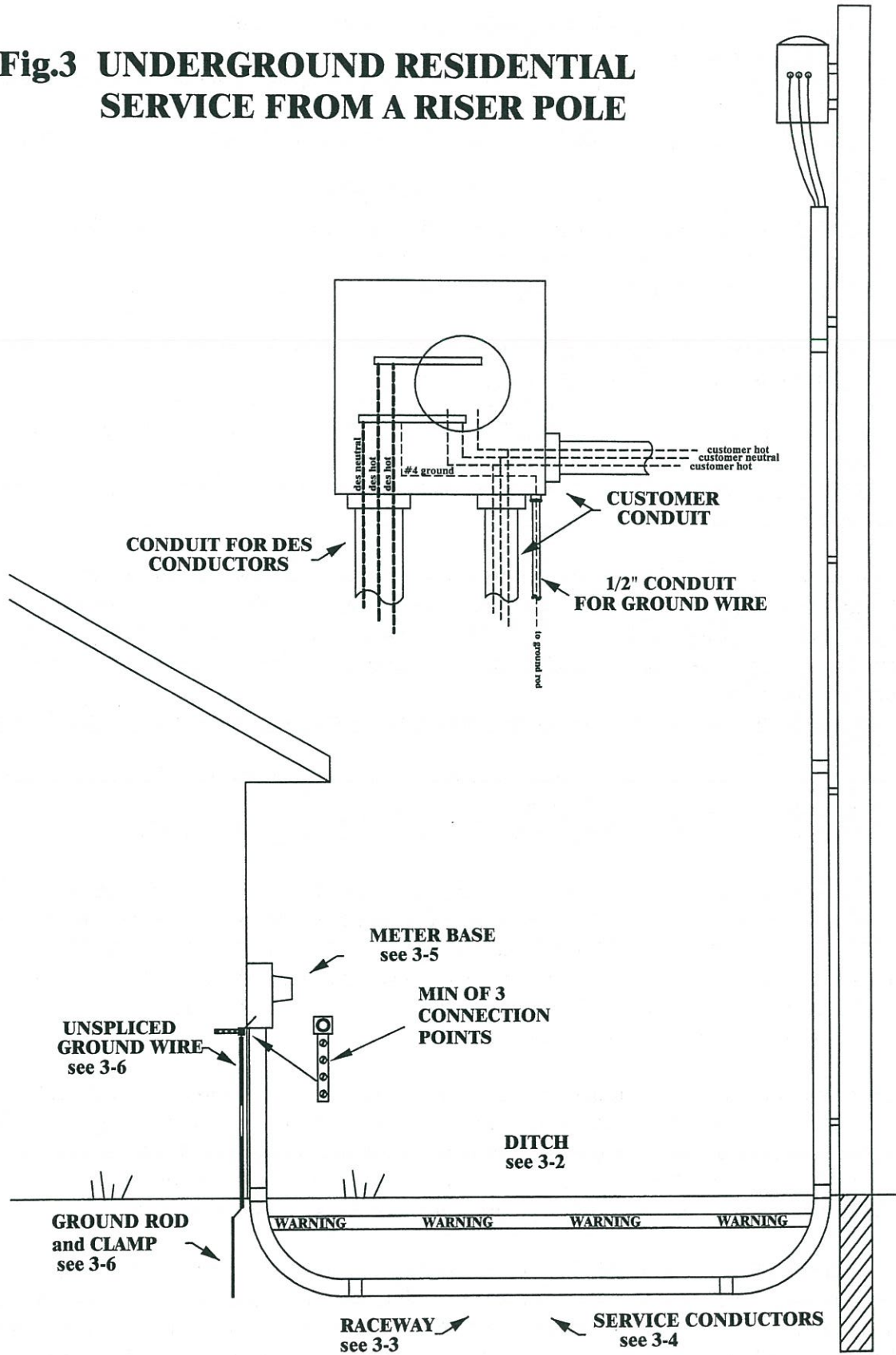


Fig.3 UNDERGROUND RESIDENTIAL SERVICE FROM A RISER POLE



REV: 1/09

- 3-1. DES will furnish and install the following materials at the service pole:
- Service conductor from transformer to meter base for cost of \$1.00 per ft. of conductor.
 - Where junction box (not shown) is present at service pole, see DES engineer for specifications.
- 3-2. Customer will open ditch from service pole or junction box to meter location with the following specifications:
- Where ditch length will exceed 225 ft. see DES engineer.
 - Depth sufficient to bed service conductors 24 in. below final grade, including ditches.
 - Where impractical to obtain 24 in. depth, see DES engineer.
 - Customer will backfill ditch after inspection by DES - 24 hr. notice required.
- 3-3. Continuous raceway from service pole base, or junction box, to meter base will be furnished and installed by customer to the following specifications:
- 3 in. schedule 40 or schedule 80 electrical PVC, with correct type fittings and/or bushings.
 - Minimum 24 in. long radius schedule 80, continuing with schedule 80 conduit into bottom of meter base and up pole.
 - Rope with a minimum breaking strength of 300 pounds or 1/4" pull rope inside raceway. Strings will not be accepted.
- 3-4. Service conductors installed near other utility lines, structures, or obstructions require:
- Conductors run parallel to water or gas lines must have a minimum 3 ft. separation.
 - Conductors crossing water or gas lines, phone or TV cable, shall have a minimum vertical clearance of not less than 12 inches run in schedule 80 electrical conduit. Concrete encasement maybe required.
 - Conduit under paving such as roads, driveways, patios, etc. Must be run schedule 80 electrical PVC.
 - Telephone and TV cable may be run in same ditch with a minimum 12 in. horizontal separation between service conductor and cable.
 - Disconnect means will be on right side of meter base. Use type W conductors.
- 3-5. A meter base of proper size and type will be furnished and installed by the customer. Meter will be located between 5 and 6 ft. above final grade, on end of house closest to service pole at a point marked by DES engineer. Meter base will not be located on or under porches, decks, carports. If distribution panel is not located in immediate vicinity of meter, a weatherproof disconnect may be required; refer to National Electric Code. Conduit for DES conductor to enter on left side of meter base. Customer's conduit to exit below or to right of meter base.
- 3-6. A ground wire of No. 4 bare copper or larger shall be run from the meter base to a driven ground rod. An 8 ft. driven ground rod bonded to ground wire with clamp suitable for direct soil burial will be installed below final grade. If rebar is used in a concrete foundation or slab the rebar shall be stubbed out of the concrete at the service entrance. The ground wire will be attached to the rebar using a suitable clamp then run to the ground rod and then to the meter base unspliced.
- 3-7. Ground wire shall be run in a 1/2" PVC conduit below grade. Conduit should not be attached to meter base, it should start 4" below meter base and continue down to the ground leaving the ground wire exposed between the meter base and the conduit. Install below the meter base an intersystem bonding terminal with a minimum of three additional termination points on the exposed bare ground wire.