

NOTES:

- I. REQUEST TO ATTACH TO TRANSMISSION STRUCTURE. A REQUEST TO ATTACH FORM MUST BE SUBMITTED TO TRANSMISSION ENGINEERING IF WEATHER STATION IS TO BE ATTACHED TO A TRANSMISSION STRUCTURE. CONTACT SDG&E TRANSMISSION ENGINEERING FOR MORE INFORMATION.
- II. VARIOUS SITES MAY BE BUILT ACCORDING TO REQUIREMENTS OF DEVICES LISTED BELOW.
- III. CONTACT PROJECT MANAGER BEFORE DESIGN BEGINS TO DETERMINE COMMUNICATIONS REQUIREMENT.
- IV. INSTALL FIBERGLASS ARM IF NEW CONSTRUCTION.
- V. METEOROLOGY AND KEARNY SCADA TEAM **MUST BE** CONTACTED IN PLANNING PHASE AND RECEIVE **ADVANCE NOTICE** WHEN **ANY** WORK IS SCHEDULED.
 - a. SDGE METEOROLOGY SDGEMETEOROLOGY@SEMPRAUTILITIES.COM
 - b. KEARNY - LINE SCADA KEARNY-LINESCAD@SEMPRAUTILITIES.COM
- VI. WHENEVER POSSIBLE, WEATHER STATIONS SHALL NOT BE REMOVED WITHOUT FIRST CONSULTING WITH THE ABOVE TWO GROUPS.
- X. THIS ITEM IS EXEMPT.

DEFINITIONS:

- **ANEMOMETER:** AN INSTRUMENT FOR MEASURING AND INDICATING THE FORCE OR SPEED AND SOMETIMES DIRECTION OF THE WIND.
- **PYRANOMETER:** AN INSTRUMENT FOR MEASURING RADIATION FROM THE SKY BY COMPARING THE HEATING EFFECT OF SUCH RADIATION UPON TWO BLACKENED METALLIC STRIPS WITH THAT PRODUCED IN THE SAME STRIPS WHEN HEATED BY MEANS OF AN ELECTRIC CURRENT.
- **OMNIDIRECTIONAL ANTENNA:** BEING IN OR INVOLVING ALL DIRECTIONS; ESPECIALLY : RECEIVING OR SENDING RADIO WAVES EQUALLY WELL IN ALL DIRECTIONS.
- **YAGI ANTENNA:** A HIGHLY DIRECTIONAL AND SELECTIVE SHORTWAVE ANTENNA.
- **WEATHER STATION:** A STATION FOR TAKING, RECORDING, AND REPORTING METEOROLOGICAL OBSERVATIONS.

REFERENCE:

- a. ALLOWABLE WORKING AND CLIMBING SPACE - SEE STANDARD 251.
- b. WOOD/STEEL POLE GROUNDING METHODS - SEE STANDARD 1002.
- c. RISER POSITION - SEE STANDARD 1402/4206.
- d. COMMUNICATION ANTENNA ATTACHMENTS MUST COMPLY WITH THE CPUC G.O. 95 AND 128 PUBLICATIONS RULES.

| REV | CHANGE | DRWN | BY | CHKD | APVD | DATE |
|-----|----------------------|------|-----|------|------|------------|
| E | REVISED TO 3D FORMAT | NV5 | JKI | GLW | KRG | 08/16/2022 |
| D | EDITORIAL CHANGES | EDM | JKI | JES | CZH | 03/05/2020 |
| C | TABLE UPDATE | - | JAC | JES | CZH | 11/12/2019 |



SDG&E ELECTRIC OVERHEAD AND UNDERGROUND CONSTRUCTION STANDARDS

SCALE: NOT TO SCALE

WEATHER MONITORING SYSTEM

| | |
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| DRAWING NO: | SHEET: |
| OH576.2 | 2 OF 2 |
| UG4651.2 | |

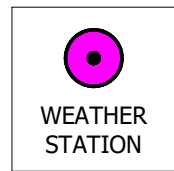
SCOPE: THIS STANDARD SHOWS THE INSTALLATION OF A WEATHER MONITORING SYSTEM WITH VARIOUS CONFIGURATION OF POWER SOURCE AND EQUIPMENT MOUNTING ON POLE.

