

Catch basin technology

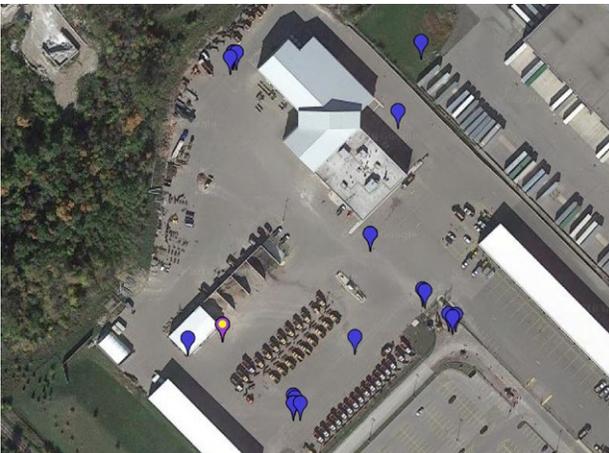
MANAGING THE POLLUTANTS AT BRAMPTON MAINTENANCE YARD

The City of Brampton, Ontario, Canada is redeveloping its Public Works Yards to meet the future of Brampton's growth, service expectations and commitment to a greener, cleaner environment.

The City of Brampton's Sandalwood Works Yard is a base used for road maintenance and snow clearing operations. In addition to servicing and maintaining roads, sidewalks and other City owned infrastructure, they plow and remove snow from the City's roadways, downtown core Brampton Transit bus stops, bridge deck sidewalks, school crossings, and walkways.

CATCHMENT

In the winter thousands of tonnes of snow, is loaded onto dump trucks and transported to the yard where it is stored and melted.

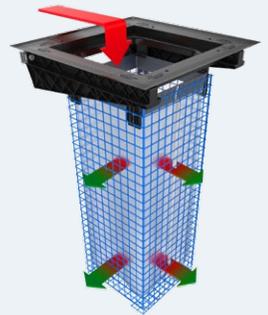


 Catch basin inserts

As a very active, high traffic yard all year round, the City saw the need to update existing stormwater infrastructure with retrofittable technology to manage the solid wastes, debris and stormwater contaminants associated with these essential services that is being transported to the Yard every day.



Enviropod™ Filter is a high performance catch basin insert that captures and retains sediment, nutrients, heavy metals, litter and debris before they enter the stormwater system.



The LittaTrap™ is a versatile catch basin insert system. It is easily installed in new or existing catch basin and may be configured to capture plastics, gross solids and sediment. The LittaTrap™ is hand maintainable, allowing for low cost and frequent maintenance. By installing a LittaTrap™ there is a significant improvement of capturing both positive and neutrally buoyant materials which are typically washed down a storm drain, particularly in periods of heavy rain.



Brampton Maintenance Yard, Ontario, Canada



Enviropod Canada in conjunction with their partners **Imbrium Systems** approached the Brampton Public Works team to trial the Enviropod technologies: the **Enviropod™ Filter** – a high performing catch basin insert and the **LittaTrap™** – a low cost, hand maintainable catch basin insert. Both technologies are highly engineered for high performance and high flows.

Two trial units were installed and monitored for 18 months to understand suitability across all weather conditions. The trial involved retrofitting the technology into existing catch basins at Sandalwood Works Yard and required no construction or disturbance to the existing infrastructure.

After 18 months of testing these new technologies, the City has retrofitted the remaining thirteen (13) of the fifteen (15) catch basins in the Yard with six (6) additional Enviropod Filters and seven (7) LittaTraps.

Different technologies were installed in different parts of the yard. The LittaTrap is a simple tool for managing plastics, gross solids and sediment in stormwater runoff. These were installed in lower contaminant generating areas.

The Enviropod is a high performing catch basin insert capable of capturing fine sediments and associated pollutants such as heavy metals. The Enviropod Filters were installed in areas that were subject to higher loadings of finer sediment from the snow melting operation. (Independent testing has shown the system removes over 90% of particles greater than 100 microns in size.)

OUTCOME

William Guy, Manager, Contracts with the City of Brampton Public Works Department says of the solutions, "The Enviropod technologies are a cost effective, easily maintained approach to managing pollutants and debris washing off our Yard from our snow melting and general road maintenance operations. By installing both LittaTraps and Enviropods we have found a simple, practical and effective solution to filter runoff and reduce the debris making its way into the stormwater system.

Another key reason for choosing and installing the Enviropod units is there are no expensive filters to be replaced every couple of months. Maintenance can be easily performed by staff at the Yard by simply pulling the LittaTrap or Enviropod baskets up by hand, emptying them and putting them back in. Cold weather and frozen filters are no longer an issue, and that, for our purposes, is a winning design."