Copy right, Airphoto USA, LLC, All Rights Reserved. This Dipiction was complied from unverified public and private resourses and is illustrative only. No representation as to the accuracy of this information. Parcel boundaries are particularly unreliable.

Users make use of this depiction at their own risk.

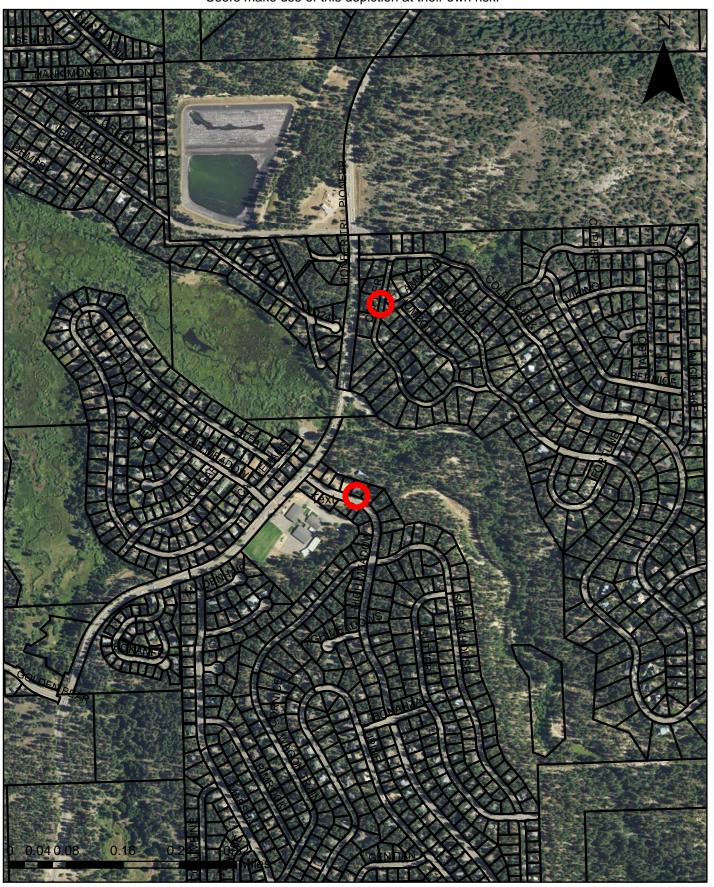


Exhibit A-Location Map

Copy right, Airphoto USA, LLC, All Rights Reserved. This Dipiction was complied from unverified public and private resourses and is illustrative only. No representation as to the accuracy of this information. Parcel boundaries are particularly unreliable.

Users make use of this depiction at their own risk.



Exhibit B-Surrounding Land Use

Copy right, Airphoto USA, LLC, All Rights Reserved. This Dipiction was complied from unverified public and private resourses and is illustrative only. No representation as to the accuracy of this information. Parcel boundaries are particularly unreliable.

Users make use of this depiction at their own risk.

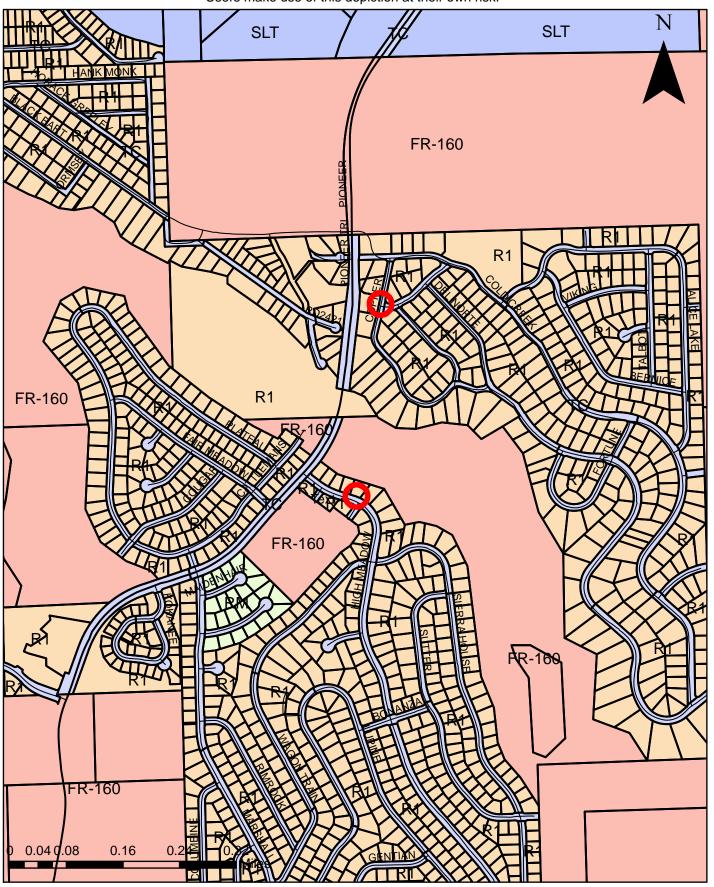


Exhibit C-Surrounding Zoning

Geil Engineering Engineering * Surveying * Planning 1226 High Street

Auburn, California 95603-5015

Phone: (530) 885-0426 * Fax: (530) 823-1309

Verizon Wireless

Project Name:

SC South Lake Tahoe 075

Project Site Location:

PROW High Meadow Trail

South Lake Tahoe, CA

El Dorado County

Date of Observation:

02-22-18

Equipment/Procedure Used to Obtain Coordinates: Trimble GeoXT post processed with Pathfinder Office software.

Type of Antenna Mount:

Existing Utility Pole

Coordinates:

Latitude:

N 38°54'26.09" (NAD83)

N 38°54'26.42" (NAD27)

Longitude:

W 119°57'42.32" (NAD83)

W 119°57'38.67" (NAD27)

ELEVATION of Ground at Structure (NAVD88)

6332.2' AMSL

Height of Structure:

38.4' AGL

CERTIFICATION: I, the undersigned, do hereby certify elevation listed above is based on a field survey done under my supervision and that the accuracy of those elevations meet or exceed 1-A Standards as defined in the FAA ASAC Information Sheet 91:003, and that they are true and accurate to the best of my knowledge and belief.

Daniel G. Geil L.S. 7640

* NO. L. 7640

SC SOUTH LAKE TAHOE 075



PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150

PSL #481972

SITE INFORMATION

PSL #: OWNER:

LIBERTY UTILITIES 701 NATIONAL AVE

TAHOE VISTA, CA 96148 ERIC TROSKA T 775-870-2469

VERIZON WIRELESS 2785 MITCHELL DRIVE, SUITE 9 APPLICANT:

WALNUT CREEK, CA 94598

EPIC WIRELESS AGENT: 222 W. LOCKEFORD STREET

SUITE 9 LODI, CA 95240 TEL: (916) 781-5921

APN ADJACENCY 025-721-061

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE

COUNTY:

ZONING: PUBLIC ROW

ZONING JURISDICTION: EL DORADO COUNTY

LAT:

38°54'26.09" LONG:

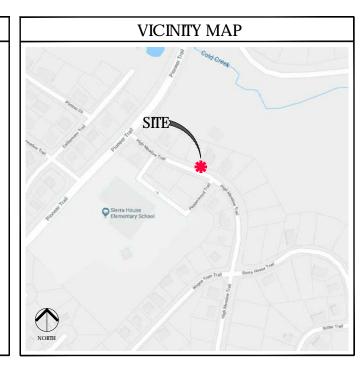
119°57'42.32" ELEVATION +6332 2' AMSI

CODE COMPLIANCE

NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY LOCAL JURISDICTION, INCLUDING BUT NOT LIMITED TO:

- CALIFORNIA CODE OF REGULATIONS
- CALIFORNIA CODE OF REGULATIONS 2016 CALIFORNIA BUILDING CODE 2016 CALIFORNIA MECHANICAL CODE 2016 CALIFORNIA PLUMBING CODE 2016 CALIFORNIA ELECTRIC CODE 2016 GREEN CODE
- 2016 EDITION OF TITLE 24 ENERGY STANDARDS
- ANY LOCAL BUILDING CODE AMENDMENTS TO THE ABOVE
- CITY / COUNTY ORDINANCES





POLE IMAGE



PROJECT TEAM

AGENT

222 W. Lockeford Stree Lodi, CA 95240

CONSTRUCTION MANAGER: ROB HERNANDEZ

LEASING & ZONING MGR: MARK LOBAUGH

ARCHITECT/ENGINEER

Meridian Management LLC 785 Oak Grove Road E2 Concord, CA 94518

PROJECT MANAGER: RODNEY BARNES

cell: 707.592.5924 email: rodney@meridian.managemen

2785 Mitchell Drive Walnut Creek, CA 94598

HANDICAP REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA ADMINISTRATIVE STATE CODE PART 2. TITLE 24. CHAPTER 11B, SECTION 1103B.



PROJECT DESCRIPTION

THIS IS AN LINMANNED TELECOMMUNICATIONS FACILITY FOR THE VERIZON WIRELESS NETWORK CONSISTING OF THE INSTALLATION AND OPERATION OF AN ANTENNA AND ASSOCIATED EQUIPMENT ON AN EXISTING WOOD POLE IN THE PUBLIC RIGHT-OF-WAY.

- INSTALL NEW TELECOMMUNICATIONS EQUIPMENT BOXES ON AN EXISTING 38.4' HT. WOOD
- ALL POLE-MOUNTED EQUIPMENT TO BE INSTALLED ON A GO95 COMPLIANT STANDOFF
- EQUIPMENT CONSISTS OF (1) CANTENNA ON 7' WOOD POLETOP EXTENSION, (1) RRUS4449, (1) RRUS8843, (2) DIPLEXERS, (2) DISCONNECT SWITCHES, (1) RRU SHROUD, (2) STL. BOLLARDS, (1) GROUND-MOUNTED SMALL CELL CABINET, AND A POWER METER ON SIDE OF SMALL CELL CABINET.
- OVERHEAD POWER FROM TRANSFORMER
- INSTALL POLE STEPS AS REQUIRED
 ALL POLE-MOUNTED EQUIPMENT INCLUDING CONDUIT RISERS TO BE INSTALLED MIN. 5" FROM POLE ON STANDOFF BRACKETS

DRAWING INDEX

ALL EQUIPMENT TO BE PAINTED VALSPAR 'DEEP EARTH' COLOR.

| SHEET NO: | SHEET TITLE |
|-----------|---|
| T.1 | TITLE SHEET |
| C.1 | SITE SURVEY |
| A.1 | OVERALL SITE PLAN |
| A.2 | POLE PLAN ENLARGEMENTS |
| A.3 | ELEVATIONS |
| A.4 | ELEVATIONS |
| A.5 | EQUIPMENT DETAILS |
| A.6 | EQUIPMENT DETAILS |
| A.7 | EQUIPMENT DETAILS, PLUMBING DIAGRAM |
| A.8 | EQUIPMENT DETAILS |
| E.1 | SINGLE LINE DIAGRAM, BUSS DIAGRAM, PANEL SCHEDULE |
| E.2 | POLE GROUNDING, ELECTRICAL DETAILS |
| TC.1 | VEHICLE TRAFFIC CONTROL PLAN |
| | |

ADMINISTRATIVE REQUIREMENTS

CONTRACTOR SHALL VERIFY ALL PLANS & (E) DIMENSIONS & 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 IF USING 11"X17" PLOT, DRAWINGS WILL BE HALF SCALE

verizon /

2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



Concord CA 94518 707 592 5924

Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

100% Construction Drawings

SC SOUTH LAKE **TAHOE 075**

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

It is a violation of law for any person Architect/Engineer, to alter this document.

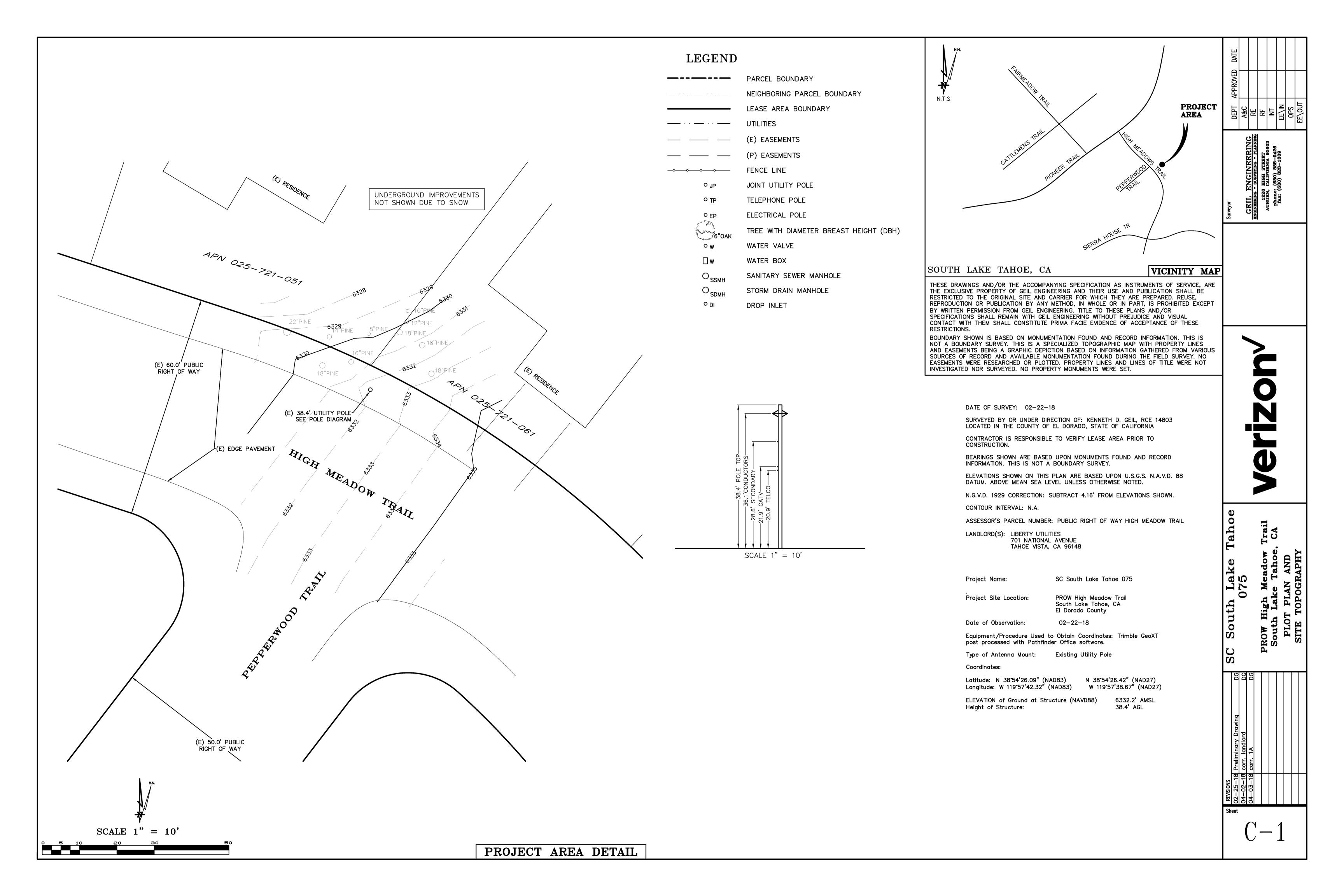
| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

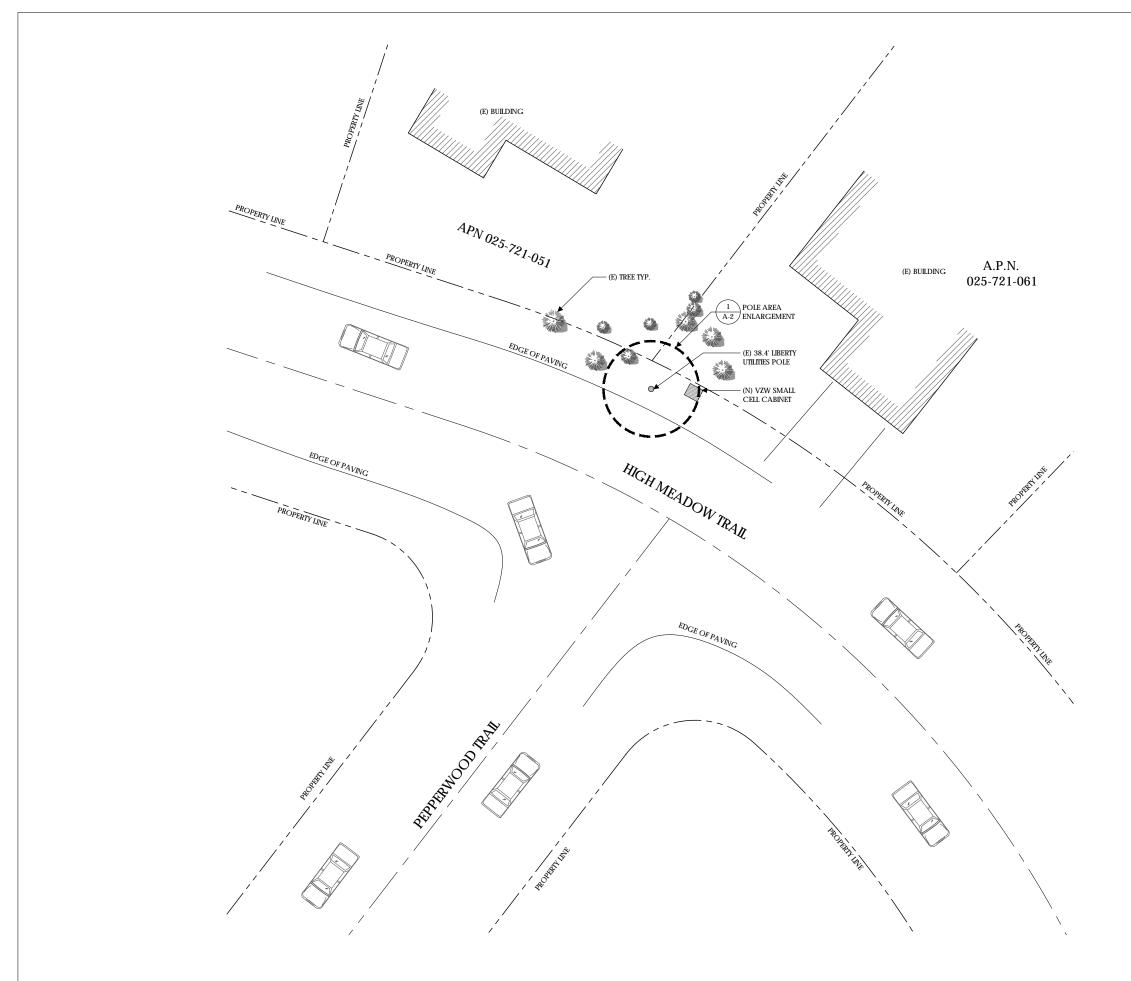
Project No.

Date: 04/03/18 Scale: AS SHOWN CAD File:

Designed By: JG Checked:

TITLE SHEET







Client:



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 075

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

Professional S

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.:
Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

OVERALL SITE PLAN

Sheet Title:

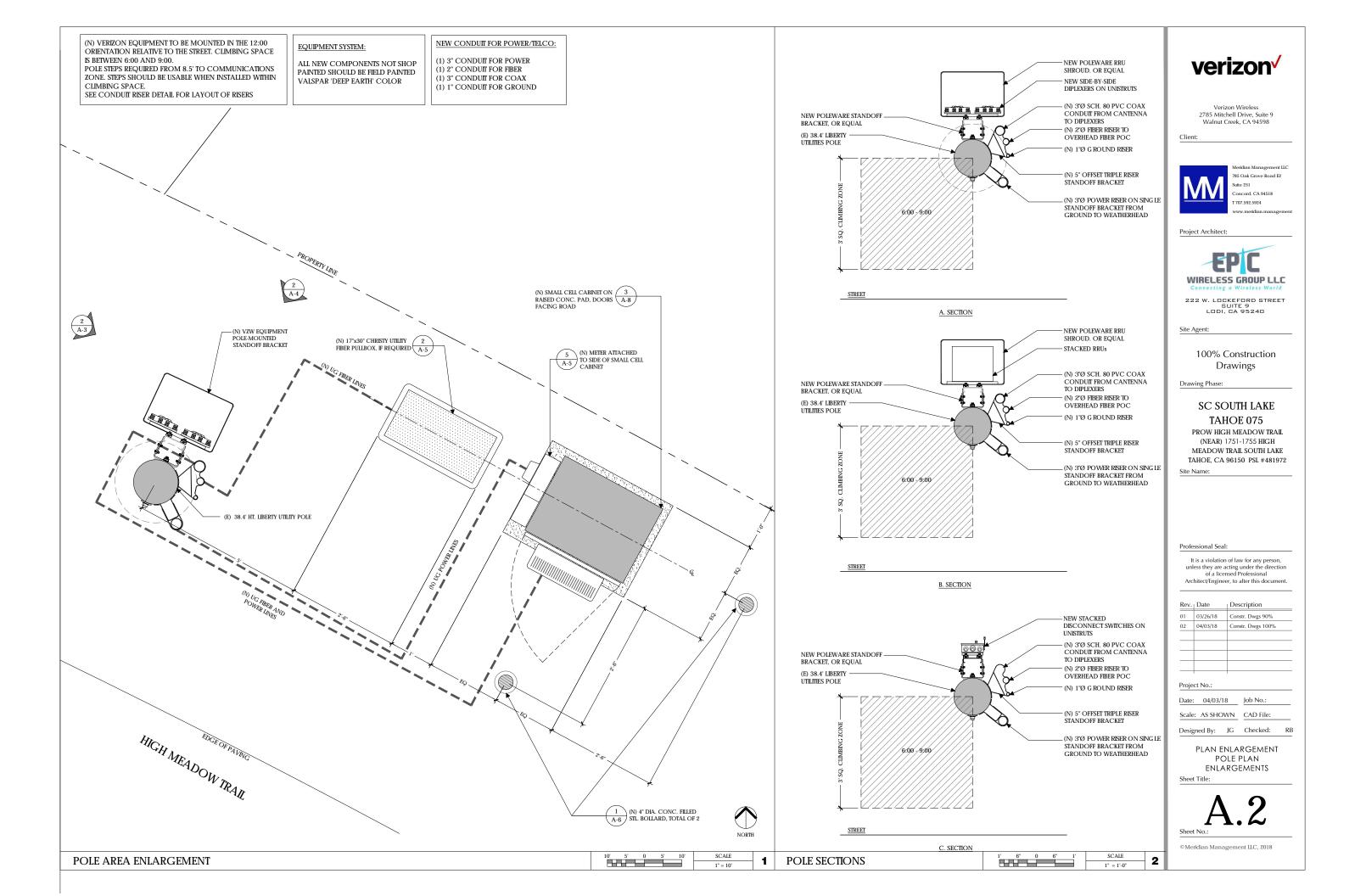
NORTH

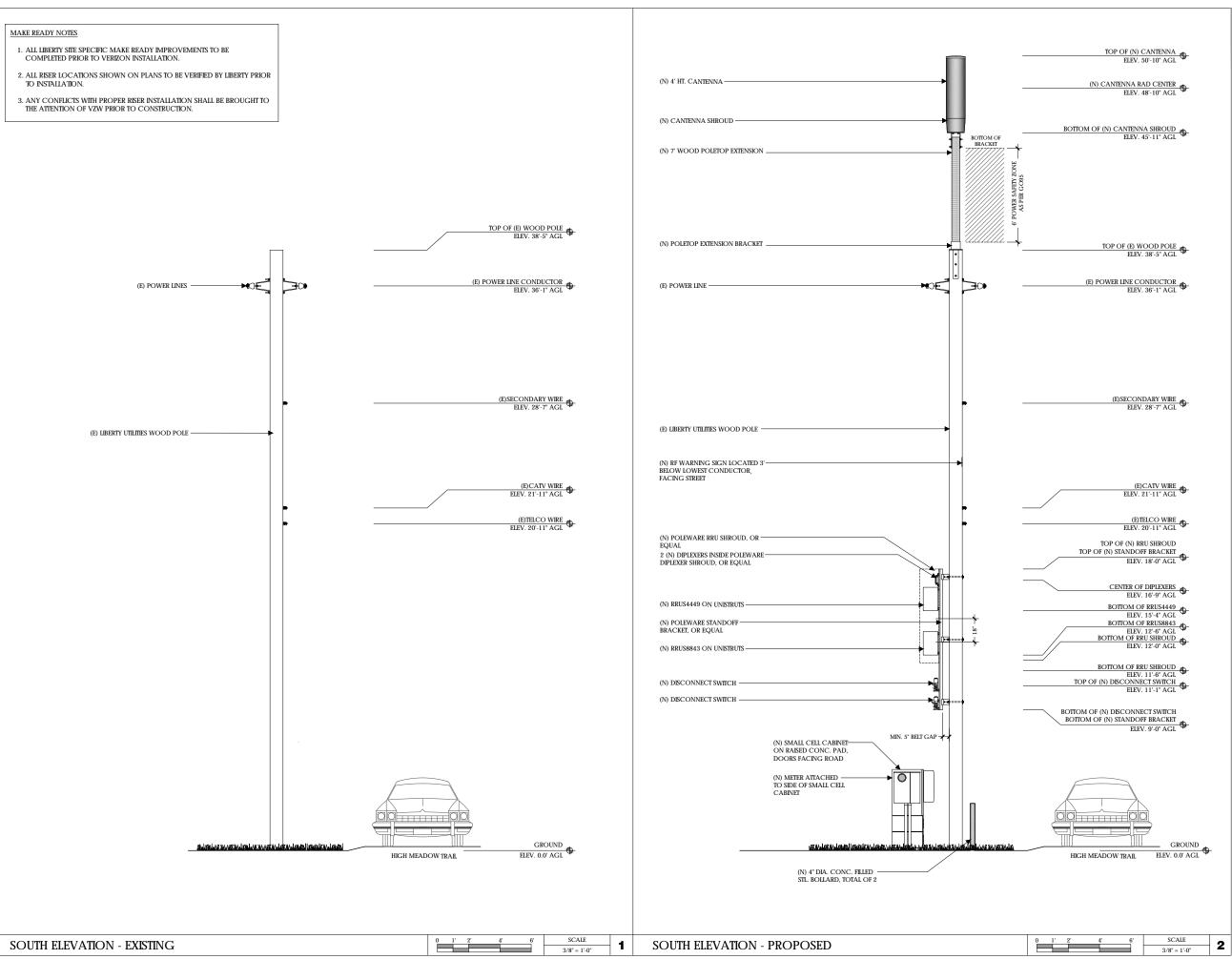


© Meridian Management II.C. 20

10' 5' 0 5' 10' SCALE 1" = 10'

OVERALL SITE PLAN







Clien



785 Oak Grove Road E2 Suite 251 Concord, CA 94518 T 707.592.5924

Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction
Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 075

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

Professional Sea

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | 1 | |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

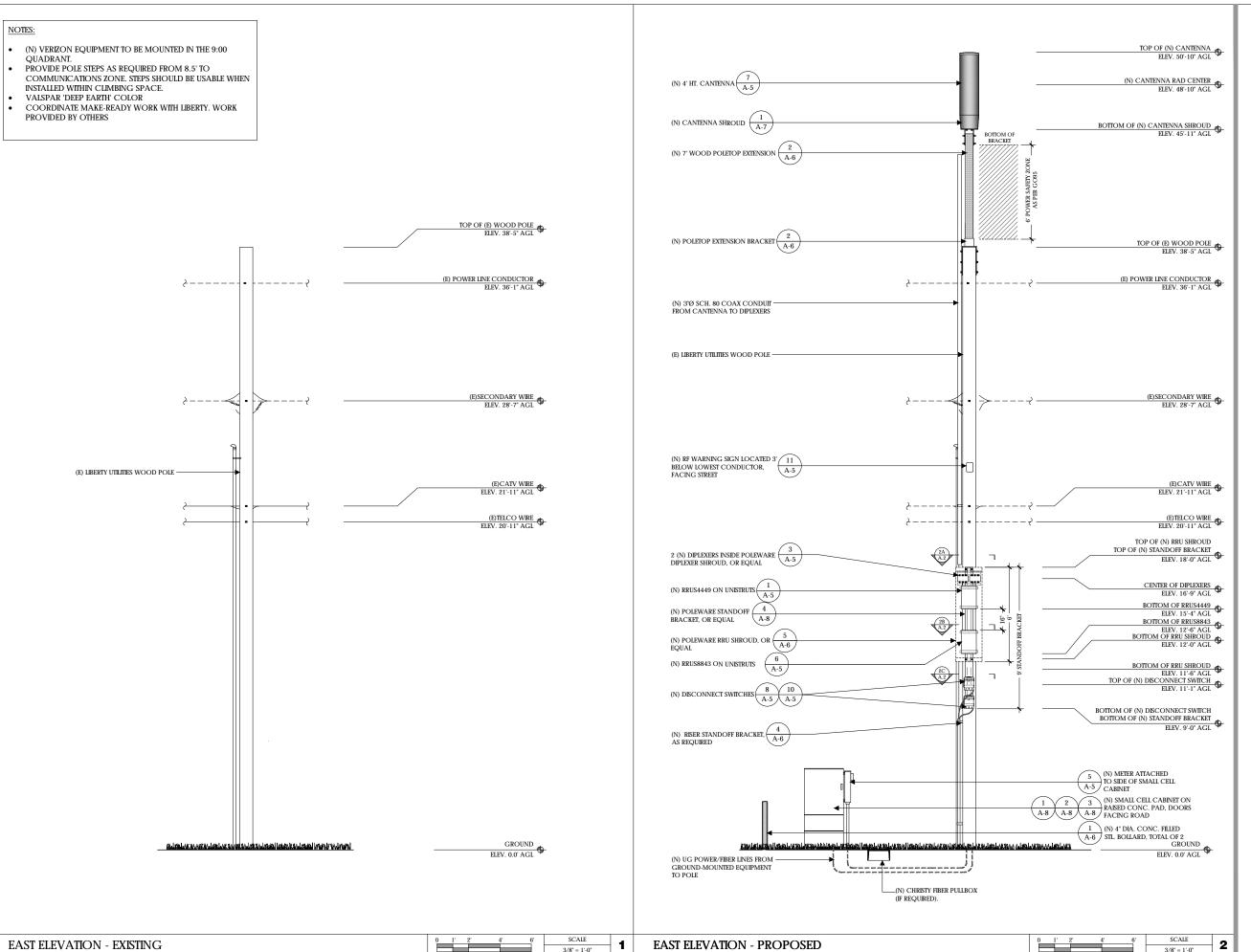
Designed By: JG Checked: RB

ELEVATIONS

Sheet Title:

A.3

Sheet No.:





Client:



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 075

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

Professional Sea

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | - | + |

Project No.:

Date: 04/03/18 Job No.:
Scale: AS SHOWN CAD File:

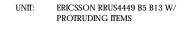
Designed By: JG Checked: RB

ELEVATIONS

Sheet Title:

A.4

Sheet No.:



HEIGHT: 18 INCHES

WIDTH: 13.2 INCHES

LENGTH: 9.4 INCHES

WEIGHT: 70 LBS (EXCLUDES MOUNTING HARDWARE)



UNIT: ERICSSON RRUS8843 W/ PROTRUDING ITEMS

18 INCHES HEIGHT:

WIDTH: 13.2 INCHES

DEPTH: 11.3 INCHES

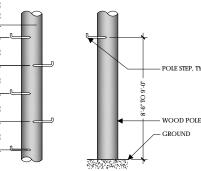
WEIGHT: 75 LBS

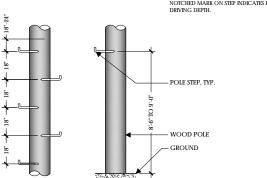




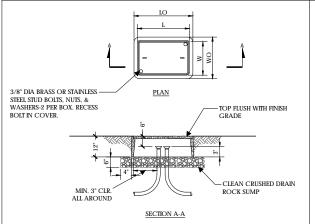
MODEL # DESCRIPTION: POLE $\frac{5}{8}$ X 10 INCH GALVANIZED 99 LBS AERIAL SERVICE COMPANY, INC. 1-800-256-5186

POLE STEPS ARE USED ON WOOD POLES WHERE FREQUENT ACCESS TO POLE MOUNTED EQUIPMENT IS REQUIRED. FLAT DRIVING SURFACE AND SHARP POINT EASE INSTALLATION. FETTER DRIVE HIREAD PERMITS REMOVAL WITH A WEENCH. HOT DIPPED CAMBANITY DESTA COMPANIENTED STANDARD TO THE POLE OF THE GALVANIZED FOR CORROSION RESISTANCE. NOTCHED MARK ON STEP INDICATES PROPER DRIVING DEPTH.





6 POLE STEPS **RRUS4449** RRUS8843 9 1

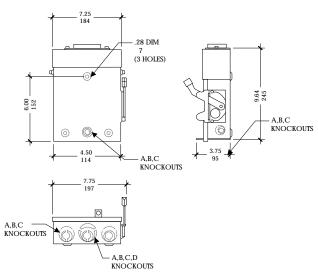


PULL BOX MINIMUM DIMENSION TABLE PULL BOX CONCRETE BOX COVER (PCC ONLY) LO WO L W 30" 17" 25-3/8" 13-1/4" HEIGHT: 48.0 INCHES

DIAMETER: 14.6 INCHES

WEIGHT: 38.1 LBS (WITHOUT MOUNTING BRACKET)





FIBER TRANSPORT PULL BOX

2 NOT USED

BYPASS

25 INCHES

4-5/8 INCHES

HEIGHT: 24 INCHES

UNIT:

DEPTH:

CANTENNA

DISCONNECT SWITCH

SCALE **∃10** NOT TO SCALE

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

verizon/

Verizon Wireless 2785 Mitchell Drive, Suite 9

Walnut Creek, CA 94598

WIRELESS GROUP LLC

222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

100% Construction

Drawings

SC SOUTH LAKE

TAHOE 075 PROW HIGH MEADOW TRAIL

(NEAR) 1751-1755 HIGH

MEADOW TRAIL SOUTH LAKE

TAHOE, CA 96150 PSL #481972

Project Architect:

Site Agent:

Drawing Phase:

Site Name:

785 Oak Grove Road E2

Concord, CA 94518 707.592.5924

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | + |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS

© Meridian Management LLC, 2018

HEIGHT: 8.31 INCHES

WIDTH: 2.48 INCHES

DEPTH: 7.0 INCHES

WEIGHT: 4.4 LBS



NEW PHENOLIC SIGN ATTACHED TO EXTERIOR PANEL

NORMAL SHUT-DOWN PROTOCOLS: 1. Call 800-264-6620 NOC 24 HRS prior to schedule a shutdown day and time. 2. Give NOC the Node number 3. On scheduled day of shutdown, pull the disconnect handle to the "OFF" position.
4. Call NOC when work is completed. EMERGENCY SHUT-DOWN PROTOCOLS: 1. Call 800-264-6620 NOC immediately

2. Give NOC the Node number

Pull the disconnect handle to the "OFF" position.
 Call NOC when work is completed.

