AIRPORT ROAD WATER STORAGE TANK

TOWN OF ST. JOHNSBURY, VERMONT





Airport Road Water Storage Tank

In a preliminary evaluation report by Dufresne Group (DG), the existing Airport Road Water Storage Tank was found to be deficient in numerous areas. Most importantly, it was concluded that nearly 55 vertical feet of the 72 foot tall tank was unusable in order to maintain minimum pressures in the water system. This and other factors, including a prematurely failed coating system on the tank, warranted the design of a new water storage tank.

The new Airport Road Water Storage Tank was built at a higher elevation in order to maintain adequate system pressure and reduce the amount of dead storage in the tank. The new tank increased system pressures, increased available fire flow, and dead storage.

The project was funded by Rural Development under the American Recovery and Reinvestment Act (ARRA) and received 75% grant funding

KEY FEATURES:

- Design completed for both a glass-fused-to-steel and a precast concrete tank.
- Site design included a 1,250 linear foot access road at a grade exceeding 20%.
- Water main designed to maintain service to existing water storage tank during construction of the new tank.
- Innovative stormwater system included to collect and treat stormwater runoff from the project site.