



STANDARD UNDERGROUND ELECTRIC SERVICE REQUIREMENTS TO A STRUCTURE

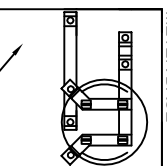
100, 200, OR 400 AMP 120/240 Volt Single Phase

*THE REQUIREMENTS OF THIS SPECIFICATION ARE EFFECTIVE JULY 1, 2026 AND SUPERSEDE ALL PREVIOUS PUBLICATIONS

NOTE: BEFORE GEA INSTALLS ANY FACILITIES ON PRIVATE PROPERTY, AN EASEMENT WILL NEED TO BE OBTAINED.

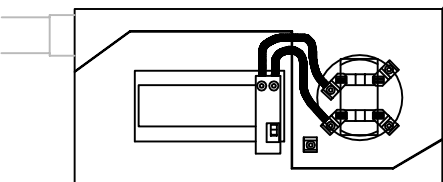
NOTE: THE STATE ELECTRICAL INSPECTOR MUST INSPECT CONDUIT/CONDUCTORS INSTALLED IN TRENCH BETWEEN METER BASE AND POLE BEFORE TRENCH IS BACKFILLED. AN INSPECTION PERMIT WILL BE NEEDED. VISIT THE TN DEPARTMENT OF COMMERCE AND INSURANCE WEB SITE FOR PURCHASE INFORMATION

SIDE WIRED/OFFSET METER BASE

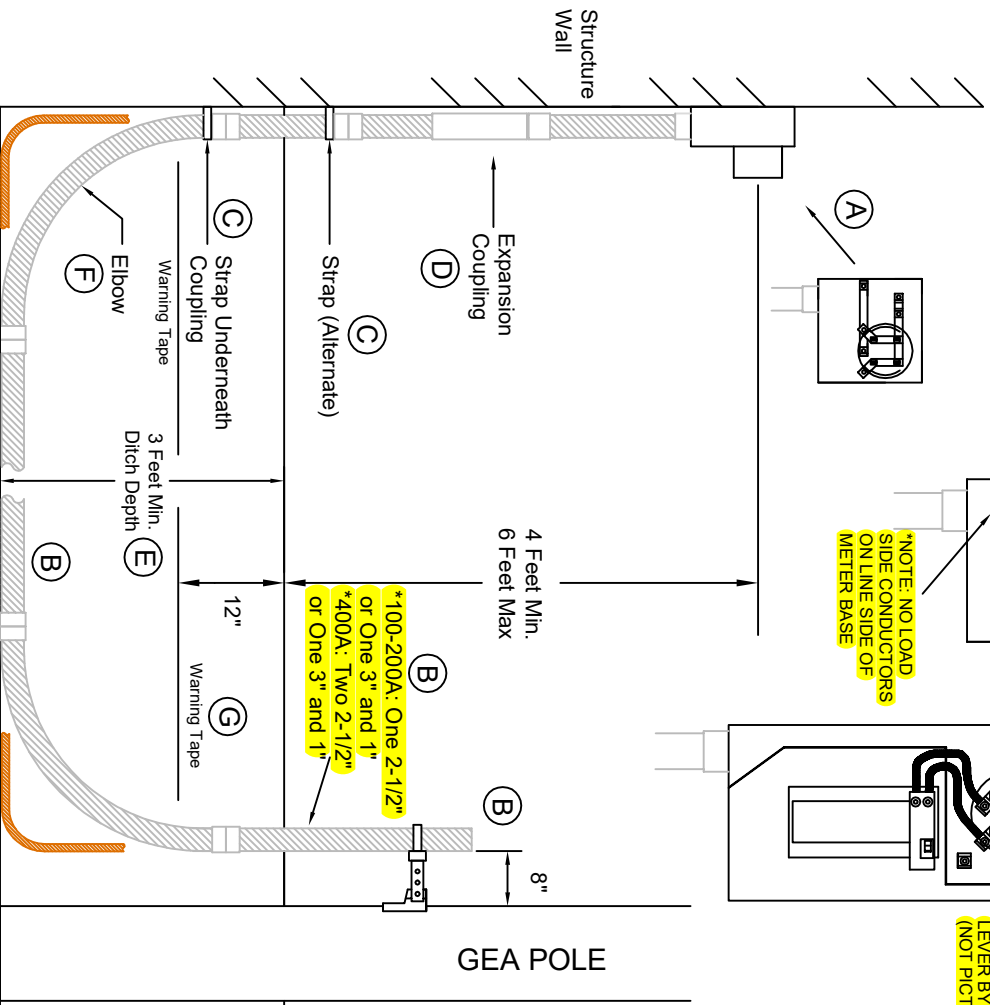


*NOTE: NO LOAD SIDE CONDUCTORS ON LINE SIDE OF METER BASE

COMBINATION METER BASE WITH DEDICATED CHASE FOR UTILITY CONDUCTORS



*NOTE: 400A METER BASE MUST HAVE A METER LEVER BYPASS (NOT PICTURED)



Greeneville Energy Authority

423-636-6200

www.mygea.net

A. UG METER BASE: Customer must contact GEA Engineering Department at 423-636-6241 to have the meter base location determined. GEA may require relocation of the meter base when customer has not complied with this requirement. Meter base must be mounted a minimum of 4 feet and a maximum of 6 feet above finished grade. Meter base must be grounded per National Electric Code requirements.

