

CONDUIT & INSTALLATION

- All material supplied by Customer unless otherwise noted.
- All power conduit shall be 3" schedule 40 gray electrical PVC.
- Sweeps shall be 36" minimum radius and kept to a minimum. Back to back sweeps are not allowed.
- Backbone communication conduit shall be 2" gray schedule 40 PVC. Install 1" gray schedule 40 PVC from Douglas County PUD transformer, handhole or pole location to home/business.
- Tape or cap ends of power conduit to prevent material from entering.
- Conduit fittings and joints shall be installed clean, square and thoroughly glued.
- Cap ends of communication conduits (no glue, please).

TRENCHING

- Customers are to provide trenching, backfilling and compaction in accordance with Douglas County PUD standards.
- Trench shall be as straight as possible.
- Backfill with a minimum 3 inch layer of clean backfill, rocks no larger than 1 inch and no sharp objects placed over conduits. (clean native backfill meeting the aforementioned standards is acceptable).
- Trench shall be free of trash and frozen or organic material and be thoroughly compacted throughout.
- Trenching in a public right-of-way or crossing under a public roadway requires a roadway use permit. This must be applied for and issued to the licensed and bonded excavation contractor who will perform all work in the public right-of-way.

SPECIAL NOTES

CALL BEFORE YOU DIG! 811

ALL CONDUIT MUST BE INSPECTED BEFORE COVERING - CALL DOUGLAS COUNTY PUD AT 881-2366 TO SCHEDULE INSPECTION

DO NOT INSTALL CONDUITS INTO EXISTING TRANSFORMERS, HANDHOLES, VAULTS OR ANY ENERGIZED EQUIPMENT



**DOUGLAS
COUNTY
PUD**

RESIDENTIAL CONSTRUCTION STANDARDS

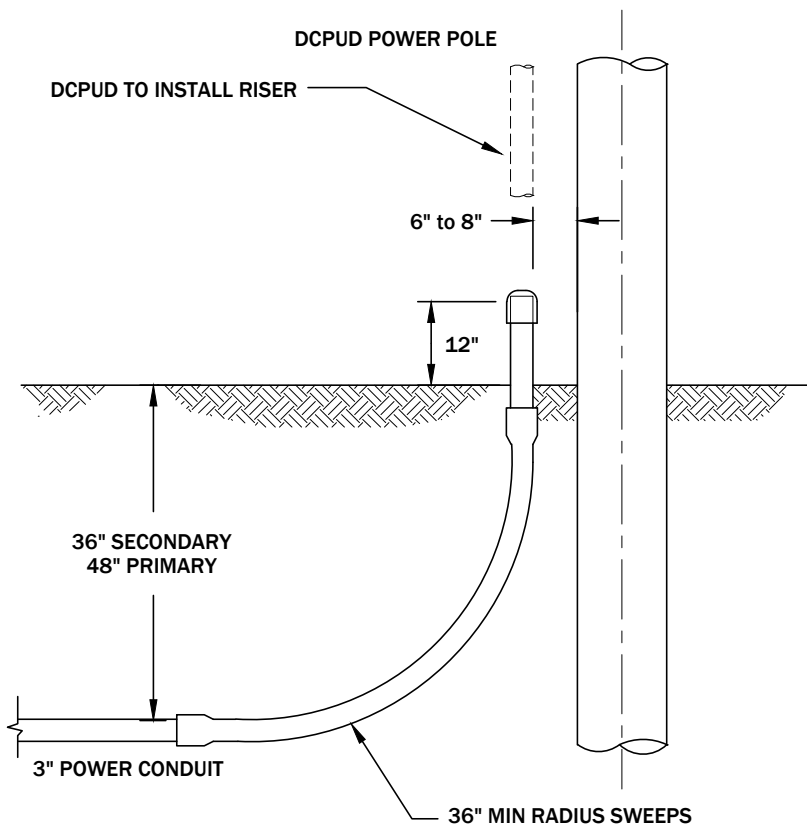
TRENCHING AND CONDUIT REQUIREMENTS

APPROVED:

