

File No.
S64-0012-R-3
Location Map

Verizon Wireless Mt. Aukum

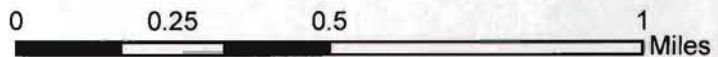


Exhibit A

CONDITIONS OF APPROVAL

PROJECT DESCRIPTION

1. This Special Use Permit Revision is based upon and limited to compliance with the project description, the Staff Report exhibits marked Exhibits E through F and conditions of approval set forth below. Any deviations from the project description, exhibits, or conditions must be reviewed and approved by the County for conformity with this approval. Deviations may require approved changes to the permit and/or further environmental review. Deviations without the above described approval will constitute a violation of permit approval.

Special Use Permit S64-0012 allows the following:

Addition to existing building for radio beam site and for general service administration personnel for computers.

This revision to Special Use Permit S64-0012-R allows the following:

The removal of four (4) omni antennas and the installation of six (6) new panel antennas. The new mounts shall be painted to match the existing lattice structure and existing building and shall not exceed the height of the existing mounts. The new panels shall match the color of the existing panels and shall not exceed the height of the existing panels. Any new equipment shall be contained in the existing building.

No increase in height of the 29.7 foot lattice structure shall be authorized by this permit revision.

Scope of Work for New Project (El Dorado County BP #238589)

Replace (3) (E) BXA-70040, (1) (E) BXA-80063 and (2) BXA-80040 antennas with (6) (N) SBNHH-1D65B antennas. Install (2) (N) SBNHH-1D65B antennas for (N) B2B sector. Install (4) (N) RRUS-12 with A-2 packs for AWS. Install (2) (N) Raycap Surge Protectors (1 @ antennas & 1 @ equipment). Install (1) (N) eNodeB cabinet. Install (1) (N) Hybrid cable. Replace (12) (E) runs of 7/8" coax with (14) (N) runs of 1 5/8" coax. Replace (E) cable tray with wider one to accommodate larger coax. The new mounts shall be painted to match the existing lattice structure and existing building and shall not exceed the height of the existing mounts. The new panels shall match the color of the existing panels and shall not exceed the height of the existing panels. Any new equipment shall be contained in the existing building.

The grading, development, use, and maintenance of the property, the size, shape, arrangement, and location of structures, parking areas and landscape areas, and the protection and preservation of resources shall conform to the project description above and the hearing exhibits and conditions of approval below. The property and any portions thereof shall be sold, leased or financed in compliance with this project description and the approved hearing exhibits and conditions of approval hereto. All plans must be submitted for review and approval and shall be implemented as approved by the County.

b. Hold a public hearing to determine whether to modify the conditions of approval in order to reduce identified adverse impacts; or initiate proceedings to revoke the special use permit, requiring the facility's removal if it is no longer an integral part of the wireless communications system.

By operation of this condition, it is the intent of County to reserve the right to modify or add new conditions, consistent with the language specified above. The failure of the County to conduct or complete a five-year review in a timely fashion shall not invalidate the Special Use Permit. The applicant shall pay a fee determined by the Development Services Director to cover the cost of processing a five-year review on a time and materials basis.

The applicant accepts this condition

9. Prior to commencement of any use authorized by this permit, the applicant shall provide a written description, together with appropriate documentation, showing conformance of the project with each condition imposed as part of the project approval. The applicant shall also schedule an inspection by Planning Services for verification of compliance with applicable conditions of approval. The operator shall pay Planning Services for the time spent reviewing the site on a time and materials basis. All future development plans shall include this condition on the submitted plans.

The applicant accepts this condition and has provided documentation.

10. The operator (lessee) and property owner (lessor) are responsible for complying with all conditions of approval contained in this Special Use Permit. Any zoning violations concerning the installation, operation, and/or abandonment of the facility are the responsibility of the owner and the operator.

The applicant is in compliance with all zoning conditions.

11. All Development Services fees for processing this application shall be paid in full prior to issuance of a Building Permit.

The applicant accepts this condition.

12. In the event of any legal action instituted by a third party challenging the validity of any provision of this approval, the applicant and landowner agrees to be responsible for the costs of defending such suit and shall hold County harmless from any legal fees or costs County may incur as a result of such action.

The applicant and land owner shall defend, indemnify, and hold harmless El Dorado County and its agents, officers, and employees from any claim, action, or proceeding against El Dorado County or its agents, officers, or employees to attack, set aside, void, or annul an approval of El Dorado County concerning a Special Use Permit.

The County shall notify the applicant/owner of any claim, action, or proceeding and County will cooperate fully in the defense.

The applicant accepts this condition.

