

# Land Use Application

Applicant(s): Amanda Nations, Crown Castle on behalf of T-Mobile Property Owner(s): Lee Strom

Mailing Address: 1505 Westlake Ave N, Suite 800  
Seattle, WA 98109

Mailing Address: 8603 47TH AVE SW  
Seattle, WA 98136

Phone: 206-336-2889

Phone:

Email: amanda.nations.contractor@crowncastle.com

Email:

## Location of property:

Township: 3N

Range: 11E

Parcel address:

Section & Qtr. Section: NW 1/4 of Section 28

County:

Tax Lot No(s): 03112853000200

Parcel Size (acres): 5.14

Existing use of parcel: wireless telecommunications

Use of adjacent parcels: vacant, residential

**Project description:** This should include all proposed activities and details on size, height, exterior colors, and construction materials of proposed structures. Any areas of ground disturbance and landscaping details should also be described. It is important to describe all aspects of your project so that you may gain approval for all of the development activities you plan to do.

Replace (4) panel antennas with (2) panel antennas; replace antenna mounts; remove (4) TMAs; add (4) RRUs.

Replace (2) cabinets within existing ground lease area.

TRANSMISSION CANNOT EXCEED 23GHz PER EASEMENT AGREEMENT. 15

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**Application checklist:** The following is required to complete your application:

- Application form completed and signed
- Site plan
- Key viewing areas checklist, elevation drawings, and landscape details, if required
- Names and addresses of adjacent property owners, if required
- Any additional information as required

Signature of the property owner(s) indicates that the property owner(s) is/are aware that an application is being made on the subject property. **Signature of the property owner(s) also authorizes the Gorge Commission or the Commission's designee(s) reasonable access to the site in order to evaluate the application.**

**Applicant(s) signature:**

date

 date 7/8/2019

**Property owner(s) signature:**

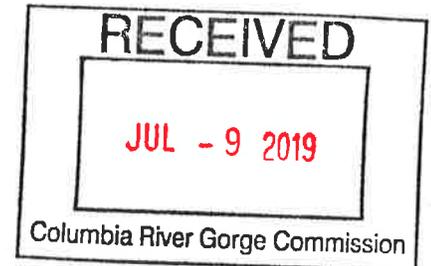
date

 date 7/3/19



1505 Westlake Ave N  
Seattle, WA 98109

Phone: (206) 336-2889  
Fax:  
www.crowncastle.com



July 8, 2019

COLUMBIA RIVER GORGE COMMISSION  
57 Wauna Ave  
White Salmon, WA 98672

RE: Eligible Facilities Request to modify equipment on a communications tower located at:  
Burdoin Mountain, White Salmon, WA, 98672  
Crown Site Number: 829066 / Crown Site Name: White Salmon  
Customer Site Number: PO02423A / Application Number: 439434

Crown Castle USA Inc. ("Crown Castle") on behalf of T-Mobile West LLC ("T-Mobile") is submitting the attached Eligible Facilities Request application to modify transmission equipment on a telecommunications tower located at Burdoin Mountain, White Salmon, WA 98672 in COUNTY OF KLICKITAT, WA (the "White Salmon Tower").

Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012, commonly known as the "Spectrum Act" (Pub. Law No. 112-96, 126 Stat 156), mandates that state and local governments "may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station."

T-Mobile proposes to modify the "White Salmon Tower" as follows: **Replace (4) panel antennas with (2) panel antennas; replace antenna mounts; remove (4) TMAs; add (4) RRUs. Replace (2) cabinets within existing ground lease area.**

Itemized list of submittal documents:

- Cover Letter and Certification of Non-Substantial Changes
- Land Use Application
- Site plan (2)
- Construction drawings, stamped and signed by a Washington State-registered engineer (2)
- 47 CFR § 1.40001 (for reference)

T-Mobile is committed to working cooperatively with all jurisdictions around the country to secure expeditious approval of requests to modify existing personal wireless service facilities. If you should require more information regarding the Spectrum Act, please do not hesitate to contact me with your questions.

Sincerely,

Amanda Nations  
Amanda.Nations.Contractors@crowncastle.com  
(206) 336-2889

**ELIGIBLE FACILITIES REQUEST CERTIFICATION FOR NON-SUBSTANTIAL  
CHANGES  
TO A WIRELESS TOWER NOT LOCATED WITHIN A PUBLIC RIGHT OF WAY**

1) Address of the Wireless Tower:   NW 1/4 of Section 28, Township 3N, Range 11 East, Willamette Meridian, Klickitat County, WA  

2) The height (measured in feet above ground level) of the existing Tower as originally approved, including any modifications approved prior to February 22, 2012:  64'-7" 

3) What is the height (measured in feet above ground level) at which the modifications to the Transmission Equipment will occur on the Tower?  57'-0" 

4. What will be the height (measured in feet above ground level) of the existing Tower after the modifications to the Transmission Equipment are installed?  64'-7" 

5) Effect of modifications of Transmission Equipment on Tower height:

(A) Will the modifications in Transmission Equipment (addition, removal or replacement of Transmission Equipment) result in increasing the height above ground level of the existing Tower?

Yes  No

(B) Will the modifications in Transmission Equipment result in increasing the height above ground level of the existing Tower by more than: (i) 10% of the height of the existing Tower, as originally approved, including any modifications approved prior to February 22, 2012; or (ii) twenty feet above the height of the existing Tower, as originally approved, including any modifications approved prior to February 22, 2012, whichever height increase is greater?

Yes  No

6) Will the modifications in Transmission Equipment (measured at the height above ground level where the Transmission Equipment will be attached to the tower) result in any Transmission Equipment protruding horizontally from the edge of tower by more than twenty (20) feet or by more than the existing width of the tower at that height, whichever of these dimensions is greater?

Yes  No

7) Will the proposed changes in Transmission Equipment involve excavation or placement of new equipment outside the existing Tower site or outside any access or utility easements currently related to the site?

Yes  No

8) Will the proposed modification in Transmission Equipment involve installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four?

Yes  No

9) Will the proposed modification in Transmission Equipment defeat the existing concealment elements of the Tower?

Yes  No

(10) Prior Conditions of Approval

(A) Will the proposed modification in Transmission Equipment comply with conditions of approval imposed on the Tower prior to February 22, 2012?

Yes  No

(B) If the answer to 10(A) is "No," is the non-compliance due solely to any of the conditions addressed in questions 5-9 above?

Yes  No

**If the answer to either question 5A or 5B is "No", and the answers to questions 6-9 are "No", and the answer to either 10A or B is "Yes" then the proposed modifications do not substantially change the physical dimensions of the existing Tower. Please provide a brief explanation, if necessary, to clarify any answer.**

Explanatory Comments (If Needed):

Question No. \_\_\_\_\_

Comment:

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This certification is dated this 8th day of July, 2019.

  
Signature

Amanda Nations, Real Estate Specialist

Name & Title



PO02423A\_WHITE SALMON\_L600\_CD\_CCI\_07-11-2018

SITE NAME: WHITE SALMON

SITE NUMBER: PO02423A

CROWN CASTLE BU #: 829066, APP #: 439434

BURDOIN MOUNTAIN

WHITE SALMON, WA 98672



12920 SE 38TH ST  
BELLEVUE, WA 98006



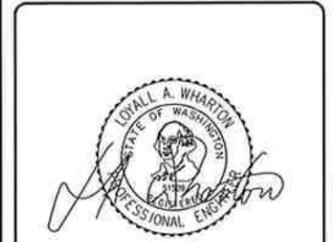
1505 WESTLAKE AVENUE NORTH, SUITE 800  
SEATTLE, WA 98109



1387 CALLE AVANZADO  
SAN CLEMENTE CA 92673 (949) 391-8824

DRAWN BY: JAC  
CHECKED BY: MM

REV	DATE	DESCRIPTION	BY
2	05/13/2019	100% CD'S FOR SUBMITTAL	CP
1	08/07/2018	100% CD'S FOR REVIEW	DAM
0	07/11/2018	90% CD'S FOR REVIEW	JAC



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.

CROWN CASTLE SITE ID: 829066  
WHITE SALMON  
BURDOIN MOUNTAIN  
WHITE SALMON, WA 98672  
MONOPOLE

SHEET TITLE  
TITLE SHEET

SHEET NUMBER  
T-1

**SITE INFORMATION**

PROPERTY OWNER: STORM, LEE  
9603 47TH AVE SW  
SEATTLE, WA 98136

TOWER OWNER: CROWN CASTLE  
8547 154TH AVE NE  
REDMOND, WA 98052

APPLICANT: T-MOBILE  
ADDRESS: 8960 ALDERWOOD RD  
PORTLAND, OR 97220

LAT/LONG TYPE: NAD-83  
LATITUDE: 45° 43' 18.899" N  
LONGITUDE: -121° 26' 18.20" W

ZONING JURISDICTION: KLIKITAT COUNTY  
ZONING CLASSIFICATION: OS - OPEN SPACE  
CURRENT USE: UNMANNED TELECOMMUNICATIONS FACILITY  
ASSESSOR'S PARCEL NO.: 03112853000200  
PROPOSED USE: UNMANNED TELECOMMUNICATIONS FACILITY

TYPE OF CONSTRUCTION: V-B  
OCCUPANCY GROUP: U-2  
LEGAL DESCRIPTION: TRACT 2 SP 79-24 IN NENW; 28-3-11

**VICINITY MAP**



**DRIVING DIRECTIONS**

- DIRECTIONS FROM PORTLAND INTERNATIONAL AIRPORT:
1. HEAD NORTHWEST ON NE AIRPORT WAY
  2. TURN RIGHT ONTO THE INTERSTATE 205 S RAMP TO INTERSTATE 84(PORTLAND)/SALEM
  3. TAKE EXIT 64 FOR MT HOOD HWY TOWARD OR-35/WHITE SALMON/GOVT. CAMP
  4. TURN LEFT ONTO BUTTON BRIDGE RD/MT HOOD HWY
  5. CONTINUE ONTO HOOD RIVER BRIDGE
  6. TURN LEFT ONTO WA-14 W
  7. TURN RIGHT ONTO DOCK GRADE RD
  8. TURN LEFT ONTO E JEWETT BLVD
  9. TURN RIGHT ONTO N MAIN AVE
  10. SLIGHT RIGHT ONTO SNOWDEN RD
  11. TURN RIGHT ONTO BATES RD
  12. TURN RIGHT ONTO TUNNEL RD
  13. TURN RIGHT ONTO RAMSAY LN
  14. TURN RIGHT ONTO CRESTVIEW LN
  15. TURN LEFT ONTO DIRT ROAD
  16. FOLLOW PATH TO DESTINATION

