

PROJECT DATA

SITE NAME: CSP-CALHAN
ADDRESS: 11820 HAHN ROAD
 CALHAN, CO 80808
JURISDICTION: EL PASO
VERIZON PROJECT #: 20171625605

PROJ. SUMMARY: SITE IMPROVEMENTS FOR A WIRELESS FACILITY FOR VERIZON WIRELESS, KNOWN AS "CSP-CALHAN". ALL WORK INCLUDES INSTALLING (NEW) UHF MONOPOLE ANTENNA AND RUNNING ALL REQUIRED POWER AND SIGNAL CABLE FROM THE EQUIPMENT SHELTER TO THE ANTENNA.

CODE/LOCATION INFORMATION:

CONSTRUCTION TYPE: V-B
OCCUPANCY: B-UNMANNED
EQUIPMENT SHELTER HEIGHT: 10'-6" A.G.L.
(E) TOWER & ANTENNA HEIGHT: 100'-0" A.G.L.
NEW ANTENNA HEIGHT: 100'-0" A.G.L.
NO. STORIES: ONE (1)
GROSS BUILDING AREA: 438 S.F.
OCCUPANT LOAD: 2 / UNMANNED
BUILDING CODE: 2009 IBC

PROJECT CONTACTS

ARCHITECT: T-REX ARCHITEX
 146 MADISON ST.
 SUITE 200
 DENVER, CO 80206
ARCHITECT: DONI MITCHELL
 303-388-2918

OWNER: CORLIS REALITY
 5225 SILVER DR.
 COLORADO SPRINGS, CO 80918
OWNER: CLETE CORLIS
 719-599-9000

VERIZON WIRELESS CONSTRUCTION MANAGER: 3131 SOUTH VAUGHN WAY
 AURORA, CO 80014
VERIZON WIRELESS CONSTRUCTION MANAGER: MIKE HICKEY
 951-413-9704

ZONING: RETHERFORD ENTERPRISES, INC.
 7093 SILVERHORN DRIVE
 EVERGREEN, CO 80439
ZONING: JOY RETHERFORD
 720-261-2064

GENERAL NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS RELATED TO THIS WORK PRIOR TO COMMENCING CONSTRUCTION AND VISIT THE SITE AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE DOCUMENTS AND ACTUAL CONDITIONS. THE CONTRACTOR SHALL OBTAIN WRITTEN CLARIFICATION FROM THE ARCHITECT PRIOR TO PROCEEDING WITH ANY WORK.
2. THIS SET OF PLANS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS TAKE PRECEDENCE.
3. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL COMPLY WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES OF ALL GOVERNING JURISDICTIONS. CONTRACTOR SHALL POST ALL NOTICES, SECURE ALL PERMITS, AND COMPLY WITH ALL LAWS, RULES, REGULATIONS AND LAWFUL ORDERS BEARING ON THE PERFORMANCE OF THE WORK.
4. THE CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION AND SHALL SUPERVISE AND DIRECT THE PROJECT ACCORDINGLY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
5. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION, PATCH AND REPAIR ALL DAMAGED ITEMS. RESTORE EACH DISTURBED AREA TO PRE-CONSTRUCTION CONDITION.
6. THE WORK DESCRIBED BY THE DRAWINGS OF ANY ONE DISCIPLINE MAY BE AFFECTED AND REQUIRE REFERENCE TO THE WORK DESCRIBED ON DRAWINGS OF ANOTHER DISCIPLINE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND COORDINATE THE WORK OF ALL SUB-CONTRACTORS, TRADES, AND / OR SUPPLIERS PRIOR TO COMMENCING CONSTRUCTION TO INSURE THAT ALL PARTIES ARE AWARE OF OVERLAPPING REQUIREMENTS.
7. ALL INTERRUPTED SYSTEMS SHALL BE COORDINATED WITH APPROPRIATE AUTHORITIES AND RESTORED TO ORIGINAL CONDITION AND OPERATION.
8. ALL DEMOLISHED ITEMS ARE TO BE REMOVED COMPLETELY FROM THE SITE.
9. CALL 3-DAYS BEFORE YOU DIG ! NOTIFICATION HOTLINE: 1-800-922-1977 or 811

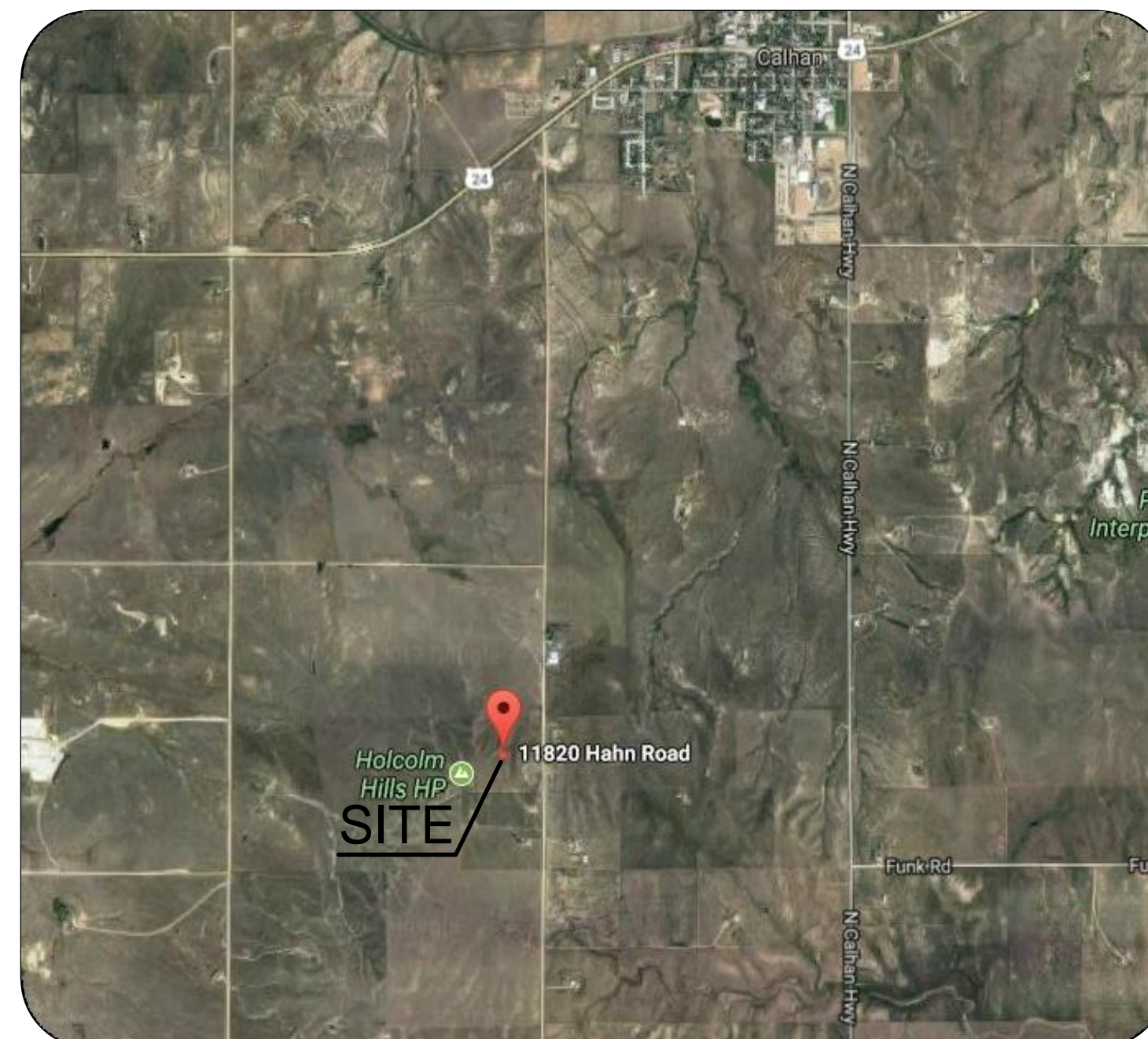
CSP-CALHAN

SITE MODIFICATION REQUEST

SMR-2WAY



3131 S. VAUGHN WAY, SUITE 550
 AURORA, CO 80014
 303-694-3234



VICINITY MAP
 SCALE: NTS

SCOPE OF WORK
 Emergency Two-Way Radio Installation

TO BE PERFORMED BY VERIZON WIRELESS preferred Contractor (VZW)

OUTDOOR WORK

1. VZW to attach WS300 stand-off bracket at approved UHF antenna mounting location
3. VZW to attach UHF monopole antenna to stand-off bracket; Antenna and Mount will be supplied by VZW to supply proper length of 7/8" foam coaxial cable (LCF78 or equivalent), terminated with N-type Male connectors at each end. with appropriate ground kits correct
4. VZW to attach RDR-supplied RF jumper from UHF monopole antenna to VZW-supplied hardline
5. VZW to supply appropriate tower hangers for the foam coaxial cable and attach to tower per VZW practices
6. VZW to run hardline to shelter location
7. VZW to apply water-proofing materials (butyl rubber tape, covered with 2" vinyl tape, or equivalent) to all outdoor coaxial connections. PPC Connectors are acceptable.
8. VZW to ground hardline at bulkhead ground bar
9. VZW to bring hardline into shelter and terminate on VZW-supplied ground bar at shelter bulkhead

