



JAMES D. MACCONNELL AWARD
submission by: whw architects

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EXECUTIVE SUMMARY

The goal of the Ecole Séconde du Sommet project was to create a new school and community centre for the Acadian School Board in Halifax. The client and the community wanted a new facility that would respond to the needs of the French community of the greater Halifax region. For the design team, this was an opportunity to collaborate with an engaged client group in the exploration and implementation of new trends in school design.

The French community of Halifax saw the new facility as an opportunity to improve existing conditions for students and to enliven their cultural identity as a community. As a result, this project marked an exciting time for the French community of Halifax. The patience and leadership of this group helped create a vision of a new learning environment for the French students to continue their education closer to home. The previous reality for many post-elementary students wanting to continue their education in French was difficult commutes and extensive travel outside of the communities and neighborhoods. At the time, the Regional Municipality of Halifax and the Acadian School Board had only one Junior / Senior High School offering education in the French language in the entire region. As a result, many students were choosing to drop their education in the French language to attend an English school closer to home. A new school could help reverse this trend, retaining students in the French school system that may have previously opted for an English school in their neighbourhood.

A major concern for the greater French community was the lack of a central gathering space to celebrate the French language and Acadian culture. The creation of a cultural centre could breathe new life into the community, increasing opportunities for socialization and strengthening cultural unity. Furthermore, in combining the school and community centre, this new facility could ensure a stronger French-speaking community for future generations. The Entire Design team and stakeholder group was interested in exploring the new trends in school design to create more interactive, flexible and collaborative learning environments that responded to the various ways students learn. Today's 'digital kids' construct knowledge in real time and the physical learning environment has to support this hands-on learning in a way that speaks to today's learners. The following design strategies were investigated to create a 'school designed for learning'.

DESIGN STRATEGIES

- Create flexible, engaging spaces utilizing daylight, colour and interesting materials
- Actively engage the school community in the design process
- Use healthy school design
- Design the school to be a 'textbook' for learners
- Establish the school as a centre of community
- Integrate technology in every aspect of design

Engaging the school community in the design process helped develop a clear understanding of their educational ideas that, in concert with the strategies above, have led to a creative architectural response to the idea. WHW Architects is proud to have played a part in bringing the vision to reality.

SCOPE OF WORK

One pliquantum, offictecum The scope of work was to provide full consultant services for the design and contract administration for a new CSAP (Acadian School Board) school including a community centre and daycare facility.

The main public / community spaces of the school were to be designed for 600 students with the learning spaces designed to accommodate an enrollment of 450 grade 7 – 12 students. The intent was to design core spaces for the current student population,

while providing for future classroom spaces in the event that the student enrollment exceeds 450 in the future.

The Consultant team was expected to deliver an integrated design process involving all stakeholders. The project was to comply with the standards to meet LEED Certification, and the Consultant team was to consider aesthetics, functional relationships, code requirements, energy conservation, schedule and budget in all aspects of the design.

BUDGET

\$15.5M CAD

COMMUNITY ENGAGEMENT PROCESS

STAKEHOLDERS

- Department of Education
- Department of Transportation and Infrastructure Renewal,
- CSAP members (Conseil scolaire acadien provincial) – Acadian School Board
- Faculty
- Parents
- Members of the Acadian Community
- Students
- Members of the daycare board and teachers

CHALLENGES

Schedule

The Consultant team was presented with an extremely challenging schedule. The design team proposed a schedule for completion without full knowledge of the many obstacles that were

present. We were tasked with the unrealistic target of providing a 15 million dollar plus school within 9 months of construction during winter months in a northern climate. In order to help facilitate this very tight schedule, the consultant team met with numerous contractors to investigate strategies for expedited construction methods and tendering options.

Budget

As is consistent with most school projects, the budget was extremely tight to provide the requested types of program spaces and sizes that the user group required. The Design Team had to be creative with the use of space and design for flexibility with the notion that spaces needed to work harder for longer hours and not remain

vacant. The concept of multi-purpose and multi-use space was used extensively through this project.

Site

The rough terrain was formerly undeveloped, and included wetlands and significant elevation changes which compounded the challenge of including a football field on the site.