**PROJECT DESCRIPTION**

- T-MOBILE PROPOSES TO MODIFY AN EXISTING WIRELESS INSTALLATION. THE SCOPE WILL CONSIST OF THE FOLLOWING:
- REMOVE (4) EXISTING T-MOBILE PANEL ANTENNAS
  - REMOVE (4) EXISTING T-MOBILE TMA'S
  - REMOVE (2) EXISTING T-MOBILE CHAIN MOUNTS
  - REMOVE (2) EXISTING T-MOBILE SECTOR FRAME MOUNTS
  - REMOVE (1) EXISTING T-MOBILE ULTRASITE CABINET
  - REMOVE (1) EXISTING T-MOBILE RADIO CHAIR @ EQUIPMENT LEVEL
  - INSTALL (2) NEW T-MOBILE PANEL ANTENNAS
  - INSTALL (1) NEW T-MOBILE SITE PRO UWSB-NP MOUNTS
  - INSTALL (2) NEW T-MOBILE AHLOA @ ANTENNA LEVEL
  - INSTALL (2) NEW T-MOBILE FXFG @ ANTENNA LEVEL
  - INSTALL (1) NEW T-MOBILE COVP @ ANTENNA LEVEL
  - INSTALL (1) NEW T-MOBILE HYBRID LINE
  - INSTALL (2) NEW T-MOBILE FCOA CABINET @ EQUIPMENT LEVEL
  - INSTALL (2) NEW T-MOBILE ABIA UNITS @ EQUIPMENT LEVEL
  - INSTALL (1) NEW T-MOBILE ASIA UNIT @ EQUIPMENT LEVEL
  - INSTALL (1) NEW T-MOBILE ABIL UNIT @ EQUIPMENT LEVEL
  - INSTALL (1) NEW T-MOBILE ASIK UNIT @ EQUIPMENT LEVEL
  - INSTALL (2) NEW T-MOBILE AMOB UNITS @ EQUIPMENT LEVEL
  - INSTALL (1) NEW T-MOBILE COVP @ EQUIPMENT LEVEL
  - INSTALL (1) NEW T-MOBILE 400A POWER PLANT UPGRADE IN (E) CABINET
  - INSTALL (1) NEW T-MOBILE LED LIGHT W/ TIMER SWITCH @ EQUIPMENT LEVEL
  - NO NEW ELECTRICAL WORK OR BATTERIES ARE TO BE INSTALLED ON THIS PROJECT.
  - DESIGN PACKAGE BASED ON APP # 439434, DATED 06/21/2018, REV. 0 AND RFDS # PO02423A\_L600\_2.2, DATED 06/11/2018, VERSION: 2.2.
  - STRUCTURAL ANALYSIS: BY OTHERS.
  - MOUNT ANALYSIS: BY OTHERS.

**GENERAL NOTES**

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE. 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 NEW.

**ENGINEERING**

- ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES.
- 2015 INTERNATIONAL BUILDING CODE
  - 2015 FIRE CODE
  - CITY/COUNTY ORDINANCES
  - 2015 PLUMBING CODE
  - BUILDING OFFICIALS & CODE ADMINISTRATORS (BOCA)
  - 2015 ELECTRICAL CODE
  - 2015 MECHANICAL CODE
  - LOCAL BUILDING CODE

**DO NOT SCALE DRAWINGS**

SUBCONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

**811 WASHINGTON**  
Know what's below.  
Call before you dig.  
Call THREE Working Days Before You Dig!  
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**CONSTRUCTION DRAWING**

IF USING 11"x17" PLOT, DRAWINGS WILL BE HALF SCALE

**DRAWING INDEX**

SHEET NO:	SHEET TITLE
T-1	TITLE SHEET
GN-1	GENERAL NOTES
A-1	SITE PLAN & ENLARGED SITE PLAN
A-2	EQUIPMENT LAYOUT
A-3	ANTENNA LAYOUT
A-4	ELEVATIONS
D-1	DETAILS
D-2	DETAILS
G-1	GROUNDING DETAILS
RF-1	CABLE LINE DIAGRAM

**APPROVALS**

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

	PRINT NAME	SIGNATURE	DATE
PROJECT MANAGER:			
T-MOBILE RF ENGINEER:			
SITE ACQUISITION:			
CONSTRUCTION MANAGER:			
SITE OWNER:			
T-MOBILE DEVELOPMENT MANAGER:			
T-MOBILE CONSTRUCTION MANAGER:			
T-MOBILE OPS MANAGER:			
T-MOBILE REGULATORY REVIEW:			
T-MOBILE PROJECT MANAGER:			

**PROJECT TEAM**

**CLIENT REPRESENTATIVE:**  
CROWN CASTLE USA, INC.  
1505 WESTLAKE AVENUE NORTH,  
SUITE 800  
SEATTLE, WA 98109  
CONTACT: MIKE GILSON  
PH: (206) 336-7402  
EMAIL: Mike.Gilson.Contractor@crowncastle.com

**ENGINEER:**  
M SQUARED WIRELESS  
1387 CALLE AVANZADO  
SAN CLEMENTE, CA 92673  
CONTACT: MICHAEL MONTELLA  
PH: (949) 391-8824

**SITE ACQUISITION:**  
CROWN CASTLE USA, INC.  
1505 WESTLAKE AVE N, SUITE 800  
SEATTLE, WA 98109  
CONTACT: AMANDA NATIONS  
PH: (206) 336-2889  
EMAIL: amanda.nations.contractor@crowncastle.com

**PROJECT MANAGER:**  
CROWN CASTLE USA, INC.  
1505 WESTLAKE AVENUE NORTH,  
SUITE 800  
SEATTLE, WA 98109  
CONTACT: KARIN JACKSON  
PH: (480) 735-8953  
EMAIL: Karin.Jackson@crowncastle.com

**CONSTRUCTION MANAGER:**  
CROWN CASTLE USA, INC.  
1505 WESTLAKE AVENUE NORTH,  
SUITE 800  
SEATTLE, WA 98109  
CONTACT: DAVID WATKINS  
PH: (541) 784-6730  
EMAIL: David.Watkins@crowncastle.com

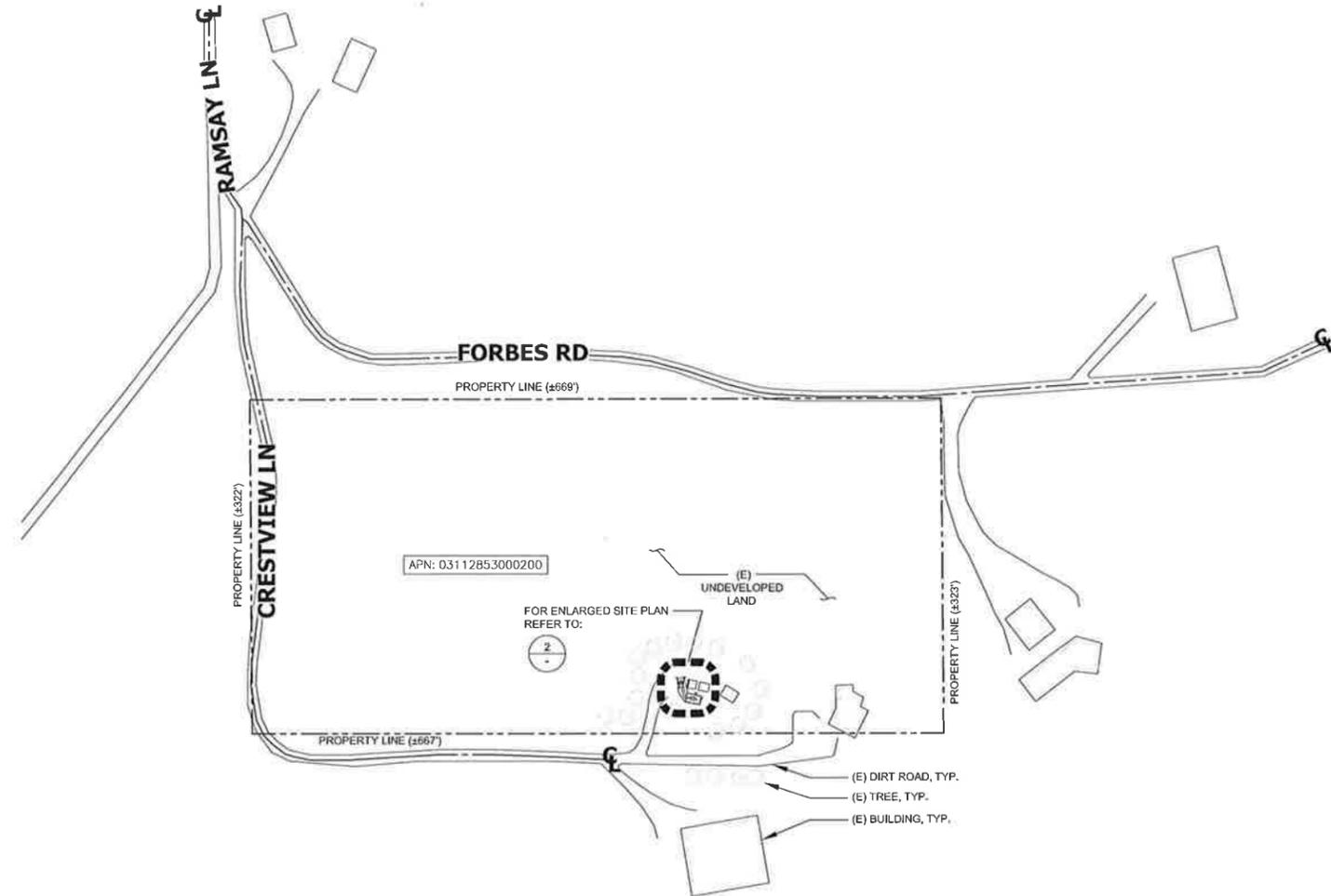


**NOTES:**

1. THE WIRELESS COMMUNICATION FACILITY COMPLIES WITH FEDERAL STANDARDS FOR RADIO FREQUENCY IN ACCORDANCE WITH THE TELECOMMUNICATION ACT OF 1996 AND SUBSEQUENT AMENDMENTS AND ANY OTHER REQUIREMENTS IMPOSED BY STATE OR FEDERAL REGULATORY AGENCIES.
2. NO EXISTING PARKING STALLS ARE BEING ADDED OR REMOVED AS PART OF THE NEW INSTALLATION.
3. THESE DRAWINGS WERE PRODUCED WITHOUT THE BENEFIT OF A CURRENT LAND SURVEY. ALL PROPERTY LINES, EASEMENTS, SETBACKS, AND EXISTING CONDITIONS ARE APPROXIMATE AND SHALL BE VERIFIED PRIOR TO START OF CONSTRUCTION.

