



Wolfville Welcome Centre

Visitor Information

Design Brief Program

- Approximately 1300 sq.ft.
- Display area and service counter
- Staff interior washroom, lunchroom, storage, mechanical room
- Two exterior fully accessible washrooms
- Roof covered exterior stage area, potential three seasons room

Design Brief Priorities

- Incorporate timber framing at entrance and stage area as possible given budget.
- Incorporate technology in the space.
- Accessibility is a priority in design.
- Energy efficiency is a priority in design.
- Building innovations, scale and site suitability are important.
- Hardscape plans to allow accessible access to the building and stage.

Design Criteria

- During the design start up meeting the preceding design brief was elaborated to the following
- **Accessibility:** desire to meet Rick Hansen Foundation Gold Certification
- **Energy Efficiency:** desire to achieve a recognized standard. Following discussion of LEED, PassivHaus, and Net-Zero, it was agreed to pursue a design to make the building Net-Zero ready and Net-Zero Energy if budget allows.
- **Flood Zone:** the building will be located within the area identified in the new draft LUB constraints map as the 25 year extreme flood risk zone.

Design Criteria Accessibility

- The nature of the building program and the site lend itself to be easily physically accessible.
- All of the building spaces are at grade, most of the park has minimal slope in the topography
- Rick Hansen Certification covers more than physical accessibility, and the standards are more stringent than the building code, to ensure we can make a place that is inclusive for all.
- Accessibility of the materials and information within the building are also considered. (vision and hearing impaired)

Design Criteria

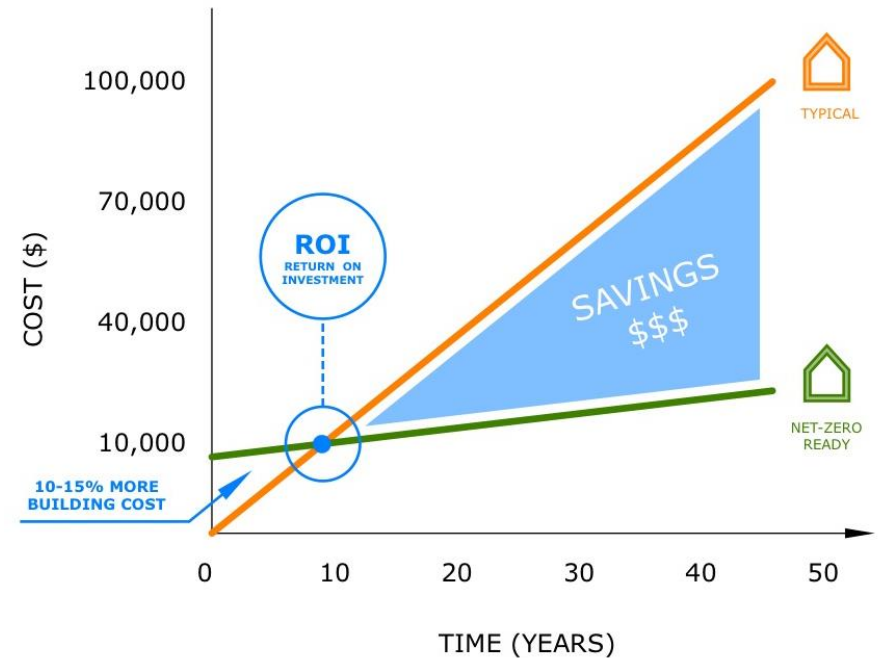
Energy Efficiency

Net Zero Energy

Definition: Supply all of the buildings energy requirements with on-site renewable energy

Strategy:

- First make the building envelope highly thermally efficient to reduce the heating energy load to as low as possible.
- Use highly efficient appliances, lighting, equipment to reduce the task energy demand
- Add solar PV panels to the roof to offset the building's energy demand



Flood Resistant Design Criteria

- The Draft Documents for the new LUB have the following criteria that apply to this project regarding building in the flood risk zone.
- “The finished floor elevation is no lower than 8m geodetic”
- “The walls and floors below 12m geodetic shall be constructed to avoid permanent damage.”

Flood Resistant Design Strategy

- The floor level of the new building will be above the 8m geodetic mark
- Strategy: Utilize a structural system that employs materials resistant to damage from moisture. Utilize as much as possible finish materials that are resistant to moisture
- ICF wall construction in place of wood frame walls with cellulose insulation. Polished concrete floor finish. Maintain mechanical and electrical systems as high above the floor as is practical.
- Expectation: There will still be damage incurred to the building from a flood event, but the intent of flood resistant design is to minimize the damage from that risk.
- Cost: There is a premium to achieve this goal. ICF wall construction versus the wood frame construction is more costly. We will be assessing the cost benefit versus risk with staff as we move forward with the design.

Design Rationale Site Plan

Located so existing VIC can remain in place until the new one is ready to be occupied

Closer to Main Street for greater presence

Close to bus parking

Building location defines 2 areas of the park, the quiet contemplative area around the pond, and the active play area to the south of the building

The building is at the cross roads of the millennium trail



Design Rationale

Site Plan cont'd

Building orientation optimized for solar PV array on roof.