INDOOR WORK

1. VZW to install lightning arrester at shelter bulkhead ground bar. standard arrester should work with n-connectors
3. VZW to run length of 1/2" Superflex (or equivalent) cable from bulkhead arrester to top of RDR rack, terminated with N-type Female connector Is LDF4 acceptable
4. VZW to supply 24vdc or -48vdc with XX amp breaker from eh PDF to the radio rack power distribution panel. VZW to bolt/anchor RDR rack to floor
5. VZW to bond RDR rack to building ground system
6. VZW to sweep coax run from top of rack location to antenna point and determine and annotate total cables losses. This can be done by VZW Cell Tech
7. VZW to identify and label dedicated IP port at switch location and provide IP address/subnet mask/gateway (Field Operations will do this)

TO BE PERFORMED BY RED DOG RADIOS (RDR)

OUTDOOR WORK

1. RDR to supply WS300 stand-off bracket and UHF monopole antenna
2. RDR to supply RF jumper
3. RDR to provide ground assistance with ropes, tool bucket, any items needed to assist tower personnel

INDOOR WORK

1. RDR to inspect and accept DC wiring installed and available at top of rack
2. RDR to inspect and accept 1/2" Superflex cable installed and available at top of rack, terminated with N-type Female
3. RDR to inspect and accept that rack is anchored to floor and bonded to ground system
4. RDR to supply all connections from rack to AC power source and 1/2" Superflex cable
5. RDR to supply and physically install AGM lead acid batteries, including making fused connections to power supply
6. RDR to activate repeater system
7. RDR to set power level to set system output to 150W ERP, taking calculated coaxial losses into account, and record true power level in watts at 1/2" Superflex rack interface connector
8. RDR to measure and record repeater sensitivity as referenced to 12 dB SINAD at 1/2" Superflex rack interface connector
9. RDR to run CAT5E cable from equipment to switch port location, including properly terminating necessary RJ45 connectors
10. RDR to ensure all cables on rack are run smoothly, cleanly and in accordance with VZW best practices, including bundling with approved waxed lacing cord techniques
11. RDR to photograph and supply digital images of repeater rack and installation details to VZW personnel for record-keeping purposes

INDEX OF DRAWINGS: (7 SHEETS)

T1	TITLE SHEET
LS1	SURVEY
A1	SITE PLAN
A1.1	ELEVATION
A2	SHELTER PLANS / CABLE LENGTHS
A3	ANTENNA DETAILS
A3.1	SITE PHOTOS AND POWER SYSTEM DETAILS

SYMBOL & MATERIAL LEGEND

--- PROPERTY LINE SETBACK OR EASEMENT	--- W --- WATER LINE	--- G --- GAS LINE	--- E --- ELECTRICAL	--- T --- TELCO	--- X --- FENCE	--- HYBRID / COAX	--- FIBEROPTIC	--- DC POWER	⊙ POWER POLE	⊗ BENCHMARK	⊙ DOOR TAG	⊗ WINDOW TAG	⊗ WALL TYPE	⊗ SECTION INDICATOR	⊗ ELEVATION INDICATOR	⊗ DETAIL INDICATOR	⊗ WOOD CONT.	⊗ WOOD BLOCKING	⊗ REVISION	⊗ PROPERTY CORNER	⊗ ELEVATION TAG HEIGHT CALLOUT	⊗ SPOT ELEVATION	▨ MASONRY	▨ CONCRETE	▨ EARTH	▨ GRAVEL	▨ PLYWOOD OR O.S.B.	▨ SAND	▨ STEEL	▨ CMU	▨ RIGID INSULATION	▨ ARCHITECTURAL WOODWORK	▨ CHAIN LINK FENCE	▨ EXISTING EASEMENT	▨ NEW UTILITY EASEMENT	▨ NEW ACCESS / UTILITY EASEMENT	▨ LEASE AREA	▨ NEW ANTENNAS	▨ NEW RRHS / OVPS	▨ NEW PENETRATIONS	BBU BASE BAND UNIT	OVP OVER-VOLTAGE PROTECTION	PDF POWER DISTRIBUTION FRAME	RRH REMOTE RADIO HEAD	C.V. CONTRACTOR VERIFY	± PLUS OR MINUS	℄ CENTER-LINE	℄ PLATE
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STAMP



DRAWINGS

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PROJECT FOR



DATE ISSUED

MAY 31, 2018

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-----	PRELIMINARY CD SET
-----	FINAL CD SET
-----	PERMIT SUBMITTED

DATE	REVISIONS
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2/18/17	△ FINAL CD SET
2/18/17	△ OWNER INFO
5/31/18	△ ZONING REVISION
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PROJECT NAME

CSP-CALHAN

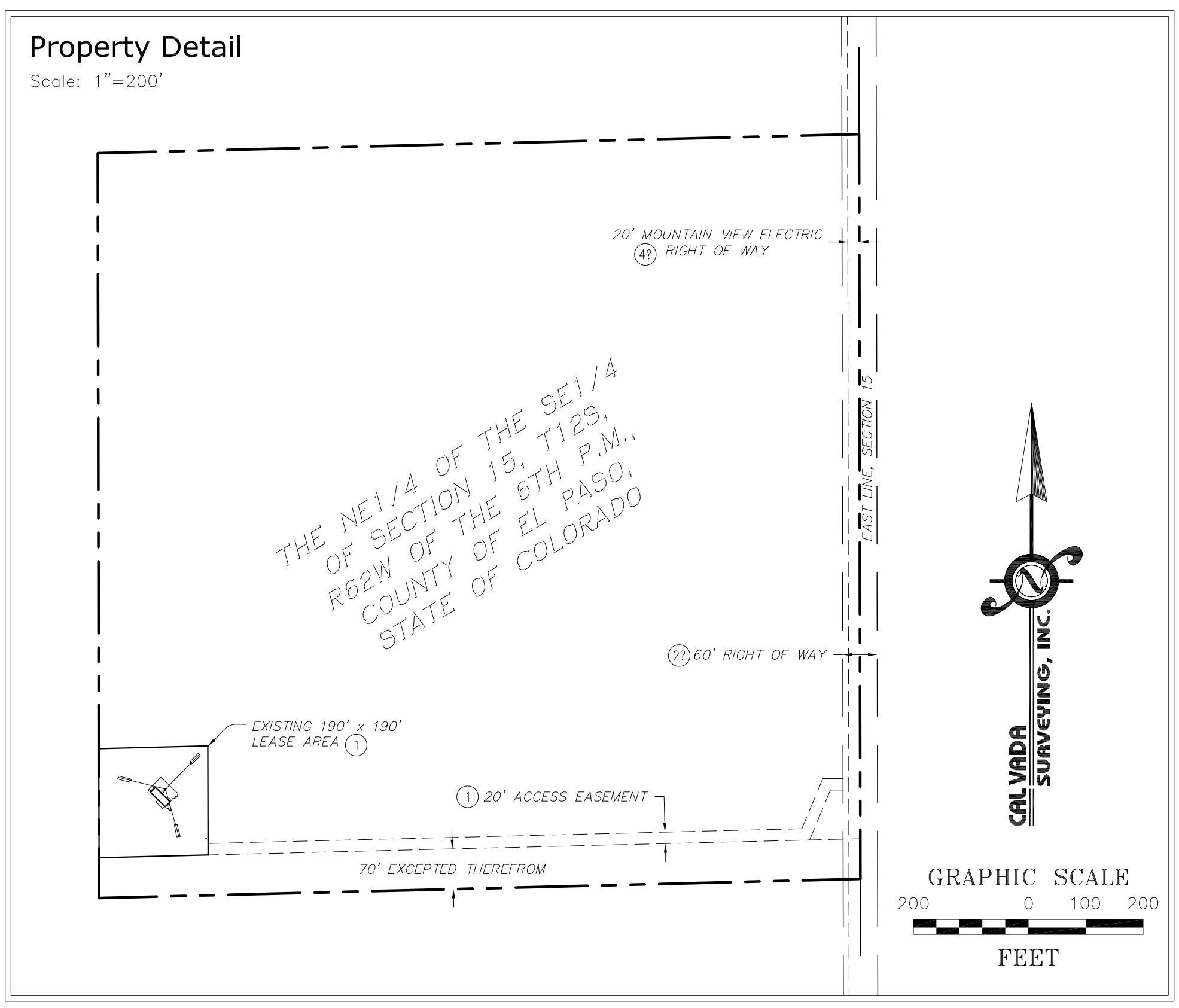
CELL SITE
SMR-2WAY
 11820 HAHN ROAD
 CALHAN, CO 80808

COUNTY OF EL PASO
 STATE OF COLORADO

T1

TITLE PAGE

Last Saved On: 8-16-11 At: 08:56am As: N:\Projects\2010 Projects\10074-CSP_CALAHAN LTE\dwg\10074-CSP_CALAHAN LTE By: Justin



