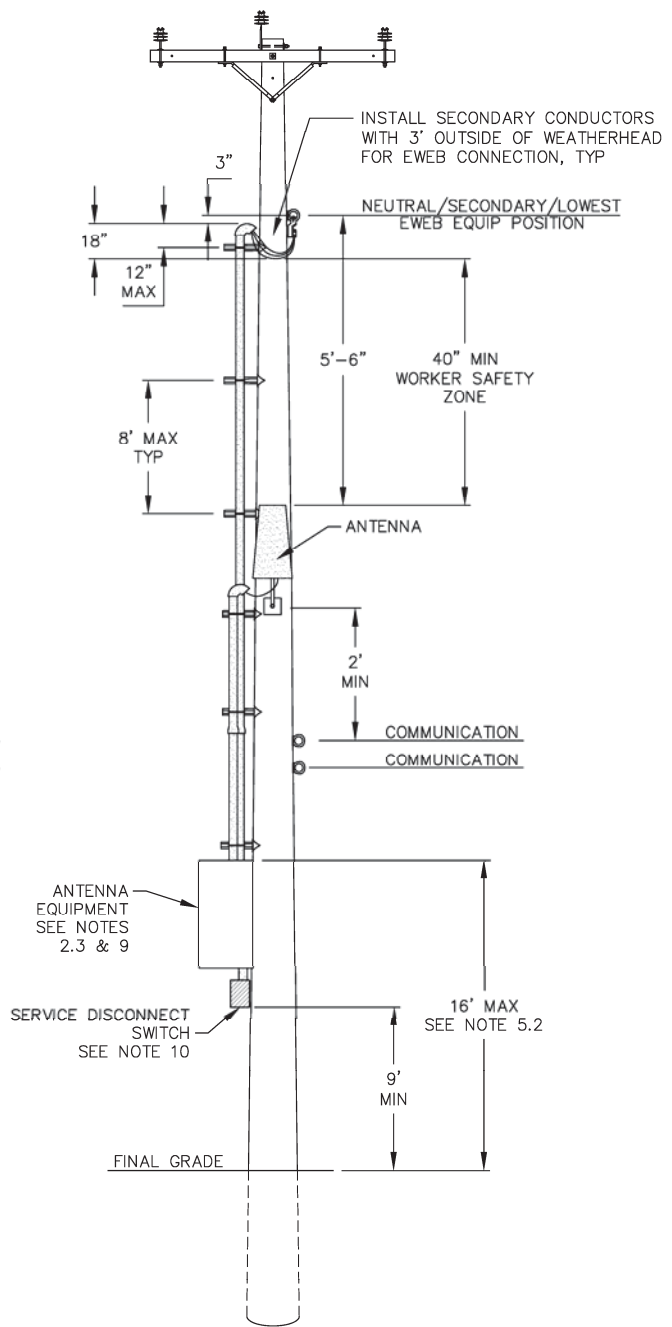


FACE OF SECONDARY OR GUY STUB
WOOD POLE, 45 FT, MIN

ANTENNA INSTALLED AT THE TOP OF
SECONDARY OR GUY STUB POLE



FACE OF PRIMARY
WOOD POLE

ANTENNA INSTALLED IN
COMMUNICATIONS SPACE

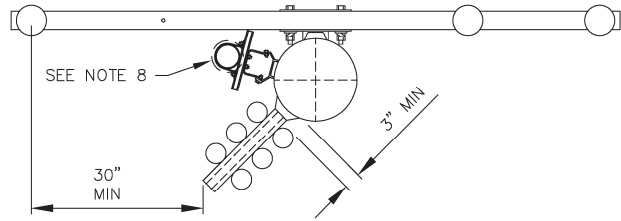
DISTRIBUTION CUSTOMER RESPONSIBILITIES STANDARD
EUGENE WATER & ELECTRIC BOARD - EUGENE, OREGON

