JASPER SHARED SCHOOL FACILITY

A BRIDGING PERSPECTIVE

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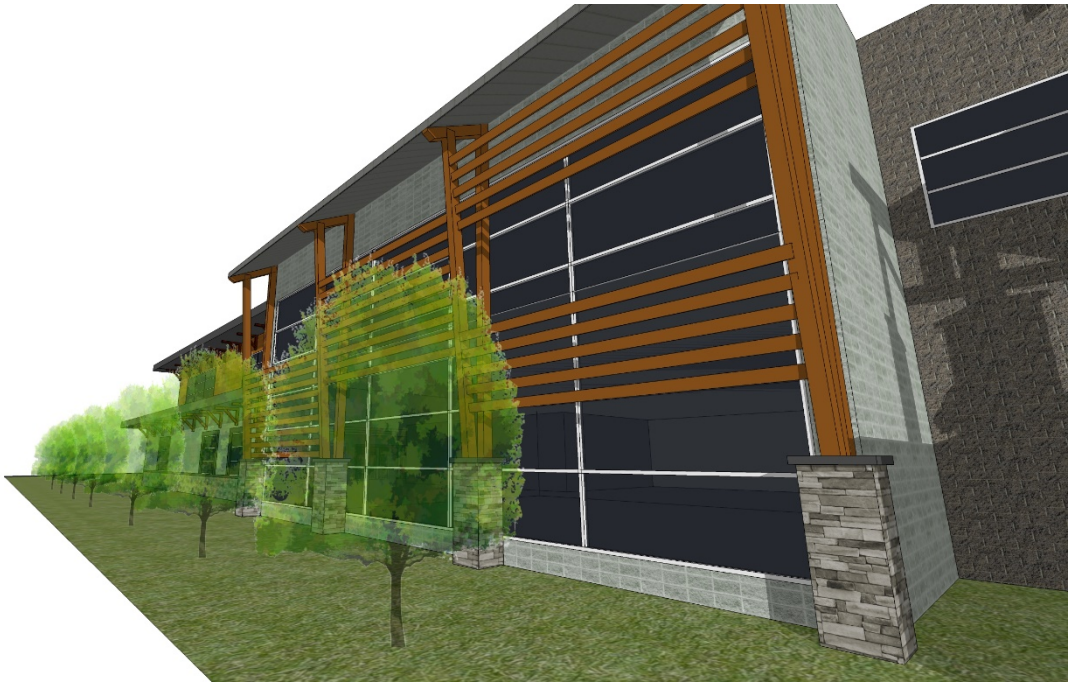


History – Jasper Junior / Senior High School

- Originally constructed in 1952 with additions in 1958, 1967, and 1987. Interior renovations also completed in 1987
- 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

