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Steps for a New Electric Service

Before any work can begin, there are several items that must be considered and completed. Following is a guide to help with this process.

1. Contact Lane County to get approval for your project and obtain proper permits. It is the member’s responsibility to know the county regulations and arrange for your electrical inspection.

   For your convenience, the phone numbers are listed below:

   Lane County (541) 686-7828
   City of Eugene (503) 687-5283
   City of Oakridge (541) 782-2258
   City of Lowell (541) 937-2157
   City of Veneta (541) 935-2191

2. Make an appointment with a Lane Electric Cooperative Engineering Technician.

   • Pay the Engineering Fee.
     o Residential = $300
     o Commercial = $500

   • Provide preliminary construction plans before meeting on sight. Be open to changes from the technician.

   • If you are not a member, fill out a membership application.

   • A load disclosure agreement will be required.

   Note: Upon becoming a member, Lane Electric’s Member Service department will run a credit inquiry to establish whether a deposit will be required.
• Meet on sight with an Engineering Technician to discuss your needs and go over design options. A formal estimate will be mailed or emailed to you following this appointment.

   **Note:** It is your responsibility to contact the phone or cable company in the area to include them in the project.

3. Members are responsible for obtaining all necessary easements. The Cooperative requires a signed and notarized easement for all new accounts. The legal description as filed with Lane County must be attached.

   **Note:** Lane Electric will provide the proper easement form and free notary services upon request.

4. Pay for the construction costs in full. **Construction will not be scheduled or started without full payment!**

   • Refer to the Quote number on the estimate when making the payment.

   **Note:** Scheduling generally takes 1-4 weeks. Unforeseen weather, power outages, or the need for special equipment may increase this time. Please show patience.

5. Gather materials for the project.

   • The member or contractor is responsible for picking up and installing any fiberglass sleeves, concrete vaults or CT cabinets. They are to be placed based on specifications provided by the Engineering Technician.

   **Note:** 24 hours notice is required prior to picking up materials. The warehouseman must pull the materials before you arrive and will help you load these items into a truck or trailer. **Pickup hours are 8:30 am to 3 pm Monday thru Thursday. If 24 hours notice is not given or pickup is not at**
the appropriate time, you will be turned away at the gate!

6. Unless determined otherwise by Lane Electric, customers will supply all trenches and conduit. Call in locates to the Utility Notification Center 48 hours prior to digging. 811 or 1-800-332-2344

- Members are responsible for providing all trenches; 39” deep (36 inches from ground level to the top of conduit), installing 3” conduit and 36” sweeps.

Note: While trenching, if you hit solid rock, contact your Engineering Technician for further instruction. If sharing a trench with other utilities, see the trench detail on page 18.

- Lane Electric will provide the mule tape upon request.
- Members are responsible for setting sleeves and/or vaults.
- When trenching to a pole, trench to within 10 inches of the existing pole. If a new pole is being installed, trench to 2 feet away of the new poles’ location.
- If trenching to an existing underground primary transformer or cabinet the Engineering Technician must be notified prior to digging.
- A Journeyman Lineman is required to be present when trenching within 3 feet of energized equipment. He will direct the trenching near the primary equipment and help get the conduit sweeps into the facility safely.
- Call the Engineering Technician while the trench is still open. Do not backfill until a Lane Electric Journeyman Lineman has approved the trench.
- You may only backfill where trenching crosses a driveway, but leave both ends open or provide proof of depth.
• Backfill after you have passed the trench inspection and notify your Engineering Technician that it has been completed.

7. Install the Meter Base.

• The member is responsible for providing the meter base for any 200 or 400 amp services.

  o If a larger amperage or CT service is needed, Lane Electric will build it and must be provided 24-hour notice prior to pick up.

• For construction power, a temporary meter base may need to be provided.

  o Temporary meter bases should be located on a post no more than 5 feet from a pad mounted transformer and 20 feet for a pole mounted transformer.

  o For underground connections, make sure there is enough wire to connect to the transformer. If using underground wire, it will be direct buried, no conduit is needed.

  o The Lane County electrical inspector must inspect and greentag the meter base before it will be connected by Lane Electric. Inform the Engineering Technician when this is done.

  o There is a one-time $75 charge for all temporary services to the first electric bill.

