

PART 1 PROJECT DESCRIPTION

Use for all categories. Projects are judged based on criteria of sustainable design, architectural merit and innovation. **Please submit Part 1 and Part 2 as separate pdf files.**

2025

CANADIAN GREEN BUILDING AWARDS

THE NATIONAL PROGRAM OF
SUSTAINABLE ARCHITECTURE
& BUILDING MAGAZINE

SABMag

PROJECT CATEGORIES

Identify which Award category you are entering

☐ **1. Residential [small]**

Open to new or renovated buildings less than 600m² in area, of which a minimum of 75% is dedicated to single-family or multi-family residential uses.

☐ **2. Residential [large]**

Open to new or renovated buildings [typically multi-unit buildings or groups of related buildings] greater than 600m² in area, of which at least 75% is dedicated to residential uses.

☐ **3. Commercial/Industrial [small]**

Open to new or renovated buildings up to 2,000m² in area, of which more than 75% is dedicated to commercial or industrial uses.

☐ **4. Commercial/Industrial [large]**

Open to new or renovated buildings [or groups of related buildings] greater than 2,000m² in area, of which at least 75% of the floor area is dedicated to commercial or industrial uses.

☐ **5. Institutional [small]**

Open to new or renovated buildings up to 2,000m² in area, of which more than 75% is dedicated to institutional uses.

☐ **6. Institutional [large]**

Open to new or renovated buildings [or groups of buildings] greater than 2,000m² in area, of which at least 75% of the floor area is dedicated to institutional uses.

☐ **7. Mixed Use**

Open to new or renovated buildings [or groups of related buildings] of any size, in which no individual use exceeds 75% of the overall floor area.

☒ **8. Existing Building Upgrade**

Open to buildings of any size or type in which the primary focus of the work has been to enhance the performance or extend the life of an existing structure. Entries in this category are required to respond only to the submission criteria appropriate to the project.

☐ **9. Interior Design**

Open to interior design projects of any size or type. Entries in this category are required to respond only to the submission criteria appropriate to the project.

An award will be given in each category at the discretion of the jury.

>> PROJECT DETAILS

Project name: Ross Creek Annex
Address: 2182 Sheffield Rd. Canning, NS
Year completed: 2023

PROGRAM AND CONTEXT

Project type: [Identify all uses occupying 10% or more of gross floor area]

A2 - Community Hall

Project site: [Check all that apply]

- ☐ Previously undeveloped land ☒ Urban ☒ Rural
☒ Previously developed land ☐ Suburban

Other Building description: [Check only one]

- ☐ New ☒ Renovation ☐ Both [If both, list ___% new and ___% renovation]

STATISTICS* Provide the following metrics as applicable to your project.

- Site Area: 4434 m²
- Building gross floor area: 405 m²
- Energy Intensity: 55 KWhr/m²/year [Include both base building and process energy]

[optional: report energy intensity separately as follows:

- Energy Intensity, base building: 55 KWhr/m²/year
- Energy Intensity, process energy: N/A KWhr/m²/year
- Reduction in energy intensity: N/A %.
- State the reference standard on which the % reduction is based: MNECB, NECB or ASHRAE 90.1

[include version]: N/A

- Recycled materials content: N/A % by value
- Construction materials diverted from landfill: N/A %
- Regional materials by value: N/A
- Water consumption from municipal source: N/A litres/occupant/year

[Include both base building and process consumption]

- Reduction in water consumption: N/A %
- State the reference on which the % reduction is based: ☐ LEED or other ☐

*NOTE FOR PART 9 RESIDENTIAL PROJECTS: PROVIDE THE STATISTICS ABOVE IF AVAILABLE. Include in the Executive Summary [see next page] the EnerGuide or the Home Energy Rating System [HERS] ratings if available, and the WalkScore rating [see www.walkscore.com]. Also, a qualitative assessment of project performance should be included in the appropriate sections of the narrative.

Ross Creek Annex

2025 SAB Awards

The Ross Creek Annex is a music and food-focused community venue in the village of Canning, Nova Scotia, designed for Ross Creek Centre for the Arts as well as the larger surrounding community. The building is a deep-energy retrofit of an existing, previously decommissioned church. The main church hall is transformed into a flexible music performance space that can also be used for a variety of events and gatherings. The building also houses a new recording studio, multi-purpose room and community kitchen on the newly accessible lower level.

