WASTEWATER TREATMENT FACILITY CAPACITY UPGRADE

CITY OF BARRE, VERMONT







36-inch Diameter Pipe Crossing Existing Utilities

Twin 24-inch Connections

The Town of Barre needed additional wastewater Capacity to meet the residential growth needs within the Town. The City of Barre receives and treats wastewater from the Town of Barre, but the Wastewater Treatment Facility was limited to a 3.4 mgd capacity. Various improvements were defined by the State of Vermont to provide an additional 600,000 gpd in treatment capacity.

To facilitate the capacity increase Dufresne Group worked with Steve Micheli, then Water and Wastewater System Superintendent, and the Vermont Waste Management Division to develop an evaluation report, facilities plan, and a Basis of Design for the project. The report summarized the improvements needed to increase the capacity from 3.4 to 4.0 mgd. Final design activities were completed in November of 2000 and construction activity was initiated in May of 2001.

The project was successfully completed by December of 2001.

KEY FEATURES:

- Utilization of existing abandoned structures for additional chlorine contact time and dechlorination.
- Construction improvements were designed to allow for continuous operation of the existing facility.
- 0.6 mgd of capacity was completed for a total project cost of \$920,000 or about \$1.50 per gpd.
- Additional controls and alarms were installed to prevent any chlorine from entering the Stevens Branch of the Winooski River.
- 0% interest loan provided by the State.