Government of Alberta
Infrastructure

Grande Yellowhead Public School Division

Conseil scolaire Centre-Nord

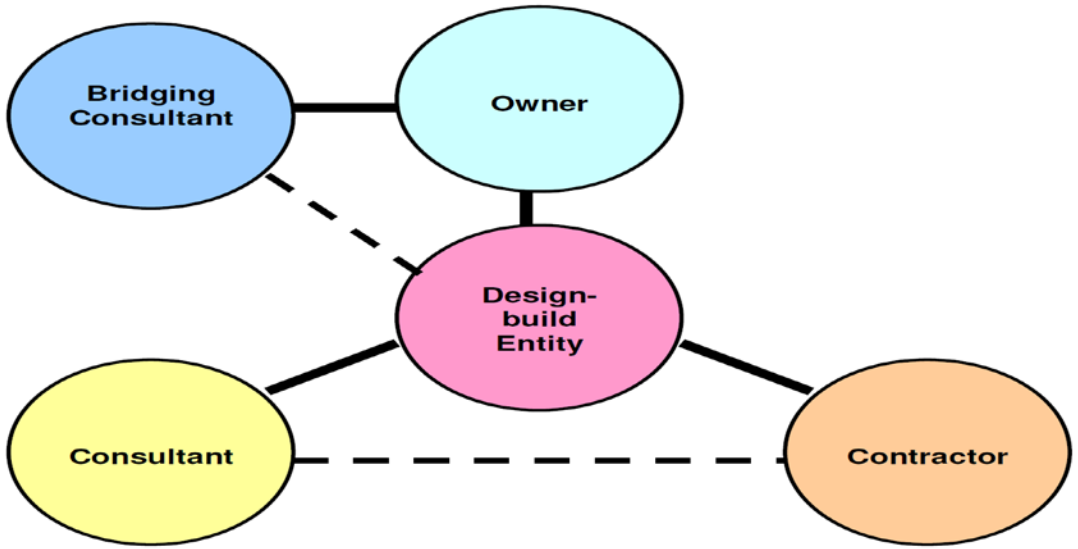
Parks Canada Parcs Canada

Municipality of JASPER

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)

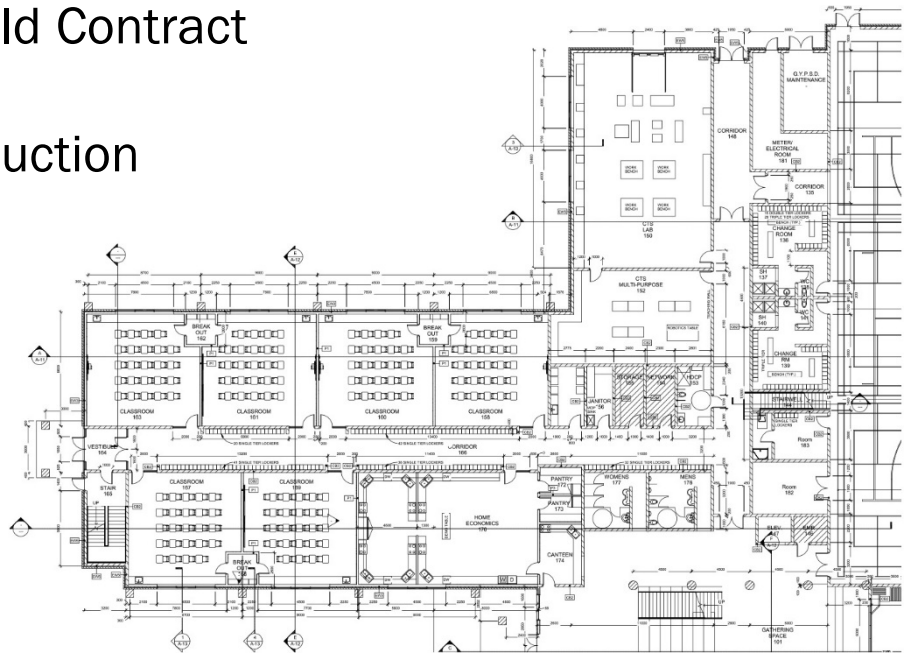
January 15, 2012 – Complete combined school Schematic Design

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 @ 80m²)	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**	**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	138 m²	
Recycle Room	11 m²	
Server Network	40 m²	
Mechanical and Meter Rooms	162 m²	
Circulation Space	566 m²	
Wall Area	253 m²	
Storage Area	76 m²	
Total Non-Instructional Area	**1,640 m²**	**1,640 m²**
Total Core Building Area		**3,740 m²**
Add Modular Classrooms (4 @ 100m²)		**400 m²**
Total Building Area		**4,140 m²**

Background Information

➔ **Preliminary Program**
École Desrochers

École Desrochers

Conseil scolaire Centre-Nord

Preliminary Program

150 Student Capacity K-12 School

Instructional Area (7 Teaching Stations)

Classrooms (2@ 80m^2)	160 m^2	
Science Classroom	120 m^2	
Ancillary		
1 @ 130m^2	130 m^2	
1@ 90m^2	90 m^2	
Information Services	115 m^2	
CTS Classroom	142 m^2	
Gymnasium	430 m^2	
Gymnasium Storage	43 m^2	
Library	80 m^2	
Total Instructional Area	**1,310 m^2**	**1,310 m^2**