Culture

There was a strong desire to incorporate the Acadian Culture throughout the school. Celebration of the culture and history of the French-speaking, Acadian community was paramount. The colours of the Acadian flag were represented throughout the school in paint, flooring materials,

acoustic panels, coloured glass, and polished concrete. A local artist was engaged to create images of Acadian farms, and old growth forests were translated onto the fabric that wrapped the acoustic panels hung in the street and daycare. A stylized version of the Acadian star was cast into the tilt panels of the exterior walls of the gymnasium.

Space Restrictions

Creating collaborative spaces within Net to Gross parameters was a challenge. Collaborative, project-based learning spaces outside of the typical classroom were not in the space programming and therefore came out of the gross space. We were tasked with providing a school that met a net to gross ratio of less than 1.5. This meant that we needed to be very efficient with our planning to afford us the ability to create some of these collaborative spaces. For example, one of the key design challenges was to create a performance space within the prescribed DOE program, despite their having a lack of resources for a dedicated space. This was achieved by organizing the Cafeteria/Drama/Music spaces along a common center line, making a classic “cafetorium” type space. The cafeteria, drama room and kitchen roof are easily opened up to each other to create one large theatre/auditorium space, allowing educational and entertainment opportunities in these anchor spaces. The Cafeteria steps down to create the stage which is maintained at the main floor elevation of the school. This sunken cafeteria creates an auditorium type space for gathering and performances. A second story ‘production room’ was created by making use of the space over the kitchen area. This gives the school community as well as the larger Acadian community

the ability to run sound and light from this production room and produce some wonderful shows in addition to providing great hands-on learning opportunities.

Language

The first language of the school board members is French and in some cases, members of the stakeholder group did not speak English. There was some additional effort in fully understanding the needs of the user group, including the philosophy of the Acadian School Board and how it applies to teaching. Likewise, there were communication challenges for the consultant team in properly explaining and presenting the project and design.

User Group Considerations

The Design Team was tasked with providing a full service daycare as part of the high school. There were numerous challenges with housing these two programs in the same building. For example, addressing how the two groups enter the school, articulating the doorways so they read as separate, equally important entrances, separating exterior play space from other exterior activities, and facilitating parent drop off and pick up for both user groups.

LEED Certification

The requirement to create a LEED certified building, the first school in the Province of Nova Scotia to target a LEED rating, provided another challenge. Various sustainable elements were incorporated. The school features a green roof and a highly reflective coating on the remainder of the roof. The school maximizes daylight where possible and glazing along the entire back wall of the gym makes it possible to use the gymnasium without turning on

the lights. Occupancy sensors were used throughout the school for both water use and lighting. A cistern is used to collect rainwater that is used for non-potable uses in the school, thereby reducing water consumption. Local materials, FSC wood, low VOC products and products with a high recycled content were selected for use in the school.

AVAILABLE ASSETS

The most important asset to the project was the engagement of those involved. The Client and stakeholder groups recognized the importance of this project – as an educational institution, as a beacon that would gather the greater community socially, and as a facility that would provide necessary services that were lacking, such as French-language childcare. Their enthusiasm and commitment to the project, as well as that of the Design Team, were the greatest assets to the project.

Physically, the beautiful, virgin site was an inspiration to the project. Furthermore, as the first new building in a new, planned community the team was able to start from a ‘clean slate’ – an opportunity that is increasingly rare since similar projects typically require existing, surrounding architecture be factored into new designs.

VALUE OF PROCESS + COMMUNITY

The integrated design process involving all of the stakeholders gave a voice to all of the groups with an interest in seeing this project succeed. Regular design meetings and workshops with the stakeholders that encouraged dialogue around the design of the school.



EDUCATIONAL ENVIRONMENT

HOW THE ENVIRONMENT SUPPORTS THE CURRICULUM

This new school has been designed from the outset to be a reflection of the vitality and importance of the Acadian and French culture in the region. WHW was asked to reflect their spirit and energy in the design of this building. This has resulted in an exciting, unique landmark school and community center. The playful and colorful interior mirrors the richness of the Acadian culture and art. The school is organized much like a town, harmonizing the most interesting and exciting activities in a central area promoting a sense of community and collaborative learning.

The school has been developed around the concept of a simple “T” circulation pattern which is anchored by a vibrant Acadian street that runs through the heart of the school and links many of the important, multi-function and community spaces together. This street is a two story volume, flooded with natural light from clerestory glazing that connects the library, cafetorium, drama, music, gym and the administration areas together in a very natural way. The street concept promotes improved community access to these key spaces and encourages student collaboration and social interaction... an important aspect of learning and growing.

