

CASE STUDY

GLENORCHY TRAIL

Slope Stabilization - Oakville, ON Canada

+Project Snapshot

The subsurface of clay shale was eroding on this steep slope due to the scouring action of the adjacent Sixteen Mile Creek, which removed material from the slope walls, preventing the slope from reaching a stable inclination. Town officials were concerned their well used trail system would fail within the Glenorchy Conservation Area.

Location: Oakville, Ontario Canada

Year Constructed: 2014

Application Type: Slope Stabilization

Project Size: 8100 Units / 450 m²

Client: Town of Oakville

Reinforcement: Threaded Anchors

Vegetation: Hydroseed & Live Stakes

Engineer: Amec Foster Wheeler

Contractor: CSL Group

Bag Filler : Marco Clay Products



Shoreline Protection | Slope Stabilization | Stormwater Management
Erosion Control | River / Streambank Restoration | Retaining Walls



+Reinforced Application

Envirolok, combined with mechanical connection to the slope provides stability and the ability to expedite construction to restore vegetative cover lost to erosion.

A crane was used to access the slope across the creek and atop a 3m buttress to enable expedited construction.

125 x 3m grouted and threaded rebar anchors were first installed into the slope to which Envirolok was mechanically connected with geogrid.



+Vegetation Approach:

The project was hydroseeded immediately following construction with a Bonded Fibre Matrix containing native grass and wildflower seed and perennial rye cover crop. Following application, approximately 2000 dogwood and willow live stakes were inserted into the Envirolok structure.

+Results

Excellent results with full vegetated cover achieved within 3 months of construction. Envirolok supplies a permanent vegetated solution to persistent erosion of slopes. Envirolok easily conforms to the natural contours of a slope compared to other systems. Envirolok also provides structural support that when combined with native vegetation allows the establishment of habitat along sensitive areas.

