

# Manufactured Topsoil Success Story

## Royalton, VT Bridge Construction

### Manufactured Topsoil (MFT)

MFT is an exceptionally productive, cost-effective, and sustainable alternative to stripping native loam, compliant with VTrans topsoil specifications. It is composed of locally sourced, environmentally sound recycled materials that supports lush, healthy vegetative cover requiring little additional input or maintenance. With an increase in both cost and scarcity of native topsoil, as well as the enactment of Act 250 preventing the stripping of material from existing gravel pits for this purpose, Manufactured Topsoil is the ideal solution for roadside construction projects and reclamations.



This retention pond alongside VT RT 14 has been re-lined with MFT in the beginning stages of the reclamation.

### The Project

The Royalton bridge improvement project included realignment and widening of VT RT 14 as well as total reconstruction of an aging railroad bridge. 1.5 acres of land, including both flat and sloped roadside areas, as well as a small retention pond required reclamation with a replacement topsoil. Looking for a cost-effective, vigorous, and erosion resistant option, the contractor chose to utilize MFT composed of safe, sustainable, recycled materials for this project.

The MFT was aged for two months prior to application and spread with conventional construction equipment, and a wildflower seed slope mix was applied in August 2024.

### The Blend

Blends are project specific based on project requirements and ingredients.

- 5 part Paper Fiber for increased organic matter and improved water retention.
- 5 part sand for porosity and structure.
- 1 part EQ Biosolids as a source of slow-release, plant available nitrogen, and organic matter.
- 1/2 part Bottom Ash for pH adjustment, potassium, micronutrients, and deep, rich color.



Photos taken August 6th 2024, shortly after the application of the MFT.



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### The Results

**Average pH: 8.2, Average Organic Matter %: 3.4**

The application of MFT on multiple locations at the bridge construction site, including the retention pond, and both flat and sloped terrain highlights the versatility of the material, as well as its effectiveness at controlling erosion. Despite the material having been aged for only two months prior to application, the MFT is steadily supporting vegetative growth.



Photos taken October 8th, 2024, just over two months after the application of the MFT. The sloped areas are stable and the MFT is encouraging healthy grass growth.