The most significant sustainability strategy was to renovate an existing building instead of demolishing and building new, saving 26.9 tonnes of carbon emissions by extending the life of the existing structure. The upgrades to the exterior envelope which include additional insulation, a new airtight weather barrier and new triple pane windows, will lower energy consumption and increase occupant comfort. Converting the HVAC system from oil to electric with new heat pumps and high efficiency ventilation system was a critical future-planning and carbon reduction strategy. Lastly, installing solar PV panels on roof offsets overall building energy use by 50%.

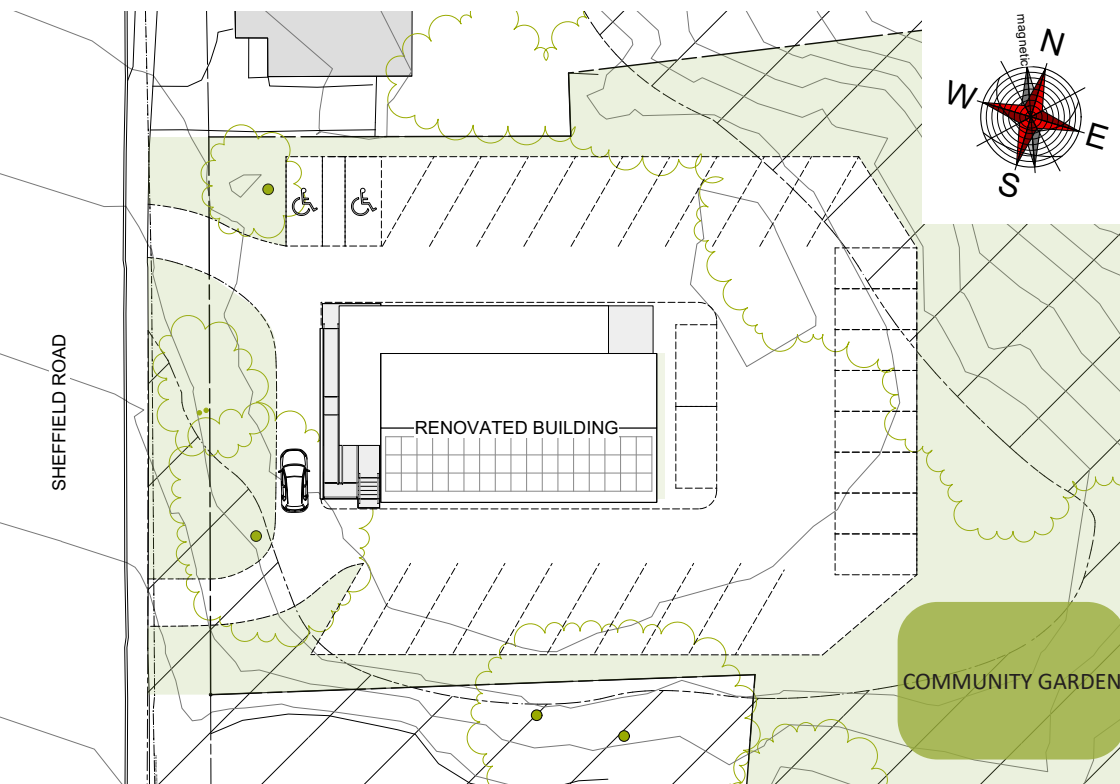


Strategic Decisions

In 2020, the clients decided to renovate the decommissioned St Lawrence Church for use by Ross Creek Centre for the Arts, a multi-disciplinary arts education and development organization in the Annapolis Valley. The church was selected as it was a perfect location to provide Ross Creek with a performance venue in the village of Canning, and to provide community-oriented programming and music events.

The church was an ideal building as no additions were needed to fulfill the project space requirements and therefore the surrounding forest was able to be maintained. The layout of the existing church with the large, open nave space and additional space in the basement was well set up to be converted into community gathering spaces with minimal changes. Extending the life of the existing structure reduced construction costs while saving a historic, beautiful and familiar building in the community.

The design works within the constraints of the existing building to maximize passive design strategies. The building's south facing orientation provides an advantage for solar heat gain and a large roof surface area for the solar PV panel array. The electrification of the HVAC system with new heat pumps and a high efficiency ventilation system supplements the passive strategies.