Other Items to Consider

1) Lane Electric may need 1-8 weeks after all payments and requirements have been met before work can be done.
2) If more than 120 days elapse between initial contact and commencement of construction all cost estimates, engineering deposits, scheduling and other related items are void.

3) All information shown above is subject to changes in policies, legal requirements, construction costs, etc.

4) This booklet is merely an aid to the party requesting service and is not binding to the Cooperative.
Easement

ELECTRIC LINE RIGHT-OF-WAY EASEMENT

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned, and all additional Owner’s Name

for a good and valuable consideration, the receipt whereof is hereby acknowledged, do hereby grant unto the LANE ELECTRIC COOPERATIVE, INC., a cooperative association, whose post office address is Eugene, Lane County, Oregon, and to its successors or assigns, the right to enter upon the lands of the undersigned, situated in the County of Lane, State of Oregon, and more particularly described as follows:

Legal Description as Filed With Lane County Inserted Here

And to construct, reconstruct, upgrade, re-phase, uncover, repair, operate and maintain on or under the above described land and/or in or under or upon all streets, roads or highways abutting said lands, an underground electric line or system, and to license, permit, or otherwise agree to the joint use of occupancy of the line or system by any other person, association or corporation, for electrification, telecommunication, telephone, cable TV, Internet and/or other telecommunication purposes.

The right-of-way easement hereby granted covers the entire property described.

The undersigned agree that all wires and other facilities including any main service entrance equipment, installed on the above described lands at the Cooperative’s expense shall remain the property of the Cooperative, removable at the option of the Cooperative.

The undersigned covenant that they will not erect or maintain any structure which might interfere with the operation or maintenance of the line and that they are the owners of the above described lands, and that the said lands are free and clear of encumbrances and liens of whatsoever character except those held by the following persons, banks or companies:

IN WITNESS WHEREOF, We have hereunto set our hands and seals this ___ day of Oct. 2017

Executed in the presence of:

Owner of Property’s Signature

Additional Owner of Property’s Signature

STATE OF: Oregon COUNTY OF: Lane

Be it remembered, That on this ___ day of ___ month ___ year ___, before me, the undersigned, a Notary Public in and for the said County and State, personally appeared the within named Owner of Property’s Name and all Additional Owners’ Names

Who are known to me to be the identical individuals as described in and who executed the within instrument and acknowledged to me that they executed the same freely and voluntarily.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal on this day and year last above written.

Signature of Notary

Notary Public for Oregon
My commission expires: Date Commission Expires

LEC accepts this conveyance of real property or easement. Approved by:

Signature of Manager
Tony Toncray, Manager, Engineering Services

-7-
Establishing Proper Right-of-Ways
Temporary Overhead Installation

Requirements:

1. Temporary pole should be located 5 – 20 feet from transformer pole or as specified by the Cooperative.

2. Consumer shall supply temporary pole, meter base, mast with weather head, main disconnect, and grounds to National Electric Code (NEC) construction code specifications.

3. The Cooperative will provide a maximum 20’ overhead service drop and install the meter.

4. Energizing of consumer’s service is contingent upon an approved State or City electrical inspection.

5. Before you dig, call the Utility Notification Center at 811 or 1-800-332-2344, 48 hours in advance.
Temporary Underground Installation

Underground Temporary using Underground Service Equipment

Requirements:
1. Consumer will supply conductors long enough to be connected inside LEC’s transformer or secondary box. Maximum of 3’ from temporary meter pole to transformer or secondary box.

2. Consumer will supply all trench, meter base, grounds, pole, and disconnect switch.

3. LEC will connect the consumer’s wire to the transformer or secondary box and install the meter.

4. Energizing of consumer’s service is contingent upon an approved State or City electrical inspection.

5. Before you dig, call the Utility Notification Center at 811 or 1-800-332-2344, 48 hours in advance.
**Meter Accessibility**

**Requirements:**

1. Meters must always remain accessible. Most Lane Electric meters are read remotely, however, periodic inspections will occur.

