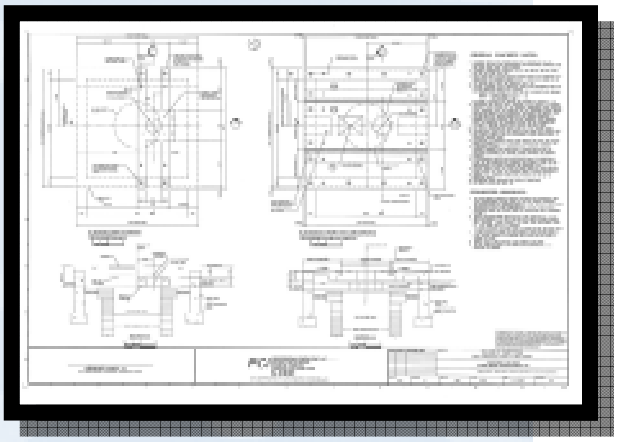
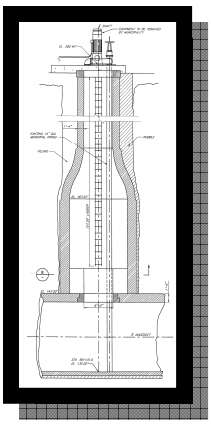
Village of Tarrytown – Rehabilitation of Shaft 10 for New Croton Aqueduct Village of Tarrytown, New York





Design Data

Owner
The Village of Tarrytown

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Location
The Village of Tarrytown, Westchester County, New Jersey

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Project Cost
Approximately $400,000

The Village of Tarrytown planned to replace its existing 55-year old vertical turbine pump with a new pump of the same type and flow/head capacity during New York City shut down for repairs and pressurization work just upstream of Tarrytown connection with the New York City Aqueduct.

Supply water extracted from the New York City Catskill Aqueduct System is volumetrically metered then lifted to the balance of the Village of Tarrytown (Village) water distribution system (System) by the pumps at the Shaft 10 Pump Station (Shaft 10 PS). The Shaft 10 PS lifts the water to an elevation that can both service the requirements of the High Service Area (HSA) distribution system and the HSST.

PCI reviewed and studied the existing pump installation and the related structural details to remove and replace the existing pump with a new pump. A compete hydraulic analysis was conducted to size the pump and the foundation structure of the shaft was studied and redesigned to install the new pump. PCI also studied the testing and upgrading of the existing electrical conduits and equipment.

A detailed testing and inspection report was prepared for the Shaft Pump Replacement and presented to the Owner.

A control methodology and electrical system evaluation inspection was conducted for the Shaft 10 Pump Station (Shaft 10 PS), the Low Service Storage Tank (LSST), the High Service Storage Tank (HSST) and High Service Tank Booster Pump Station (HSTBPS).

PCI
Professional Consulting, Inc. ***Consulting Engineers***