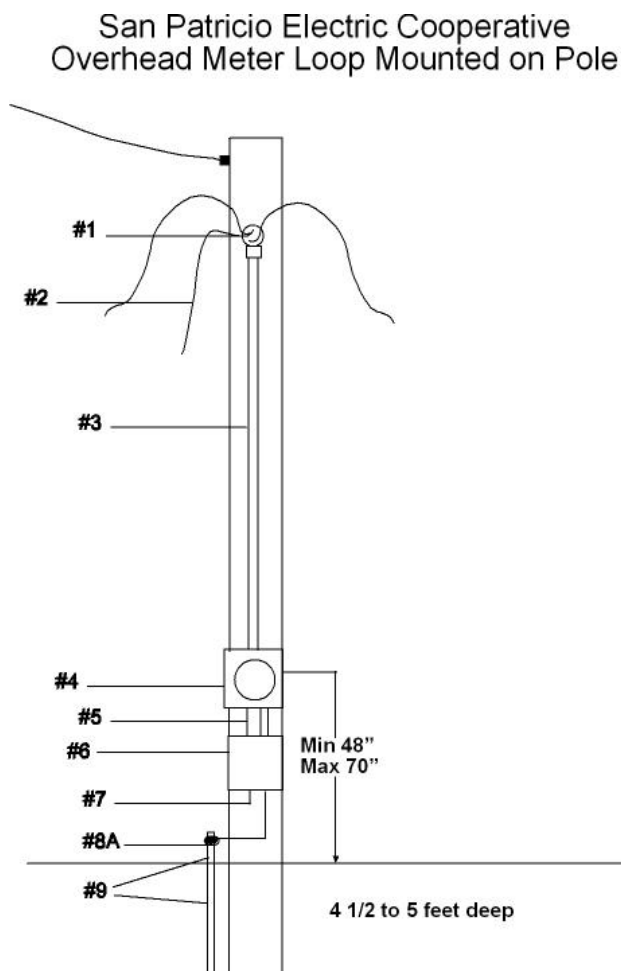


**San Patricio Electric Cooperative - 361-364-2220**  
**Meter Loop Diagram Mounted on Pole – 320 AMP Service**

**IT IS REQUIRED THAT ALL POLE MOUNTED METER LOOPS BE ON THE WORK SITE ON THE DAY THAT CONSTRUCTION IS SCHEDULED IN ORDER FOR WORK TO BE DONE.**



Installed on a **30-ft. meter pole** as provided by San Patricio Electric

1. 2 ½ - 3" Weatherhead
2. 60 feet of copper wire (A). Cut wire in three equal lengths.  
Mark neutral or use odd colored wire. Wire must extend out of weatherhead at least 24".
3. **15 feet** of 2 ½" - 3" rigid galvanized conduit or rigid aluminum conduit (B).
4. Meter can
5. Threaded galvanized nipple. Must be same diameter as riser conduit above meter can. Length must be a minimum of 4" but not more than 6". Lock rings are required on all nipples and adapters. It is preferred that insulation bushings be used to protect the conductors.
6. Breaker box with hub
7. Breaker(s) inside breaker box
8. Minimum size #2 copper ground wire must be installed between the meter can and the breaker box.
  - a) Wire should be sized according to the load. See chart on back.
  - b) Conduit should be sized according to the size of wire that will be used. See chart on back.
9. 5/8" x 8' Cooper Weld Ground Rod & Clamp – 2"-3" Exposed

The guidelines on ground clearances for service conductors as described on the reverse side **MUST BE FOLLOWED**.

Consumers may set their own meter pole. **NOTE: Contact SPEC about placement of meter pole in relation to transformer pole BEFORE placing meter pole.** The meter pole must be a minimum of 20 feet in length with a 6" top.

Revised 5/5/2006

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Pole must be set 5 feet deep in the ground. Meter loop riser must extend to within 18” from top of the pole. Meter loop should be mounted on the pole so that meter can is a minimum of 60” from ground level and a maximum of 72” from ground level. A 5/8” X 8’ copper weld ground rod and copper weld ground rod clamp must be installed with a minimum size #2 copper ground wire.

Meter loop must be completely assembled by the member or by an electrician in order to be connected. Co-op employees will not help in the assembling of a meter loop on the job site. San Patricio Electric has a licensed electrician that builds meter loops and offers other services as well. For a price quote please call the Cooperative at 361-364-2220.

**CONSTRUCTION of a 3 WIRE METER LOOP:**

Meter Loop must be assembled by the member or by an electrician. The Co-op shall determine the acceptability of the meter loop before the connection is made.

Meter Loop shall be made of rigid galvanized conduit or rigid aluminum conduit. EMT is NOT acceptable. A minimum size of 350 MCM stranded copper is required.

Meter and Main disconnect must be located on the outside area of any structure and must be accessible to the Cooperative. Disconnect must be located directly below the meter. Disconnect must be breakers or fuses. **BLADED DISCONNECT SWITCHES ARE NOT ALLOWED.**

**CONSTRUCTION of 5 WIRE METER LOOP WILL NO LONGER BE ACCEPTED.**

Consumer wiring from the load side of the consumer’s breaker box **can not** be run back up through the meter can and the main meter loop riser. To feed consumer overhead services, a separate riser pipe must be installed from the breaker box to run back up the pole. This riser must **also** have a neutral wire in it. Riser must be electrical grade PVC, galvanized pipe or rigid aluminum conduit. The clearance of this riser must also meet height requirements.

**ALLOWABLE AMPERAGE OF AN INSULATED CONDUCTOR**

Taken from National Electric Code Manual Table 310-16

Copper wire, type THHN max. Temp. 90° centigrade, 600 volt insulation minimum

WIRE SIZE		CONDUIT SIZE
#6 Cu.	75 amps (min. size allowable) per wire	1”
#4 Cu.	95 amps per wire	1”
#2 Cu.	130 amps per wire	1 ¼”
1/0 Cu.	170 amps per wire	1 ½”
2/0 Cu.	200 amps per wire	2”
3/0 Cu.	225 amps per wire	2”
4/0 Cu.	260 amps per wire	2”
350 mcm	320 amps per wire	2 ½ - 3”

**Ground Clearance**

NOTE: For 120/240-volt service drop installations, minimum clearances must be maintained according to SPEC regulations:

- 12’ of clearance should be maintained where no traffic is present
- 15’ of clearance should be maintained over driveways
- 22’ of clearance should be maintained over roadways
- 22.5’ of clearance should be maintained over swimming pools
- 3.5’ of clearance should be maintained over building roofs (no pedestrians)
- 11’ of clearance should be maintained over building roofs (with pedestrians)

The measurement for clearance is determined at the lowest point in the service wire. The clearances from the ground to the service wire will decrease as the distance between the meter pole and the service pole, or transformer pole, increases.