OUTSIDE PANEL DOOR SHOWING DISCONNECT SWITCH – DISC. OR PANEL DOOR W/ Latch-loop (Lockable)

CONTRACTOR NOTE: SITE ID WILL BE SITE ID, MARKET ID,

NEMA 3R RAIN COVER

SITE #, AND SITE NAME

 $\underline{\text{ON WOOD POLES}}$ - SIGN ON ALUMINUM WITH SS SCREW TO THE POLE 3' $\overline{\text{BELOW ANTENNA}}$

SIGN PLACEMENT:
AFFIX TO THE STRUCTURE 3-4' BELOW THE COMMERCIAL RF ANTENNA(S) OR
3' BELOW LOWEST POWER WIRE

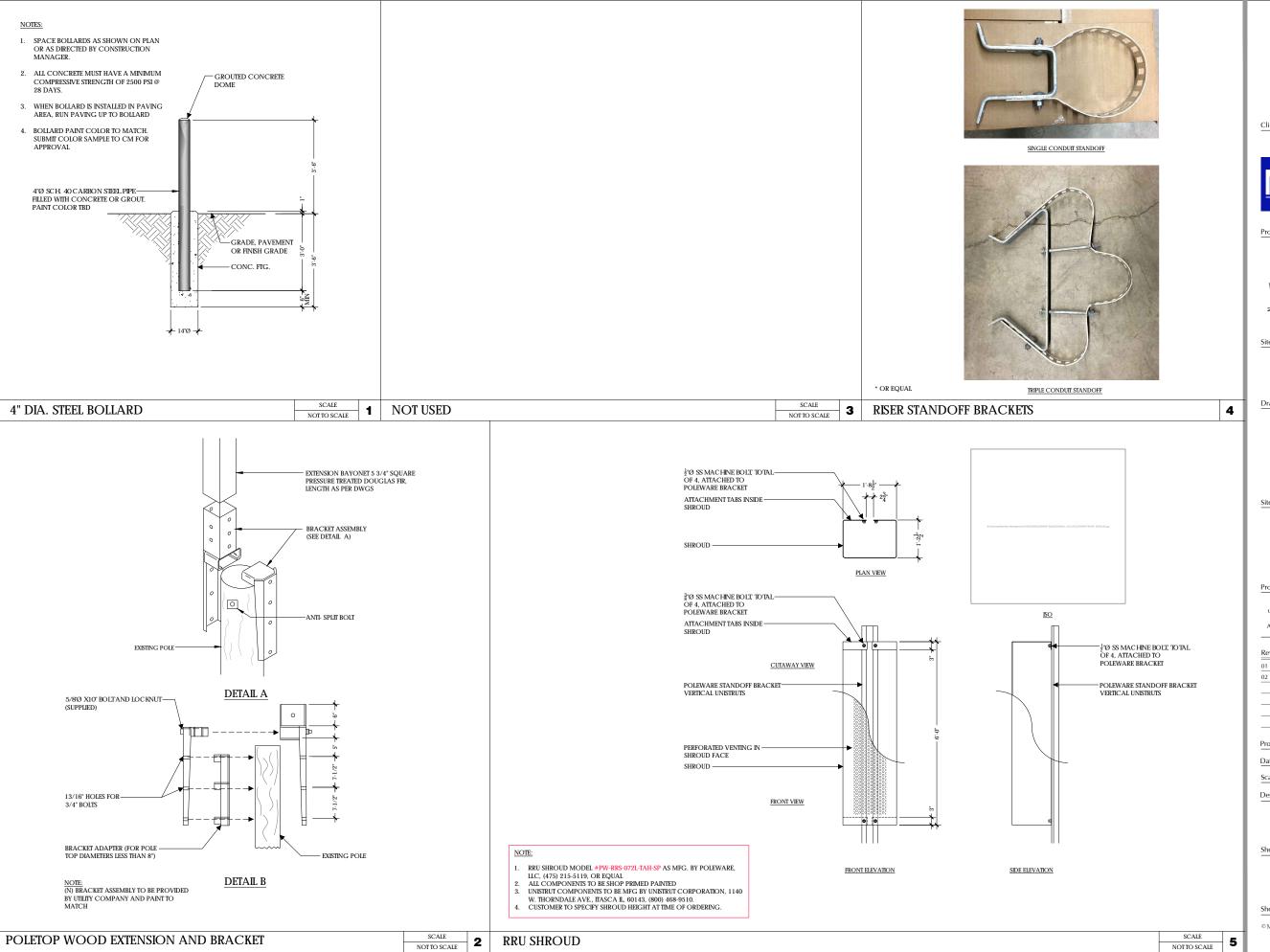
SIGN COLOR: YELLOW

CONTRACTOR NOTE: SITE ID WILL BE SITE ID, MARKET ID, SITE #, AND SITE NAME

DIPLEXER 3 METER DISCONNECT SIGNAGE

RF WARNING SIGNAGE

11







785 Oak Grove Road E2 Concord, CA 94518 707.592.5924

Project Architect:

WIRELESS GROUP LLC

222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE **TAHOE 075**

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | 1 |

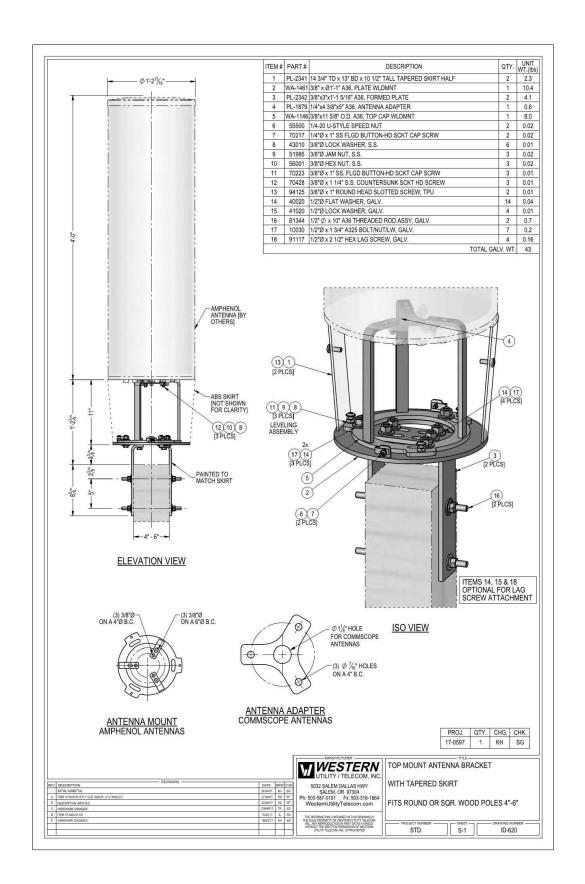
Project No.:

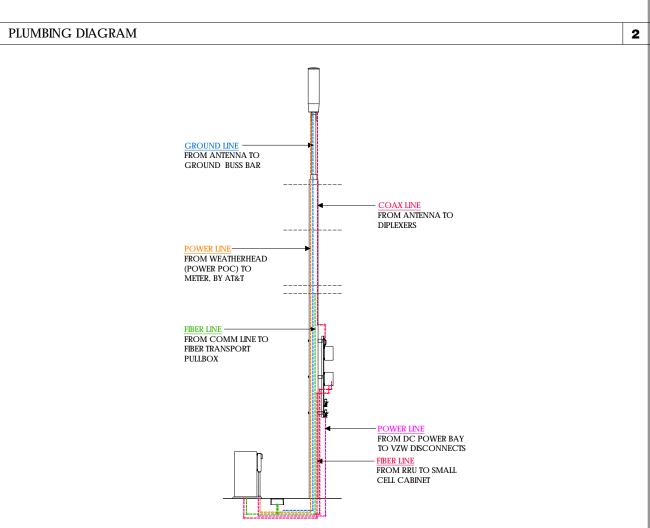
Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS







Client:



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction
Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 075

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

Professional Sea

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS PLUMBING DIAGRAM

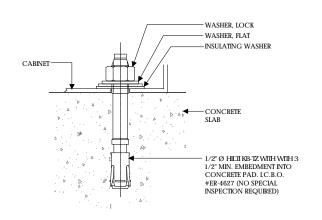
Sheet Title:

3

A.7

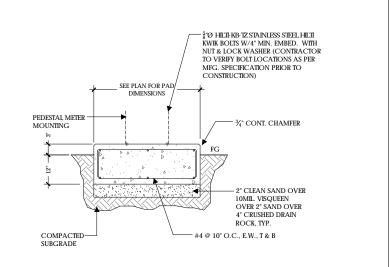
© Meridian Management LLC, 2018

1 CONDUIT RISER DIAGRAM



CABINET ANCHORAGE

SCALE NTS



CONCRETE PAD

SCALE 2

UNIT: SMALL CELL CABINET

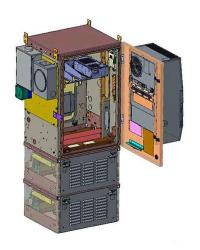
HEIGHT: 61 INCHES

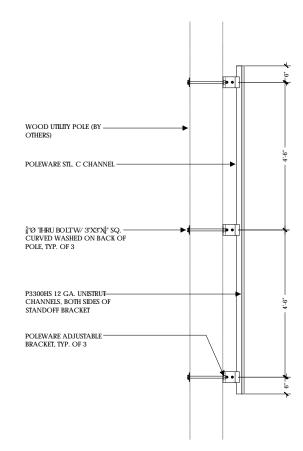
WIDTH: 24 INCHES

DEEP: 30 INCHES

WEIGHT 300 LBS

(FULLY LOADED)

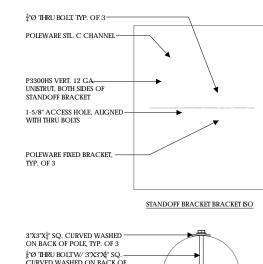


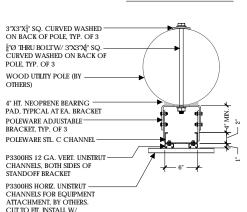




UNISTRUT MACHING BOLTS THRU WOOD UTILITY POLE (BY -POLEWARE STL. CHANNEL - $\frac{5}{8}$ "Ø THRU BOLTW/ 3"X3"X $_1^{l}$ " SQ. CURVED WASHED ON BACK OF POLE, TYP. OF 3 CHANNELS, BOTH SIDES OF STANDOFF BRACKET P3300HS UNISTRUT CHANNELS, BOTH SIDES OF STANDOFF BRACKET. INSTALL BOLT THRU PREDRILLED STANDOFF BRACKET HOLES

STANDOFF BRACKET FRONT ELEVATION





CHANNEL NUTS W/ SPRINGS.

STANDOFF BRACKET PLAN

785 Oak Grove Road E2 Concord, CA 94518 707.592.5924

Project Architect:

WIRELESS GROUP LLC

verizon/

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE **TAHOE 075**

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS

Sheet No.:

© Meridian Management LLC, 2018

NOTE:

- STANDOFF BRACKET MODEL #PW-SOB-09L-ADJ-SP AS MFG. BY

- POLEWARE, ILC, (475) 215-5119, OR EQUAL ALL COMPONENTS TO BE SHOP PRIMED PAINTED UNISTRUT COMPONENTS TO BE MFG BY UNISTRUT CORPORATION, 1140 W. THORNDALE AVE., ITASCA II., 80143, (800) 468-9510.
- W. INCANDALE AVE., II-ASCA II., 00143, (800) 406-9310.

 HORIZONTAL UNISTRUTS (P3300HS) FOR EQUIPMENT INSTALLATION NOT INCLUDED

 ADJUSTABLE BRACKETS FOR SLANTED POLES AVAILABLE BY SPECIAL
- ORDER

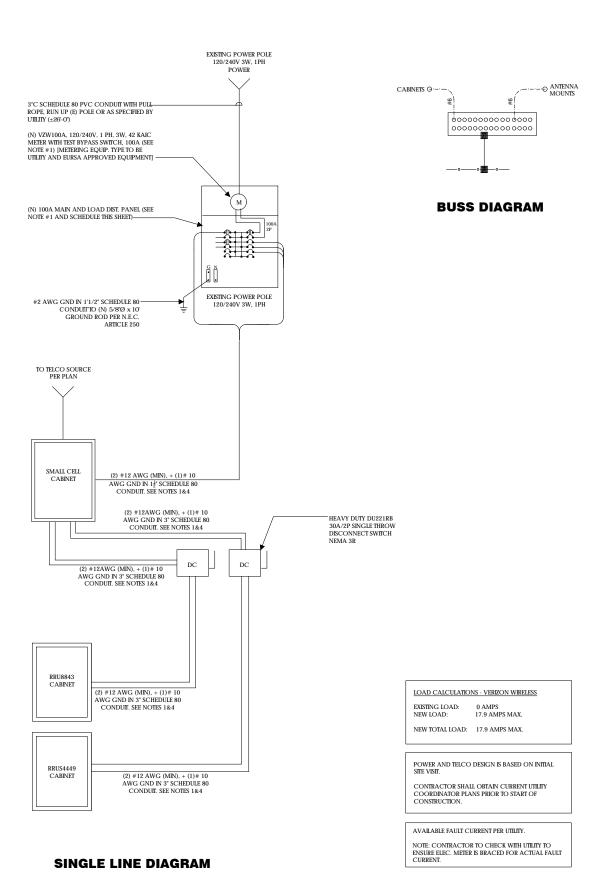
SMALL CELL CABINET

SCALE NOT TO SCALE

3

STANDOFF BRACKET

SCALE NOT TO SCALE 4



POWER AND TELCO NOTES:

- 1. POWER AND TELCO POINTS OF CONNECTION AND ANY EASEMENTS ARE PRELIMINARY AND SUBJECT TO CHANGE BY
- 2. CONTRACTOR SHALL COORDINATE WITH LITILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY ENGINEERING PLANS AND SPECIFICATIONS ONLY WHERE APPLICABLE PER PROJECT
- 3. CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT, PULL WIRES, CABLE PULL BOXES, CONCRETE ENCASEMENT OF CONDUIT, TRANSFORMER PAD, BARRIERS, POLE RISER TRENCHING, BACK FILL, AND UTILITY FEES, AND INCLUDE REQUIREMENTS IN SCOPE
- 4. CONTRACTOR SHALL LABEL ALL MAIN DISCONNECT SWITCHES AS REQUIRED BY CODE.

GENERAL ELECTRICAL NOTES:

- 1. PROVIDE ALL ELECTRICAL WORK & MATERIALS AS SHOWN ON THE DWGS, AS CALLED FOR HEREIN, & AS IS NECESSARY TO FURNISH A COMPLETE INSTALLATION
- 2. THE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ADOPTED CALIFORNIA ELECTRICAL CODE, STATE OF CALIFORNIA TITLE 24, ALL OTHER APPLICABLE CODES AND ORDINANCES & THE REQUIREMENTS OF THE FIRE MARSHALL. ALL EQUIPMENT & WIRING SHALL BEAR THE APPROVAL STAMP OF UNDERWRITERS LABORATORY (UL) OR AN APPROVED TESTING LABORATORY, PAYMENT FOR ALL INSPECTION FEES AND PERMITS ARE PART OF THIS CONTRACT.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND GOOD CONDITION OF ALL MATERIALS & EQUIPMENT FOR THE ENTIRE INSTALLATION & UNIT COMPLETION OF WORK, ERECT & MAINTAIN APPROVED & SUITABLE BARRIERS, PROTECTIVE DEVICES & WARNING SIGNS, BE FULLY RESPONSIBLE FOR ANY LOSS OR INJURY TO PERSONS OR PROPERTY RESULTING FROM NEGLIGENCE AND/OR ENFORCEMENT OF ALL SAFETY PRECAUTIONS & WARNINGS
- 4. COORDINATE THE ELECTRICAL INSTALLATION WITH ALL OTHER TRADES.
- 5. ALL SAW CUTTING, TRENCHING, BACK FILLING & PATCHING SHALL BE PART OF THIS CONTRACT.
- 6. FINALIZE ALL ELECTRICAL SERVICE ARRANGEMENTS, INCLUDING VERIFICATION OF LOCATIONS, DETAILS, COORDINATION OF THE INSTALLATION & PAYMENT OF ACCRUED CHARGES WITH LOCAL POWER COMPANY, VERIFY LOCATION FOR FACILITIES & DETAILS WITH POWER UTILITY, IN ADDITION TO THE REQUIREMENTS SHOWN IN THE CONTRACT DOCUMENTS, WORK SHALL COMPLY WITH CONSTRUCTION STANDARDS & SERVICE REQUIREMENTS OF THE RESPECTIVE UTILITIES, INCLUDING ANY SUPPLEMENTAL DWGS ISSUED & SHALL BE SUBJECT TO APPROVAL OF THESE UTILITIES.
- 7. ALL WIRING SHALL BE COPPER. INSULATION FOR BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE "THWN" CONDUCTORS LARGER AND
- 8. PROVIDE CONDUIT SEALS FOR ALL CONDUITS PENETRATING WEATHERPROOFING OR WEATHERPROOF ENCLOSURE ENVELOPE. MASTIC SEAL ALL CONDUIT OPENING PENETRATIONS COMPLETELY WATERTIGHT.
- UNLESS SHOWN OTHERWISE, FUSED DISCONNECT SWITCHES SHALL BE PROVIDED WITH LOW-PEAK, S\DUAL ELEMENT FUSES SIZED TO
 EQUIPMENT NAMEPLATE FUSE CURRENT RATING. MOTOR STARTERS SHALL BE PROVIDED WITH SIMILARLY SIZED FUSIBLE ELEMENTS, SWITCHES AND OTHER OUTDOOR EQUIPMENT SHALL BE RATED NEMA 3R AND/OR ULLISTED FOR WET ENVIRONMENT.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING THE GROUNDING SYSTEM AND ENSURING A 5 OHM OR LESS GROUNDING PATH, ADDITIONAL GROUND RODS AND/OR CHEMICAL ROD SYSTEM SHALL BE USED TO ACHIEVE THIS REQUIREMENT IF THE GIVEN DESIGN CANNOT BE MADE TO ACHIEVE THIS REQUIREMENT.

- 1. SUBCONTRACTOR SHALL PROVIDE DIST, PANEL AND BREAKERS FOR POWER TO THE BTS UNITS AND THE BTS/UTILITY CABINET
- 2. ALL SERVICE EQUIPMENT AND INSTALLATIONS SHALL COMPLY WITH THE N.E.C. AND UTILITY COMPANY AND LOCAL CODE
- 3 SUBCONTRACTOR SHALL PROVIDE FLECTRICAL SERVICE ENTRANCE EQUIPMENT WITH FAULT CURRENT RATINGS GREATER
 THAN THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.
- 4. MAXIMUM ONE WAY CIRCUIT RUN NOT TO EXCEED 75 FEET.



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



707.592.5924

Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE **TAHOE 075**

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

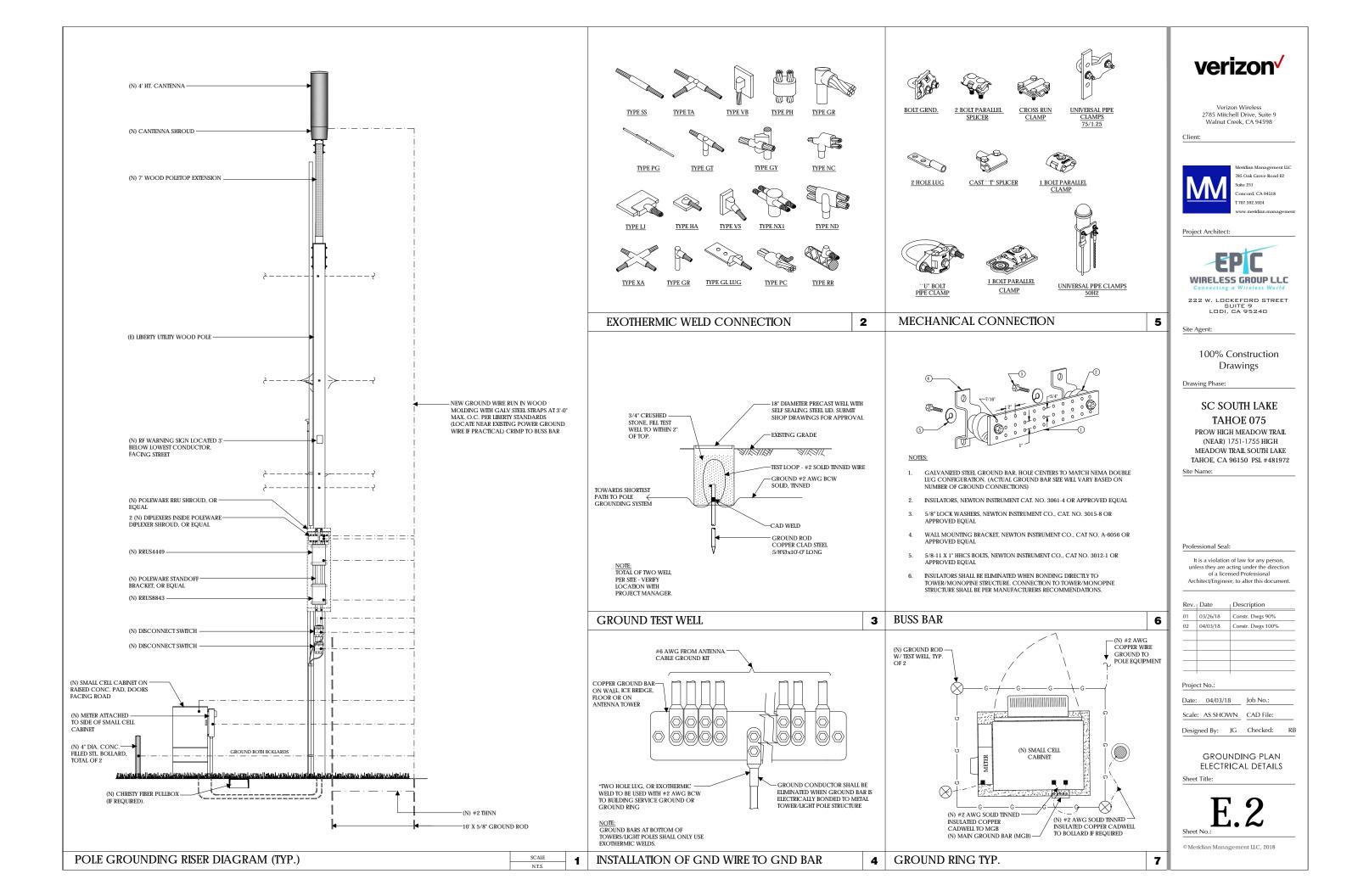
Project No.

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

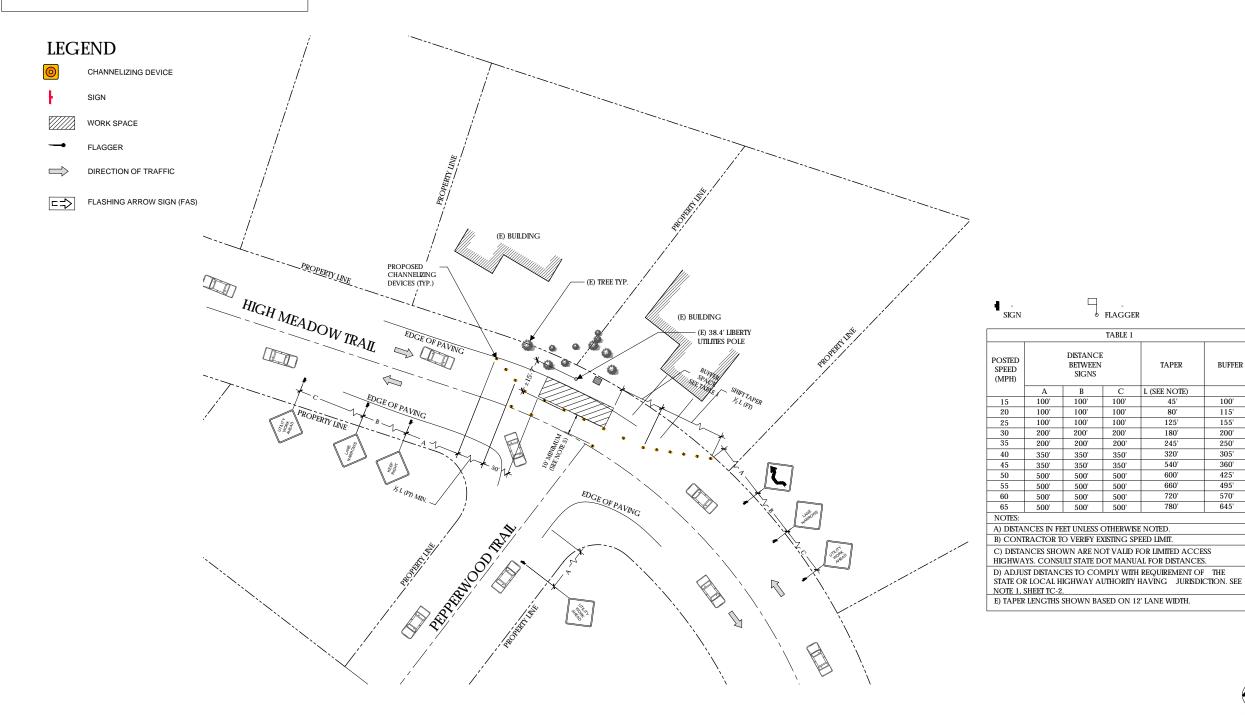
Designed By: JG Checked:

SINGLE LINE DIAGRAM BUSS DIAGRAM PANEL SCHEDULE



PLAN NOTES:

- 1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY VEHICULAR TRAFFIC CONTROL PLANS (TCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TCP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
- 2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
- 3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING. DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES, DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION, NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
- 4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
- 5. MAINTAIN A MINIMUM LANE WIDTH OF 10'.



DOT NOTES:

- 1. WHEN LANE CLOSURE IS REQUIRED, THE TRAFFIC CONTROL PLAN SHOULD BE PROVIDED AND NOTARIZED BY AN INDIVIDUAL/COMPANY THAT HAS FLAGGER CONTROL TRAINING CERTIFICATION.
- "BLUE-LIGHTS" (OFF-DUTY POLICE OFFICERS) WILL BE ON SITE FOR LANE CLOSURES AND IF REQUIRED.

verizon /

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



785 Oak Grove Road E2 Concord. CA 94518 707.592.5924

Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings (E) LIGHT POLE

Drawing Phase:

SC SOUTH LAKE **TAHOE 075** PROW HIGH MEADOW TRAIL

(NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | 1 | |

Project No.:

Date: 04/03/18 Job No.: Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

VEHICLE TRAFFIC CONTROL PLAN

© Meridian Management LLC, 2018

1

BUFFER

115'

155'

200'

250'

305'

360'

425'

495'

570'

645'

SCALE

OVERALL SITE PLAN

FLAGGER

TABLE 1

100'

100'

200'

200'

350'

350'

500'

TAPER

180'

245'

320'

540'

600'

660'

720'

780'

L (SEE NOTE)

DISTANCE

BETWEEN

100'

100' 100' 100'

100'

200'

500' 500' 500'

500' 500' 500'

350'

200' 200'

350' 350'

500' 500'

100'

200'

350'

SC SOUTH LAKE TAHOE 060



PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150

PSL #471233

George's Auto Detailing

VICINITY MAP

SITE

SITE INFORMATION

471233

OWNER:

PSL #:

LIBERTY UTILITIES

701 NATIONAL AVENUE TAHOE VISTA, CA 96148 ERIC TROSKA T 775-870-2469

APPLICANT:

VERIZON WIRELESS 2785 MITCHELL DRIVE, SUITE 9 WALNUT CREEK, CA 94598

M 775-870-2469

EPIC WIRELESS 222 W. LOCKEFORD STREET

LODI, CA 95240

APN ADJACENCY:

(IFO) 025-452-051

SITE ADDRESS: PROW COPPER WAY

(NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150

COUNTY:

ZONING: PUBLIC ROW

ZONING JURISDICTION: EL DORADO COUNTY

LAT:

LONG:

119°57'39.01"

±6537.9' AMSL

38°54'42.39"

EL DORADO

ELEVATION

CODE COMPLIANCE

CONSTRUCTION WORKS AND MATERIALS MUST COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY LOCAL JURISDICTION, INCLUDING BUT NOT LIMITED TO:

- CALIFORNIA CODE OF REGULATIONS 2016 CALIFORNIA BUILDING CODE
- 2016 CALIFORNIA MECHANICAL CODE
- 2016 CALIFORNIA PLUMBING CODE
- 2016 CALIFORNIA ELECTRIC CODE 2016 GREEN CODE
- 2016 EDITION OF TITLE 24 ENERGY STANDARDS
- ANY LOCAL BUILDING CODE AMENDMENTS TO THE ABOVE CITY / COUNTY ORDINANCES
- 2016 CALIFORNIA FIRE CODES WITH ALL LOCAL AMENDMENTS GO 95 REGULATIONS



POLE IMAGE

PROJECT TEAM

AGENT

Epic Wireless Group, Inc. 222 W. Lockeford Street

Lodi, CA 95240 Tel: (916) 781-5921

CONSTRUCTION MANAGER: ROB HERNANDEZ

cell: 916.216.7931 email: rob.hernandez@epicwireless.net

LEASING & ZONING MGR: MARK LOBAUGH

cell: 916.203.4067

email: mark.lobaugh@epicwireless.net

ARCHITECT/ENGINEER

Meridian Management LLC 785 Oak Grove Road E2 Suite 251 Concord, CA 94518 www.meridian.management

PROJECT MANAGER: RODNEY BARNES

cell: 707.592.5924

email: rodney@meridian.management

CLIENT

Verizon Wireless 2785 Mitchell Drive Walnut Creek, CA 94598

HANDICAP REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA ADMINISTRATIVE STATE CODE PART 2, TITLE 24, CHAPTER 11B, SECTION 1103B.

Exhibit D2

PROJECT DESCRIPTION

THIS IS AN UNMANNED TELECOMMUNICATIONS FACILITY FOR THE VERIZON WIRELESS NETWORK CONSISTING OF THE INSTALLATION AND OPERATION OF AN ANTENNA AND ASSOCIATED EQUIPMENT ON AN EXISTING WOOD POLE IN THE PUBLIC RIGHT-OF-WAY.

- INSTALL NEW TELECOMMUNICATIONS EQUIPMENT BOXES ON AN EXISTING 41.0' HT. WOOD
- EQUIPMENT CONSISTS OF (1) CANTENNA ON 7' WOOD POLETOP EXTENSION, (1) RRUS4449 BOLLARDS, (1) GROUND-MOUNTED SMALL CELL CABINET, AND A POWER METER ON SIDE OF SMALL CELL CABINET.
- OVERHEAD POWER FROM TRANSFORMER
- INSTALL POLE STEPS AS REQUIRED 6. ALL POLE-MOUNTED EQUIPMENT INCLUDING CONDUIT RISERS TO BE INSTALLED MIN. 5"
- FROM POLE ON STANDOFF BRACKETS ALL EQUIPMENT TO BE PAINTED VALSPAR 'DEEP EARTH' COLOR.

| SHEET NO: | SHEET TITLE | |
|-----------|---|--|
| T.1 | TITLE SHEET | |
| C.1 | SITE SURVEY | |
| A.1 | OVERALL SITE PLAN | |
| A.2 | POLE PLAN ENLARGEMENTS | |
| A.3 | ELEVATIONS | |
| A.4 | ELEVATIONS | |
| A.5 | EQUIPMENT DETAILS | |
| A.6 | EQUIPMENT DETAILS | |
| A.7 | EQUIPMENT DETAILS, PLUMBING DIAGRAM | |
| A.8 | EQUIPMENT DETAILS | |
| E.1 | SINGLE LINE DIAGRAM, BUSS DIAGRAM, PANEL SCHEDULE | |
| E.2 | POLE GROUNDING, ELECTRICAL DETAILS | |
| TC.1 | VEHICLE TRAFFIC CONTROL PLAN | |

ADMINISTRATIVE REQUIREMENTS

CONTRACTOR SHALL VERIFY ALL PLANS & (E) DIMENSIONS & 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 IF USING 11"X17" PLOT, DRAWINGS WILL BE HALF SCALE

verizon /

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



785 Oak Grove Road E2

Project Architect:



222 W. LOCKEFORD STREET LODI, CA 95240

Site Agent:

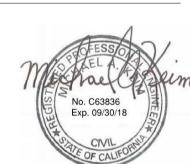
100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE **TAHOE 060**

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Date: 04/03/18

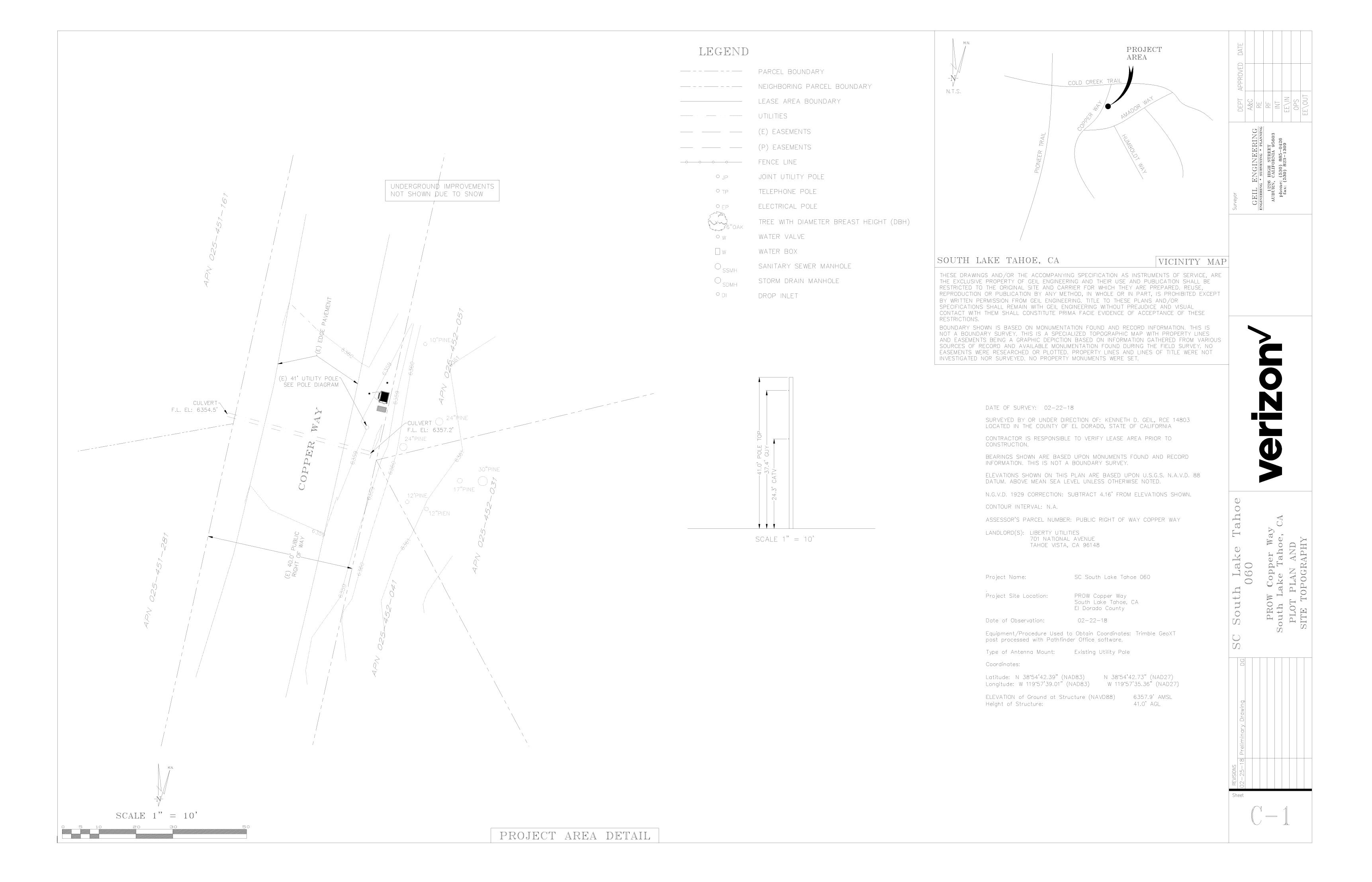
Scale: AS SHOWN CAD File:

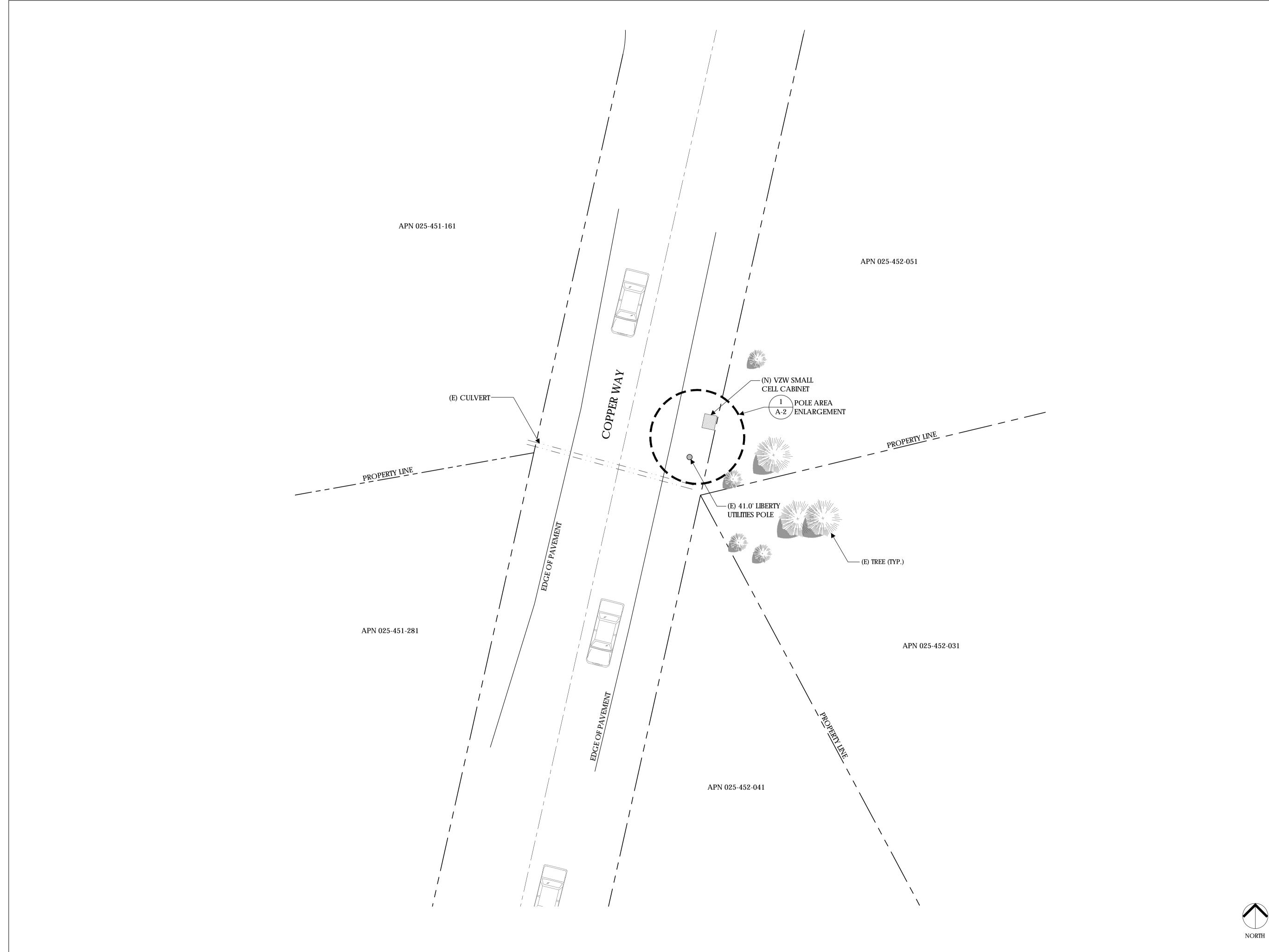
Designed By: JG Checked:

TITLE SHEET

Sheet Title:

Sheet No.:





OVERALL SITE PLAN



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



Project Architect:



Site Agent:

100% Construction
Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY
(NEAR) 2611 COPPER WAY
SOUTH LAKE TAHOE, CA 96150
PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

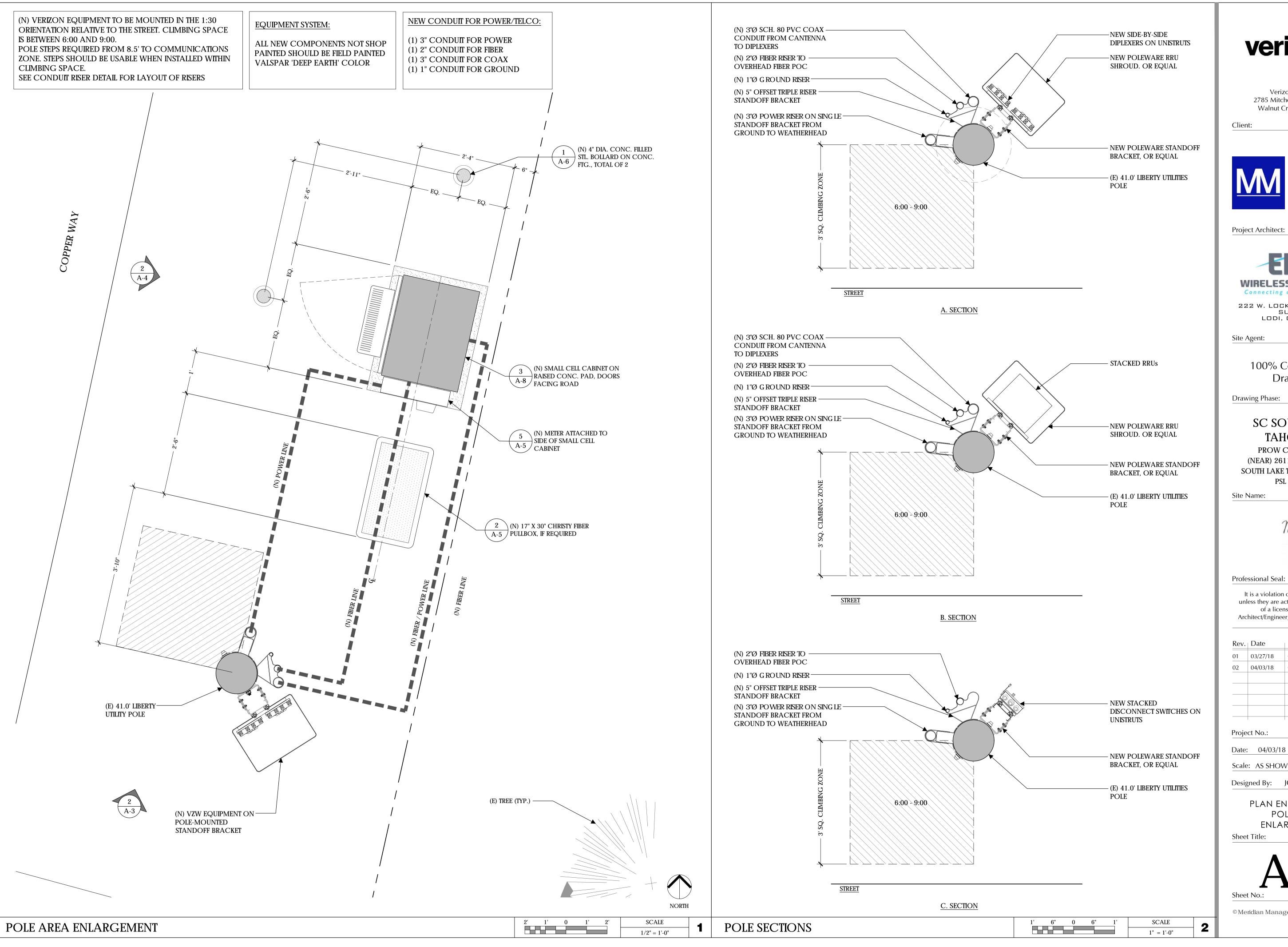
OVERALL SITE PLAN

Sheet Title:



© Meridian Management LLC, 2018

8' 4' 0 4' 8' SCALE 1/8" = 1'-0"







785 Oak Grove Road E2 Concord, CA 94518 T 707.592.5924 www.meridian.management



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

> 100% Construction Drawings

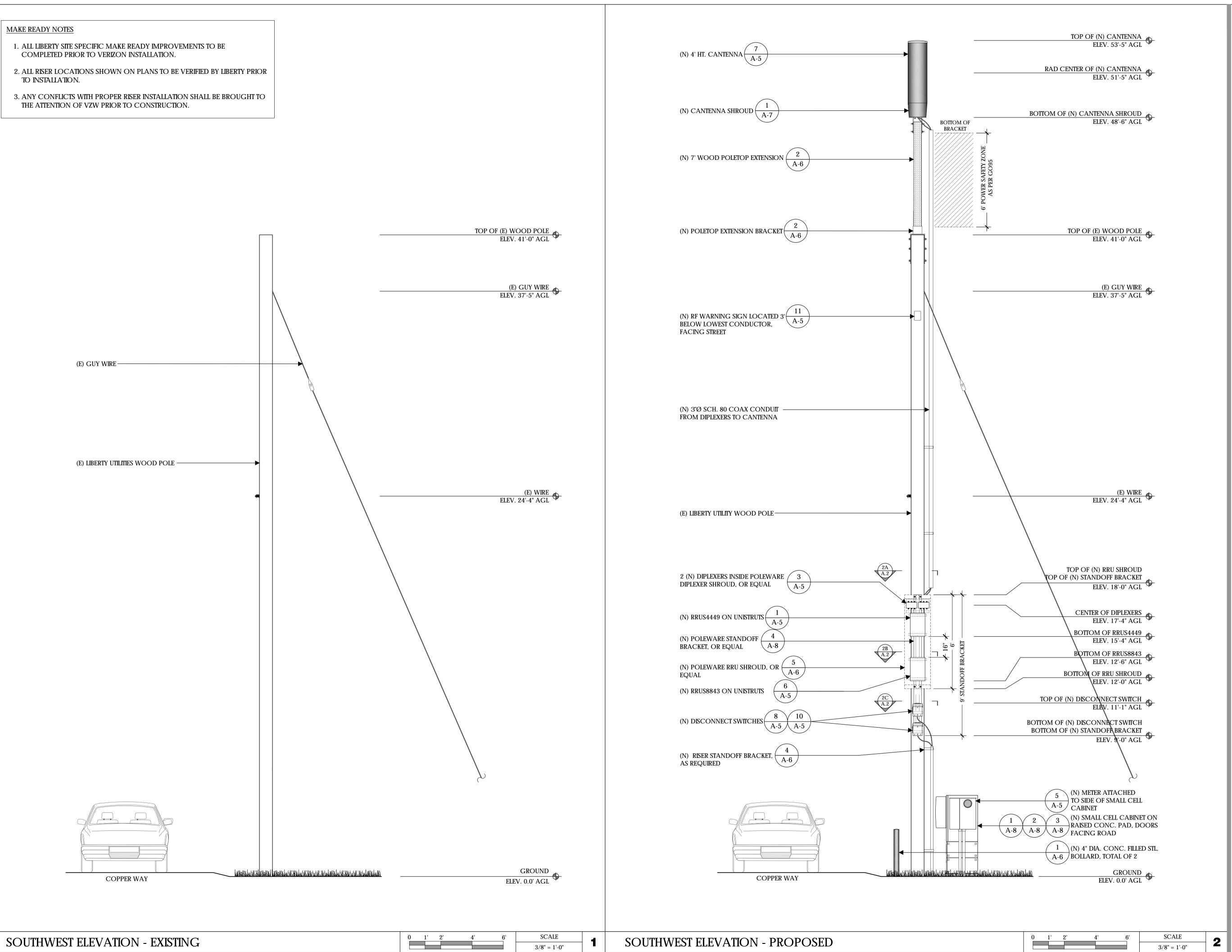
SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233



It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| 01 02 | 03/27/18 04/03/18 | | tr. Dwgs 90% tr. Dwgs 100% | |
|--------------|----------------------|------|-------------------------------|----|
| 02 | 04/03/18 | Cons | tr. Dwgs 100% | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | et No.: 04/03/18 | | Job No.: | |
| Date: Scale: | : AS SHOV | | CAD File: | |
| Desig | ned By: | JG | Checked: | RB |
| Sheet | PO ENLAI | LE F | RGEMENT PLAN EMENTS | |





Client:



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

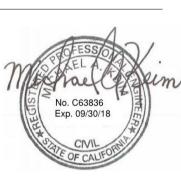
100% Construction
Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY
(NEAR) 2611 COPPER WAY
SOUTH LAKE TAHOE, CA 96150
PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.

Scale: AS SHOWN CAD File:

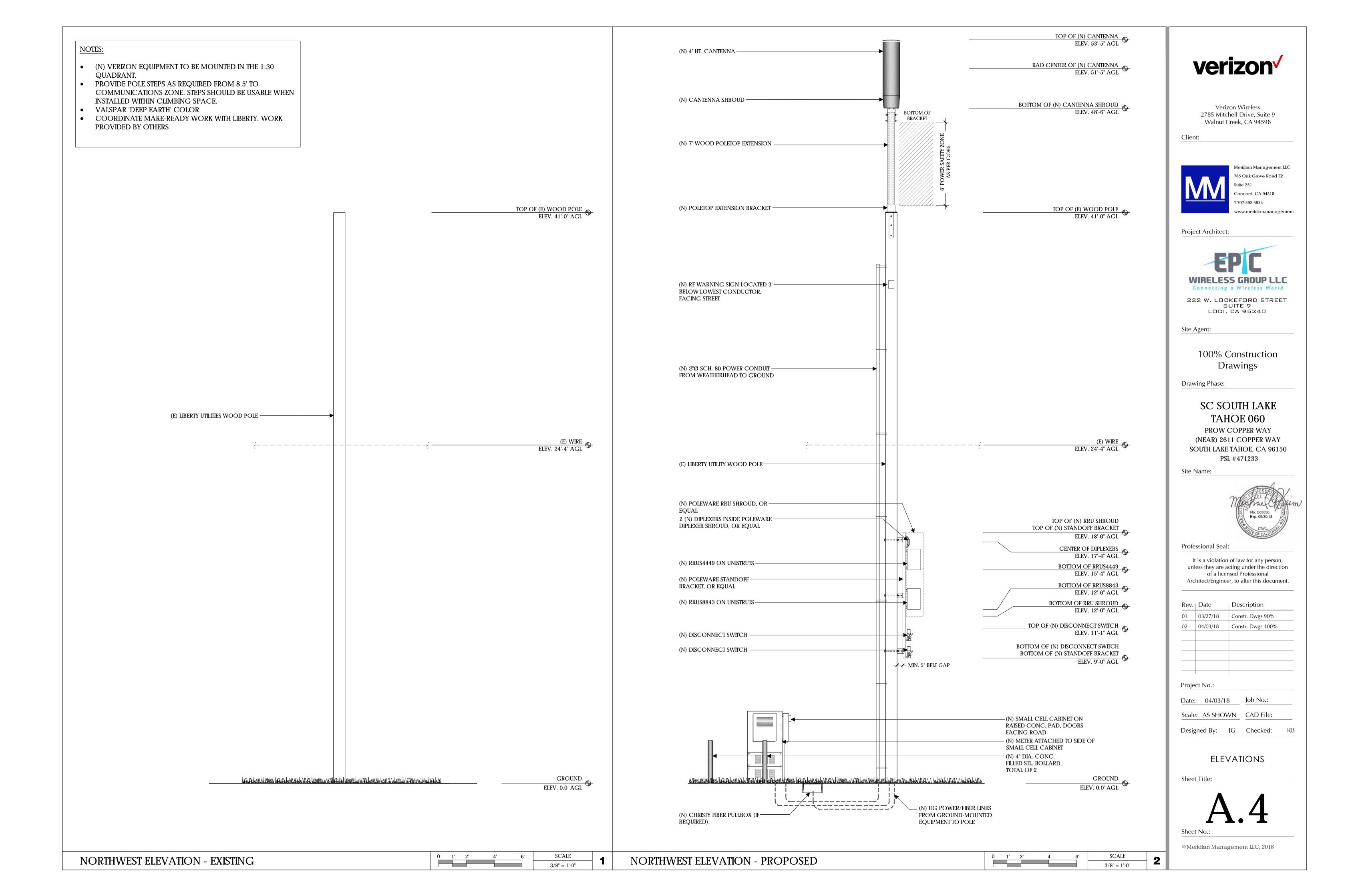
Designed By: JG Checked: RB

ELEVATIONS

Sheet Title:

A.3

Sheet No.:



ERICSSON RRUS4449 B5 B13 W/ PROTRUDING ITEMS

HEIGHT: 18 INCHES

WIDTH: 13.2 INCHES

LENGTH: 9.4 INCHES

WEIGHT: 70 LBS (EXCLUDES MOUNTING HARDWARE)



ERICSSON RRUS8843 W/ PROTRUDING ITEMS

HEIGHT: 18 INCHES

13.2 INCHES

11.3 INCHES

WEIGHT: 75 LBS

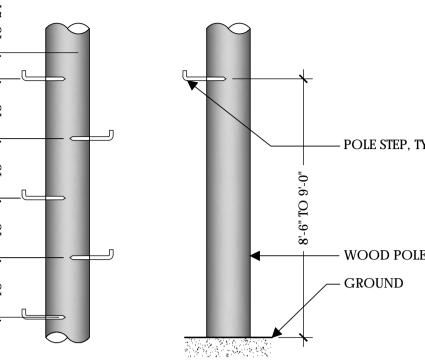


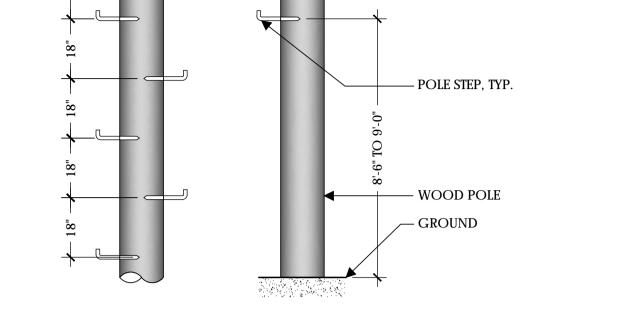


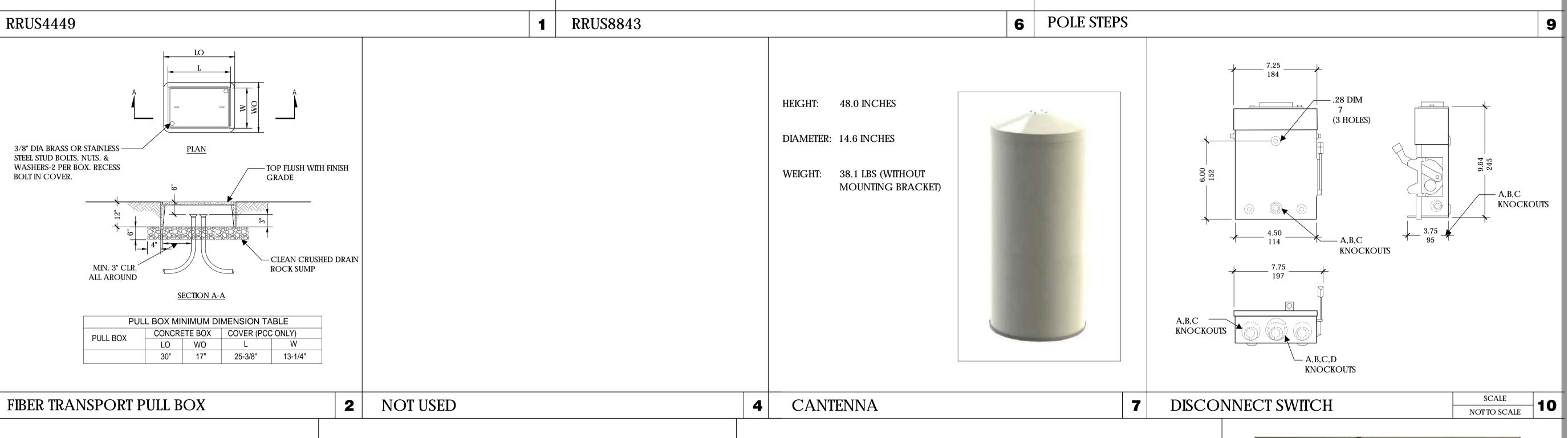
WEIGHT PER 100: MANUFACTURER:

MODEL #: DESCRIPTION: POLE ⁵/₈ X 10 INCH GALVANIZED AERIAL SERVICE COMPANY, INC. 1-800-256-5186 http://www.linemen-tools.com/

POLE STEPS ARE USED ON WOOD POLES WHERE FREQUENT ACCESS TO POLE MOUNTED EQUIPMENT IS REQUIRED. FLAT DRIVING SURFACE AND SHARP POINT EASE INSTALLATION. FETTER-DRIVE THREAD PERMITS REMOVAL WITH A WRENCH. HOT-DIPPED GALVANIZED FOR CORROSION RESISTANCE. NOTCHED MARK ON STEP INDICATES PROPER DRIVING DEPTH.









HEIGHT: 8.31 INCHES

WIDTH: 2.48 INCHES

DEPTH: 7.0 INCHES

WEIGHT: 4.4 LBS

* OR APPROVED EQUAL

DIPLEXER

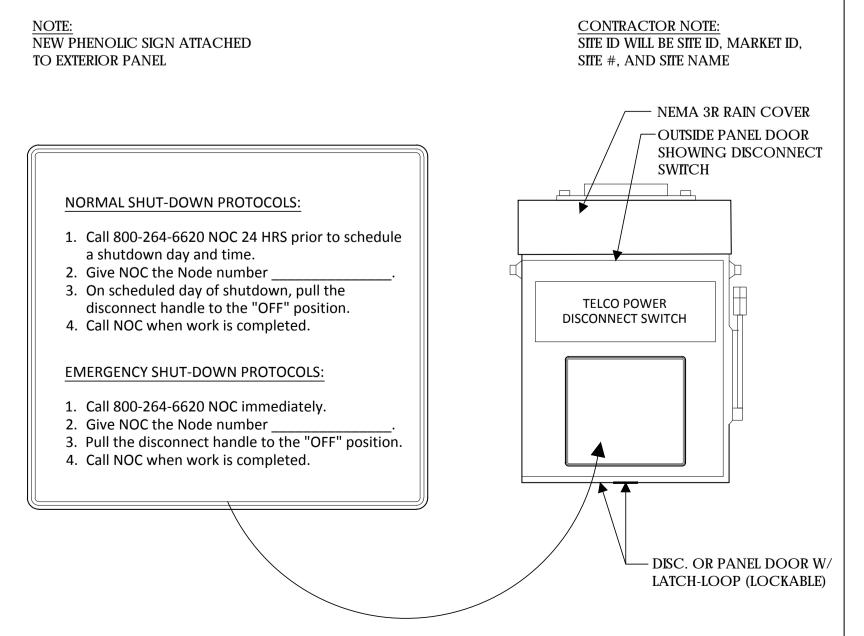
100 AMP METER W/ TEST **BYPASS**

HEIGHT: 24 INCHES

DEPTH: 4-5/8 INCHES

WIDTH: 12 INCHES







ON WOOD POLES - SIGN ON ALUMINUM WITH SS SCREW TO THE POLE 3' **BELOW ANTENNA**

SIGN PLACEMENT: AFFIX TO THE STRUCTURE 3-4' BELOW THE COMMERCIAL RF ANTENNA(S) OR 3' BELOW LOWEST POWER WIRE

SIGN COLOR: YELLOW

CONTRACTOR NOTE:

SITE ID WILL BE SITE ID, MARKET ID, SITE #, AND SITE NAME

verizon /

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



785 Oak Grove Road E2 T 707.592.5924

Project Architect:



LODI, CA 95240

Site Agent:

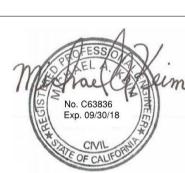
100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Sheet Title:

11

Date: 04/03/18

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB EQUIPMENT

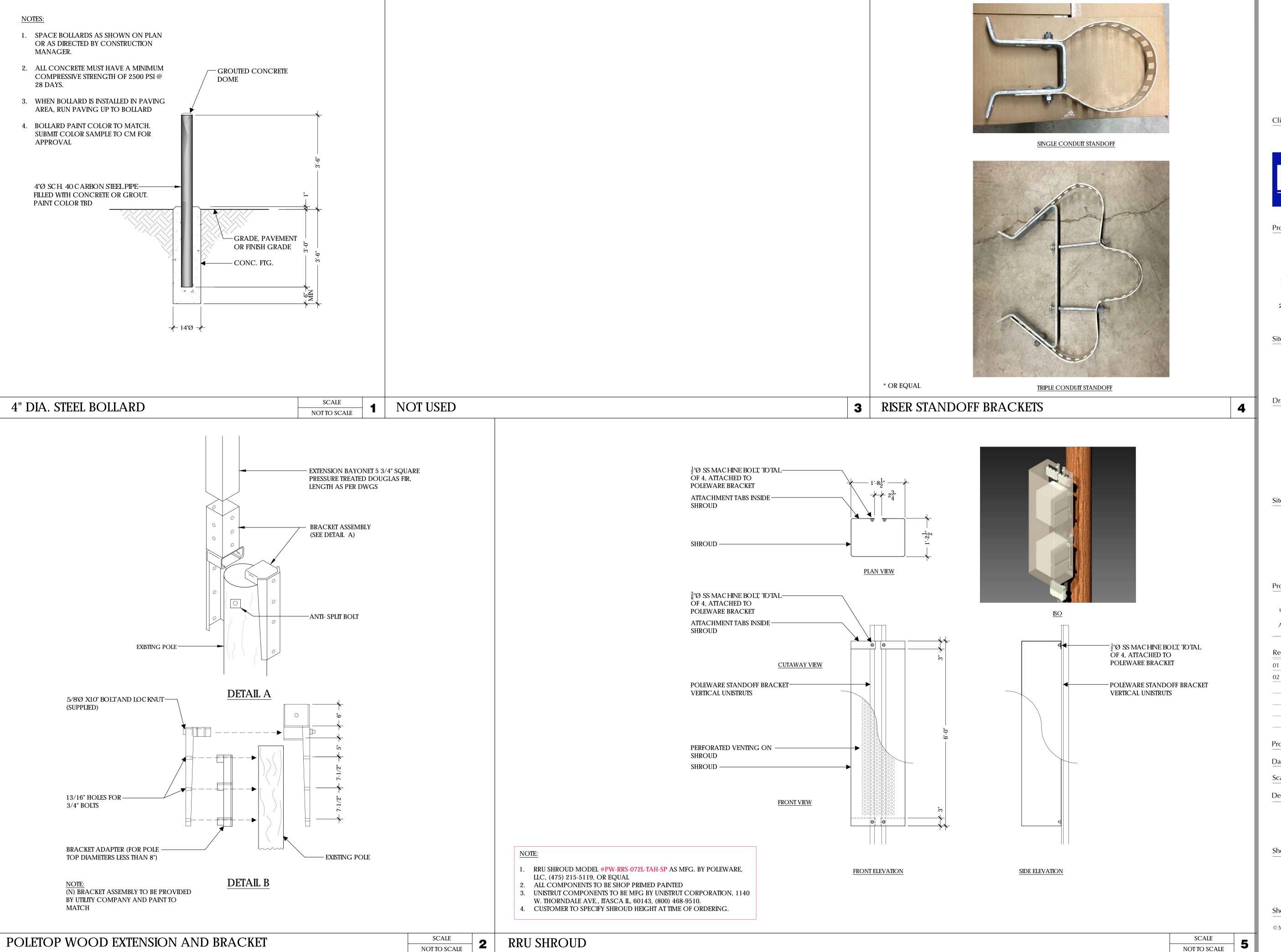
DETAILS

© Meridian Management LLC, 2018

3 METER

DISCONNECT SIGNAGE

8 RF WARNING SIGNAGE



verizon /

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



785 Oak Grove Road E2 T 707.592.5924

Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

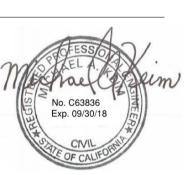
100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18

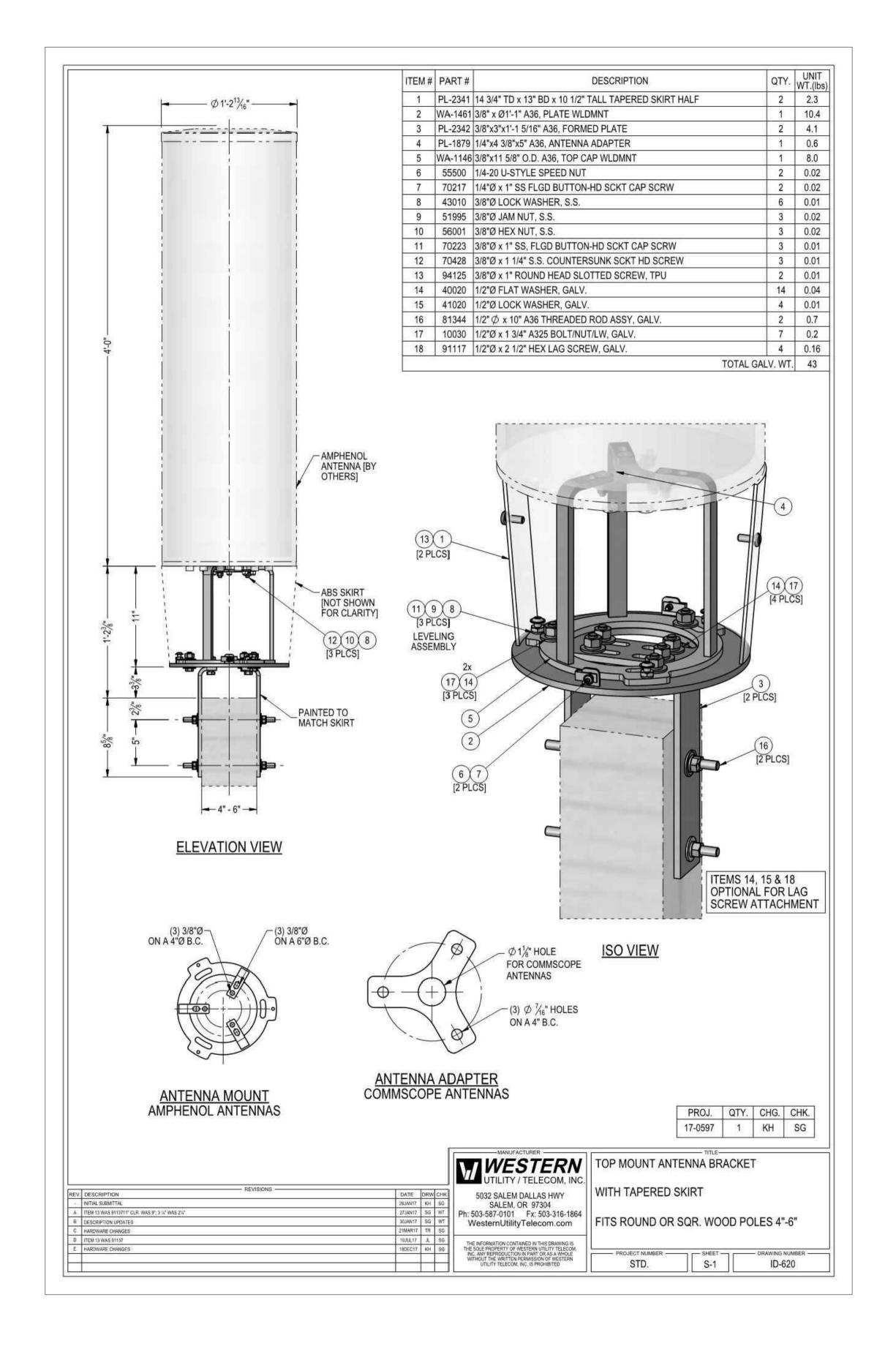
Scale: AS SHOWN CAD File:

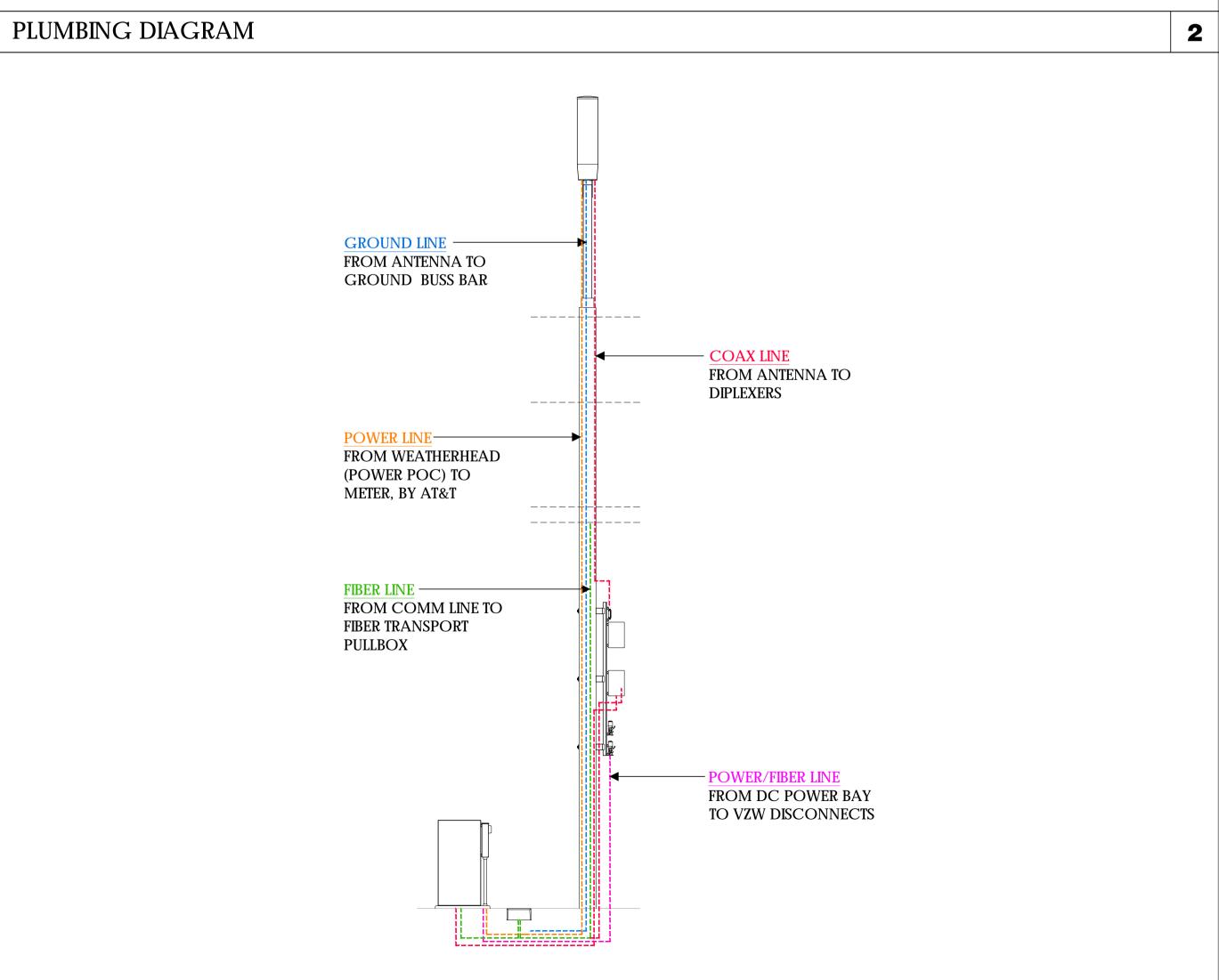
Designed By: JG Checked: RB

EQUIPMENT DETAILS

Sheet Title:

Sheet No.:





verizon /

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



Project Architect:



LODI, CA 95240

Site Agent:

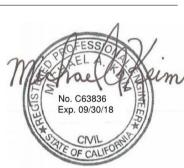
100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS PLUMBING DIAGRAM

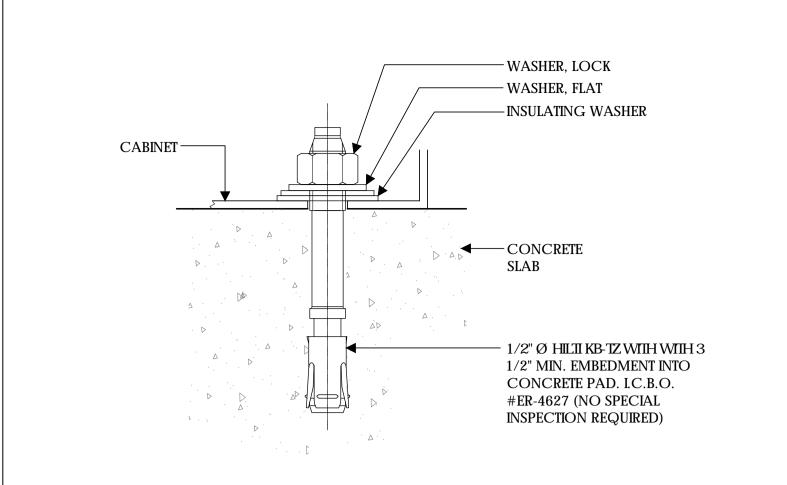
Sheet Title:

Sheet No.:

© Meridian Management LLC, 2018

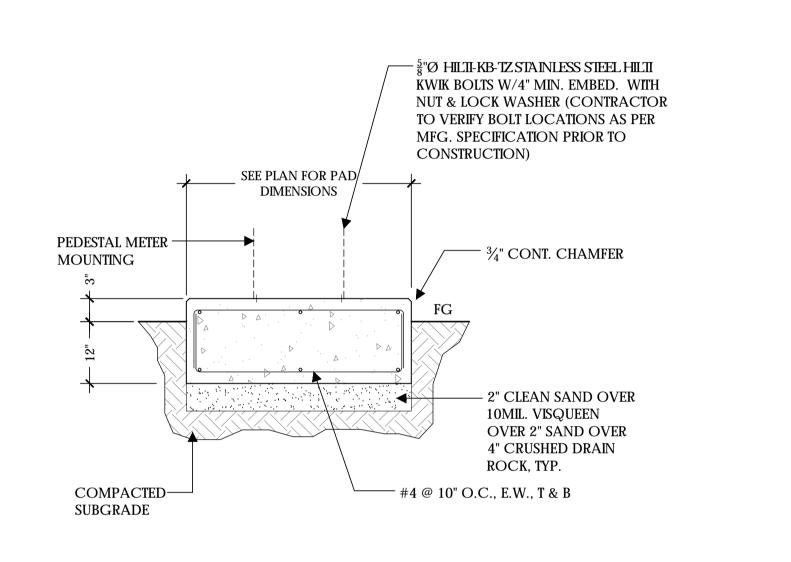
CONDUIT RISER DIAGRAM

CANTENNA SHROUD AND BRACKET



CABINET ANCHORAGE

SCALE N.T.S.