Oriented such that east end stage area has advantage of natural bowl area of topography to viewing the stage.

Enhanced relationship to the pond

Slight angle to the street allows for entrance to address the street but also to be visible from Main Street



Design Rationale

Building Shape

Building Shape:

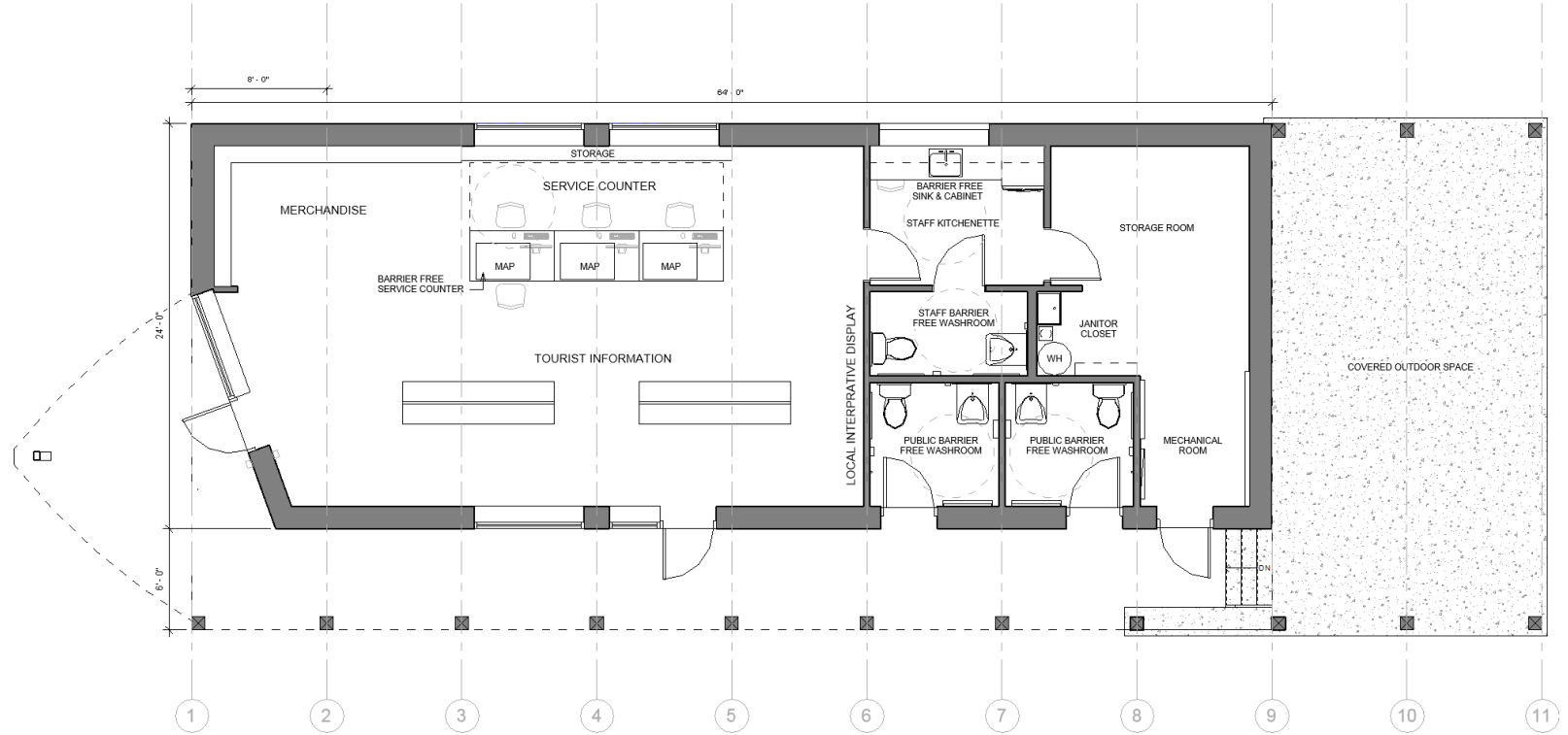
Budget and energy efficiency goals dictate a simple building shape.

The roof pitch is optimized for solar orientation.

East / west long axis helps define the two areas of the park.



Design Rationale Floor Plan



- Main public room entered from the street with views to both sides of the park.
- All services located tightly together in the middle of the building to create efficiencies
- Public washrooms in direct view from active play area of the park
- South facing colonnade provides weather protected access to public washrooms, stage area as a waiting area, view to active area of the park
- Stage area at east end to take advantage of natural bowl shape of the site for viewing space



Design Rationale Materials

Walls: Insulated Concrete Form (ICF) (resistance to flood damage)

Roof: Metal roofing (durability and reference to agricultural heritage)

Timber Elements (reference to agricultural heritage)

Exterior Cladding: Natural Wood Siding (minimize refinishing maintenance)

Interior Floors: Polished Concrete (resistance to flood damage)





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