

## Compact **Stormwater Treatment** For Expanding Retail Space

**OWNER** SmartCentres

ENGINEER GHD
CONTRACTOR Dagmar
LOCATION Bradford, ON

The Up-Flo Filter® is an advanced stormwater treatment solution for capturing very fine sediment, heavy metals, oil and nutrients from residential, commercial and industrial sites. The system is a multi-stage stormwater treatment system that combines pretreatment with fluidized bed filtration technology in a single device. The water flows in through an inlet grate and passes through filter modules that contain an engineered media mix designed to optimize pollutant removal by evenly spreading the flow across the entire surface area. A newer commercial development in Bradford, Ontario, SmartCentres was further expanding its' retail footprint and turned to Armtec for stormwater drainage solutions.

"The addition of more retail space also required an increase in available parking spaces. The existing stormwater pond was already at it's peak capacity, so alternative methods were looked at to treat the stormwater runoff. The Town required an enhanced 80% TSS treatment level prior to discharging to their storm sewer network, which very few standalone units are capable of," explained Cody Neath, Regional Engineer for Armtec.

Due to the space limitations on the existing property, the project owners were looking for an efficient, yet compact solution. A comprehensive design package including detailed drawings were provided to the consultant.

After careful consideration of a variety of products, the Up-Flo Filter® was deemed the most efficient filtration system. Not only could the modular system be contained within a single concrete vault as opposed to the multiple vaults required by competing systems, the size would not sacrifice any of the water treatment performance.



The system is certified by the New Jersey Department of Environmental Protection (NJDEP) and the City of Toronto, to have a removal rate of >80% Total Suspended Solids (TSS). This was critical to the project as the water would eventually flow into the existing storm sewer network.

Onsite to help facilitate the delivery and install, Armtec experts were able to assist with the configuration and the crane installation of the filter modules within the vault.

With the completion of this treatment system, the expanded SmartCentres will have a comprehensive treatment system that fits within the limited footprint all while meeting the treatment requirements of the Town of Bradford West Gwillimbury.

Find out how Up-Flo Filter® can be used on your next project. Contact us today!