CONCRETE PAD

SCALE NOT TO SCALE

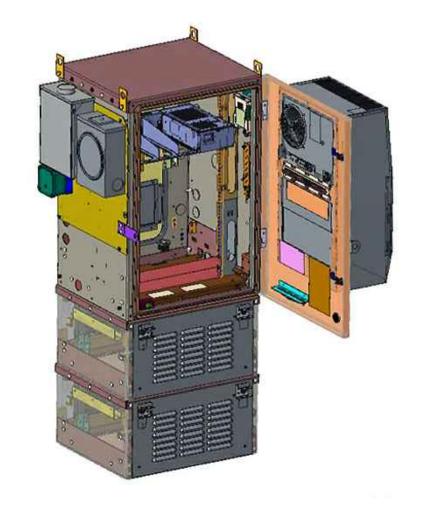
UNIT: SMALL CELL CABINET

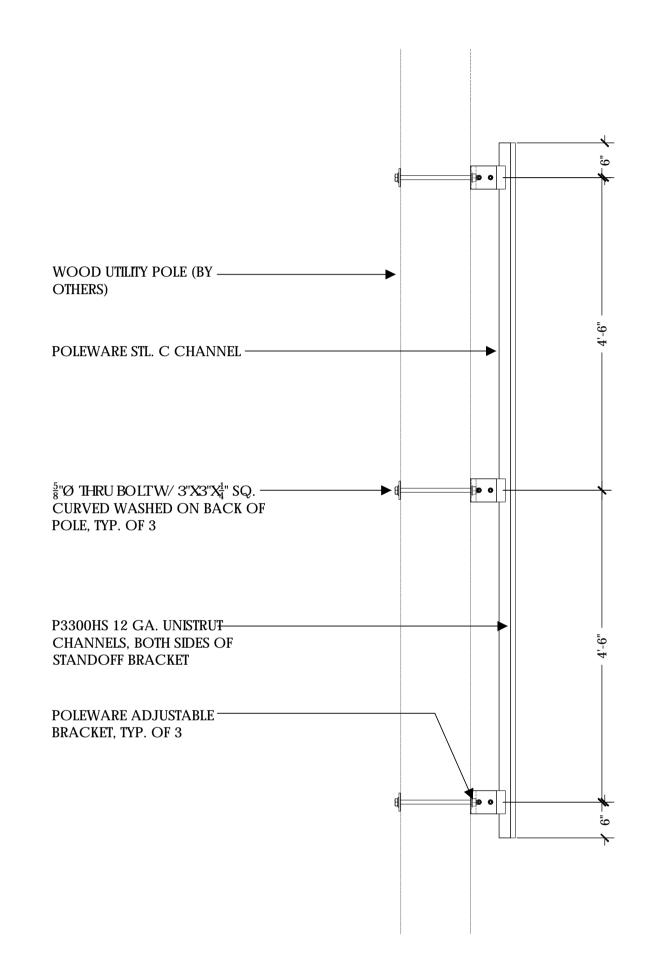
61 INCHES HEIGHT:

WIDTH: 24 INCHES

DEEP: 30 INCHES

WEIGHT 300 LBS (FULLY LOADED)

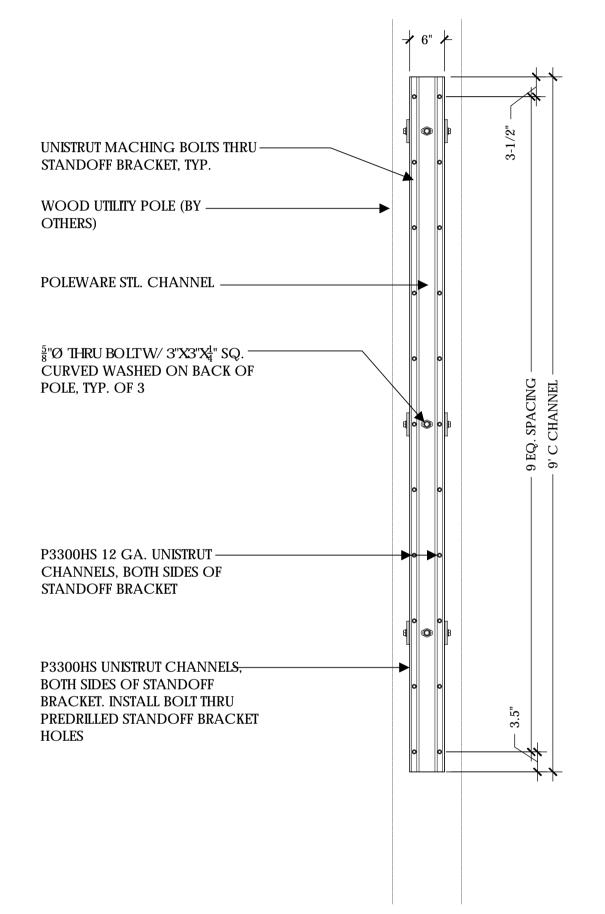


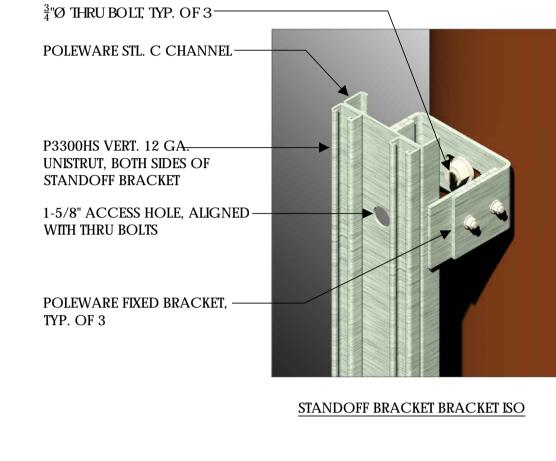


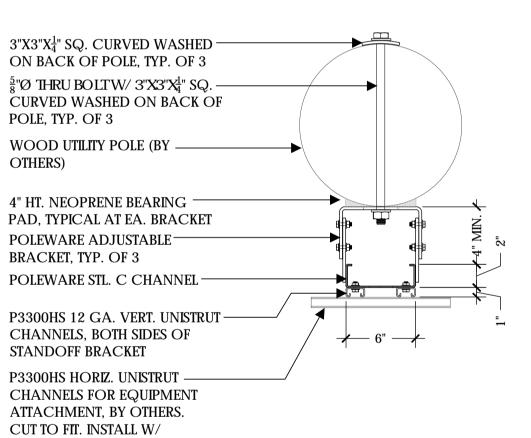


- STANDOFF BRACKET MODEL #PW-SOB-09L-ADJ-SP AS MFG. BY
- 3. UNISTRUT COMPONENTS TO BE MFG BY UNISTRUT CORPORATION, 1140
- 5. ADJUSTABLE BRACKETS FOR SLANTED POLES AVAILABLE BY SPECIAL

ORDER







CHANNEL NUTS W/ SPRINGS.

STANDOFF BRACKET FRONT ELEVATION

STANDOFF BRACKET PLAN



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



Project Architect:

WIRELESS GROUP LLC Connecting a Wireless World 222 W. LOCKEFORD STREET

SUITE 9 LODI, CA 95240

Site Agent:

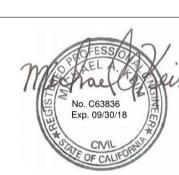
100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS

Sheet Title:

Sheet No.:

SCALE

© Meridian Management LLC, 2018

POLEWARE, LLC, (475) 215-5119, OR EQUAL

2. ALL COMPONENTS TO BE SHOP PRIMED PAINTED

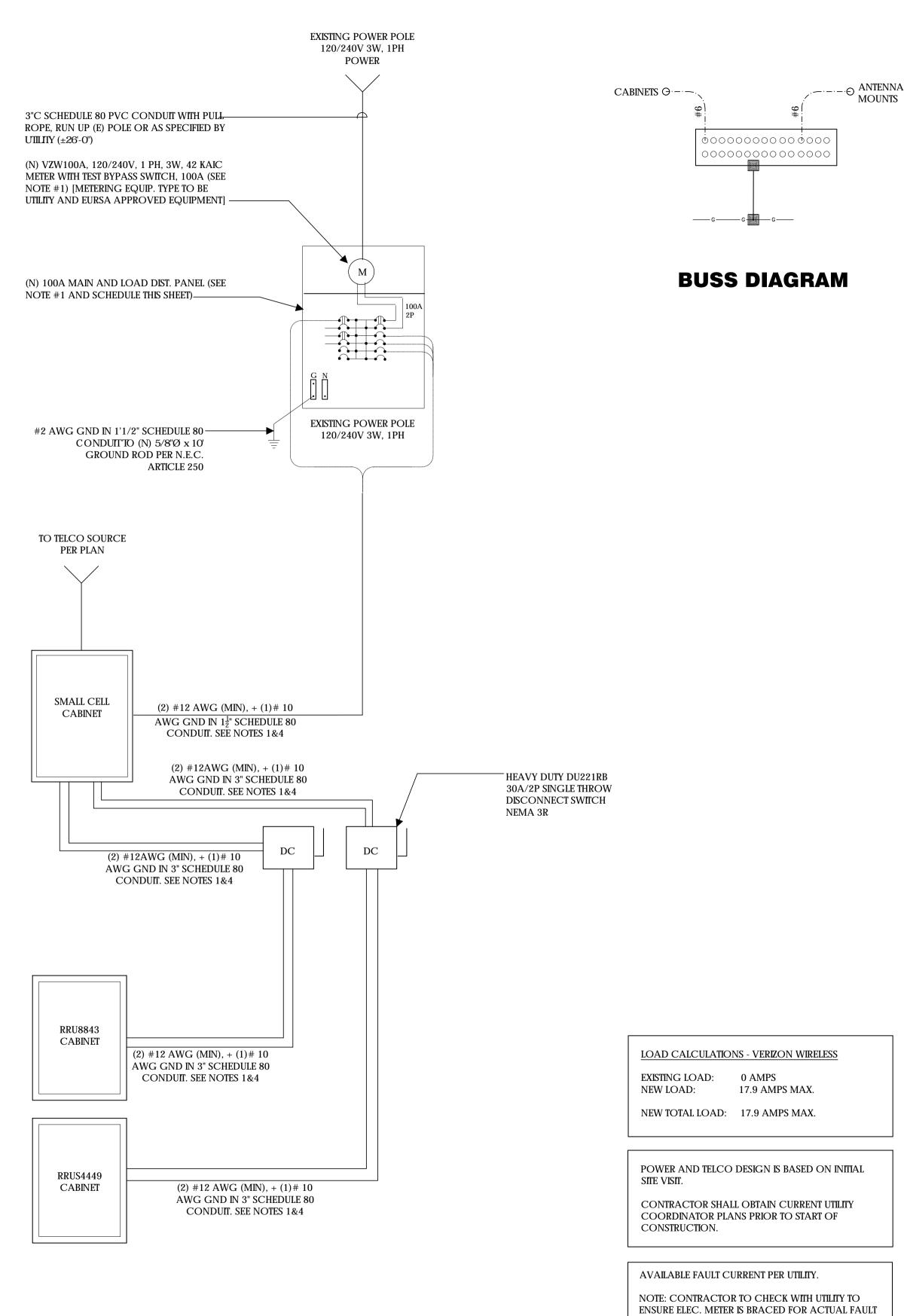
W. THORNDALE AVE., ITASCA IL, 60143, (800) 468-9510. 4. HORIZONTAL UNISTRUTS (P3300HS) FOR EQUIPMENT INSTALLATION NOT

INCLUDED

SMALL CELL CABINET NOT TO SCALE

STANDOFF BRACKET

NOT TO SCALE



SINGLE LINE DIAGRAM

POWER AND TELCO NOTES:

- 1. POWER AND TELCO POINTS OF CONNECTION AND ANY EASEMENTS ARE PRELIMINARY AND SUBJECT TO CHANGE BY THE UTILITY COMPANIES.
- 2. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY ENGINEERING PLANS AND SPECIFICATIONS ONLY WHERE APPLICABLE PER PROJECT SCOPE OF WORK.
- 3. CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT, PULL WIRES, CABLE PULL BOXES, CONCRETE ENCASEMENT OF CONDUIT, TRANSFORMER PAD, BARRIERS, POLE RISER TRENCHING, BACK FILL, AND UTILITY FEES, AND INCLUDE REQUIREMENTS IN SCOPE.
- 4. CONTRACTOR SHALL LABEL ALL MAIN DISCONNECT SWITCHES AS REQUIRED BY CODE.

GENERAL ELECTRICAL NOTES:

- 1. PROVIDE ALL ELECTRICAL WORK & MATERIALS AS SHOWN ON THE DWGS, AS CALLED FOR HEREIN, & AS IS NECESSARY TO FURNISH A COMPLETE INSTALLATION.
- 2. THE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ADOPTED CALIFORNIA ELECTRICAL CODE, STATE OF CALIFORNIA TITLE24, ALL OTHER APPLICABLE CODES AND ORDINANCES & THE REQUIREMENTS OF THE FIRE MARSHALL. ALL EQUIPMENT & WIRING SHALL BEAR THE APPROVAL STAMP OF UNDERWRITERS LABORATORY (UL) OR AN APPROVED TESTING LABORATORY, PAYMENT FOR ALL INSPECTION FEES AND PERMITS ARE PART OF THIS CONTRACT.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND GOOD CONDITION OF ALL MATERIALS & EQUIPMENT FOR THE ENTIRE INSTALLATION & UNIT COMPLETION OF WORK, ERECT & MAINTAIN APPROVED & SUITABLE BARRIERS, PROTECTIVE DEVICES & WARNING SIGNS, BE FULLY RESPONSIBLE FOR ANY LOSS OR INJURY TO PERSONS OR PROPERTY RESULTING FROM NEGLIGENCE AND/OR ENFORCEMENT OF ALL SAFETY PRECAUTIONS & WARNINGS.
- 4. COORDINATE THE ELECTRICAL INSTALLATION WITH ALL OTHER TRADES.
- 5. ALL SAW CUTTING, TRENCHING, BACK FILLING & PATCHING SHALL BE PART OF THIS CONTRACT.
- 6. FINALIZE ALL ELECTRICAL SERVICE ARRANGEMENTS, INCLUDING VERIFICATION OF LOCATIONS, DETAILS, COORDINATION OF THE INSTALLATION & PAYMENT OF ACCRUED CHARGES WITH LOCAL POWER COMPANY, VERIFY LOCATION FOR FACILITIES & DETAILS WITH POWER UTILITY, IN ADDITION TO THE REQUIREMENTS SHOWN IN THE CONTRACT DOCUMENTS, WORK SHALL COMPLY WITH CONSTRUCTION STANDARDS & SERVICE REQUIREMENTS OF THE RESPECTIVE UTILITIES, INCLUDING ANY SUPPLEMENTAL DWGS ISSUED & SHALL BE SUBJECT TO APPROVAL OF THESE UTILITIES.
- 7. ALL WIRING SHALL BE COPPER. INSULATION FOR BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE "THWN" CONDUCTORS LARGER AND #6 AWG MAY BE TYPE "THWN" OR "TWN".
- 8. PROVIDE CONDUIT SEALS FOR ALL CONDUITS PENETRATING WEATHERPROOFING OR WEATHERPROOF ENCLOSURE ENVELOPE. MASTIC SEAL ALL CONDUIT OPENING PENETRATIONS COMPLETELY WATERTIGHT.
- 9. UNLESS SHOWN OTHERWISE, FUSED DISCONNECT SWITCHES SHALL BE PROVIDED WITH LOW-PEAK, S\DUAL ELEMENT FUSES SIZED TO EQUIPMENT NAMEPLATE FUSE CURRENT RATING. MOTOR STARTERS SHALL BE PROVIDED WITH SIMILARLY SIZED FUSIBLE ELEMENTS, SWITCHES AND OTHER OUTDOOR EQUIPMENT SHALL BE RATED NEMA 3R AND/OR UL LISTED FOR WET ENVIRONMENT.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING THE GROUNDING SYSTEM AND ENSURING A 5 OHM OR LESS GROUNDING PATH, ADDITIONAL GROUND RODS AND/OR CHEMICAL ROD SYSTEM SHALL BE USED TO ACHIEVE THIS REQUIREMENT IF THE GIVEN DESIGN CANNOT BE MADE TO ACHIEVE THIS REQUIREMENT.

NOTES:

- 1. SUBCONTRACTOR SHALL PROVIDE DIST. PANEL AND BREAKERS FOR POWER TO THE BTS UNITS AND THE BTS/UTILITY CABINET.
- 2. ALL SERVICE EQUIPMENT AND INSTALLATIONS SHALL COMPLY WITH THE N.E.C. AND UTILITY COMPANY AND LOCAL CODE REQUIREMENTS.
- 3. SUBCONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE ENTRANCE EQUIPMENT WITH FAULT CURRENT RATINGS GREATER THAN THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.
- 4. MAXIMUM ONE WAY CIRCUIT RUN NOT TO EXCEED 75 FEET.



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



Project Architect:

WIRELESS GROUP LLC Connecting a Wireless World

222 W. LOCKEFORD STREET

SUITE 9 LODI, CA 95240

Site Agent:

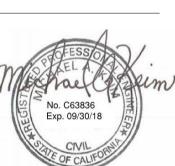
100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

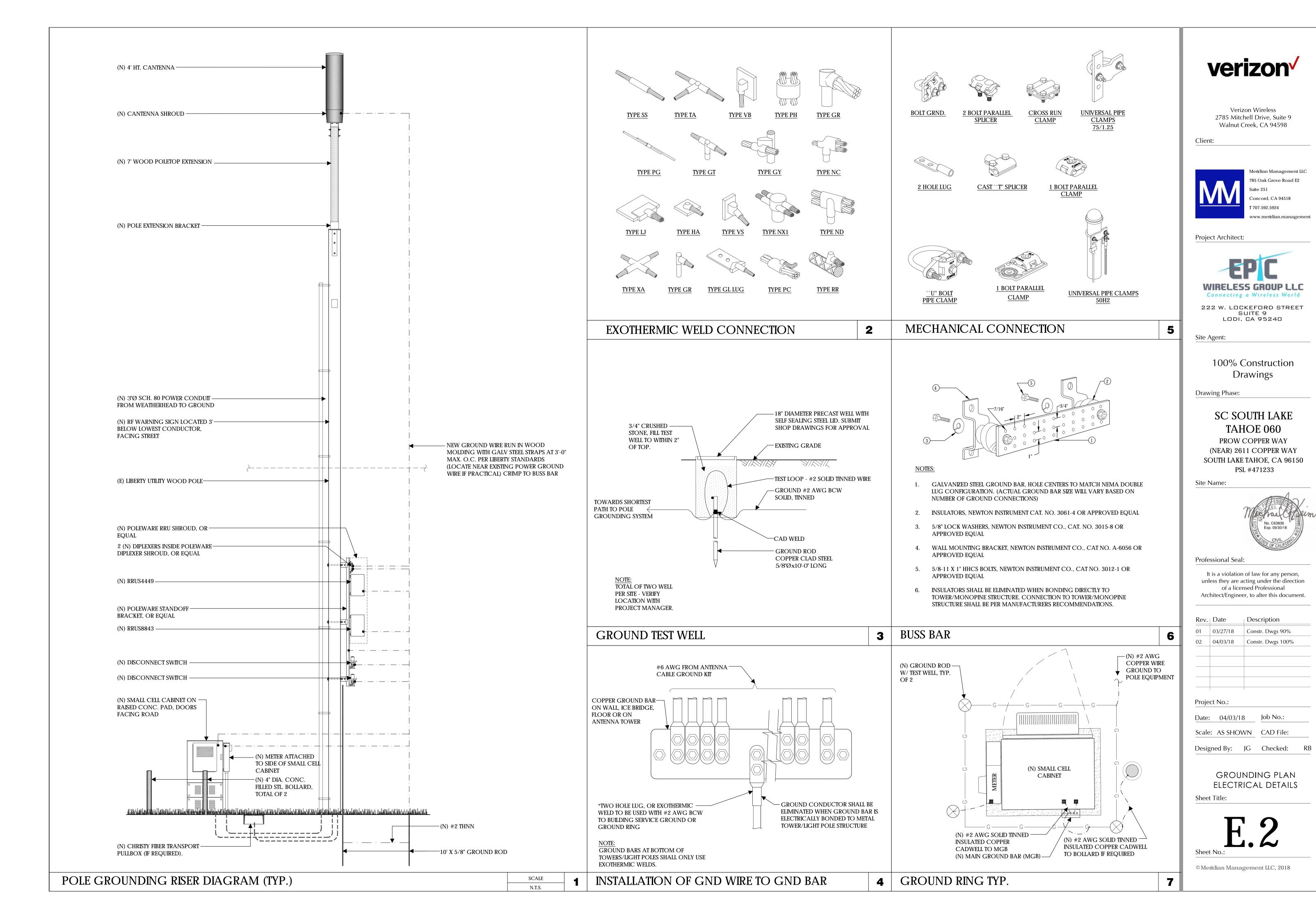
Date: 04/03/18

Designed By: JG Checked: RB

Scale: AS SHOWN CAD File:

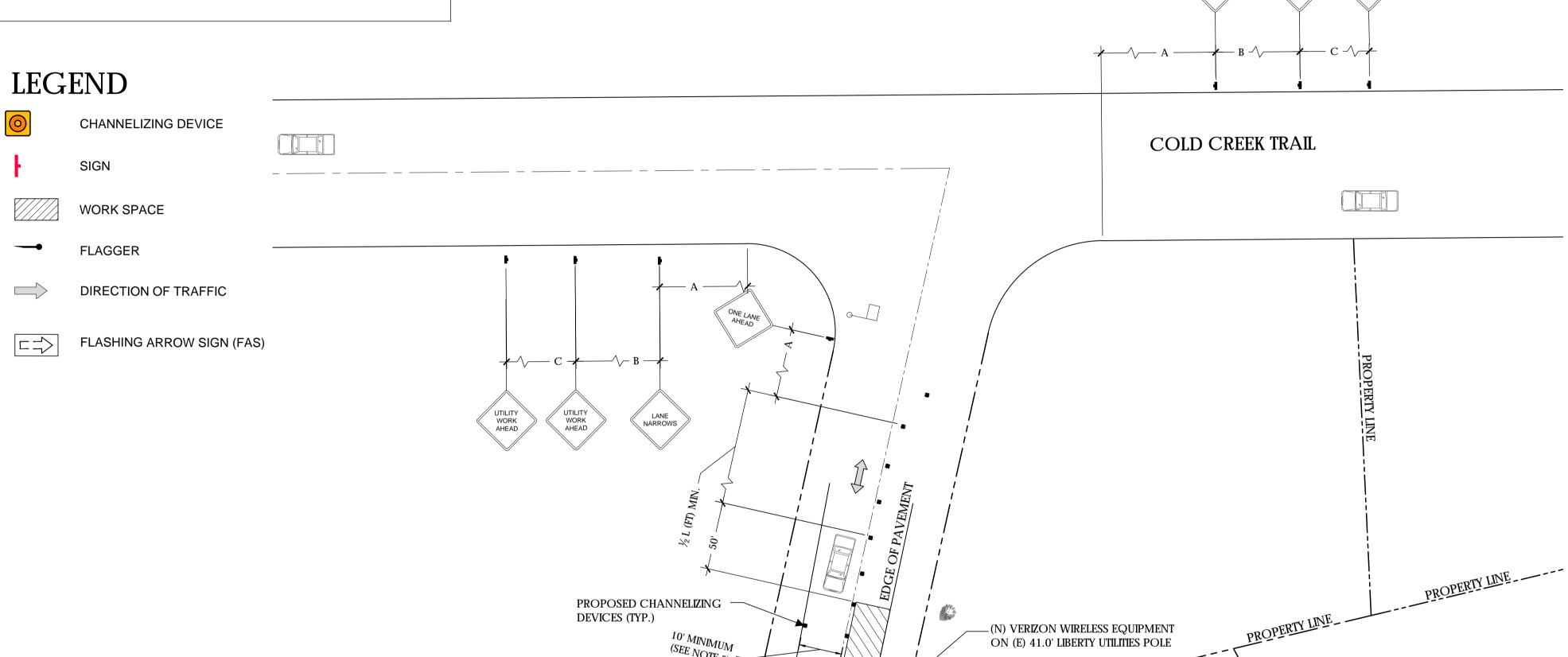
SINGLE LINE DIAGRAM BUSS DIAGRAM PANEL SCHEDULE

Sheet Title:



PLAN NOTES:

- 1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY VEHICULAR TRAFFIC CONTROL PLANS (TCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TCP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
- 2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
- 3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING. DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION. NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
- 4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
- 5. MAINTAIN A MINIMUM LANE WIDTH OF 10'.



(E) CULVERT—

COPPER WAY

| SIGN FLAGGER | | | | | |
|--------------------------|------------------------------|------|-------|--------------|------|
| | TABLE 1 | | | | |
| POSTED SPEED (MPH) | DISTANCE BETWEEN SIGNS | | TAPER | BUFFER | |
| | Α | В | С | L (SEE NOTE) | |
| 15 | 100' | 100' | 100' | 45' | 100' |
| 20 | 100' | 100' | 100' | 80' | 115' |
| 25 | 100' | 100' | 100' | 125' | 155' |
| 30 | 200' | 200' | 200' | 180' | 200' |
| 35 | 200' | 200' | 200' | 245' | 250' |
| 40 | 350' | 350' | 350' | 320' | 305' |
| 45 | 350' | 350' | 350' | 540' | 360' |
| 50 | 500' | 500' | 500' | 600' | 425' |
| 55 | 500' | 500' | 500' | 660' | 495' |
| 60 | 500' | 500' | 500' | 720' | 570' |
| 65 | 500' | 500' | 500' | 780' | 645' |

DOT NOTES:

1. WHEN LANE CLOSURE IS REQUIRED, THE TRAFFIC CONTROL PLAN SHOULD BE

PROVIDED AND NOTARIZED BY AN INDIVIDUAL/COMPANY THAT HAS

2. "BLUE-LIGHTS" (OFF-DUTY POLICE OFFICERS) WILL BE ON SITE FOR LANE

FLAGGER CONTROL TRAINING CERTIFICATION.

CLOSURES AND IF REQUIRED.

A) DISTANCES IN FEET UNLESS OTHERWISE NOTED. B) CONTRACTOR TO VERIFY EXISTING SPEED LIMIT.

C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HÍGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES. D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE NOTE 1, SHEET TC-2.

E) TAPER LENGTHS SHOWN BASED ON 12' LANE WIDTH.



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings (E) LIGHT POLE Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. Date | | Description | |
|-----------|----------|-------------------|--|
| 01 | 03/27/18 | Constr. Dwgs 90% | |
| 02 | 04/03/18 | Constr. Dwgs 100% | |
| | | | |
| | | | |
| | | | |
| | | | |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

VEHICLE TRAFFIC CONTROL PLAN

Sheet Title:

© Meridian Management LLC, 2018

20' 10' 0 10' 20' **SCALE** 1" = 20'

NORTH

OVERALL SITE PLAN

Geil Engineering
Engineering * Surveying * Planning
1226 High Street

Auburn, California 95603-5015

Phone: (530) 885-0426 * Fax: (530) 823-1309

Verizon Wireless

Project Name:

SC South Lake Tahoe 075

Project Site Location:

PROW High Meadow Trail

South Lake Tahoe, CA

El Dorado County

Date of Observation:

02-22-18

Equipment/Procedure Used to Obtain Coordinates: Trimble GeoXT post processed with Pathfinder Office software.

Type of Antenna Mount:

Existing Utility Pole

Coordinates:

Latitude:

N 38°54'26.09" (NAD83)

N 38°54'26.42" (NAD27)

Longitude:

W 119°57'42.32" (NAD83)

W 119°57'38.67" (NAD27)

ELEVATION of Ground at Structure (NAVD88)

6332.2' AMSL

Height of Structure:

38.4' AGL

CERTIFICATION: I, the undersigned, do hereby certify elevation listed above is based on a field survey done under my supervision and that the accuracy of those elevations meet or exceed 1-A Standards as defined in the FAA ASAC Information Sheet 91:003, and that they are true and accurate to the best of my knowledge and belief.

Daniel G. Geil L.S. 7640

| Carrow | Ca

SC SOUTH LAKE TAHOE 075



PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150

PSL #481972

SITE INFORMATION

PSL #: OWNER:

LIBERTY UTILITIES 701 NATIONAL AVE

TAHOE VISTA, CA 96148 ERIC TROSKA T 775-870-2469

VERIZON WIRELESS 2785 MITCHELL DRIVE, SUITE 9 APPLICANT:

WALNUT CREEK, CA 94598

EPIC WIRELESS AGENT: 222 W. LOCKEFORD STREET

SUITE 9 LODI, CA 95240

TEL: (916) 781-5921

APN ADJACENCY 025-721-061

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE

COUNTY:

ZONING: PUBLIC ROW

ZONING JURISDICTION: EL DORADO COUNTY

LAT:

LONG:

38°54'26.09" 119°57'42.32"

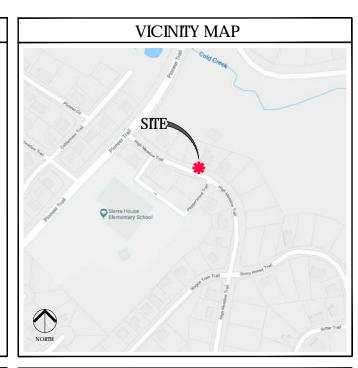
ELEVATION +6332 2' AMSI

CODE COMPLIANCE

NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY LOCAL JURISDICTION, INCLUDING BUT NOT LIMITED TO:

- CALIFORNIA CODE OF REGULATIONS
- CALIFORNIA CODE OF REGULATIONS 2016 CALIFORNIA BUILDING CODE 2016 CALIFORNIA MECHANICAL CODE 2016 CALIFORNIA PLUMBING CODE 2016 CALIFORNIA ELECTRIC CODE 2016 GREEN CODE
- 2016 EDITION OF TITLE 24 ENERGY STANDARDS
- ANY LOCAL BUILDING CODE AMENDMENTS TO THE ABOVE
- CITY / COUNTY ORDINANCES
- 2016 CALIFORNIA FIRE CODES WITH ALL LOCAL AMENDMENTS GO 95 REGULATIONS





POLE IMAGE



PROJECT TEAM

AGENT

222 W. Lockeford Stree Lodi, CA 95240

CONSTRUCTION MANAGER: ROB HERNANDEZ

LEASING & ZONING MGR: MARK LOBAUGH

ARCHITECT/ENGINEER

Meridian Management LLC 785 Oak Grove Road E2 Concord, CA 94518

PROJECT MANAGER: RODNEY BARNES

cell: 707.592.5924 email: rodney@meridian.managemen

2785 Mitchell Drive Walnut Creek, CA 94598

HANDICAP REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA ADMINISTRATIVE STATE CODE PART 2. TITLE 24. CHAPTER 11B, SECTION 1103B.



PROJECT DESCRIPTION

THIS IS AN LINMANNED TELECOMMUNICATIONS FACILITY FOR THE VERIZON WIRELESS NETWORK CONSISTING OF THE INSTALLATION AND OPERATION OF AN ANTENNA AND ASSOCIATED EQUIPMENT ON AN EXISTING WOOD POLE IN THE PUBLIC RIGHT-OF-WAY.

- INSTALL NEW TELECOMMUNICATIONS EQUIPMENT BOXES ON AN EXISTING 38.4' HT. WOOD
- ALL POLE-MOUNTED EQUIPMENT TO BE INSTALLED ON A GO95 COMPLIANT STANDOFF
- EQUIPMENT CONSISTS OF (1) CANTENNA ON 7' WOOD POLETOP EXTENSION, (1) RRUS4449, (1) RRUS8843, (2) DIPLEXERS, (2) DISCONNECT SWITCHES, (1) RRU SHROUD, (2) STL. BOLLARDS, (1) GROUND-MOUNTED SMALL CELL CABINET, AND A POWER METER ON SIDE OF SMALL CELL CABINET.
- OVERHEAD POWER FROM TRANSFORMER
- INSTALL POLE STEPS AS REQUIRED
 ALL POLE-MOUNTED EQUIPMENT INCLUDING CONDUIT RISERS TO BE INSTALLED MIN. 5" FROM POLE ON STANDOFF BRACKETS
- ALL EQUIPMENT TO BE PAINTED VALSPAR 'DEEP EARTH' COLOR.

DRAWING INDEX

| SHEET NO: | SHEET TIILE |
|-----------|---|
| T.1 | TITLE SHEET |
| C.1 | SITE SURVEY |
| A.1 | OVERALL SITE PLAN |
| A.2 | POLE PLAN ENLARGEMENTS |
| A.3 | ELEVATIONS |
| A.4 | ELEVATIONS |
| A.5 | EQUIPMENT DETAILS |
| A.6 | EQUIPMENT DETAILS |
| A.7 | EQUIPMENT DETAILS, PLUMBING DIAGRAM |
| A.8 | EQUIPMENT DETAILS |
| E.1 | SINGLE LINE DIAGRAM, BUSS DIAGRAM, PANEL SCHEDULE |
| E.2 | POLE GROUNDING, ELECTRICAL DETAILS |
| TC.1 | VEHICLE TRAFFIC CONTROL PLAN |
| | |
| | |
| | |

ADMINISTRATIVE REQUIREMENTS

CONTRACTOR SHALL VERIFY ALL PLANS & (E) DIMENSIONS & 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 IF USING 11"X17" PLOT, DRAWINGS WILL BE HALF SCALE

verizon /

2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

100% Construction Drawings

SC SOUTH LAKE **TAHOE 075**

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

It is a violation of law for any person Architect/Engineer, to alter this document.

