

NON-STANDARD UNDERGROUND ELECTRIC SERVICE REQUIREMENTS TO A STRUCTURE

100-200 AMP 120/240 Volt Single Phase

**THE REQUIREMENTS OF THIS SPECIFICATION ARE EFFECTIVE June 1, 2022 AND SUPERSEDE ALL PREVIOUS PUBLICATIONS

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

NOTE: THE STATE ELECTRICAL INSPECTOR MUST INSPECT CONDUIT/CONDUITORS INSTALLED IN DITCH BEFORE DITCH IS BACKFILLED. AN INSPECTION PERMIT WILL BE NEEDED, VISIT THE TIN DEPARTMENT OF COMMERCE AND INSURANCE WEB SITE FOR PURCHASE INFORMATION

Greeneville Light and Power System 423-636-6200 www.glps.net

The purpose of this specification is to allow the customer an alternate method of installing an underground service if they so choose or in the case that an underground service does not meet the requirements of GLPS's "STANDARD UNDERGROUND ELECTRIC SERVICE REQUIREMENTS TO A STRUCTURE".

*if a customer chooses to install an underground electric service as depicted in the drawing, the cost the customer will need to pay before connecting is \$800.

*If the requirements of the "STANDARD UNDERGROUND ELECTRIC SERVICE REQUIREMENTS TO A STRUCTURE" are not met, the customer has the option of modifying the installed conduit system to accommodate the drawing depicted in this specification. In this case the cost the customer will need to pay before connecting is \$800. If the customer wants GLPS to modify the conduit system the cost the customer will need to pay before work begins is \$1,500.

**In either situation above, the customer will be responsible for installing and maintaining the service entrance conductors from the meter base to GLPS's pedestal. The pedestal will be the point of demarcation between the customer's facilities and GLPS facilities.

- A. <u>UG METER BASE</u>: Meter base must be mounted a minimum of 4 feet and a maximum of 6 feet above finished grade. Meter base must be grounded National Electric Code requirements.
- B. <u>CONDUIT</u>: All underground services maintained by GLPS shall be installed in conduit regardless of soil conditions. *NO LB'S*, *LL'S OR LR'S ARE PERMITTED ON THE LINE SIDE OF METER BASE*.

Customer to furnish and install conduit from GLPS pole to GLPS pedestal

- Customer to furnish and install conduit from GLPS pole to GLPS pedestal (see drawing). If customer wants GLPS to install, all costs are to be paid before any work begins. All joints to be glued.
- 2-1/2 inch or 3 inch UL listed Schedule 40 PVC conduit is required for the electrical service. 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 ENTITY DUE TO ITS INSTALLED LOCATION. THE CONDUIT WILL NOT MEET NESC RULE 320B2c FOR MINIMUM SEPARATION REQUIREMENTS.
- GLPS WILL NOT ACCEPT HEATED CONDUIT REGARDLESS OF THE METHOD USED.
- Conduit at GLPS poe to be installed in contact with GLPS stand-off bracket. If GLPS 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. EXPANSION COUPLING: Per NEC requirements.
- D. DITCH 3 FEET DEEP MINIMUM: Customer to open and close service ditch from GIPS pole to GIPS pedestal unless customer wants GIPS to install, all costs are to be paid before any work begins. Depth of ditch to be a minimum of 3 feet. Ditch must be backfilled before GIPS 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 GIPS "JOINT TRENCH REQUIREMENTS" located at www.glps.ne or obtain a copy from GIPS Engineering Department.
- ELBOW: Must use at least 24 inch radius, 90-degree elbows at GIPS pole and at pedestal. For the communication conduit, use 5.75 inch radius (standard) elbows.
 CUSTOMER SERVICE ENTRANCE CONDUCTORS: Customer must furnish
- and install service entrance conductors from meter base to GLPS pedestal.

 Refer to the NEC for correct size and type.

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