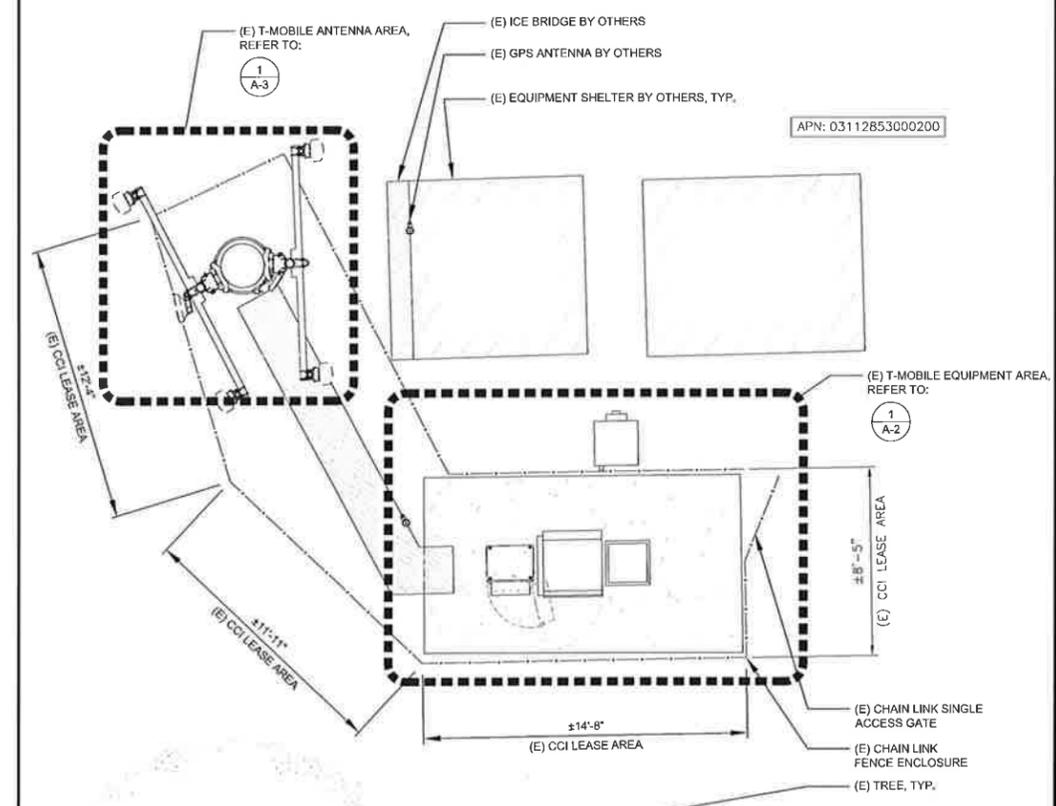
**DISCLAIMER:**

THIS SET OF DRAWINGS WAS PREPARED UTILIZING INFORMATION OBTAINED FROM PUBLIC DOCUMENTS MADE AVAILABLE ON JURISDICTION WEBSITE. MSQUARED ENGINEERS CANNOT GUARANTEE THE ACCURACY OF THE DATA AND INFORMATION DEPICTED AND HEREBY EXPRESSLY DISCLAIMS ANY RESPONSIBILITY FOR THE TRUTH, VALIDITY, INVALIDITY, ACCURACY, INACCURACY OF ANY SAID DATA AND INFORMATION. THE PARCEL LINES ON MAPS ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT INTENDED TO BE USED AS A SURVEY PRODUCT. USER ACCEPTS RESPONSIBILITY FOR THE UNAUTHORIZED USE OR TRANSMISSION OF ANY SUCH DATA OR INFORMATION IN ITS ACTUAL OR ALTERED FORM.



**SITE PLAN**

24"x36" SCALE: 1" = 80'-0"  
11"x17" SCALE: 1" = 160'-0"



**ENLARGED SITE PLAN**

24"x36" SCALE: 1/4" = 1'-0"  
11"x17" SCALE: 1/8" = 1'-0"

**T-Mobile**  
12920 SE 38TH ST  
BELLEVUE, WA 98006

**CROWN CASTLE**  
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SEATTLE, WA 98109

**M SQUARE WIRELESS**  
1387 CALLE AVANZADO  
SAN CLEMENTE CA 92673 (949) 391-6824

APN: 03112853000200

DRAWN BY:	JAC
CHECKED BY:	MM

REV	DATE	DESCRIPTION	BY
2	05/13/2019	100% CD'S FOR SUBMITTAL	CP
1	08/07/2018	100% CD'S FOR REVIEW	DAM
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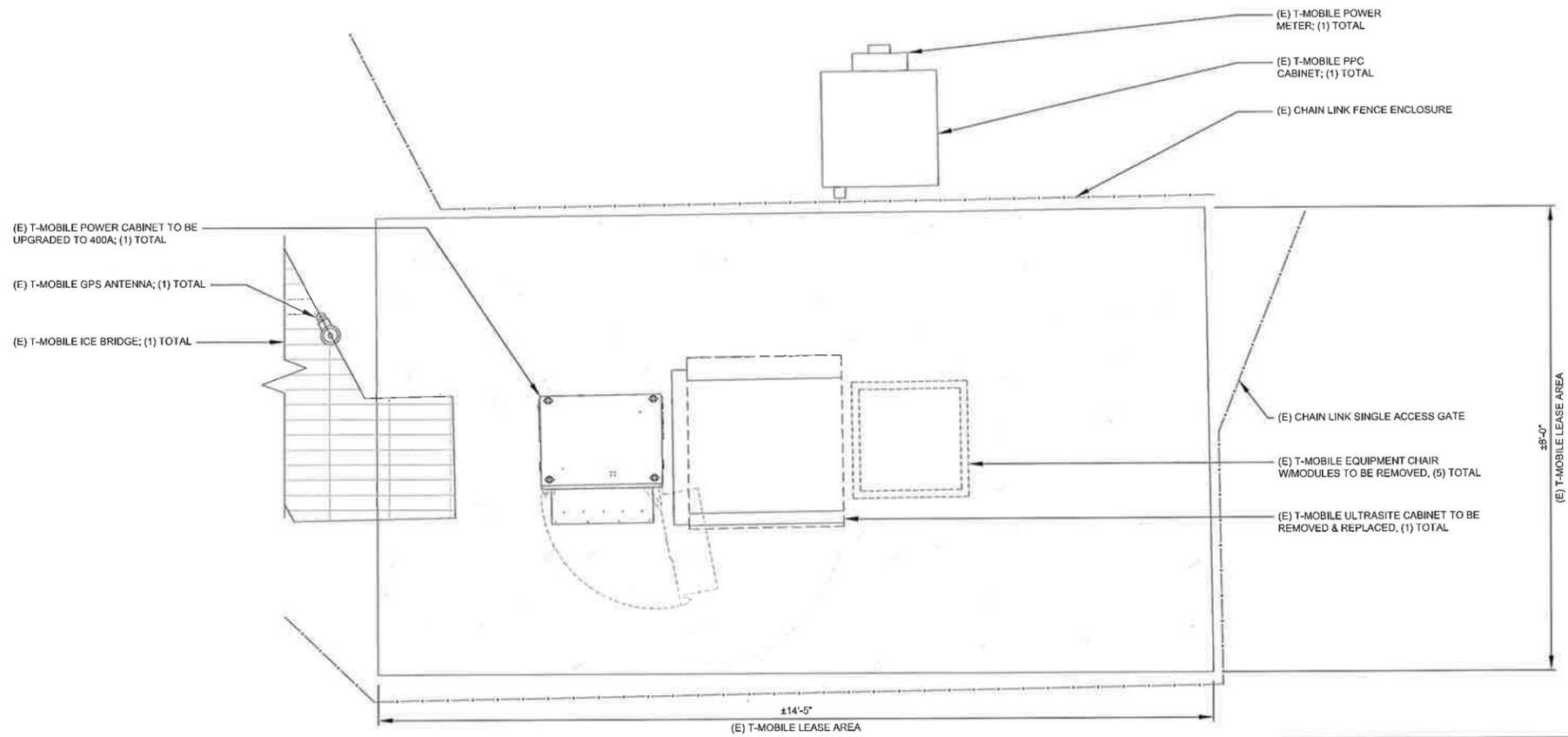