Date of Survey

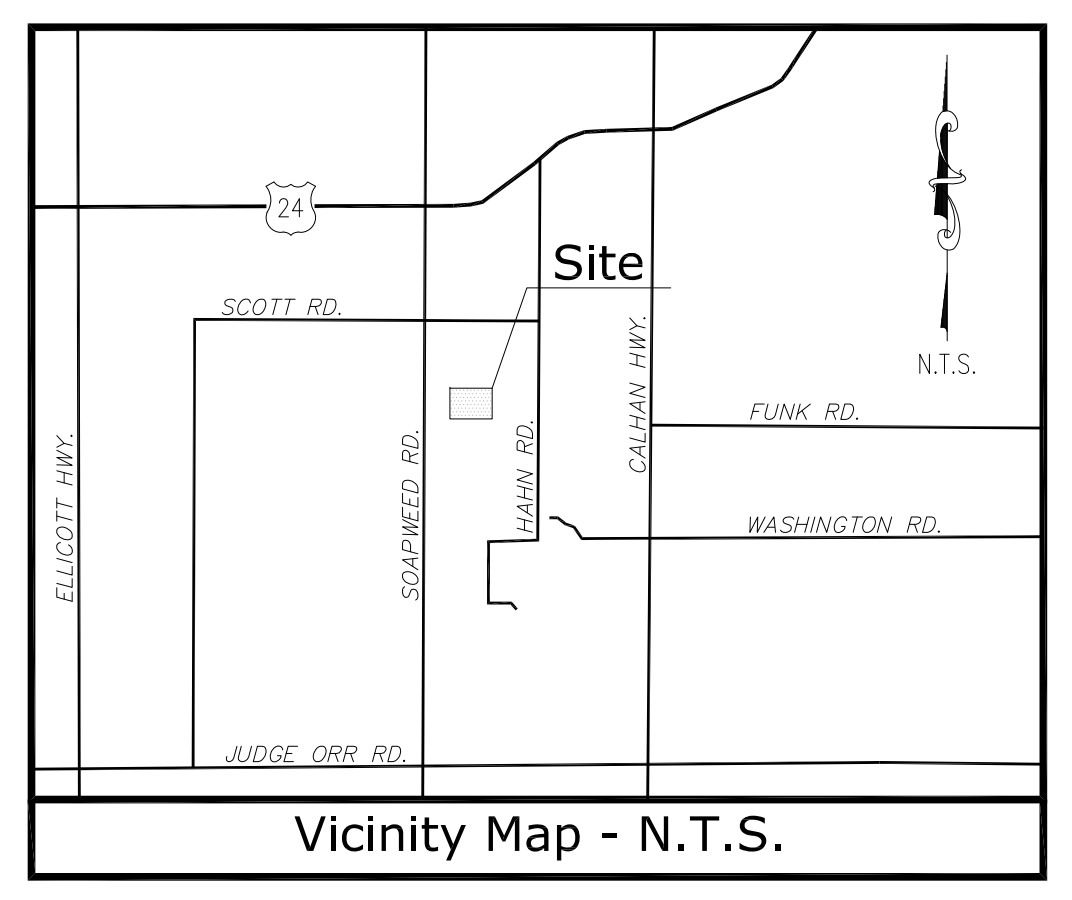
APRIL 9, 2007

Basis of Bearings

THE COLORADO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE (NAD83).
CLASSIFICATION MINIMUM GEOMETRIC ACCURACY STANDARD
THIRD 5.0 cm + 1: 10,000

Bench Mark

NGS CONTROL POINT "19 JH", ELEVATION = 6601 FEET (NAVD 88)



Title Report

PREPARED BY: CANDLAND TITLE RESEARCH, LLC
ORDER NO.: 3004
DATED: JANUARY 7, 2010

Legal Description

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 15, TOWNSHIP 12 SOUTH, RANGE 62 WEST OF THE 6TH P.M., COUNTY OF EL PASO, STATE OF COLORADO, EXCEPT FOR THE SOUTH 70 FEET OF SAID PROPERTY.

Assessor's Parcel No.

2200000253

- ### Easements
- ALL MATTERS AS SET FORTH IN "EASEMENT" RECORDED AS BOOK 5819, PAGE 498. TERMS, CONDITIONS AND PROVISIONS OF GRANT OF EASEMENT RECORDED MARCH 11, 1991 IN BOOK 5819 AT PAGE 494. NOTICE OF EXERCISE OF OPTION IN CONNECTION THEREWITH RECORDED MARCH 11, 1991 IN BOOK 5819 AT PAGE 498. (PLOTTED HEREON)
 - RIGHT OF WAY EASEMENT GRANTED TO MOUNTAIN VIEW ELECTRIC ASSOCIATION IN INSTRUMENT RECORDED JULY 12, 1994, IN BOOK 6486 AT PAGE 627. (NOT PLOTTABLE)
 - TAXES FOR 2009 ARE DUE AND PAYABLE. (AFFECTS SUBJECT PROPERTY BUT IS NOT A PLOTTABLE ITEM)

Legend

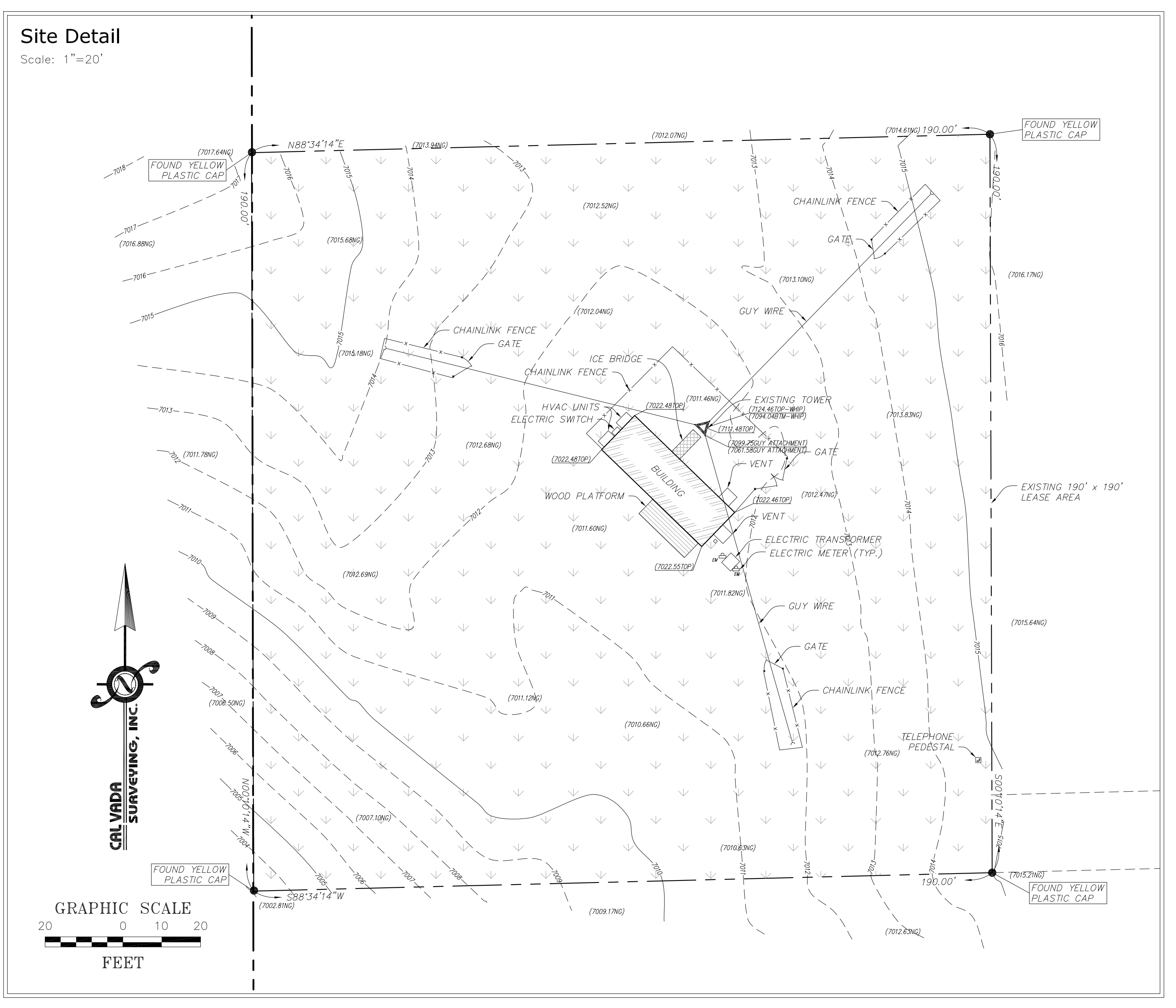
	CONCRETE PAVEMENT		NATURAL GROUND
	CONIFEROUS TREE		PARKING BOLLARD
	DIAMETER		POINT OF BEGINNING
	DECIDUOUS TREE		POINT OF COMMENCEMENT
	EDGE OF ASPHALT		OVERHEAD ELECTRIC LINE
	FINISHED FLOOR		POWER POLE
	FINISH SURFACE		PROPERTY LINE
	FIRE HYDRANT		RIGHT OF WAY
	FLOW LINE		SEWER MANHOLE
	FOUND MONUMENT AS NOTED		SIGN POST
	FOUND SECTION MONUMENT		STREET LIGHT STANDARD
	GEOGRAPHIC LOCATION		TELEPHONE PEDESTAL
	GAS METER		TYPICAL
	IRRIGATION CONTROL VALVE		WATER METER
			WATER VALVE

Certificate of Survey

THIS IS TO CERTIFY THAT THIS TOPOGRAPHIC MAP AND IMPROVEMENTS SHOWN ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

JESSE LUGO, PLS 3581

THIS DOES NOT CONSTITUTE A MONUMENTED SURVEY. REFERENCE IS MADE TO A COMMITMENT FOR TITLE INSURANCE, NUMBER 3004, ISSUED BY CANDLAND TITLE RESEARCH, LLC, AND HAVING AN EFFECTIVE DATE OF JANUARY 7, 2010. THIS SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. THE LESSOR'S LEGAL DESCRIPTION AND RECORD BOUNDARY ARE SHOWN HEREON FOR REFERENCE ONLY. THIS SURVEY DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE LESSOR'S PROPERTY.



