Hadley Road Infrastructure Improvements Project
3 Utilities, 4 Types of Infrastructure, 1 Project

Wastewater:
New Proctor Avenue Pump Station, 600 linear feet of 8-inch force main, upgrade of the Correctional Facility Pump Station, and 2,500 linear feet of 6-inch force main.

Stormwater:
Removal of several existing catch basins and replacement with new ones located closer to the curb and flow line to ensure complete roadway drainage, eliminating previous ponding issues in the roadway.

Transportation:
Farrell Street was reconstructed with higher capacity to serve increased truck traffic. New bicycle safety pavement striping was added to Farrell and Swift Streets, a major bicycle commuter thoroughfare. Implementation of the bike box pavement striping at the intersection of Farrell and Spear Street to improve bicyclists safety is a new implementation of this control device in the State of Vermont.

Drinking Water:
New 24-inch water transmission main to provide redundancy; included implementation of boltless restrained pipe thrust restraint to eliminate large concrete thrust restraints in a crowded, underground utility environment; and double-polyethylene encased DIP water main corrosion protection at a crossing of a natural gas pipeline cathodic protection system.

The Hadley Road Sanitary Sewer area discharged to the City of Burlington sanitary sewer system upstream of the Pine Street CSO, which discharges to the Lake Champlain waterfront in Burlington. Smoke testing results for this sewer area located several sources of significant inflow, which were disconnected from the sanitary sewer system and the Pine Street CSO as part of this project.

The installation of the new 24-inch water transmission main was a cost-effective solution to provide strategic redundancy in the Champlain Water District Water Transmission System.

By executing this project and treating this wastewater at a City-owned WWTF with available capacity, the City anticipates an immediate payback compared to continuing to pay the City of Burlington to treat this wastewater and over $5 million in annual Operation & Maintenance cost savings over the next 20 years. Also because of this project, there was increased traffic capacity on Farrell Street and bicycle safety on Farrell and Swift Streets.

- City of South Burlington and Champlain Water District (CWD) combined CWD-owned infrastructure improvements with the City-owned infrastructure improvements under one general contract for construction in order to avoid the public disruption and higher costs associated with completing two separate projects under two general contracts for construction.

- The project scope included assisting the City with obtaining $700,000 in grant funding and $2.4 million in loan funding. The project funding terms allowed for immediate payback in the first year compared to continuing to pay for external treatment of this wastewater.

- Transportation infrastructure improvements were incorporated into road reconstruction associated with new wastewater force mains.