2. Meters should not be enclosed in areas which are inconvenient to enter or where privacy is desired. The meter must have a working space of 36 inches wide x 36 inches deep and located in an area with a minimum of 84 inches of standing head-room.

3. New service entrance location shall be approved by the Cooperative prior to installation.

4. Meters should be located so accessibility will not be obstructed by future alterations or additions. Meters to be located at alternate locations such as under carports, decks, breezeways, etc. **shall always have a clear and unrestricted path for access to the meter.**

5. Lane Electric should be provided a gate code any time Cooperative
equipment is located behind a locked gate. A lock can be provided upon request.

**Overhead Service Attachment**

![Overhead Service Attachment Diagram]

**Service Entrance Equipment**

![Service Entrance Equipment Diagram]
Notes:

1) Lane Electric will furnish the meter, service drop conductor and service attachment to the conduit mast. The Cooperative will connect the member’s conductors to the Cooperative's service drop.

2) The consumer will furnish the service entrance conduit with weather head, conductor, and meter base in accordance to code requirements. **A minimum of 18 inches member conductor must extend from the weather head.**

3) A strong enough service mast must be mounted on the side nearest
Lane Electric’s distribution pole. A clear path must exist between service drop attachment and pole. Avoid service wire overhang above roof, or provide code clearance.

4) Energizing of Consumers service is contingent upon a State or City electrical inspection.

**Underground Service with an Underground Feeder**

**Requirements:**

1) **Before digging, call the Utility Notification Center 48 hours in advance at 811 or 1-800-332-2344.**

2) All electrical connections, equipment and equipment grounds shall comply with the **National Electrical Code**.

3) The member shall furnish and maintain a 6” x 6” x 10’ pressure treated wood post, all conduit, conduit straps, grounds, meter base, disconnects, and electrical cable beyond the meter.

4) Members will open and backfill a service trench of 36 inches minimum depth from Lane Electric’s equipment to the desired meter base location.

5) The Cooperative shall furnish and maintain the meter and electrical
Before the Cooperative energizes the meter base, the base must be inspected and approved by the State or City Electrical Inspectors and a Lane Electric Journeyman Lineman.

**Underground Service to a Building**

**Requirements:**

1) **Before digging, call the Utility Notification Center 48 hours in advance at 811 or 1-800-332-2344.**

2) All electrical connections, equipment and equipment grounds shall comply with the **National Electrical Code**.

3) The member shall furnish and maintain all conduit, conduit straps, grounds, meter base, disconnects, and electrical cable beyond the meter.

4) Members will open and backfill a service trench of 36 inches minimum depth from Lane Electric’s equipment to the desired meter base location.

5) Any conduit sweeps going into the stem wall should be a minimum 36” radius.

6) The Cooperative shall furnish and maintain the meter and electrical cable from Lane Electric’s equipment to the meter.
7) Before the Cooperative energizes the meter base, the base must be inspected and approved by the State or City Electrical Inspectors and a Lane Electric Journeyman Lineman.

**Typical Underground Connections to a Pole**
320/400 Amp Self-Contained Meter Base

C.T. Meter Base Example
**Requirements and Notes:**

1. C.T. Cabinets and wire to the cabinet will be supplied by Lane Electric.

2. C.T. Cabinets up to 800 amps are supplied by Lane Electric. Anything larger must be approved by Lane Electric’s Engineering Department.

3. Talk with your Engineering Technician for specifications.
Trenches

1) Before digging call for underground locates: 1-800-332-2344 or 811 at least 48 hours prior to digging.

2) All Trenches must be a minimum of 36 inches deep. If a 36 inch depth cannot be achieved, contact the Engineering Technician.

3) If trench is to be a joint trench (shared with other utilities) the following separations must be maintained:
   
   A) 24 inches between gas and electric lines
   B) 12 inches between water and electric lines
   C) 24 inches between sewer and electric lines
   D) 12 inches between communications and electric lines

4) If trench is to be power only, the ditch must be wide enough to accommodate the conduit, a 4” ditch width is sufficient.