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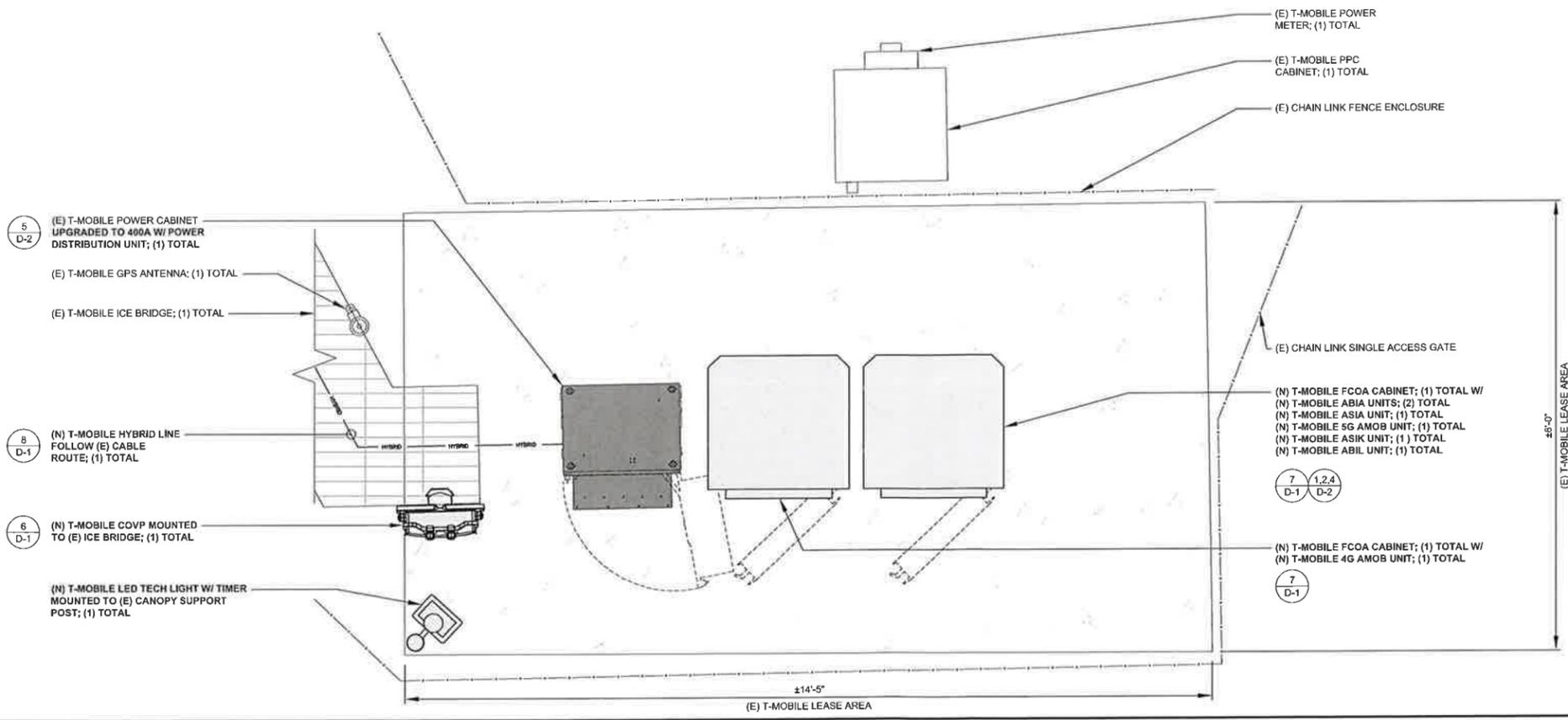
SHEET TITLE  
**SITE PLAN AND ENLARGED SITE PLAN**

SHEET NUMBER  
**A-1**



**EXISTING EQUIPMENT LAYOUT**

24"x36" SCALE: 3/4" = 1'-0"  
 11"x17" SCALE: 3/8" = 1'-0"  
 0" 6" 1" 2"  
**1**



**NEW EQUIPMENT LAYOUT**

24"x36" SCALE: 3/4" = 1'-0"  
 11"x17" SCALE: 3/8" = 1'-0"  
 0" 6" 1" 2"  
**2**

**T-Mobile**  
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 SEATTLE, WA 98109

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 SAN CLEMENTE CA 92673 (949) 391-8824

DRAWN BY: JAC  
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 BURDOIN MOUNTAIN  
 WHITE SALMON, WA 98672  
 MONOPOLE

SHEET TITLE  
**EQUIPMENT LAYOUT**

SHEET NUMBER  
**A-2**

NEW OPTIMAL ANTENNA REQUIREMENTS (VERIFY WITH CURRENT RFDS)			ANTENNA MAKE AND MODEL		RAD CENTER		AZIMUTH		TRANSMISSION LINE		
ANTENNA POSITION	TECHNOLOGY	ANTENNA COUNT	EXISTING	FINAL	EXISTING	NEW	EXISTING	NEW	CABLE LENGTH	CABLE QTY.	FEEDER TYPE
SECTOR A	1	1	DECIBEL - 980H90-M (SINGLE)	(N) COMMSCOPE FFHH-65C-R3 (OCTA)	57'-0"	57'-0"	100'	100'	±125'	1	(N) HYBRID
	2	-	-	-	-	-	-	-	-	-	-
	3	-	DECIBEL - 980H90-M (SINGLE)	-	-	-	100'	-	±68'	1	(E) COAX
	4	-	-	-	-	-	-	-	-	-	-
SECTOR B	1	1	DECIBEL - 980H90-M (SINGLE)	(N) COMMSCOPE FFHH-65C-R3 (OCTA)	57'-0"	57'-0"	255'	255'	±68'	1	(E) COAX
	2	-	-	-	-	-	-	-	-	-	-
	3	-	DECIBEL - 980H90-M (SINGLE)	-	-	-	255'	-	-	-	-
	4	-	-	-	-	-	-	-	-	-	-
SECTOR C	1	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-	-
MICROWAVE	1	1	ERICSSON UKY 210 77/SC11	(N) RFS CELWAVE SB1-220AMPT	57'-0"	57'-0"	270'	135'	±68'	1	(E) COAX
	2	1	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-	-

**NOTES TO CONTRACTOR:**

- CONTRACTOR IS TO REFER TO T-MOBILE'S MOST CURRENT RADIO FREQUENCY DATA SHEET (RFDS) PRIOR TO CONSTRUCTION
- CABLE LENGTHS WERE DETERMINED BASED ON VISUAL INSPECTION DURING SITE-WALK. CONTRACTOR TO VERIFY ACTUAL LENGTH DURING PRE-CONSTRUCTION WALK
- CONTRACTOR TO VERIFY PORTS HAVE SUFFICIENT ROOM

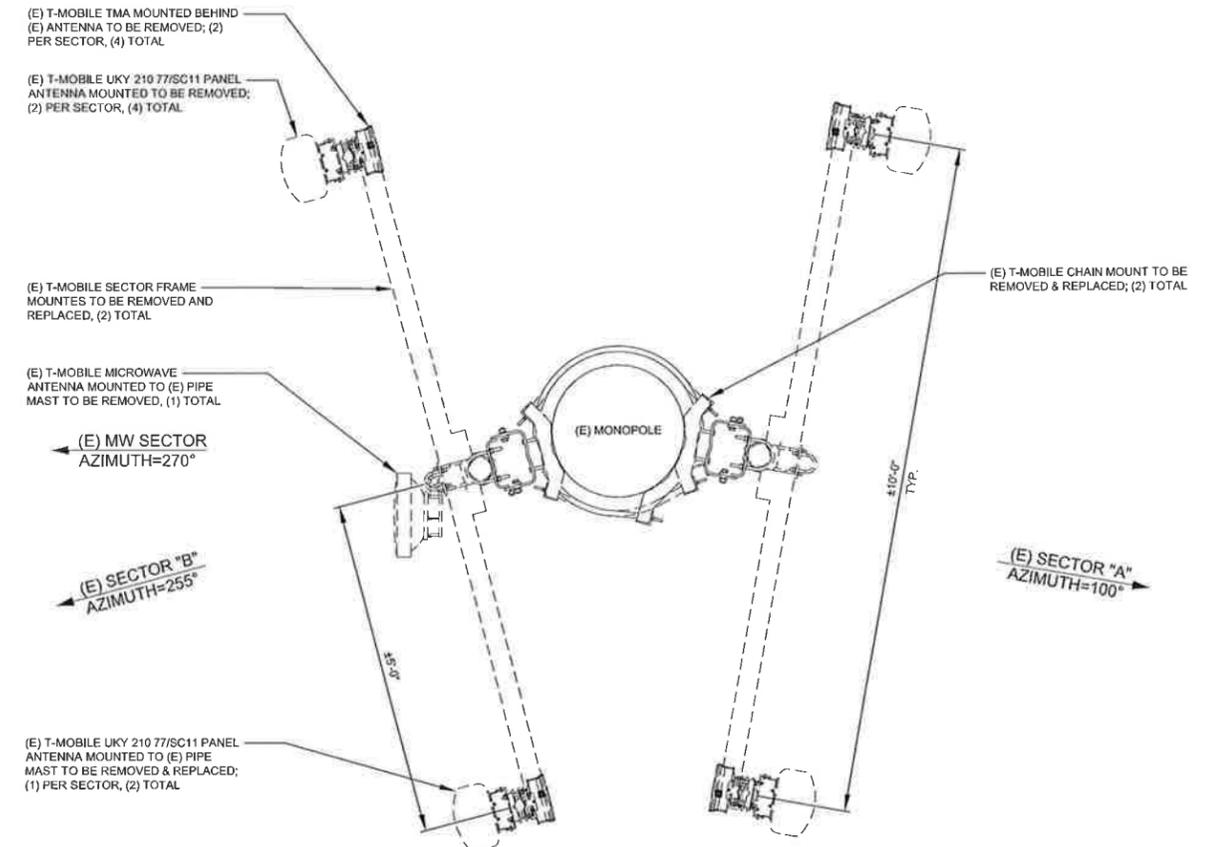
**NOTE:**

- (E) ANTENNA AZIMUTHS ARE ESTIMATED AND ARE TO BE VERIFIED BY RF.
- NEW PANEL ANTENNAS AND ALL MOUNTING HARDWARE TO BE PAINTED TO MATCH EXISTING STRUCTURE IF REQUIRED. VERIFY PAINT MANUFACTURER AND FINISH WITH OWNER

**ANTENNA & EQUIPMENT SCHEDULE**

**NOTE:**

- (E) ANTENNA / EQUIPMENT BY OTHERS NOT SHOW FOR CLARITY, (IF APPLICABLE)