DEPT	APPROVED	DATE
A&C	RE	RF
INT	EE\IN	OPS
EE\OUT		

Engineer/Consultant: **CAL VADA SURVEYING, INC.**
1605 S. Shawnee Parkway, Suite 106, Centennial, CO 80111
Phone: (303) 469-3333 - Fax: (303) 468-3338

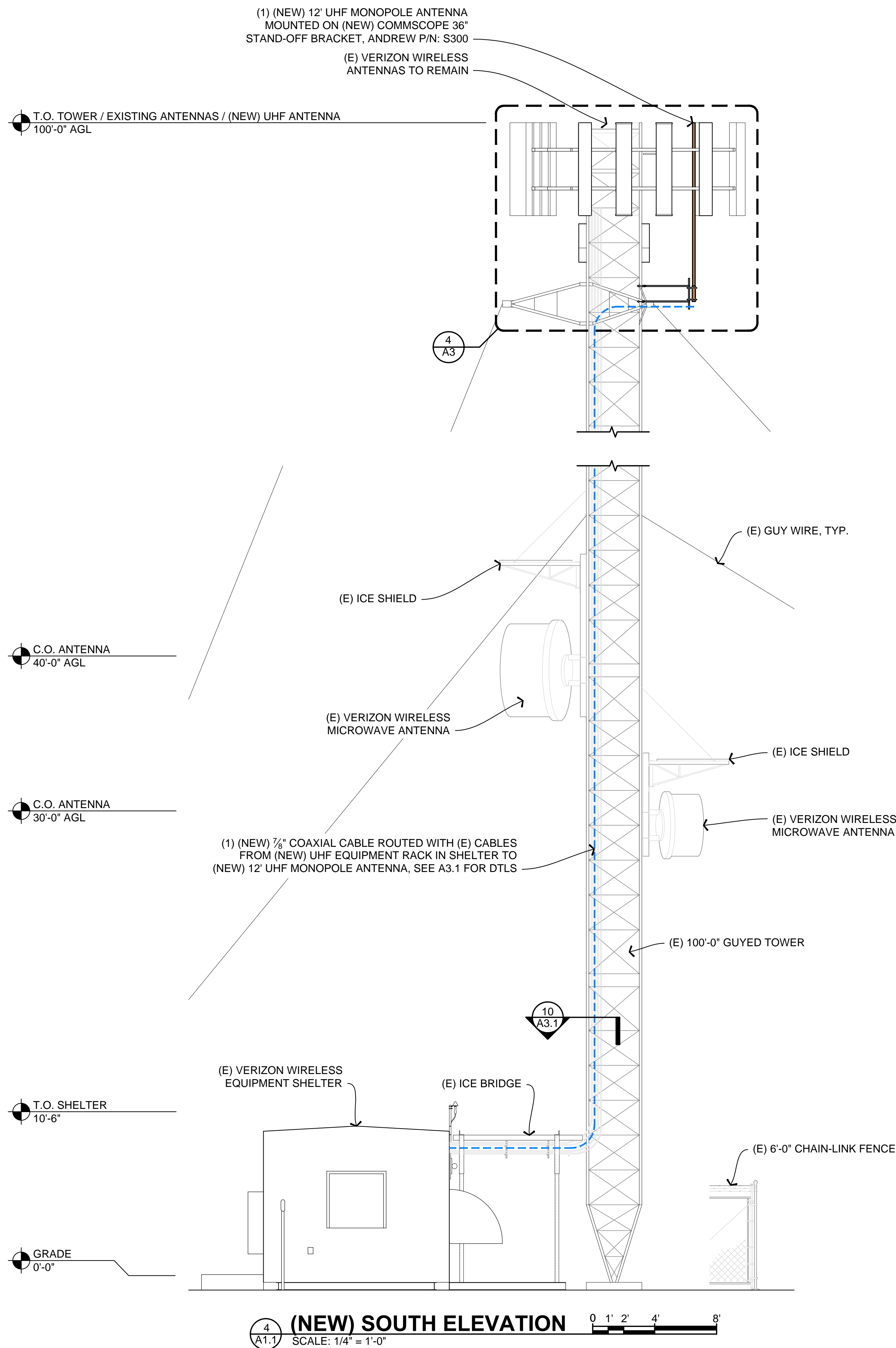
Architect: **Trex Architects**
144 Madison Street, Denver, CO 80206
303.366.2918

Architect: **verizon wireless**
3131 S. Vaughn Way, Suite 550, Aurora, CO, 80014 (949) 222-7000

CSP CALHAN LTE
11820 HAHN RD.
CALHAN, CO, 80808
COUNTY OF EL PASO
TOPOGRAPHIC SURVEY

REVISIONS	2/9/10	JFT
0		

Sheet: **LS1**



(NEW) SOUTH ELEVATION
 SCALE: 1/4" = 1'-0"
 0 1' 2' 4' 8'



3 EXTERIOR VIEW: ANTENNAS
 SCALE: N.T.S.



2 EXTERIOR VIEW: TOWER
 SCALE: N.T.S.

STAMP

T+REX ARCHITEX
 146 Madison Street
 Denver, CO 80206
 303.388.2918

DRAWINGS

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PROJECT FOR

verizon
 3131 S. VAUGHN WAY, SUITE 550
 AURORA, CO 80014
 303-694-3234

DATE ISSUED

MAY 31, 2018

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----	PERMIT SUBMITTED

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2/18/17	FINAL CD SET
2/18/17	OWNER INFO
5/31/18	ZONING REVISION
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PROJECT NAME

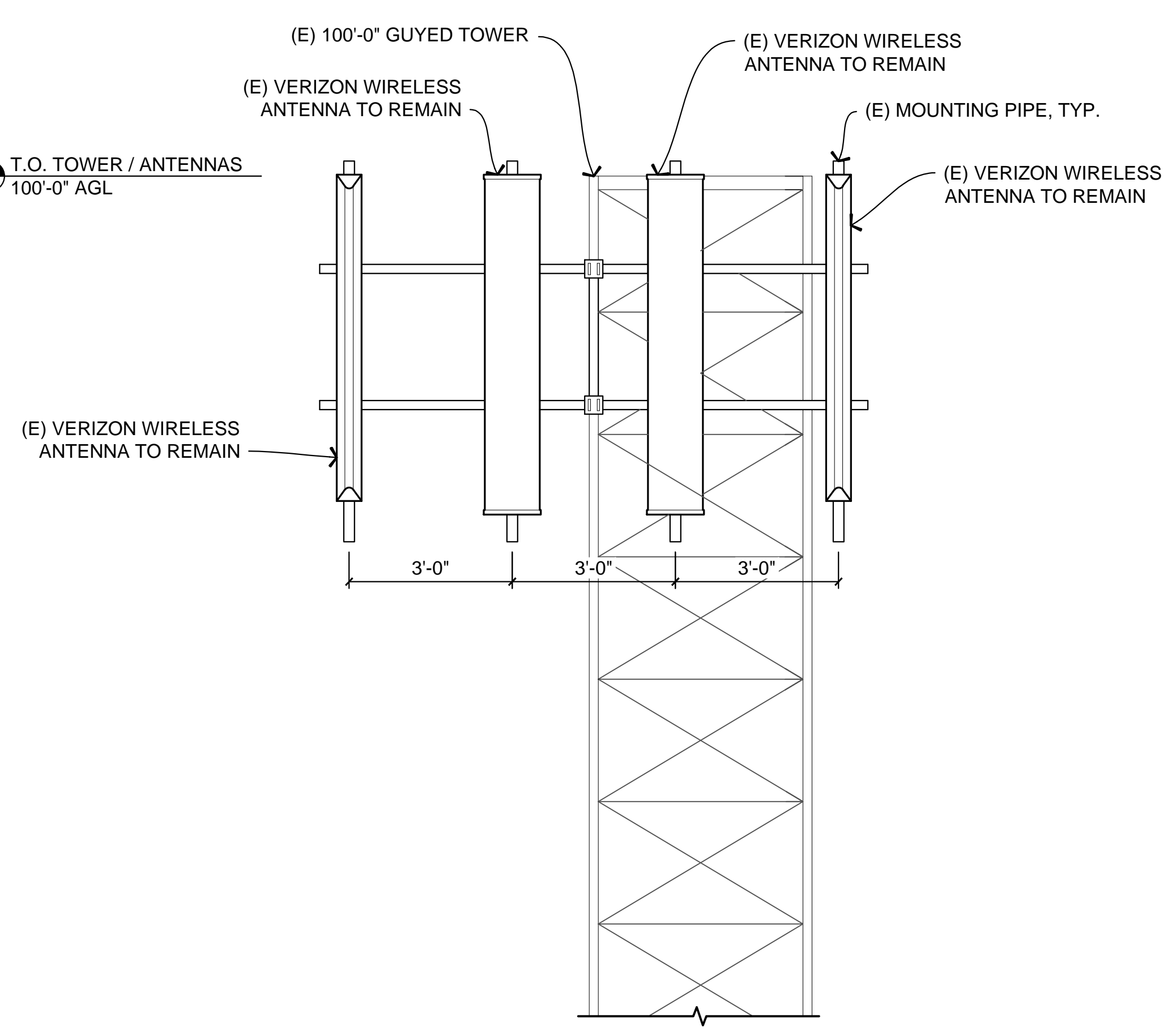
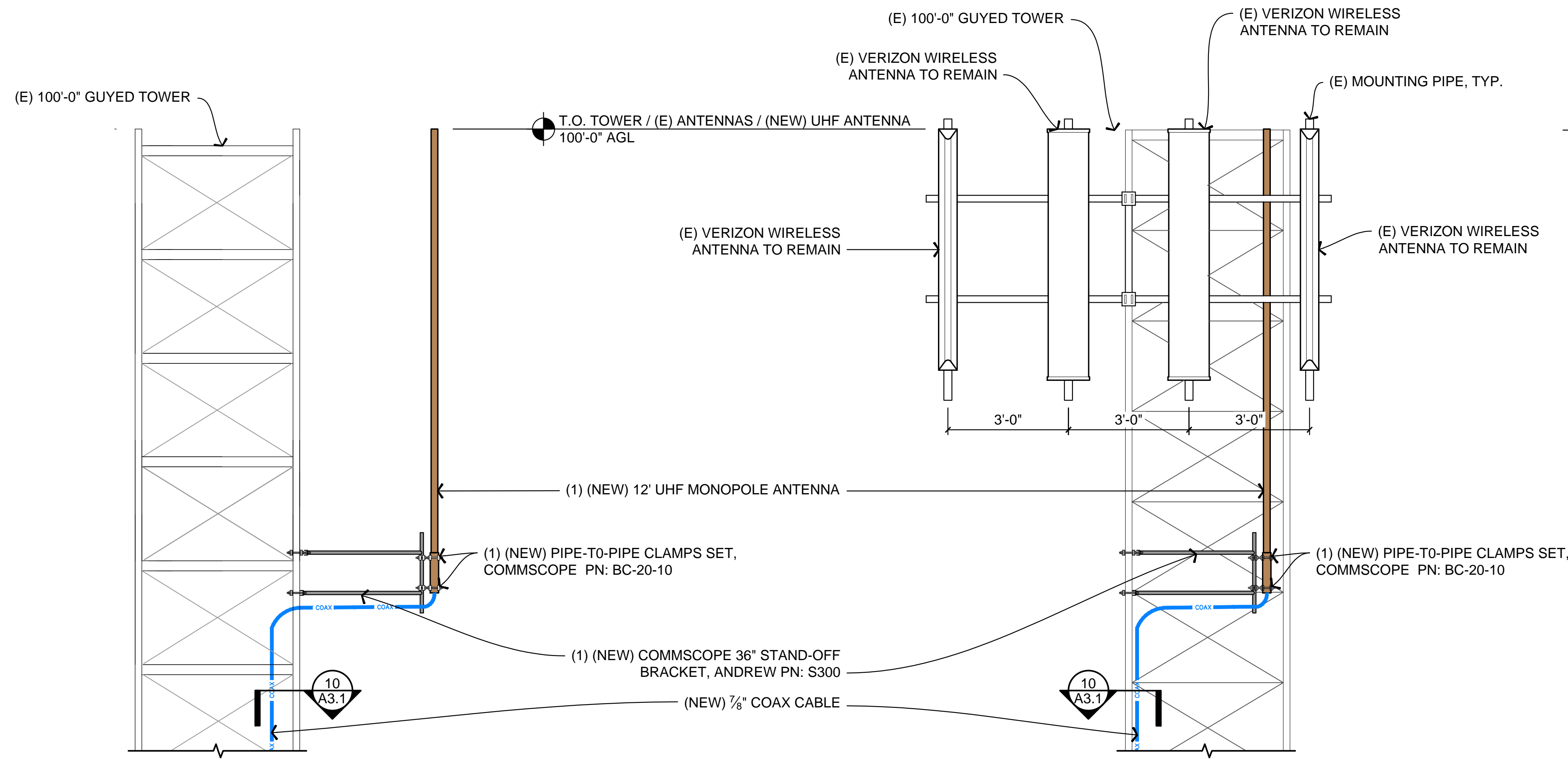
CSP-CALHAN