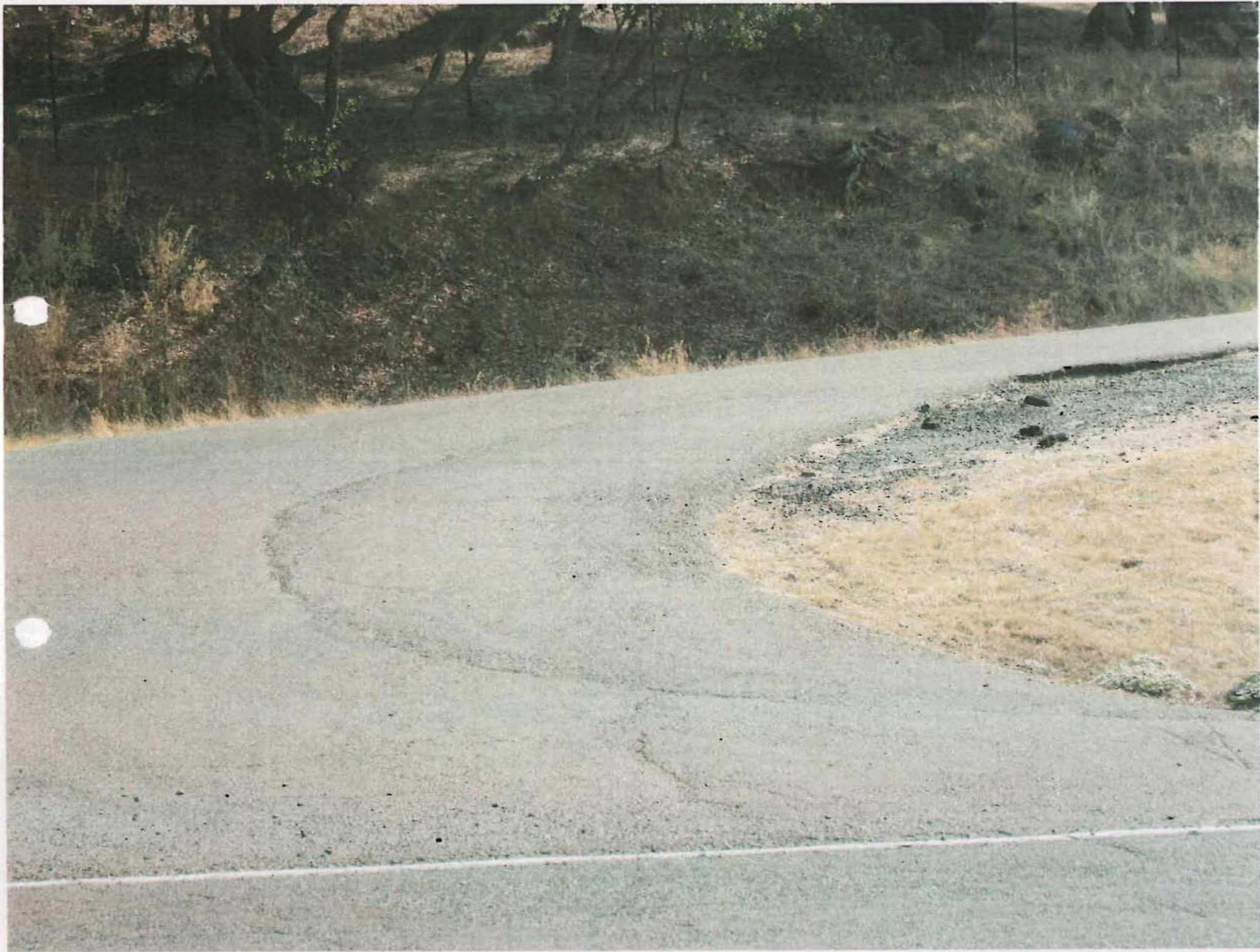
FINDINGS



15 SEP 17 PM 4:37
RECEIVED
KAMONG DEPARTMENT

Exhibit C

S 64-0012





MOUNT
LUKUM
WINERY

Open Daily



















17 SEPT 7 11 43 AM '37
RECEIVED
ADMINISTRATIVE DEPARTMENT

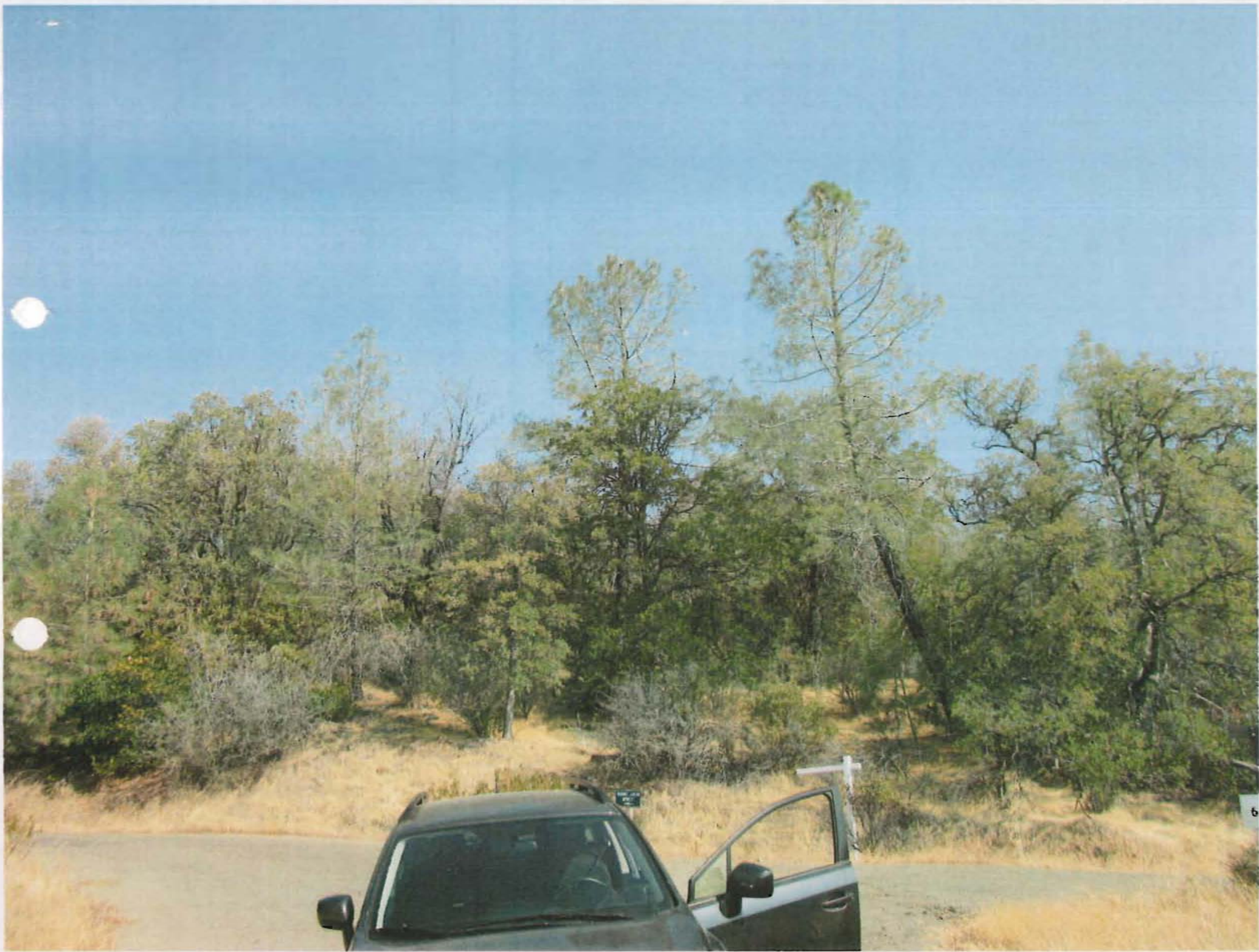
















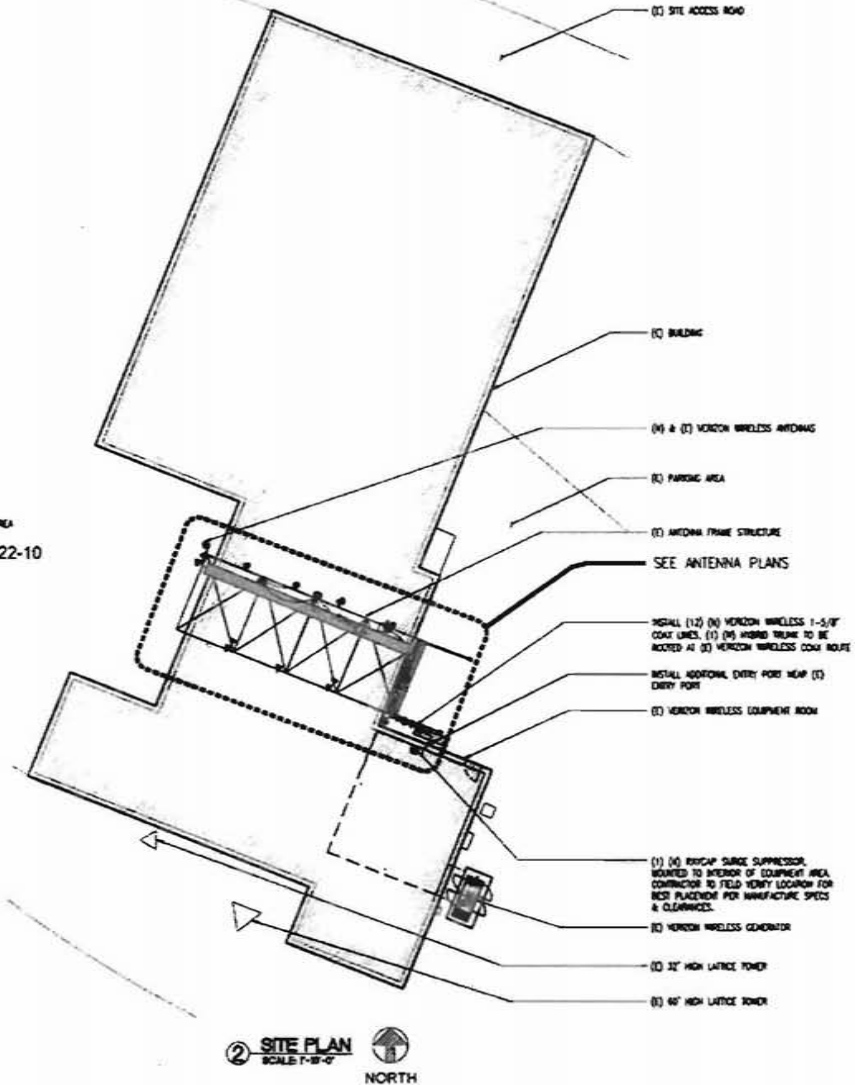
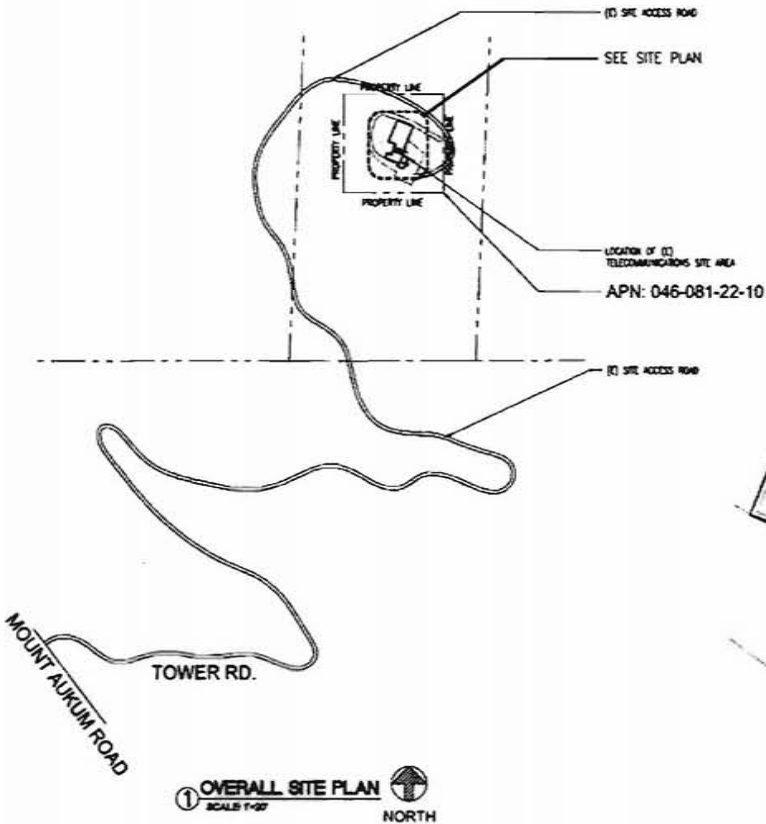


NOTES:

1. DO NOT SCALE DRAWINGS. ALL DIMENSIONS OF AND BETWEEN EXISTING BUILDINGS/STRUCTURES, OR RELATIVE DISTANCES AS SHOWN BETWEEN EXISTING BUILDINGS/STRUCTURES AND THE TRUE NORTH ARE TO BE CONFIRMED BY THE SURVEYOR.