6) If trenching through rough, rocky terrain, the conduit must be bedded with a minimum of 4 inches of sand or ¾ minus crushed rock with an additional 6” cover before native backfill.

7) All conduits must be gray, Schedule 40, electrical PVC.

8) All primary conduit (7200V) must be 3 inches diameter with 36 inches radius long sweep elbows at any bend.

9) Secondary (120/240V) conduit for a 200 amp service must be 3” diameter with 36” radius long sweep elbows at any bend. Secondary (120/240V) conduit for a 400 amp service must be 3” diameter, with 36” radius long sweep elbows at any bend.

11) Street or security lighting conduit must be 1 ¼ inches with 36” radius long sweep elbows at any bend.

12) There will be no more than 270° of bend (3- 90° bends or 2- 90° and 2- 45°) in any one run of primary or secondary conduit between devices.
13) All Primary conduits must be proved by mandrel.

**Typical Trench Detail**

1) New mule tape rated at 2500 pound must be left in all primary and or secondary conduits. Mule tape must move freely in conduit and have sufficient length (10 feet or greater) beyond each end to accommodate installation of conductor. Mule tape can be picked up at Lane Electric at no charge with 24 hours’ notice.

2) Where transformers and primary or secondary cabinets are being installed, specifications must be obtained from Lane Electric’s Engineering Department.

3) After trenching and conduit is installed call Lane Electric at 541-484-1151 to have an inspection scheduled by the Engineering And Operations Department.

4) After the trench in the conduit are inspected and approved, the trench may be backfilled.

5) Conductor cannot be installed until the trench is backfilled.

6) All backfill must be free of Large rocks.
NOTE: No electric lines, primary or secondary, may be placed under a concrete foundation or slab.

**Mandreling & Cleaning Primary Conduits**

<table>
<thead>
<tr>
<th>Conduit Size</th>
<th>Mandrel Size</th>
<th>Min. Mandrel Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4”</td>
<td>0.62”</td>
<td>1.00”</td>
</tr>
<tr>
<td>1”</td>
<td>0.78”</td>
<td>1.25”</td>
</tr>
<tr>
<td>1 1/4”</td>
<td>1.00”</td>
<td>1.50”</td>
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<tr>
<td>1 1/2”</td>
<td>1.25”</td>
<td>1.75”</td>
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<tr>
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<td>2 1/2”</td>
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<td>6”</td>
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**Wire Brush Conduit Cleaner**

**Rubber Conduit Swabs**

**Leather Washer Conduit Cleaner**

**Notes:**

1) After backfilling is complete, all conduits must be cleaned, tested and determined to be free from obstructions with the use of appropriately sized steel brush and mandrel. If a mandrel cannot successfully pull through the completed conduit system, it is the members’ responsibility to locate and repair the damaged conduit.

2) Cleaning, mandreling, and the installation of the 2500 pounds capacity mule tape may be performed simultaneously.
Secondary Pedestal Installation

- Conduit Must Be 2" Above Ground Level
- 3/4" Minus Crushed Rock
- Side View
- Customer Conduit For Service Lateral To Electric Meter
- Top View
**Typical Ground Sleeve Installation**

Notes:

1) Transformer ground sleeve must be installed perpendicular to underground primary trench.

2) Conduits are to be cut 2-3 inches above internal ground and vertical to the ground.
Notes:

1) Ground sleeve for primary junction cabinets must be installed parallel to underground primary trench.

2) Conduits are to be cut 2-3 inches above internal ground and vertical to ground.
Notes:

1) Conduit must be brought in under bottom edge of concrete sleeve.
320/400 Amp Self Contained Meter Base

Mount Meter Base & Disconnects On 3/4" Sheet of Outdoor Grade Plywood On 6"x 6"x10' Pressure Treated Posts

Main Disconnect

Main Disconnect

5'-6'

6" x 6" Post

3" Schedule-40 Conduit

Code Approved Depth

36" Min.

LEC Service Entrance Cable Source

Code Approved Grounding