

# LUBBOCK POWER & LIGHT WIRELINE POLE ATTACHMENT STANDARDS

PREPARED FOR



***Lubbock Power & Light***

PREPARED BY



1408 Texas Ave, Lubbock Tx, 79401  
P: (512) 575-3024  
Engineering Firm No. F-19271

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## 1. DEFINITIONS

For the purposes of these Standards, the following terms, phrases, words, and their derivations, shall have the meaning given herein, unless more specifically defined within a specific Article or Paragraph of these Standards. When not inconsistent with the context, words used in the present tense include the future tense, words in the plural number include the singular number, and words in the singular number include the plural number. The words “shall” and “will” are mandatory and “may” is permissive. Words not defined shall be given their common and ordinary meaning.

- 1.1 **Affiliate**: when used in relation to Licensee, means another entity that owns or controls, is owned or controlled by, or is under common ownership or control with Licensee.
- 1.2 **Applicable Standards**: means all applicable engineering and safety standards governing the installation, maintenance, and operation of facilities and the performance of all work in or around electric Utility Facilities and includes: (i) Utility Construction Standards; (ii) the most current versions of National Electric Safety Code ("NESC"), the National Electrical Code ("NEC"), the Texas Health and Safety Code, Chapter 752, and the regulations of the Occupational Safety and Health Administration ("OSHA"), each of which is incorporated by reference in this Agreement, and (iii) other reasonable safety and engineering requirements of the Utility ("Utility's Construction Standards") or other federal, state or local authority with jurisdiction over Utility Facilities. Applicable Standards may also include updated or revised laws, rules, and regulations hereafter issued by the Utility or other authority having jurisdiction, if: (1) the Utility determines that protection of the employee and public health, safety, and welfare requires the application of same to Licensee and its new Attachments on a prospective basis; or (2) if Licensee plans to modify existing Attachments and such modification would be required by NESC grandfathering rules.
- 1.3 **Assigned Space**: means space on Utility's Poles that can be used, as defined by the Applicable Standards, for the attachment or placement of wires, cables, and associated equipment for the provision of Communications Service or electric service. The Neutral Zone or Safety Space is not considered an Assigned Space.
- 1.4 **Attaching Entity**: means any public or private entity that attaches to Poles pursuant to a license agreement with Utility.

- 1.5 **Attachment(s)**: means any and all of the Licensee's Communications Facilities placed directly on the Utility's Poles or Overlashed onto an existing Attachment but does not include either a Riser or a service drop attached to a single Pole where the Licensee has an existing Attachment on such Pole.
- 1.6 **Capacity**: means the ability of a Pole to accommodate an additional Attachment based on Applicable Standards, including space, and loading considerations.
- 1.7 **City**: means the City of Lubbock, Texas.
- 1.8 **Climbing Space**: means that portion of a Pole's surface and surrounding space free from encumbrances to enable Utility employees and contractors to safely climb, access, and work on Utility Facilities and equipment.
- 1.9 **Common Space**: means space on Utility's Poles not used for placing wires or cables but which jointly benefits all users of the Poles by supporting the underlying structure and/or providing safety clearance between attaching entities and Electric Utility Facilities.
- 1.10 **Communications Facilities**: means Attachments, including associated network equipment, cables, wire or cable facilities, including but not limited to fiber optic, copper, and/or coaxial cables or wires utilized to provide Communications Service, including any and all associated equipment. Unless otherwise specified, Communications Facilities do not include wireless network equipment including but not limited to wireless antennas, receivers, radios, amplifiers, repeaters, receivers, or transceivers.
- 1.11 **Communications Service**: means the transmission or receipt of voice, video, data, Internet, or other forms of digital or analog signals over Communications Facilities.
- 1.12 **Hazardous Substance**: shall be interpreted broadly to mean any substance or material designated or defined as hazardous or toxic waste, hazardous or toxic material, hazardous or toxic or radioactive substance, dangerous radiofrequency radiation, or other similar terms by any federal, state, or local laws, regulations, or rules now or hereafter in effect including any amendments.
- 1.13 **Licensee**: means \_\_\_\_\_, its authorized successors and assignees.

- 1.14 **Make-Ready Work**: means all work, as reasonably determined by the Utility, required to accommodate the Licensee's Communications Facilities and/or to comply with all Applicable Standards. Such work includes, but is not limited to, a Pre-Construction Survey, rearrangement, relocation, and/or transfer of Utility Facilities or existing Attachments, inspections, engineering work, permitting work, tree trimming (other than tree trimming performed for normal maintenance purposes), pole strengthening, pole replacement, and construction, all in accordance with Utility's current construction and engineering standards.
- 1.15 **Neutral Zone or Safety Space**: means the area between the Supply Space and the Communication Space and is reserved for communications workers to safely perform maintenance and make connections to their service.
- 1.16 **Occupancy**: means the use or specific reservation of Assigned Space for Attachments on the same Utility Pole.
- 1.17 **Overlash**: means to place an additional wire or cable Communications Facility onto an existing Attachment owned by the Licensee.
- 1.18 **Pedestals/Vaults/Enclosures**: means above- or below-ground housings to enclose a cable/wire splice, power supplies, amplifiers, passive devices, and/or provide a service connection point and that shall not be attached to Utility Poles as set forth in Utility Construction Standards.
- 1.19 **Permit**: means written or electronic authorization of Utility for Licensee to make or maintain Attachments to specific Utility Poles under the requirements of this Agreement.
- 1.20 **Pole or Utility Pole**: means a pole owned by Utility that provides electric distribution with a voltage rating of not more than 34.5 kilovolts. Pole or Utility Pole does not include (i) poles used by Utility solely for its own radio communications purposes; or (ii) poles to support Service Drops.
- 1.21 **Post-Construction Inspection**: means the inspection required by the Utility to determine and verify that the Attachments have been made in accordance with Applicable Standards and the Permit.
- 1.22 **Pre-Construction Survey**: means all work or operations required by Applicable Standards and/or Utility to determine the potential Make-Ready Work necessary to accommodate the Licensee's Communications Facilities on a Pole. Such work includes but is not limited to, field inspection, loading calculations, and administrative processing. The Pre-Construction Survey

shall be coordinated with the Utility and include the Licensee's professional engineer.

- 1.23 **Reserved Capacity**: this means the Capacity or space on a Pole, that the Utility has identified and reserved for its own electric utility requirements, including installing communications circuits for the operation of the Utility's electric system, installing transformers, and moving the neutral as part of converting phases.
- 1.24 **Riser**: metallic or plastic encasement materials placed vertically on a Pole to guide and protect wires and cables.
- 1.25 **Service Drop**: means a single wired drop used by Utility to provide electric service to an individual customer.
- 1.26 **Supply Space**: means that area designated as such in Utility Construction Standards.
- 1.27 **Utility**: means Lubbock Power & Light.
- 1.28 **Utility Construction Standards**: means all construction requirements promulgated by the Utility applying to Utility Facilities. The Utility Construction Standards are published on the Utility's website at: [www.lpandl.com](http://www.lpandl.com).
- 1.29 **Utility Facilities**: means all personal property and real property owned or controlled by Utility, including Poles.

## **2. PURPOSE**

This Wireline Pole Attachment Standards document provides LP&L's wireline pole attachment process and standards for Facilities installed on Poles as referenced in the Wireline Pole Attachment License Agreement. All wireline pole attachment applicants shall comply with the requirements of the appropriate jurisdiction as well as the requirements stated in the latest version of this document. This document is subject to change by LP&L.

### **2.1. WIRELINE POLE ATTACHMENT LOCATION**

These Wireline Pole Attachment Standards apply to all wireline pole attachment applications submitted to LP&L, including for Poles outside the City of Lubbock Right-of-Way (R.O.W.), such as Poles under county or state jurisdiction. These standards apply only to Pole types owned or administered by LP&L.

## **3. GENERAL REQUIREMENTS**

### **3.1. COMPLIANCE WITH DESIGN REQUIREMENTS**

The licensee shall perform all make-ready and installation work in accordance with the Design Documents and all Applicable Standards.

### **3.2. LP&L OVERSIGHT REQUIREMENTS**

LP&L shall have the right to conduct on-site field oversight and inspections of the Licensee's Attachments, work, and operations on Poles and in LP&L easements. LP&L shall always have unrestricted access to Poles and to all fieldwork sites of the Licensee and the Licensee's contractors. Both LP&L and LP&L's representative at any Pole site shall have complete and final authority to order the immediate suspension of the Licensee's construction or installation activities if LP&L or LP&L's representative, in its sole discretion and judgment, deems such action necessary for reasons of safety, engineering, electrical service reliability, or property owner complaint. Such suspension shall be in effect until such time as the Licensee cures, at the Licensee's sole Cost, the alleged violation. In no event shall LP&L be responsible for any damages, losses, or Costs incurred by the Licensee as a result of such work stoppage unless such stoppage is a result of gross negligence or willful or intentional misconduct on the part of LP&L.