CONSTRUCTION NOTES:

- EXISTING BUILDING CONSTRUCTION CONDITIONS INDICATED ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PROCEEDING WITH CONSTRUCTION OR ORDERING OF MATERIALS IF EXISTING CONDITIONS DO NOT ALLOW FOR DETAILS OF CONSTRUCTION AS SHOWN ON THESE DRAWINGS. NOTIFY ENGINEER OF RECORD FOR RESOLUTION PRIOR TO PROCEEDING. CONTRACTOR SHALL EXPOSE AND RECOVER EXISTING CONDITIONS IN A TIMELY MANNER SUCH THAT ALTERNATE DESIGNS OR DETAILS, IF REQUIRED MAY BE IMPLEMENTED WITHOUT DELAY TO THE PROJECT.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL NOT ALTER, DAMAGE OR REMOVE ANY PART OF THE EXISTING STRUCTURE UNLESS SPECIFICALLY DETAILED ON THESE DRAWINGS.
- THE INTENT OF THESE DRAWINGS IS THAT THE WORK OF THE ADDITION, ALTERATION, REHABILITATION, OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH THE 2013 CBC. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS HEREON THE FINISHED WORK WILL NOT COMPLY WITH THE 2013 CBC. A CHANGE ORDER OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE PREPARED AND SUBMITTED TO AND APPROVED BY THE BUILDING DEPARTMENT PRIOR TO PROCEEDING WITH THE WORK.
- ALL WORK AND MATERIALS SHOWN ARE NEW UNLESS INDICATED AS EXISTING (E).
- IT MAY BE NECESSARY TO REMOVE ARCHITECTURAL FINISHES, PLUMBING PIPES AND FIXTURES, ELECTRICAL CONDUIT, FIXTURES, PANELS, BOXES, TELEPHONE OR FIRE ALARM WIRING AND FIXTURES OR OTHER NON-STRUCTURAL ITEMS TO INSTALL STRUCTURAL WORK AND MATERIALS SHOWN ON THESE DRAWINGS. SUCH ITEMS SHALL BE REACHED, REWIRED AND/OR REPLACED TO MATCH PRE-CONSTRUCTION CONDITIONS AT THE CONTRACTOR'S EXPENSE.
- ALL WEATHER PROOFING, INCLUDING BUT NOT LIMITED TO TORCH DOWN CALSING, 2-FLASHING OR ANY OTHER MATERIAL THAT MAY BE ALTERED DURING INSTALLATION SHALL BE REWIRED, REPLACED AND/OR MODIFIED TO ENSURE THE BUILDING AT THE INSTALLATION SITE IS WEATHER PROOF.
- ANY PROPOSED SUBSTITUTIONS FOR STRUCTURAL MEMBERS, WELDING, ANCHOR TYPES, OR DETAILING INDICATED IN THESE DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ORDERING MATERIALS. SUCH REVIEW SHALL BE BILLED ON A TIME AND MATERIALS BASIS TO THE CONTRACTOR WITH NO GUARANTEE THAT THE SUBSTITUTION WILL BE ALLOWED.



MT. AUKUM
 AWS-RIS PROJECT ID: 20151199230
 PS LOCATION #: 06183
 6780 TOWER RD.
 SOMERSET, CA 95684



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 2525 East Blinnell Street
 Folsom, CA 95630
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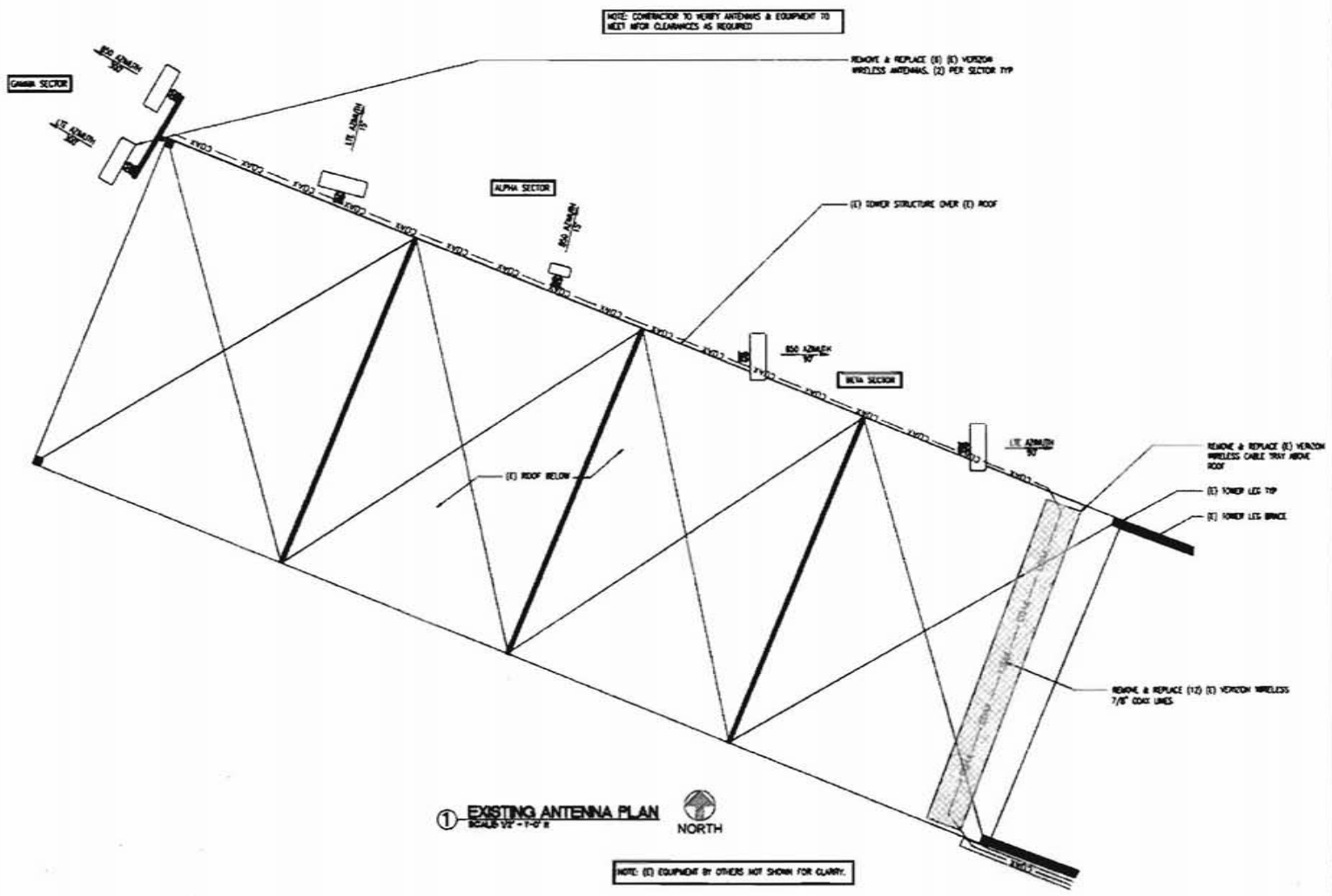
ISSUE STATUS

NO.	DATE	DESCRIPTION	ISSUED BY
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2	06/10/15	ISSUE	0
3	06/10/15	ISSUE	0

SHEET TITLE
 OVERALL SITE PLAN &
 SITE PLAN
A-1

NOTE:

1. EPIC WIRELESS HAS NOT EVALUATED ANY OR EXISTING LOADING CONDITIONS ON THIS TOWER AS DEPICTED ON THIS DRAWING. SEE STRUCTURAL ANALYSIS BY OTHERS. DRAWING SCALE IS NOT APPLICABLE IF PRINTED ON 11"x17" SHEET SIZE.