Non-Instructional Area

Administration and Staff Support Areas	150 m^2	
Basic Wrap Around Services	20 m^2	
Flexible Space	48 m^2	
Accessible Washroom	12 m^2	
Student and Public Washrooms	24 m^2	
Physical Education Office and Change Rooms	100 m^2	
Recycle Room	11 m^2	
Server Network	40 m^2	
Mechanical and Meter Rooms	50 m^2	
Circulation Space	348 m^2	
Wall Area	158 m^2	
Storage Area	44 m^2	
Total Non-Instructional Area	**1,005 m^2**	**1,005 m^2**
Total Building Area		**2,315 m^2**

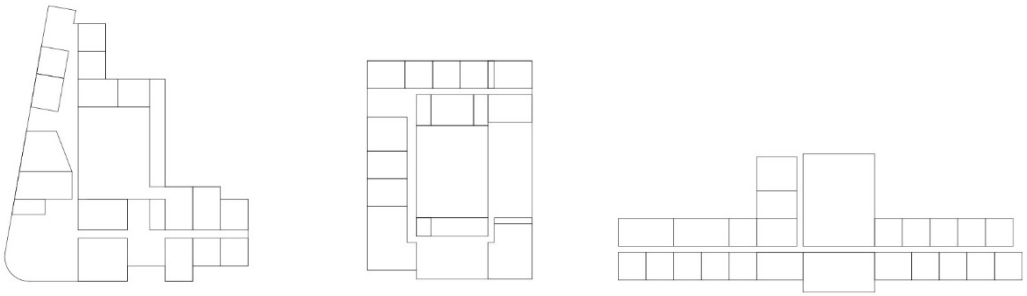
Background Information

➔ Combine Building Program

- Overall Building Area of 6,455m^2

➔ 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

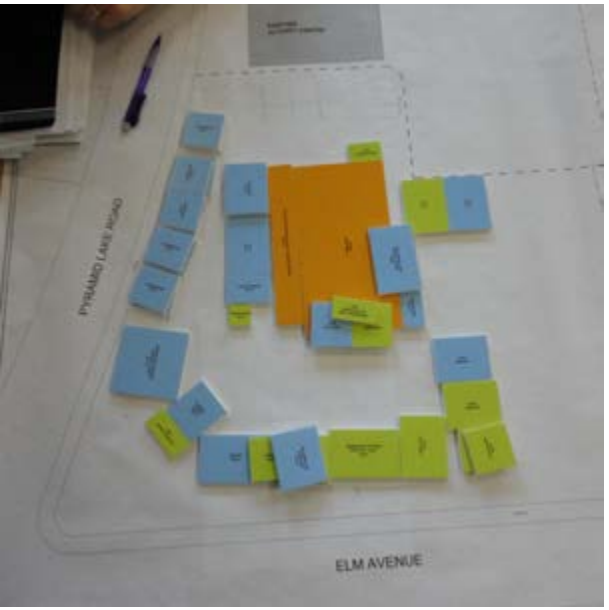
- The building is part of the landscape, not separate from it.
- The building uses simple, strong forms.
- The building creates a sense of enclosure.
- The roofs are dominant forms.
- The buildings use natural materials such as wood, traditional stone, and stucco.
- Buildings appear ‘anchored’ to the 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

