

(a) Cast-Iron Water Main Pipe and Fittings. Cast-iron pipe for water mains shall be centrifugally cast in either metal molds or sand-lined molds, and shall meet the requirements of either ASA A21.6 or ASA A21.8. All pipe shall be Class 150 pipe and shall have either bell and spigot ends or mechanical joint ends. For bell and spigot ends, approved asbestos rope or treated paper rope shall be used for packing material and lead meeting the requirements of AWWA C600, Sec. 9.5 shall be used for calking. For mechanical joint ends, lead tipped rubber sealing gaskets shall be used and the joint shall meet the requirements of ASA A21.11. When cement mortar lining is called for on the Plans or in the Proposal it shall meet the requirements of ASA A21.4. Short body cast iron fittings, 3 to 12 inches in diameter, shall meet the requirements of ASA A21.10 and cast iron pressure fittings shall meet the requirements of AWWA C100.

(b) Reinforced Concrete Water Main Pipe and Fittings. Reinforced concrete pipe and fittings for water mains shall be of the steel cylinder type and shall meet the requirements of AWWA C300 if not prestressed or AWWA C301 for prestressed pipe. Normal maximum design pressure shall be not less than 150 psi.

(c) Valves and Hydrants. Gate valves shall be the parallel seat double gate type meeting the requirements of AWWA C500 and shall have enclosed stems of brass or bronze. All other moving parts shall be bronze or bronze mounted. Fire hydrants shall have one 4-1/2-inch opening and two 2-1/2-inch openings and shall meet the requirements of AWWA C502.

(d) Service Lines and Fittings. Type K, soft temper seamless copper water tubing meeting the requirements of ASTM B 251 and ASTM B 88 shall be used for all service branches. Corporation stops shall be of brass or bronze with Mueller thread inlet and an outlet fitted to receive copper service tubing. Service stops shall be of brass or bronze and shall have inverted key, combined cap and tee with check and the inlet end shall be fitted to receive copper service tubing. Service boxes shall be of the Buffalo pattern. The cover shall be marked WATER and secured to the shaft with a brass or bronze bolt. The foot piece shall fit over the service stop.

I-124.03 New Water Main. This item shall consist of furnishing and laying a new water main to the line and grade shown on the Plans.

(a) Excavation. The trench shall be excavated only so far in advance of pipe-laying as specified by the Engineer. The trench shall be so braced and drained that the workmen may work therein safely and efficiently. Discharge of trench dewatering pumps shall be conducted to natural drainage channels, drains or sewers.

The Contractor shall proceed with caution in the excavation and preparation of the trench so that the exact location of underground structures, both known and unknown, may be determined, and he shall be held responsible for the repair of such structures when broken or otherwise damaged because of carelessness on his part.