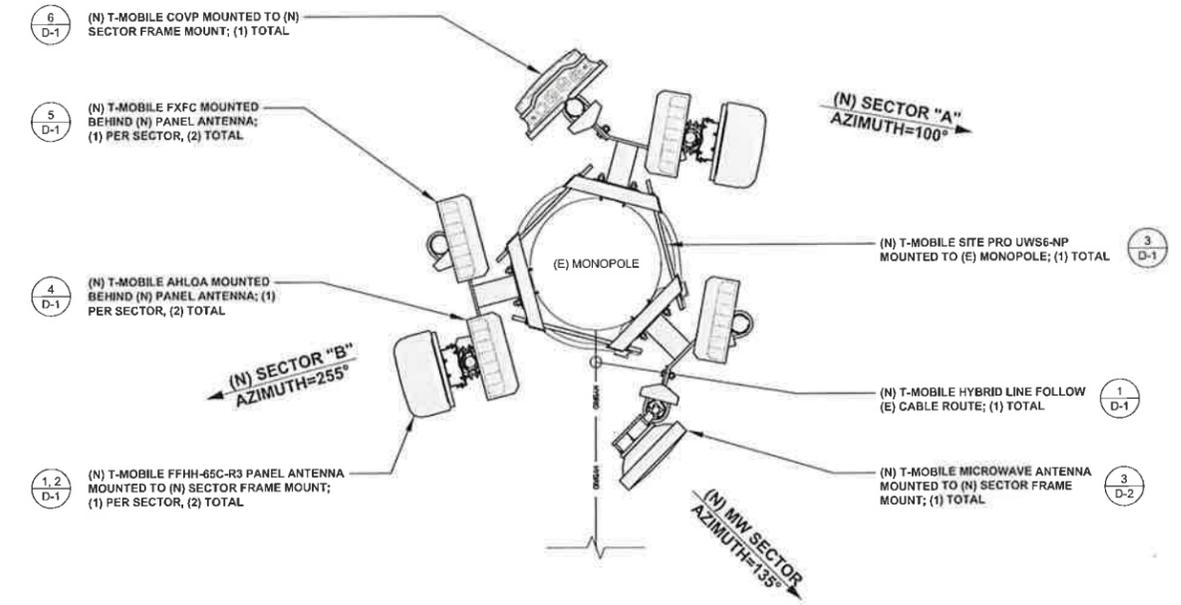


**EXISTING ANTENNA PLAN**

24"x36" SCALE: 3/4" = 1'-0"  
11"x17" SCALE: 3/8" = 1'-0"

**NOTE:**

- CONTRACTOR TO VERIFY APPROVED STRUCTURAL ANALYSIS PRIOR TO INSTALLATION.
- CONTRACTOR TO VERIFY ANTENNA TECHNOLOGIES PRIOR TO REMOVAL OF ANY ANTENNAS.
- CONTRACTOR TO SUPPLY WEATHERPROOFING FOR CONNECTIONS.
- GENERAL CONTRACTOR TO PROVIDE MOUNTS OR ADDITIONAL HARDWARE IF REQUIRED TO SUPPORT PROPOSED ANTENNAS. ALL ANTENNAS & MOUNTING HARDWARE SHALL CONFORM TO DESIGN REQUIREMENTS PER 201 IBC/2013 CBC AND EIA/TIA-222-G STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.



**NEW ANTENNA PLAN**

24"x36" SCALE: 3/4" = 1'-0"  
11"x17" SCALE: 3/8" = 1'-0"

**T-Mobile**  
12920 SE 38TH ST  
BELLEVUE, WA 98006

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1505 WESTLAKE AVENUE NORTH, SUITE 800  
SEATTLE, WA 98109

**M SQUARE WIRELESS**  
1387 CALLE AVANZADO  
SAN CLEMENTE CA 92673 (949) 381-8824

DRAWN BY: JAC  
CHECKED BY: MM

REV	DATE	DESCRIPTION	BY
2	05/13/2019	100% CD'S FOR SUBMITTAL	CP
1	08/07/2018	100% CD'S FOR REVIEW	DAM
0	07/11/2018	90% CD'S FOR REVIEW	JAC

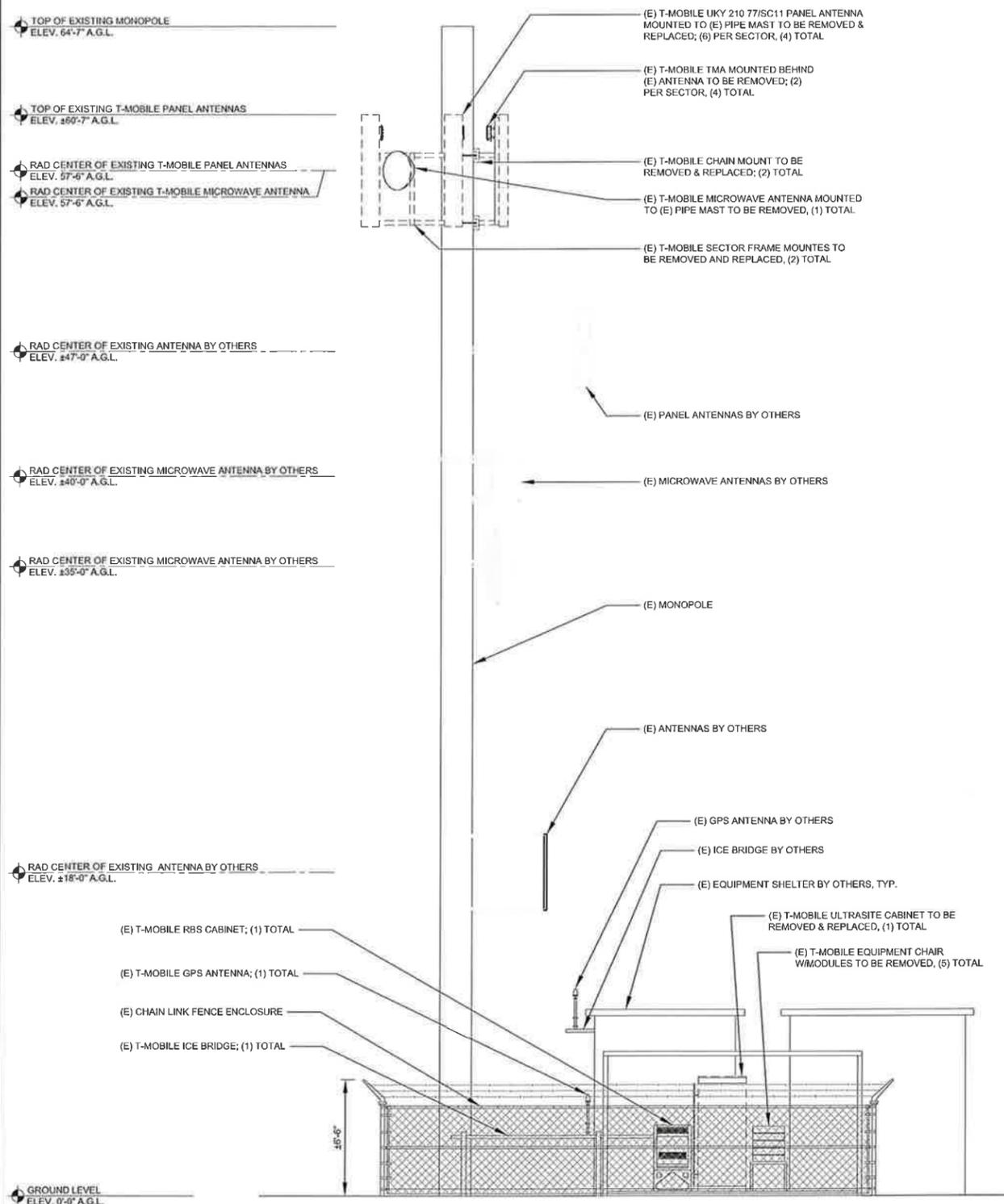


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CROWN CASTLE SITE ID: 829066  
WHITE SALMON  
BURDOIN MOUNTAIN  
WHITE SALMON, WA 98672  
MONOPOLE

SHEET TITLE  
**ANTENNA LAYOUT**

SHEET NUMBER  
**A-3**

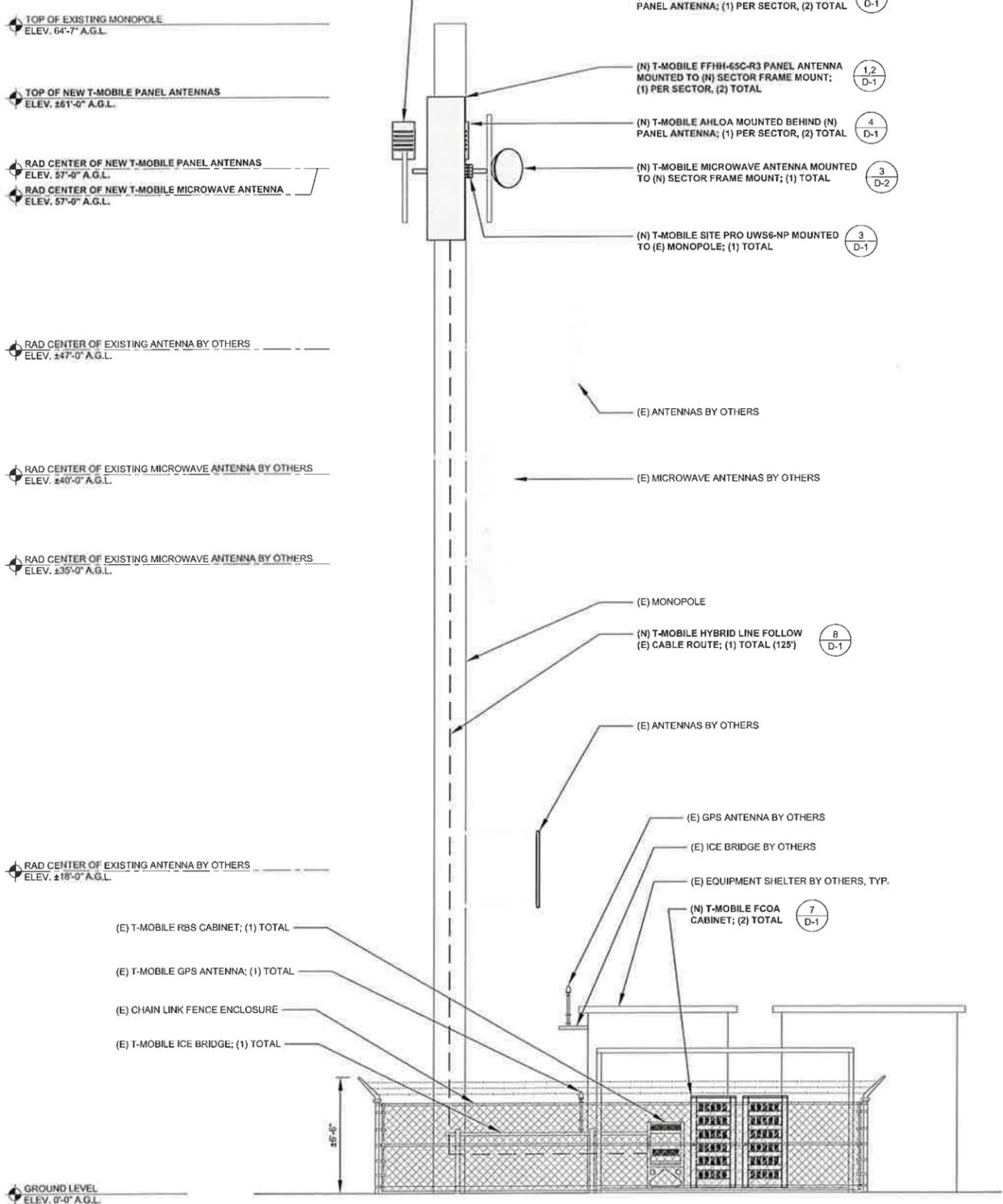


**EXISTING SOUTHWEST ELEVATION**

24"x36" SCALE: 1/4" = 1'-0"  
 11"x17" SCALE: 1/8" = 1'-0"  
 0" 2' 4' 8'

**NOTE:**  
 1. NEW PANEL ANTENNAS AND ALL MOUNTING HARDWARE TO BE PAINTED TO MATCH EXISTING STRUCTURE IF REQUIRED, VERIFY PAINT MANUFACTURER AND FINISH WITH OWNER.

