

# Swanton Village Traffic Island and Infiltration Area Design & Implementation



## Services / Expertise

Stormwater Management  
Stormwater Project Scoping  
Urban Retrofit Planning and Design  
Green Stormwater Infrastructure  
Construction Management

## Markets

Local Government  
Watershed Protection Organizations

## Project Location

Village of Swanton, Vermont

## Date Completed

2014

## Project Owner

Friends of Northern Lake Champlain

## Project ID#

2014-053



*Construction of a stormwater infiltration area at the intersection of Academy St. and Route 7 in the Village of Swanton. This green infrastructure practice treats flow from 3/4-acre of road surface.*

STONE worked with the Friends of Northern Lake Champlain and the Village of Swanton on a stormwater retrofit project at the intersection of Academy Street and Grand Avenue (Vermont Route 7), next to the village green. The Village had planned to replace an existing, painted traffic island with a curbed island in order to better manage traffic flow. The Village's Public Works Director expressed an interest in incorporating stormwater management into the practice. The Friends of Northern Lake Champlain was able to secure grant funding from Vermont's Ecosystem Restoration Program to support the design and implementation, and hired Stone to develop the design.

Stone designed an infiltration area to treat the first inch rainfall from approximately 3/4-acre of road surface, as well as from the roofs of adjoining buildings. The project included:

- Performing a physical feasibility assessment that defined the contributing area to the proposed practice, water table elevation, soil conditions, existing infrastructure, and pedestrian flow. Infiltration testing was completed, demonstrating that the soils were sandy and well-drained, and that under-draining the facility was not necessary.
- Sizing the pretreatment and treatment areas of the infiltration practice appropriately to ensure long-term performance of the system.
- Providing technical support and oversight during construction to ensure that the infiltration area met the project's water quality and quantity management objectives.

The project's design and construction were completed in 2014.