### **3.3. STANDARDS CONFLICTS REQUIREMENTS**

If there is a difference, conflict, or discrepancy between or among the requirements or practices of any Applicable Standard the following rules shall apply:

- i. if one specification or practice is more stringent than the other, the more stringent shall apply.
- ii. if one is not more stringent than the other, the National Electric Safety Code shall govern; and
- iii. if the first two rules are insufficient to resolve the conflict in a clear and unambiguous manner, LP&L shall determine which standard shall apply, giving the highest priority to safety considerations. If there is a difference, conflict, or discrepancy between or among the requirements of the Design Documents and LP&L Distribution Construction Standard, the Design Documents shall govern. In the event the Licensee believes a Design Document or LP&L Distribution Construction Standard is inconsistent with the Electrical Code or applicable law, the Licensee shall refer the matter to LP&L for determination.

### **3.4. TAGGING REQUIREMENTS**

Each Attachment (including risers) made to a Pole shall be identified at each Pole and at all times by a Cable Tag in a form approved by LP&L. During the Permit Application process, the Licensee will be required to install or replace its cable tags to fully meet this requirement.

### **3.5. MAINTENANCE REQUIREMENTS**

Licensee shall, at its sole expense, make and maintain its Attachments in a safe condition and in good repair, and in such a manner as not to interfere with or interrupt LP&L's lines, facilities, and services or with other service providers' attachments, facilities, and services.

### **3.6. TREE TRIMMING REQUIREMENTS**

Licensee shall be responsible for all tree trimming necessary for the safe and reliable installation, use, and maintenance of its Attachments, and to avoid stress on Poles caused by contact between tree limbs and Licensee's Attachments. All tree trimming shall be performed in accordance with current policies, including without limitation those relating to owner notification and consent, or as stated in the License Agreement. All vegetation debris shall be collected from the work site prior to the tree trimming crew leaving for the day. The licensee shall comply with the recent public R.O.W jurisdiction's requirements.

### **3.7. NO DAMAGE REQUIREMENTS**

Licensee shall not cause damage to LP&L or Third-Party User facilities or operations. If the Licensee, its contractors, agents, employees, or Attachments cause damage to LP&L or



Third Party User facilities or operations, the Licensee assumes all responsibility for, and shall, as determined by LP&L, either repair or promptly reimburse LP&L or the Third-Party User for all loss and expense caused by such damage. The licensee shall immediately inform LP&L and all damaged Third-Party Users of any damage to their facilities or as stated in the License Agreement. The licensee shall comply with the recent public R.O.W jurisdiction's requirements and regulations.

### **3.8. OVERLASHING REQUIREMENTS**

The licensee must obtain a permit, per the License Agreement, for any attachment it seeks to overlash an existing attachment. The licensee may not allow a third party to overlash to Licensee's facilities unless the third party has a License Agreement and an attachment permit for the overlashing attachment. Refer to the License Agreement.

### **3.9. POLE LOADING ANALYSIS REQUIREMENTS**

All PLAs and other engineering documents must be sealed by a professional engineer licensed in the State of Texas. LP&L shall accept and rely on such documentation but shall reserve the right to perform, or have a firm retained by LP&L perform its own engineering and field evaluation. All costs for such engineering and field evaluation shall be paid by the Licensee. LP&L requires a PLA as part of any Application, including overlashing. PLA guidelines may be established by LP&L and changed from time to time. A PLA shall be required for:

- i. A pole with three or more existing communications attachments.
- ii. Junction poles and
- iii. any new pole or a replacement,
- iv. any pole identified by LP&L that may need a PLA for any reason.

The total usage of a Pole based on the available ground line moment capacity of the Pole shall remain less than ninety percent (90%). Any Pole that will exceed ninety percent (90%) capacity based on a PLA shall be replaced with a calculated Pole size that will pass the ninety percent (90%) usage capacity requirement after placement of the Licensee's Attachment. LP&L may accept and rely on documentation submitted by the Licensee but reserves the right to perform, or have a firm retained by LP&L perform its own engineering and field evaluation. All costs for such engineering and field evaluations shall be paid by Licensee.

### **3.10. WIRELINE ATTACHMENTS TO LP&L UTILITY POLES**

#### **A. Communication Space Requirements**

All Wireline Attachments must be placed and remain in the Communications Space. Licensee operations in the Supply Space or in the Safety Space may be performed only with prior approval from LP&L using LP&L-approved contractors. New attachments are not allowed on any transmission poles, and are not allowed to be attached to distribution poles with a high number of existing attachments, upon review, LP&L reserves the right to decline a new attachment.

#### B. Cable Position Requirements

- i. A Licensee must place all cables on the same side of the Pole as the electric neutral. If cables are attached on both sides of the Pole, the new cable will be placed on the same side of the Pole as most of the existing attachments (including the neutral). If evenly split, the new cable will be placed on the same side of the Pole as the neutral.
- ii. Installation of a horizontal extension arm requires the advance written permission of LP&L. LP&L will approve the request only if it determines the installation will not interfere with the safe and reliable operation of the LP&L electric distribution system.
- iii. A Licensee may not weave its cables from one vertical position to another in relation to other cables on the same pole line route or transition its cable from one position to another. Weaving from one side of the Pole to the other along the pole route is also not permitted.
- iv. Bolts may not extend greater than two inches (2") beyond the tightened nut. A shorter bolt may be substituted if required, but no sawed bolts may be installed on LP&L Poles.
- v. Take-offs and guys must be on one Attachment Point.

#### C. Clearances Requirements

- i. The clearance between LP&L electrical facilities and Licensee's facilities must be in accordance with the most stringent requirement of the Applicable Standards.
- ii. Vertical clearances must be measured at Attachment Points, bolt-to-bolt. If the Licensee is using banding due to pole material being non-wood, the measurement will be from messenger to messenger.
- iii. Diagonal measurements do not apply to the vertical clearance requirement.
- iv. 96-inches (8 ft) vertical clearance between lowest primary line and highest secondary line.
- v. 48-inches vertical clearance between the lowest secondary line and highest communication line. Min. 16 ft 5 in to ground level clearance mid-spans. This applies to roads, driveways, vehicular pathways,

sidewalks, and alleys within City ROW. Other requirements apply depending on jurisdictions.

- vi. See Appendix A 5.1, STANDARD NO. I.

#### D. Non-Wooden Utility Poles Requirements

Attachments to steel, concrete, or fiberglass distribution Poles must be clamped or banded to the Poles with stainless steel straps. The drilling of holes in these Poles for an attachment or any other purpose is prohibited, except in the instance that drilled holes in steel Poles at road crossings of greater than three hundred feet (300') are permitted if approved by LP&L. Attaching to transmission poles is prohibited. Any attachments are not allowed to the transmission poles.

#### E. Sag And Mid-Span Clearances Requirements

The licensee shall leave proper sag in its lines and cables and shall observe the established sag of power line conductors and other cables so that during the life of the Attachment minimum clearances are achieved at Poles located on both sides of the span and maintained throughout the span. Minimum clearance between surfaces must be maintained between the Licensee's and other service providers' cables at mid-span and between the Licensee's and others' Attachments on the Poles.

- i. Sag Clearance between various electrical facilities and communications cables in the area between wireline attachments (mid-span) shall be as specified by the most stringent requirement of the Applicable Standards.
- ii. NESC specifies that the required vertical clearances must be measured surface-to-surface, not center-to-center.
- iii. Any mid-span Service Drop or device mounted on a communications cable or messenger must be a minimum of fifteen inches (15") from the Pole face at its nearest point to ensure adequate climbing space.
- iv. The minimum clearance between communications cables at the lowest point of sag shall be six inches (6").
- v. The maximum separation between communications cables at all points shall be 18 inches (18").
- vi. See Appendix A 5.1, STANDARD NO. II.

#### F. Anchoring And Guying Requirements

The licensee shall provide all anchors and guying necessary to accommodate the additional stress and load placed upon a Pole by its Attachments. Anchors shall not be placed outside of the easement in which a Pole stands.

- i. An anchor and guy rod with attached guy wire must be set for each turn or cable angle equal to or greater than five (5) degrees on every dead-end Pole, on each side of a road crossing, and on any Pole LP&L has guyed.
- ii. Slack spans may be no more than seventy feet (70') without guying.
- iii. Slack spans under seventy feet (70') may be un-guyed provided both Poles meet LP&L loading requirements.
- iv. Sidewalk guys are prohibited unless specifically agreed to in writing by Licensee and LP&L, on a case-by-case basis.
- v. A Licensee may never attach its guy to an LP&L anchor.
- vi. All anchors (supply and/or communications) must be at least three feet (3') apart.
- vii. Anchor rod eyes must not be more than eight inches (8") above ground.
- viii. No cable or messenger/strand shall be placed on a Pole until anchor rods and down guys are installed.
- ix. All communications guys shall have guy markers installed for visibility.
- x. No communication anchor shall be installed closer than five feet from the service of the Pole.
- xi. See Appendix A 5.1, STANDARD NO. III.

#### G. Bonding And Grounding Requirements

- i. All messengers and down-guys placed by the Licensee must be bonded directly to the pole ground with #6 soft-drawn bare copper wire. All-dielectric self-supporting communications cables and all-dielectric communications cables supported by a non-metallic messenger strand are not required to be bonded and grounded.
- ii. Any ground placed by a Licensee must be bonded to the LP&L ground near the level of the communications messenger.
- iii. See Appendix A 5.1, STANDARD NO. IV.

#### H. Climbing Space Requirements

An unobstructed climbing space must be always maintained on the face of all Poles as required by Applicable Standards, as well as adequate ground access to Poles. All Attachments must be placed as to allow and maintain a clear and proper climbing space.

