

APPENDIX C

TECHNICAL SPECIFICATIONS FOR WATER AND SEWER SERVICE LINES

Water and Sewer Line Bedding and Backfill

See Appendix B for drawings showing cross-section of trench, pipe laid on top of 6-inch minimum bedding material, bedding material around pipe, and 12-inch bedding material on top (from top of pipe). Compact bedding material in district lifts with t-bars and mechanical equipment to 95% dry density, replace gravel surface with 12-inch of pit run, plus 4-inch of road base, as required by the County and or the Willow Creek Pass Village Association (WCPVA).

Bedding material is imported crushed rock or angular surface gravel that meets the following gradation per ASTM D488 No. 67: Sieve size, Total percent passing Weight: ¾ in = 100%; 3/8 in = 20-55; No. 4 = 0-10%; No. 8 = 0-5%; (sand, pea gravel or screened rock no larger than 3/4 inch).

Connections and service lines shall be buried at a minimum depth of 7 ft., with one-foot compacted cover of sand or pea gravel bedding. Additional compaction of backfill material is required every two feet thereafter, as trench is filled to surface. Maintain 10-foot separation between water and sewer service lines.

A continued grade shall be maintained on all water service lines, between the house to the main. The Owner shall make provisions for draining the service line on the customer's side of the curb stop valve. If the grade is reversed, the owner must make provisions for draining the line at the house. Draining the service lines is not the responsibility of the District.

Water Service Lines

The water service lines shall be Type K, soft, copper, 3/4-inch diameter; larger sizes may be used for areas having low static pressure (less than 35 psi) with prior approval by the SLWSD. The service line shall be one continuous line without joints if possible. Fittings shall be brass or copper alloy, AWWA approved. Connections shall be by flared joint; no soldered joints shall be permitted underground.

Corporation stops shall be used for the connections of service line to the main line. Corporation stops shall be brass and conform to AWWA C800, such as Mueller H-15000, Ford F-600 or approved equal. The inlet shall be standard AWWA corporation stop, threaded inlet, and the outlet shall be for flared Type K copper service pipe.

A curb stop shall be installed at the lot/property line. Curb stops shall be brass and conform to AWWA C800, such as Mueller H-15204, Ford B-22 or approved equal. Connections shall be flared Type K copper service pipe. Top of curb stops shall extend to at least 2-inches above the ground surface. At the Owner's option, provisions for thaw wire connections may be incorporated into the design.

Service saddles shall be used for all water taps on all pipe materials and sizes. Service saddles shall be double strap bronze saddle, Rockwell No. 323 or approved equal. All taps shall be placed at 45° from the vertical to minimize the effects of settling, repairs, and ground movement.

The water service line shall be pressure tested at normal operating pressure plus 50 psi from the water main to the building before backfilling. Testing shall be observed by a representative of the District. (See Drawing, Appendix B, if a water meter is to be included.)

Sewer Service Lines

Sewer service lines shall be 4 inch, PVC, minimum SDR 35 thickness, with preformed watertight joints with rubber gaskets. The sewer service lines shall be water tight. The sanitary sewer service line shall be used for the conveyance of sanitary wastes only. Connections to roof, building foundation, or any other drain system are strictly prohibited.

Minimum grade for sewer service lines is 1/4-inch per foot (2%).

The sewer service will be tapped with 45° wye, tee or approved saddle with stainless steel bands. Taps shall be installed at 45° to main pipe to provide for a 2% minimum grade for service line, unless otherwise approved. Adaptor couplings may be used to bend service line to appropriate grade as required.

The sewer service line must be connected to the house sewer pipe, immediately, or a watertight cap on house end with a 4 X 4 marker post, must be installed.

In Road ROW, Excavation and Restoration/Repair

Road excavation and subsequent backfill to restore to original conditions shall conform to WCPA and SLWSD requirements. (See Standard Details, Appendix B.)