**NOTES:**  
 1. CAPACITY OF EXISTING MONOPOLE TO SUPPORT PROPOSED EQUIPMENT TO BE VERIFIED BY OTHERS  
 2. CAPACITY OF EXISTING ANTENNA MOUNTS TO SUPPORT PROPOSED EQUIPMENT TO BE VERIFIED BY OTHERS



**NEW SOUTHWEST ELEVATION**

24"x36" SCALE: 1/4" = 1'-0"  
 11"x17" SCALE: 1/8" = 1'-0"  
 0" 2' 4' 8'

**T-Mobile**  
 12920 SE 38TH ST  
 BELLEVUE, WA 98006

**CROWN CASTLE**  
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 SEATTLE, WA 98109

**M SQUARE WIRELESS**  
 1387 CALLE AVANZADO  
 SAN CLEMENTE CA 92673 (949) 391-6824

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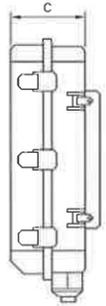
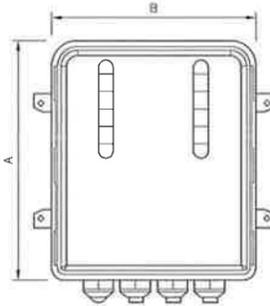
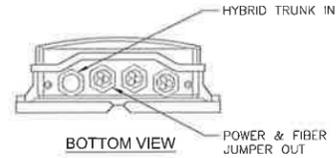
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CROWN CASTLE SITE ID: 829066  
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 BURDOIN MOUNTAIN  
 WHITE SALMON, WA 98672  
 MONOPOLE

SHEET TITLE  
**ELEVATIONS**

SHEET NUMBER  
**A-4**

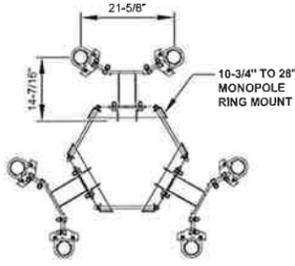
MANUFACTURER:	RAYCAP
MODEL NO.:	RNSNDC-7771-PF-4B
DIMENSIONS:	TOTAL WEIGHT :
A	20.38"
B	18.86"
C	5.83"
	±19 LBS



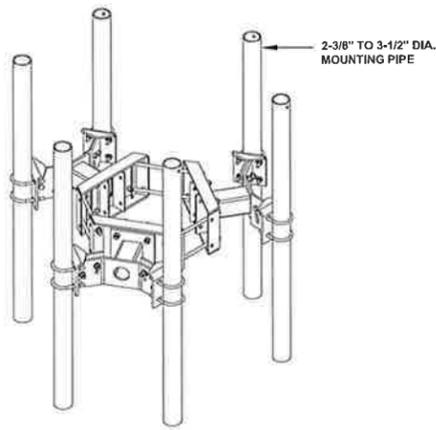
FRONT VIEW

SIDE VIEW

SITE PRO	UW56-NP
ANTENNA MOUNT - MONOPOLE	(14-1/2" STANDOFF)



PLAN VIEW

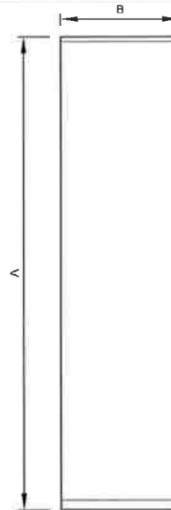


ISO VIEW

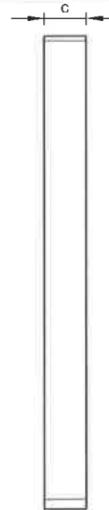
MANUFACTURER:	COMMSCOPE		
MODEL NO.:	FFHH-65C-R3		
DIMENSIONS:	CONNECTOR TYPE:	TOTAL WEIGHT :	
A	95.9"	{8} 4.3-10 FEMALE	27.6 LBS
B	25.2"	CONNECTOR LOCATION:	
C	9.3"	BOTTOM	



TOP VIEW



FRONT VIEW



SIDE VIEW

RAYCAP COVP RNSNDC-7771-PF-48

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

6

STANDOFF BRACKET RING MOUNT

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

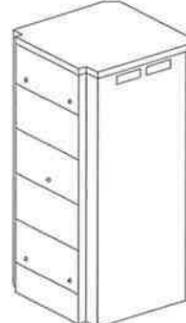
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COMMSCOPE FFHH-65C-R3

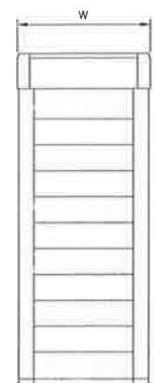
24"x36" SCALE: NTS  
11"x17" SCALE: NTS

1

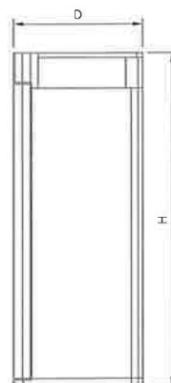
FCOA CABINET	
HEIGHT (H)	61.0"
WIDTH (W)	30.3"
DEPTH (D)	30.3"
WEIGHT	134.0 LBS.



ORTHO VIEW



FRONT VIEW



SIDE VIEW

FCOA CABINET

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

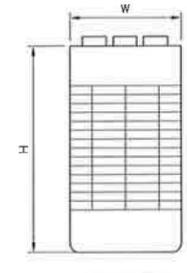
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AHLOA

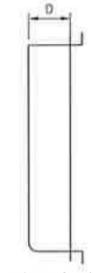
24"x36" SCALE: NTS  
11"x17" SCALE: NTS

4

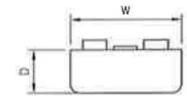
AHLOA RADIO MODULE	
HEIGHT (H)	22.1"
WIDTH (W)	12.2"
DEPTH (D)	7.5"
WEIGHT	83.9 LBS.



FRONT VIEW

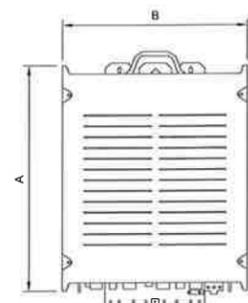


SIDE VIEW

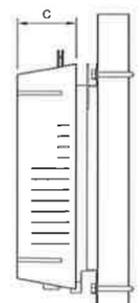


TOP VIEW

MANUFACTURER:	NOKIA
MODEL NO.:	FLEXI RRH 414RB7 X (600) 160WFH0A
DIMENSIONS:	TOTAL WEIGHT :
A	22.1"
B	19.4"
C	5.2"
	±55.1 LBS



FRONT VIEW



SIDE VIEW

ARMORED TRUNK HYBRID CABLE

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

8

NOKIA FXFC

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

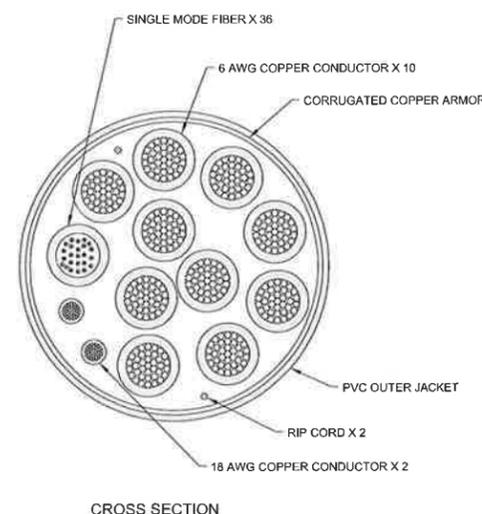
5

ANTENNA MOUNTING DETAIL

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

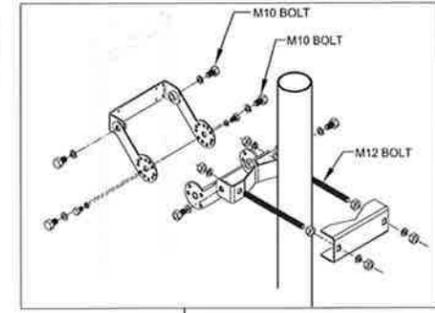
2

MANUFACTURER:	NOKIA
MODEL NO.:	ASU9325TYP01
OUTER DIAMETER (NOMINAL):	1.584"
OPERATING VOLTAGE:	600 V DC
RESISTANCE:	6.7 Ω/Kft
NOMINAL CABLE WEIGHT:	1.614 LBS/FT
MIN BENDING RADIUS:	19" IN



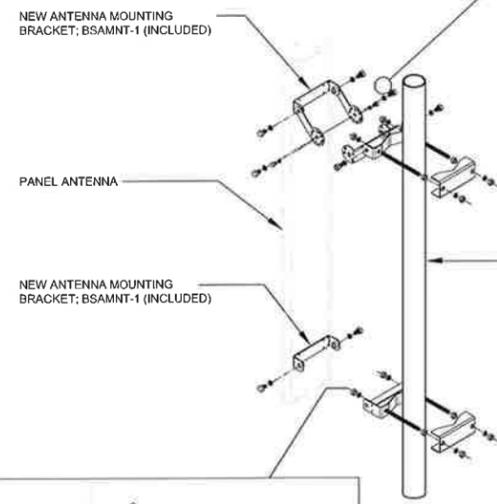
CROSS SECTION

MAXIMUM TORQUE	
M8	15N.m (11FT.LBS)
M10	37N.m (27FT.LBS)
M12	58N.m (43FT.LBS)



CRITICAL: FOR INITIAL INSTALLATION TO PIPE, DOWNTILT BRACKETS MUST BE CONFIGURED IN PRE-ASSEMBLY POSITION (FULLY COLLAPSED)

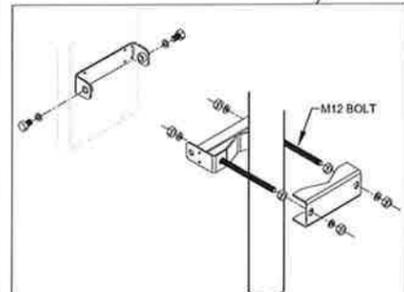
ATTENTION: INSERT M12 BOLTS AND M12 FLAT WASHERS INTO BRACKET WITH TABS PRIOR TO ATTACHING BRACKET TO ANTENNA.