INSTALLATION:

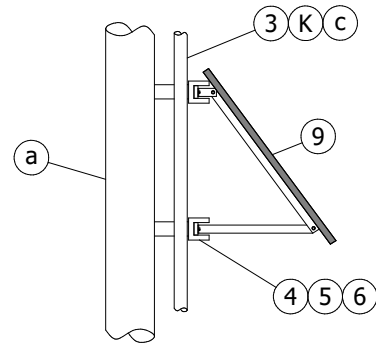
- A. DO NOT INSTALL A TELECOMMUNICATION ANTENNA ON A POLE CONTAINING A THREE-PHASE TRANSFORMER, BOOSTER, SERVICE RESTORER, CAPACITOR, REGULATOR, PRIMARY METERING, HOOKSTICK OR GANG-OPERATED SWITCH, CUTOUPS OR PRIMARY RISERS.
- B. A MINIMUM SIX FEET OF VERTICAL AND RADIAL CLEARANCE MUST BE MAINTAINED FROM THE TELECOMMUNICATIONS ANTENNAS OR SUPPORTING EQUIPMENT TO ANY SDG&E SUPPLY CONDUCTOR LEVEL.
- C. ANTENNAS AND SUPPORTING ELEMENTS SHALL MAINTAIN A MINIMUM 24 INCHES OF VERTICAL SEPARATION FROM COMMUNICATION CONDUCTORS AND EQUIPMENT.
- D. ANTENNAS SHALL MAINTAIN 24 INCHES HORIZONTAL CLEARANCE FROM THE CENTERLINE OF POLE.
- E. ANTENNAS SHALL MAINTAIN 36 INCHES VERTICAL AND RADIAL CLEARANCE FROM STREET LIGHTS AND MAST ARMS.
- F. THIS INSTALLATION MUST BE CLEARLY MARKED WITH THE APPROPRIATE SIGNAGE, PER FCC, CPUC AND UTILITY REGULATIONS. SIGNAGE TO BE INSTALLED AND MAINTAINED BY THE TELECOMMUNICATION ANTENNA OWNER. SEE STANDARD 209.
- G. THESE ITEMS SUPPLIED AND INSTALLED BY KEARNY SCADA TEAM.
- H. WEATHER STATION CELLULAR COMMUNICATION ENCLOSURE AND SCADA RADIO/BATTERY ENCLOSURE.
- J. CABINET TO BE MOUNTED AT TEN FEET FROM GROUND LEVEL TO BOTTOM OF CABINET WHEN NOT SUBJECT TO TRAFFIC CONTACT. IF VULNERABLE TO VEHICLE DAMAGE, MOUNT CABINET AT 13'-6" FROM GROUND LEVEL TO BOTTOM OF CABINET. CONSIDER LARGE VEHICLES PARKING PARALLEL TO CURB.
- K. CABINET PLACEMENT, LADDER ARMS AND CONDUIT ROUTING MUST BE SOUTH FACING FOR SOLAR PANELS.
- L. EQUIPMENT CROSSARM ORIENTATION SHOULD BE PLACED IN WEST-EAST, REGARDLESS OF LINE ARM ORIENTATION, FOR ANEMOMETER.

BILL OF MATERIALS:

| ITEM | DESCRIPTION | QUANTITY | STANDARD PAGE | STOCK NUMBER | DESIGN UNIT |
|------|---------------------------------------|----------|---------------|--------------|-------------|
| 1 | CROSSARM, 15' TANGENT FIBERGLASS | AS REQ'D | 379.09 | S294370 | 6LTF |
| 2 | YAGI ANTENNA, BROADBAND | 1 | - | S109570 | ANT |
| 3 | RISER CONSTRUCTION | AS REQ'D | 1404/4204 | - | - |
| 4 | BRACKET, LADDER ARM | AS REQ'D | 1404/4204 | S167186 (X) | LARM |
| 5 | CHANNEL, DOUBLE, GALVANIZED, 24" | AS REQ'D | 1404/4204 | S216702 (X) | - |
| 6 | NUT, CLAMPING CHANNEL, W/SPRING 1/2" | AS REQ'D | 1404/4204 | (G) | - |
| 7 | BLIND NUT, 1/2" | AS REQ'D | 1002 | S503460 (X) | - |
| 8 | OMNI ANTENNA | AS REQ'D | - | - | - |
| 9 | 70 WATT SOLAR PANELS | AS REQ'D | - | S520220 (G) | - |
| 10 | SOLAR CABINET ENCLOSURE | 1 | - | S190410 (G) | - |
| 11 | COMMUNICATION 14 X 16 ENCLOSURE | 2 | - | (G) | - |
| 12 | TAG, OWNERSHIP I.D. | - | - | (F) | CR-OWN |
| 13 | POWER SUPPLY 14 X 16 ENCLOSURE | AS REQ'D | - | (G) | - |
| 14 | WIND MONITOR (ANEMOMETER) | AS REQ'D | - | (G) | - |
| 15 | TEMPERATURE & RELATIVE HUMIDITY GAUGE | AS REQ'D | - | (G) | - |
| 16 | SERVICE POST CONNECTOR | AS REQ'D | 1002 | S262560 | - |
| 17 | PYRANOMETER | AS REQ'D | - | (G) | - |