## I. Service Drop Requirements

- i. Communications service drops shall be connected fifteen inches (15") from the Pole to the Attacher's cable main supporting Messenger.
- ii. Service drops shall not exceed one hundred feet (100') without the use of Messenger.
- iii. See Appendix A 5.1, STANDARD NO. V.

## J. Communication Cable Riser Requirements

- i. Communications service drops shall be connected fifteen inches (15") from the Pole to the Attacher's cable main supporting Messenger.
- ii. A Licensee may place a vertical run of communications cable, enclosed in conduit, shielded, or guarded, and attached to a stand-off bracket mounted to the Pole.
- iii. The Licensee's communications cable riser should be composed of, or covered with a suitable material and must at all points maintain the greater of the Pole circumference or two inches (2") from through-bolts or other metallic objects on the Pole.
- iv. Although non-metallic conduit is preferred, metallic conduit may be used if it is properly grounded to existing pole grounds and is the initial section of the riser.
- v. Supply and communications cable risers must maintain one side (180 degrees) of the Pole clear for climbing space and eventual replacement of the Pole. Communications cable risers should be located on the same side of the Pole as their overhead communications cables are attached.
- vi. Communications cable risers should end no more than six inches (6") below the communications cable attachment point.
- vii. The maximum number of riser conduits on a Pole is three (3), including LP&L risers, unless otherwise approved in writing by LP&L. Risers mounted on a shared vertical run of standoff brackets shall count as one riser.
- viii. Only one set of risers mounted to a vertical run of standoff brackets is allowed per Pole. The first Licensee to install a riser shall provide the brackets to mount the riser conduit; future Licensees shall utilize the bracket until it is fully occupied.
- ix. Sharing of conduit or ducts is prohibited unless agreed to by LP&L in writing.
- x. See Appendix A 5.1, STANDARD NO. VI.

#### 4. WIRELINE POLE ATTACHMENT APPLICATION PROCESS

The following process is to be followed by each Licensee seeking to overlash or make new attachments on LP&L-owned Poles. Note that no entity may make any attachments to LP&L's Poles without having first entered into a binding wireline Pole Attachment Licensing Agreement with LP&L. Third parties seeking to overlash to an existing pole tenant facility must have a written overlash agreement with the pole tenant to be overlashed. An applicant must provide LP&L the overlash agreement when they apply.

##### **Pole Attachment Application Process Step-by-Step Summary:**

- 1. Applicant: Download available LP&L resources and review the standards and requirements prior to applying.**
  - Download (the latest LP&L Wireline Attachment Standards)
  - Download (LP&L Poles GIS Map for 40ft Poles and Larger dated 3-11-2024)
- 2. Applicant: Obtain LP&L License Agreement (If you have executed the agreement move to step 3)**
  - Request License Agreement draft document from LP&L via Wireline Program Consultant at [lpl-wirelineapp@aeparmia.com](mailto:lpl-wirelineapp@aeparmia.com).
  - Complete all sections of the Agreement.
  - Submit the Signed Agreement to the Wireline Program Consultant at [lpl-wirelineapp@aeparmia.com](mailto:lpl-wirelineapp@aeparmia.com).
  - The agreement is then sent to LP&L Legal Counsel to process and present to the LP&L Board for consideration/ execution.
- 3. Applicant: Submit Wireline Pole Attachment Permit Application Online ([Application Link](#))**
  - Licensee shall submit a completed Permit Application via LP&L website that includes:
    - A final aerial route map in pdf format identifying the pole numbers,
    - A Google Earth file (KMZ) identifying pole location and LP&L pole number (City poles shapefiles can be obtained by Licensee from the LP&L GIS department),
    - A spreadsheet that includes pole numbers with existing and proposed attachments elevations of all communications attachments,
    - A pole loading analysis (PLA) when required stamped by a professional engineer.
    - The licensee shall prepare the Permit Application in adherence with the Applicable Standards (Paragraph 1.2 of the Agreement) and specifications as outlined in Utility Construction Standards. The Utility reviews all documents submitted for completeness check and

upon receipt of application payment, LP&L will initiate pre-construction inspection.

**NOTE:** ROW jurisdiction requires ROW permits to access the poles, the applicant must apply directly with ROW jurisdictions (If ROW jurisdiction is not the City of Lubbock, e.g. TxDOT, the applicant to submit evidence of other jurisdiction's permit application approval)

#### **4. Applicant: Submit Wireline Pole Attachment Permit Application Fee**

- All application fees must be submitted to LP&L Accounting by mail to:  
Attn: Ms. Kacey Sylvia  
P.O. Box 10541, Lubbock, Tx 79408  
Please include your project application ID on your payment to track.

#### **5. LP&L Reviews the Application**

- LP&L will perform a pre-construction inspection based on the aerial map route and poles provided. LP&L will review the application documents and pre-construction inspection results thoroughly before responding to the applicant.
- If the poles do not require Electric Make-Ready (EMR) Work, skip to step 6.
- If the poles require EMR Work, LP&L will provide an EMR cost estimate to the Applicant for approval.
- Upon receipt of written authorization and other requirements provided in the Agreement, LP&L will proceed with EMR work according to the specific agreed-upon installation plans and the terms of the Agreement, including payment by the Licensee for the Make-Ready Work charges as set out by LP&L and agreed to by the Licensee.

#### **6. LP&L Issues Notice to Proceed for Communications Wireline Installation**

- Upon completion of the EMR Work by LP&L, the utility will provide a Notice to Proceed letter for the communications wireline attachments installation.
- If no EMR work is needed, the Applicant will still need a formal Notice to Proceed letter to be able to perform the wireline attachments installation.

#### **7. Applicant: Submit Post-Construction Inspection Request**

- The applicant shall submit written notice via email at [lpl-wirelineapp@aeparmia.com](mailto:lpl-wirelineapp@aeparmia.com), that they have completed the installation per the requirements.
- The Post-Construction Inspection Notice shall be submitted within ninety (90) calendar days after installation is complete.

#### **8. LP&L Performs Post-Construction Inspection**

- LP&L will perform the Post-Construction Inspection by means it deems reasonable and charge the Licensee per Article 3 in the Agreement.
- LP&L will notify the applicant if the post-construction inspection fails via email. If the inspection fails, the applicant shall address the comments to

meet the current requirements and request another post-construction inspection until the installation passes the inspection.

#### **9. LP&L Issues Permit**

- A permit will not be issued until the post-construction inspection passes and all fees are paid.

## **5. APPENDIX A**

### 5.1 LP&L WIRELINE POLE ATTACHMENT STANDARD DETAILS

### 5.2 WIRELINE POLE ATTACHMENT PROCESS FLOWCHART

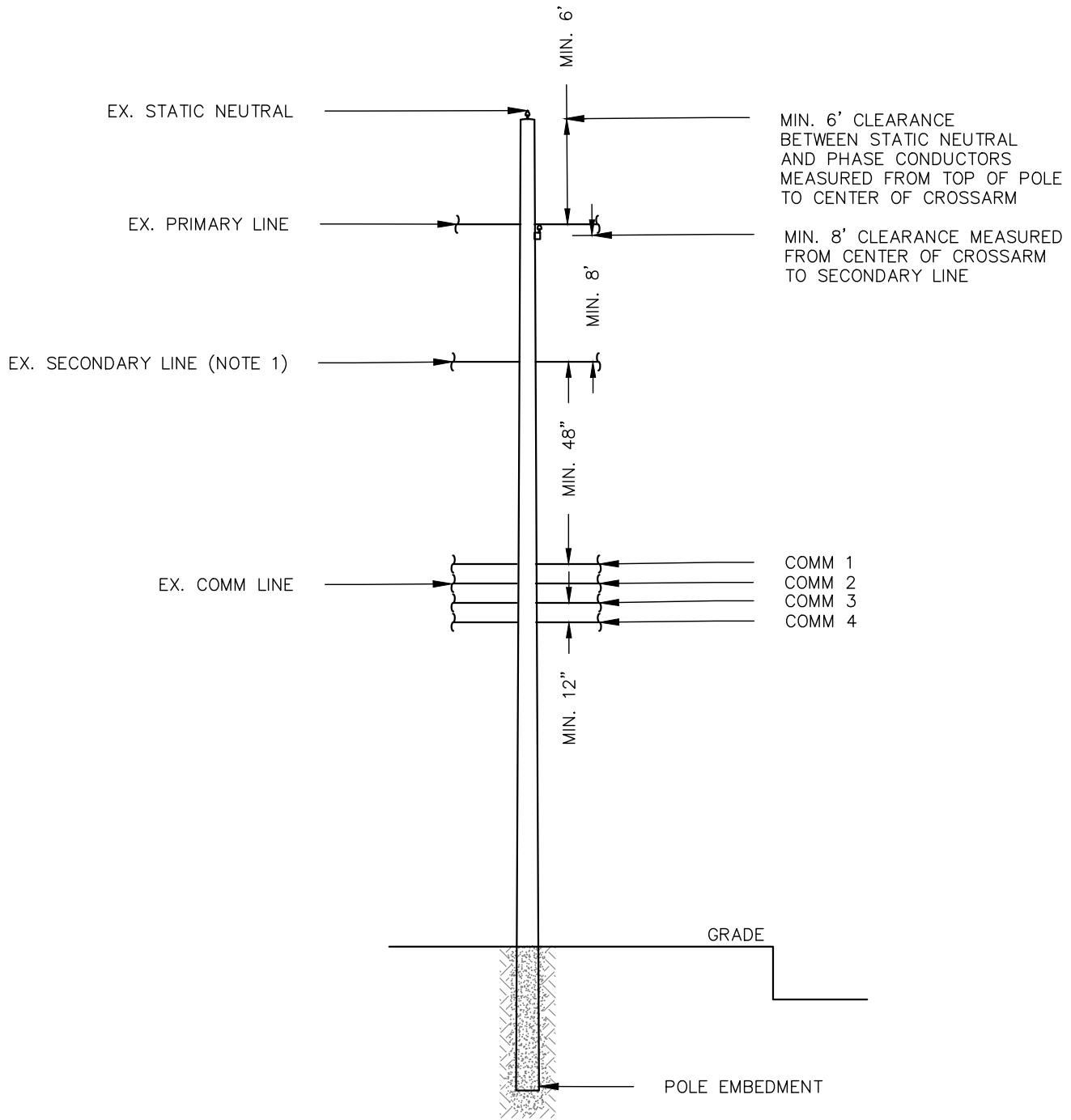
### 5.3 POLE LOADING ANALYSIS REPORT REQUIREMENTS

