



Green Building

Leadership

County offices become international showpiece

Northumberland shows leadership by example

VINCE VERSACE
STAFF WRITER

Northumberland County's new headquarters will be highlighted at a worldwide sustainable building conference in Australia this September thanks to its use of innovative green technology.

"The building is being presented and recognized for its innovative features playing such a big role in a prominent public building," explains Ted Wilson, architect and LEED (Leadership in Energy and Environmental Design) accredited professional at Totten Sims Hubicki (TSH).

The new Northumberland County headquarters is located at a gateway entrance off Highway 401 in Cobourg, approximately one hour east of Toronto. The 42,000-square-foot, two-storey building, is built into a hill and features a rooftop garden, geothermal heating and



Northumberland County's new headquarters is recognized for innovative features, including a green roof, geothermal heating and cooling systems and energy-efficient materials.

cooling system and high performance, energy-efficient windows and materials.

"This building allowed us to apply lessons we learned elsewhere and incorporate the largest amount of green features in one project," says Wilson.

In 2005, the province asked for more court space at Northumberland County's

former building in order to consolidate local courts into one location. The county found it would be cheaper to build a new headquarters and move its staff rather than expand the current offices or lose existing annual Ontario lease revenue of \$375,000.

The new county headquarters was built for \$9.3 million and opened in fall

2007. It houses the county's council chamber and offices for its 100 employees.

TSH has designed and used a geothermal well system in Colborne's Keeler Centre, also in Northumberland. The building design team also looked at the Lake Simcoe Conservation Authority headquarters in Newmarket to see energy

efficient features and principles in use for a government/administrative building.

"We helped design the Lake Simcoe building and it was doing on a smaller scale what we wanted to do with the county building," says Wilson.

Forty, 300-foot deep, six-inch wide wells, were drilled for the geothermal system.

Approximately 30 will be used at one time to help moderate the building's climate.

The building's peaked roof and large mechanical room allow for the geothermal heating and cooling system to collect and transfer heat from the earth through the buried fluid-filled pipes.

The environmentally-friendly system costs 40 per cent of the price of traditional heating and cooling. The recent long winter was a great first test for the system, says Wilson.

"We were really happy with how the system performed and we look forward to this summer to see how the building cools," says Wilson.

A 7,000-square-foot planted green roof provides people on the second storey with a view of a lawn when they look out a window. The light weight grass, called sedum, is designed to soak up storm water.

"It is basically a wild grass mix which will grow between four to six inches high which only needs weeding twice a year," says Wilson.

TSH