JASPER SHARED SCHOOL FACILITY
A BRIDGING PERSPECTIVE

Robert Rabinovitch
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History – Jasper Junior / Senior High School


- School Facility Evaluation conducted in 1999 identified that the existing Jasper Junior/Senior High School was in need of extensive interior and exterior upgrades.

- September 2003 École Desrochers established and was housed in 2 classrooms within Jasper Junior/Senior High School as well as a double portable classroom.

- Development Permit on portable classrooms was scheduled to expire in 2006.
History – Jasper Junior / Senior High School

- Jasper High School Shared Facilities Study - Concept Development Report completed in October 2005
- September 2006 École Desrochers moved into renovated space within the Royal Canadian Legion.
- Value Analysis - Design Charrette for the Jasper Junior/Senior High School / École Desrochers Project was conducted in February 2008.
History – Jasper Junior / Senior High School

The Workun Garrick Partnership retained in September 2011 for the:

- Jasper- Greater North Central Francophone Education Regional K-12 School (École Desrochers) &
- Jasper- Grande Yellowhead Public School Division 7-12 School (Jasper Junior/Senior High School)

- Revised Project Name to Jasper Shared School Facility to better reflect the nature of the project.
Bridging - Project Team

➡️ **Architectural**
The Workun Garrick Partnership Architecture and Interior Design Inc.

➡️ **Structural**
Scheunhage Popek & Associates Ltd.

➡️ **Mechanical**
Hemisphere Engineering Inc. (now MCW Hemisphere Ltd.)

➡️ **Electrical**
JO Engineering Inc.

➡️ **Landscape / Civil**
ISL Engineering and Land Services
Client / Interested Parties

⇒ **Client**
Alberta Infrastructure

⇒ **School Boards**
Grande Yellowhead Public School Division
Conseil Scolaire Centre-Nord

⇒ **Other Parties**
Parks Canada
Municipality of Jasper
Parents
Community
Role of Bridging Consultant

Description

- The owner first hires a Bridging Consultant(s) to prepare a preliminary design and performance specifications for the project.
- The project is bid or negotiated in order to select the design-build team who will complete the design and construction.
- The design-build Consultant team completes the design.
- The design-build Contractor constructs the project.
Role of Bridging Consultant

🚀 Advantages
- There is a single point of responsibility,
- The contractor may be more motivated to provide cost savings and value to the owner, provided the Bridging Consultant does not insert too many restrictions in the performance requirements.

🚀 Disadvantages
- There is risk that the bridging consultant cannot adequately define the needs, resulting in an unknown end product.

🚀 Challenges
- Trying to convey to the Design-Build Team 100% of the clients needs and wants on 30% drawings.
Project Schedule (as established by Alberta Infrastructure)

January 15, 2012 – Complete combined school Schematic Design

February 15, 2012 – Apply for Development Permit with Parks Canada

March 1, 2012 – Submit final Technical Performance Specifications for the design and construction document

May 1, 2012 – Commence Design-Build Contract

June 30, 2014 – Completion of construction
Background Information

Preliminary Program
Jasper Junior/Senior High School
- No modulars allowed in National Park

Jasper Junior/Senior High School
Grande Yellowhead Public School Division

Preliminary Program

375 Student Capacity 7-12 School

Instructional Area (11 Teaching Stations)

- Classrooms (5 @ 80 m²) 400 m²
- Science Classroom 120 m²
- Ancillary
  - 1 @ 130 m² 130 m²
  - 2 @ 90 m² 180 m²
- Information Services 115 m²
- CTS Classroom (2 @ 142 m²) 285 m²
- Gymnasium 645 m²
- Gymnasium Storage 65 m²
- Library 160 m²

Total Instructional Area 2,100 m²

Non-Instructional Area

- Administration and Staff Support Areas 227 m²
- Basic Wrap Around Services 20 m²
- Flexible Space 90 m²
- Accessible Washroom 12 m²
- Student and Public Washrooms 45 m²
- Physical Education Office and Change Rooms 136 m²
- Recycle Room 11 m²
- Server Network 40 m²
- Mechanical and Motor Rooms 162 m²
- Circulation Space 556 m²
- Wall Area 253 m²
- Storage Area 76 m²