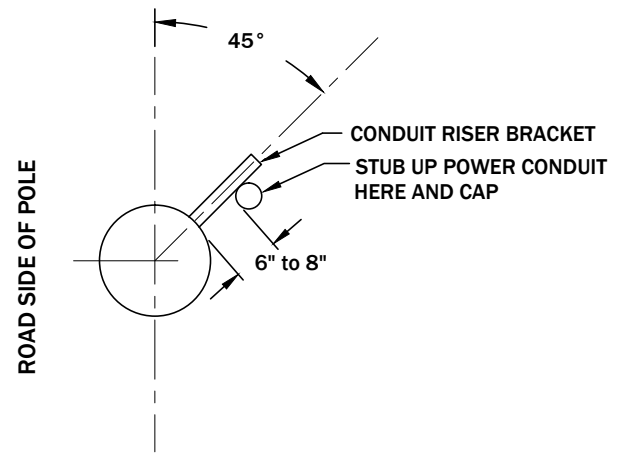
REV DATE 1/13/16

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RCS-001



If no bracket exists at pole, stub conduit up to within 8" (but no closer than 6") of pole at a preferred quadrant location.

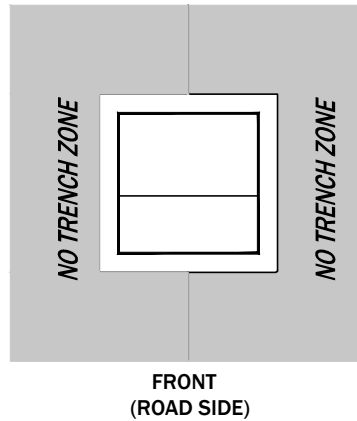


CONDUIT STUB UP AT POLE

Primary conduit will enter at left side of transformer

Secondary/service conduits will enter at right side of transformer

HAND DIG WHEN WITHIN 3 FEET OF AN ENERGIZED TRANSFORMER. TAKE CONDUIT TO THE BASE OF THE TRANSFORMER - DOUGLAS COUNTY PUD PERSONNEL WILL SWEEP INTO TRANSFORMER AT TIME OF INSPECTION.



CONDUIT STUB AT ENERGIZED TRANSFORMER



**DOUGLAS
COUNTY
PUD**

RESIDENTIAL CONSTRUCTION STANDARDS

TRENCHING AND CONDUIT REQUIREMENTS

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REV DATE 11/30/15

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RCS-001

District Customer Fiber Conduit Requirements:

1. A conduit is an underground PVC pipe that is used as a path to run wire from one point to another. For areas where communication service is not available via overhead power infrastructure, conduit must be used. If no existing conduit path is available, the customer is responsible for installing conduit from the District fiber pedestal, fiber handhole or power pole to the home or business.
2. The law requires you to [call 811](#) to have utilities located before digging.
3. For ease of conduit installation, your conduit can be installed from the District's pole, fiber pedestal or fiber handhole to the nearest location of your home or business.
4. **1" diameter (minimum), gray, schedule-40 conduit must be installed.**
5. **When installing sweeps pre-made 90° bends must be used. Use larger radius sweeps (minimum radius 18 inches).**
 - a. **Local hardware stores normally carry shorter radius 1" sweeps which can be difficult or impossible to pull cable through. Larger electrical supply companies such as Platt, CED, Stoneway, North Coast Electric, etc. normally carry larger radius sweeps.**
 - b. **No more than (3) sweeps are allowed with 1" conduit and (4) sweeps with 2" conduit; exceeding these maximum numbers may make it impossible to install cable in the conduit. Back-to-back sweeps are not allowed.**
 - c. **If the District cannot pull cable through the customer conduit, it is the customer's responsibility to fix the problem so cables can be pulled.**
6. **When installing conduit, glue all joints. Gluing helps prevent conduit from coming apart.**
7. **The District recommends burying conduit 18 inches deep.**
8. **Once conduit is installed, the ditch may be backfilled. If conduit is being installed to a District fiber pedestal or fiber handhole, conduit should end 6" short of the pedestal or handhole and the last 3 feet of the trench left open so District crews can connect to the end of the conduit and sweep it into the pedestal/handhole.**
9. **If conduit is being installed to a District power pole, sweep the conduit up 4" – 9" away from the base of the pole. Do not sweep the conduit up next to the pole.**
10. **Sweep the conduit up next to the home about 4"- 8" above ground.**
11. **Do not install the conduit in a wall or inside the home or building. The conduit must be easily accessible from outside of the home with clearance for pulling cables.**
12. **Please note, the District will install a demarcation box (demarc) on the side of a home or business near the location where the conduit is swept up. The District requires this demarc box to be located on the outside of a home or business for ease of maintenance.**

Once the District installation is complete, the District will notify the ISP. The customer or the ISP is responsible for installing the necessary cabling from the District demarc box into the home or business. This is normally CAT5 or CAT6 cable.