### 5.4 WIRELINE POLE ATTACHMENT FEE SCHEDULE





**APPENDIX A**  
**5.1. LP&L WIRELINE POLE ATTACHMENT STANDARD DETAILS**



**NOTES:**

1. AN ATTACHMENT SHALL BE MINIMUM 48" BELOW LOWEST POWER WHICH INCLUDES BUT NOT LIMITED TO: NEUTRAL, DRIP LOOPS, ENERGIZED CONDUCTORS, BOTTOM OF TRANSFORMERS, TOP OF PRIMARY AND SECONDARY RISERS.
2. IN THE ABSENCE OF SECONDARY LINE, RISER, TRANSFORMER OR ANY POWER FACILITY BELOW THE PRIMARY, MINIMUM CLEARANCE OF 11'-4" MUST BE MET BETWEEN PRIMARY CROSSARM AND COMMUNICATION TO LEAVE ADEQUATE SPACE FOR POSSIBLE LP&L FACILITIES,
3. MAXIMUM OF 4-COMMUNICATION COMPANY ATTACHMENTS PER POLE.



**Lubbock Power & Light**

402 MUNICIPAL DR.  
LUBBOCK, TX 79403

**POLE ATTACHMENTS  
CLEARANCES**

**LP&L POLE ATTACHMENT  
PROGRAM**

**STANDARD No. I**

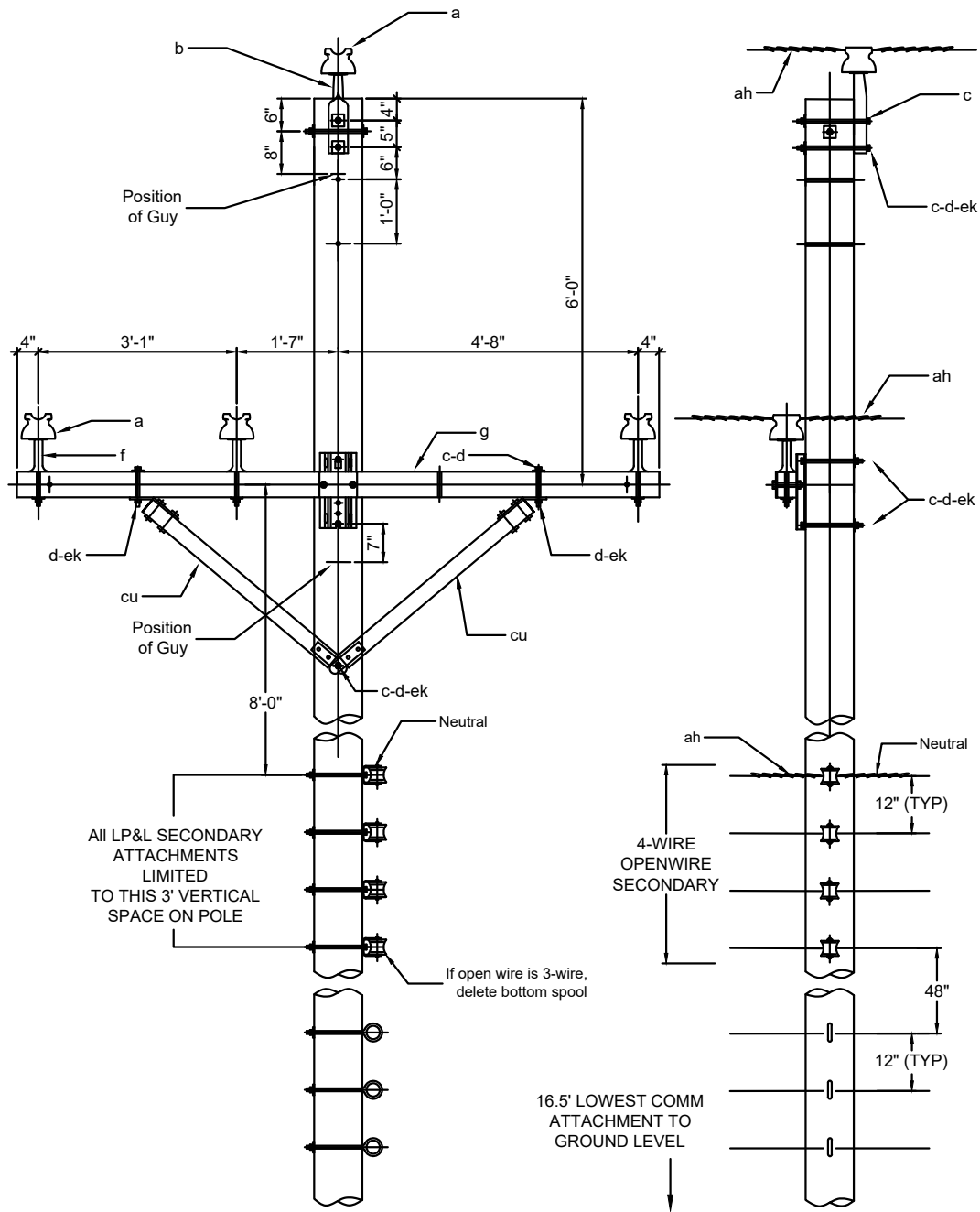
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DATE:	08/28/2023

PREPARED BY:



**AEPARMIA  
ENGINEERING**

1408 TEXAS AVE  
AUSTIN, TX 79401  
info@aeparmia.com  
www.aeparmia.com  
TBPE FIRM NO. 19271



NOTE: MAXIMUM OF 4-COMMUNICATION COMPANY ATTACHMENTS PER POLE.



**Lubbock Power & Light**

402 MUNICIPAL DR.  
LUBBOCK, TX 79403

STD. RESIDENTIAL OVERHEAD  
ALLEY CONSTRUCTION  
ELECTRIC AND COMMUNICATION CLEARANCES  
40'-CL4 POLE SINGLE SUPPORT 6" INBED

LP&L POLE ATTACHMENT  
PROGRAM

STANDARD No. II

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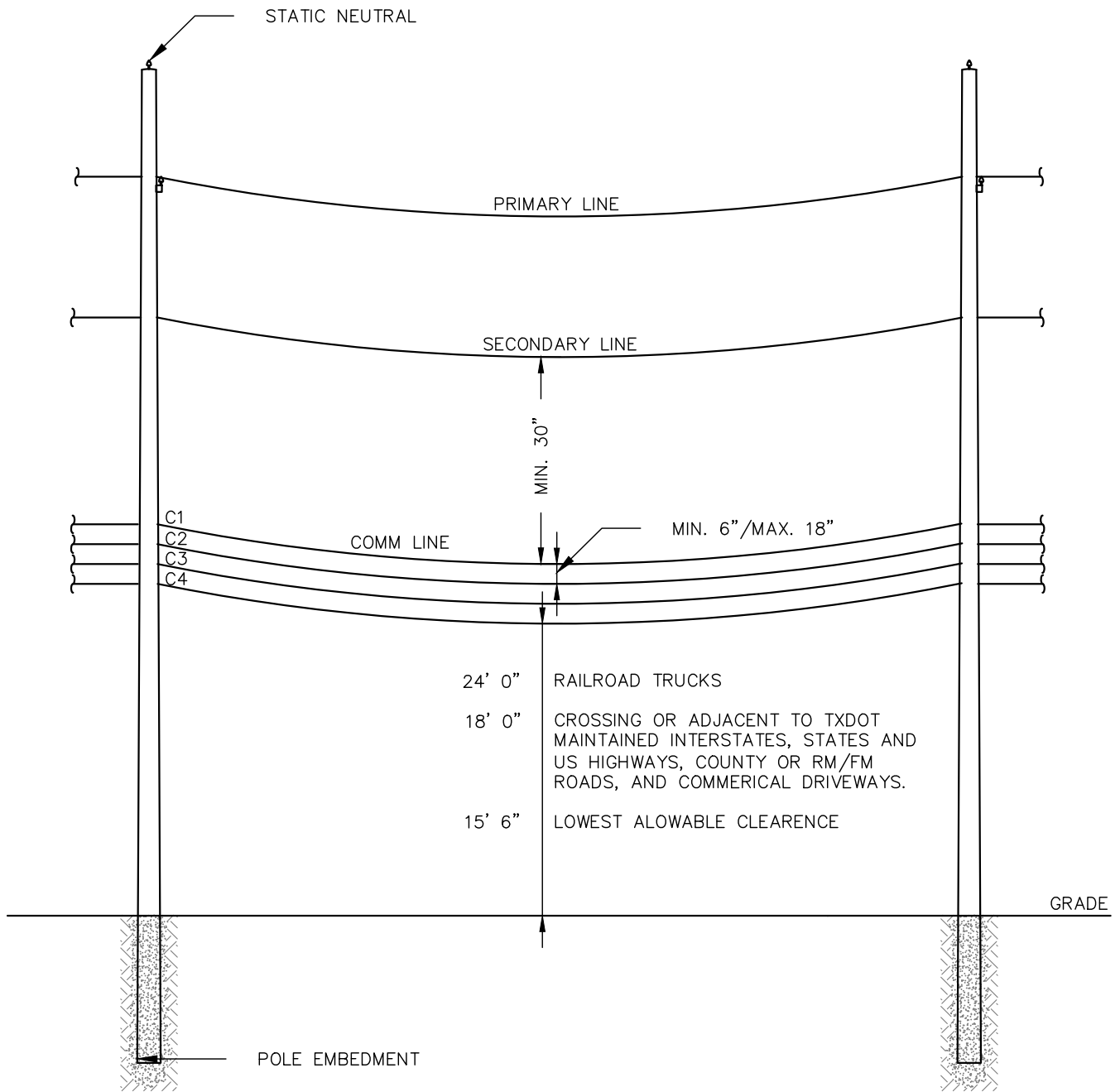
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info@aeparmia.com  
www.aeparmia.com  
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NOTES:  
 IN THE EVENT OF MULTIPLE GOVERNING AUTHORITIES THE MOST STRINGENT RULE SHALL APPLY.



