

**INSTALLATION DETAILS FOR UNDERGROUND SERVICES  
 NONMETALLIC AND RIGID STEEL CONDUIT ON PRIVATE PROPERTY**

**A. General**

1. No definite separation is required between power, telephone and CATV cables although 8" to 12" is advisable.
2. All direct burial cables\*, nonmetallic and rigid steel conduit for lateral service to private property from the distribution trench shall be 36" minimum below final grade in the public right-of-way. All rules for material types, trench finish and backfill shall be as noted below.
3. The bottom of the trench shall be free of debris and fine graded by hand to remove sharp embedded rocks and loose stones over 1/2", or the trench shall be over-excavated and the over-excavation replaced with bedding material to cover protruding rocks and stones by at least 2". The bottom shall be graded even. Bedding shall be sand. Over conduit, place bedding material or a 2" layer of unsaturated excavated material selected to exclude all sharp rocks and stones over 1/2" size. Around all telephone and television cables, place bedding material or select excavation material. Backfill conforming to this may be placed directly over conduit and all cables.
4. The customer is responsible for ensuring against entry of water into buildings, into or through service equipment, or other locations where entry of water could be considered a problem. See the Seattle City Light "Requirements for Electrical Service Connection" manual for details.

**B. Nonmetallic Conduit on Private Property**

1. Minimum depth shall be 18" over nonmetallic conduit. (36" for high voltage conduit — above 600 volts)
2. Conduit shall be PVC schedule 40 or other nonmetallic conduit approved for direct burial.
3. Bending of PVC conduit with heat (e.g., heat blankets or hot boxes) is prohibited. See Construction Guideline U2-11 Note 8, or in the Network area, Network Construction Guideline NDK-10 Note 10.

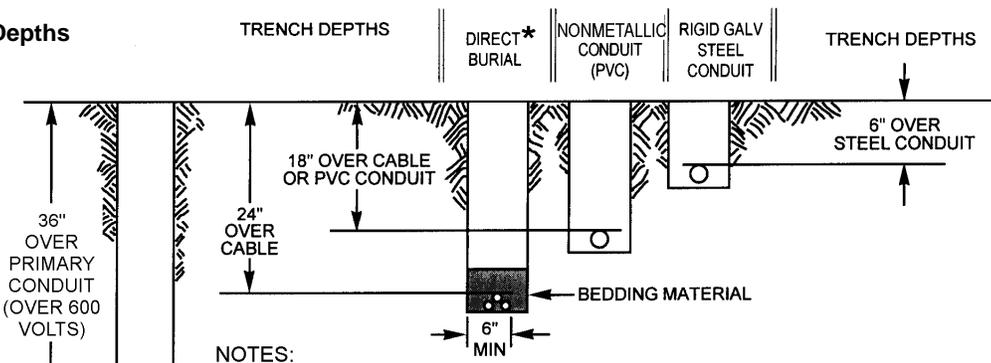
**C. Rigid Steel Conduit on Private Property**

1. Minimum depth shall be 6" over rigid steel conduit. (36" for high voltage conduit — above 600 volts)
2. Conduit shall be rigid galvanized steel.
3. Minimum bend radius shall be 3 feet for 3-inch conduit, 4 feet for 4-inch conduit, and 5 feet for 5-inch conduit.

**D. Direct Burial Cables on Private Property**

Not allowed for new permanent construction.

**Trenching Depths for Private Property**



NOTES:  
 SEE CONSTRUCTION GUIDELINE U2-10/NDK-50 FOR TRENCHING IN PUBLIC RIGHT-OF-WAY

\*NOT ALLOWED FOR PERMANENT CONSTRUCTION

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