



Before



After



The Lincoln Avenue Pump Station in the Town of Manchester, Vermont is a major component of the Town's wastewater collection and pumping system as it pumps approximately 70% of the total wastewater flow to the Wastewater Treatment Facility. The existing wet well at the station was undersized and the pump cycle time was less than 2 minutes, far below the minimum 5 minutes required by State regulations.

In addition to this deficiency, the pump station is located in a flood plain and was only accessible by boat during flood conditions. The operators had difficulty entering the building once they reached it due to limited space between the building door and the flood door.

The improvements included the follows:

- 10'x10'x15' deep precast concrete wet well
- Roof replacement with new roof hatch
- Water service replacement
- Pump control panel replacement
- Furnace replacement
- 4' fill to raise the grade of the access drive above the 100 year flood elevation
- Electrical service replacement

KEY FEATURES

- Design challenges included space constraints from property lines, setbacks and existing abandoned clarigester.
- Significant increase in pump cycle time.
- Resolved limited access to the pump station during flood conditions.
- Replacement of aging equipment and materials.
- Construction completed with uninterrupted flows through the station.
- Soil hydrocarbons discovered during construction were remediated.