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**SAG  
 CLEARANCES**

**LP&L POLE ATTACHMENT  
 PROGRAM**

**STANDARD No. III**

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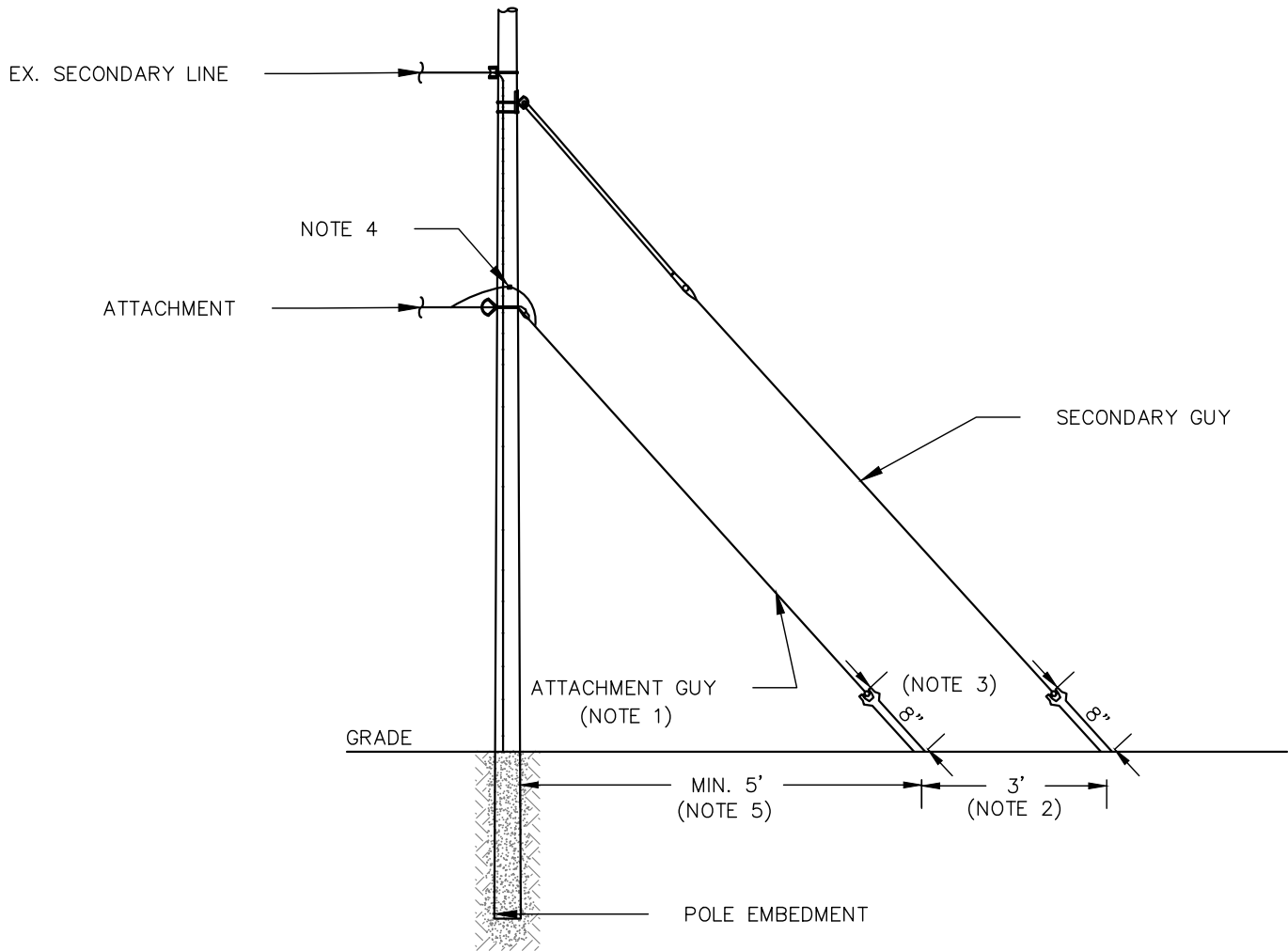
DATE: 10/12/2021

PREPARED BY:



**AEPARMIA  
 ENGINEERING**

1408 TEXAS AVE  
 AUSTIN, TX 79401  
 info@aeparmia.com  
 www.aeparmia.com  
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NOTES:

1. EACH PARTY (LP&L & ATTACHER) SHALL INSTALL INDEPENDENT GUYS AND ANCHORS FOR THEIR RESPECTIVE FACILITIES. AUXILIARY ANCHOR EYES ON UTILITY ANCHOR RODS SHALL NOT BE UTILIZED BY AN ATTACHER.
2. ALL ANCHORS MUST BE SEPARATED BY AT LEAST THREE (3) FEET.
3. IF AGREED BY MULTIPLE ATTACHERS AND DESIGNED AS A SYSTEM TO SUPPORT THE TOTAL LOADS APPLIED, PROVIDED THE POINTS OF ATTACHMENT ARE RELATIVELY CLOSE TO EACH OTHER ON THE POLE. A COMMON ATTACHMENT GUY AND/OR ANCHOR CAN BE INSTALLED. ATTACHER INSTALLING THE ANCHOR SHALL COORDINATE DESIGN AND INSTALLATION WITH ALL PARTIES. DESIGN SHALL BE SUBMITTED TO LP&L FOR APPROVAL BEFORE CONSTRUCTION.
4. ATTACHMENT STRAND AND GUY WIRES SHALL BE BONDED AND CONNECTED TO THE POLE GROUND. ATTACHER SHALL FURNISH THE NECESSARY #6 SOFT DRAWN BARE COPPER WIRE AND CONNECTORS TO CONNECT DIRECTLY TO THE POLE GROUND.
5. NO ATTACHMENT ANCHOR SHALL BE INSTALLED CLOSER THAN FIVE (5) FEET FROM THE SURFACE OF THE POLE.



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ANCHORING & GUYING

LP&L POLE ATTACHMENT  
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SCALE: N.T.S.