PANEL ANTENNA

NEW ANTENNA MOUNTING BRACKET: BSAMNT-1 (INCLUDED)

3" STD. PIPE (3-1/2" O.D.) ANTENNA MOUNTING MAST, MIN. 6'-0" L (ATTACH TO EXISTING CROSSARM W/ SITE PRO 1 PN: SCX-4 CROSSOVER KIT)



MAXIMUM TORQUE	
M10	37N.m (27FT.LBS)
M12	58N.m (43FT.LBS)

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**M SQUARE WIRELESS**  
1387 CALLE AVANZADO  
SAN CLEMENTE CA 92673 (949) 391-8824

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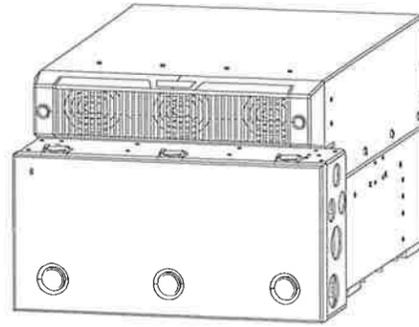
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WHITE SALMON  
BURDOIN MOUNTAIN  
WHITE SALMON, WA 98672  
MONOPOLE

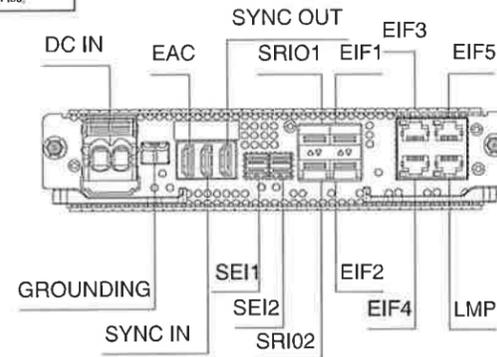
SHEET TITLE  
**DETAILS**

SHEET NUMBER  
**D-1**

NOKIA AMOB	
HEIGHT (H)	12.2"
WIDTH (W)	17.6"
DEPTH (D)	23.8"
WEIGHT	50.7 lbs.



NOKIA ABIA	
HEIGHT (H)	1.1"
WIDTH (W)	14.2"
DEPTH (D)	8.6"
WEIGHT	4.4 lbs.



NOT USED

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

7

AMOB DETAIL

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

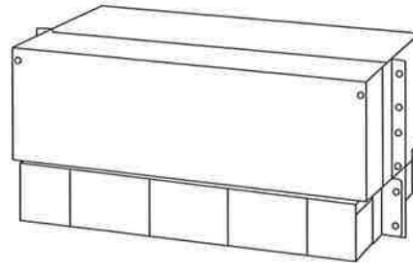
4

ABIA DETAIL

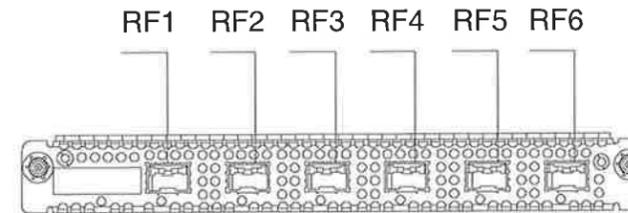
24"x36" SCALE: NTS  
11"x17" SCALE: NTS

1

ALPHA E3 DCPP SPECIFICATIONS	
-48V	
400A	
5 RU, 23" RACK	
60.0 LBS	



NOKIA ASIA	
HEIGHT (H)	1.7"
WIDTH (W)	14.2"
DEPTH (D)	8.6"
WEIGHT	6.6 lbs.



NOT USED

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

8

SFX31-3031 ALPHA E3 DCPP UPGRADE

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

5

ASIA DETAIL

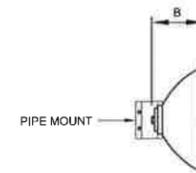
24"x36" SCALE: NTS  
11"x17" SCALE: NTS

2

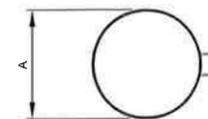
MANUFACTURER:	RFS
MODEL NO.:	SB1-220AMPT
DIMENSIONS:	TOTAL WEIGHT:
A	15"
B	6.7"
C	-
	8.8 LBS



TOP VIEW



SIDE VIEW



FRONT VIEW

NOT USED

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

9

NOT USED

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

6

2' MICROWAVE ANTENNA

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

3

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**CROWN CASTLE**

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SEATTLE, WA 98109

**M SQUARE WIRELESS**

1397 CALLE AVANZADO  
SAN CLEMENTE CA 92673 (949) 391-8824

DRAWN BY: JAC

CHECKED BY: MM

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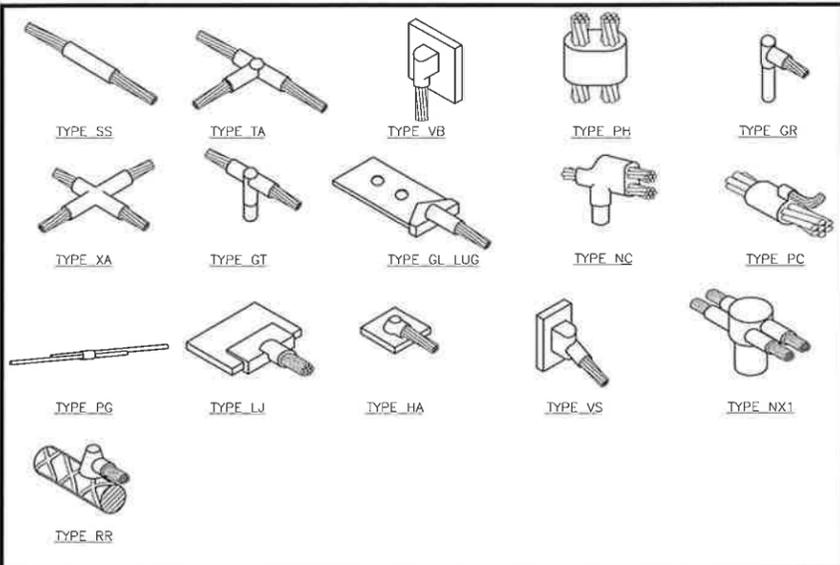
CROWN CASTLE SITE ID: 829066  
WHITE SALMON  
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WHITE SALMON, WA 98672  
MONOPOLE

