

Fire Hydrants. Fire hydrants shall conform to AWWA Specifications C503 and shall be JAMES JONES J-4060A wet barrel fire hydrants with 4-foot minimum bury, two N.T.S. 2½ inch nozzles, one 4 ¼ inch nozzle, 6 inch mechanical joint inlet, 1½ inch pentagon operating nut, no drain, paint exterior "Safety Yellow" over one coat primer. Break check valve shall be installed. Contact City Engineer on specifications for hydrants to be installed in areas not served by the City Fire Department.

Fire hydrant alternatives include, MUELLER "481 H" and the CLOW "F-960" Wet Barrel Fire Hydrants All wet barrel hydrants shall have a LONG BEACH Iron Works "LB400" break-off check valve, or approved equal.

Pipe Laying. Unless otherwise specifically authorized by the City Engineer, all pipe shall be laid with the bells facing the direction of laying and shall be laid in accurate conformity with the prescribed lines and grades. Each length shall be jointed to the preceding section as hereinafter specified; and after said jointing procedure has commenced, there shall be no movement of the pipe whatsoever in subsequent operations. Each pipe shall have a firm bearing for its full length in the trench, except at bell holes and field joints.

Whenever necessary to deflect the pipe from a straight line either in the vertical or horizontal plane to avoid obstructions, or where long radius curves are permitted, the degree of deflection at joints shall be approved by the City Engineer.

When the pipe is laid, it shall be free as possible of all foreign matter. If, in the opinion of the City Engineer or his field representative, the pipe contains dirt that will not be removed during the flushing operation, the interior of the pipe shall be cleaned and swabbed, as necessary, with an anti-bacterial solution as approved by the City Engineer.

Every precaution shall be taken to protect the pipe against the entrance of foreign material before the pipe is placed in the new line. At the close of the day's work, or whenever workmen are absent from the job site, the last section of pipe shall be plugged, capped or otherwise tightly closed to prevent the entry of foreign matter of any nature.

Trenching. All trenches shall be of sufficient depth to provide a minimum cover of 30-inches, measured from the top of pipe to the finish grade level. Greater depths of cover shall be provided when so shown on the drawings or to clear the top of any valve stem or other water appurtenances.

Bedding and Compaction. See Drawings T-1 through T-3.

Concrete Thrust Blocks. Concrete thrust blocks shall be provided at all bends, tees, dead-ends and fire hydrants, and other points as specified by the Engineer. Thrust blocks shall be constructed in accordance with the Standard Details and shall be poured against undisturbed soil. Care shall be taken to insure that no concrete will cover bolt heads on fittings when thrust blocks are installed.

Plugs. All plugs installed in tees or pipe ends shall be secured in place by means of approved, mechanical devices.

ENGINEERING DEPARTMENT		CITY OF MERCED, CA.	
WATER SYSTEM - CONSTRUCTION SPECIFICATIONS			W-16
DRAWN:	APPROVED BY:	DATE:	
DATE:	<i>David L. Tucker</i>	<i>4/4/06</i>	SHEET OF
REVISED:	CITY ENGINEER		