

# Robbins HCLC

MacEwan College City Centre Campus, Edmonton 2005–2006

The Robbins Health Care Learning Centre is the second LEED®-NC building with an irrigation system designed by **ion** for MacEwan College. **ion** worked in a multi-disciplinary P3 team to design, administer construction and attain coveted water efficiency credits required for the building rating application.

The landscape lends to the urban campus context with architecturally-detailed planters, site furniture, lighting and pedestrian paving. The landscape and irrigation system are built entirely on top of a parkade. Plant materials with ornamental and drought-hardy qualities were carefully selected by the Landscape Architect.

Drip/micro-irrigation was used extensively and soil moisture sensors were incorporated to manage irrigation landscape areas with varying soil depths, plant water requirements and microclimates. Popup sprinklers with rotary stream nozzles, modeled to exhibit Distribution Uniformity of 85%, were incorporated for economy without compromising efficiency. The satellite controller communicates with the irrigation central control employed by the campus.

A rain harvesting system collects stormwater runoff from roofs and site paving into a cistern located in the underground parkade. **ion** modeled the site water balance of the potential collection area runoff compared to the peak and seasonal irrigation requirements to attain water efficiency credits WE1.1- Reduce Landscape Water by 50% and WE1.2- No Potable Water.