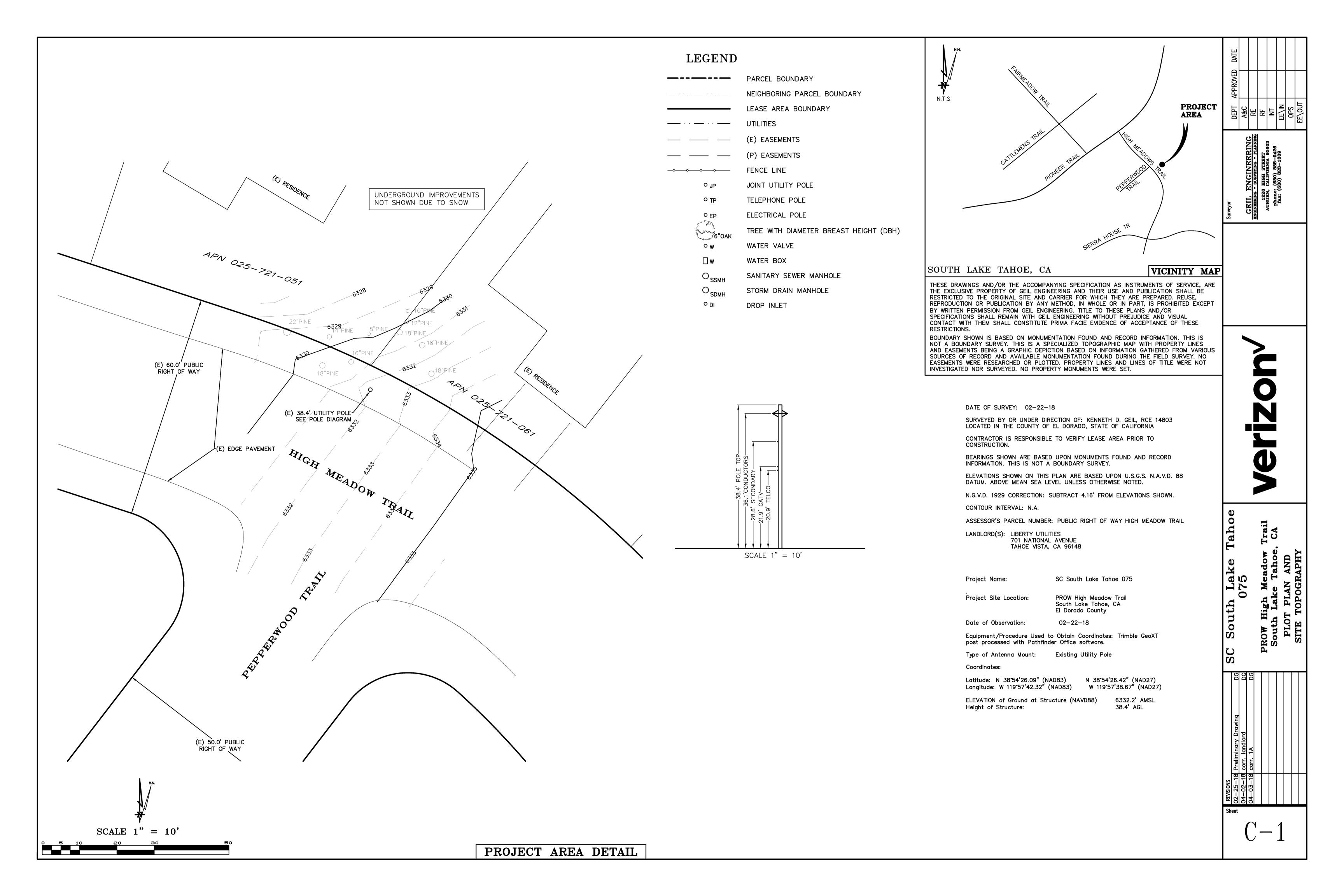
| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

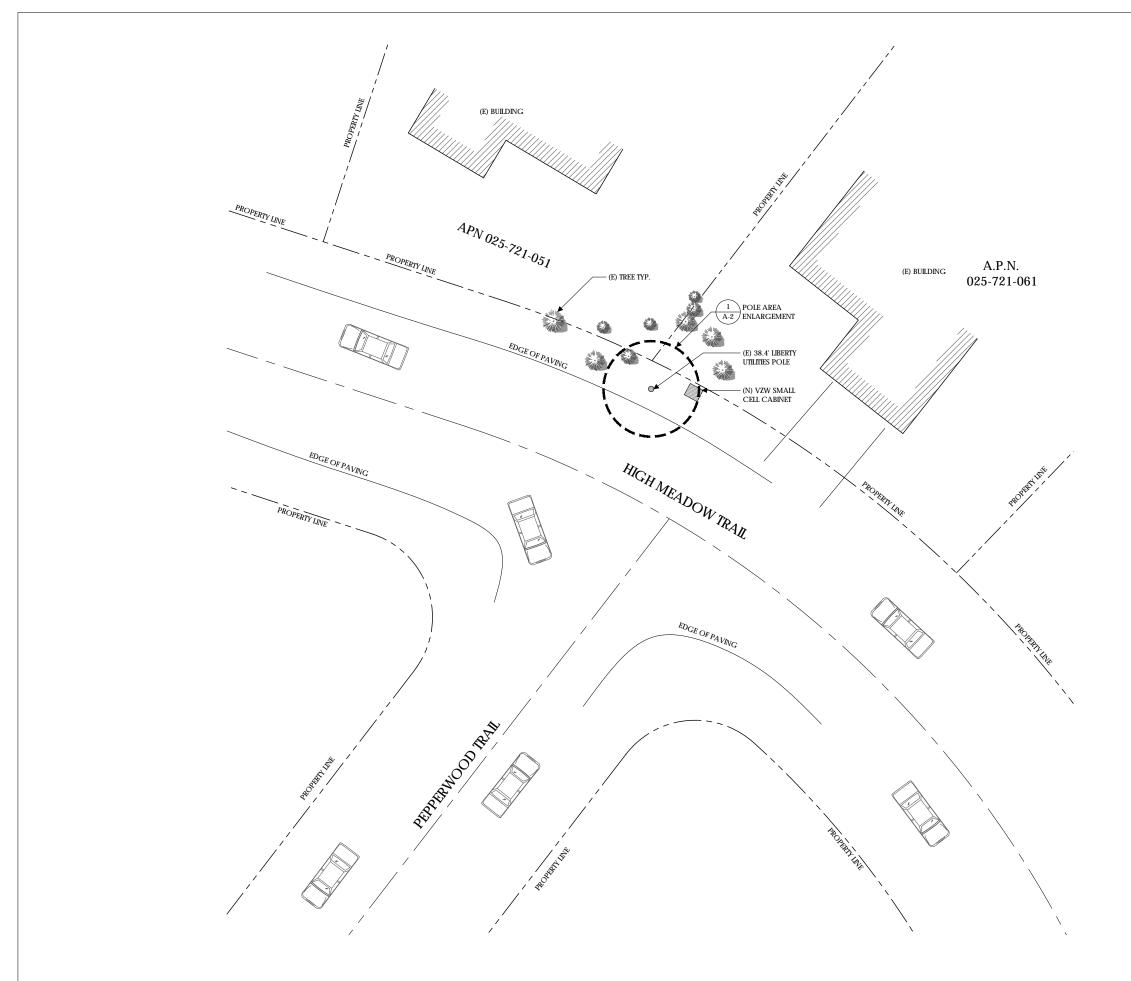
Project No.

Date: 04/03/18 Scale: AS SHOWN CAD File:

Designed By: JG Checked:

TITLE SHEET







Client:



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 075

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

Professional S

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.:
Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

OVERALL SITE PLAN

Sheet Title:

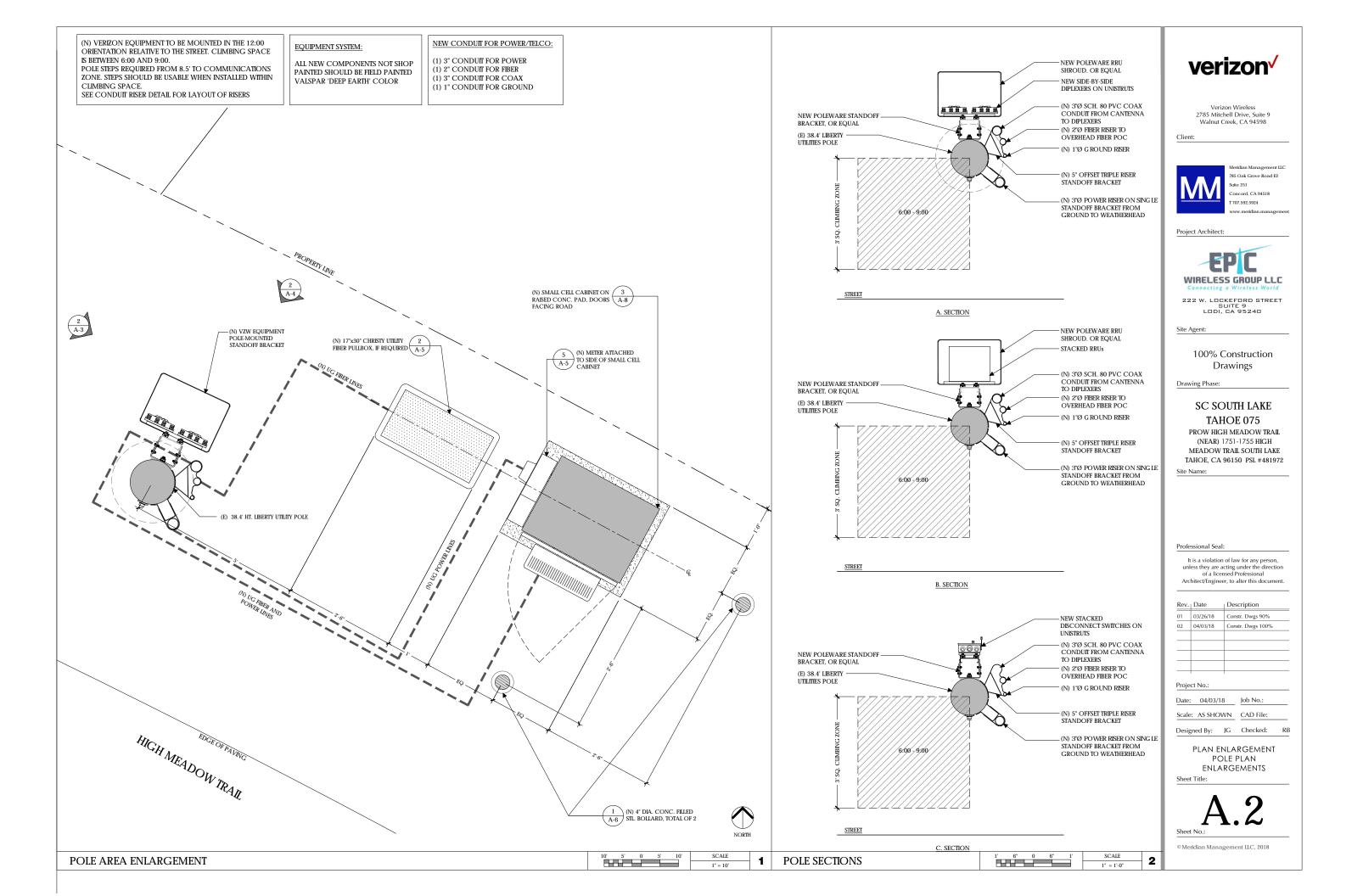
NORTH

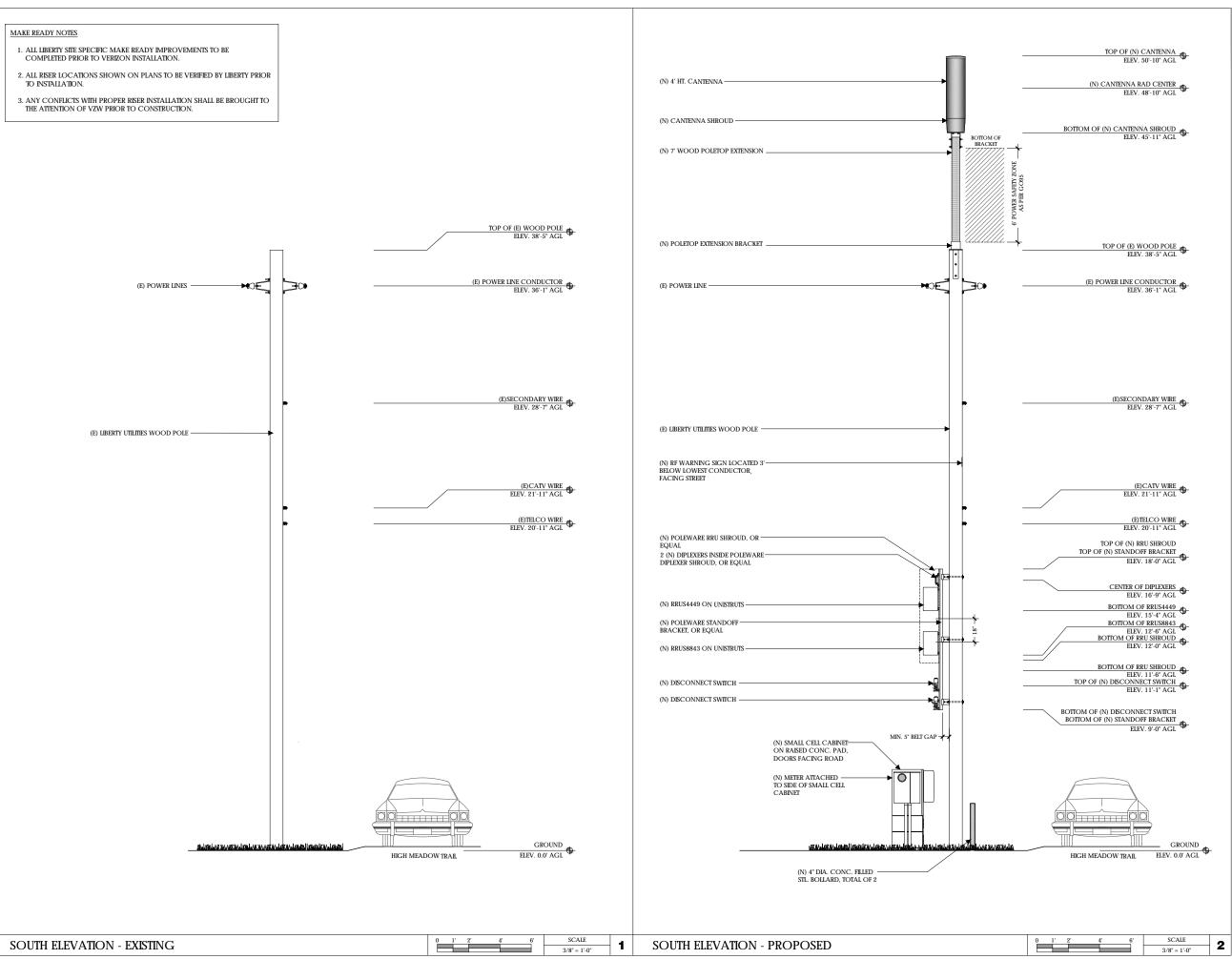


© Meridian Management II.C. 20

10' 5' 0 5' 10' SCALE 1" = 10'

OVERALL SITE PLAN







Clien



785 Oak Grove Road E2 Suite 251 Concord, CA 94518 T 707.592.5924

Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction
Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 075

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

Professional Sea

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | 1 | |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

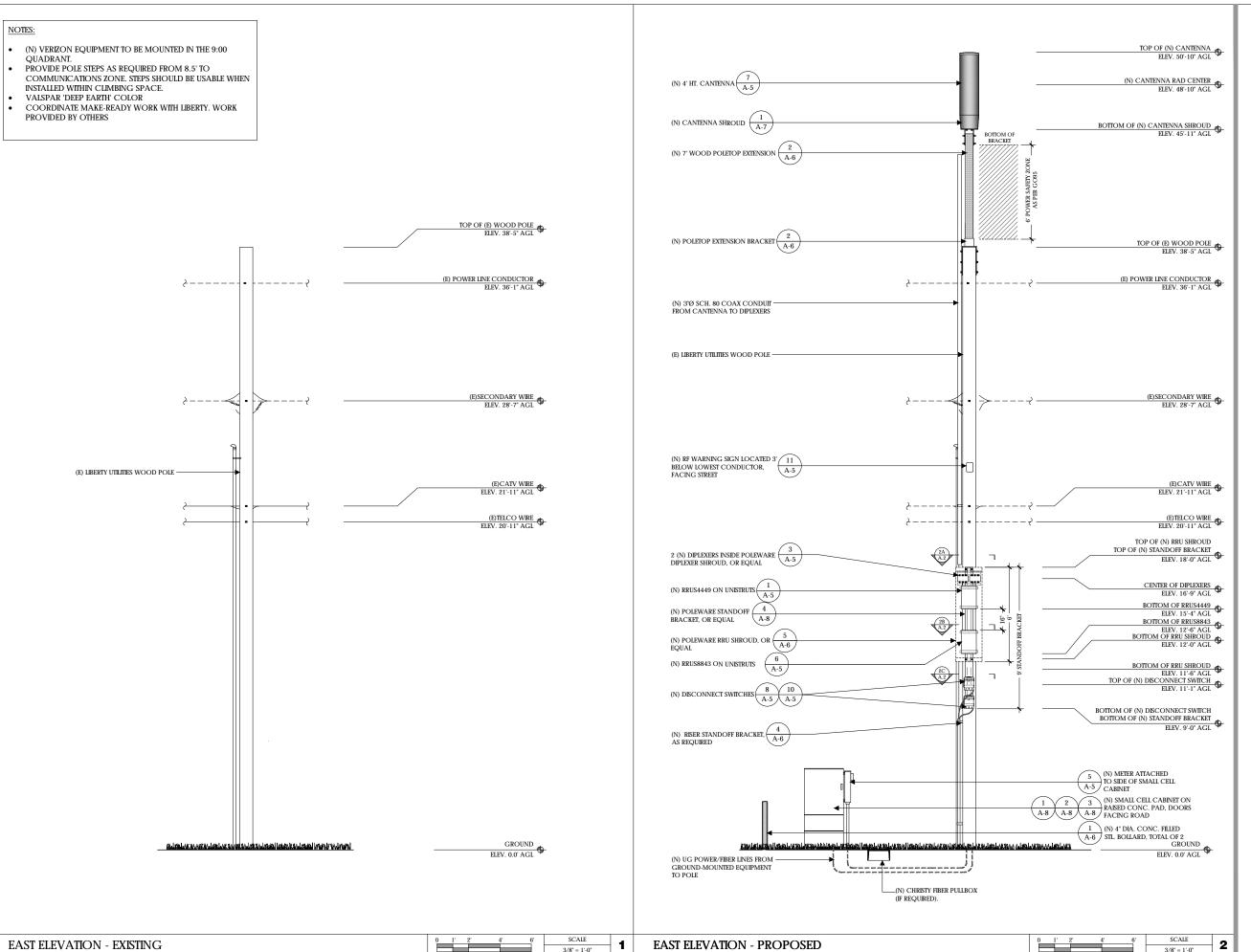
Designed By: JG Checked: RB

ELEVATIONS

Sheet Title:

A.3

Sheet No.:





Client:



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 075

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

Professional Sea

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | - | + |

Project No.:

Date: 04/03/18 Job No.:
Scale: AS SHOWN CAD File:

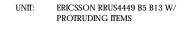
Designed By: JG Checked: RB

ELEVATIONS

Sheet Title:

A.4

Sheet No.:



HEIGHT: 18 INCHES

WIDTH: 13.2 INCHES

LENGTH: 9.4 INCHES

WEIGHT: 70 LBS (EXCLUDES MOUNTING HARDWARE)



UNIT: ERICSSON RRUS8843 W/ PROTRUDING ITEMS

18 INCHES HEIGHT:

WIDTH: 13.2 INCHES

DEPTH: 11.3 INCHES

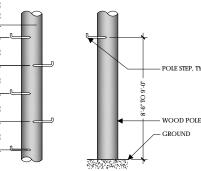
WEIGHT: 75 LBS

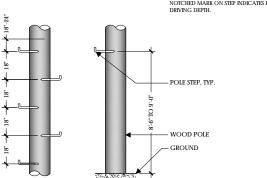




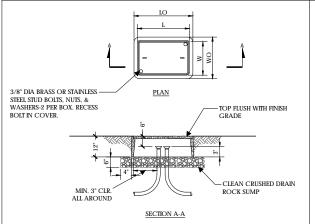
MODEL # DESCRIPTION: POLE $\frac{5}{8}$ X 10 INCH GALVANIZED 99 LBS AERIAL SERVICE COMPANY, INC. 1-800-256-5186

POLE STEPS ARE USED ON WOOD POLES WHERE FREQUENT ACCESS TO POLE MOUNTED EQUIPMENT IS REQUIRED. FLAT DRIVING SURFACE AND SHARP POINT EASE INSTALLATION. FETTER DRIVE HIREAD PERMITS REMOVAL WITH A WEENCH. HOT DIPPED CAMBANITY DESTA COMPANIENTED STANDARD TO THE POLE OF THE GALVANIZED FOR CORROSION RESISTANCE. NOTCHED MARK ON STEP INDICATES PROPER DRIVING DEPTH.





6 POLE STEPS **RRUS4449** RRUS8843 9 1

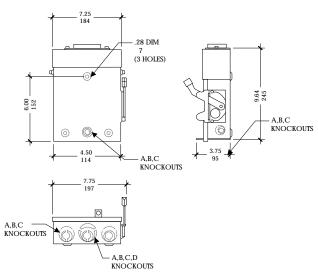


PULL BOX MINIMUM DIMENSION TABLE PULL BOX CONCRETE BOX COVER (PCC ONLY) LO WO L W 30" 17" 25-3/8" 13-1/4" HEIGHT: 48.0 INCHES

DIAMETER: 14.6 INCHES

WEIGHT: 38.1 LBS (WITHOUT MOUNTING BRACKET)





FIBER TRANSPORT PULL BOX

2 NOT USED

BYPASS

25 INCHES

4-5/8 INCHES

HEIGHT: 24 INCHES

UNIT:

DEPTH:

CANTENNA

DISCONNECT SWITCH

SCALE **∃10** NOT TO SCALE

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

verizon/

Verizon Wireless 2785 Mitchell Drive, Suite 9

Walnut Creek, CA 94598

WIRELESS GROUP LLC

222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

100% Construction

Drawings

SC SOUTH LAKE

TAHOE 075 PROW HIGH MEADOW TRAIL

(NEAR) 1751-1755 HIGH

MEADOW TRAIL SOUTH LAKE

TAHOE, CA 96150 PSL #481972

Project Architect:

Site Agent:

Drawing Phase:

Site Name:

785 Oak Grove Road E2

Concord, CA 94518 707.592.5924

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | + |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS

© Meridian Management LLC, 2018

HEIGHT: 8.31 INCHES

WIDTH: 2.48 INCHES

DEPTH: 7.0 INCHES

WEIGHT: 4.4 LBS



NEW PHENOLIC SIGN ATTACHED TO EXTERIOR PANEL

NORMAL SHUT-DOWN PROTOCOLS: 1. Call 800-264-6620 NOC 24 HRS prior to schedule a shutdown day and time. 2. Give NOC the Node number 3. On scheduled day of shutdown, pull the disconnect handle to the "OFF" position.
4. Call NOC when work is completed. EMERGENCY SHUT-DOWN PROTOCOLS: 1. Call 800-264-6620 NOC immediately

2. Give NOC the Node number

Pull the disconnect handle to the "OFF" position.
 Call NOC when work is completed.

OUTSIDE PANEL DOOR SHOWING DISCONNECT SWITCH – DISC. OR PANEL DOOR W/ Latch-loop (Lockable)

CONTRACTOR NOTE: SITE ID WILL BE SITE ID, MARKET ID,

NEMA 3R RAIN COVER

SITE #, AND SITE NAME

 $\underline{\text{ON WOOD POLES}}$ - SIGN ON ALUMINUM WITH SS SCREW TO THE POLE 3' $\overline{\text{BELOW ANTENNA}}$

SIGN PLACEMENT:
AFFIX TO THE STRUCTURE 3-4' BELOW THE COMMERCIAL RF ANTENNA(S) OR
3' BELOW LOWEST POWER WIRE

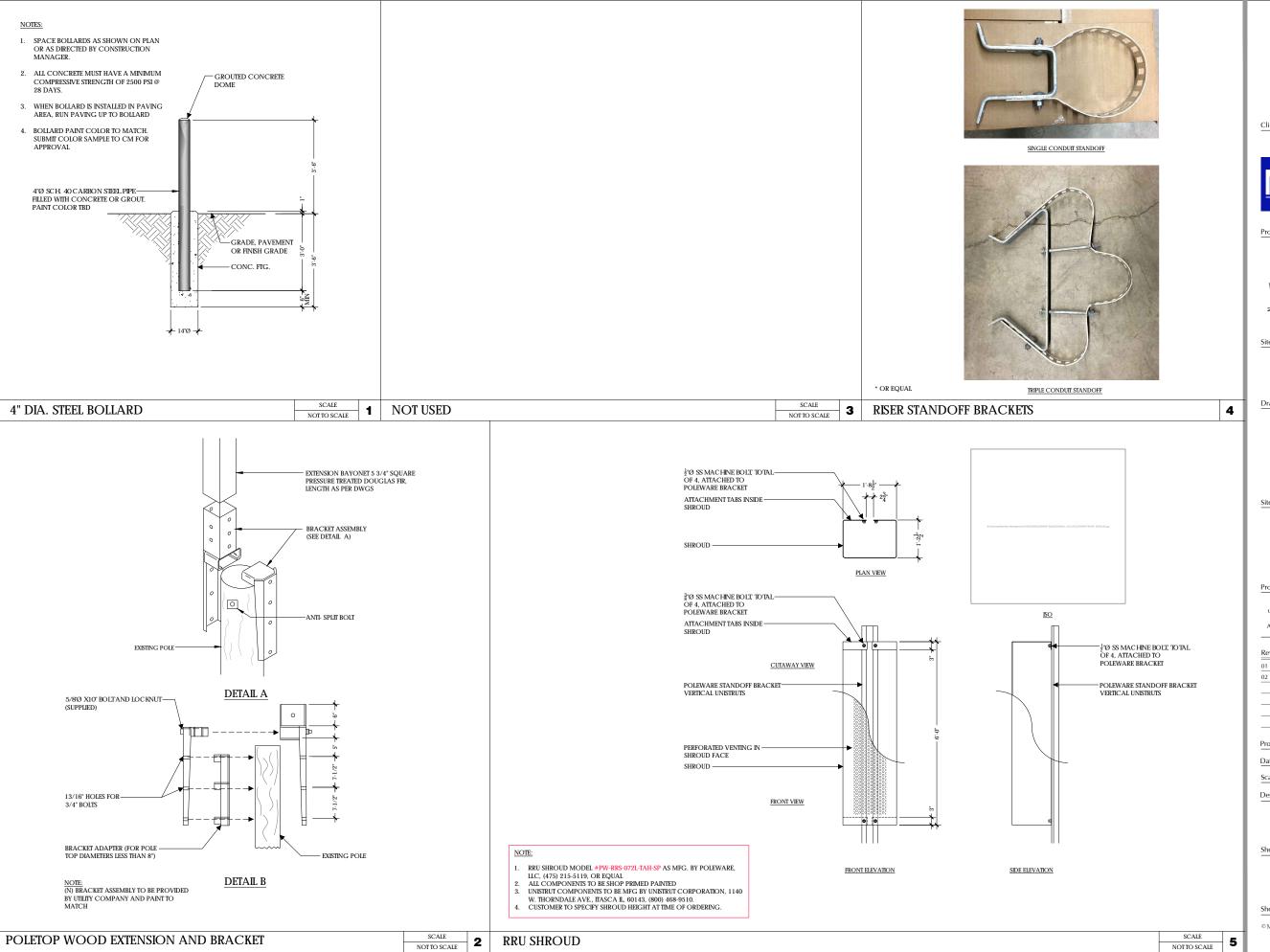
SIGN COLOR: YELLOW

CONTRACTOR NOTE: SITE ID WILL BE SITE ID, MARKET ID, SITE #, AND SITE NAME

DIPLEXER 3 METER DISCONNECT SIGNAGE

RF WARNING SIGNAGE

11







785 Oak Grove Road E2 Concord, CA 94518 707.592.5924

Project Architect:

WIRELESS GROUP LLC

222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE **TAHOE 075**

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | 1 |

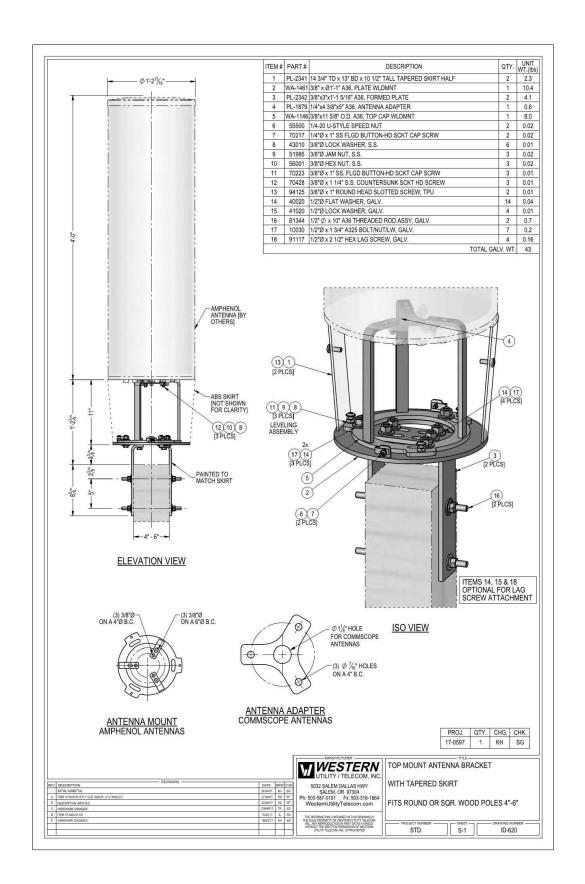
Project No.:

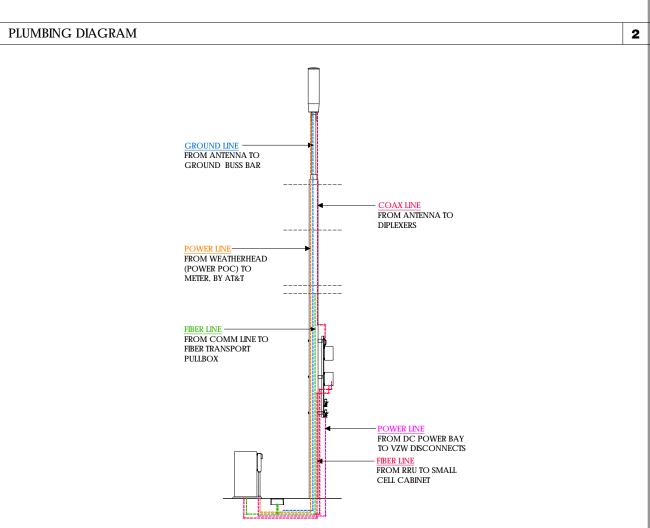
Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS







Client:



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 075

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

Professional Sea

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS PLUMBING DIAGRAM

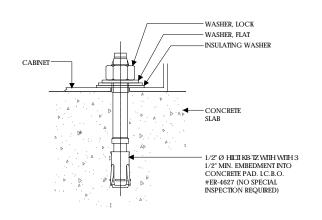
Sheet Title:

3

A.7

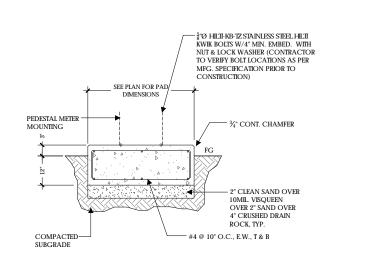
© Meridian Management LLC, 2018

1 CONDUIT RISER DIAGRAM



CABINET ANCHORAGE

SCALE NTS



CONCRETE PAD

SCALE 2

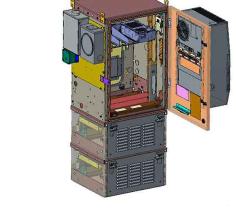
UNIT: SMALL CELL CABINET

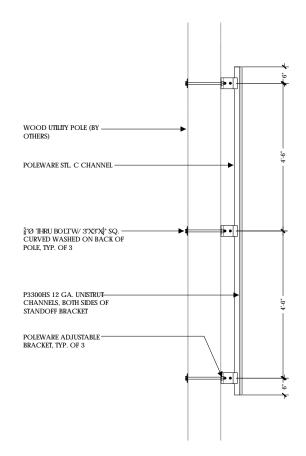
HEIGHT: 61 INCHES

WIDTH: 24 INCHES

DEEP: 30 INCHES

WEIGHT 300 LBS (FULLY LOADED)







CHANNELS, BOTH SIDES OF STANDOFF BRACKET P3300HS UNISTRUT CHANNELS, BOTH SIDES OF STANDOFF BRACKET. INSTALL BOLT THRU PREDRILLED STANDOFF BRACKET HOLES

UNISTRUT MACHING BOLTS THRU

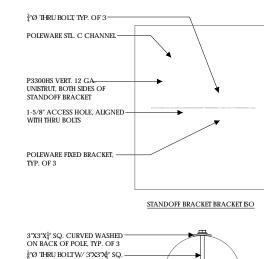
WOOD UTILITY POLE (BY -

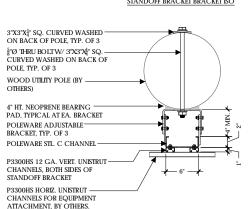
POLEWARE STL. CHANNEL -

 $\frac{5}{8}$ "Ø THRU BOLTW/ 3"X3"X $_1^{l}$ " SQ.

CURVED WASHED ON BACK OF POLE, TYP. OF 3

STANDOFF BRACKET FRONT ELEVATION





CHANNEL NUTS W/ SPRINGS.

STANDOFF BRACKET PLAN

WIRELESS GROUP LLC

Project Architect:

222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

verizon /

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

785 Oak Grove Road E2

Concord, CA 94518 707.592.5924

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE **TAHOE 075**

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Date | Description |
|----------|-------------------|
| 03/26/18 | Constr. Dwgs 90% |
| 04/03/18 | Constr. Dwgs 100% |
| | |
| | |
| | |
| | |
| | 03/26/18 |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS

Sheet No.:

© Meridian Management LLC, 2018



NOTE: STANDOFF BRACKET MODEL #PW-SOB-09L-ADJ-SP AS MFG. BY

POLEWARE, ILC, (475) 215-5119, OR EQUAL ALL COMPONENTS TO BE SHOP PRIMED PAINTED UNISTRUT COMPONENTS TO BE MFG BY UNISTRUT CORPORATION, 1140 W. THORNDALE AVE., ITASCA II., 80143, (800) 468-9510.

