## Tourister Mills

Warren, Rhode Island

## Stormwater Treatment

Owner:
Brady Sullivan Properties, LLC
Engineer:
Crossman Engineering
Contractor:
M. Saccoccia Construction

Installation:
2019


Originally built in the 1920's and once home to the famous Tourister Luggage Company, Tourister Mill is now a stunning waterfront apartment community on a beautiful bay of Warren, Rhode Island.

Technical Description:
(5) Modular Wetland Linear®

Bioretention Systems


Given the development's location directly along the bay, it was necessary to comply with the Rhode Island state stormwater quality permits while closely managing land use to maximize the limited open space for occupant amenities and parking.

The developers were required to implement Low Impact Development (LID) stormwater treatment systems to comply with Rhode Island regulations and mitigate the pollutants generated from the site's impervious area, including nutrients, sediments, trash and debris, and hydrocarbons.

The original parking lot design included 18 bulky stormwater systems with low efficiency standards. However, using these systems would have resulted in the loss of 34 parking spaces, which was not acceptable to the owner. Engineers found a redesign option that would eliminate the loss of parking spaces using only five Modular Wetlands Linear (MWL) biofiltration systems.

High water tables also posed a challenge. A non-proprietary bioretention system would be impossible, as tidal changes would overwhelm and wash out the system, while larger/bulkier systems would require deeper excavation.

The MWL utilizes horizontal flow, a design that allows the system to efficiently provide the same or better treatment as other

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systems in an even smaller footprint. Additionally, the system can incorporate an open planter bed that allows it to blend into surrounding landscapes.

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