COMMUNICATION ANTENNA INSTALLATION GUIDELINES

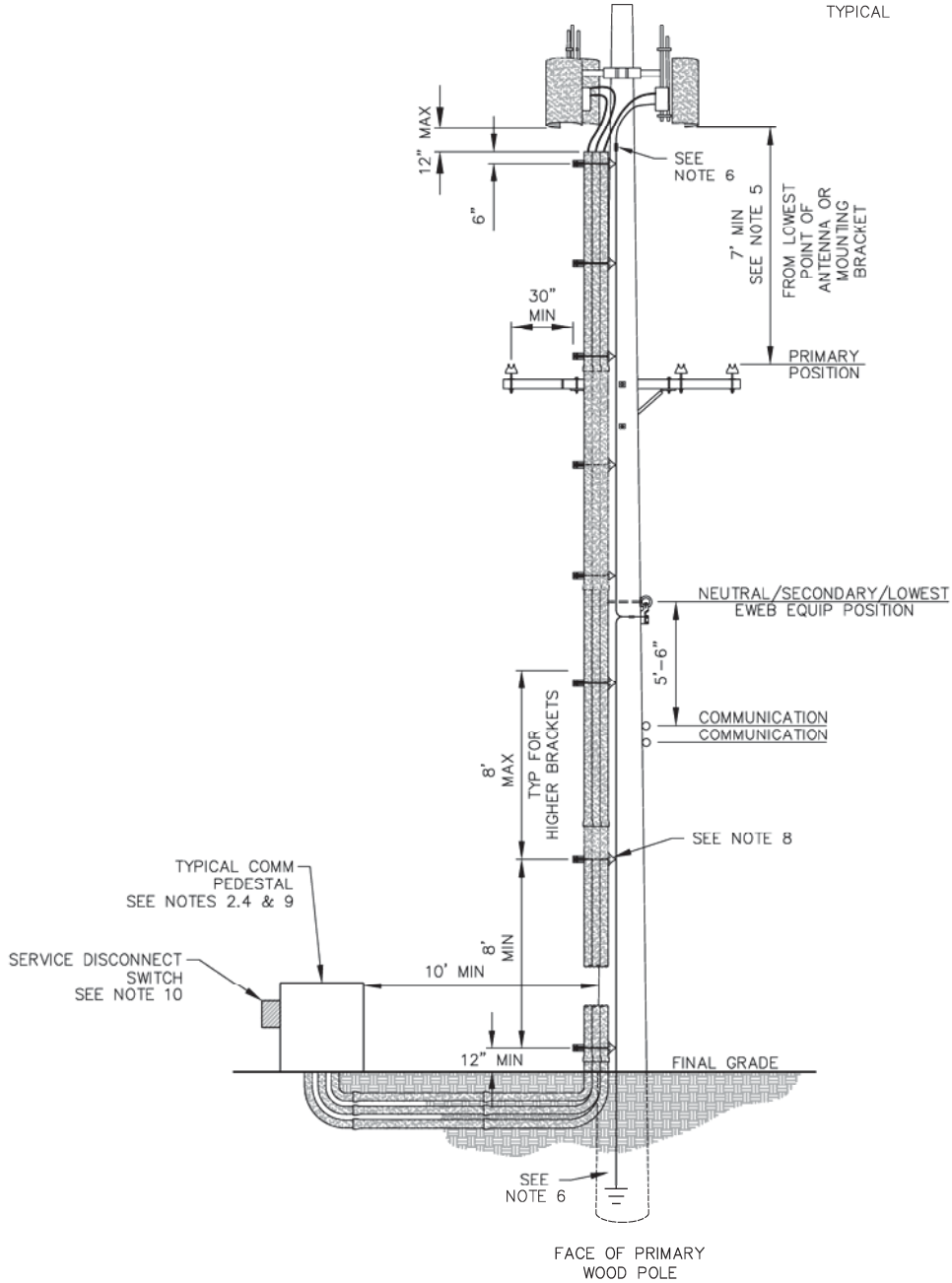
Approved Feb 10, 2020

EC4-A.8000

**REV
7**



SECTION DETAIL
TYPICAL



ANTENNA INSTALLED AT THE TOP
OF PRIMARY POLE

DISTRIBUTION CUSTOMER RESPONSIBILITIES STANDARD
EUGENE WATER & ELECTRIC BOARD - EUGENE, OREGON

COMMUNICATION ANTENNA INSTALLATION GUIDELINES

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**REV
7**

1.0 SCOPE

- 1.1 This standard contains the requirements for typical communication antenna installations on EWEB owned poles.
- 1.2 **Locations of all equipment will be determined for each specific site and finalized at the mandatory preconstruction meeting.**

2.0 GENERAL REQUIREMENTS AND INFORMATION

- 2.1 Only one communication applicant's antenna is allowed on any EWEB owned pole.
- 2.2 EWEB poles that may be considered for installation of a communications antenna shall meet the following requirements:
 - 2.2a Shall be located in the public right of way, not in a public utility easement.
 - 2.2b Shall be truck accessible.
 - 2.2c Shall not support transmission conductors.
 - 2.2d Shall not support more than one level of primary conductors, including corner pole with a single primary circuit and two sets of crossarms.
 - 2.2e Shall not support any equipment other than one single phase 7.2 kV primary transformer. Excluded equipment includes, but not limited to a three phase transformer, a bank of more than one single phase transformer, reclosure, capacitors, and switches.
- 2.3 Communication equipment associated with the antenna may be mounted in the communications space on the pole provided it does not require an electric revenue meter, weighs no more than 550 lbs., and does not overload the pole nor impede the pole climbing space.
- 2.4 When communications equipment is mounted on the ground, equipment shall be placed no closer than that shown to any EWEB pole and be situated so as not to interfere with down guys and anchors.
- 2.5 All work performed by EWEB to accommodate applicant, will be at the applicant's expense.
- 2.6 It is the responsibility of the communication applicant to give prior notification to property and business owners and residents in the area who will be affected by the installation. It is the sole responsibility of the applicant to resolve any and all complaints resulting from the installation including complaints relative to the increased pole height, impaired view or visibility issues.

