

WATER STORAGE TANK & WATER MAIN IMPROVEMENTS

TOWN OF CHESTER, VERMONT



Precast Prestressed Concrete Tank

The Chester water system was last upgraded in the early 1980s. Following a comprehensive evaluation of the water system in 2014, Dufresne Group designed improvements to address inadequate pressures during fire flows, provide storage reliability and replace deteriorated water main. The project included:

- 3,600 ft of 12-inch diameter pipe on Route 103 replacing asbestos cement pipe
- 500 ft of 8-inch diameter pipe on Breezy Lane
- 330,000 gallon precast-prestressed concrete water storage tank
- 3,000 ft of 12-inch diameter water transmission main
- Land purchase
- Solar powered mixer at the new tank
- Mixer at the existing storage tank
- Existing tank cleaning and recoating

The \$4,050,000 total project cost is funded through the Drinking Water State Revolving Loan Fund with assistance from the Vermont Municipal Bond Bank.

KEY FEATURES:

- The tank site represents the least expensive cost alternative, with a \$1,000,000 saving over two alternative sites evaluated, and the least environmental impact. The tank site also realizes the Town's goals for developing additional recreational facilities, land preservation and a potential future Town aggregate source.
- The second water storage tank substantially improves system hydraulics and resolves all fire flow deficiencies. The second storage facility resolved operational deficiencies, allows the original tank to be taken off-line for maintenance and ensures continued water supply to Green Mountain Union High School.