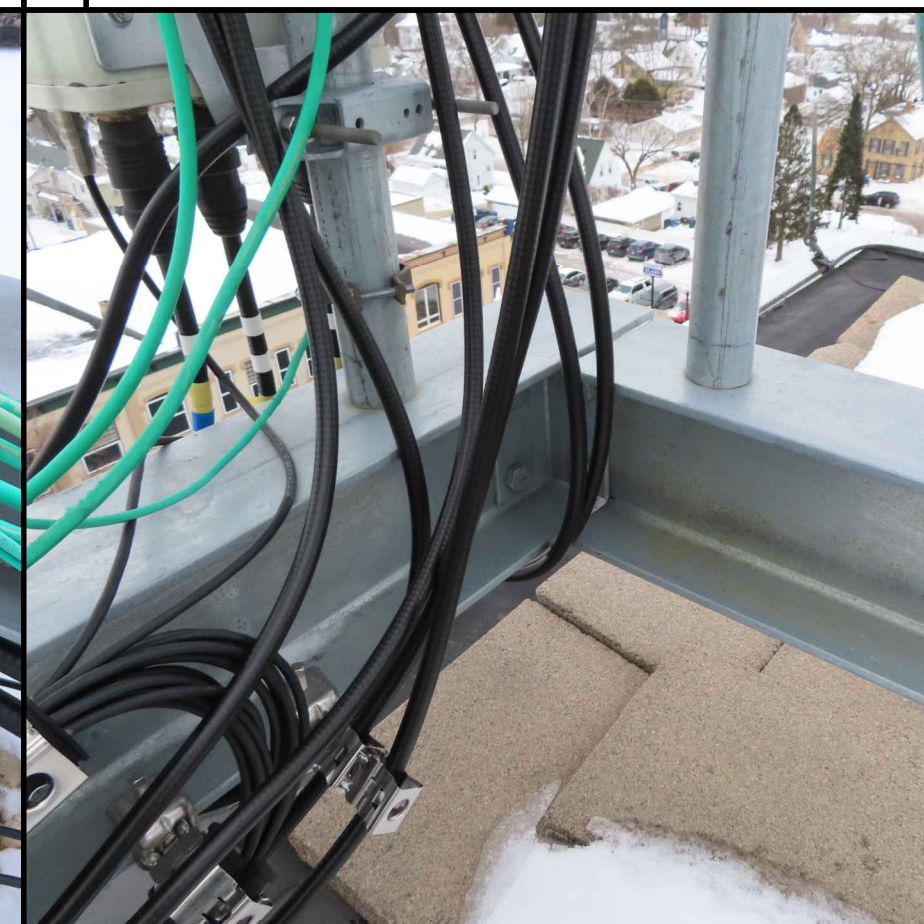
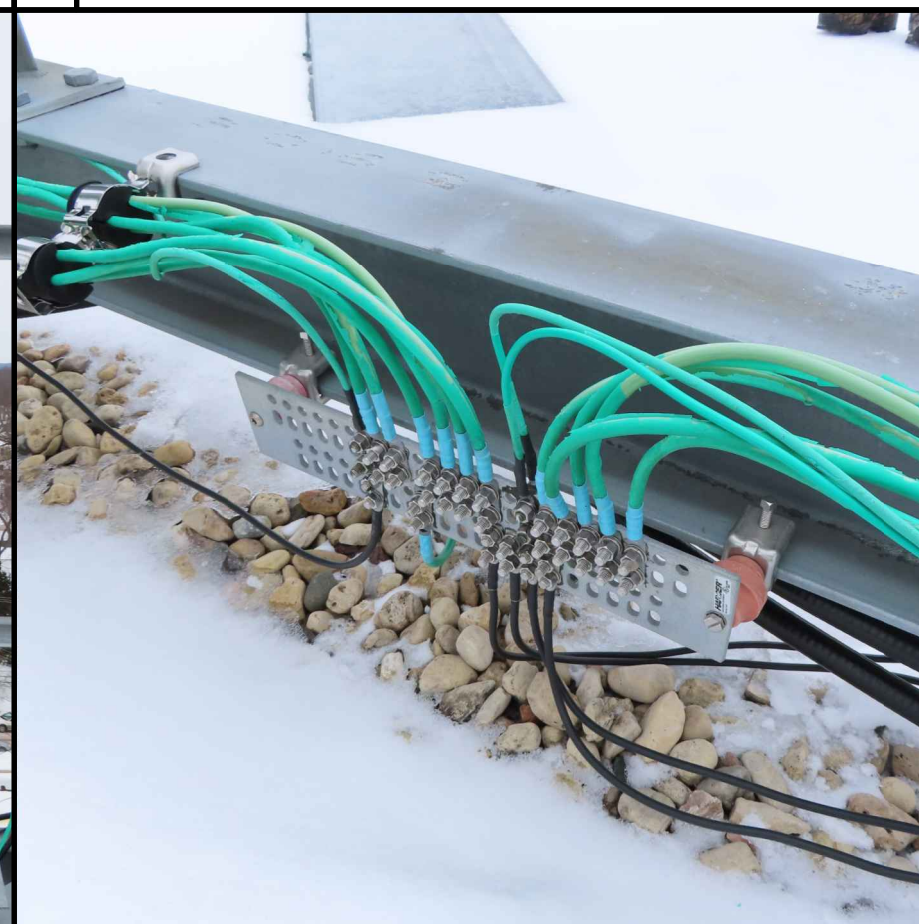
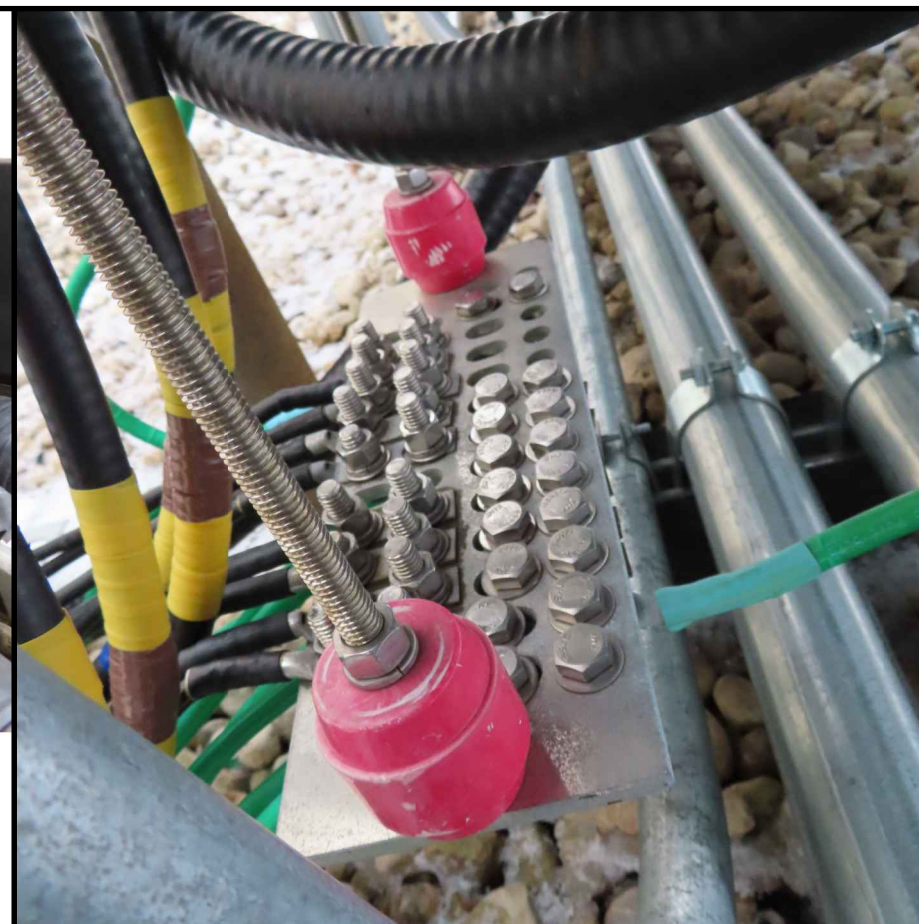
CHECKED BY:	KCB
PLOT DATE:	10/16/2019
PROJECT NUMBER:	21206
SET TYPE:	DRAFT
SHEET NUMBER:	T-505

PLUMBING DIAGRAM: AX110-SS-CDMA

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CONSULTANT:



**CLIENT:**



**SITE PHOTOS**  
**BARABOO DT (785430)**  
**BARABOO, WISCONSIN**

SUBMITTAL:

[illegible]

CHECK  
BY

ED	KCB
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PLOT  
DATE

	10/16/2019
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PROJ  
NUMB

CT ER	21206
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SET  
TYPE

DRAFT

SHEET  
NUMBE

**T-901**



