

City of Carlsbad
Specifications
for Hydrostatic Testing, Flushing, Disinfection & Flow Testing

HYDROSTATIC TESTING

The contractor shall be required to hydrostatic test all water mains, laterals, dead ends, and service lines. The test shall be conducted in the presence of the Water Dept. Superintendent or his authorized representative.

The contractor shall provide all equipment needed to perform the test. If connections to the existing lines are allowed, it is with the understanding that the contractor assumes any responsibility in case of damage or failure of the existing system. Leakage through connections to the existing lines, or leaking existing valves under the test pressure will invalidate the test.

The line shall be tested at 150 pounds, or 1.5 times the normal operating pressure of the line, whichever is greater, for not less than four hours. Leakage shall not exceed 10 gallons per inch of pipe diameter per mile of pipe. The cost of testing and finding leaks, and retesting shall be at the expense of the contractor. Water for testing will be furnished by the City of Carlsbad,

FLUSHING & DISINFECTION

Prior to disinfecting the contractor is required to flush all new water lines. To remove any foreign material that may interfere with disinfection.

Flushing can be performed from fire hydrants or convenient outlets. If not available the contractor shall install flush points.

After flushing the water lines they will be disinfected with a chlorine liquid solution. This solution must be drawn through out the new system, as well as any new service lines. The chlorine solution shall remain in the line for at least 24 hours. The line can then be flushed until the chlorine residual is equal to the normal residual in the existing system or at least 0.2 ppm.

TESTING

Prior to the line being placed into service, bacteria samples will be taken by the City at the contractor's expense. Should results of the bacteriologic analysis be unsatisfactory, the disinfection procedure shall be repeated.

FLOW TEST

All new fire hydrants will be flow tested and must flow a minimum of 1,000 gpm with 20 psi. residual in order to meet fire codes. The Fire Dept. will perform the flow test before the new system is approved. Each new service will be flow tested to make sure there has not been any damage to the copper line.