SHEET TITLE

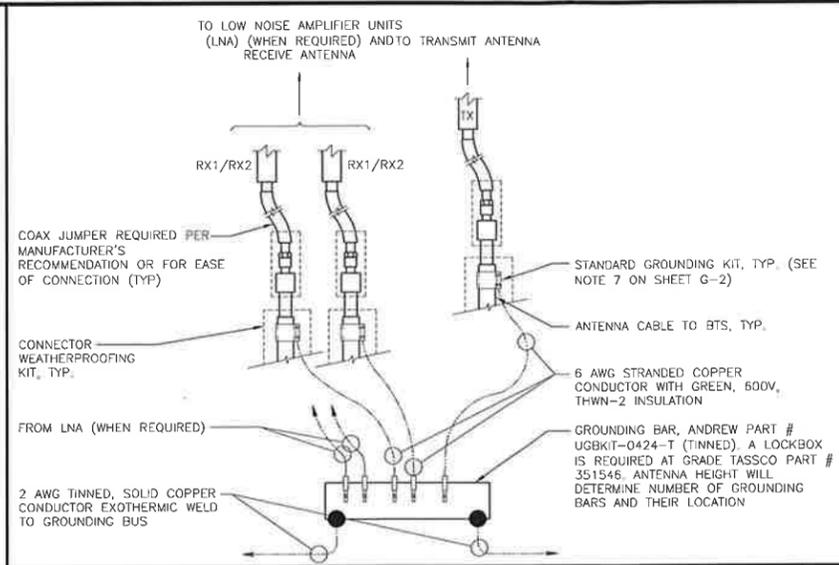
**DETAILS**

SHEET NUMBER

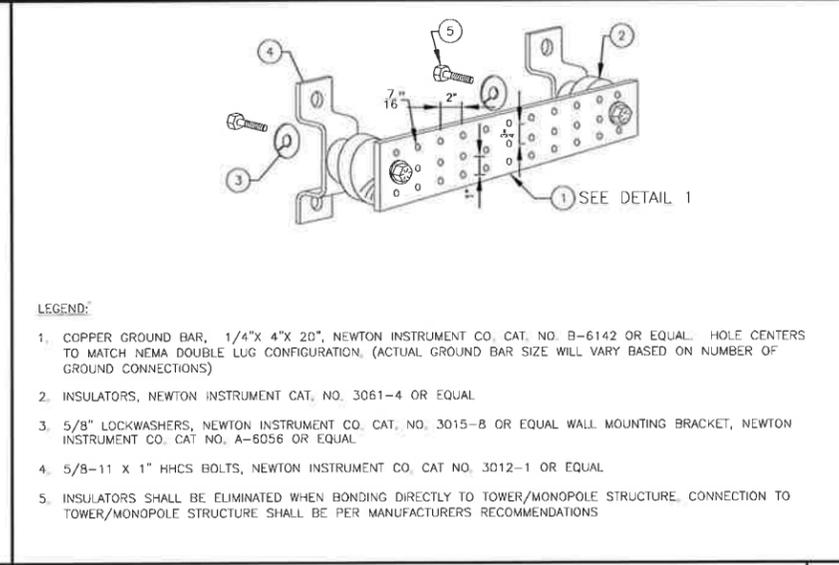
**D-2**



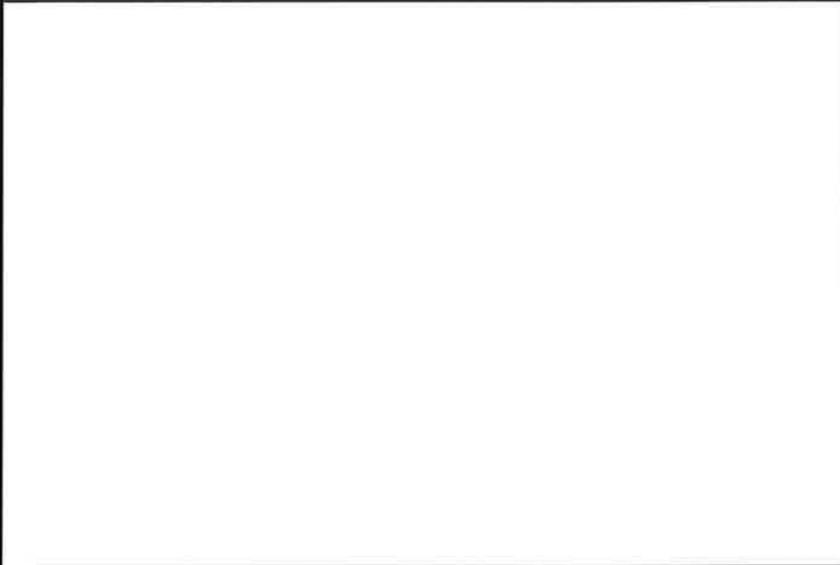
TYPICAL CADWELD TYPES 24"x36" SCALE: NTS 11"x17" SCALE: NTS 7



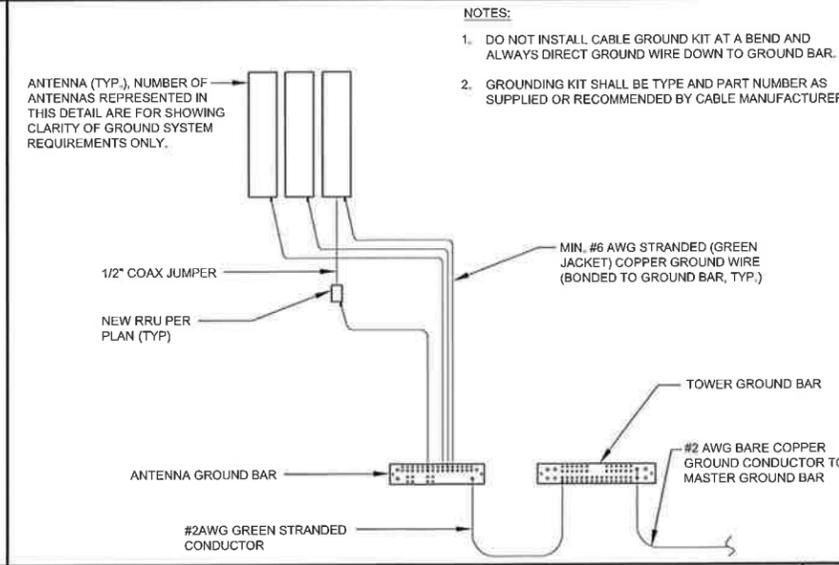
GROUNDING BAR CONNECTION 24"x36" SCALE: NTS 11"x17" SCALE: NTS 4



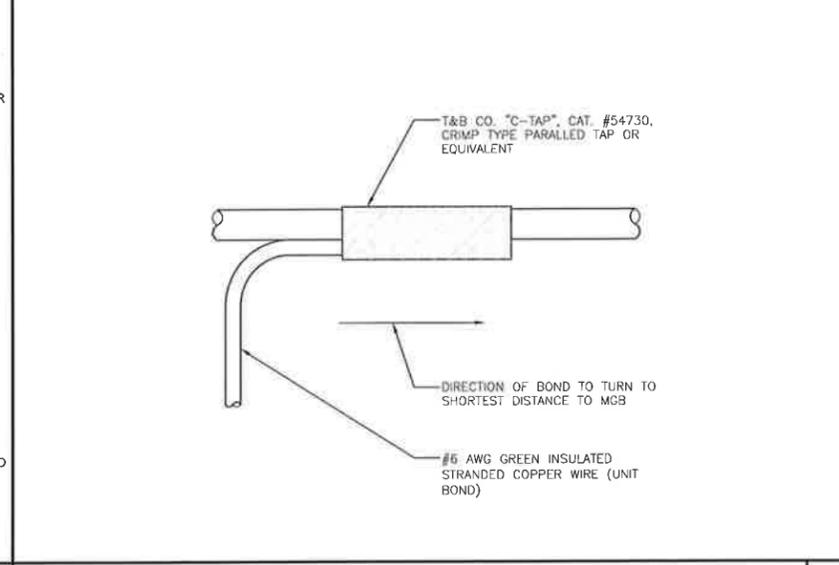
GROUNDING BAR DETAIL 24"x36" SCALE: NTS 11"x17" SCALE: NTS 1



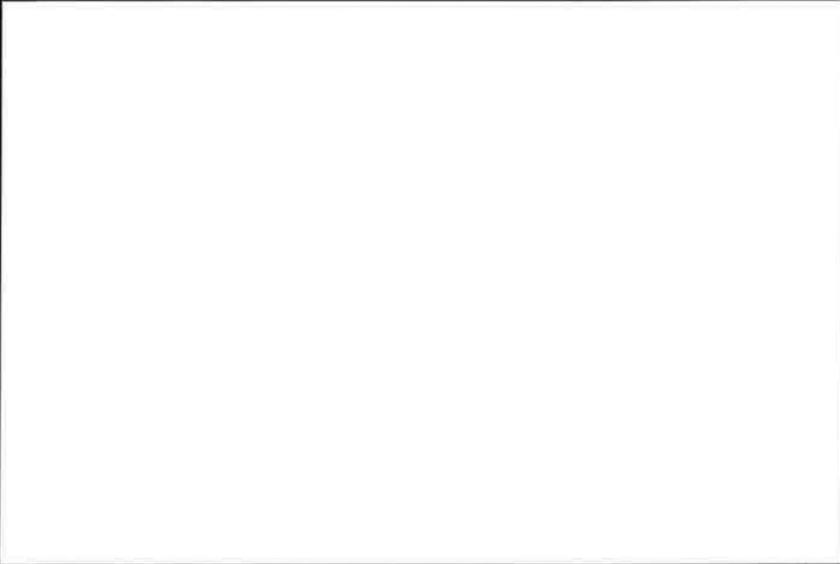
NOT USED 24"x36" SCALE: NTS 11"x17" SCALE: NTS 8



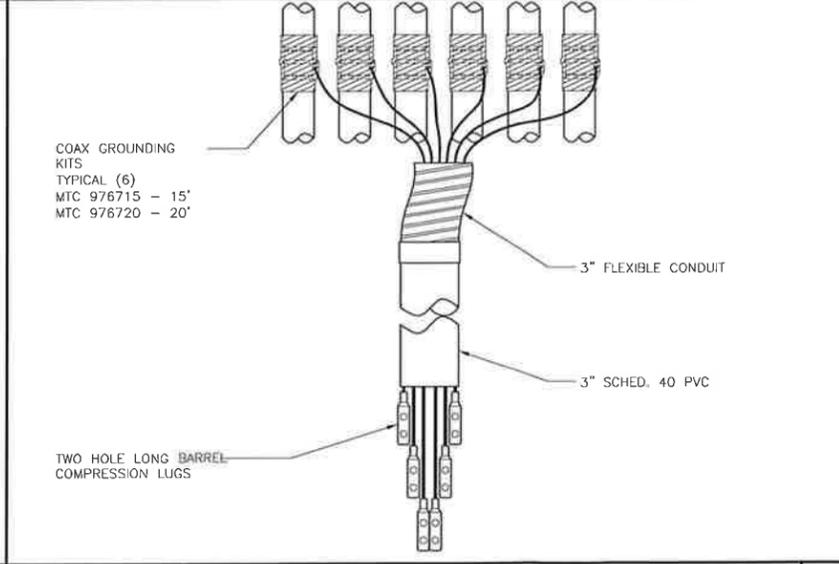
ANTENNA GROUNDING PLAN 24"x36" SCALE: NTS 11"x17" SCALE: NTS 5



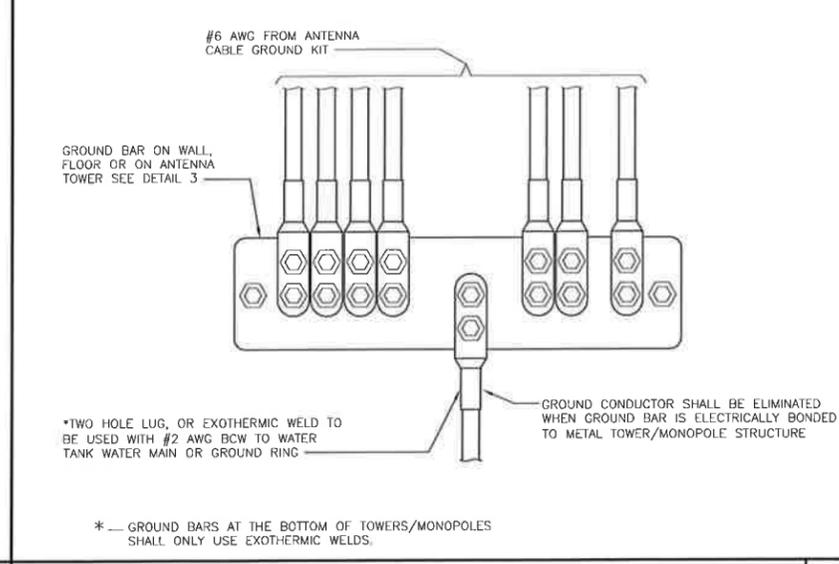
GROUNDING WIRE CONNECTION 24"x36" SCALE: NTS 11"x17" SCALE: NTS 2



NOT USED 24"x36" SCALE: NTS 11"x17" SCALE: NTS 9



COAX GROUND KIT 24"x36" SCALE: NTS 11"x17" SCALE: NTS 6



WIRE TO GROUND BAR CONNECTION 24"x36" SCALE: NTS 11"x17" SCALE: NTS 3

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MONOPOLE

SHEET TITLE  
**GROUNDING DETAILS**

SHEET NUMBER  
**G-1**