MT. AUKUM
 ARS-838 PROJECT ID: 20151199230
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ISSUE STATUS

NO.	DATE	DESCRIPTION	REV
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3	04/20/15	ISSUE	0

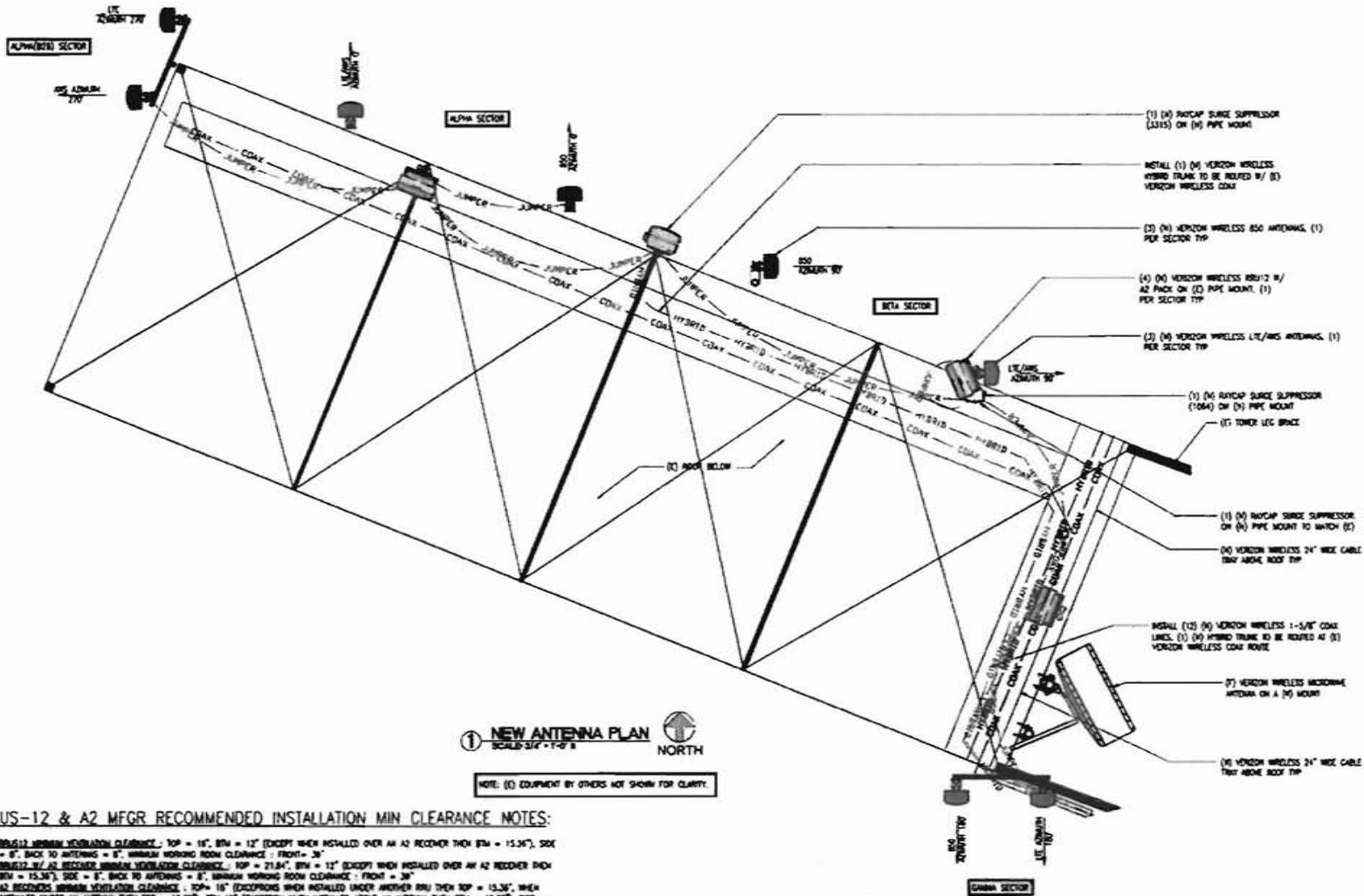
SHEET TITLE:
 ANTENNA PLAN

A-2

NOTE:

1. EPIC WIRELESS HAS NOT EVALUATED NEW OR EXISTING LOADING CONDITIONS ON THIS TOWER AS DEPICTED ON THIS DRAWING. SEE STRUCTURAL ANALYSIS BY OTHERS. DRAWING SCALE IS NOT APPLICABLE IF PRINTED ON 11"x17" SHEET SIZE.

NOTE: CONTINUOR TO VERIFY ANTENNAS & EQUIPMENT TO MEET MIN. CLEARANCES AS REQUIRED.



MT. AUKUM
 AWS-828 PROJECT ID: 20151199230
 PS LOCATION #: 160183
 6780 TOWER RD.
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ISSUE STATUS

REV	DATE	DESCRIPTION	BY
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02	04/13/15	ISSUE CDS	0
03	04/20/15	ISSUE CDS	0

SHEET TITLE:
 ANTENNA PLANS

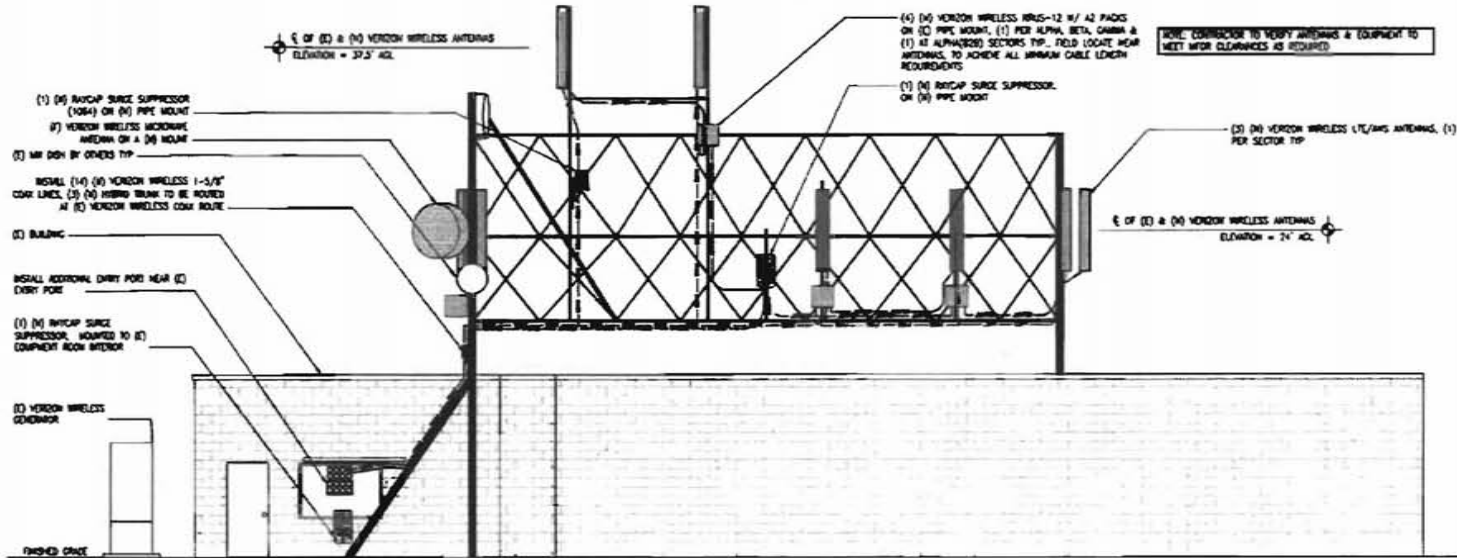
A-3

RRUS-12 & A2 MFGR RECOMMENDED INSTALLATION MIN CLEARANCE NOTES:

