



SOUTHDOWN CARTER CENTRE: AURORA, ONTARIO



Firm's Role

Mechanical Engineering and Environmental Consulting Services

Description

The Southdown Carter Centre, a 1,600 m² (17,000 ft²) building, is a quiet retreat centre for clergy. To maximize energy efficiency and minimize environmental impact, Sustainable EDGE designed HVAC and plumbing systems that take advantage of the naturally cold well water and the inherent benefits of vegetation.

Features

- High performance thermal envelope
- Glazing optimized for building orientation
- Displacement ventilation used in concert with Energy Recovery Ventilators
- Cooling and dehumidification of summer ventilation air
- Radiant floor heating and cooling
- Deep aquifer water supplies cooling and potable water
- Supply water UV light disinfected and softened, using a non-salt-based softening system
- Natural wastewater treatment using a vegetated constructed wetland
- Stormwater management using planted swales and a rain garden

Architect: Larkin Architects

Owner: Southdown Institute