HOW THE ENVIRONMENT SUPPORTS A VARIETY OF LEARNING AND TEACHING STYLES

Spatial environments respond to various scales and methods of learning. For example, irregular shaped classrooms with informal breakout spaces, formal classroom spaces, widely distributed small group learning spaces adjacent to but not part of the classrooms and community spaces for more collaborative learning, such as the Acadian Street, cafetorium and drama rooms.

PHYSICAL ENVIRONMENT

PHYSICAL ATTRIBUTES OF THE ENVIRONMENT

Adjectives that describe the school include the following: open, light-filled, colorful, safe, comfortable, collaborative, transparent, sustainable, private and public, accessible...

Acadian Culture is demonstrated in the physical environment of this building through many aspects of the design. A study of Acadian village vernacular influenced material and colour in the building.

The plan reflects the differentiation between the academic precincts, places where students and staff are entitled to teach and learn and the more public face of the school. This is a common theme in WHW's school design approach: the academic spaces are safe, secure and belong to the students. The cruciform plan promotes easy simple supervision of circulation areas by one staff member. The partition material choices along the "street" help to promote a level of transparency that encourages passive supervision, while at the same time provide necessary separation needed for the public/private zoning important to successful use of the school after hours.

The community spaces, such as the cafetorium, library and daycare center are located near, or immediately adjacent to the front entry. WHW has incorporated generous expanses of glazing creating views into these and other key spaces from the interior street that enlivens the overall entry experience and creates an enhanced sense of space and light. Additionally WHW has carefully located many of the spaces to provide views of surrounding

natural environment, ample natural light penetration into the centre of the school and a warm, inviting arrival experience during the darker months of the year.

HOW THE FACILITY FITS WITHIN THE LARGE CONTEXT OF THE COMMUNITY

This school was the first new building in a planned new community. Therefore it acted as a design landmark for future development in the area. A modern but respectful design established a pallet of materials, color and scale that influenced the diversity of the surrounding neighbourhoods and set a high level of design as the cornerstone of the new community. The school offered a full selection of publically accessible spaces, including a gymnasium, sports field, cafetorium, library, meeting rooms, daycare and a selection of learning spaces.

The school is a community learning centre, as a resource, not

just the parents and students. The school is easily accessible by foot, bicycle and transit and parking is provided for those arriving by car. The school supports learners from birth (in the daycare community) to seniors in some of the educational programming for adults and the access to the cafetorium, gymnasium, library and specialty classrooms. Creating a community learning centre was the product of an inclusive and collaborative design process involving all of the stakeholders.

HOW THE PROJECT INSPIRES AND MOTIVATES

This school reflects the spirit of the French culture and community. Refined design provides cheerful and comfortable spaces, views of the surrounding landscape, plenty of natural light and a strong feeling of excitement, activity and life immediately upon entering the school. All key spaces are linked together and easily visible from the central street fostering a sense of place and the importance and transparency of effective learning.



RESULTS OF THE PROCESS + PROJECT

HOW THE PROJECT ACHIEVES EDUCATIONAL GOALS AND OBJECTIVES

Firstly, the school satisfies the initial need of providing education in the French language.

HOW THE PROJECT ACHIEVES SCHOOL DISTRICT GOALS

École Sécondaire du Sommet offers young people a quality education in their own first language and culture. The school was inspired by the community's strong sense of pride in belonging to the Acadian and Francophone community, and in turn helps to strengthen that sense of

pride and identity. The project incorporates the culture of the Acadian community throughout the fabric of the school, with a strong emphasis on performance spaces and art. It also provides a variety of teaching spaces in clearly defined and safe areas for learners of all ages.

École Sécondaire du Sommet High School prepares students for the challenges of tomorrow's society and for postsecondary education. At the same time, it aims to inspire young people to continue in life-long learning opportunities.

Students will be aware of the importance of the contribution of Acadian, Acadians and other Francophones in Canadian society.

They recognize their language and culture as the basis of their identity and their membership in a dynamic, productive and democratic respect for cultural values of others.

HOW THE PROJECT ACHIEVES COMMUNITY GOALS

The school acts as a French community beacon, providing a modern, elegant and community friendly building that is easily accessible by all. The building supports a strong cultural foundation for the French Community of the Halifax Region.