- RRUS-12 MINIMUM VENTILATION CLEARANCE: TOP = 18", BTM = 12" (EXCEPT WHEN INSTALLED OVER AN A2 RECDER THEN BTM = 15.36"), SIDE = 8", BACK TO ANTENNAS = 8", MINIMUM WORKING ROOM CLEARANCE: FRONT = 36"
- RRUS-12 A2 RECDER MINIMUM VENTILATION CLEARANCE: TOP = 21.84", BTM = 12" (EXCEPT WHEN INSTALLED OVER AN A2 RECDER THEN BTM = 15.36"), SIDE = 8", BACK TO ANTENNAS = 8", MINIMUM WORKING ROOM CLEARANCE: FRONT = 36"
- A2 RECDERS MINIMUM VENTILATION CLEARANCE: TOP = 16" (EXCEPTIONS WHEN INSTALLED UNDER ANOTHER RRU THEN TOP = 13.36", WHEN INSTALLED UNDER AN ANTENNA THEN TOP = 19.68"), BTM 12" (EXCEPTIONS WHEN INSTALLED ABOVE AN ANTENNA THEN BTM = 19.68"), SIDE = 8", BACK TO ANTENNAS = 8" MINIMUM WORKING ROOM CLEARANCE: FRONT = 36"
- NEVER LOCATIONS TO BURN: HEAT TRAPS, INCLUDING BUT NOT LIMITED TO, AREAS SUBJECT TO DIRECT EXPOSURE TO SUNLIGHT THROUGH WINDOWS OR SCREENS WITHOUT PROPER VENTILATION, OR INSTALLATIONS IN LOFTS OR ENCLOSURES, WHERE AIR VENTILATION DOES NOT EXIST.
- OUTDOOR LOCATIONS TO AVOID: NEAR EXHAUST OF BUILDING VENTILATION SYSTEMS, NEAR THE EXHAUST OF THE CHIMNEY, OPPOSITE LARGE SURFACES MADE OF GLASS OR NEW CONCRETE, WHERE THERE IS NO ALTERNATE RRUS MAY BE INSTALLED HORIZONTALLY WITH FRONT DOWNWIND. THIS ALTERNATE LAYS THE POWER SUPPLY CABLES AND THE AIR OUTPUT POWER CABLE SHOULD BE ONLY USED AS A LAST RESORT.

NOTE:

1. EPIC WIRELESS HAS NOT EVALUATED WIND OR EXISTING LOADING CONDITIONS ON THIS ANTENNA SUPPORT STRUCTURE AS SHOWN ON THIS DRAWING. SEE STRUCTURAL ANALYSIS BY OTHERS. DRAWING SCALE IS NOT APPLICABLE IF PRINTED ON 11"x17" SHEET SIZE.



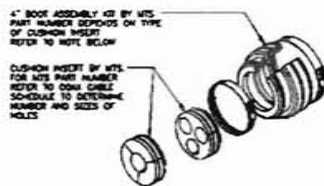
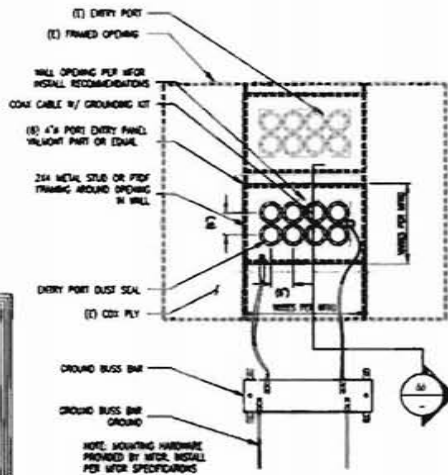
1 ELEVATION
SCALE: 1/4" = 1'-0"

DETAIL NOTES:

- THESE INSTALLATION DETAILS SERVE AS A BASIC GUIDELINE FOR STANDARD INSTALLATIONS AND MAY VARY. SEE MANUFACTURER'S SPECIFICATIONS FOR MORE DETAILED INFORMATION.
- THE CONTRACTOR SHALL FIELD VERIFY ALL FIELD CONDITIONS PRIOR TO INSTALLATION AND CONFIRM FEASIBILITY OF ALL INSTALLS. IF SPECIAL INSTALLATION REQUIREMENTS OCCUR THAT ARE NOT COVERED IN THIS PLAN, THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE ENGINEER OF RECORD FOR A NEW DESIGN SOLUTION IN A TIMELY MANNER.
- ALL WAREHOUSE TO BE STAINLESS STEEL OR GALV PER APPLICATION AND AS RECOMMENDED BY MANUFACTURER.

ENTRY PORT NOTES:

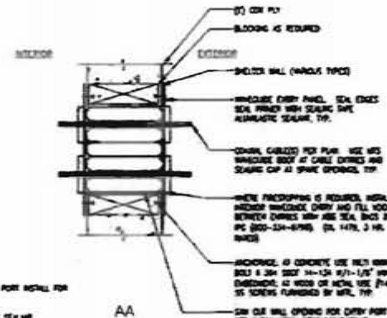
- CONTRACTOR SHALL BE REQUIRED TO INVESTIGATE CONDITIONS OF THE (3) ENTRY PORT WITHIN THE (3) FRAMED OPENING, AND IMPROVE AS NEEDED PER 2013 CBC. ADDITIONAL 2X4 PROF OF METAL STUD SUPPORT BLOODING AS REQUIRED AT (3) AND (4) ENTRY PORT MODIFICATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WEATHER PROOFING AT (4) ENTRY PORT AND ANY MODIFICATION OF THE (3) CONDITIONS. ANY FRAMING OF WEATHER PROOFING BLOODING SHALL BE REPAIRED WITH THIS MODIFICATION BY STANDARD METHODS OF FLASHING/ BITUMEN, MEMBRANE SEALER OR SIMILAR, CHALKING/ SILICONE OR EQUIVALENT. EXPOSED COU-PLY TO BE PAINTED WITH EXTERIOR PAINT.



FOR CUSHION STRING REFER TO WFR CATALOG

NOTE:

- CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF ENTRY PORT INSTALL FOR CLEARANCES. GROUND METAL AS REQUIRED.
- ALL EXTERIOR PENETRATIONS TO BE WEATHERPROOFED BY SEALANT.
- DIRTING WALL SLICING MEMBER SEAL BETWEEN WIRELESS DIRT AND WALL.



2 ENTRY PORT DETAIL
SCALE: NTS



MT. AUKUM

AWS-BLD PROJECT ID: 20151199230

PS LOCATION #: 160183

6780 TOWER RD.

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ISSUE STATUS

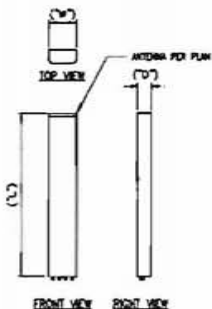
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03	08/15/15	ISSUE CAPS	0

SHEET TITLE:
 ELEVATION & DETAIL

A-4

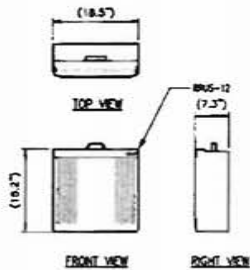
DETAIL NOTES:

1. THESE INSTALLATION DETAILS SERVE AS A BASIC GUIDELINE FOR STANDARD INSTALLATIONS AND MAY VARY. SEE MANUFACTURER SPECIFICATIONS FOR MORE DETAILED INFORMATION.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL FIELD CONDITIONS PRIOR TO INSTALLATION AND CONFIRM FEASIBILITY OF ALL DETAILS. IF SPECIAL INSTALLATION REQUIREMENTS OCCUR THAT ARE NOT COVERED IN THIS PLAN, THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE ENGINEER OF RECORD FOR A NEW DESIGN SOLUTION IN A TIMELY MANNER.
3. ALL HARDWARE TO BE STAINLESS STEEL OR GALV PER APPLICATION AND AS RECOMMENDED BY MANUFACTURER.



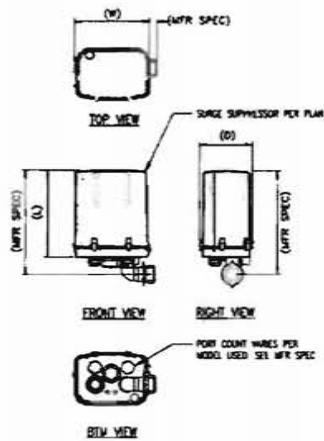
1 ANTENNA DETAIL
SCALE: T-1/2" = 1'

NOTE:
1. CONTRACTOR TO REFER TO BOM AND RF BLDG SHEET FOR NUMBER AND TYPE OF ANTENNA(S) TO INSTALL. FOR ANTENNA DIMENSIONS & SPECS SEE EQUIPMENT SPECIFICATIONS SCHEDULE SHEET A6.