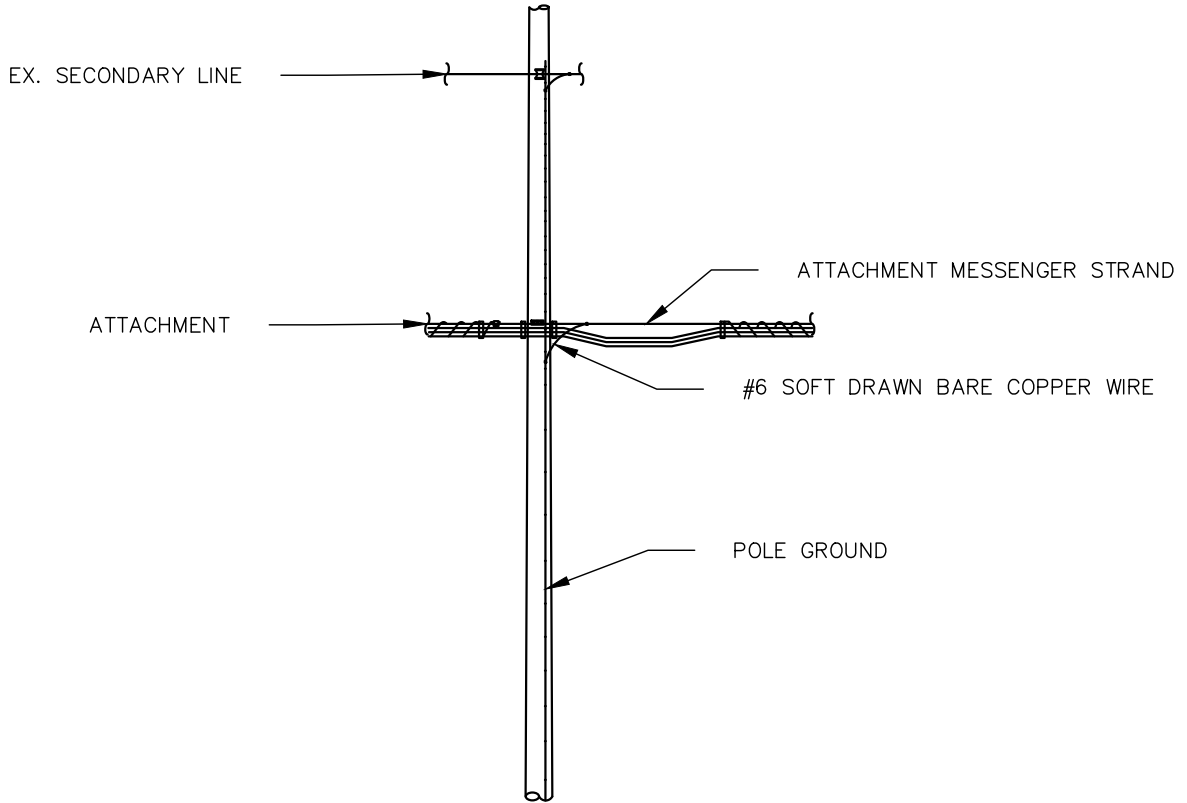
DATE: 08/28/2023

PREPARED BY:



**AEPARMIA  
ENGINEERING**

1408 TEXAS AVE  
AUSTIN, TX 79401  
info@aeparmia.com  
www.aeparmia.com  
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NOTES:

1. ATTACHMENT MESSENGER STRAND SHALL BE BONDED TO POLE GROUND ON EVERY POLE.
2. ATTACHER TO FURNISH #6 SOFT DRAWN COPPER BONDING WIRE AND CONNECTORS AND CONNECT TO POLE GROUND.



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BONDING & GROUNDING

LP&L POLE ATTACHMENT  
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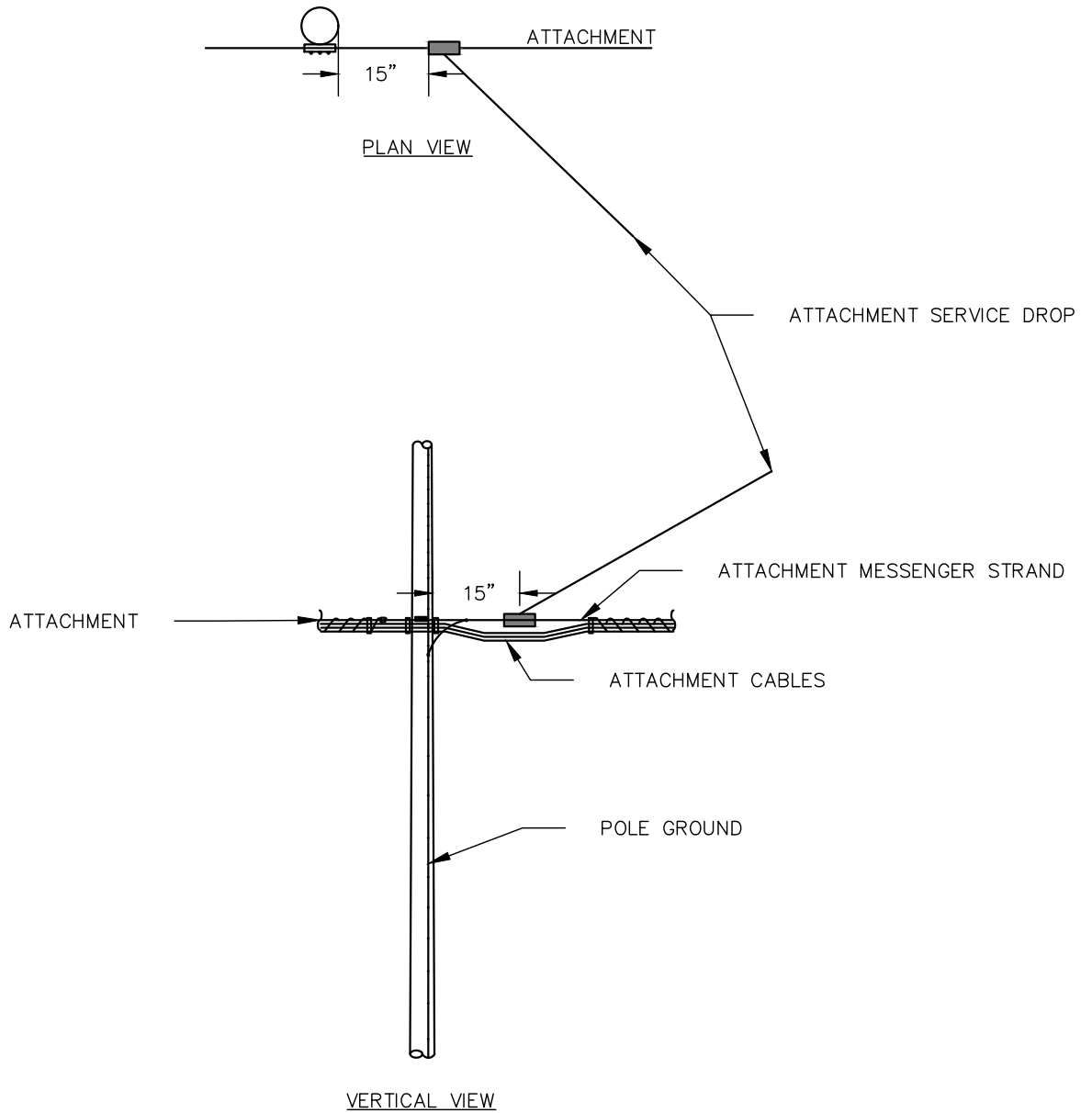
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**AEPARMIA  
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1408 TEXAS AVE  
AUSTIN, TX 79401  
info@aeparmia.com  
www.aeparmia.com  
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SERVICE DROP ATTACHMENT  
POINT

LP&L POLE ATTACHMENT  
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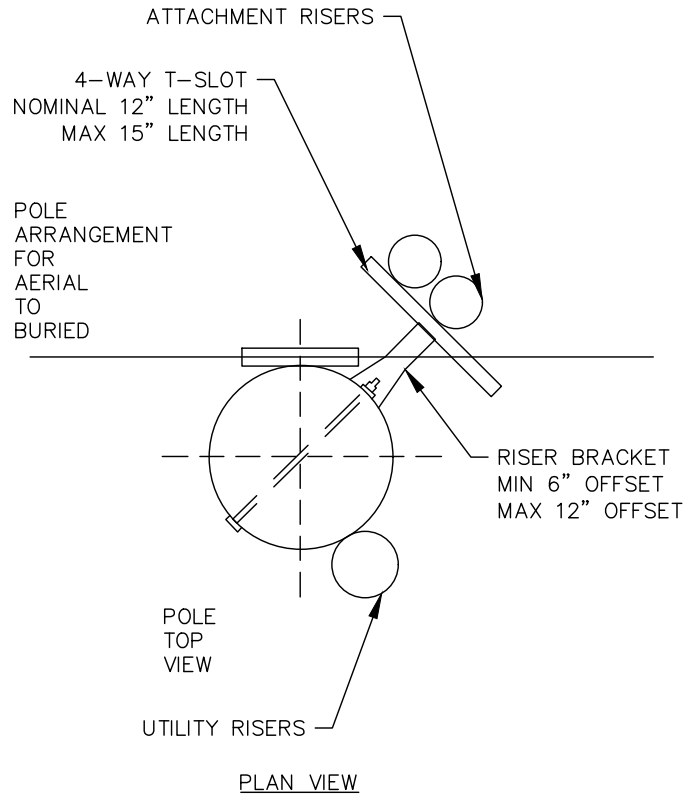
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**AEPARMIA  
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AUSTIN, TX 79401  
info@aeparmia.com  
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NOTES:

1. ATTACHMENT RISER BRACKET ONLY NECESSARY WHEN UTILITY RISER EXISTS ON THE SAME POLE.
2. PLACE RISER BRACKETS EVERY SIX (6) VERTICAL FEET OR SPACE EVENLY. MINIMUM OF THREE (3) BRACKETS PER HOLE.
3. UTILITY AND ATTACHMENT RISERS SHALL NOT BE MADE ON THE SAME POLE WHERE IT IS PRACTICABLE TO PLACE THEM ON SEPARATE POLES.
4. ALL RISERS SHALL BE SO ARRANGED AS NOT TO INTERFERE WITH CLIMBING OR WORKING SPACE.