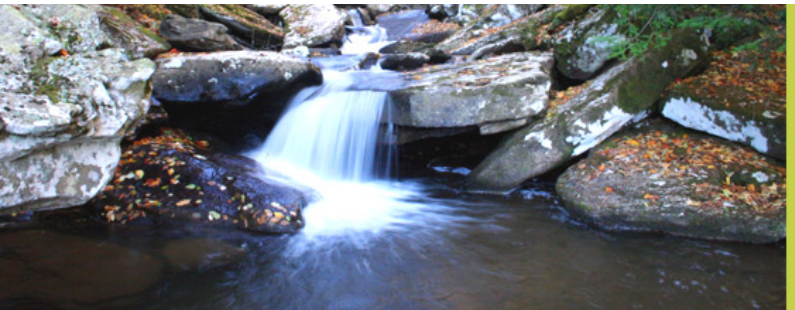
Orange- Possible Shared Spaces

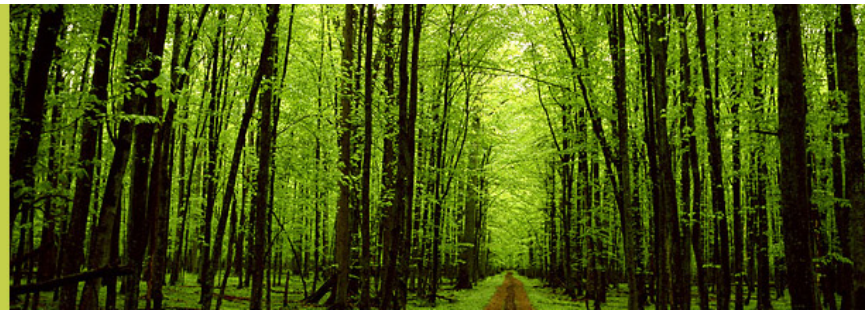
Design Charrette

- 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 al spaces within the building.
  - Provide an area for a living wall to be incorporated into the building.





Building Sub-Committee Report

Site

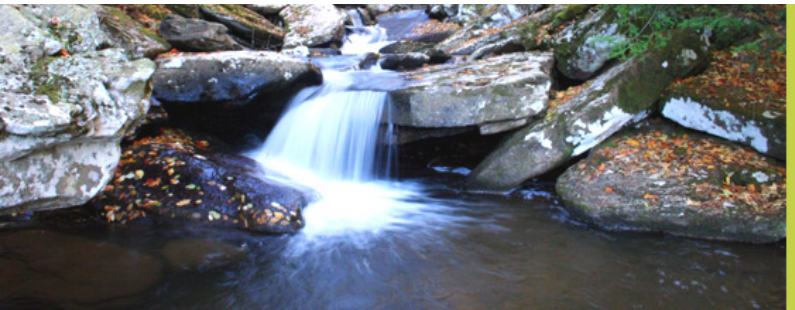
- Use open cell concrete blocks for parking areas.
- Limit parking to a minimum and maintain as much green space as possible.
- Provide a roof top garden

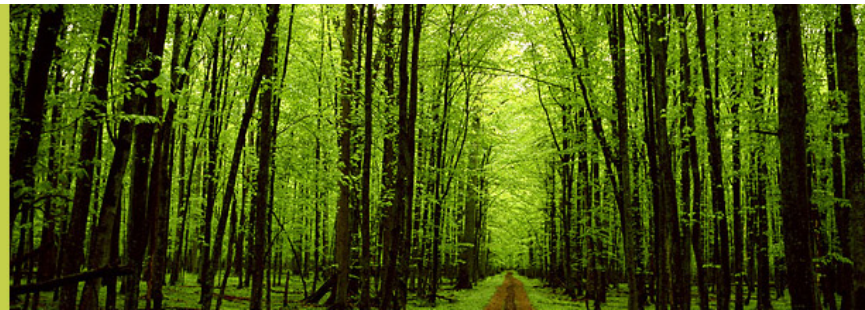
Equity

- 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


AQUATIC CENTRE
MUSEUM
PARKING
BONHOMME ST.
PROPOSED SCHOOL
JASPER ELEMENTARY SCHOOL
ELM AVENUE

Main Floor Plan

Second Floor Plan

Jasper Junior/Senior High School Main Entry

Library

École Desrochers Main Entrance

École Desrochers East Entrance

Finished Photos

Finished Photos

Finished Photos

Finished Photos

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