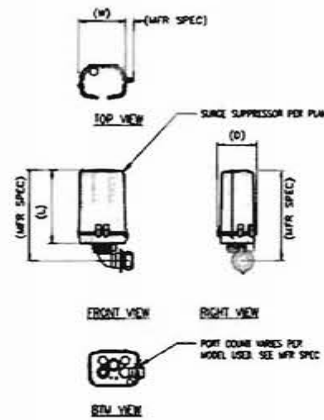
2 RRUS-12 DETAIL
SCALE: T-1/2" = 1'

NOTE: CONSIGCOR MODEL: RRUS-12 MODEL# WEIGHT: 57.3 LBS



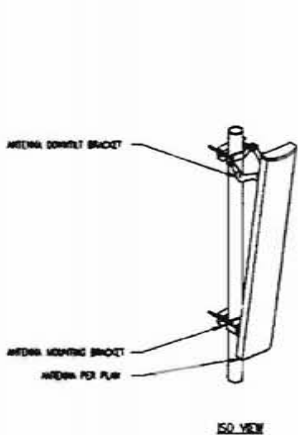
3 SURGE SUPPRESSOR DETAIL
SCALE: T-1/2" = 1'

NOTE: CONSIGCOR MODEL: SSCUP SC40C-3315-PT-48 MODEL# WEIGHT: 28.8 LBS

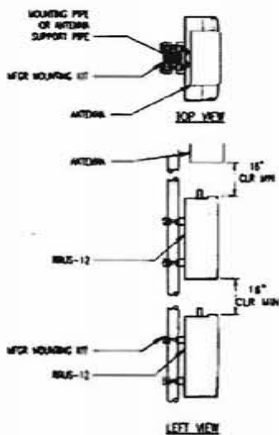


4 SURGE SUPPRESSOR DETAIL
SCALE: T-1/2" = 1'

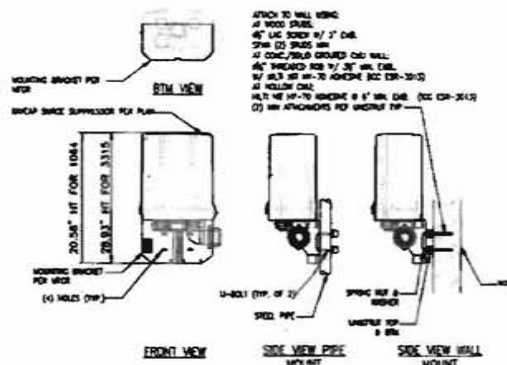
NOTE: CONSIGCOR MODEL: SSCUP SC40C-1004-PT-48 MODEL# WEIGHT: 12.1 LBS



5 ANTENNA MOUNTING DETAIL
SCALE: T-1/2" = 1'



6 RRUS-12 MOUNTING DETAIL
SCALE: T-1/2" = 1'



7 SURGE SUPPRESSOR MOUNTING DETAIL
SCALE: T-1/2" = 1'

ATTACH TO WALL USING:
 (A) WOOD STUDS
 (B) 1/2" DIA. SCHED 40 X 2" CHL.
 (C) 1/2" DIA. SCHED 40 X 2" CHL.
 (D) CONC. BOLA GROUND CHD WALL.
 (E) 1/2" THREADED ROD 1/2" DIA. CHL.
 (F) 1/2" DIA. SCHED 40 X 2" CHL. (SEE EXP-2010)
 (G) W/OUT CHL.
 (H) 1/2" DIA. SCHED 40 X 2" CHL. (SEE EXP-2010)
 (I) W/OUT ATTACHMENTS PER UNDERLYING TYP.



verizon wireless
WIRELESS SERVICE PROVIDED BY VERIZON WIRELESS COMMUNICATIONS

MT. AUKUM
 ARS-B28 PROJECT ID: 20151199230
 PS LOCATION #: 160183
 6780 TOWER RD.
 SOMERSET, CA 95884



RFI NO WIRELESS GROUP INC

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ISSUE STATUS

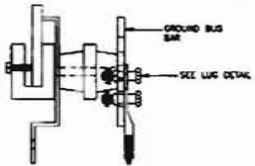
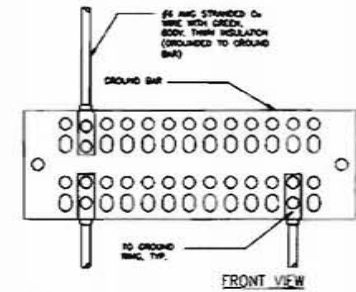
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2	10/15/15	ISSUE CDS	0
3	10/15/15	ISSUE CDS	0

SHEET TITLE:
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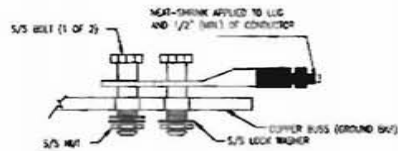
A-5

DETAIL NOTES:

1. THESE INSTALLATION DETAILS SERVE AS A BASIC GUIDELINE FOR STANDARD INSTALLATIONS AND MAY VARY. SEE MANUFACTURER SPECIFICATION FOR MORE DETAILED INFORMATION.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL FIELD CONDITIONS PRIOR TO INSTALLATION AND CONFIRM FEASIBILITY OF ALL INSTALLS. IF SPECIAL INSTALLATION REQUIREMENTS OCCUR THAT ARE NOT COVERED IN THIS PLAN, THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE ENGINEER OF RECORD(S) FOR A NEW DESIGN SOLUTION IN A TIMELY MANNER.
3. ALL HARDWARE TO BE STAINLESS STEEL OR GALV PER APPLICATION AND AS RECOMMENDED BY MANUFACTURER.

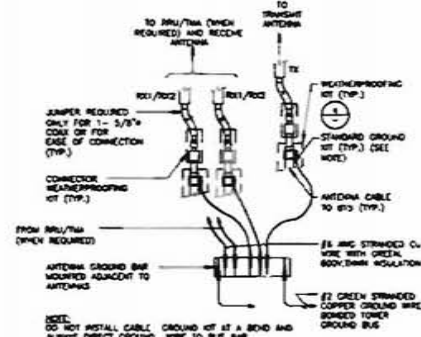


1. **GROUND WIRE TO GROUND BAR DETAIL**
NOT TO SCALE

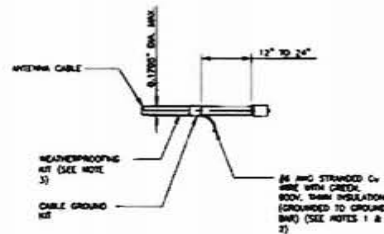


1. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING BELLEVILLE. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
2. FOR GROUND, BOND TO STEEL ONLY. INSERT A LOCK WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH KOPR-SHIELD.
3. ALL HARDWARE TO BE 1/8" DIAMETER

2. **LUG DETAIL**
NOT TO SCALE

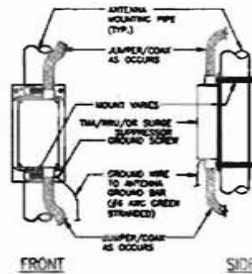


3. **ANTENNA CABLE GROUNDING DETAIL**
NOT TO SCALE



- NOTES:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
 2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
 3. WEATHER PROOFING SHALL BE (TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.)

