

Rumney Memorial School ABSORBS THE STORM

A Summary of WNRCD's two phase project to **SHRINK** Rumney School's Stormwater **FOOTPRINT**

BEFORE

The Rumney School campus has a terraced yard and a fair amount of impervious surfaces such as gravelled parking lots, buildings, sidewalks, and compacted turf. These surfaces prevent the infiltration of rainwater and snowmelt, exacerbating stormwater issues. Approximately 4.5 acres, 1.5 of which are impervious, drains into a low, grassed area and ultimately a ditch running parallel to Shady Hill Road in front of the school.

Increased stormwater energy moving across the school's buildings and compacted gravel lots ultimately finds its way to an undersized culvert within the road-side ditch. Some of that stormwater moves through a small pipe under the road and into an adjacent field. This runoff created a **gully**, and formed an **outfall** that caused significant erosion, sediment deposition, and failing vegetation on Martin Brook's banks.



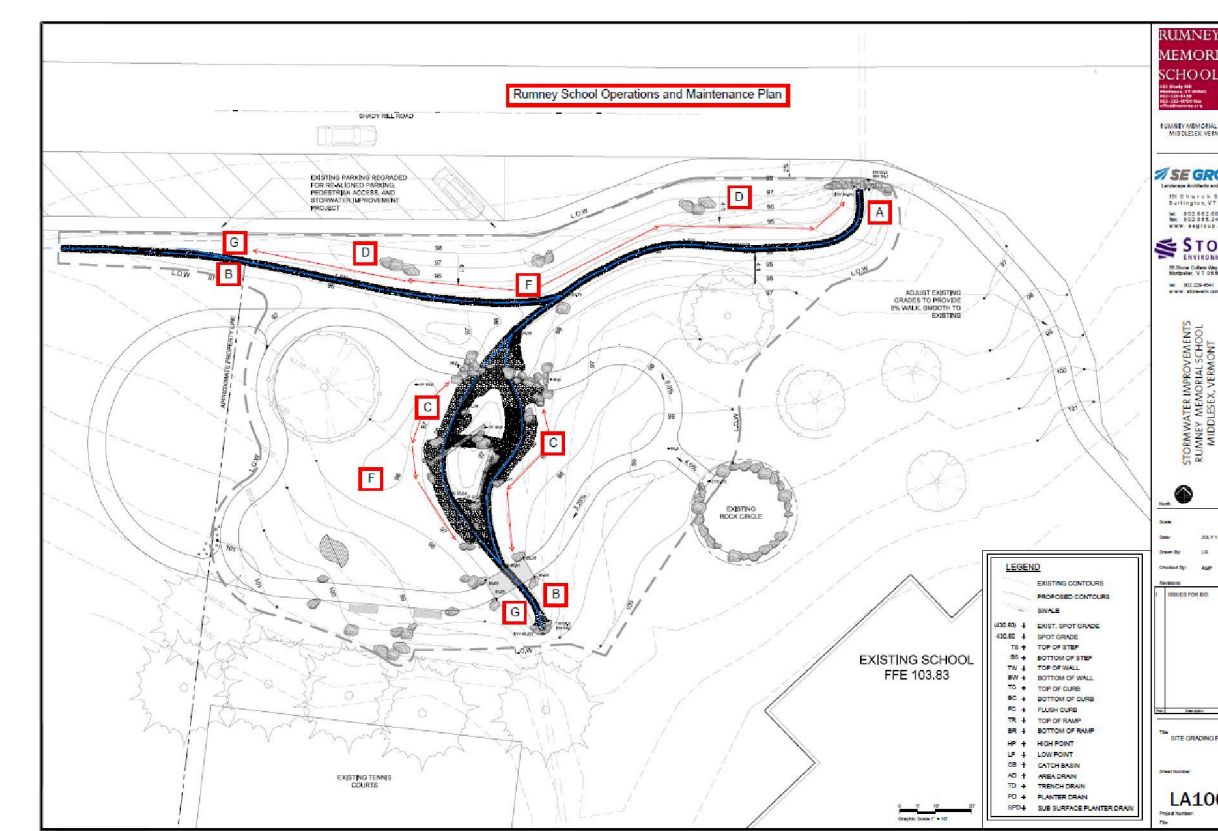
In Fall 2014, the Winooski Natural Resources Conservation District (WNRCD) spearheaded a stormwater improvement project for Rumney Memorial School in Middlesex, VT to address a serious stormwater concern impacting nearby Martin Brook (locally known as Shady Rill). This project was accomplished through the acquisition of two state-funded Ecosystem Restoration Grants. Implementation of a two phase project was carried out in 2015 and 2016 thanks to the collaboration of several partner organizations.

PHASE 1

In the beginning of 2015, WNRCD received its first grant to coordinate the execution of the following:

- Assessment and mapping of existing site conditions and constraints
- Development of conceptual designs to address stormwater concerns
- Selection of an optimal design, and development of 30% of this design

WNRCD contracted Stone Environmental and SE Group to do the engineering and landscaping designs, respectively.



Site design prepared by Stone Environmental



PHASE 2

WNRCD received a second grant in fall 2015 to carry out project implementation. Tasks for this phase included:

- Stakeholder involvement from school, students, and parents to provide comments and suggestions for final design
- Completion of 100% design
- Construction and planting of final plan

Canonica Farm and Forest Services were contracted to construct the retrofit, who subcontracted Churchill Landscaping to do the planting work in 2016.

AFTER



The successful installation of the retrofit was completed in Summer 2016. WNRCD would like to thank all the partners and stakeholders who contributed to this effort!

- Rumney school faculty, parents and students
 - Stone Environmental
- VT Department of Environmental Conservation
 - Black River Design
 - SE Group
- Canonica Farm and Forest Services
 - Churchill Landscaping
- Lake Champlain Basin Program



RUMNEY'S GREEN TEAM

In addition to mitigating the detrimental impacts on Martin Brook, this project serves as an **ecological learning laboratory** for the school's students. Before final designs were drawn up, partners sought input from the **GREEN TEAM**, who take an active role in their school's sustainability efforts. To satisfy their requests, the landscape and engineering consultants included a sturdy walking bridge, a play area with room for paths, and pollinator species to attract bees, butterflies and other beneficial insects.