CELL SITE
 SMR-2WAY
 11820 HAHN ROAD
 CALHAN, CO 80808

COUNTY OF EL PASO
 STATE OF COLORADO

A1.1
 ELEVATION

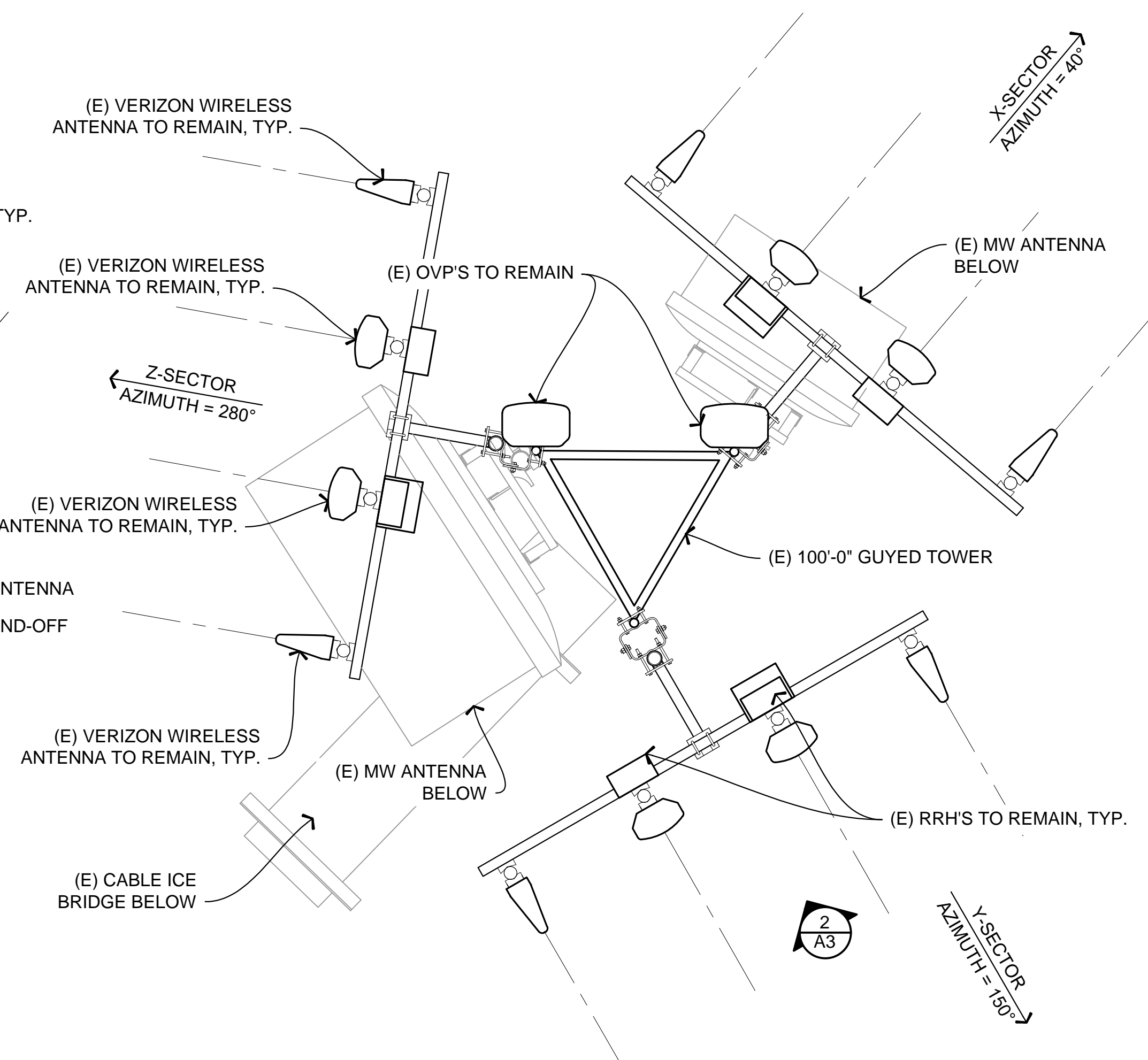
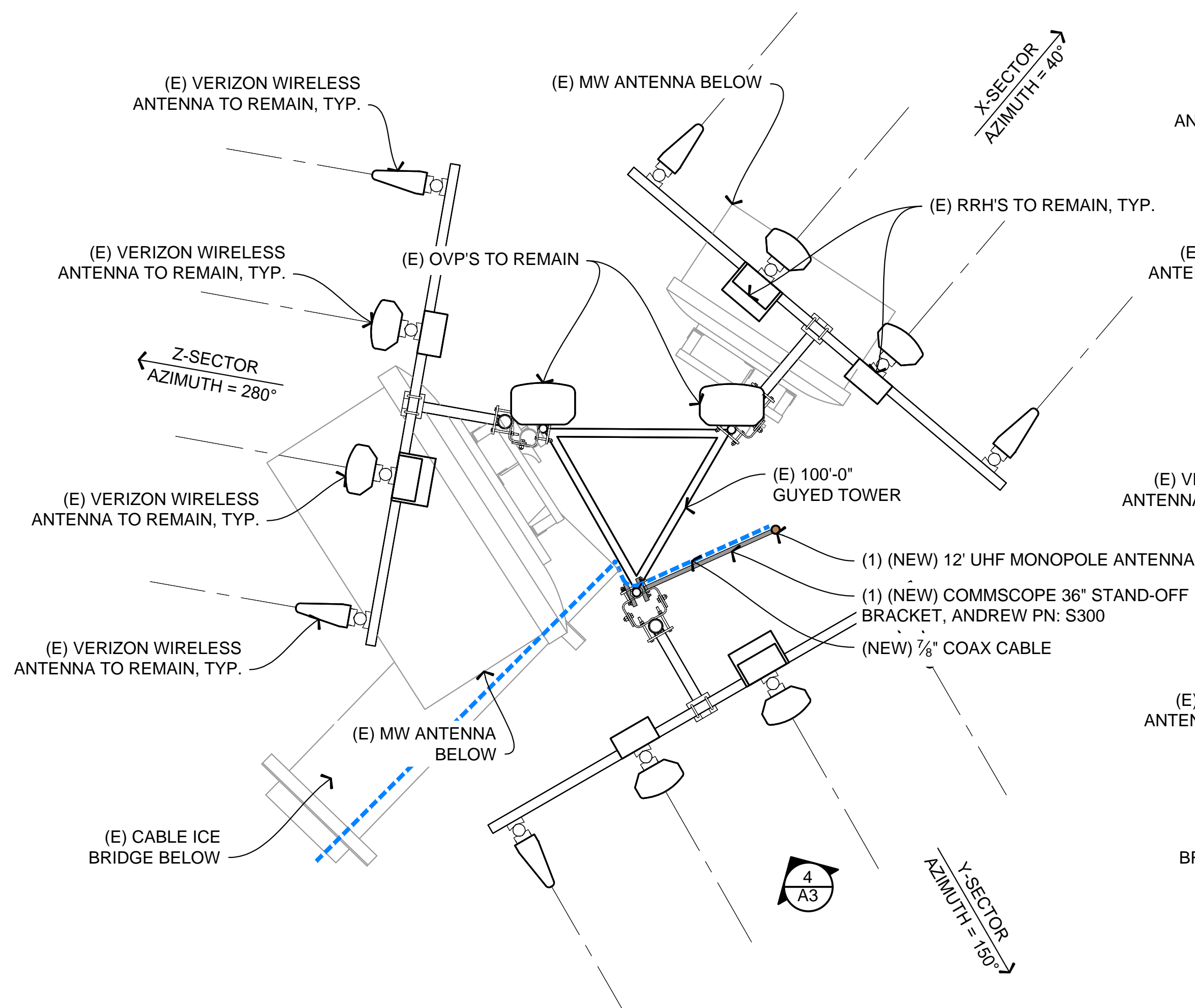
N.H.