N. INCANDALE AVE., II-ASCA IL, 00143, (800) 406-9310.

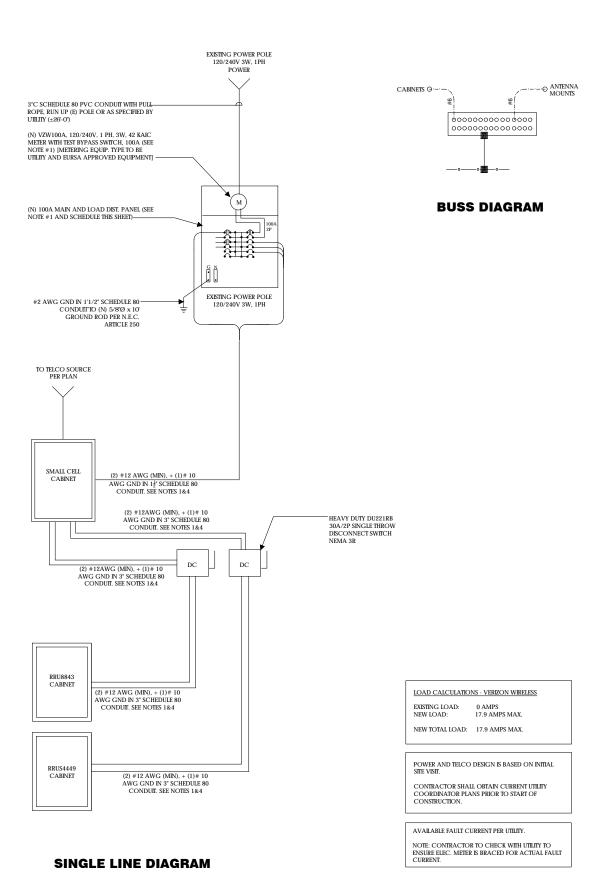
HORIZONTAL UNISTRUTS (P3300HS) FOR EQUIPMENT INSTALLATION NOT INCLUDED

ADJUSTABLE BRACKETS FOR SLANTED POLES AVAILABLE BY SPECIAL ORDER

SCALE SMALL CELL CABINET STANDOFF BRACKET NOT TO SCALE

SCALE

NOT TO SCALE 4



POWER AND TELCO NOTES:

- 1. POWER AND TELCO POINTS OF CONNECTION AND ANY EASEMENTS ARE PRELIMINARY AND SUBJECT TO CHANGE BY
- 2. CONTRACTOR SHALL COORDINATE WITH LITILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY ENGINEERING PLANS AND SPECIFICATIONS ONLY WHERE APPLICABLE PER PROJECT
- 3. CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT, PULL WIRES, CABLE PULL BOXES, CONCRETE ENCASEMENT OF CONDUIT, TRANSFORMER PAD, BARRIERS, POLE RISER TRENCHING, BACK FILL, AND UTILITY FEES, AND INCLUDE REQUIREMENTS IN SCOPE
- 4. CONTRACTOR SHALL LABEL ALL MAIN DISCONNECT SWITCHES AS REQUIRED BY CODE.

GENERAL ELECTRICAL NOTES:

- 1. PROVIDE ALL ELECTRICAL WORK & MATERIALS AS SHOWN ON THE DWGS, AS CALLED FOR HEREIN, & AS IS NECESSARY TO FURNISH A COMPLETE INSTALLATION
- 2. THE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ADOPTED CALIFORNIA ELECTRICAL CODE, STATE OF CALIFORNIA TITLE 24, ALL OTHER APPLICABLE CODES AND ORDINANCES & THE REQUIREMENTS OF THE FIRE MARSHALL. ALL EQUIPMENT & WIRING SHALL BEAR THE APPROVAL STAMP OF UNDERWRITERS LABORATORY (UL) OR AN APPROVED TESTING LABORATORY, PAYMENT FOR ALL INSPECTION FEES AND PERMITS ARE PART OF THIS CONTRACT.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND GOOD CONDITION OF ALL MATERIALS & EQUIPMENT FOR THE ENTIRE INSTALLATION & UNIT COMPLETION OF WORK, ERECT & MAINTAIN APPROVED & SUITABLE BARRIERS, PROTECTIVE DEVICES & WARNING SIGNS, BE FULLY RESPONSIBLE FOR ANY LOSS OR INJURY TO PERSONS OR PROPERTY RESULTING FROM NEGLIGENCE AND/OR ENFORCEMENT OF ALL SAFETY PRECAUTIONS & WARNINGS
- 4. COORDINATE THE ELECTRICAL INSTALLATION WITH ALL OTHER TRADES.
- 5. ALL SAW CUTTING, TRENCHING, BACK FILLING & PATCHING SHALL BE PART OF THIS CONTRACT.
- 6. FINALIZE ALL ELECTRICAL SERVICE ARRANGEMENTS, INCLUDING VERIFICATION OF LOCATIONS, DETAILS, COORDINATION OF THE INSTALLATION & PAYMENT OF ACCRUED CHARGES WITH LOCAL POWER COMPANY, VERIFY LOCATION FOR FACILITIES & DETAILS WITH POWER UTILITY, IN ADDITION TO THE REQUIREMENTS SHOWN IN THE CONTRACT DOCUMENTS, WORK SHALL COMPLY WITH CONSTRUCTION STANDARDS & SERVICE REQUIREMENTS OF THE RESPECTIVE UTILITIES, INCLUDING ANY SUPPLEMENTAL DWGS ISSUED & SHALL BE SUBJECT TO APPROVAL OF THESE UTILITIES.
- 7. ALL WIRING SHALL BE COPPER. INSULATION FOR BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE "THWN" CONDUCTORS LARGER AND
- 8. PROVIDE CONDUIT SEALS FOR ALL CONDUITS PENETRATING WEATHERPROOFING OR WEATHERPROOF ENCLOSURE ENVELOPE. MASTIC SEAL ALL CONDUIT OPENING PENETRATIONS COMPLETELY WATERTIGHT.
- UNLESS SHOWN OTHERWISE, FUSED DISCONNECT SWITCHES SHALL BE PROVIDED WITH LOW-PEAK, S\DUAL ELEMENT FUSES SIZED TO
 EQUIPMENT NAMEPLATE FUSE CURRENT RATING. MOTOR STARTERS SHALL BE PROVIDED WITH SIMILARLY SIZED FUSIBLE ELEMENTS, SWITCHES AND OTHER OUTDOOR EQUIPMENT SHALL BE RATED NEMA 3R AND/OR ULLISTED FOR WET ENVIRONMENT.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING THE GROUNDING SYSTEM AND ENSURING A 5 OHM OR LESS GROUNDING PATH, ADDITIONAL GROUND RODS AND/OR CHEMICAL ROD SYSTEM SHALL BE USED TO ACHIEVE THIS REQUIREMENT IF THE GIVEN DESIGN CANNOT BE MADE TO ACHIEVE THIS REQUIREMENT.

- 1. SUBCONTRACTOR SHALL PROVIDE DIST, PANEL AND BREAKERS FOR POWER TO THE BTS UNITS AND THE BTS/UTILITY CABINET
- 2. ALL SERVICE EQUIPMENT AND INSTALLATIONS SHALL COMPLY WITH THE N.E.C. AND UTILITY COMPANY AND LOCAL CODE
- 3 SUBCONTRACTOR SHALL PROVIDE FLECTRICAL SERVICE ENTRANCE EQUIPMENT WITH FAULT CURRENT RATINGS GREATER
 THAN THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.
- 4. MAXIMUM ONE WAY CIRCUIT RUN NOT TO EXCEED 75 FEET.



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



707.592.5924

Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE **TAHOE 075**

PROW HIGH MEADOW TRAIL (NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

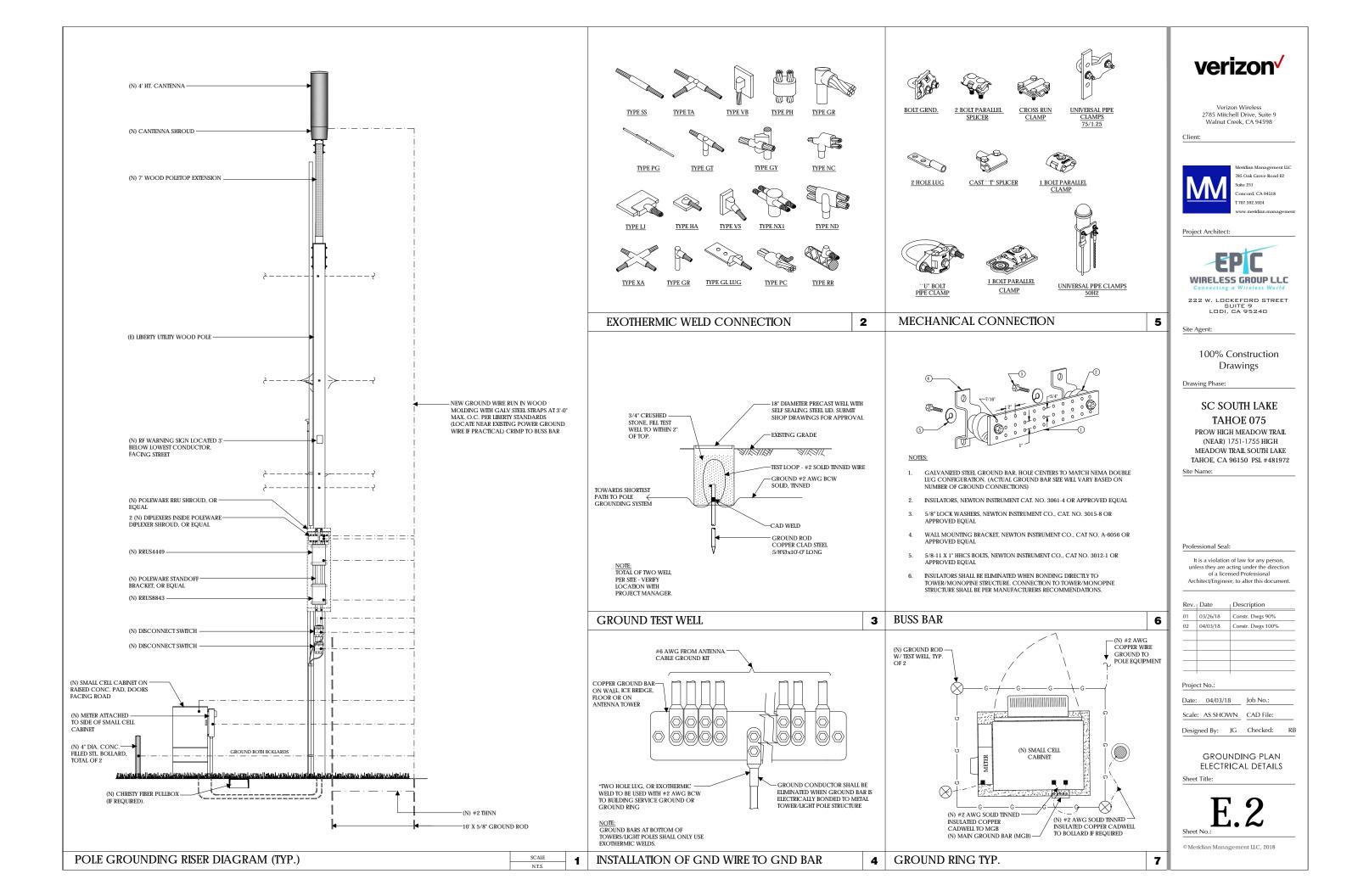
Project No.

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

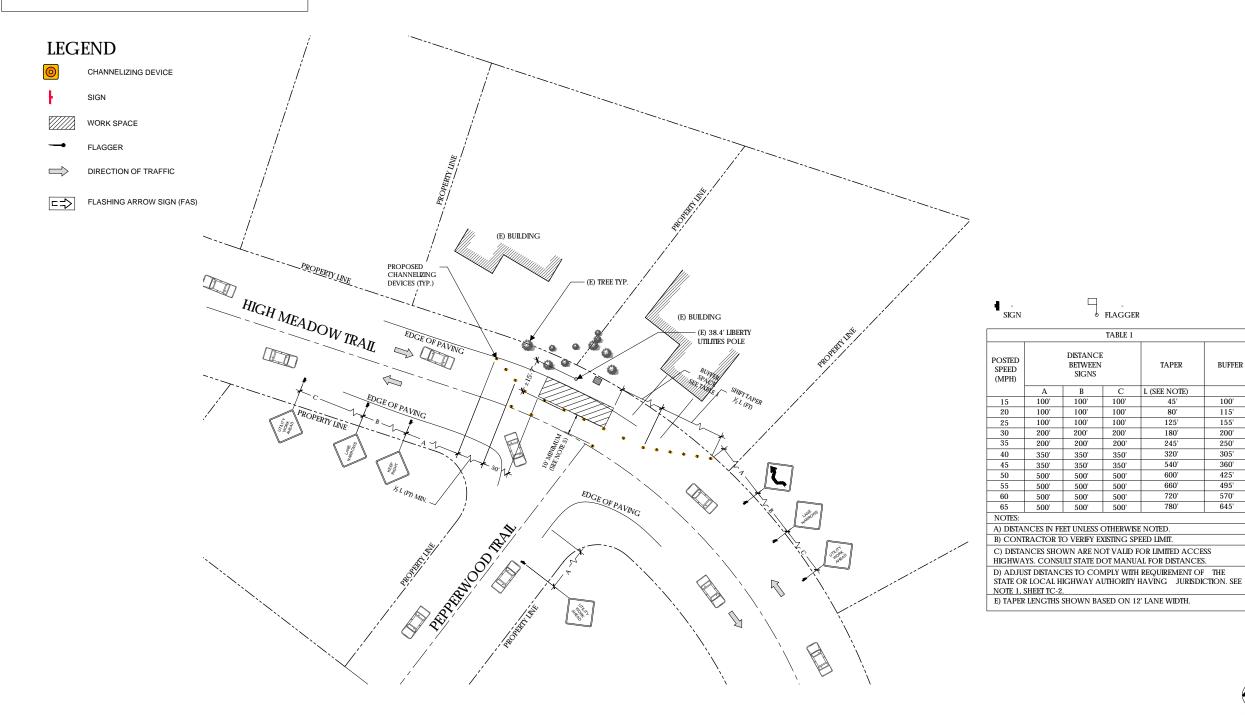
Designed By: JG Checked:

SINGLE LINE DIAGRAM BUSS DIAGRAM PANEL SCHEDULE



PLAN NOTES:

- 1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY VEHICULAR TRAFFIC CONTROL PLANS (TCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TCP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
- 2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
- 3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING. DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES, DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION, NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
- 4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
- 5. MAINTAIN A MINIMUM LANE WIDTH OF 10'.



DOT NOTES:

- 1. WHEN LANE CLOSURE IS REQUIRED, THE TRAFFIC CONTROL PLAN SHOULD BE PROVIDED AND NOTARIZED BY AN INDIVIDUAL/COMPANY THAT HAS FLAGGER CONTROL TRAINING CERTIFICATION.
- "BLUE-LIGHTS" (OFF-DUTY POLICE OFFICERS) WILL BE ON SITE FOR LANE CLOSURES AND IF REQUIRED.

verizon /

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



785 Oak Grove Road E2 Concord. CA 94518 707.592.5924

Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings (E) LIGHT POLE

Drawing Phase:

SC SOUTH LAKE **TAHOE 075** PROW HIGH MEADOW TRAIL

(NEAR) 1751-1755 HIGH MEADOW TRAIL SOUTH LAKE TAHOE, CA 96150 PSL #481972

Site Name:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/26/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | 1 | |

Project No.:

Date: 04/03/18 Job No.: Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

VEHICLE TRAFFIC CONTROL PLAN

© Meridian Management LLC, 2018

SCALE

OVERALL SITE PLAN

FLAGGER

TABLE 1

100'

100'

200'

200'

350'

350'

500'

TAPER

180'

245'

320'

540'

600'

660'

720'

780'

L (SEE NOTE)

DISTANCE

BETWEEN

100'

100' 100' 100'

100'

200'

500' 500' 500'

500' 500' 500'

350'

200' 200'

350' 350'

500' 500'

100'

200'

350'

1

BUFFER

115'

155'

200'

250'

305'

360'

425'

495'

570'

645'

SC SOUTH LAKE TAHOE 060



PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150

PSL #471233

George's Auto Detailing

VICINITY MAP

SITE

SITE INFORMATION

471233

OWNER:

PSL #:

LIBERTY UTILITIES

701 NATIONAL AVENUE TAHOE VISTA, CA 96148 ERIC TROSKA T 775-870-2469

APPLICANT:

VERIZON WIRELESS 2785 MITCHELL DRIVE, SUITE 9

M 775-870-2469

EPIC WIRELESS 222 W. LOCKEFORD STREET

WALNUT CREEK, CA 94598

LODI, CA 95240

EL DORADO COUNTY

38°54'42.39"

±6537.9' AMSL

APN ADJACENCY:

(IFO) 025-452-051 PROW COPPER WAY

SITE ADDRESS: (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150

EL DORADO

COUNTY:

ZONING: PUBLIC ROW

LAT:

LONG:

ZONING JURISDICTION:

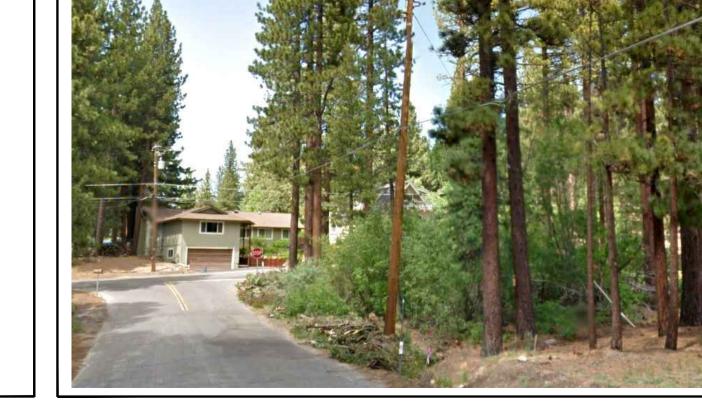
119°57'39.01"

ELEVATION

CODE COMPLIANCE

CONSTRUCTION WORKS AND MATERIALS MUST COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY LOCAL JURISDICTION, INCLUDING BUT NOT LIMITED TO:

- CALIFORNIA CODE OF REGULATIONS
- 2016 CALIFORNIA BUILDING CODE
- 2016 CALIFORNIA MECHANICAL CODE
- 2016 CALIFORNIA PLUMBING CODE • 2016 CALIFORNIA ELECTRIC CODE
- 2016 GREEN CODE
- 2016 EDITION OF TITLE 24 ENERGY STANDARDS
- ANY LOCAL BUILDING CODE AMENDMENTS TO THE ABOVE
- CITY / COUNTY ORDINANCES
- 2016 CALIFORNIA FIRE CODES WITH ALL LOCAL AMENDMENTS GO 95 REGULATIONS



POLE IMAGE

PROJECT TEAM

AGENT

Epic Wireless Group, Inc. 222 W. Lockeford Street

Lodi, CA 95240 Tel: (916) 781-5921

CONSTRUCTION MANAGER: ROB HERNANDEZ

cell: 916.216.7931 email: rob.hernandez@epicwireless.net

LEASING & ZONING MGR: MARK LOBAUGH

cell: 916.203.4067

email: mark.lobaugh@epicwireless.net

ARCHITECT/ENGINEER

Meridian Management LLC 785 Oak Grove Road E2 Suite 251 Concord, CA 94518 www.meridian.management

PROJECT MANAGER: RODNEY BARNES

cell: 707.592.5924

email: rodney@meridian.management

CLIENT

Verizon Wireless 2785 Mitchell Drive Walnut Creek, CA 94598

HANDICAP REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA ADMINISTRATIVE STATE CODE PART 2, TITLE 24, CHAPTER 11B, SECTION 1103B.

Exhibit E2

PROJECT DESCRIPTION

THIS IS AN UNMANNED TELECOMMUNICATIONS FACILITY FOR THE VERIZON WIRELESS NETWORK CONSISTING OF THE INSTALLATION AND OPERATION OF AN ANTENNA AND ASSOCIATED EQUIPMENT ON AN EXISTING WOOD POLE IN THE PUBLIC RIGHT-OF-WAY.

- INSTALL NEW TELECOMMUNICATIONS EQUIPMENT BOXES ON AN EXISTING 41.0' HT. WOOD
- EQUIPMENT CONSISTS OF (1) CANTENNA ON 7' WOOD POLETOP EXTENSION, (1) RRUS4449 BOLLARDS, (1) GROUND-MOUNTED SMALL CELL CABINET, AND A POWER METER ON SIDE OF SMALL CELL CABINET.
- OVERHEAD POWER FROM TRANSFORMER INSTALL POLE STEPS AS REQUIRED
- 6. ALL POLE-MOUNTED EQUIPMENT INCLUDING CONDUIT RISERS TO BE INSTALLED MIN. 5"
- FROM POLE ON STANDOFF BRACKETS ALL EQUIPMENT TO BE PAINTED VALSPAR 'DEEP EARTH' COLOR.

| SHEET NO: | SHEET TITLE | | |
|-----------|---|--|--|
| T.1 | TITLE SHEET | | |
| C.1 | SITE SURVEY | | |
| A.1 | OVERALL SITE PLAN | | |
| A.2 | POLE PLAN ENLARGEMENTS | | |
| A.3 | ELEVATIONS | | |
| A.4 | ELEVATIONS | | |
| A.5 | EQUIPMENT DETAILS | | |
| A.6 | EQUIPMENT DETAILS | | |
| A.7 | EQUIPMENT DETAILS, PLUMBING DIAGRAM | | |
| A.8 | EQUIPMENT DETAILS | | |
| E.1 | SINGLE LINE DIAGRAM, BUSS DIAGRAM, PANEL SCHEDULE | | |
| E.2 | POLE GROUNDING, ELECTRICAL DETAILS | | |
| TC.1 | VEHICLE TRAFFIC CONTROL PLAN | | |

ADMINISTRATIVE REQUIREMENTS

CONTRACTOR SHALL VERIFY ALL PLANS & (E) DIMENSIONS & 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 IF USING 11"X17" PLOT, DRAWINGS WILL BE HALF SCALE



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598



Project Architect:



222 W. LOCKEFORD STREET LODI, CA 95240

Site Agent:

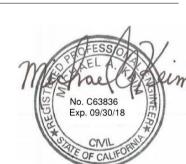
100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE **TAHOE 060**

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|-------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |
| Proje | ct No.: | |

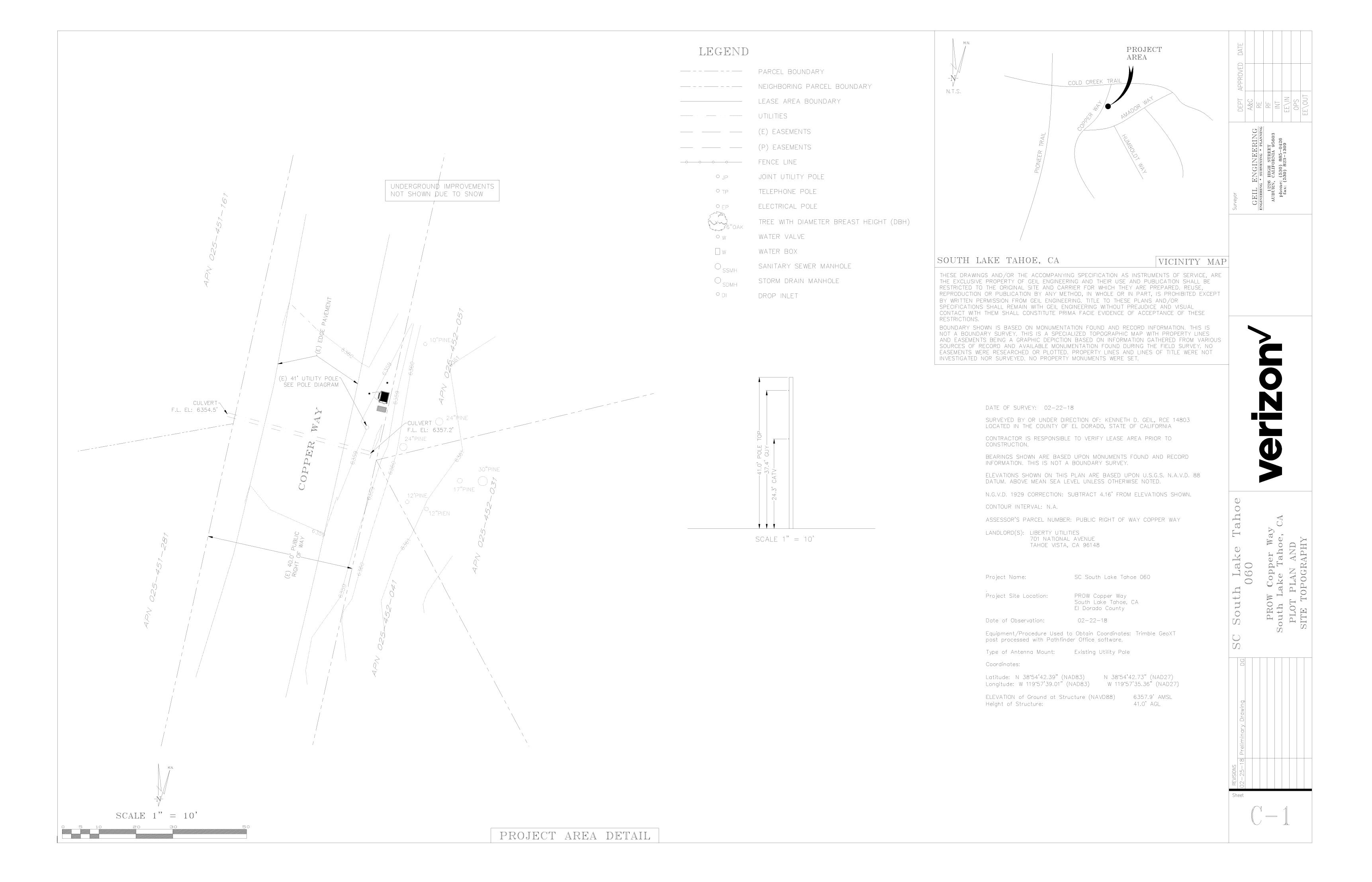
Date: 04/03/18 Scale: AS SHOWN CAD File:

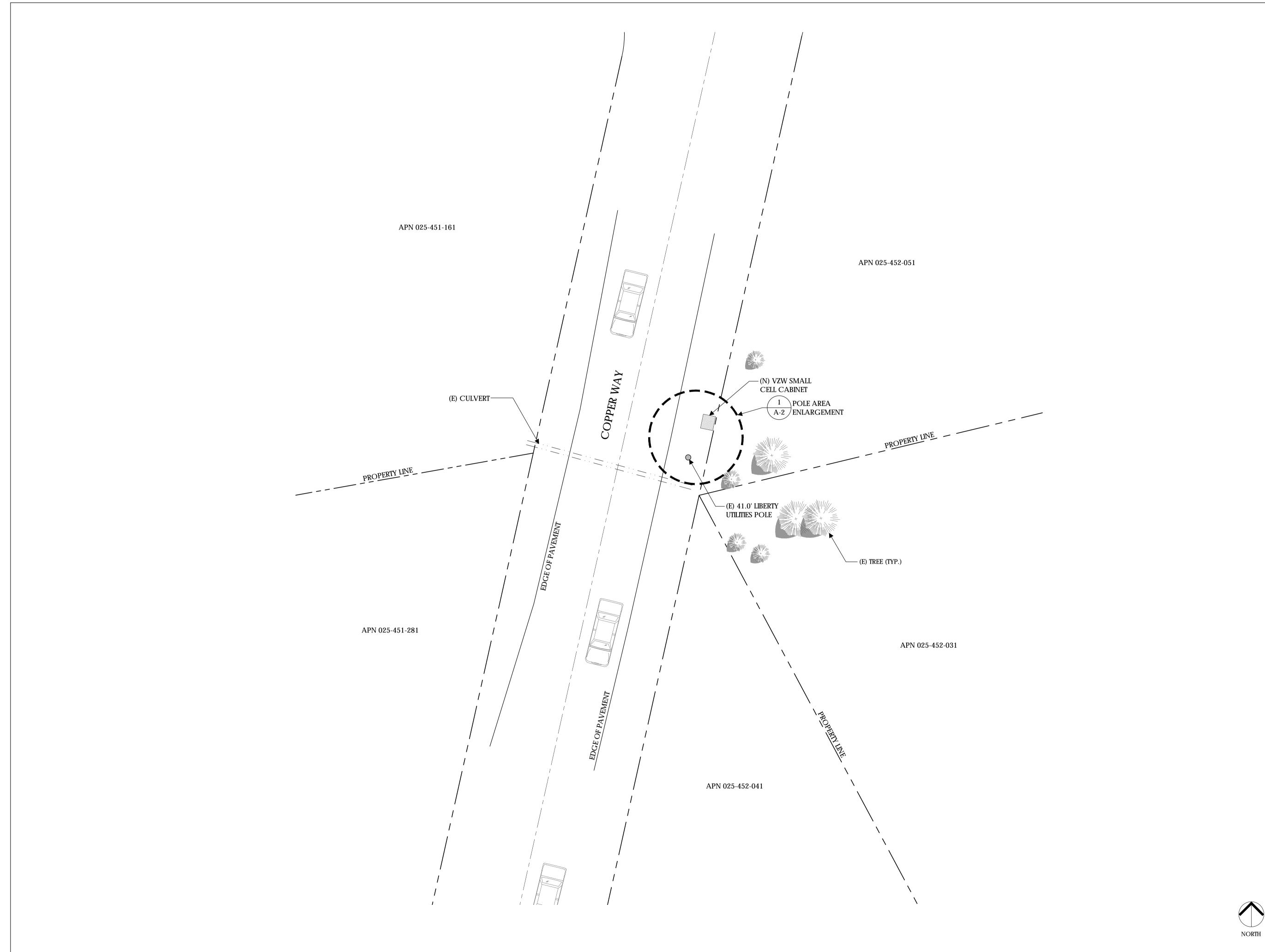
Designed By: JG Checked: RB

TITLE SHEET

Sheet Title:

Sheet No.:







Clien



Meridian Management LLC
785 Oak Grove Road E2
Suite 251
Concord, CA 94518
T 707.592.5924
www.meridian.management

Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

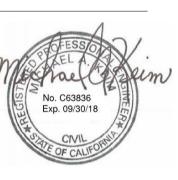
100% Construction
Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY
(NEAR) 2611 COPPER WAY
SOUTH LAKE TAHOE, CA 96150
PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

OVERALL SITE PLAN

Sheet Title:



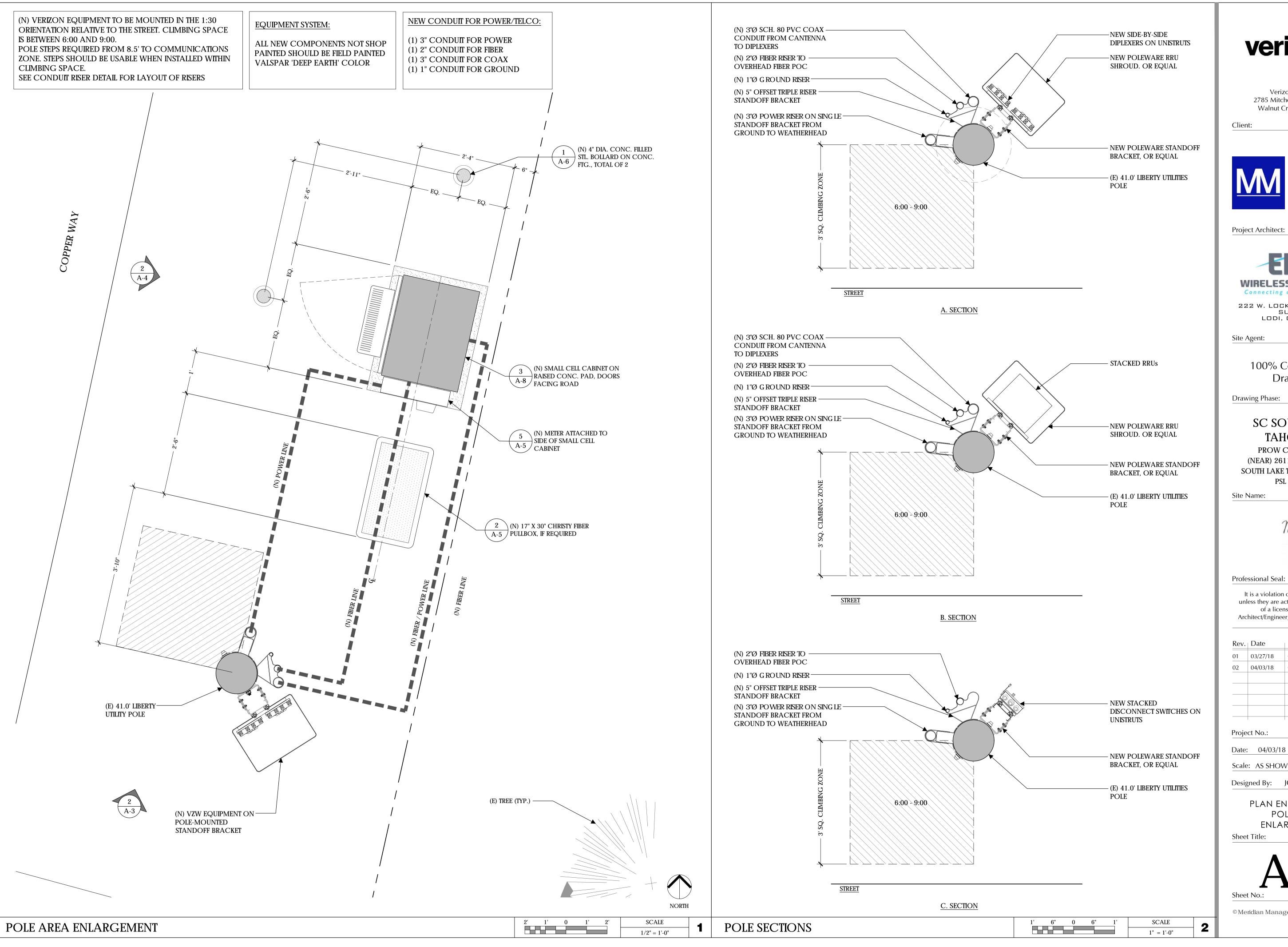
© Meridian Management LLC, 2018

OVERALL SITE PLAN

8' 4' 0 4' 8'

SCALE

1/8" = 1'-0"







785 Oak Grove Road E2 Concord, CA 94518 T 707.592.5924 www.meridian.management



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

> 100% Construction Drawings

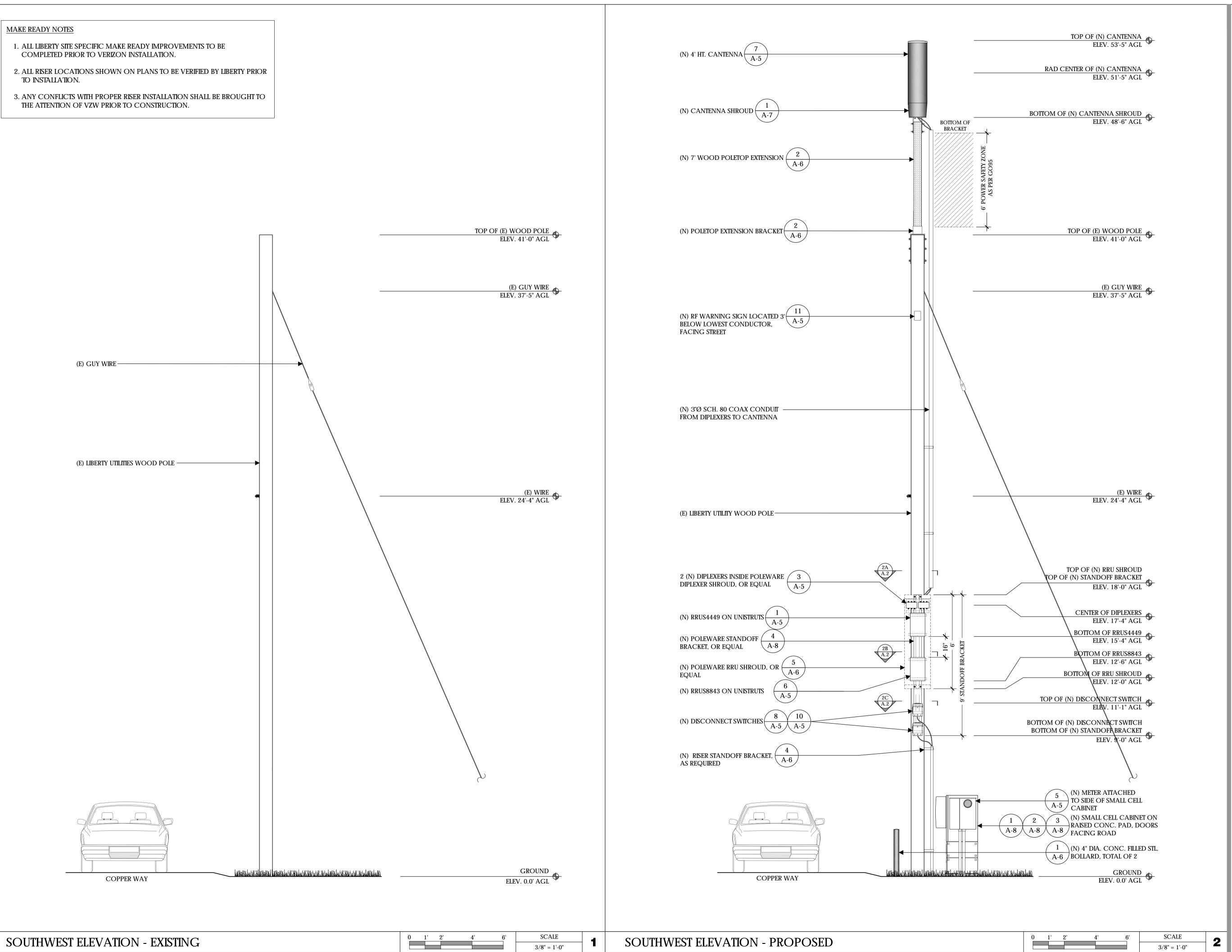
SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233



It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| 01 02 | 03/27/18 04/03/18 | | tr. Dwgs 90% tr. Dwgs 100% | |
|--------------|----------------------|------|-------------------------------|----|
| 02 | 04/03/18 | Cons | tr. Dwgs 100% | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | et No.: 04/03/18 | | Job No.: | |
| Date: Scale: | : AS SHOV | | CAD File: | |
| Desig | ned By: | JG | Checked: | RB |
| Sheet | PO ENLAI | LE F | RGEMENT PLAN EMENTS | |





Client:



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

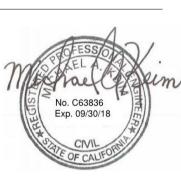
100% Construction
Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY
(NEAR) 2611 COPPER WAY
SOUTH LAKE TAHOE, CA 96150
PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.