4. **GROUNDING KIT DETAIL**
NOT TO SCALE



5. **TMA/RRU/SURGE SUPPRESSOR GROUND DETAIL**
NOT TO SCALE



MT. AUKUM
AWS-B23 PROJECT ID: 20151199230
PS LOCATION #: 160183
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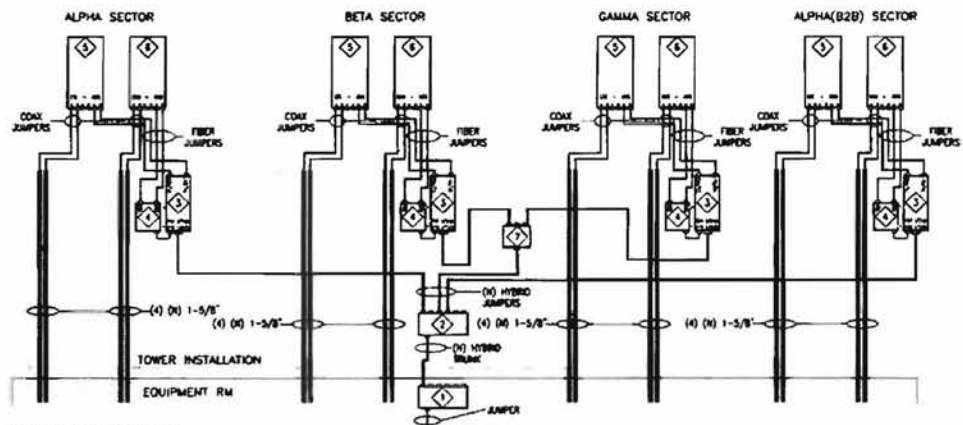
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ISSUE STATUS

REV	DATE	DESCRIPTION	BY
01	03/04/15	ISSUE	CS
02	04/13/15	REVISED	CS
03	04/20/15	ISSUE	CS

SHEET TITLE:
DETAILS

A-6



① PLUMBING DIAGRAM
NO SCALE

KEY NOTES:

- ① (1) (N) VERIZON WIRELESS RAYCAP SURGE SUPPRESSOR AT EQUIPMENT, NEAR ENTRY PORT
- ② (1) (N) VERIZON WIRELESS RAYCAP SURGE SUPPRESSOR AT ANTENNA SUPPORT STRUCTURE
- ③ (2) (N) AWS RRUS-12 MOUNTED NEAR AWS ANTENNAS, (1) PER SECTOR
- ④ (2) (N) AWS A2 PACK MOUNTED NEAR AWS ANTENNAS, (1) PER SECTOR
- ⑤ (4) (N) LTE/AWS ANTENNAS, (1) PER SECTOR
- ⑥ (4) (N) B50/AWS ANTENNAS, (1) PER SECTOR
- ⑦ (1) (N) VERIZON WIRELESS RAYCAP SURGE SUPPRESSOR AT ANTENNA SUPPORT STRUCTURE

NOTES:

1. EPIC WIRELESS HAS NOT EVALUATED NEW OR EXISTING LOADING CONDITIONS ON THIS ANTENNA SUPPORT STRUCTURE AS REPORTED ON THIS DRAWING. SEE STRUCTURAL ANALYSIS BY OTHERS.
2. DRAWING SCALE IS NOT APPLICABLE IF PRINTED ON 11"x17" SHEET SIZE.
3. THE CONTRACTOR SHALL VERIFY AND CHECK AGAINST MOST CURRENT RFDS DESIGN.
4. CONTRACTOR SHALL ALSO VERIFY ALL HYBRID LINE LENGTHS PRIOR TO ORDERING ANY MATERIALS.
5. NET CONTROL: N/A
6. PROJECT DESCRIPTION: PER RFDS DATED: 01/08/15.

SECTOR NAME	POS	SECTOR AZIMUTH	QTY	ANTENNA TYPE	ANTENNA MFR	LINE - INCHES		RFD CENTER (AGL)	SHA/ DPLEXER/ RRU (QTY/TYP)	APPROX CABLE LENGTH	COAX CABLE (QTY/SZC)	COMMENTS	
						W	H						
ALPHA	1	15°	1	LTE	ANDREW	71.1	23.9	7.9	38	24'	0	60'	(2)/7/8"
	2		B50	ANDREW	84.6	11.2	5.1	24	24'	0	60'	(2)/7/8"	
BETA	1	90°	1	LTE	ANDREW	71.1	23.9	7.9	38	37.5'	0	60'	(2)/7/8"
	2		B50	ANDREW	71.1	23.9	7.9	38	37.5'	0	60'	(2)/7/8"	
GAMMA	1	300°	1	LTE	ANDREW	71.1	23.9	7.9	38	24'	0	60'	(2)/7/8"
	2		B50	ANDREW	71.1	23.9	7.9	38	24'	0	60'	(2)/7/8"	

REWORK (1) (2) (2) 7/8" COAX LINES

② (E) ANTENNA / COAX CABLE/ EQUIPMENT SCHEDULE
NO SCALE

SECTOR NAME	POS	SECTOR AZIMUTH	QTY	ANTENNA TYPE	ANTENNA MFR	LINE - INCHES		RFD CENTER (AGL)	SHA/ DPLEXER/ RRU (QTY/TYP)	APPROX CABLE LENGTH	COAX CABLE (QTY/SZC)	COMMENTS	
						W	H						
ALPHA	1	0°	1	LTE/AWS	ANDREW	72	11.9	7.1	42.6	24'	(1) BMS2/R	60'	(2) 1-5/8"
	2		B50/AWS	ANDREW	72	11.9	7.1	42.6	24'	0	60'	(2) 1-5/8"	
BETA	1	90°	1	LTE/AWS	ANDREW	72	11.9	7.1	42.6	37.5'	(1) BMS2/R	60'	(2) 1-5/8"
	2		B50/AWS	ANDREW	72	11.9	7.1	42.6	37.5'	0	60'	(2) 1-5/8"	
GAMMA	1	180°	1	LTE/AWS	ANDREW	72	11.9	7.1	42.6	24'	(1) BMS2/R	60'	(2) 1-5/8"
	2		B50/AWS	ANDREW	72	11.9	7.1	42.6	24'	0	60'	(2) 1-5/8"	
ALPHA(B2B)	1	270°	2	LTE/AWS	ANDREW	72	11.9	7.1	42.6	24'	(1) BMS2/R	60'	(2) 1-5/8"

INSTALL (14) (N) 1-5/8" COAX LINES AND ADD (1) (N) HYBRID FRAME

③ (N) ANTENNA / COAX CABLE/ EQUIPMENT SCHEDULE
NO SCALE

NEW EQUIPMENT													
S.D.W.	SECTOR/ LOCATION	POS	EQUIP QTY	APPLIED TECH	EQUIPMENT MFR	LINE - INCHES		RFD CENTER (AGL)	SHA/ DPLEXER/ RRU (QTY/TYP)	APPROX CABLE LENGTH	COAX CABLE (QTY/SZC)	COMMENTS	
						W	H						
	ALPHA/BETA/GAMMA/ALPHA(B2B)	< 15° OF AWS ANT	4	AWS/LTE	ENCLOSURE RRUS12/R	20.4	18.3	10.8	79.3				
	TOWER	< 15° OF RRUS12	1	N/A	COMSCOPE MNL/ RAYCAP RCMC-3315-PF-48	18.18	15.73	0.25	26.9				INSTALL ALL EQUIPMENT PER MFR SPECIFICATION TO ACHIEVE ALL RECOMMENDED CLEARANCES
	AT EQUIPMENT	FIELD VERIFY	1	N/A	COMSCOPE MNL/ RAYCAP RCMC-3315-PF-48	18.18	15.73	0.25	26.9				
	TOWER	FIELD VERIFY	1	N/A	COMSCOPE MNL/ RAYCAP RCMC-1094-PF-48	13.85	10.15	0.13	12.1				

verizonwireless
VERIZON WIRELESS IS PROVIDING WIRELESS SERVICE TO THIS TOWER

MT. AUKUM
AWS-RIB PROJECT ID: 20151199229
PS LOCATION #: 160183
6780 TOWER RD.
SOMERSET, CA 95684

RF ID
WIRELESS GROUP INC.

ATM Engineering
Tim McFarland, SE
2525 East Bidwell Street
Folsom, CA 95630
Phone: 916-859-7300
Direct: 916-934-5177
Email: tim@atmengineering.com

STAMP

ISSUE STATUS

REV	DATE	DESCRIPTION	BY
01	03/04/15	ISSUE CO'S	0
02	04/13/15	ISSUE CO'S	0
03	04/20/15	ISSUE CO'S	0

SHEET TITLE:
EQUIPMENT / CABLE SCHEDULES
AND PLUMBING DIAGRAM



WATERFORD

COMPLIANCE...FROM START TO SIGNAL

15 SEP 17 PM 4:37

RECEIVED
PLANNING DEPARTMENT

Radio Frequency Emissions Compliance Report For Verizon Wireless

Site Name:	Mount Aukum	Site Structure Type:	Rooftop
Address:	6780 Tower Road Somerset, CA 95684	Latitude:	38.573986
Report Date:	July 30, 2015	Longitude:	-120.726864
		Project:	LM43 Modification

General Summary

Verizon Wireless has contracted Waterford Consultants, LLC to conduct a Radio Frequency Electromagnetic Compliance assessment of the proposed modification of the Mount Aukum site located at 6780 Tower Road, Somerset, California. This report contains information about the radio telecommunications equipment to be installed at this site and the surrounding environment with regard to RF Hazard compliance. This assessment is based on installation designs and operational parameters provided by Verizon Wireless.

