

Yorkdale Mall

Toronto, Ontario • 2009



Water Saved: 23,367 m³

CO2 Offset: 4673 KG

Dollars saved since 2007: \$42,355

Project Overview:

SMART Watering Systems and Yorkdale Mall entered into a partnership in 2008 to reduce landscape potable water use. SWS was asked to perform a system audit, provide upgrade recommendations and implement a Centralized Control system that could detect leaks and make weather based irrigation scheduling adjustments. As a result, the landscape material flourished while significant water savings were achieved.

The existing irrigation systems at Yorkdale Mall had been installed approximately 15-20 years ago and were in need of performance enhancements. Vandalism and water waste from wind and pipe leaks were all issues that needed to be addressed in order to achieve water savings, improve plant health and mitigate property damage.

Many of the sprinkler heads on site used traditional spray head nozzles and these were replaced with rotary nozzles with a higher water application efficiency and much lower precipitation rate. SWS installed water meters & master valves at all points of connection in order to track how much water was being used and to have the ability to shut the system down in the case of leaks or vandalism damage. The irrigation controllers were replaced by two way communication satellites which gave SWS and Oxford properties the ability to remotely track and control how much water was used. Finally a weather station was installed on site to allow SWS and Yorkdale staff the ability to schedule the irrigation system based on rainfall & ET data.

This collaborative approach between SMART Watering Systems and Oxford Properties resulted in Yorkdale Mall using **85% less water** to irrigate their landscape.



Conservation Solutions Implemented:

Control Package - The Toro Sentinel Irrigation Management System using 4 satellites controlling 80 zones of irrigation that are monitored & controlled on site as well as remotely by SWS staff.

Irrigation system efficiency improvements - Traditional spray head nozzles were replaced with Hunter MP Rotator rotary nozzles and Rainbird Rotary nozzles to minimize water waste resulting from over-pressurization.

Sensors on site - Four Data Industrial water flow meters and a Davis Vantage Pro weather station.

