## Stormwater Management

## Collection, Conveyance, Treatment, and Discharge

Because of the Clean Water Act and its amendments, communities must manage both the quantity and quality of stormwater runoff. As communities develop or infrastructure ages, increased demands are placed on its stormwater management systems—catch basins, sewers, detention ponds, ditches, and other drainage features—to accommodate stormwater runoff. Consequently, improving stormwater management is a large undertaking for most communities.

hanks for all the help. It's nice to see that we have made a huge step forward in protecting the facility and adjacent property." VT Dept. of Buildings and General Service, February 2011



Reconfiguration design and construction of transit center vehicle ingress/egress and stormwater system to provide flood proofing impacting Rutland's historic downtown.

Marble Valley Engineering, PC knows that there is not a single design philosophy that can manage stormwater on every site and meet local requirements. We have the experience with stand-alone improvement projects and projects that are part of other construction activities to help your community with the planning, design, permitting, and construction of stormwater management facilities.

## Our services include:

- Hydrologic Analysis of Watersheds
- Hydraulic Modeling of Conveyance Systems
- Design of Storm Sewers, Culverts, and Inlet Structures
- Underground Detention and Infiltration Systems
- Retention and Detention Ponds
- Stormwater Treatment
- Storm and Sanitary Sewer Separation
- Oversight of Construction

We take a two-pronged approach to managing stormwater: the first step involves smart site design strategies that reduce peak flows and total runoff followed by the design of appropriate stormwater facilities that manage runoff and contribute to the aesthetic quality of the site.

Our experience and knowledge, particularly with Low Impact Development (LID) techniques and Best Management Practices (BMPs), lead to innovative and cost effective solutions to stormwater management problems.



Subterranean stormwater storage system with weir discharge control to attenuate discharge to municipal combined sewer system. System located in the Moon Brook stormwater-impaired watershed.