Site Plan



Building Before Renovation

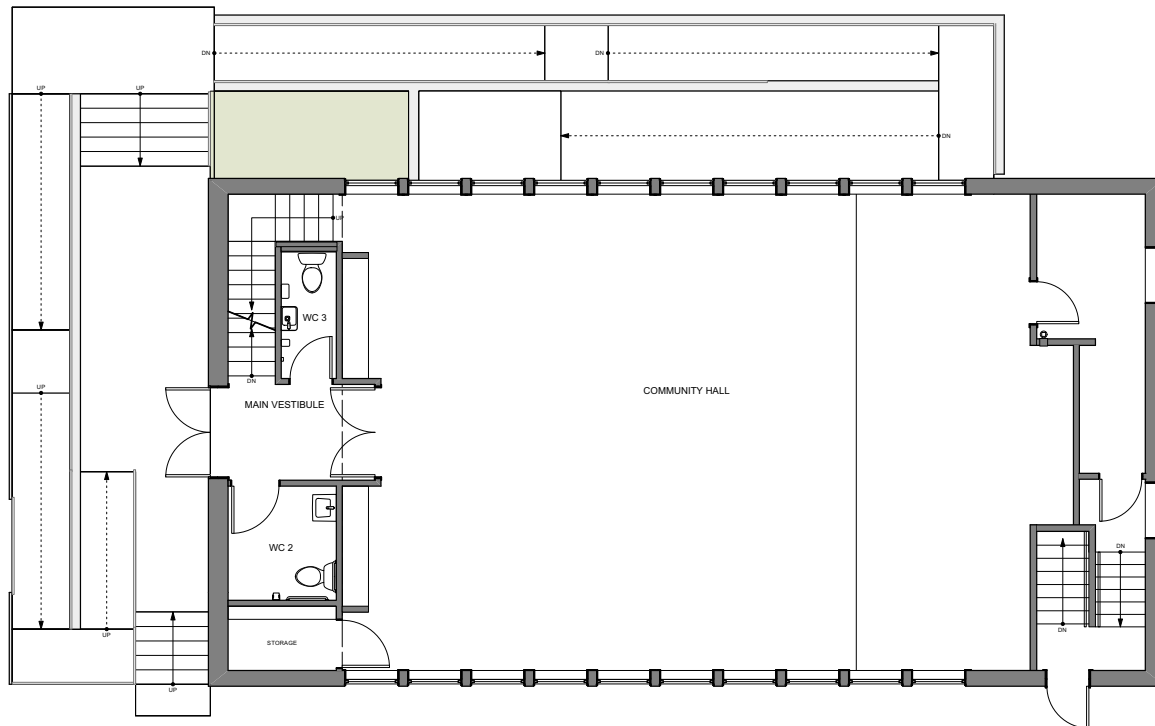


Building After Renovation

Community and Wellness

The owners had a clear desire to bring a new, welcoming and accessible venue to the local community of Canning and the surrounding Annapolis Valley. Significant project budget was allocated for two ramps to ensure both the main and basement levels are accessible to all visitors. The exterior ramps to both levels are integrated into the front façade as a feature that encourages them to be used by everyone, instead of being a peripheral element.

On the main floor, the community hall is a large open, brightly lit space with a stage at one end. Lighting and sound equipment are effectively placed for an ideal performance setting. It encourages community interaction as the perfect space for all types of gatherings and events hosted by Ross Creek or other groups who wish to rent the space. Ross Creek's focus on music and food programming includes a wide variety of events such as concerts, music workshops, kids programming and community suppers. Through movement, social interaction and healthy eating, these activities all support physical and psychological health of the participants. Bicycle parking is also provided to encourage active transportation.



