# MINIMUM REQUIREMENTS: METER LOCATIONS ON PEDESTALS - WITH UNDERGROUND

SINGLE PHASE, 120/240 VOLTS, 3 WIRE SERIVCE, 200 AMPERE, MINIMUM

#### **GENERAL**

The member shall purchase a meter base from the Cooperative or purchase an approved meter base and install it on the pedestal at member's expense (See FIGURE 1).

All service entrance equipment from the meter box to the house is to be supplied and installed by the member, including proper size conduit from the meter base to 30" below ground level. A frost sleeve is required between the meter pan and ground level (See FIGURE 2).

Conduit from the meter base to 30" below ground level shall be rigid, galvanized steel or rigid non-metallic conduit or Schedule 80 PVC. It shall be of proper size as indicated, below, and securely fastened to the pedestal and the side of the house with suitable clamps.

The main switch or service panel shall be located at a readily accessible location nearest the point of entrance of the service entrance conductors in the house as stated in the National Electric Code.

Prior to the installation of the new service, contact an electrical inspection agency approved by the Cooperative if you have any questions.

### **GROUNDING**

Ground wire shall be one continuous length without a splice or joint from the main switch to the grounding electrode. Ground clamps must connect the ground wire securely on the two driven grounding electrodes which are to be located a minimum of 6' apart in undisturbed earth.

Driven grounding electrodes must be 5/8" x 8' copper clad rod or 5/8" x 8' solid, galvanized rod. PVC conduit installed on the pedestal and or the house requires a 3-wire cable from the pedestal to the house. If a disconnect is located beneath the meter box, then a four 4-wire cable shall be installed between the meter box and the house. If metal conduit is used on either end, it must be bonded to either the meter box and or the main service panel.

If a continuous run of metallic conduit is installed from the meter box on the pedestal to the house main panel, then bonding bushings must be used to bond the meter box and main panel together. In this case, a 3-wire cable may be used between each point.

For all of the above, two (2) grounding electrodes must be installed at the house.

## **NOTES**

- 1. All installations to be made according to the diagram.
- 2. All material to be approved by Underwriters Laboratory.
- 3. All wiring to be in accordance with the National Electric Code and certified by a Cooperative approved inspection agency.
- 4. Always have a qualified electrician take care of your wiring needs.
- 5. Members not following these minimum requirements may be refused service connection.
- 6. Service connections and/or meter removal shall be done only by authorized Cooperative personnel.
- 7. A reduced neutral conductor may be allowed.
- 8. All service entrances will be located by Cooperative personnel. Any change to the service entrance location without the authorization of Cooperative personnel may cause an additional expense to the member.

Service entrance conductor and grounding conductor schedule.

ITEM	MATERIAL	100 Ampere		150 Ampere		200 Ampere		300 Ampere		400 Ampere		600 Ampere Service	
1	Service Entrance Cable, Type SEU Copper Wire	Service #2/0		Service #2/0		Service #2/0		Service		Service		Service	
2	Service Entrance Cable, Type SEU Aluminum Wire		#4/0		#4/0		#4/0						
3	Copper wire, Type THW in Conduit	#2/0		#2/0		#2/0		350 MCM		500 MCM		6-350 MCM	
4	Aluminum Wire, Type THW in Conduit		#4/0		#4/0		#4/0		500 MCM		750 MCM		6-500 MCM
5	Minimum Conduit Size	2"	2"	2"	2"	2"	2"	3"	3"	3"	3 ½"	4"	4"
6	Minimum Conduit Size for UG Service Conductors	2"	2"	2"	2"	2"	2"	3"	3"	4"	4"	4"	4"
7	Copper Ground Wire to Driven Grounding Electrode	#4	#4	#4	#4	#4	#4	#1/0	#1/0	#1/0	#1/0	#1/0	#1/0

# UNDERGROUND SERVICE CONNECTIONS FROM OVERHEAD LINES ✓ DCEC POLE POLE AND PEDESTAL DETAILS WEATHERHEAD DCEC TO FURNISH PVC CONDUIT FROM MEMBER'S CONDUIT UP TO 2". ANY CONDUIT THAT WOULD **TRANSFORMER** REQUIRE SERVICE CONDUCTORS LARGER THAN 2" SHALL BE SUPPLIED BY THE MEMBER AND INSTALLED DCEC TO MARK LOCATION TO INSTALL CONDUIT ON THE POLE SERVICE CONDUCTORS (APPROX. 35' REQUIRED FROM GROUND LEVEL) DCEC TO SPECIFY AND STAKE PEDESTAL LOCATION 6" X 6" TREATED TIMBER PEDESTAL, CENTERLINE OF METER 5' ABOVE PIPE STRAPS **GRADE** TRANSFORMER GROUND WIRE METER BOX FURNISHED AND INSTALLED BY MEMBER RIGID STEEL, OR FROST SLEEVES SCHEDULE 80 PVC RIGID STEEL, IMC, OR CONDUIT **REQUIRED PVC SCHEDULE 80** 1-10' LENGTH, 18" MIN. CONDUIT (SEE NOTE #1) **BELOW GRADE** WARNING RIBBON LOOP GROUND AT 12"TO 18" ABOVE CONDUIT METER (#4 CU) MINIMUM COVER REQUIREMENTS 30" ABOVE CONDUIT TO SERVICE ENTRANCE COPPERWELD OR GALVANIZED STEEL RODS, 8' LENGTHS, 5/8" DIAMETER 15' FROM POLE DCEC TO SPECIFY AND STAKE PEDESTAL LOCATION TRENCH DETAILS **NOTES** FINAL GRADE 1. RIGID STEEL OR IMC TO BE BONDED AT METER BOX AND SERVICE ENTRANCE PANEL 33" MIN. DEPTH OF TRENCH CABLE DEPTH POLE AND PEDESTAL DETAILS DIRT **BACKFILL** FIGURE 1 SERVICE CABLE 30" (IF REQUIRED) 12" MIN. → **TRENCH DETAILS** DCEC SYSTEM UNDERGROUND SERVICE CONNECTIONS FROM OVERHEAD FIGURE 2 LINES 5/20/2020 PD