UHF ANTENNA MOUNTING DETAIL
SCALE: 1/2" = 1'-0"

(NEW) ANTENNA ELEVATION
SCALE: 1/2" = 1'-0"

(E) ANTENNA ELEVATION
SCALE: 1/2" = 1'-0"



(NEW) ANTENNA PLAN
SCALE: 1/2" = 1'-0"

(E) ANTENNA PLAN
SCALE: 1/2" = 1'-0"

STAMP

T+REX ARCHITEX
146 Madison Street
Denver, CO 80206
303.388.2918

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CELL SITE

SMR-2WAY

11820 HAHN ROAD
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COUNTY OF EL PASO
STATE OF COLORADO

A3

SECTOR PLANS / ELEVATIONS

STAMP

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146 Madison Street
Denver, CO 80206
303.388.2918

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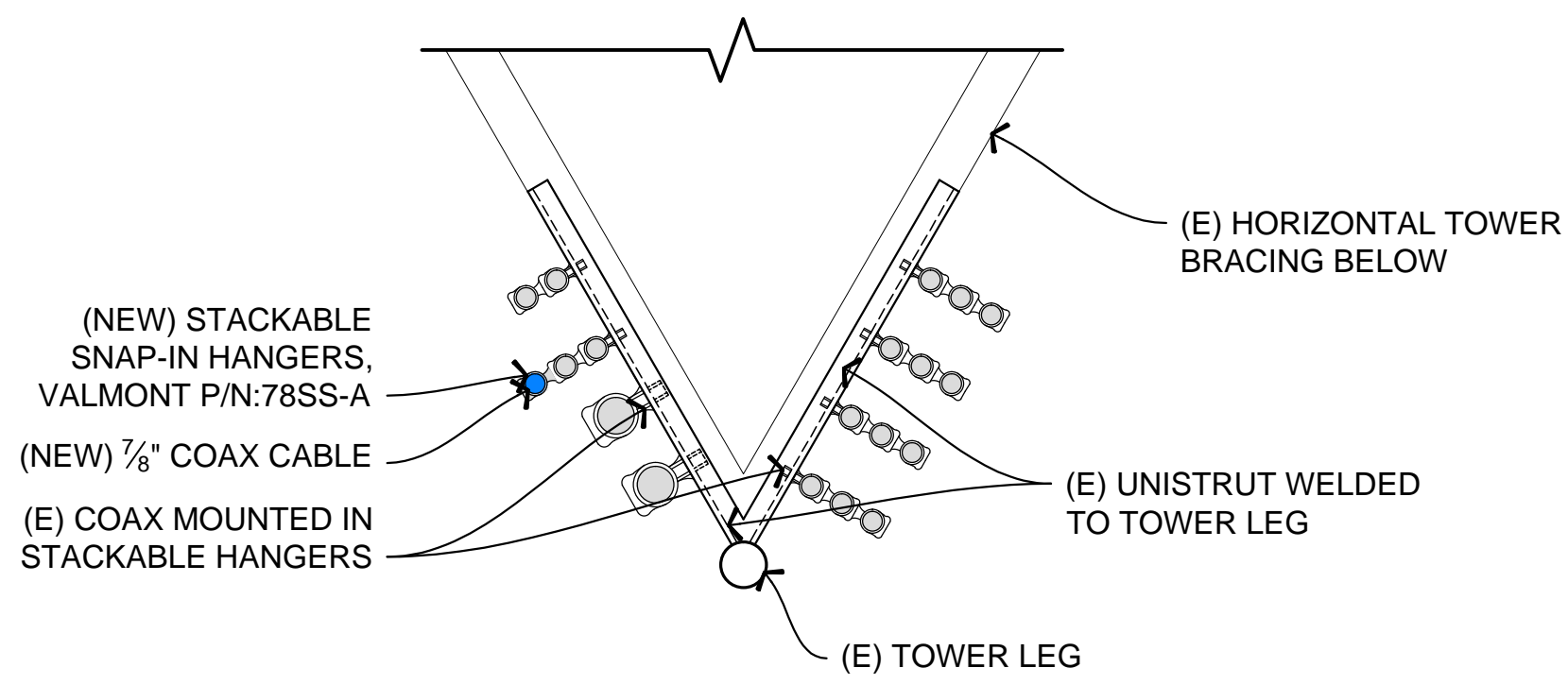
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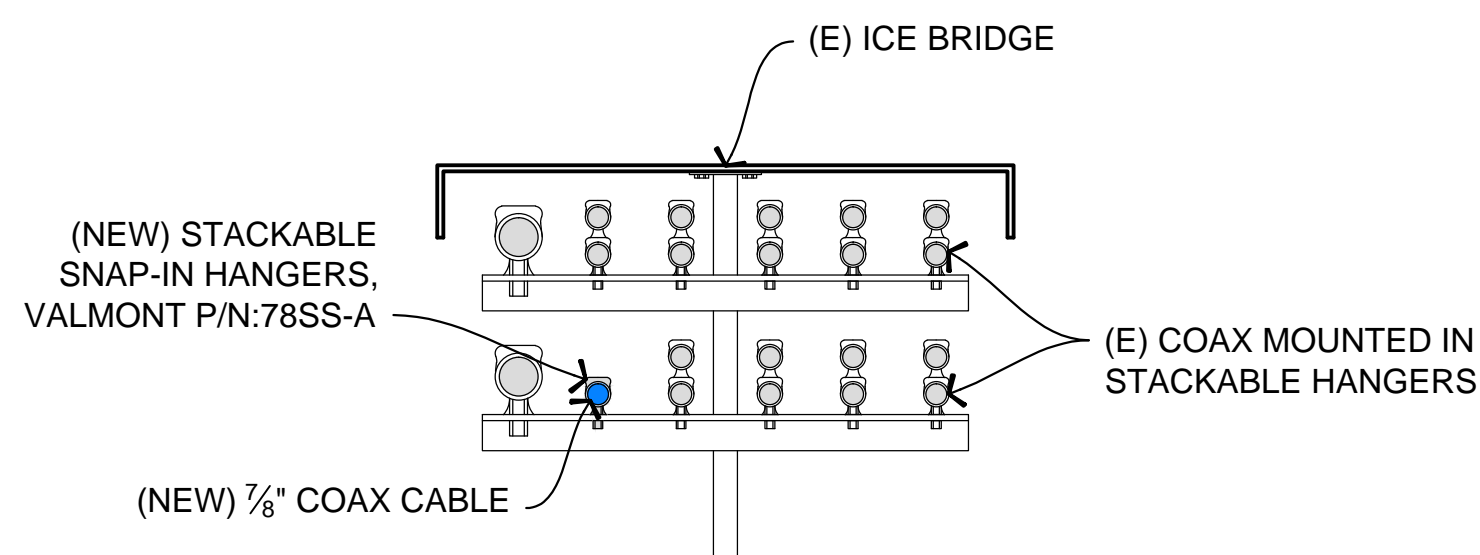
A3.1
DETAILS

N.T.