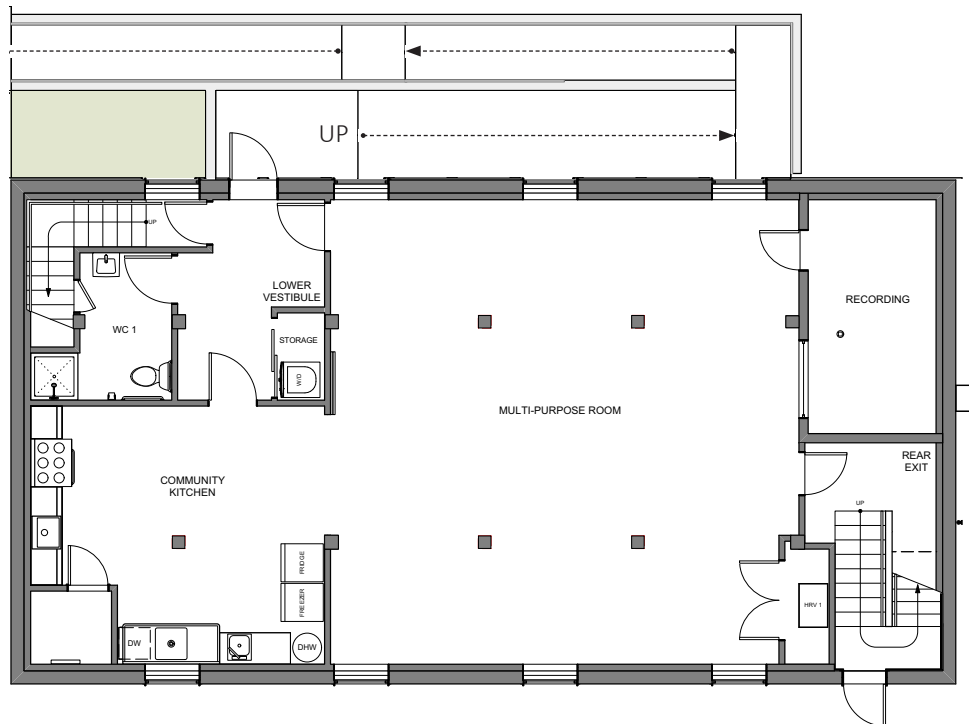
Main Floor Plan



Community and Wellness

In the basement, a multi-purpose room and community kitchen bring people together through healthy and accessible food which builds community resiliency. A community garden located in the rear yard, supports the commercial grade community kitchen with healthy fresh produce. The sound proof recording studio allows for recording on the main or lower levels and is the only one of its kind in the community.

The deep energy retrofit and heat pump heating and cooling system have transformed a once seasonally uncomfortable building to one that is regularly used for yoga, martial arts and other fitness classes on both levels.



Basement Floor Plan



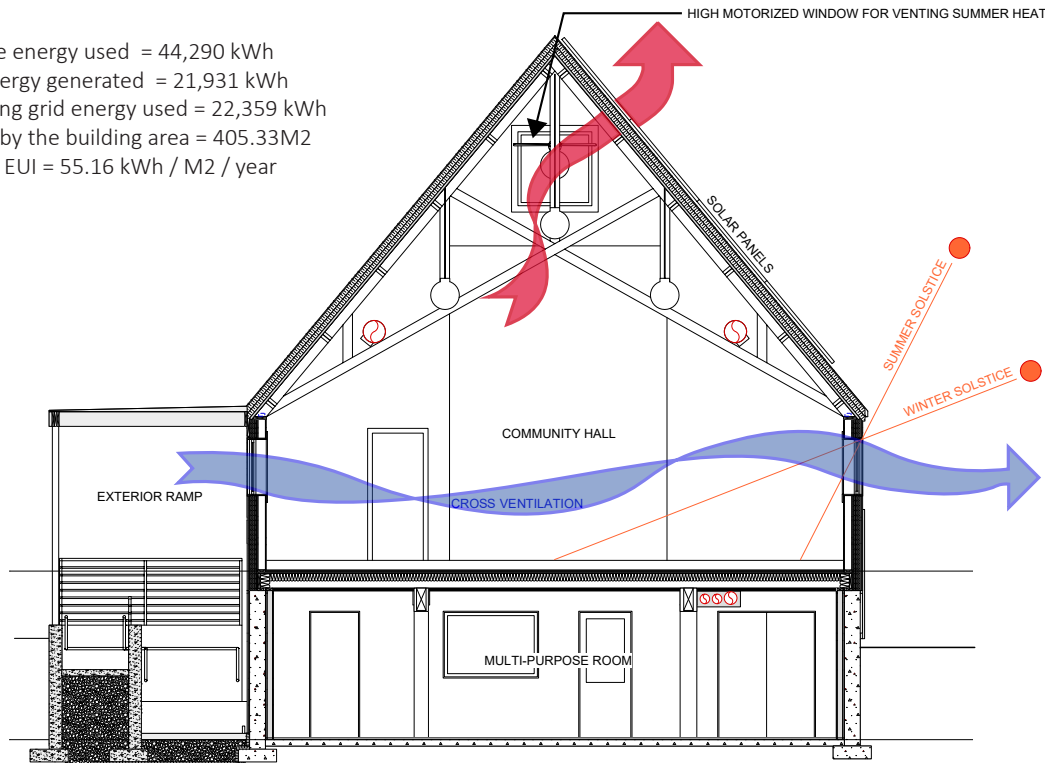
Light, Air, Heating and Cooling

The building's orientation with an elongated, high gable roof running east-west provided an advantage in many ways. The uninterrupted south roof allows for maximum solar gains. The new bank of south windows provide a great quality of light to the main gathering spaces. Both measures reduce loads on the mechanical and electrical systems.