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CABLE RISERS

LP&L POLE ATTACHMENT PROGRAM

STANDARD No. VII

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1408 TEXAS AVE  
AUSTIN, TX 79401  
info@aeparmia.com  
www.aeparmia.com  
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**NOTES:**

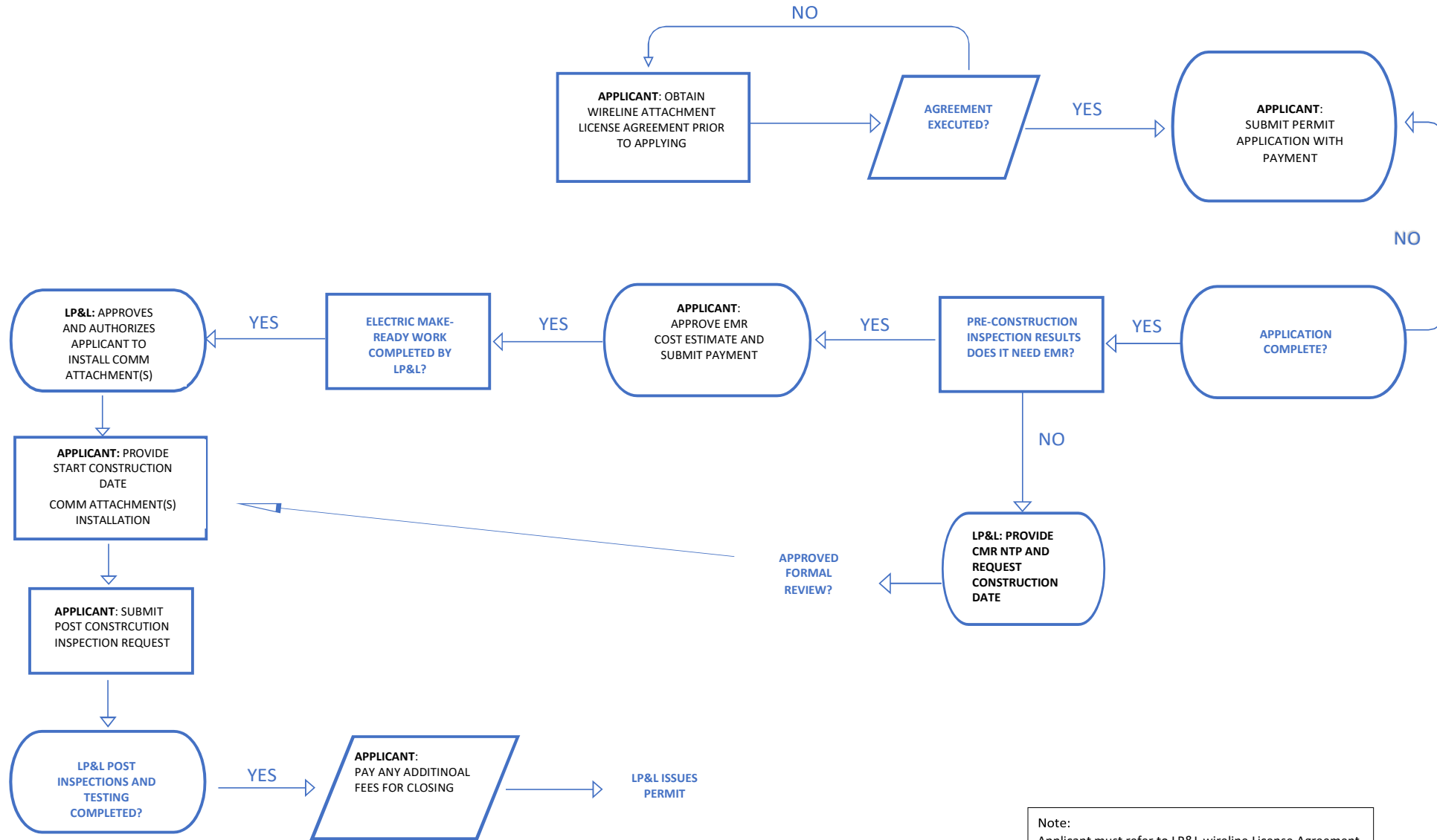
1. REFER TO SEPARATE STRUCTURAL ANALYSIS REPORT PREPARED BY WIRELESS INSTALLATION LICENSEE (LICENSEE)'S LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS.
2. LICENSEE SHALL VERIFY THAT A POLE AND MOUNT STRUCTURAL ANALYSIS, DEPICTING THE LOADING SHOWN, HAS BEEN PERFORMED AND SHOWS A "PASS" OR AN "ACCEPTABLE" OR "ADEQUATE" OR "SUFFICIENT" RATING. UNDER NO CIRCUMSTANCE WHAT SO EVER SHALL THE PROPOSED EQUIPMENT BE INSTALLED WITHOUT SAID STRUCTURAL ANALYSIS SEALED BY A PROFESSIONAL ENGINEER IN THE STATE OF TEXAS. IF SAID ANALYSIS REQUIRES THAT THE POLE AND OR MOUNT BE MODIFIED, SUCH MODIFICATIONS SHALL BE APPROVED BY THE PROFESSIONAL ENGINEER AND REISSUED A SEALED REVISED REPORT PRIOR TO INSTALLATION OF THE PROPOSED EQUIPMENT.
3. ALL EXPOSED EQUIPMENT AND SHROUDS SHALL MATCH THE COLOR APPROVED BY LP&L AND CITY OF LUBBOCK.
4. MIDPOLE RADIO SHROUD SHALL NOT EXCEED FIVE FEET IN HEIGHT PER THE STATE OF TEXAS S.B. No. 1004 SECTION 1. SUBTITLE A, TITLE 9, LOCAL GOVERNMENT CODE, CHAPTER 284 SEC.284.003. (5).
5. ALL HARDWARE SHALL BE STAINLESS STEEL.
6. ALL RISERS SHALL BE SECURED TO POLE EVERY FIVE FEET OR LESS.
7. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED BY LOCAL, STATE, AND FEDERAL STANDARDS AND REGULATIONS.
8. LICENSEE SHALL INSTALL RF WARNING SIGNS ON POLE NEAR THE BASE OF THE POLE AS WELL AS NEAR THE EQUIPMENT AT THE LEVEL WHERE THE SAFE APPROACH DISTANCE ENDS FOR FCC GENERAL POPULATION/UNCONTROLLED POWER LEVELS.
9. ALL INSTALLATION SHALL BE IN ACCORDANCE WITH ANSI/ASSE A10.48 AND ANY OTHER FEDERAL, STATE AND LOCAL STANDARDS.
10. ANY NEW OR REPLACEMENT POLES WILL BE SET ACCORDING TO 12% OF NEW POLE HEIGHT PLUS TWO FEET.
11. FOR EXISTING LP&L CONDUIT(S) THAT WILL REMAIN, LICENSEE SHALL REPAIR/REPLACE AT THE COST OF THE LICENSEE IF THE CITY FINDS THE CONDUIT TO BE DAMAGED AND/OR UNUSABLE TO PULL CABLE DURING CONSTRUCTION.
12. LICENSEE SHALL INSTALL IDENTIFICATION TAGS ON ALL LICENSEE'S RISERS.
13. REFER TO LP&L'S RULES IN MOST RECENT WIRELESS INSTALLATION STANDARDS FOR INSTALLATION PRACTICES.
14. LICENSEE SHALL BE AWARE OF PUBLIC ART WITHIN A 20 FEET RADIUS OF WORK SITE AND SHALL NOT CAUSE ANY DISTURBANCE TO IT.
15. LICENSEE SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS AND REGULATIONS AS WELL AS LICENSEE'S STANDARDS AND SPECIFICATIONS.
16. LICENSEE SHALL ENSURE THAT INSTALLED EQUIPMENT IS NOT OVERHANGING ONTO PRIVATE PROPERTY, OBSTRUCTING THE SIDEWALK, OR VIOLATING ADA REGULATIONS.
17. LICENSEE SHALL COORDINATE WORK WITH OTHERS ON FIBER INSTALLATIONS PRIOR TO AND DURING CONSTRUCTION.
18. CLEARANCES SHOWN ARE MINIMUM VALUES IN ACCORDANCE WITH LP&L REQUIREMENTS OR THE NESC. ADDITIONAL CLEARANCE AT THE POLE MAY BE REQUIRED TO COMPLY WITH THE MINIMUM MID-SPAN CLEARANCES DEFINED ON STANDARD NO. W07.
19. MINIMUM CLEARANCE BETWEEN STREET LIGHT DROP LOOP AND COMMUNICATIONS LINE MAY BE REDUCED TO 3" IF STREET LIGHT DRIP LOOP IS ENTIRELY COVERED WITH A NON-METALLIC COVERING.
20. MINIMUM CLEARANCE FROM ANTENNA TO POWER OR COMMUNICATIONS LINES SHALL BE MEASURED FROM THE LOWEST POINT OF ANTENNA BRACKET ATTACHMENT.
21. MAXIMUM 3" RIGID OR SCH 80 PVC CONDUIT.
22. MAXIMUM OF THREE (3) RISERS PER POLE.
23. USE THROUGH BOLTS TO ATTACH TO WOOD POLES.
24. ON STEEL POLES USE BOLT-A-BAND EVERY FIVE (5) FEET. ATTACH CONDUIT TO BANDS.
25. GROUND ANTENNA AND ENCLOSURE TO GROUND ROD. USE EXISTING POLE GROUND IF AVAILABLE.
26. UTILITY AND ATTACHMENT RISERS SHALL NOT BE MADE ON THE SAME POLE WHERE IT IS PRACTICABLE TO PLACE THEM ON SEPARATE POLES.
27. ALL RISERS SHALL BE SO ARRANGED AS NOT TO INTERFERE WITH CLIMBING OR WORKING SPACE.
28. CONSULT SECTION 239 OF THE NATIONAL ELECTRIC SAFETY CODE (NESC) FOR SITUATIONS NOT COVERED BY THESE STANDARDS.
29. METER AND DISCONNECT COMBINATION - REFER TO LP&L STANDARD NO. W05 AND LP&L SERVICE REQUIREMENTS.
30. SERVICE ADDRESS SHALL BE PLACED ON METER CAN USING VISIBLE AND DURABLE STICKER.
31. LP&L PERSONNEL SHALL DE-ENERGIZE WIRELESS EQUIPMENT PRIOR TO PERFORMING ANY WORK ON POLE.
32. SERVICE TRANSFORMER SHALL NOT BE ON SAME POLE.
33. GROUND ANTENNA AND ENCLOSURE TO GROUND ROD INSTALLED BY LICENSEE'S LICENSED ELECTRICIAN.
34. GROUNDING MUST BE IN COMPLIANCE WITH LP&L STANDARDS AND THE NESC.
35. POINT OF ATTACHMENT SHALL BE INSTALLED BY LICENSEE'S QUALIFIED CONTRACTOR.
36. UTILITY POLE SHALL BE ACCESSIBLE BY BUCKET TRUCK AT ALL TIMES.
37. LICENSEE SHALL OBTAIN TREE TRIMMING PERMIT FROM CITY OF LUBBOCK PRIOR TO CONSTRUCTION, IF REQUIRED.
38. LICENSEE SHALL ENSURE THAT PRIMARY LINES DO NOT COME INTO CONTACT WITH TREES.