NOTE: ONLY SIDE WIRED/OFFSET METER BASES OR METER BASE COMBINATIONS WITH A DEDICATED CHASE FOR UTILITY SIDE CONDUCTORS WILL BE ACCEPTED FOR GEA TO FURNISH AND INSTALL THE UNDERGROUND SERVICE CONDUCTORS TO THE METER BASE.

B. CONDUIT: All underground services shall be installed in conduit regardless of soil conditions. **NO LB'S, UL'S OR LR'S ARE PERMITTED ON THE LINE SIDE OF METER BASE.**

Customer to furnish and install all conduit from meter base to GEA pole per drawing. All joints to be glued.

Maximum service length for a 200A or smaller service:

- 215 feet from a GEA transformer pole
- 235 feet from a GEA pad mount transformer

Maximum service length for a 400A service:

- 160 feet from a GEA transformer pole
- 180 feet from a GEA pad mount transformer

2-1/2 inch or 3 inch UL listed Schedule 40 PVC conduit is required for the electrical service. No reducers or mixing of conduit sizes are permitted. Customer must also furnish and install a 1 inch UL listed Schedule 40 PVC conduit for future communications/meter reading. The 1 inch conduit is to be installed in close proximity and preferably in contact with the electrical service conduit. **NOTE: THE 1 INCH CONDUIT CANNOT BE USED BY ANY OTHER ENTRY DUE TO ITS INSTALLED LOCATION. THE CONDUIT WILL NOT MEET NESC RULE 320B2c FOR MINIMUM SEPARATION REQUIREMENTS.**

GEA WILL NOT ACCEPT HEATED CONDUIT REGARDLESS OF THE METHOD USED. UNDER NO CIRCUMSTANCES WILL GEA ACCEPT CONDUIT OFFSETS TO AVOID NOTCHING/MODIFYING OF FOOTER.

All Conduits to be installed above grade and must not exceed 2 inches away from structure wall. Conduit at GEA pole to be installed in contact with GEA stand-off bracket. If GEA stand-off bracket is not present during installation, install conduit 8 inches away from surface of pole. Seal the end of all conduits that do not enter an enclosure.

C. COUPLING SUPPORT STRAP/STRAPS: Install strap directly below coupling ensuring contact with coupling. This prevents conduit from settling during backfill. If there is nothing below grade to anchor the coupling support strap, cut the conduit one foot above grade and install coupling support strap. Straps are required every 24 inches for exposed conduit above grade.

D. EXPANSION COUPLING: An expansion coupling is required for all underground services.

E. DITCH 3 FEET DEEP MINIMUM: Customer to open and close service ditch. Depth of ditch to be a minimum of 3 feet. Ditch must be backfilled before GEA can energize service. If rock is encountered and minimum depth cannot be achieved, conduit can be encased with 3 inches of concrete. Water lines cannot be installed in the ditch with electrical lines. A 5 foot separation is required. Water lines can cross electric lines as long as a minimum of 12 inches of separation is maintained. Communication lines can be installed in the same ditch as electric as long as a minimum of 12 inches of separation is maintained. Refer to GEA "JOINT TRENCH REQUIREMENTS" located at www.mygea.net or obtain a copy from GEA Engineering Department.

F. ELBOW: Must use at least 24 inch radius, 90-degree elbows at GEA pole and at meter base on structure. 36 inch radius 90-degree elbows must be used for horizontal turns in ditch. Maximum of 3 elbows (one at pole, one at structure and one in ditch) can be used. For the communication conduit, use 5.75 inch radius (standard) elbows.

G. WARNING TAPE & TRENCH INSPECTION: Warning tape must be installed & secured to all vertical elbows 1 foot below final grade.

NOTE: ALL REQUIREMENTS LISTED ABOVE MUST BE MET FOR GEA TO FURNISH AND INSTALL UNDERGROUND CONDUCTORS TO METER BASE. IF THE REQUIREMENTS CANNOT BE MET, REFER TO THE GEA SPECIFICATION "NON-STANDARD UNDERGROUND ELECTRIC SERVICE REQUIREMENTS TO A STRUCTURE".

*NOTE: 1 INCH COMMUNICATION DUCT NOT SHOWN IN ITS ENTIRETY FOR CLARITY