Scale: AS SHOWN CAD File:

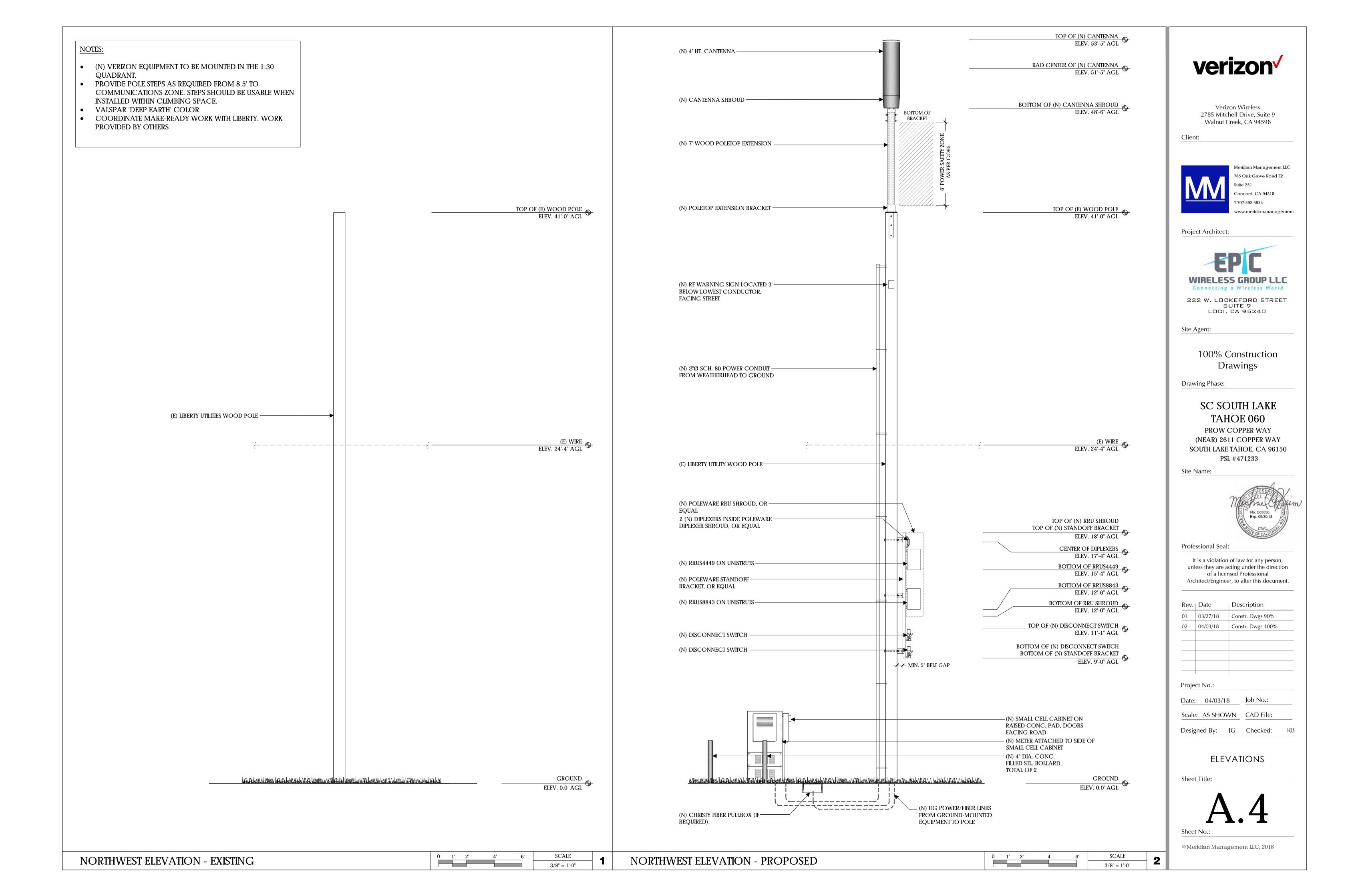
Designed By: JG Checked: RB

ELEVATIONS

Sheet Title:

A.3

Sheet No.:



ERICSSON RRUS4449 B5 B13 W/ PROTRUDING ITEMS

HEIGHT: 18 INCHES

WIDTH: 13.2 INCHES

LENGTH: 9.4 INCHES

WEIGHT: 70 LBS (EXCLUDES MOUNTING HARDWARE)



ERICSSON RRUS8843 W/ PROTRUDING ITEMS

HEIGHT: 18 INCHES

13.2 INCHES

11.3 INCHES

WEIGHT: 75 LBS

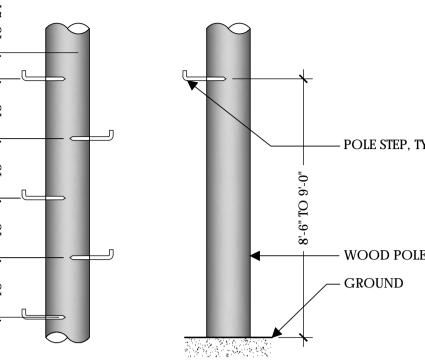


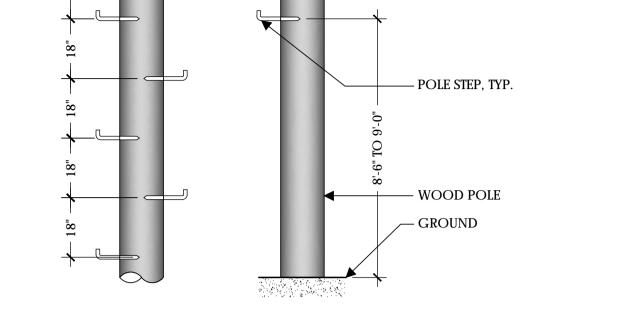


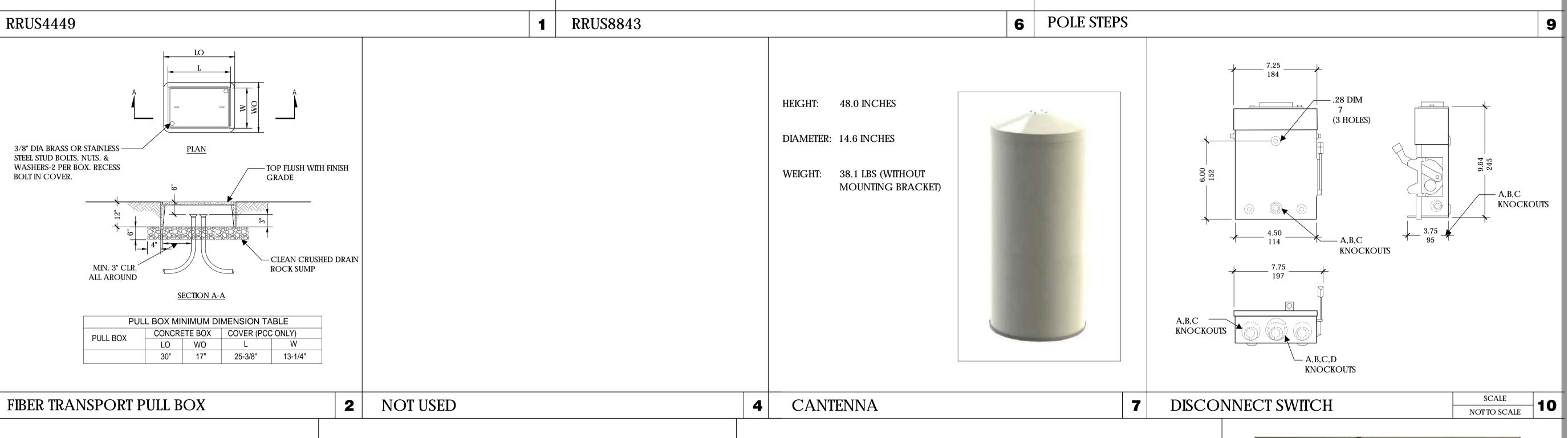
WEIGHT PER 100: MANUFACTURER:

MODEL #: DESCRIPTION: POLE ⁵/₈ X 10 INCH GALVANIZED AERIAL SERVICE COMPANY, INC. 1-800-256-5186 http://www.linemen-tools.com/

POLE STEPS ARE USED ON WOOD POLES WHERE FREQUENT ACCESS TO POLE MOUNTED EQUIPMENT IS REQUIRED. FLAT DRIVING SURFACE AND SHARP POINT EASE INSTALLATION. FETTER-DRIVE THREAD PERMITS REMOVAL WITH A WRENCH. HOT-DIPPED GALVANIZED FOR CORROSION RESISTANCE. NOTCHED MARK ON STEP INDICATES PROPER DRIVING DEPTH.









HEIGHT: 8.31 INCHES

WIDTH: 2.48 INCHES

DEPTH: 7.0 INCHES

WEIGHT: 4.4 LBS

* OR APPROVED EQUAL

DIPLEXER

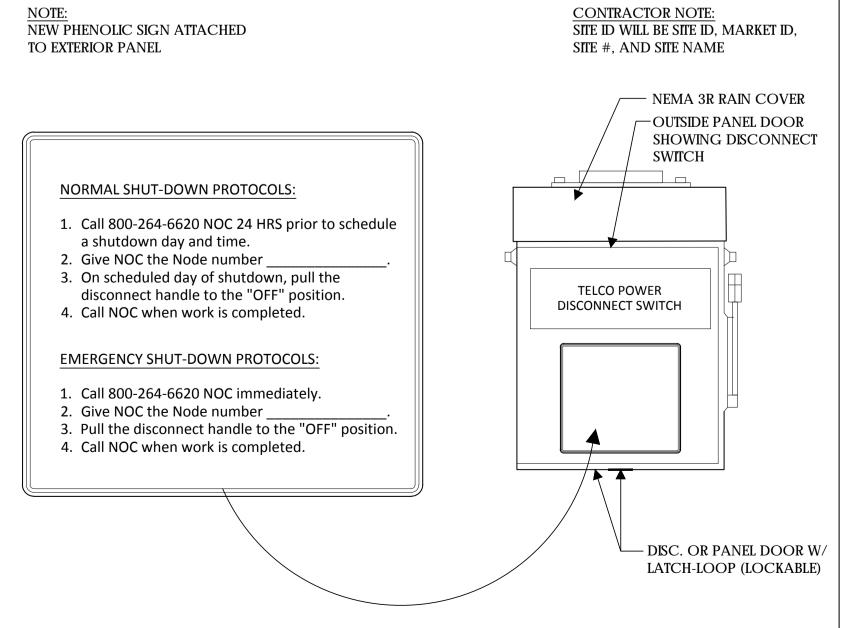
100 AMP METER W/ TEST **BYPASS**

HEIGHT: 24 INCHES

DEPTH: 4-5/8 INCHES

WIDTH: 12 INCHES







BELOW ANTENNA

SIGN PLACEMENT: AFFIX TO THE STRUCTURE 3-4' BELOW THE COMMERCIAL RF ANTENNA(S) OR 3' BELOW LOWEST POWER WIRE

SIGN COLOR: YELLOW

CONTRACTOR NOTE:

SITE ID WILL BE SITE ID, MARKET ID, SITE #, AND SITE NAME

8 RF WARNING SIGNAGE



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



Meridian Management LLC 785 Oak Grove Road E2 T 707.592.5924

Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

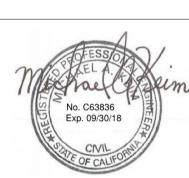
100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS

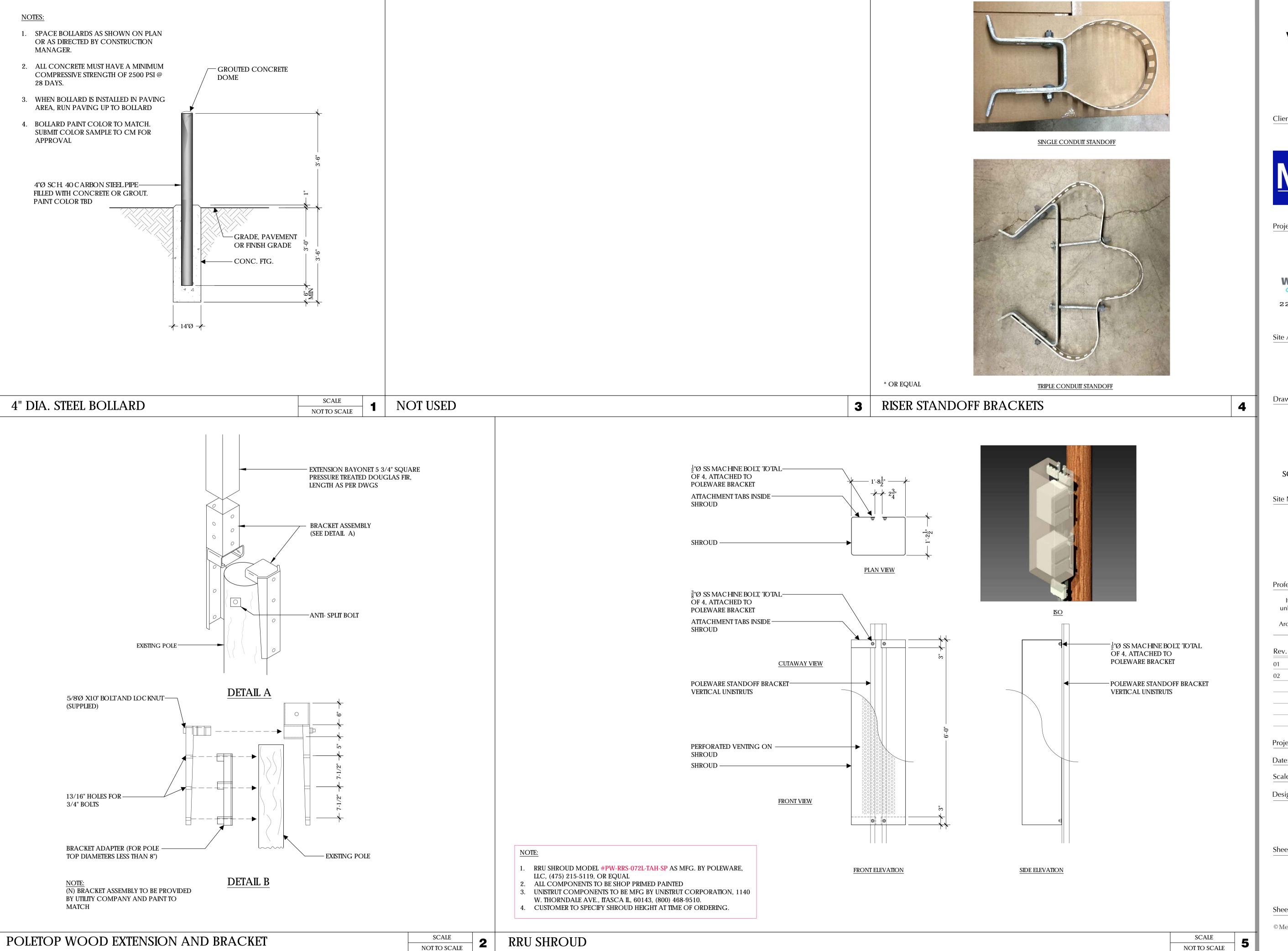
Sheet Title:

11

© Meridian Management LLC, 2018

3 METER

DISCONNECT SIGNAGE



verizon /

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



Meridian Management LLC 785 Oak Grove Road E2 T 707.592.5924

Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE **TAHOE 060**

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18

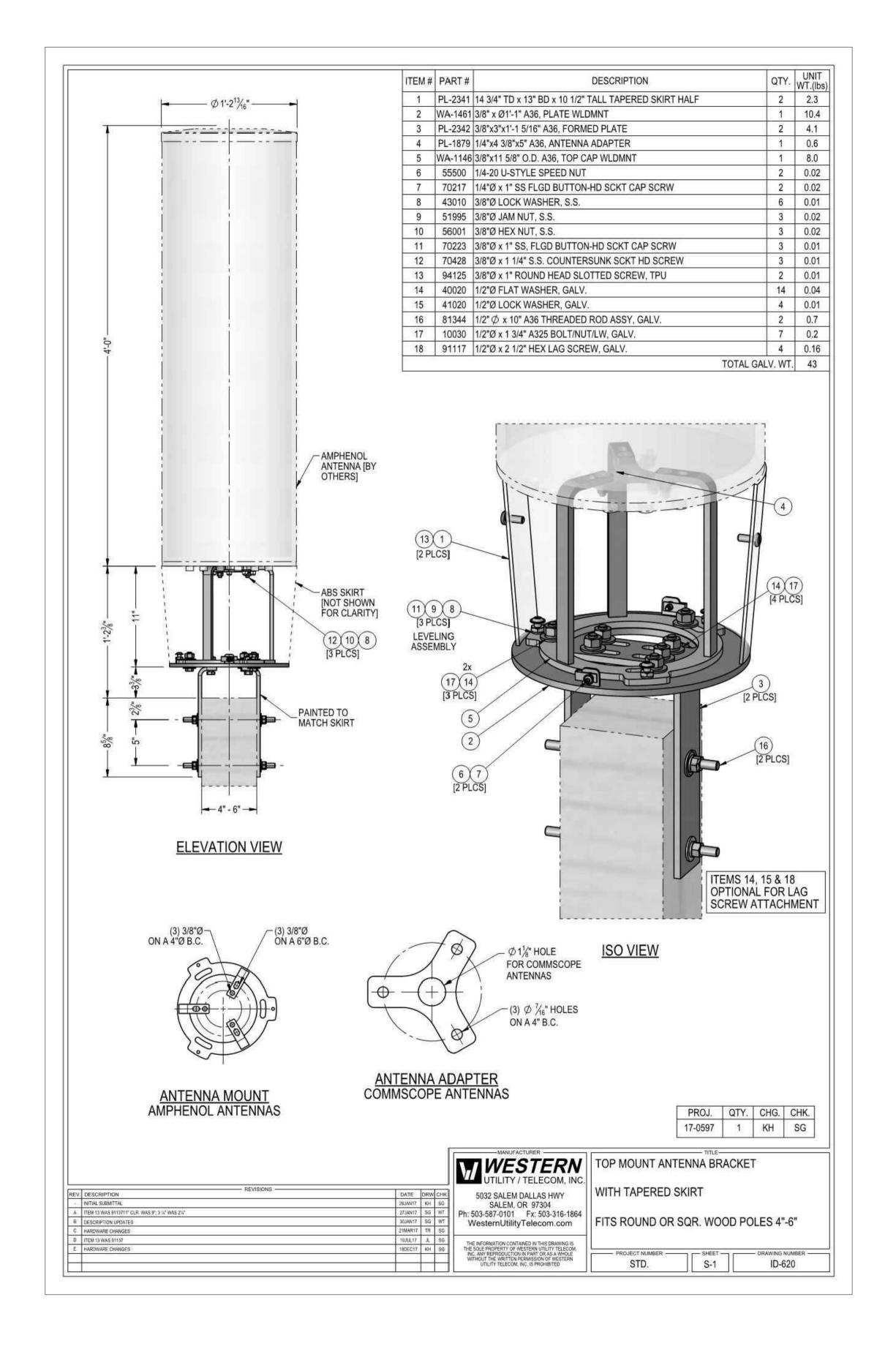
Scale: AS SHOWN CAD File:

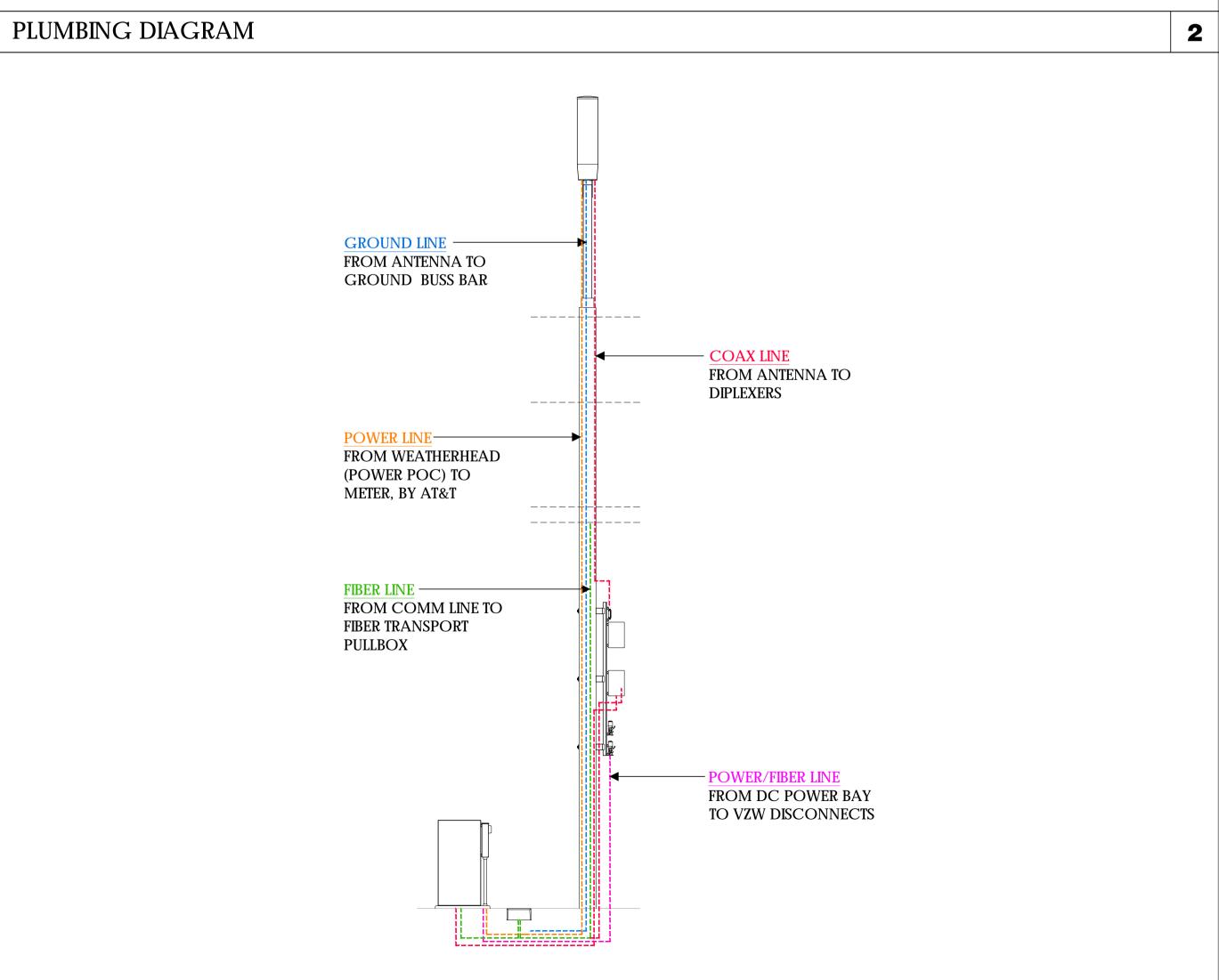
Designed By: JG Checked: RB

EQUIPMENT DETAILS

Sheet Title:

Sheet No.:





verizon /

Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



Project Architect:



LODI, CA 95240

Site Agent:

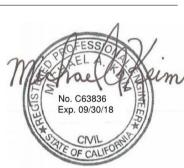
100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS PLUMBING DIAGRAM

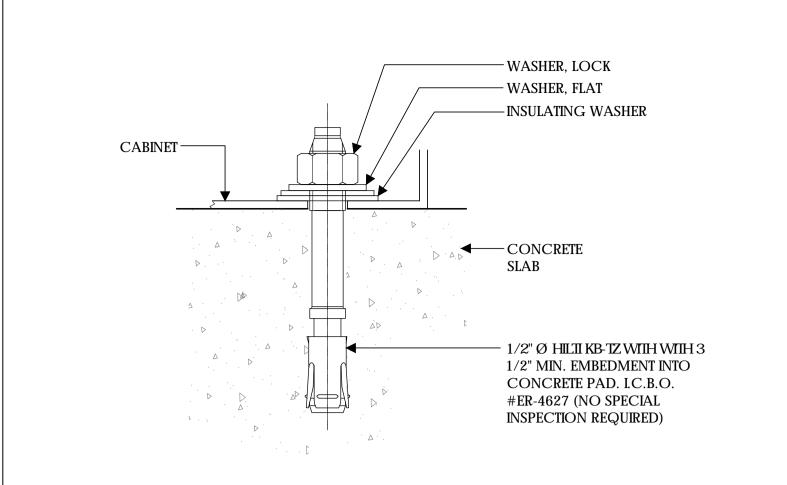
Sheet Title:

Sheet No.:

© Meridian Management LLC, 2018

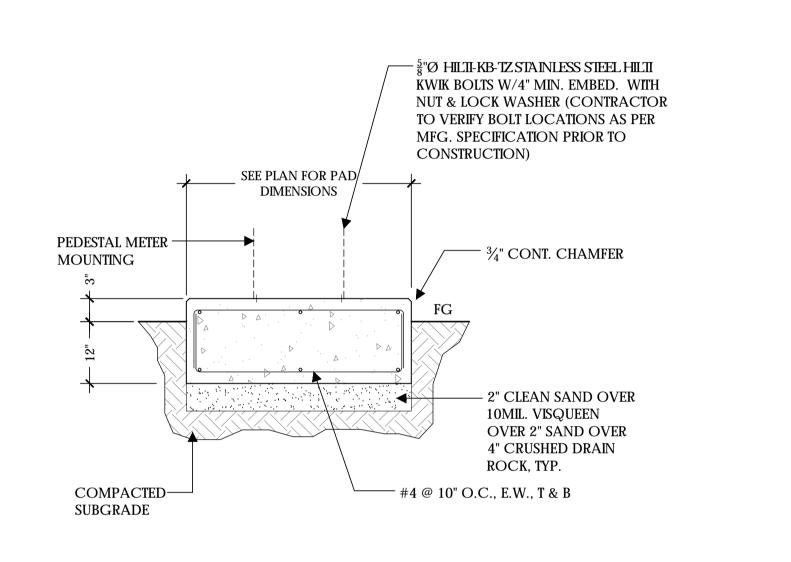
CONDUIT RISER DIAGRAM

CANTENNA SHROUD AND BRACKET



CABINET ANCHORAGE

SCALE N.T.S.



CONCRETE PAD

SCALE NOT TO SCALE

UNIT: SMALL CELL CABINET

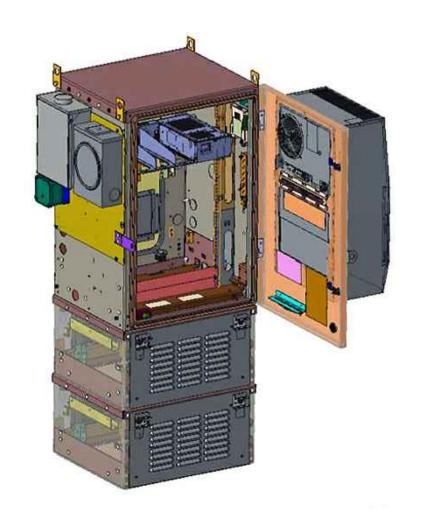
61 INCHES HEIGHT:

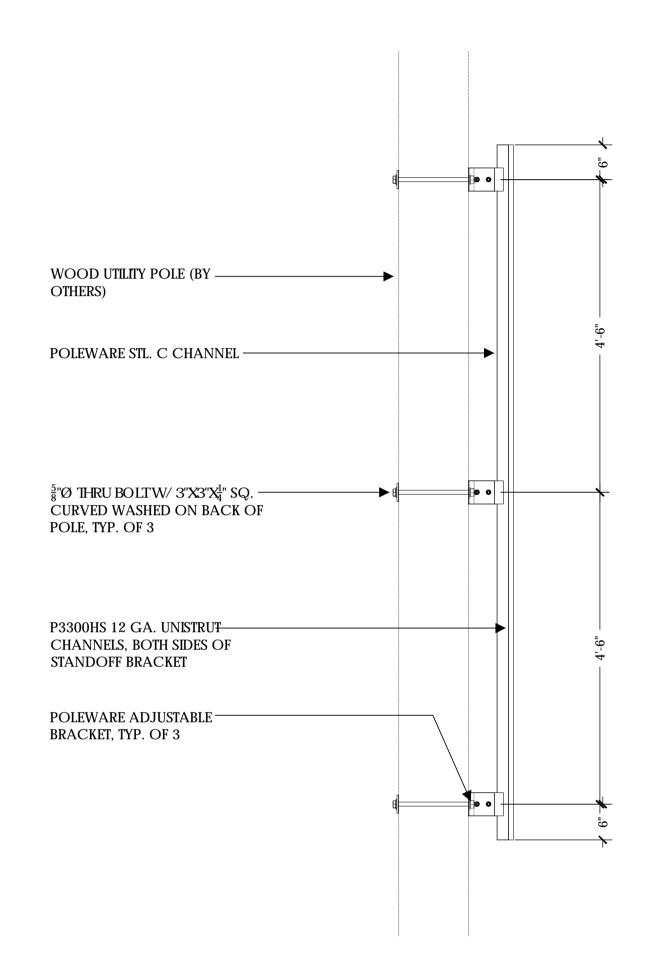
WIDTH: 24 INCHES

DEEP: 30 INCHES

WEIGHT 300 LBS (FULLY LOADED)

SMALL CELL CABINET

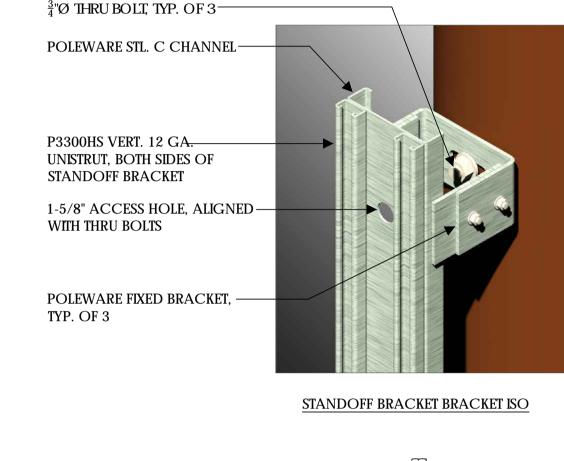


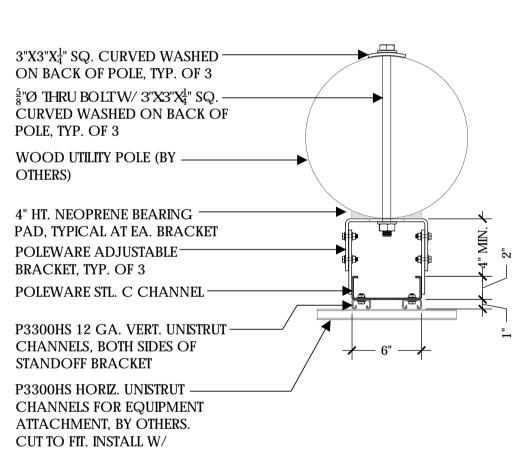




- POLEWARE, LLC, (475) 215-5119, OR EQUAL
- 3. UNISTRUT COMPONENTS TO BE MFG BY UNISTRUT CORPORATION, 1140
- 4. HORIZONTAL UNISTRUTS (P3300HS) FOR EQUIPMENT INSTALLATION NOT
- 5. ADJUSTABLE BRACKETS FOR SLANTED POLES AVAILABLE BY SPECIAL

UNISTRUT MACHING BOLTS THRU-STANDOFF BRACKET, TYP. WOOD UTILITY POLE (BY -OTHERS) POLEWARE STL. CHANNEL - $\frac{5}{8}$ "Ø THRU BOLTW/ 3"X3"X $\frac{1}{4}$ " SQ. -CURVED WASHED ON BACK OF POLE, TYP. OF 3 P3300HS 12 GA. UNISTRUT CHANNELS, BOTH SIDES OF STANDOFF BRACKET P3300HS UNISTRUT CHANNELS, BOTH SIDES OF STANDOFF BRACKET. INSTALL BOLT THRU PREDRILLED STANDOFF BRACKET **HOLES**





STANDOFF BRACKET FRONT ELEVATION

STANDOFF BRACKET PLAN



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



Project Architect:

WIRELESS GROUP LLC Connecting a Wireless World 222 W. LOCKEFORD STREET

SUITE 9 LODI, CA 95240

Site Agent:

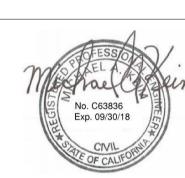
100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

EQUIPMENT DETAILS

Sheet Title:

Sheet No.:

© Meridian Management LLC, 2018

STANDOFF BRACKET MODEL #PW-SOB-09L-ADJ-SP AS MFG. BY

2. ALL COMPONENTS TO BE SHOP PRIMED PAINTED

W. THORNDALE AVE., ITASCA IL, 60143, (800) 468-9510.

INCLUDED

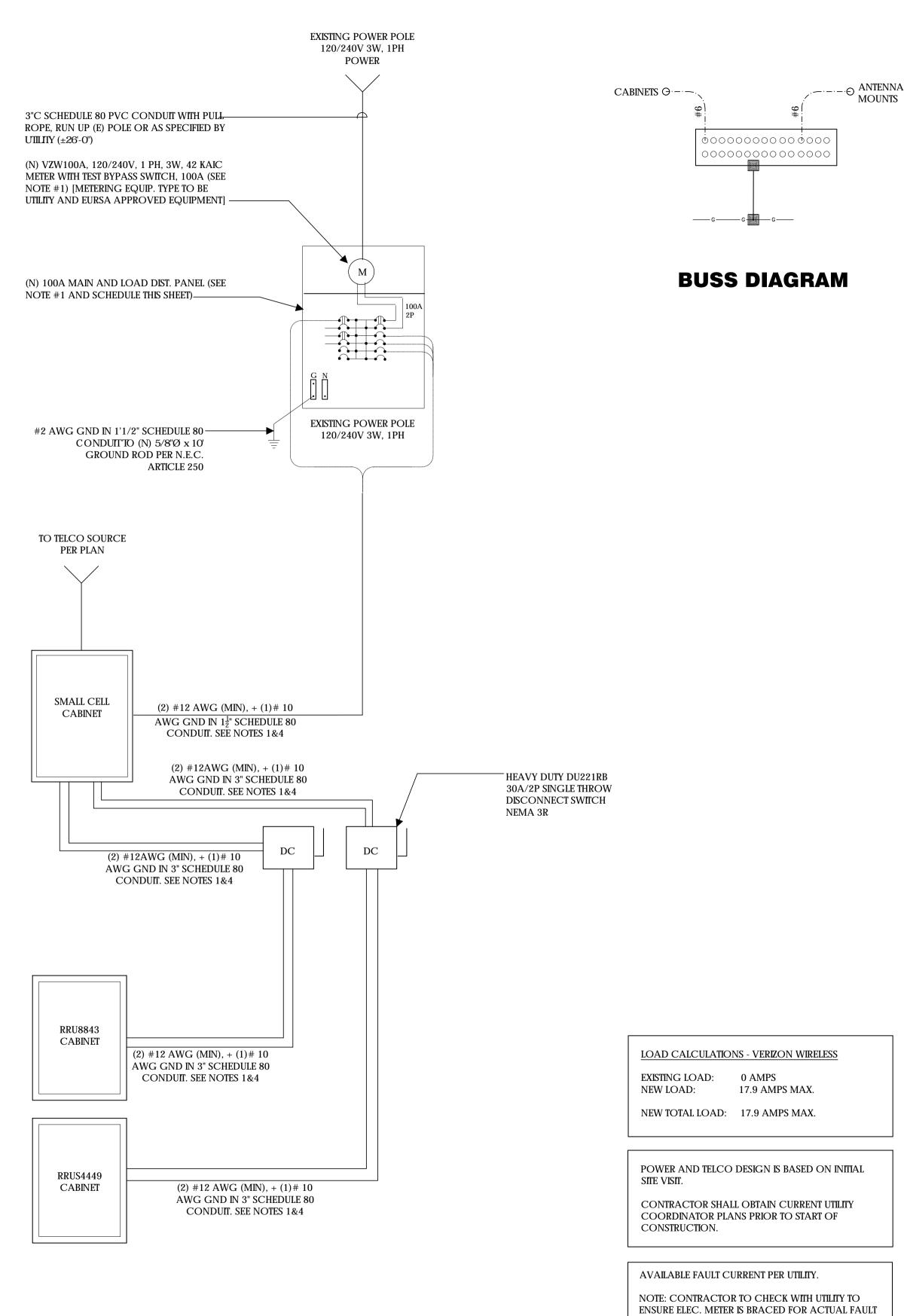
ORDER

NOT TO SCALE

STANDOFF BRACKET

CHANNEL NUTS W/ SPRINGS.

