St. Michael's Hospital

Location:

Medical Health Centre
61 Queens Street East,
Toronto, Ontario

Type of Contract:

Energy Performance Contract

Contract Value:

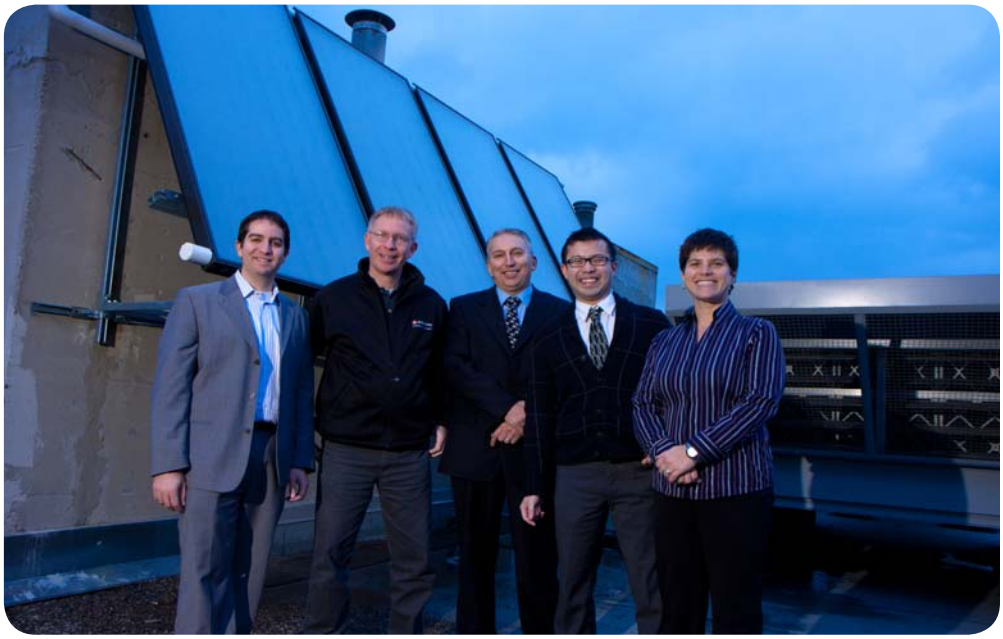
$258,000

Job Completed:

November 2010

"The entire project was executed in a "live" building with patient, clinics and long operating hours to work around. Ainsworth staff performed an excellent job of completing the project on time with the results as designed without compromising patient comfort. "

-Ron Saporta, Director
Engineering & Plant Services



From left Ron Saporta, Dir, Engr.& Plant Services, St. Michael's Hospital; Paul Beekman, Ainsworth Project Manager; John Korhammer, Ainsworth Account Manager; Charles Fung, Project Engineer, St. Michael's Hospital; Lisa VanLint, Project Coordinator, St. Michael's Hospital

Founded in 1892 by the Sisters of St. Joseph, St. Michael's is fully affiliated with the University of Toronto. The Hospital is a major teaching and research hospital with expertise in diverse areas of health care. The Hospital also provides outstanding medical education to future health care professionals in more than 26 academic disciplines. Critical care and trauma, heart disease, neurosurgery, diabetes, cancer care, and care of our vulnerable population are among the Hospital's recognized areas of expertise.

Ainsworth's relationship with St. Michael's Hospital dates back many years and has included service as well as project and design build work. As a result, in 2009 when Saint Michael's hospital decided they needed to revitalize and redesign their Women's Health Clinic/Patient Facility and replace the aging infrastructure, they turned to Ainsworth.

The Patient Care facility at 61 Queens St., East, is a 22 year old building with approximately 90,000 sqare feet. St. Michael's Hospital Engineering staff 's vision was to transform this existing facility into a "GREEN" building with practical energy conservation and renewable energy measures.

After conducting a detailed Feasibility Study outlining specific measures, project costs, achievable savings and a methodology to monitor and verify the savings, Ainsworth was awarded the contract.

The Project

- Retro-commissioning of the existing building automation system to optimize the operation of the many facility systems including the following:
  - Heat Pump System
  - Evaporative Condenser System
  - Building Exhaust Air Fan
  - Hot Water Space Heating Boilers
  - Garage Ramp Heating System and
  - Domestic Hot Water Storage Tanks

- Retrofit of existing lighting with energy efficiency lighting, such as:
  - High Lumen T8 Lamp and Low Ballast Factor T8 Ballast
  - LED MR16 Lamps for accent lighting
  - Compact Fluorescent Lamps for pot fixtures
  - Halogen Lamps where dimming is needed
  - Retrofit 8' Fluorescent fixtures for garage to 4' fixtures using T8 Lamps and Ballast

- Installation of high-efficiency motors for building glycol circulation pumps.

- Installation of Solar thermal heating domestic system for domestic hot water heating system.

St. Michael's Hospital has found many benefits from this "Greening" process, which has helped it to manage economic, operational and environmental responsibilities, while accommodating changing uses for this facility.

St. Michael's Hospital is enjoying savings in annual operating cost resulting from reduced energy consumption, while realizing improved light levels and space conditions for patients and staff. The lowered environmental impact resulting from these infrastructure upgrades is the equivalent of 89 tons of CO_2 emission reduction or the planting of 45 acres of trees.