Operable windows are installed to provide passive cross ventilation through the spaces. 100% of the occupied floor area is within 7 meters of an operable window for excellent daylighting. All existing windows were replaced with new triple pane windows to improve energy efficiency, air tightness and comfort. All LED light fixtures were used including for the stage lighting system.

A new electric HVAC system with cold climate heat pumps, and a high-efficiency ventilation system supplements the passive heating, cooling and ventilation strategies. The two levels can be controlled individually when occupied. The conversion from oil to electric sets the building up for future reductions in fossil fuel consumption as the Nova Scotia power grid becomes cleaner. To reduce the building's dependency on the power grid, fifty-one 460W PV panels were installed on the roof, which offsets the building energy use by 50%.

Total site energy used = 44,290 kWh
Solar energy generated = 21,931 kWh
Remaining grid energy used = 22,359 kWh
Divided by the building area = 405.33M2
Building EUI = 55.16 kWh / M2 / year



Building Cross-Section

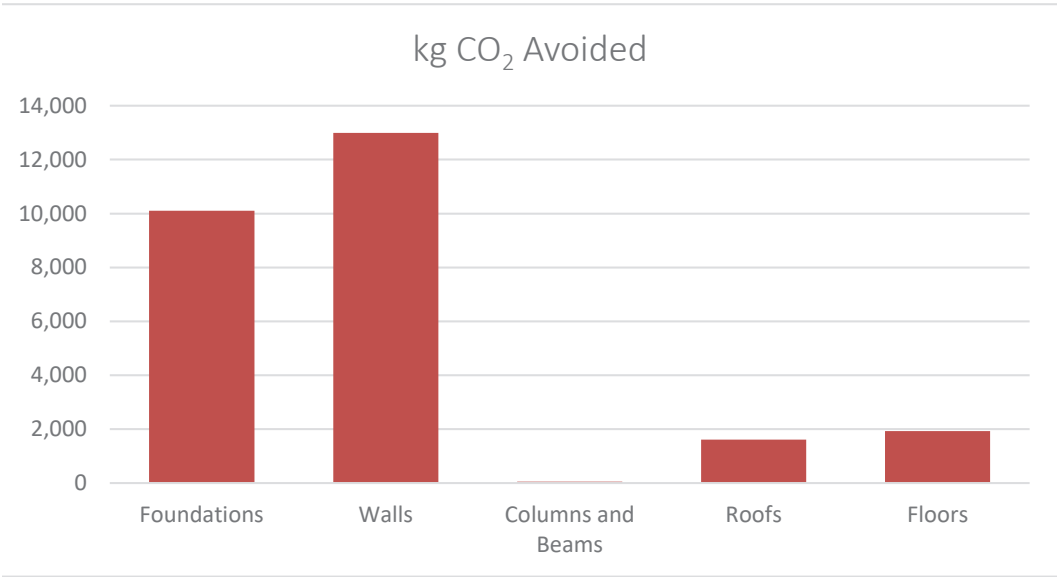


Materials and Building Life Cycle

A deep energy retrofit approach to the exterior envelope reduced the energy consumption of the building significantly. There was previously minimal insulation in the exterior walls and no insulation in the roof. All exterior walls and the above grade foundation were wrapped in 3” of Type-2 EPS foamboard insulation and new airtight weather barrier. The existing exterior wood stud wall was filled with rockwool insulation. 6” of XPS low GWP foamboard insulation and a new airtight weather barrier were added to the roof.

Where possible existing interior finish materials were maintained or salvaged materials were used. Maple hardwood and marmoleum flooring were chosen for their durability and low carbon footprint. By retaining the foundation, floor, walls, and roof of the existing building, 26.9 tonnes of carbon emissions were avoided. This is equivalent to driving 192,000 km in a car. The building’s open spaces provide flexibility in use and the ability to adapt to future tenants.

The reuse of the materials mentioned above diverted 144 Tonnes of material waste from landfill.



Building During Construction



Main Floor After Renovation



Education and Information Sharing

The clients saw the value in working with and salvaging the existing church building. It was important to them that the renovation improved both the energy efficiency of the old building as well as made it functional for the new users. As a community building, the Annex is a public demonstration of how decommissioned churches can be renovated and repurposed and used as community hubs for generations to come. The distinct red shiplap wood exterior cladding distinguishes it as a new sustainable landmark in the Annapolis Valley.

