Drinking Water

Sources, Treatment, Storage, Distribution, Modeling

Marble Valley Engineering, PC assists clients in the production and distribution of safe drinking water. We have extensive experience in the planning, design, and construction of drinking water system infrastructure.

Our thorough approach to system understanding and analysis enables us to confidently engineer the wells, water intakes, treatment plants, storage tanks, pump stations, and distribution pipelines necessary to protect public health.

Distribution System Improvements

Replacement of 3,700 feet of 4-inch cast iron main with 8-inch ductile iron in the vicinity of Proctor High School.

Our reports typically include a nodal map of the distribution network and a prioritized listing of recommended improvements with their estimated cost.

As with all of our areas of technical expertise, we bring a strong graphical sense to the design of drinking water infrastructure. Our design process incorporates our perception of how construction will physically occur thereby optimizing the efficiency with which projects can be built and ultimately perform.

Our services include:

- Field Testing of System Pressure and Flows
- Water System Mapping
- Demand Analysis
- Source Water Analysis and Evaluation
- Hydraulic Model Development
- Hydraulic and Water Quality Analysis of Present and Future Conditions
- Extended Period Simulations
- Renovation, Retrofit, Adaptive Re-use, Expansion, and New Plant Design
- Water Quality Treatment
- SCADA and Conceptual Control Planning
- Arsenic Removal Systems
- Disinfection Systems
- Site and Storage Tank Selections
- Pumping Systems
- Storage Evaluations
- Transmission and Distribution Pipeline Design
- Pressure Boosting
- Backflow Prevention and Utility Metering
- Executive Assistance with Project Financing
- Operation and Maintenance Manuals
- Technical Support for Cost Effective Operation and Regulatory Compliance

"Without you, none of what we accomplished would have happened." Castleton Fire District #1, December 2009

600,000 gallon replacement precast, prestressed concrete water storage tank.

Castleton Fire District #1

MARBLE VALLEY ENGINEERING, PC
CIVIL & STRUCTURAL
775-1181

Marble Valley Engineering, PC • 69 Grove Street, Rutland, VT 05701 • 802-775-1181