



LID Monitoring Projects

CVC Building - Green Office Building

Background

To show Credit Valley Conservation (CVC)'s commitment to the environment, the design of the New CVC Head Office Building includes various low impact development (LID) methods. The building includes LID measures such as, a rainwater harvesting system, a permeable pavement parking lot with perimeter bioswales, and water and energy conservation measures. These methods will help to reduce the buildings environmental impact. The building is on track to reach a LEEDS gold level.

Location: CVC Head Office, 1255 Old Derry Road, Mississauga

LID Practices Implemented

- **Permeable Paving Stone Parking Lot** increases stormwater infiltration by allowing water to soak into the joints between the paving stones and into the ground.
- **Perimeter Bioswales** are a stormwater management technique that uses the chemical, biological, and physical properties of plants and soils to treat stormwater runoff. They are designed to mimic natural conditions promoting infiltration, retention, and the slow release of stormwater runoff.
- **Rainwater Harvesting Systems** can reduce rooftop runoff as rainwater is collected by roof downspouts and directed to a cistern for future grey water use. At the CVC building, water collected in the cistern will be used for flushing toilets and landscape watering.





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Why are we Monitoring?

- We are evaluating the effectiveness of the swales and permeable pavement at reducing the volume and improving the quality of stormwater runoff from parking lot.
- We are also conducting a water balance on the rainwater harvesting system to determine the cost savings over using municipal water.



What are we Monitoring?

Parking Lot

- CVC is measuring water flow from the parking lot using a continuous level logger and a weir.
- We are also taking flow weighted water samples during precipitation events.

Rainwater Harvesting System

- CVC is measuring the water flow entering and exiting the rainwater harvesting tank using continuous flow loggers.
- We are also taking grab water quality samples from the tank.

When did monitoring begin?

- Monitoring will begin in June 2011

Who are the Partners?

- Credit Valley Conservation, & The Ontario Ministry of the Environment.