



Residence 3483 Lakeshore Road, Burlington, Ontario

Green Facts - Building Uses No Fossil Fuel Green House Gas Emitting Energy, Resulting In - Carbon Neutral Status

LOCATION : 3484 Lakeshore Rd, Burlington, Ontario

ARCHITECT : Common Ground Architect
Mr. Kleo Isaia.

TEAM MEMBERS :
Mechanical Consultant
Mr. Imran Majeed
Advanced Buildings Solutions Inc.

Electrical Consultant
Suri & Associates.



GEOTHERMAL DESIGN FEATURES

- Horizontal Geothermal system to support entire building energy demands.
- Loops to be placed in reverse return arrangements to have better control.
- System flow in pipes has high turbulence effect to have better heat transfer.
- Loop to be placed in two layers, separated at a distance of 2 feet.
- Geothermal is integrated with other mechanical systems.

PROJECT DESCRIPTION:

The residence project consist of basement, first and second floor levels including, pool, mini theater, covered patio, exercise room, recreation room, pool, master bed rooms, atrium, high ceiling, washrooms, kitchen, garage, elevator, storage and service rooms.

Mr. Majeed was engaged to provide following services:

- Mechanical - HVAC
- Plumbing - Drain, Water distribution
- Geothermal - Horizontal System in 2 layers.
- Infloor Heating System in Basement
- Pool Environment Design
- Passive DHW heating system.

NOTABLE FEATURES:

The Green building features include:

- Horizontal Geothermal system to support entire building energy demands.
- Energy Recovery ventilation system to temper the fresh air.
- HVAC system - High efficient geothermal heat pumps.
- De-Humidification system for Pool area.
- High Efficient water to water heat pump system.