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402 MUNICIPAL DR. LUBBOCK, TX 79403	STANDARD DETAILS NOTES	STANDARD No. VIII		PREPARED BY:   AEPARMIA ENGINEERING  1408 TEXAS AVE AUSTIN, TX 79401 info@aeparmia.com www.aeparmia.com TBPE FIRM NO. 19271
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**APPENDIX A**  
**5.2. WIRELINE POLE ATTACHMENT PROCESS FLOWCHART**





Note:  
Applicant must refer to LP&L wireline License Agreement, Standards, and Forms for additional details.

**APPENDIX A**  
**5.3. POLE LOADING ANALYSIS REPORT REQUIREMENTS**



## Lubbock Power & Light

### Pole Loading Analysis Requirements

This document provides guidelines for third-party vendors who perform pole loading analysis (PLA) on Lubbock Power & Light (LP&L) infrastructure.

All Pole Installation applications shall include a PLA sealed by a Texas licensed Professional Engineer (P.E.). LP&L will accept and rely on the documentation submitted by Licensee if the report complies with LP&L requirements. If the submitted documentation does not comply with LP&L requirements, LP&L has the right to reject the report. LP&L reserves the right to perform, or have a firm retained by LP&L perform, its own engineering and field evaluations. Licensee shall pay all costs for such engineering and field evaluations.

The pole attribute data described below shall be used when submitting a PLA. Licensee shall deliver a comprehensive O-Calc PLA Report in PDF format, which shall contain a summary of the detailed PLA results for each pole including safety factors for pole loading, guy wires, vertical loads, and all attachment heights. Licensee shall submit a single PLA Report in the approved format for each pole. The PLA data shall include but not be limited to:

1. Permitted Software: Osmose O-Calc Pro or approved equivalent
2. For Distribution Poles:
  - a. A digital photo of each pole
  - b. Pole brand information (Length, Class, Species)
  - c. Span lengths and associated line angle for all attachments
  - d. Complete electrical and communication equipment data including type, size, and orientation
  - e. LP&L's complete requirements for Loading District and Construction Grades can be found on Attachment 1 and are as follows:
    - i. Electric distribution poles located at highway or railroad crossings:
      - NESC Grade B construction
      - Worse case load-governing between:
        - NESC 250B – Heavy Loading
        - NESC 250C – High Wind with basic wind speed of 94 mph, where applicable
        - NESC 250D
    - ii. All other electric distribution poles:
      - NESC Grade C construction at crossings (C X)
      - Worst case load-governing between:
        - NESC 250B – Heavy Loading
        - NESC 250C – High Wind with basic wind speed of 94 mph, where applicable
        - NESC 250D



- f. Complete pole attachment attributes, which include:
  - i. Type
  - ii. Owner
  - iii. Height
  - iv. Clearance
  - v. Size of all electrical and communication attachments on pole
3. Total usage of the pole based on the available ground line moment capacity of the pole shall be less than 90%. Licensee shall replace any pole exceeding 90% capacity with a calculated pole size that will pass the 90% usage capacity requirement.
4. Setting Depth:
  - a. Wood pole depth shall be based on Table 1 in Attachment 2
  - b. Non-wood pole depth is set according to Table 2 in Attachment 2
  - c. Soil conditions must be considered when determining setting depth.
  - d. Complete guying information including guy wire diameter, anchor location, and orientation. LP&L uses 3/8" guy wires for small conductors and 1/2" guy wires for larger conductors. Please contact LP&L if a different size is found.
5. Height Measurements:
  - a. Licensee shall submit collected digital images calibrated with O-Calc to extract attachment heights, or a survey showing the ground clearance at mid-span for all conductors, and pole height at attachments heights relative to the ground line. These attachment heights are applied in the pole model (described below) to their respective attachments. Overall pole height is also measured and setting depth adjusted to exactly model field conditions.
6. For non-wood poles contractor shall use the charts in Attachment 3 to determine the percentage of usage of the pole based on the ground line moment. LP&L will review any usage value above 90% to determine if a new class of pole is required.



**Attachment 1: Approved Osmose O-Calc Pro LoadCase Values**

**Tables 1-3: Wood electric distribution poles located at highway or railroad crossings**

NESC Rule	250B
Const. Grade	B
Ice Thickness (in)	0.5
Wind Speed (mph)	39.53
Wind Pressure (psf)	4
Transverse Wind LF	2.50
Wire Tension LF	1.65
Vertical LF	1.50

NESC Rule	250C
Const. Grade	B
Ice Thickness (in)	0.0
Wind Speed (mph)	94
Wind Pressure (psf)	22.62
Transverse Wind LF	0.87
Wire Tension LF	1.0
Vertical LF	1.0

NESC Rule	250D
Const. Grade	B
Ice Thickness (in)	0.5
Wind Speed (mph)	94
Wind Pressure (psf)	22.62
Transverse Wind LF	1.0
Wire Tension LF	1.0
Vertical LF	1.0

**Tables 4-6: All other wood electric distribution poles**

NESC Rule	250B
Const. Grade	C X
Ice Thickness (in)	0.5
Wind Speed (mph)	39.53
Wind Pressure (psf)	4
Transverse Wind LF	2.20
Wire Tension LF	1.30
Vertical LF	1.90

NESC Rule	250C
Const. Grade	C X
Ice Thickness (in)	0.0
Wind Speed (mph)	94
Wind Pressure (psf)	22.62
Transverse Wind LF	0.87
Wire Tension LF	1.0
Vertical LF	1.0

NESC Rule	250D
Const. Grade	B
Ice Thickness (in)	0.5
Wind Speed (mph)	94
Wind Pressure (psf)	22.62
Transverse Wind LF	1.0
Wire Tension LF	1.0
Vertical LF	1.0



Attachment 2: Pole Setting Depth Chart

Table 1: Wood Distribution Poles

Pole Height (ft)	Setting Depth (ft)	Pole Top AGL (ft)
30	5.0	25.0
35	5.5	29.5
40	6.0	34.0
45	6.5	38.5
50	7.0	43.0
55	7.5	47.5
60	8.0	52.0

This chart calculates setting depths by finding 10% of the pole’s height and adding an extra 2’.

Table 2: Non-Wood Poles

Pole Height (ft)	Setting Depth (ft)	Pole Ground Line Moment Capacity (ft-Kips)
LD-2 or Equivalent		
40	7.00	120.0
45	7.50	135.0
50	8.00	145.0
55	8.75	155.0
60	9.25	170.0
LD-4 or Equivalent		
40	7.50	165.0
45	8.00	180.0
50	8.50	195.0
55	9.25	210.0
60	9.75	230.0
LD-6 or Equivalent		
40	8.00	205.0
45	8.50	230.0
50	9.00	255.0
55	9.75	275.0
60	10.25	300.0
LD-8 or Equivalent		
40	8.50	255.0
45	9.00	285.0
50	9.50	315.0
55	10.25	345.0
60	10.75	380.0



**APPENDIX A**  
**5.4. WIRELINE POLE ATTACHMENT FEE SCHEDULE**

## APPENDIX A—FEES AND CHARGES

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### Pole Attachment Fees and Charges

Effective Date 08/01/2023

**1. Annual Pole Attachment Fee: \$ 5.25 per pole/per year**

The Annual Attachment Fees may be adjusted annually pursuant to the terms of this Pole Attachment License Agreement.

**2. Non-Recurring Fees:**

Permit Application Fee .....\$ 30 per Pole  
(Max 50 Poles per Permit Application)

Make Ready Work Charges ..... See Sections 8, 9, & 10

**3. Unauthorized Attachment Penalty Fee:**

Three times the annual attachment fee, per occurrence.

**4. Failure to Timely Transfer, Abandon or Remove Facilities Penalty:**

One-fifth (1/5) annual attachment fee per day, per pole, first thirty (30) days;

Annual attachment fee per day, per pole, second thirty (30) days and thereafter.