

Excavated material may be used for backfill in other areas provided it consists of loam, clay, sand, gravel or other material approved by the Water Works Superintendent. Backfill shall be free from cinders, ashes, refuse, organic material, boulders, rocks, stones, or frozen material.

Trenches shall be excavated to depth and width as required. Trench walls shall be sloped only above the crown of the pipe. Trenches shall be kept dry by means of pump or well points and the discharge therefrom shall not be discharged into existing sanitary sewers.

Water main shall be laid on a flat bottom trench with bell holes provided at each joint (AWWA Type 2).

The disposition of other obstructions encountered or of unsuitable foundation material shall be as directed by the Water Works Superintendent.

Pipe shall be joined in accordance with AWWA C600 and the manufacturer's recommendations. Deflection shall be limited to the amounts shown on the Standard Drawings.

Bedding material shall be placed by hand and thoroughly consolidated under the haunches and to the springline of the pipe. From the springline to a point one foot above the top of the pipe, initial backfill material shall be placed by hand or approved mechanical means.

Thrust restraint shall be provided for all hydrants, plugs, caps, tees, reducers, and bends. The restraint provided shall be sufficient to withstand the maximum pressure (including test pressure) to be encountered in the pipeline. Restraint shall be by means of restrained joint pipe, US Pipe "TR Flex" or equal, unless otherwise specified by the Water Works Superintendent.

The Standard Drawings show the lengths of restraint required for the various fittings and pipe sizes and the details for concrete blocking.

Tie rods may be used for restraining fire hydrants and valves, but only upon specific approval of the Water Works Superintendent.

Oak blocking may be used for restraining hydrants, plugs, caps, tees, reducers, and bends when mechanical joint restraints are used.



VILLAGE OF INDIAN HILL
DEPARTMENT OF WATER WORKS

APPROVED *J. Q.*
DATE February 2013

SPECIFICATIONS
WATER MAIN
AND APPURTENANCES

DRAWING NO.
WW-111