3.0 APPLICATION TO EWEB

- 3.1 **EWEB Cell Site Lease of Modification Application** shall be requested and submitted through EWEB's Joint Use Coordinator, EWEB's contact for all communication/Joint Use inquiries.
- 3.2 Application for new electric service is required and shall be requested through EWEB's Building and Renovation Department.

4.0 CODES AND PERMITS

- 4.1 Installations must meet EWEB's requirements included in this standard, EWEB's Policy and Procedures and all applicable EWEB construction standards.
- 4.2 Communication applicant is responsible to ensure all applicable permits are obtained, local, county, state and federal regulations are followed, and all zoning codes, applicable land use codes, environmental permits and pertinent City ordinances are met.
- 4.3 Communication antenna installation and electrical services associated with installation shall comply with all applicable requirements of the latest Edition of the National Electrical Safety Code (NESC) and National Electrical Code (NEC).

5.0 CLEARANCES

- 5.1 Antennas and associated equipment shall be installed to provide the minimum clearances shown from other equipment and conductors. All pertinent OSHA rules and regulations shall be adhered to while communication workers are working on or around EWEB facilities.
- 5.2 The clearance of the antenna equipment above ground shown assumes it is not mounted over a roadway and subject to vehicle traffic. If space below the antenna equipment enclosure is subject to vehicle traffic, and cannot be mounted on the side of the pole opposite to the vehicle traffic, bottom of enclosure shall be 15 ft, minimum above grade and top of enclosure shall be 19 ft, max above grade. Coordinate with EWEB for mounting location of equipment above a roadway.
- 5.3 All new antenna installations shall meet the minimum clearances shown. For maintenance activities on certain existing antenna installations deemed acceptable by EWEB the clearance from the bottom of the antenna to the top of the primary conductor for antennas mounted above EWEB's primary conductors may be reduced to 5 ft.

6.0 BONDING AND GROUNDING

- 6.1 All metallic parts of the installation on pole shall be bonded together and bonded to the pole ground. All pole grounds shall be bonded to the EWEB pole ground where present.

7.0 CLIMBING SPACE

- 7.1 Climbing space shall be established and maintained from the ground line to the bottom of the communication antenna base in accordance with NESC Section 236 and EWEB standard EC4-0.3800.

8.0 CONDUIT RISERS

8.1 Wood Distribution Poles:

8.1a Maximum size and number of conduits installed on an EWEB wood distribution pole is **(6) - 4" conduits** or an approved combination. Communication antenna conduits shall be installed on aluminum or galvanized steel brackets, with a maximum bracket length of 24". All bracket mounting hardware shall be galvanized steel. Conduit brackets shall be installed on a quadrant of the pole determined by EWEB and finalized at the preconstruction meeting.

8.1b The EWEB electric service conduit may be supported from applicant's communication antenna conduit pole dip brackets. If necessary, separate conduit brackets may be installed to support the EWEB service conduit provided pole climbing space is maintained.

8.1c Communication conduits shall be Schedule 40 or 80 PVC, colored gray with bell end, and meet requirements of UL 651 and NEMA TC 2.

8.2 Communication applicant's installed substructure or trenching to an EWEB electric facility (i.e. electric service pole dip substructure, transformer or secondary box) will require inspection by EWEB. Electric substructure and trenching installations must have EWEB inspector's approval prior to backfilling.

8.3 It is the communication applicant's responsibility when installing electric substructure facilities to ensure full compliance with the permitting authority's Standards of Construction requirements, i.e. City of Eugene - Public Improvement Design Standards and Utility of Right of Way permit, Construction within & use of the Public Way or Oregon Department of Transportation (ODOT) – Oregon Standard Construction Drawings.

9.0 IDENTIFICATION AND DAMAGE NOTIFICATION

9.1 Communication applicant shall install and maintain a pole tag/decal made of a non-corrosive and durable material, suitable for outdoor use and resistant to ultraviolet radiation on antenna equipment or EWEB's pole. The tag information shall identify the name of the owner, emergency 24-hour contact number, horizontal and vertical distance from antenna at which it is safe to work continuously and unique identifier for that antenna site.

10.0 INSTALLATION AND MAINTENANCE

10.1 Communication applicant shall be responsible for installation and maintenance of the antenna and all associated equipment cables, conduits and conduit risers. Antenna installation and maintenance work performed in the supply space or within 10 feet of a primary conductor shall be done by workers qualified per OSHA 1910.332 to perform the work. All work shall be coordinated through EWEB's Joint Use Coordinator and Electric Operations. EWEB will require prior notice for Electric

Operations work planning and scheduling and a preconstruction meeting per the requirements specified on the EWEB design drawings for the job.

10.2 Applicant shall install and maintain a load-break, UL-listed disconnect switch to de-energize both the normal (utility) and backup power to the communication antenna(s).