Total Non-Instructional Area 1,640 m²

Total Core Building Area 3,740 m²

Add Modular Classrooms (4 @ 100 m²) 400 m²

Total Building Area 4,140 m²
## Preliminary Program

### École Desrochers

**Conseil scolaire Centre-Nord**

#### 150 Student Capacity K-12 School

<table>
<thead>
<tr>
<th>Instructional Area (7 Teaching Stations)</th>
<th>m²</th>
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<tbody>
<tr>
<td>Classrooms (2@ 80m²)</td>
<td>160</td>
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<tr>
<td>Science Classroom</td>
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<tr>
<td>Ancillary</td>
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<tr>
<td>1 @ 130m²</td>
<td>130</td>
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<tr>
<td>1@ 90m²</td>
<td>90</td>
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<tr>
<td>Information Services</td>
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<td>CTS Classroom</td>
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<td>Gymnasium</td>
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<td>Gymnasium Storage</td>
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<td>Library</td>
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**Total Instructional Area**

*1,310 m²*

#### Non-Instructional Area

<table>
<thead>
<tr>
<th>Area</th>
<th>m²</th>
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<tbody>
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<td>Administration and Staff Support Areas</td>
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<tr>
<td>Basic Wrap Around Services</td>
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<td>Flexible Space</td>
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<td>Accessible Washroom</td>
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<td>Physical Education Office and Change Rooms</td>
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<td>Mechanical and Meter Rooms</td>
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<tr>
<td>Circulation Space</td>
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<td>Wall Area</td>
<td>158</td>
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<td>Storage Area</td>
<td>44</td>
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</tbody>
</table>

**Total Non-Instructional Area**

*1,005 m²*

**Total Building Area**

*2,315 m²*
Background Information

► Combine Building Program
  ▪ Overall Building Area of 6,455m²

► Shared Spaces
  ▪ Gymnasium (3 stations)
  ▪ Library
  ▪ CTS Classrooms
  ▪ Multi-purpose Rooms
  ▪ Wrap-around Services

► Other Considerations
  ▪ LEED Silver
    • Town/Public desire for LEED Gold or Platinum
    • Living Building disused
  ▪ Architectural Motif for the town of Jasper
Architectural Motif for the Town of Jasper

Objectives

- Describes design features and materials that are expected of all new and re-development in Jasper;
- Respects Jasper’s character, history and traditional scale of development;
- Strengthen Jasper’s image as a well designed mountain community;
- Presents a Palette of acceptable, natural inspired colours.

When do the Guideline’s Apply?
The guidelines apply to the exteriors of all public and private new and re-developments within the Municipality of Jasper. This includes residential, commercial and institutional projects
What Makes a Building Fit in Jasper

- The building is part of the landscape, not separate from it.
- The building uses simple, strong forms.
- The building creates a sense of enclosure.
- The roofs are dominant forms.
- The buildings use natural materials such as wood, traditional stone, and stucco.
- Buildings appear ‘anchored’ to the ground with a solid base.
- Fire resistant native plant species are encouraged for landscaping.
- Variance was required to allow the building to have flat roofs.
Site

- The site was currently a dog park (no available sites in Jasper)
Design Charrette

- 1 day session conducted on Oct 27, 2011
- Committee divided into 3 groups.
- Asked to come up with preliminary design concepts for the facility.
- Concentrate on relationship of 2 schools and relationship of individual spaces within each school.
- Team Members from The Workun Garrick Partnership provided assistance with each group to help move the process along.

Blue- Jasper Junior/Senior High School
Green- École Desrochers
Orange- Possible Shared Spaces
Design Charrette

- After much discussion, two (2) main design concepts seemed to have the most support from the committee.
  
  1) Locating École Desrochers on the second level near the elementary school, to allow for direct access by the elementary students to the adjacent playground at Jasper Elementary School
  
  2) Using the corner of the site for a prominent design element such as a Library.

- Committee took a break while The Workun Garrick Partnership worked on developing the various schemes to see if consensus on a preferred scheme could be developed.
Building Sub-Committee Report

→ **Energy**
  - Groundwater geothermal system.
  - Photovoltaic system (solar panels).

→ **Water**
  - Reduce water consumption through low flush toilets, automatic flush valves and faucets, etc.
  - Manage storm water on site.
  - Grey water recycling

→ **Health**
  - Windows in all classrooms and provide natural light to all teaching spaces.
  - Provide ventilation (fresh air) to all spaces within the building.
  - Provide an area for a living wall to be incorporated into the building.
Building Sub-Committee Report

➡️ Site
- Use open cell concrete blocks for parking areas.
- Limit parking to a minimum and maintain as much green space as possible.
- Provide a roof top garden

➡️ Equity
- School should be all inclusive, encourage community use of the school.
- Ensure the building is handicap accessible.

➡️ Beauty
- Use natural colours that reflect the surrounding area.
- Rooms to be open so that people can see in and you can see the building systems.
Site Plan
Second Floor Plan
Jasper Junior/Senior High School Main Entry
Library
École Desrochers Main Entrance
Finished Photos
Finished Photos