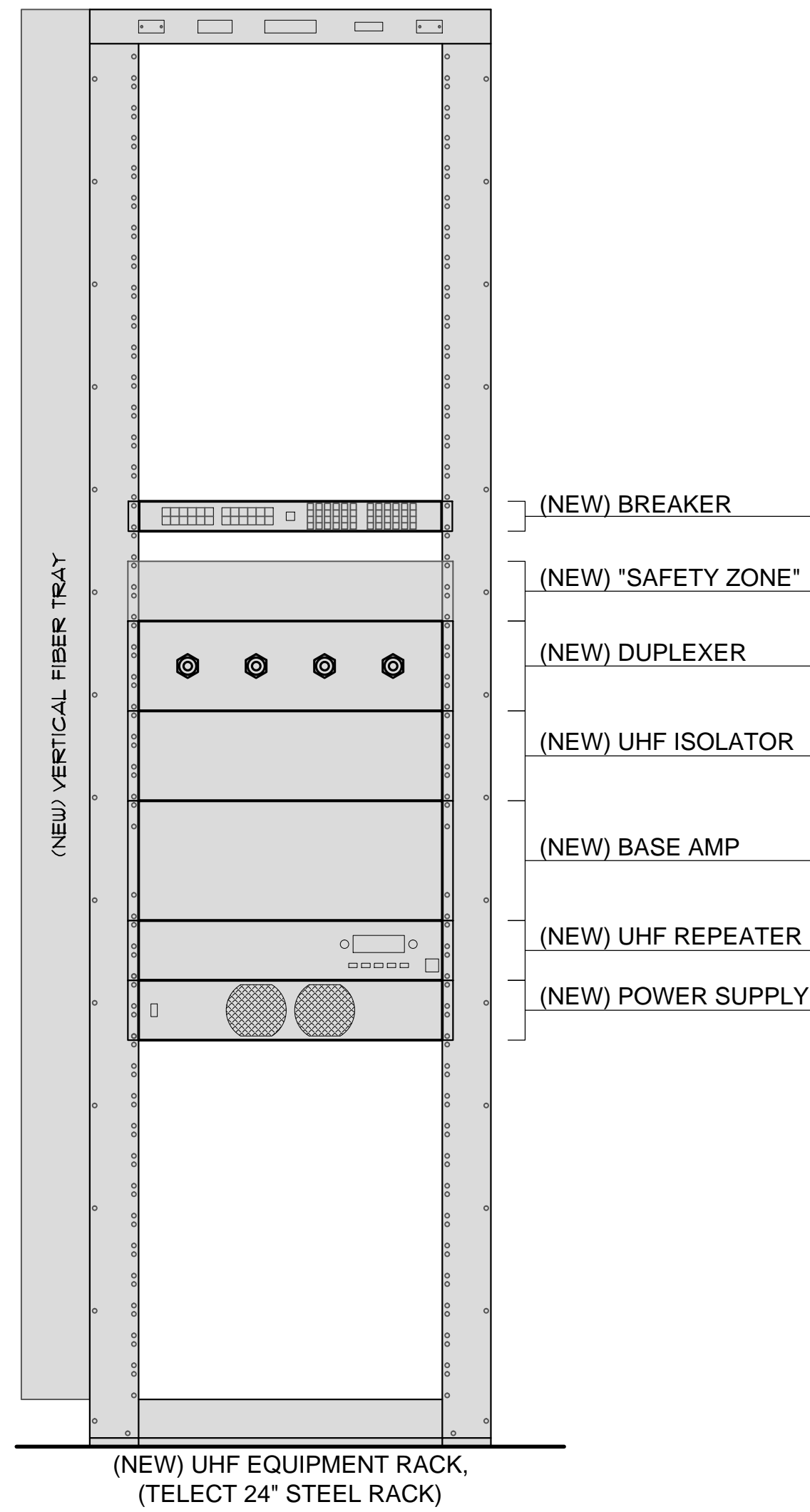
(NEW) VERTICAL CABLE LADDER DETAIL

10 A3.1 SCALE: 1-1/2" = 1'-0"



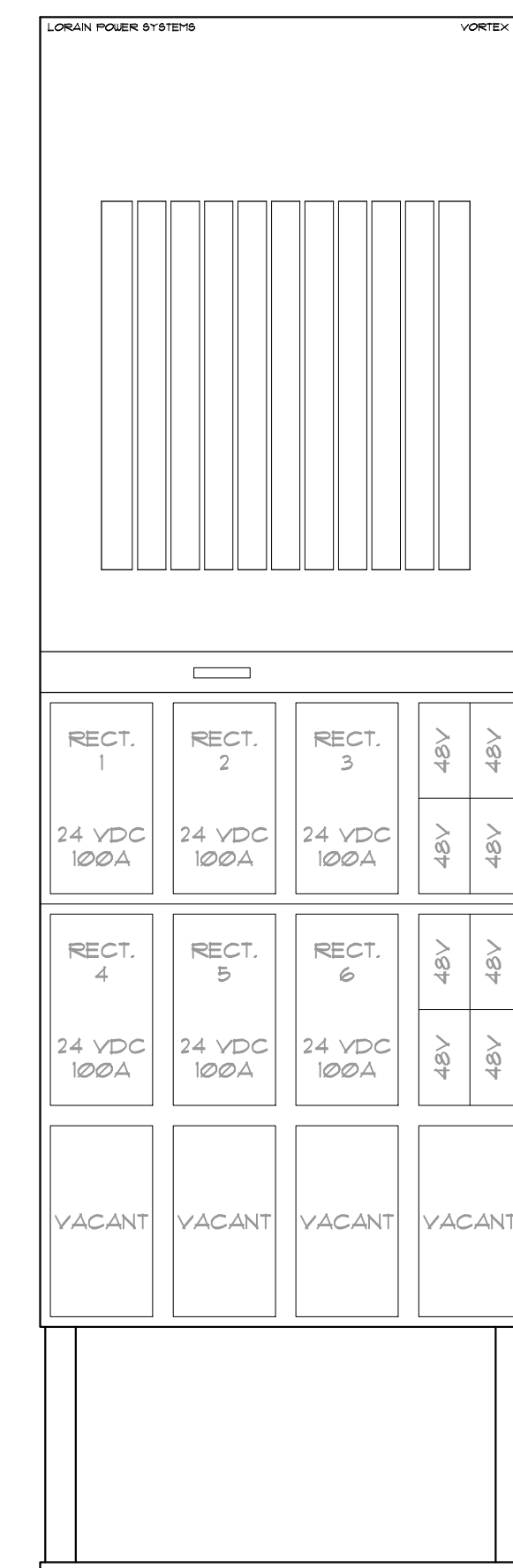
(NEW) CABLE ICE BRIDGE DETAIL

9 A3.1 SCALE: 1-1/2" = 1'-0"



(NEW) UHF EQUIPMENT RACK

7 A3.1 SCALE: N.T.S.



LORAIN POWER SYSTEMS:
(6) 24 VDC RECTIFIERS @ 130A
(8) 48 VDC RECTIFIERS @ 10A
LOAD = 238 A

48V VDC BUS: (5) BREAKERS
(3) EMPTY SLOTS

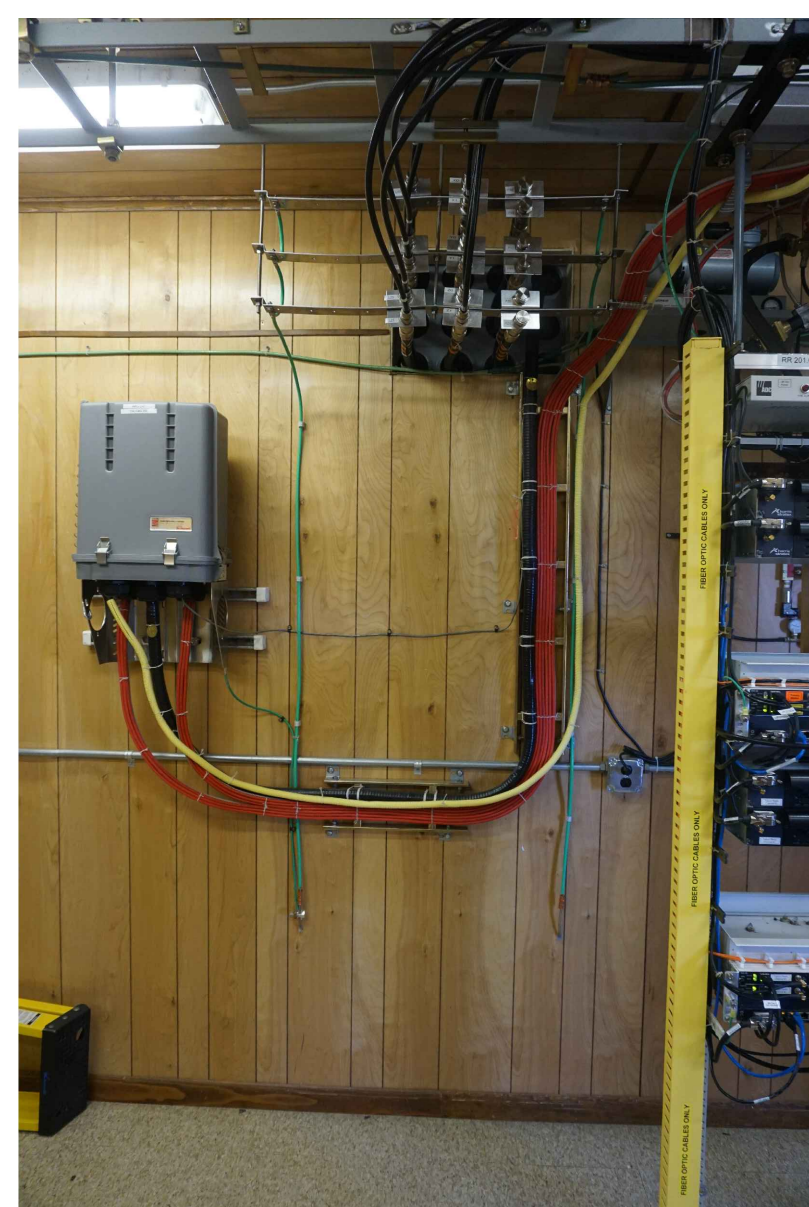
POWER SUPPLY & BATTERY SYSTEM

2 A3.1 SCALE: N.T.S.



