

SECTION 150620
PLUMBING (S-90)

1. DESCRIPTION

This specification shall govern all work necessary for the installation of plumbing required to complete the project.

2. MATERIALS

Pipe shall be hot-dipped galvanized steel water pipe schedule 40.

Fittings shall be threaded type using galvanized malleable iron fittings. All joints shall be coated with an appropriate epoxy and up to 3 inches of the adjoining pipe, after installation.

Pipe Supports shall rigidly support pipe to concrete bulkhead. Clamps shall be galvanized steel with an epoxy coating applied both before and after installation. Perforated strap hangers will not be permitted.

Water Faucet shall be 3/4" hose connection, rough brass, T-handle and of good quality.

3. PERMITS AND BUILDING CODES

The Contractor shall be responsible for obtaining plumbing permit and work shall comply with applicable requirements of the City.

4. CONSTRUCTION METHODS

(1) Handling Materials

The Contractor shall be responsible for the safe storage of all materials furnished to or by him and accepted by him until it has been incorporated into the completed project. The interior of all pipes shall be kept free from dirt and foreign matter. All materials found during the progress of work to have defects will be rejected, and the Contractor shall remove such defective material from the site.

(2) Sterilization

Fittings: Valves and fittings shall be kept clean. Where soil or other substances come in contact with the water surface of the fittings, the interior shall be washed and sterilized with 2% solution of calcium hypochlorite.

Pipe: As each joint of pipe is placed the contractor, unless specified otherwise by the Engineer, shall throw powered calcium hypochlorite (70%) through the length of the joint. (One pound for each 1680 gallons of water to give 50 mg./1.) After the line is assembled, it shall be slowly filled with water and allowed to stand for 48 hours. After sterilization is completed, lines shall be flushed. The Engineer will take a sample test 2 hours after refilling. If the sample does not pass State Health Department purification standards, the procedure shall be repeated. The entire procedure shall be coordinated with and under the supervision of the Water Division Superintendent/Engineer. During the sterilization, process valves shall be operated only under the supervision of the Water Division Superintendent/Engineer. There shall be a fee of \$100 paid by the Contractor to the City for each retest that is required.

(3) Hydrostatic Testing Water System

See Section 026202 Hydrostatic Testing of Pressure System.

5. MEASUREMENT

Unless specified otherwise in the special provisions, measurement shall be made as follows:

Pipe will be measured by the linear foot along the centerline for each size of pipe installed. Measurement shall be up to but not include the fittings.

Fittings will be measured as individual units for each type and size installed.

6. PAYMENT

Payment shall include but not limited to all materials, labor, equipment, support clamps, testing, sterilization, and all other incidentals necessary to complete the job.