The compliance framework is derived from the Federal Communications Commission (FCC) Rules and Regulations for preventing human exposure in excess of the applicable Maximum Permissible Exposure ("MPE") limits. At any location at this site, the power density resulting from each transmitter may be expressed as a percentage of the frequency-specific limits and added to determine if 100% of the exposure limit has been exceeded. The FCC Rules define two tiers of permissible exposure differentiated by the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. General Population / Uncontrolled exposure limits apply to those situations in which persons may not be aware of the presence of electromagnetic energy, where exposure is not employment-related, or where persons cannot exercise control over their exposure. Occupational / Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment, have been made fully aware of the potential for exposure, and can exercise control over their exposure.

Frequency (MHz)	Limits for General Population/ Uncontrolled Exposure		Limits for Occupational/ Controlled Exposure	
	Power Density (mW/cm ²)	Averaging Time (minutes)	Power Density (mW/cm ²)	Averaging Time (minutes)
30-300	0.2	30	1	6
300-1500	f/1500	30	f/300	6
1500-100,000	1	30	5	6

In situations where the predicted MPE exceeds the General Population threshold in an accessible area as a result of emissions from multiple transmitters, FCC licensees that contribute greater than 5% of the aggregate MPE share responsibility for mitigation.

Based on the computational guidelines set forth in FCC OET Bulletin 65, Waterford Consultants, LLC has developed software to predict the overall Maximum Permissible Exposure possible at any particular location given the spatial orientation and operating parameters of multiple RF sources. These theoretical results represent worst-case predictions as emitters are assumed to be operating at 100% duty cycle.

For any area in excess of 100% General Population MPE, access controls with appropriate RF alerting signage must be put in place and maintained to restrict access to authorized personnel. Signage must be posted to be visible upon approach from any direction to provide notification of potential conditions within these areas. Subject to other site security requirements, occupational personnel should be trained in RF safety and equipped with personal protective equipment (e.g. RF personal monitor) designed for safe work in the vicinity of RF emitters. Controls such as physical barriers to entry imposed by locked doors, hatches and ladders or other access control mechanisms may be supplemented by alarms that alert the individual and notify site management of a breach in access control. Waterford Consultants, LLC recommends that any work activity in these designated areas or in front of any transmitting antennas be coordinated with all wireless tenants.

Analysis

Verizon Wireless proposes to replace six (6) antennas, install two (2) new antennas and install four (4) 2100 MHz Remote Radio Head units with A2 Backpacks. The antennas are mounted on antenna support structures 12 and 26 feet above the main roof level antennas oriented toward 0, 90, 180 and 270 degrees. Verizon Wireless operates an 11 GHz microwave mounted at 12 above the main roof level and oriented toward 65 degrees. From this site, Verizon Wireless will enhance voice and data services to surrounding areas in licensed 700, 850 and 2100 MHz bands. The Effective Radiated Power (ERP) in any direction will not exceed 8,639 Watts. No co-located antennas are known to be operating at this site.

Power density decreases significantly with distance from any antenna. The panel-type antennas to be employed at this site are highly directional by design and the orientation in azimuth and mounting elevation, as documented, serve to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. For accessible areas at ground level, the maximum predicted power density level resulting from all operations is 5.234% of the FCC General Population limits. For accessible areas at the roof level, the maximum predicted power density level resulting from all operations is 16.1913% of the FCC Occupational limits (80.9565% of the FCC General Population limits). The Verizon Wireless operation proposed herein will not expose members of the General Public to hazardous levels of RF energy at accessible areas on the ground or on the roof.

Waterford Consultants, LLC recommends posting contact information and RF Guidelines signage at the roof access point that informs personnel entering the site of basic precautions to be followed when working around antennas. These recommendations are depicted in Figure 1. Any work activity in front of transmitting antennas should be coordinated with Verizon Wireless.

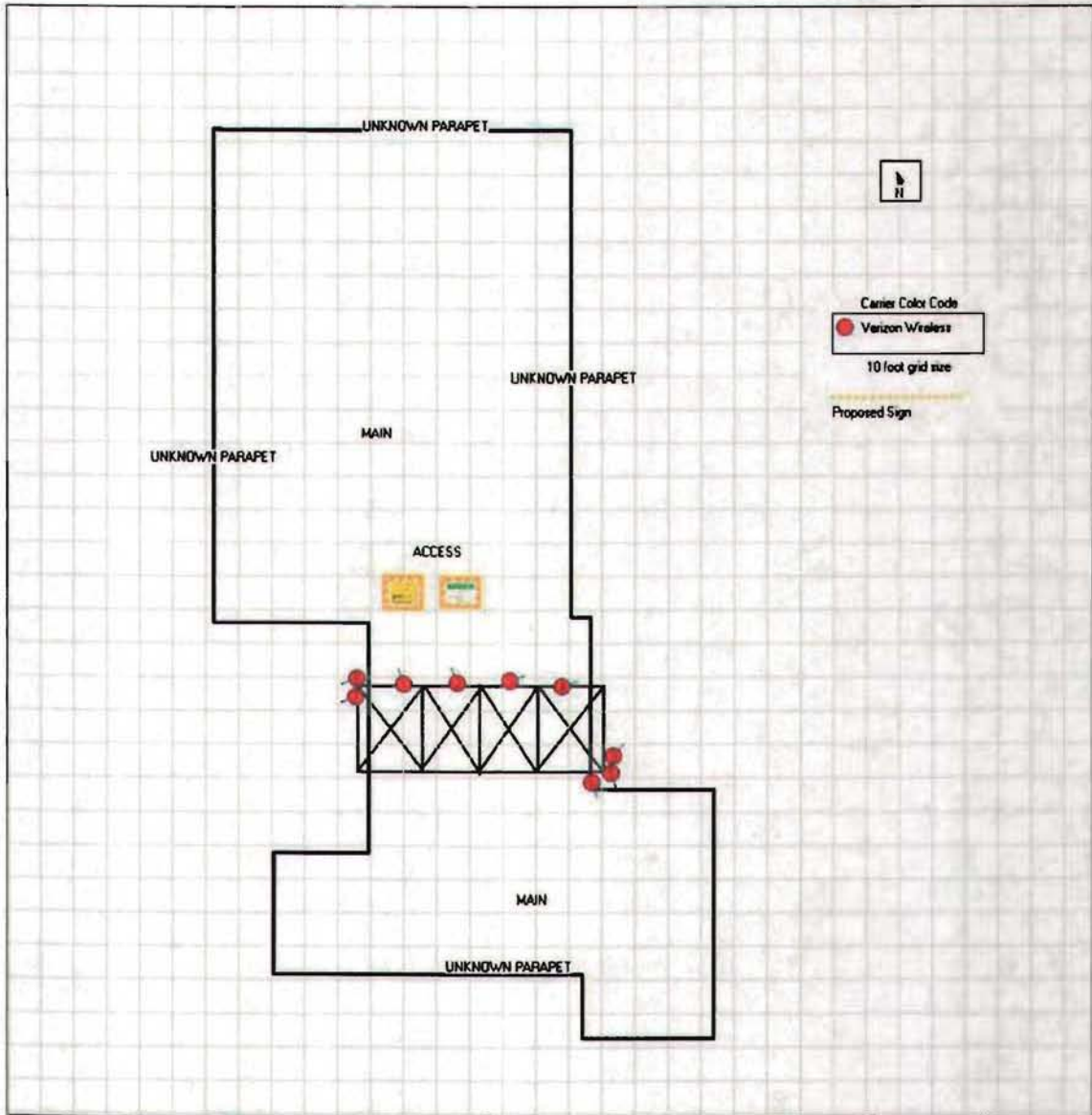


Figure 1: Antenna Locations and Recommended Mitigation

Compliance Statement

Based on information provided by Verizon Wireless, predictive modeling and the mitigation action to be implemented by Verizon Wireless, the installation proposed by Verizon Wireless at 6780 Tower Road, Somerset, California will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. § 1.1307(b)(3) and 1.1310.

Certification

I, Frederick T. Herb, am the reviewer and approver of this report and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation, specifically in accordance with FCC's OET Bulletin 65. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.



Frederick T. Herb, P.E.
Registered Professional Engineer, License #35076
July 30, 2015