SCALE NOT TO SCALE



SINGLE LINE DIAGRAM

POWER AND TELCO NOTES:

- 1. POWER AND TELCO POINTS OF CONNECTION AND ANY EASEMENTS ARE PRELIMINARY AND SUBJECT TO CHANGE BY THE UTILITY COMPANIES.
- 2. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY ENGINEERING PLANS AND SPECIFICATIONS ONLY WHERE APPLICABLE PER PROJECT SCOPE OF WORK.
- 3. CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT, PULL WIRES, CABLE PULL BOXES, CONCRETE ENCASEMENT OF CONDUIT, TRANSFORMER PAD, BARRIERS, POLE RISER TRENCHING, BACK FILL, AND UTILITY FEES, AND INCLUDE REQUIREMENTS IN SCOPE.
- 4. CONTRACTOR SHALL LABEL ALL MAIN DISCONNECT SWITCHES AS REQUIRED BY CODE.

GENERAL ELECTRICAL NOTES:

- 1. PROVIDE ALL ELECTRICAL WORK & MATERIALS AS SHOWN ON THE DWGS, AS CALLED FOR HEREIN, & AS IS NECESSARY TO FURNISH A COMPLETE INSTALLATION.
- 2. THE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ADOPTED CALIFORNIA ELECTRICAL CODE, STATE OF CALIFORNIA TITLE24, ALL OTHER APPLICABLE CODES AND ORDINANCES & THE REQUIREMENTS OF THE FIRE MARSHALL. ALL EQUIPMENT & WIRING SHALL BEAR THE APPROVAL STAMP OF UNDERWRITERS LABORATORY (UL) OR AN APPROVED TESTING LABORATORY, PAYMENT FOR ALL INSPECTION FEES AND PERMITS ARE PART OF THIS CONTRACT.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY AND GOOD CONDITION OF ALL MATERIALS & EQUIPMENT FOR THE ENTIRE INSTALLATION & UNIT COMPLETION OF WORK, ERECT & MAINTAIN APPROVED & SUITABLE BARRIERS, PROTECTIVE DEVICES & WARNING SIGNS, BE FULLY RESPONSIBLE FOR ANY LOSS OR INJURY TO PERSONS OR PROPERTY RESULTING FROM NEGLIGENCE AND/OR ENFORCEMENT OF ALL SAFETY PRECAUTIONS & WARNINGS.
- 4. COORDINATE THE ELECTRICAL INSTALLATION WITH ALL OTHER TRADES.
- 5. ALL SAW CUTTING, TRENCHING, BACK FILLING & PATCHING SHALL BE PART OF THIS CONTRACT.
- 6. FINALIZE ALL ELECTRICAL SERVICE ARRANGEMENTS, INCLUDING VERIFICATION OF LOCATIONS, DETAILS, COORDINATION OF THE INSTALLATION & PAYMENT OF ACCRUED CHARGES WITH LOCAL POWER COMPANY, VERIFY LOCATION FOR FACILITIES & DETAILS WITH POWER UTILITY, IN ADDITION TO THE REQUIREMENTS SHOWN IN THE CONTRACT DOCUMENTS, WORK SHALL COMPLY WITH CONSTRUCTION STANDARDS & SERVICE REQUIREMENTS OF THE RESPECTIVE UTILITIES, INCLUDING ANY SUPPLEMENTAL DWGS ISSUED & SHALL BE SUBJECT TO APPROVAL OF THESE UTILITIES.
- 7. ALL WIRING SHALL BE COPPER. INSULATION FOR BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE "THWN" CONDUCTORS LARGER AND #6 AWG MAY BE TYPE "THWN" OR "TWN".
- 8. PROVIDE CONDUIT SEALS FOR ALL CONDUITS PENETRATING WEATHERPROOFING OR WEATHERPROOF ENCLOSURE ENVELOPE. MASTIC SEAL ALL CONDUIT OPENING PENETRATIONS COMPLETELY WATERTIGHT.
- 9. UNLESS SHOWN OTHERWISE, FUSED DISCONNECT SWITCHES SHALL BE PROVIDED WITH LOW-PEAK, S\DUAL ELEMENT FUSES SIZED TO EQUIPMENT NAMEPLATE FUSE CURRENT RATING. MOTOR STARTERS SHALL BE PROVIDED WITH SIMILARLY SIZED FUSIBLE ELEMENTS, SWITCHES AND OTHER OUTDOOR EQUIPMENT SHALL BE RATED NEMA 3R AND/OR UL LISTED FOR WET ENVIRONMENT.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING THE GROUNDING SYSTEM AND ENSURING A 5 OHM OR LESS GROUNDING PATH, ADDITIONAL GROUND RODS AND/OR CHEMICAL ROD SYSTEM SHALL BE USED TO ACHIEVE THIS REQUIREMENT IF THE GIVEN DESIGN CANNOT BE MADE TO ACHIEVE THIS REQUIREMENT.

NOTES:

- 1. SUBCONTRACTOR SHALL PROVIDE DIST. PANEL AND BREAKERS FOR POWER TO THE BTS UNITS AND THE BTS/UTILITY CABINET.
- 2. ALL SERVICE EQUIPMENT AND INSTALLATIONS SHALL COMPLY WITH THE N.E.C. AND UTILITY COMPANY AND LOCAL CODE REQUIREMENTS.
- 3. SUBCONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE ENTRANCE EQUIPMENT WITH FAULT CURRENT RATINGS GREATER THAN THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.
- 4. MAXIMUM ONE WAY CIRCUIT RUN NOT TO EXCEED 75 FEET.



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

Site Agent:

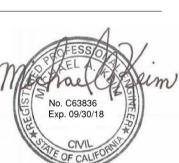
100% Construction Drawings

Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY (NEAR) 2611 COPPER WAY SOUTH LAKE TAHOE, CA 96150 PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |
| | | |

Project No.:

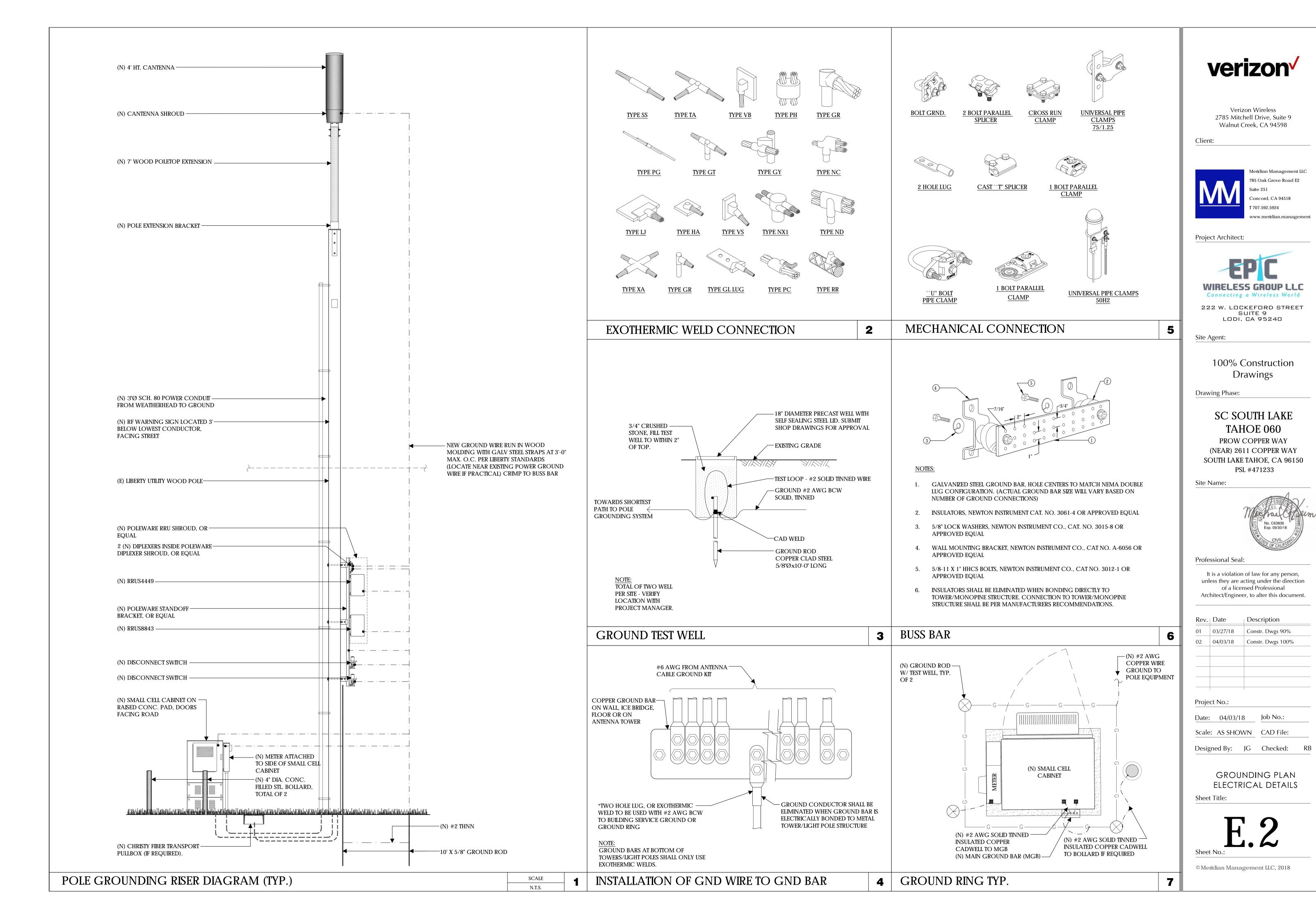
Date: 04/03/18

Designed By: JG Checked: RB

Scale: AS SHOWN CAD File:

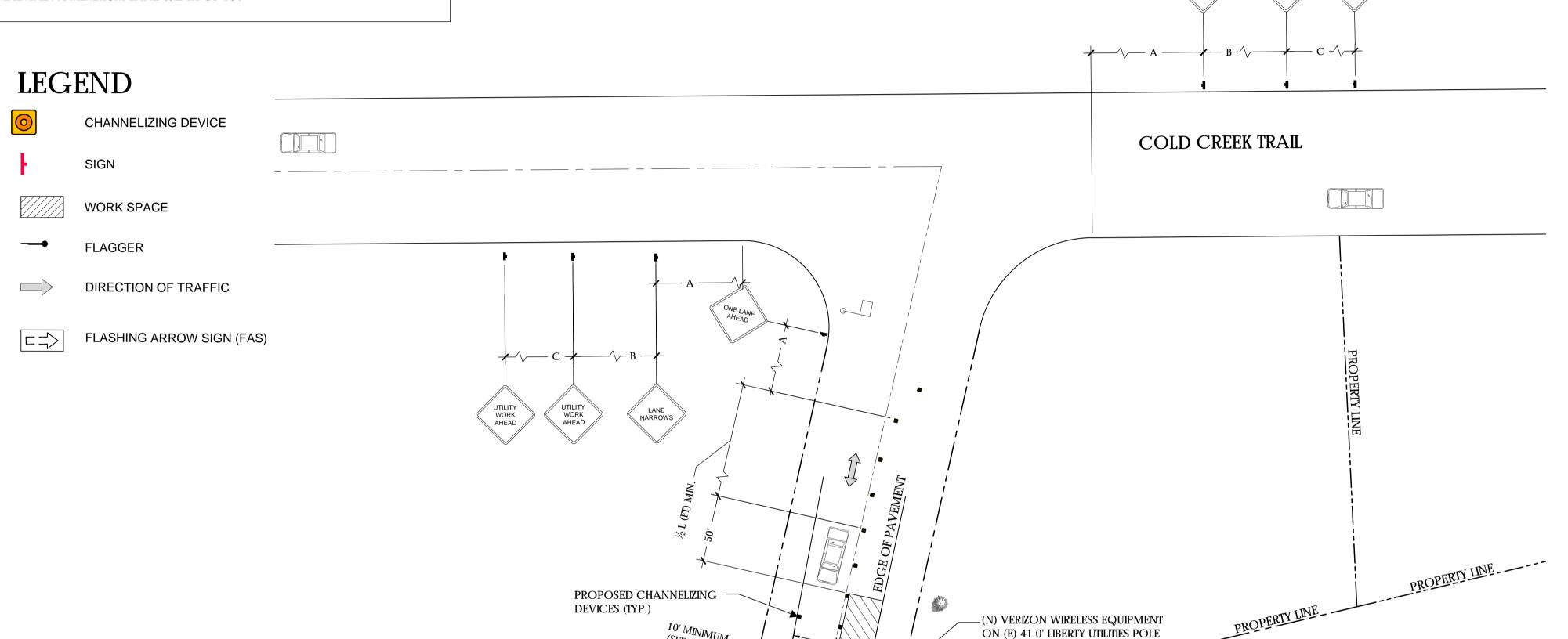
SINGLE LINE DIAGRAM BUSS DIAGRAM PANEL SCHEDULE

Sheet Title:



PLAN NOTES:

- 1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY VEHICULAR TRAFFIC CONTROL PLANS (TCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TCP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
- 2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
- 3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING. DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION. NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
- 4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
- 5. MAINTAIN A MINIMUM LANE WIDTH OF 10'.



(E) CULVERT—

COPPER WAY

| | | | TABLE 1 | | | | |
|--------------------------|------|------------------------------|---------|--------------|------|-------|--------|
| POSTED SPEED (MPH) | | DISTANCE BETWEEN SIGNS | | BETWEEN | | TAPER | BUFFER |
| | А | В | С | L (SEE NOTE) | | | |
| 15 | 100' | 100' | 100' | 45' | 100' | | |
| 20 | 100' | 100' | 100' | 80' | 115' | | |
| 25 | 100' | 100' | 100' | 125' | 155' | | |
| 30 | 200' | 200' | 200' | 180' | 200' | | |
| 35 | 200' | 200' | 200' | 245' | 250' | | |
| 40 | 350' | 350' | 350' | 320' | 305' | | |
| 45 | 350' | 350' | 350' | 540' | 360' | | |
| 50 | 500' | 500' | 500' | 600' | 425' | | |
| 55 | 500' | 500' | 500' | 660' | 495' | | |
| 0.0 | | | | 700' | , | | |

FLAGGER

DOT NOTES:

1. WHEN LANE CLOSURE IS REQUIRED, THE TRAFFIC CONTROL PLAN SHOULD BE

PROVIDED AND NOTARIZED BY AN INDIVIDUAL/COMPANY THAT HAS

2. "BLUE-LIGHTS" (OFF-DUTY POLICE OFFICERS) WILL BE ON SITE FOR LANE

FLAGGER CONTROL TRAINING CERTIFICATION.

CLOSURES AND IF REQUIRED.

A) DISTANCES IN FEET UNLESS OTHERWISE NOTED.

B) CONTRACTOR TO VERIFY EXISTING SPEED LIMIT.

500' 500' 500'

65 | 500' | 500' | 500'

NOTES:

C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HIGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES.

D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE NOTE 1, SHEET TC-2.

E) TAPER LENGTHS SHOWN BASED ON 12' LANE WIDTH.



Verizon Wireless 2785 Mitchell Drive, Suite 9 Walnut Creek, CA 94598

Client:



Project Architect:



222 W. LOCKEFORD STREET SUITE 9 LODI, CA 95240

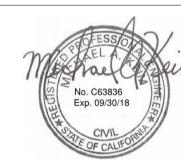
Site Agent:

100% Construction
Drawings
(E) LIGHT POLE
Drawing Phase:

SC SOUTH LAKE TAHOE 060

PROW COPPER WAY
(NEAR) 2611 COPPER WAY
SOUTH LAKE TAHOE, CA 96150
PSL #471233

Site Name:



Professional Seal:

It is a violation of law for any person, unless they are acting under the direction of a licensed Professional Architect/Engineer, to alter this document.

| Rev. | Date | Description |
|------|----------|-------------------|
| 01 | 03/27/18 | Constr. Dwgs 90% |
| 02 | 04/03/18 | Constr. Dwgs 100% |
| | | |
| | | |
| | | |
| | | |

Project No.:

Date: 04/03/18 Job No.:

Scale: AS SHOWN CAD File:

Designed By: JG Checked: RB

VEHICLE TRAFFIC CONTROL PLAN

Sheet Title:

TC.1

© Meridian Management LLC, 2018

NORTH

570'

645'

20' 10' 0 10' 20' SCALE 1" = 20'

720'

780'

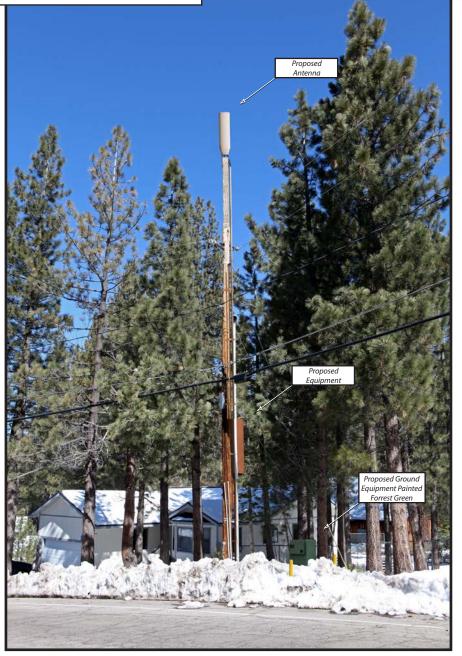
Existing

verizon

SC South Lake Tahoe 075 (NEAR) HIGH MEADOW TRAIL, SOUTH LAKE TAHOE, CA Photosims Produced on 4-5-2018

Proposed









verizon

AdvanceSime Photo Simulation Solutions Contact (925) 202-8507 SC South Lake Tahoe 075

(NEAR) HIGH MEADOW TRAIL, SOUTH LAKE TAHOE, CA

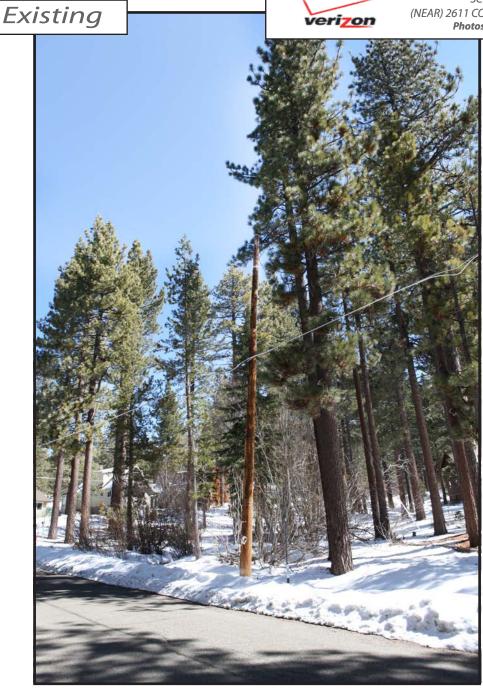
Photosims Produced on 4-5-2018

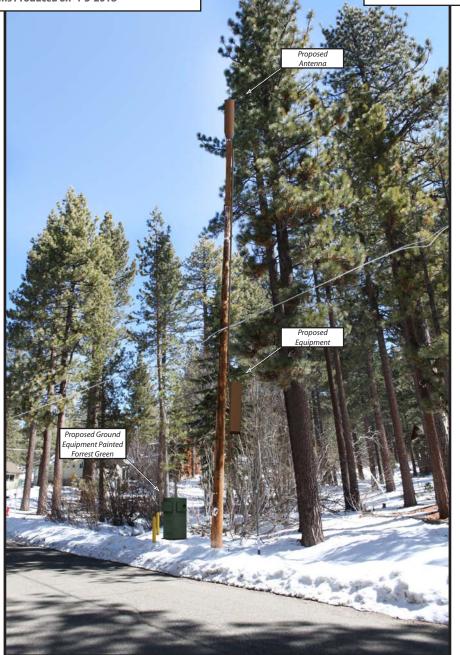
view from Copper Way looking southwest at site



SC South Lake Tahoe 060 (NEAR) 2611 COPPER WAY, SOUTH LAKE TAHOE, CA Photosims Produced on 4-3-2018

Proposed











veri<u>zon</u>

Advance Simple Photo Simulation Solutions Contact (925) 202-8507

SC South Lake Tahoe 060 (NEAR) 2611 COPPER WAY, SOUTH LAKE TAHOE, CA Photosims Produced on 4-3-2018

Verizon Wireless • Proposed Small Cell (No. 481972 "SC South Lake Tahoe 075") High Meadow Trail • South Lake Tahoe, California ANNING DEPARTMENT

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate its small cell (No. 481972 "SC South Lake Tahoe 075") proposed to be sited in South Lake Tahoe, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

Executive Summary

Verizon proposes to install a cylindrical antenna on a utility pole sited in the public right-of-way near the intersection of High Meadow Trail and Pepperwood Trail in South Lake Tahoe. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

Prevailing Exposure Standard

The U.S. Congress requires that the Federal Communications Commission ("FCC") evaluate its actions for possible significant impact on the environment. A summary of the FCC's human exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. The FCC limit for exposures of unlimited duration to radio frequency energy for various wireless services are as follows:

| Wireless Service | Frequency Band | Occupational Limit | Public Limit |
|------------------------------------|----------------|------------------------|------------------------|
| Microwave (Point-to-Point) | 5-80 GHz | 5.00 mW/cm^2 | 1.00 mW/cm^2 |
| WiFi (and unlicensed uses) | 2–6 | 5.00 | 1.00 |
| BRS (Broadband Radio) | 2,600 MHz | 5.00 | 1.00 |
| WCS (Wireless Communication) | 2,300 | 5.00 | 1.00 |
| AWS (Advanced Wireless) | 2,100 | 5.00 | 1.00 |
| PCS (Personal Communication) | 1,950 | 5.00 | 1.00 |
| Cellular | 870 | 2.90 | 0.58 |
| SMR (Specialized Mobile Radio) | 855 | 2.85 | 0.57 |
| 700 MHz | 700 | 2.40 | 0.48 |
| [most restrictive frequency range] | 30-300 | 1.00 | 0.20 |

Power line frequencies (60 Hz) are well below the applicable range of this standard, and there is considered to be no compounding effect from simultaneous exposure to power line and radio frequency fields.

General Facility Requirements

Small cells typically consist of two distinct parts: the electronic transceivers (also called "radios") that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are



Z6WC Page 1 of 4

Verizon Wireless • Proposed Small Cell (No. 481972 "SC South Lake Tahoe 075") High Meadow Trail • South Lake Tahoe, California

typically mounted on the support pole or placed in a cabinet at ground level, and they are connected to the antennas by coaxial cables. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. This means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation," dated August 1997. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna's radiation pattern is not fully formed at locations very close by (the "near-field" effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

Site and Facility Description

Based upon information provided by Verizon, including drawings by Meridian Management LLC, dated March 26, 2018, it is proposed to install one Amphenol Model CUUT360X12F 4-foot tall, omnidirectional cylindrical antenna on an extension above the top of the existing utility pole sited in the public right-of-way on the north side of High Meadow Trail, near its intersection with Pepperwood Trail in South Lake Tahoe. The antenna would employ no downtilt and would be mounted at an effective height of about 48½ feet above ground. The maximum effective radiated power in any direction would be 2,240 watts, representing simultaneous operation at 840 watts for AWS, 750 watts for PCS, 340 watts for cellular, and 310 watts for 700 MHz service. There are reported no other wireless base stations at the site or nearby.

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.010 mW/cm², which is 1.3% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby building is 1.4% of the public exposure limit. It should be noted that these results include several "worst-case" assumptions and therefore are expected to overstate actual power density levels from the proposed operation.



Verizon Wireless • Proposed Small Cell (No. 481972 "SC South Lake Tahoe 075") High Meadow Trail • South Lake Tahoe, California

Recommended Mitigation Measures

Due to its mounting location and height, the antenna would not be accessible to unauthorized persons, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, it is recommended that appropriate RF safety training, to include review of personal monitor use, be provided to all authorized personnel who have access to the antenna. No access within 7 feet at the same height as the antenna, such as might occur during certain maintenance activities at the top of the pole, should be allowed while the small cell is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. It is recommended that an explanatory sign* be posted at the antenna and/or on the pole below the antenna, readily visible from any angle of approach to persons who might need to work within that distance.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that operation of the small cell proposed by Verizon Wireless near the intersection of High Meadow Trail and Pepperwood Trail in South Lake Tahoe, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating small cells. Training authorized personnel and posting explanatory signs are recommended to establish compliance with occupational exposure limits.

^{*} Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (e.g., a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required. Signage may also need to comply with the requirements of California Public Utilities Commission General Order No. 95.



Verizon Wireless • Proposed Small Cell (No. 481972 "SC South Lake Tahoe 075") High Meadow Trail • South Lake Tahoe, California

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration No. E-18063, which expires on June 30, 2019. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

No. E-18063 Exp. 6-30-2019

Rajat Mathur, P.E. 707/996-5200

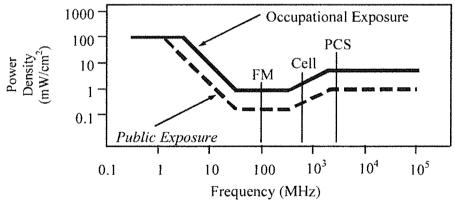
April 5, 2018

FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

| Frequency | _Electro | emission in | emission in MHz) | | | | |
|------------------------------|-----------------|-------------------------------------|------------------|-------------------------------------|--------------------|--|--|
| Applicable Range (MHz) | Field S | Electric Field Strength (V/m) | | Magnetic Field Strength (A/m) | | Equivalent Far-Field Power Density (mW/cm ²) | |
| 0.3 - 1.34 | 614 | 614 | 1.63 | 1.63 | 100 | 100 | |
| 1.34 - 3.0 | 614 | 823.8/f | 1.63 | 2.19/f | 100 | 180/f³ | |
| 3.0 - 30 | 1842/ f | 823.8/f | 4.89/ f | 2.19/f | 900/f ² | $180/f^2$ | |
| 30 - 300 | 61.4 | 27.5 | 0.163 | 0.0729 | 1.0 | 0.2 | |
| 300 - 1,500 | 3.54 √ f | 1.59√f | √ r/106 | $\sqrt{f/238}$ | f/300 | f/1500 | |
| 1,500 - 100,000 | 137 | 61.4 | 0.364 | 0.163 | 5.0 | 1.0 | |



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



RFR.CALC[™] Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density $S = \frac{180}{\Box B_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$, in mW/cm²,

and for an aperture antenna, maximum power density $S_{max} = \frac{0.1 \times 16 \times \cancel{\square} \times P_{net}}{\pi \times h^2}$, in mW/cm²,

where \square_{BW} = half-power beamwidth of the antenna, in degrees, and

 P_{net} = net power input to the antenna, in watts,

D = distance from antenna, in meters,

h = aperture height of the antenna, in meters, and

 η = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density
$$S = \frac{2.56 \square 1.64 \square 100 \square RFF^2 \square ERP}{4 \square \pi \square D^2}$$
, in mW/cm²,

where ERP = total ERP (all polarizations), in kilowatts,

RFF = relative field factor at the direction to the actual point of calculation, and

D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 ($1.6 \times 1.6 = 2.56$). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.

Verizon Wireless • Proposed Small Cell (No. 471233 "SC South Lake 2611 Copper Way • South Lake Tahoe, California

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate its small cell (No. 471233 "SC South Lake Tahoe 060") proposed to be sited in South Lake Tahoe, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

Executive Summary

Verizon proposes to install a cylindrical antenna on a utility pole sited in the public right-of-way near 2611 Copper Way in South Lake Tahoe. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

Prevailing Exposure Standard

The U.S. Congress requires that the Federal Communications Commission ("FCC") evaluate its actions for possible significant impact on the environment. A summary of the FCC's human exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. The FCC limit for exposures of unlimited duration to radio frequency energy for various wireless services are as follows:

| Wireless Service | Frequency Band | Occupational Limit | Public Limit |
|------------------------------------|----------------|------------------------|------------------------|
| Microwave (Point-to-Point) | 5-80 GHz | 5.00 mW/cm^2 | 1.00 mW/cm^2 |
| WiFi (and unlicensed uses) | 2–6 | 5.00 | 1.00 |
| BRS (Broadband Radio) | 2,600 MHz | 5.00 | 1.00 |
| WCS (Wireless Communication) | 2,300 | 5.00 | 1.00 |
| AWS (Advanced Wireless) | 2,100 | 5.00 | 1.00 |
| PCS (Personal Communication) | 1,950 | 5.00 | 1.00 |
| Cellular | 870 | 2.90 | 0.58 |
| SMR (Specialized Mobile Radio) | 855 | 2.85 | 0.57 |
| 700 MHz | 700 | 2.40 | 0.48 |
| [most restrictive frequency range] | 30–300 | 1.00 | 0.20 |

Power line frequencies (60 Hz) are well below the applicable range of this standard, and there is considered to be no compounding effect from simultaneous exposure to power line and radio frequency fields.

General Facility Requirements

Small cells typically consist of two distinct parts: the electronic transceivers (also called "radios") that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are typically mounted on the support pole or placed in a cabinet at ground level, and they are connected to



Verizon Wireless • Proposed Small Cell (No. 471233 "SC South Lake Tahoe 060") 2611 Copper Way • South Lake Tahoe, California

the antennas by coaxial cables. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. This means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation," dated August 1997. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna's radiation pattern is not fully formed at locations very close by (the "near-field" effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

Site and Facility Description

Based upon information provided by Verizon, including drawings by Meridian Management LLC, dated March 27, 2018, it is proposed to install one Amphenol Model CUUT360X12F 4-foot tall, omnidirectional cylindrical antenna on an extension above the top of the existing utility pole sited in the public right-of-way on the east side of Copper Way, about 100 feet south of Cold Creek Trail in South Lake Tahoe. The antenna would employ no downtilt and would be mounted at an effective height of about 51½ feet above ground. The maximum effective radiated power in any direction would be 2,240 watts, representing simultaneous operation at 840 watts for AWS, 750 watts for PCS, 340 watts for cellular, and 310 watts for 700 MHz service. There are reported no other wireless base stations at the site or nearby.

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.0029 mW/cm², which is 0.54% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby building is 0.49% of the public exposure limit. It should be noted that these results include several "worst-case" assumptions and therefore are expected to overstate actual power density levels from the proposed operation.

Verizon Wireless • Proposed Small Cell (No. 471233 "SC South Lake Tahoe 060") 2611 Copper Way • South Lake Tahoe, California

Recommended Mitigation Measures

Due to its mounting location and height, the antenna would not be accessible to unauthorized persons, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, it is recommended that appropriate RF safety training, to include review of personal monitor use, be provided to all authorized personnel who have access to the antenna. No access within 7 feet at the same height as the antenna, such as might occur during certain maintenance activities at the top of the pole, should be allowed while the small cell is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. It is recommended that an explanatory sign* be posted at the antenna and/or on the pole below the antenna, readily visible from any angle of approach to persons who might need to work within that distance.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that operation of the small cell proposed by Verizon Wireless near 2611 Copper Way in South Lake Tahoe, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating small cells. Training authorized personnel and posting explanatory signs are recommended to establish compliance with occupational exposure limits.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration No. E-18063, which expires on June 30, 2019. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

Rajat Mathur, P.E.

707/996-5200

No. E-18063 Exp. 6-30-2019

April 5, 2018

* Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (e.g., a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required. Signage may also need to comply with the requirements of California Public Utilities Commission General Order No. 95.

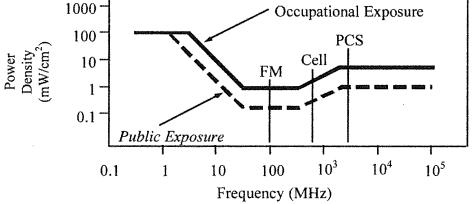


FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

| Frequency | Electro | magnetic Fields (f is frequency of emission in MHz) Magnetic Equivalent Far-Field Strength Power Density (A/m) (mW/cm²) | | | | |
|------------------------------|-------------------------------------|---|---------|----------------|---------------------|-----------|
| Applicable Range (MHz) | Electric Field Strength (V/m) | | | Power Density | | |
| 0.3 - 1.34 | 614 | 614 | 1.63 | 1.63 | 100 | 100 |
| 1.34 - 3.0 | 614 | 823.8/f | 1.63 | 2.19/f | 100 | $180/f^2$ |
| 3.0 - 30 | 1842/ f | 823.8/f | 4.89/ f | 2.19/f | 900/ f ² | 180/f² |
| 30 - 300 | 61.4 | 27.5 | 0.163 | 0.0729 | 1.0 | 0.2 |
| 300 - 1,500 | 3.54 √ f | 1.59 √ f | √f/106 | $\sqrt{f}/238$ | f/300 | f/1500 |
| 1,500 - 100,000 | 137 | 61.4 | 0.364 | 0.163 | 5.0 | 1.0 |



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



HAMMETT & EDISON, INC. CONSULTING ENGINEERS

SAN FRANCISCO

RFR.CALC[™] Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$, in mW/cm²,

and for an aperture antenna, maximum power density $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$, in mW/cm²,

where θ_{BW} = half-power beamwidth of the antenna, in degrees, and

 P_{net} = net power input to the antenna, in watts,

D = distance from antenna, in meters,

h = aperture height of the antenna, in meters, and

 η = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density
$$S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$$
, in mW/cm²,

where ERP = total ERP (all polarizations), in kilowatts,

RFF = relative field factor at the direction to the actual point of calculation, and

D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 ($1.6 \times 1.6 = 2.56$). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.