MAP SYMBOL



DETAIL 1
SOLAR PANEL ATTACHMENT SIDE VIEW

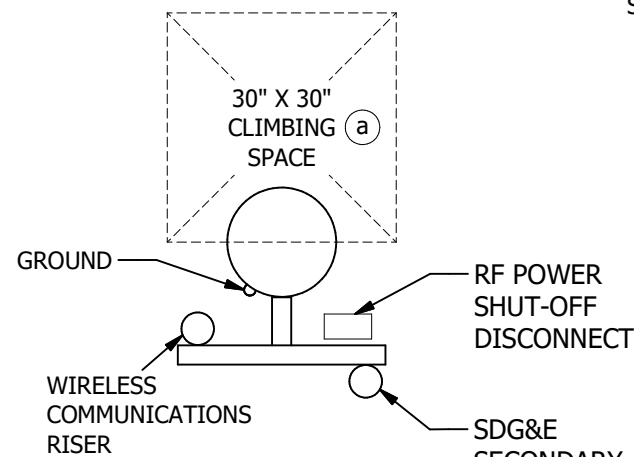


FIGURE 2
PLAN VIEW

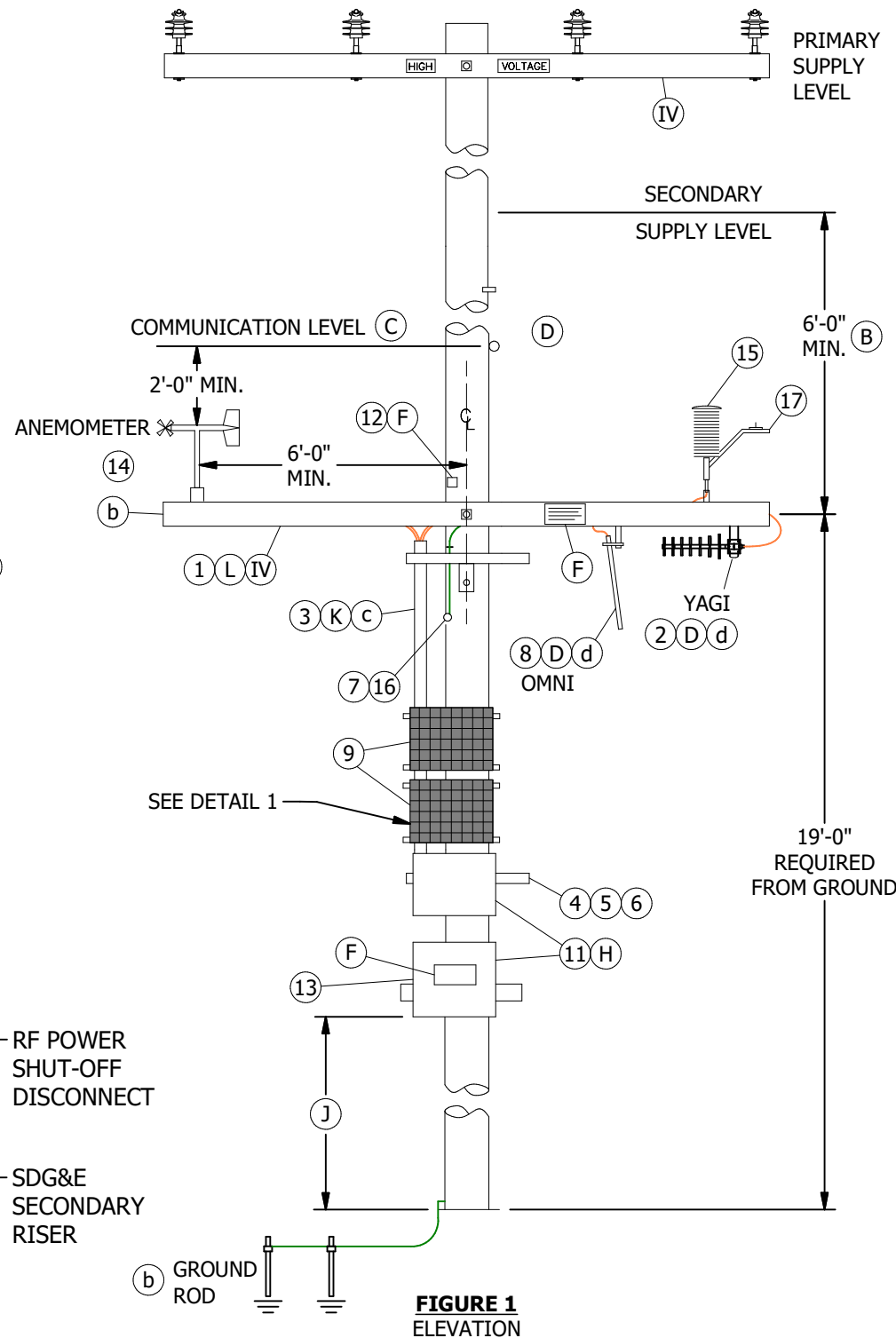


FIGURE 1
ELEVATION

| REV | CHANGE | DRWN | BY | CHKD | APVD | DATE |
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