

UNDERGROUND SERVICE INSTALLATION

200 AMP, UM 5-2 METER BASE, 120/240 V SERVICE
PAD MOUNTED TRANSFORMER with VAULT
Firelands Electric Cooperative, Inc.

METER BASE /
DISCONNECT
SWITCH
COMBINATION
(MEMBER)

PROVISIONS FOR
TWO 2-POLE
PLUG-IN
BREAKERS
SQUARE "D" HOMELINE
IS RECOMMENDED

GROUND WIRE

TO SERVICE
PANEL
(MEMBER)

200 AMP
2-POLE
CIRCUIT
BREAKER
(MEMBER)

PADMOUNT
TRANSFORMER
(FIRELANDS)

METER BASE /
DISCONNECT
SWITCH
COMBINATION
MEMBER-OWNED
(CO-OP SUPPLIED)

TRANSFORMER
VAULT
MEMBER-OWNED
(CO-OP INSTALLED)

METER
(FIRELANDS)

SECURE
MOUNTING
PEDESTAL
(FIRELANDS)

SLIP JOINT
(MEMBER)

GROUND GRADE

6" BELOW GROUND GRADE -
RED "CAUTION" TAPE IS REQUIRED
TO BE BURIED ABOVE ALL CABLE IN CONDUIT

18" RADIUS
PVC
"SWEEP L"
(FIRELANDS)

TO PANEL
BOX
(MEMBER)

SECONDARY CABLE IN CONDUIT

GROUND ROD
& CLAMP
INSTALLED BY
FIRELANDS

GROUND WIRE

GROUND GRADE

6" BELOW GROUND GRADE -
RED "CAUTION" TAPE IS REQUIRED
TO BE BURIED ABOVE ALL CABLE IN CONDUIT

42" MINIMUM
(MEMBER)

PRIMARY CABLE IN CONDUIT

36" RADIUS PVC
"SWEEP L"
(FIRELANDS)

36" RADIUS
PVC
"SWEEP L"
(FIRELANDS)

18" RADIUS PVC
"SWEEP L"
(FIRELANDS)

PRIMARY AND SECONDARY PVC CONDUIT
FROM UTILITY POLE TO METER PEDESTAL IS
INSTALLED BY MEMBER.
(MEMBER)

PRIMARY AND SECONDARY CABLE FROM
UTILITY POLE TO METER PEDESTAL IS
MAINTAINED BY FIRELANDS.
(FIRELANDS)

GROUND ROD
& CLAMP
INSTALLED BY
FIRELANDS



**UNDERGROUND SERVICE INSTALLATION
PAD MOUNTED TRANSFORMER with VAULT
200 AMP, UM 5-2 METER INSTALLATION**

Notes:

- Primary cable conduit must be a minimum of 42-inches below the final ground level. Conduit must be a minimum of 2-inches for primary cable.
- Secondary cable conduit must be a minimum of 24-inches below the final ground level. For a 200 Amp service, the conduit must be a minimum of 2½-inches.
- Aluminum electrical joint compound shall be applied to all aluminum conductors before installing in terminals of meter base.
- A separation of 12-inches is required between the primary and secondary conduits where they enter the transformer from underground.
- The transformer pad must be level. Transformer vault should be set on undisturbed ground. If ground is disturbed and unsettled, compacted sand must be used to fill around the transformer area. The transformer area is approximately 4-feet by 4-feet. Contact your cooperative for complete installation procedures.
- Member is responsible for opening and then filling the trenches, installing all conduit and preparing the sites for the pedestal and transformer. The cooperative will install primary and secondary cables up to the pedestal base of meter; install the transformer and pedestal, in addition to making the necessary connections.

Ownership of Installed Facilities:

- (a) The cooperative owns and maintains all primary and secondary cable from utility pole to meter pedestal and the cooperative maintains all ownership of electrical meters.
- (b) The cooperative supplies the transformer vault to the member, and installation is the member’s responsibility.
- (c) Member owns and maintains all materials, including slip joint, beyond the pedestal located below meter base unit.

Materials:

Amount Required

2-inch Rigid Schedule 40 PVC Conduit (for primary)	_____	
2-inch Rigid Schedule 40 PVC 36" Radius "Sweep L"	_____	(2)
2½-inch Schedule 40 Rigid PVC Conduit (for secondary)	_____	
2½-inch Rigid Schedule 40 PVC 18-inch Radius Sweep "L"	_____	(2)
#4 Cu. Ground Wire	_____	
Ground Rod, 5/8-inch diameter by 8-feet	_____	(1)
Ground Rod Clamp	_____	(1)
200 Amp, Combination Meter Base / Disconnect Switch	_____	(1)
18-inch or 30-inch Vault, Depending on Ground Conditions	_____	(1)

Available from Cooperative –

- ✓ Meter
- ✓ Primary Cable
- ✓ Secondary Cable
- ✓ Pad Mounted Transformer
- ✓ Pedestal