## Water System Improvement Program Cleaning and Cement Mortar Lining of Water Mains





## Design Data

## Owner

Town of Mount Pleasant, New York Village of Pleasantville, New York Village of Tarrytown, New York Village of Mount Kisco, New York

■ *Location* Westchester County, New York

**Total Estimated Cost** \$4,600,000.00

PCI has prepared numerous water distribution analysis for various municipalities in the New York, New Jersey, and Pennsylvania. These analyses have resulted in comprehensive water distribution restoration programs. Our staff conducted detailed hydraulic distribution modeling, laboratory testing, and independent pipe strength computations to recommended 5-year and 10-year restoration programs. These programs have recommendations for the replacement of water mains, upgrading of sizes of water mains, replacement of valves and hydrants, installation of control valves, e.g. pressure reducing, pressure sustaining, etc. and cleaning and cement mortar lining (C&CML) of water mains. PCI is highly experienced in preparing these studies and design documents, seeking regulatory approvals and performing construction administration of these projects.

Prior to the design of C&CML it is important to thoroughly evaluate the strength and capacity of existing water main. Proper design should include by-pass water mains sized for domestic and fire demands, preparation and coordination of traffic control plans with local fire, school, and residential/ commercial districts, location of lining pits, temporary and permanent service connections, use of proper lining material and inspection verification of lining work. Our office prepared many such designs, and performed construction administration of C&CML projects which has resulted in improved system efficiency, reduced pipe failures, increased low service pressures and distribution flows, and elimination of red water complaints.

## *PCI Professional Consulting, Inc.*

**Consulting Engineers**