



**STORM WATER TREATMENT UNIT TYPICAL SECTION**

As part of the Northern portion of the Westside Infrastructure Project, Dufresne Group provided final design and permitting assistance for a stormwater treatment system to treat runoff from both the Northern and Southern portions of the project. Dufresne Group met with the Watershed Management Division – Stormwater Program to discuss the project. The project consisted mostly of redevelopment of existing impervious area with a small increase of less than 10% in new impervious area. After discussions with the Stormwater Program, Dufresne Group utilized the “Stormwater Procedure for Public Linear Transportation Projects”. Under this procedure, this project only required treatment for 30% of the Water Quality Volume since the project was considered a minor expansion.

Runoff was collected from the Westside area via the new storm drain system and conveyed through the existing storm drain system on Cliff Street to a discharge point on Sleeper’s Brook. A Hancor Storm Water Quality Unit was chosen for the treatment device, with a total suspended solids removal rate of 80%. This unit was installed off-line just upstream of the discharge point with a main line bypass to handle larger flows. This unit was sized to provide treatment for 0.496 acre-feet, which was well above the minimum required treatment volume of 0.226 acre-feet.

### KEY FEATURES:

- Coordination with the Stormwater Program to identify a stormwater treatment solution to meet current regulations and fit within the urban Westside area.
- Design for the entire project minimized new impervious area for a net increase of less than 10%.
- Reduction of treatment requirements using “Stormwater Procedure for Public Linear Transportation Projects”.
- Provided more than double the required treatment volume with a single treatment unit.