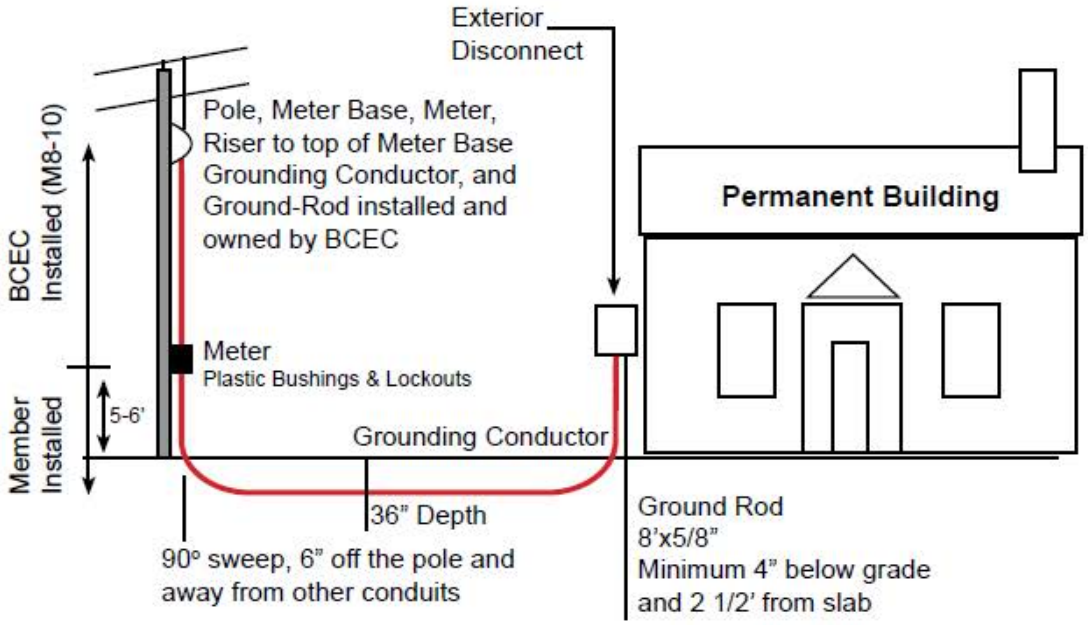
Bowie-Cass ELECTRIC COOPERATIVE

UNDERGROUND SERVICE FROM OVERHEAD PRIMARY TO PERMANENT BUILDING



Underground triplex
2' Sch 40 Gray PVC
Min 36" Depth
Conduit stubbed up 6" from pole

Bowie-Cass Electric Cooperative, Inc.
Douglassville, Texas
UG Service to Permanent Bldg

Dwn by:	Ckd by:	Scale	Drawing
File No.	Date 12-23	None	M3-A

BCEC Underground Services

1. All wiring shall be in accordance with Articles of the latest edition of the National Electric Code.
2. BCEC will supply and install a meter base on our pole or meter base pedestal.
3. All conduit shall be sized per Table 5.1 from the meter base to the main disconnect and shall have locknuts and plastic bushings. Conduit between meter base and main disconnect shall be rigid type (no flex).
4. The Member is responsible for the installation of the underground conduit and cable from the bottom lugs of the BCEC meter base to the member's exterior service disconnect. The installer should ensure that the meter base is not energized before beginning work.
5. Member shall call Texas 811 prior to any digging and follow all laws pertaining to excavation. https://texas811.org/homeowner
6. Underground cable shall be installed in Schedule 40 gray PVC pipe buried at a minimum depth of 36 inches and using *90 degree sweeps.*
7. The member is responsible for the termination of the underground cable into the bottom lugs (load side) of the meter base and into the exterior service disconnect as well as properly grounding the exterior disconnect with 8' x 5/18" ground rod.

Underground service from pole mounted transformers. To provide underground service to a permanent building from a BCEC overhead line, the existing BCEC pole or an additional pole equipped with a weatherhead, conduit, and meter base will be provided, owned and installed by BCEC. This requires the member to then install underground service conduit from the bottom of the meter base to their exterior disconnect. Member will also properly ground the main exterior disconnect. With the exception of the underground conduit, no member owned equipment is allowed to be mounted on or placed within 5 feet of any BCEC pole.

Underground service from pad mount transformers. BCEC will install the pedestal and the conduit and wire between an underground transformer and the underground meter base pedestal. The member shall be responsible for trenching and installing the underground conduit and conductor at a depth of a minimum 36 inches deep in gray PVC schedule 40 conduit between the underground meter base pedestal and the exterior disconnect. Member will also properly ground the exterior disconnect.

Table 5.1	Conductor Size for 120/240V, 3-Wire Dwelling Service, Single Phase, From NEC Table 310.15 (B) (&) and NEC Table 250.66				
Service Size	Ungrounded Conductor (AWG/kcmil) *(Notes 2, 4)*		Minimum Neutal GoundED Conductor) *(Notes 3, 4)*	GroudING Conductor to Ground Rod (NEC Table 250.66)	Rigid Conduit Size
	Copper	Aluminum			
100 Amp Main	#4	#2	#4 Cu, #2 Al	#6 Solid Copper *(Note 6)*	1.25" Minimum *(Note 1)*
200 Amp Main	2/0	4/0	#1 Cu, 2/0 Al	#4 Solid Copper *(Note 5)*	2" Minimum
320 Amp Main	350	500	4/0 Cu, 300 kcmil Al	#2 Copper *(Note 5)*	3: Minimum