

APPENDIX D—SPECIFICATIONS FOR LICENSEE’S ATTACHMENTS TO UTILITY POLES

Licensee, when making Attachments to Utility Poles, will adhere to the following engineering and construction practices.

- A. All Attachments shall be made in accordance with the Applicable Standards as defined in Paragraph 1.2 of this Agreement.
- B. Clearances
 1. **Attachment and Cable Clearances:** Licensee’s Attachments on Utility Poles, including metal attachment clamps and bolts, metal cross-arm supports, bolts and other equipment, must be attached so as to maintain the minimum separations specified in the National Electrical Safety Code (“NESC”) and in drawings and specifications Utility may from time to time furnish Licensee. (*See Drawings A-01 to A-99.*)
 2. **Service Drop Clearance:** The parallel minimum separation between Utility’s service drops and communications service drops shall be twelve (12) inches, and the crossover separation between the drops shall be twenty-four (24) inches. (*See Drawings A-06 and A-07.*)
 3. **Sag and Mid-Span Clearances:** Licensee will be particularly careful to leave proper sag in its lines and cables and shall observe the established sag of power line conductors and other cables so that minimum clearances are (a) achieved at poles located on both ends of the span; and (b) retained throughout the span. At mid-span, a minimum of twelve (12) inches of separation must be maintained between any other cables. At the pole support, a twelve (12) inch separation must be maintained between Licensee and any other communications connection/attachment. (*See Drawing A-07.*)
 4. **Vertical Risers:** All Risers, including those providing 120/240 volt power for Licensee’s equipment enclosure, shall be placed on the quarter faces of the Pole and must be installed in conduit with weatherhead attached to the Pole with stand-off brackets. A two (2) inch clearance in any direction from cable, bolts, clamps, metal supports and other equipment shall be maintained. (*See Drawings A-02 and A-05.*)

5. **Climbing Space**: A clear Climbing Space must be maintained at all times on the face of the Pole. All Attachments must be placed so as to allow and maintain a clear and proper Climbing Space on the face of the Utility Pole. Licensee's cable/wire Attachments shall be placed on the same side of the Pole as those of other Attaching Entities. In general, all other Attachments and Risers should be placed on Pole quarter faces. (*See* Drawing A-08.)
6. **Pedestals and Enclosures**: Every effort should be made to install Pedestals, vaults and/or Enclosures a minimum of four (4) feet from Poles or other Utility Facilities.

C. Down Guys and Anchors

1. Licensee shall be responsible for procuring and installing all anchors and guy wires to support the additional stress placed on the Utility's Poles by Licensee's Attachments. Anchors must be guyed adequately.
2. Anchors and guy wires must be installed on each Utility Pole where an angle or a dead-end occurs. Licensee shall make guy attachments to Poles at or below its cable Attachment. No proposed anchor can be within four (4) feet of an existing anchor without written consent of Utility.
3. Licensee may not attach guy wires to the anchors of Utility or third-party user without the anchor owner's specific prior written consent.
4. No Attachment may be installed on a Utility Pole until all required guys and anchors are installed. No Attachment may be modified, added to or relocated in such a way as will materially increase the stress or loading on Utility Poles until all required guys and anchors are installed.
5. Licensee's down guys, if needed, shall be bonded to ground wires of Utility's Pole. The connections to the system neutral are to be made by the utility as an item of Make-Ready Work. Utility will determine if guys should be grounded or insulated.

D. Certification of Licensee's Design

1. Licensee's Attachment Permit application must be signed and sealed by a professional engineer, registered in the [State], certifying that Licensee's aerial cable design fully complies with the NESC and Utility's Construction Standards and any other applicable federal, state or local codes and/or requirements.

2. This certification shall include the confirmation that the design is in accordance with pole strength requirements of the NESC, taking into account the effects of Utility's Facilities and other Attaching Entities' facilities that exist on the Poles without regard to the condition of the existing facilities.

E. Miscellaneous Requirements

1. **Cable Bonding:** Licensee's messenger cable shall be bonded to Utility's Pole ground wire at each Pole that has a ground wire. If no ground exists on a Pole, Licensee shall install a Pole ground in accordance with the attached detail drawing. (See Drawings A-03 to A-05.)
2. **Customer Premises:** Licensee's service drop into customer premises shall be protected as required by the most current edition of the NEC.
3. **Communication Cables:** All Communications cables/wires not owned by Utility shall be attached within the Communications space that is located 40 inches below the lowest Utility conductors. (See Drawings A-01 through A-99.)
4. **Riser Installations:** All Licensee's Riser installations shall be in utility-approved conduit materials and placed on stand-off brackets. Ground wires may be attached directly to Pole. (See Drawings A-02 to A-05.)
5. **Tagging:** All Licensee's cables shall be identified with a band-type communications cable tag or other identification acceptable to Utility at each Attachment within twelve (12) inches of the Pole. The communications tag shall be consistent with communication industry standards and shall include at least the following: Licensee name, emergency contact number and cable type. At the discretion of Utility, Tags shall be color coded to permit identification of Attaching Entity by observation from the ground.

F. Utility Construction Drawings and Specifications

1. Refer to the attached Utility Construction Drawings, and obtain additional construction specifications from Utility in accordance with its requirements.
2. Apply the Utility's construction drawings and specifications in accordance with the NESC, NEC and any other federal, state or local code requirements.