

Town of St. Stephen

Garcelon Civic Centre, St. Stephen, NB

Address ([Map](#)): 22 Budd Avenue, St. Stephen, New Brunswick E3L1E9 Canada
 Sector: Recreational/Sport
 MCW Office: Moncton
 Sub Categories: Ice Rink, Swimming Pools

Status: Complete



Mechanical:
MCW Maricor
 Electrical:
MCW Maricor
 Architect:
Architects Four Ltd.
 Contractor:
Dora Construction

Project Description

The Garcelon Civic Center was designed to make a significant and positive contribution to the health, wellness, and the social, cultural, and economic prosperity of the Town of St. Stephen and the Greater St. Stephen region. The \$19.6 million, 76,682 square foot facility includes an NHL size ice arena; aquatic center including a 25M pool and therapeutic pool; multi-purpose activity and meeting room space; year round walking track that follows the complete perimeter around the ice hockey arena. The civic center facilities will include environmentally friendly and energy efficient technology that provides flexibility in the building's operations and mitigates the impact rising energy costs will have on operating costs and the efficient use of the building during its lifetime.

Mechanical Systems Description:

Mechanical reflects the construction of a facility using value engineering to maintain project budgets, and a cooperative team effort to ensure on-schedule project delivery. The Mechanical systems were designed and installed to minimize the energy use for the complete Facility.

The major energy consumer, the ice plant, utilizes multiple water-to-water heat pump technology to recover waste heat from that production process and use the waste heat in the following systems:

1. Under ice pad frost prevention system.
2. In-floor and spectator bleacher heating systems.
3. Water-to-air heat pumps systems which provide heating and air conditioning to support and public spaces.
4. Heating of facility swimming pools.
5. Heating of domestic water systems.
6. Ice/snow melting pit.

The plumbing fixtures installed in this Facility are "low water" consumption type fixtures.

Electrical Systems Description:

Electrical design reflects the construction of a facility using value engineering to maintain project budgets, and a cooperative team effort to ensure on-schedule project delivery.