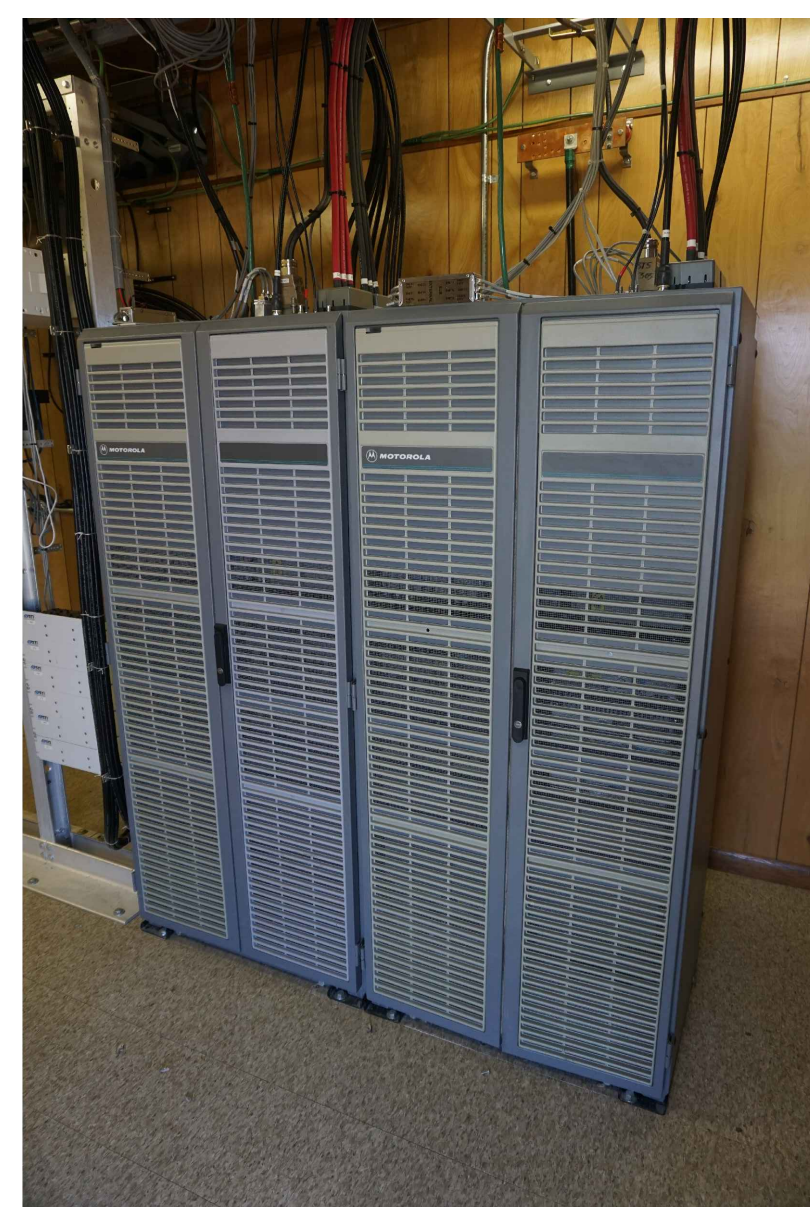
INTERIOR VIEW: E-NODE B/BBU RACK

8 A3.1 SCALE: N.T.S.



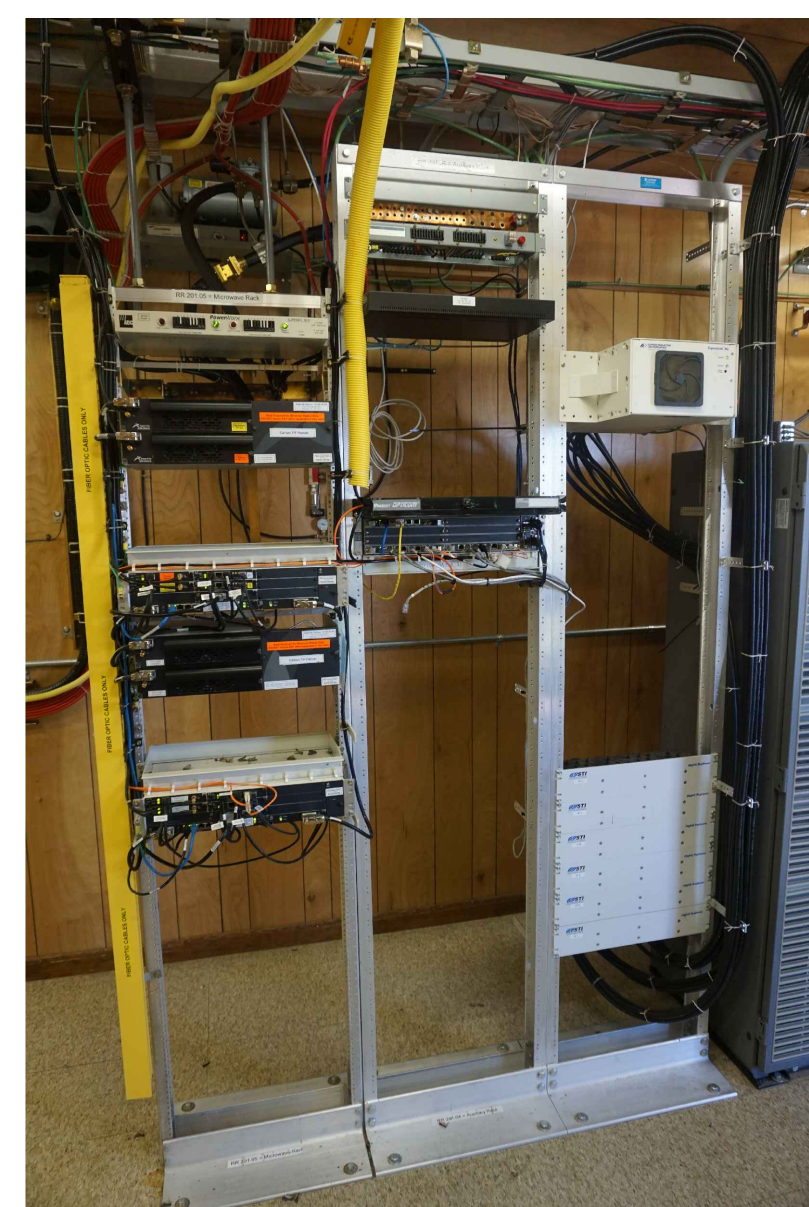
INTERIOR VIEW: BASE OVP (LOWER)

6 A3.1 SCALE: N.T.S.



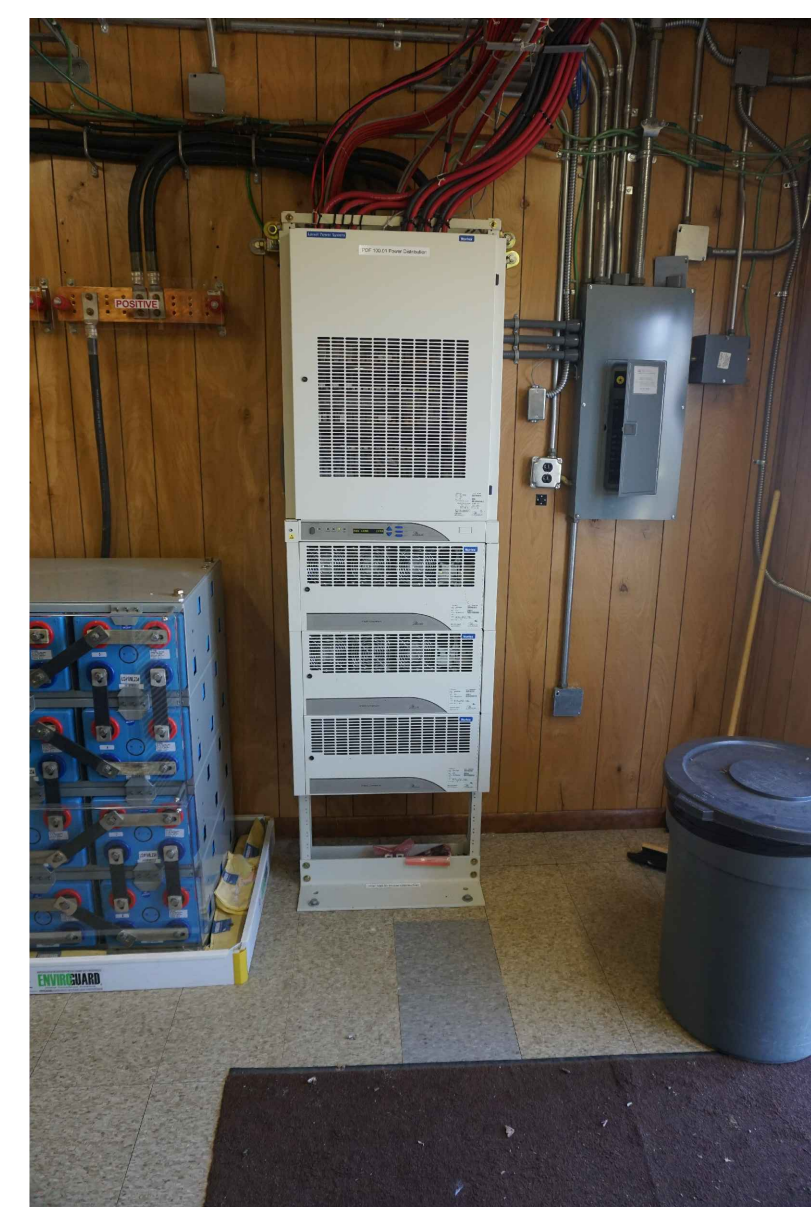
INTERIOR VIEW: SC4812'S

5 A3.1 SCALE: N.T.S.



INTERIOR VIEW: MW & FIBER RACKS

4 A3.1 SCALE: N.T.S.



INTERIOR VIEW: PDF

3 A3.1 SCALE: N.T.S.



INTERIOR VIEW: BATTERIES

1 A3.1 SCALE: N.T.S.

Markup Summary

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