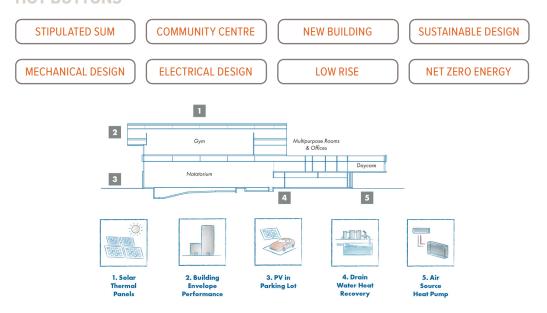


NORTHEAST SCARBOROUGH COMMUNITY CENTRE

ABOUT THIS PROJECT

- Multi-use community centre and child care facility in Scarborough's Joyce Trimmer Park, featuring a gymnasium and fitness studios, indoor pools, multi-purpose space, teaching kitchen, and public and administrative areas.
- + The building was required to meet Toronto City Council's Net Zero Greenhouse Gas Emissions (NZGHG) specification, which included fuel-switching from natural gas to electricity for building heat, and incorporating a renewable energy source to offset emissions from the provincial power generating grid.
- + Targeting Net Zero Energy, which required the building's energy consumption be drastically reduced so the renewable energy generation fit within budget.
- + Mechanical design utilizes electric-based heating and cooling plants, employing air-sourced heat pump technology to reduce energy consumption.
- + The plants combine simultaneous heating and cooling units, as well as heating only units, in order to deal with the heating-dominant load profile of the building.
- + Supplemental electric boilers are provided for periods of low ambient outdoor air temperatures when air-source heat pump capacity is diminished.
- + Solar thermal panels, ultra-high heat recovery performance, variable speed technology, LED lighting, and enhanced building envelope performance all contributed to the NZGHG/Net Zero Energy goals for the project.

HOT BUTTONS



LOCATION

Toronto, ON

SMITH + ANDERSEN SERVICES PROVIDED

Mechanical, Electrical, Communications, Security, Audio-Visual

KEY TEAM MEMBERS

Perkins+Will City of Toronto

SIZE

94,100 sq. ft. (8,700 sq. m.)

BUDGET

\$58 Million

COMPLETION YEAR

2024

SUSTAINABILITY

Net Zero (Target) NZGHG specifications