# 2014 Exhibition of School Planning and Architecture

## Mar Jok Elementary School

School District 23 District of West Kelowna British Columbia

## **Mar Jok Elementary School**



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- 1. Mar Jok Elementary School
- 2. Outdoor Teaching Space
- 3. District of West Kelowna Space
- 4. Gymnasium
- 5. School Field

- 6. District of West Kelowna Sports Field
- 7. Parking and Drop-Off
- 8. Revised Floodplain Spillway
- 9. Community Daycare
- 10. Outdoor Pool

#### Community

The District of West Kelowna is a new municipality with limited facilities for community use. Mar Jok Elementary School includes additional shared spaces to be used by both the students and the community including a high school size gymnasium, municipal operated community program space, stage and multi-purpose room, and small foyer/ kitchen. With the versatility of use, the school becomes an anchor point for the rapidly growing community it is located in, enhancing the existing facilities in the area and creating future development opportunities. Placing a new school in an existing community improves safe

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and easy pedestrian & bicycle access and allows for separation of traffic streams but also make it easier for the community to use the school after hours.









#### Community

Incorporated in the design is an extra 15% of program space dedicated to a Neighbourhood Learning Centre, through which shared spaces are added to benefit both the school and the community 24/7. The design employs an efficient use of spaces, such as a shared entry for both school and community spaces, as well as opportunities for 21st Century Learning for all ages, supporting community partnering and involvement. The shared entrance offers greater security for school administration being able to see all visitors to, from and around the building according to CEPTD criteria. Collaboration with the municipality allowed for the development of a small park including an official size soccer field adjacent to the school to compliment the facilities own smaller playing field. Shared parking and exterior washroom facilities provides the community with even greater versatility of space adding to the usability of the adjacent municipal amenities.









#### Learning

A variety of learning spaces are offered in the school, each with it's own unique characteristics. From spaces intended for open learning and collaboration with high ceilings and lighting levels to private rooms for oneon-one instruction, to a more traditional classroom environment. The school board's intent to utilize advancing technology with smart boards, iPads, and other digital media resources will allow the school to evolve and adapt with changing teaching techniques and different learning styles. Hands on learning is encouraged with the inclusion of "da Vinci Labs" intended to allow the students the opportunity to learn through activity and experimentation along side traditional instruction.









#### Learning

The multitude of educational spaces in the school offer seamless transition from large group participation, to classroom learning, to one-on-one instruction. Collapsible partitions and movable walls allow for greater flexibility of use based on the function. Such flexibility not only encourages collaborative learning but collaborative teaching as well. Classrooms are clustered in four groups all with a central project space for multi-age cooperative learning or individual class hands on learning. Utilization of different varieties of furniture options in different arrangements allows greater opportunities for informal learning in both group and individual work. Primary facilities are located on the main floor with easier, safe access to protected exterior learning spaces. Adaptability of space offers opportunities for future changes in educational delivery methods and will support shifting trends in learning and teaching.









#### Physical

Clustering of classrooms into four smaller "home" groups makes it easier for students to become more acquainted with each other. The educational space of the school is designed with each space opening on to a gradually more open and public space; classrooms open on to the cluster project spaces; project spaces open on to the central resource room and exterior. These levels of adjacency encourage impromptu socialization as well as structured collaboration through open and transparent spaces with a centralized learning commons (Resource Room) as the social heart of the educational portion of the building. Being an activity and sports hub for the neighbourhood means that, in conjunction with the collaborative spaces, the school encourages greater physical activity and stimulation for growing students.



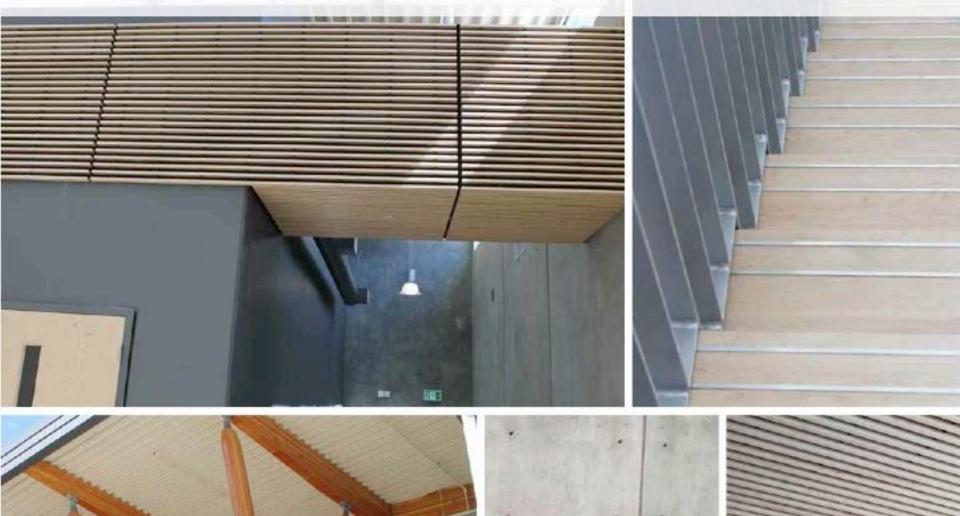
#### Physical

Sustainability was always a consideration during design and the school was designed with LEED gold as the benchmark for sustainable construction. In addition, the design team employed three guiding principles throughout the project. First, environmental awareness through a display with interactive energy consumption and exposing the mechanical and electrical systems. Second, a healthy interior environment with operable windows, controllable HVAC, and incorporating natural daylighting. And third, a conscious effort at reducing cost consumption through geothermal heating, LED lighting and natural daylighting. There were additional considerations for the site such as minimizing the amount of cut and fill necessary to build the school, upgrading the existing spillway and integrating into the site, and locating the school on higher ground due to the floodplain covenant.



#### Physical

Materiality was at the forefront when designing the school. The school district proposed using products that would require minimal maintenance during the life of the building in order to assist in reducing the life cycle cost of the building. A theme of raw, exposed finishes with clean and thoughtful detailing is seen throughout the building. Exposed concrete as the structure and finish of the school is used and shows a respect to the sustainability of using a locally abundant product. The school follows in the province's Wood First Initiative with plenty of exposed wood finishes helping to create a warmer, more natural feel in the open spaces. To combat noise in so much open space, acoustic cloud ceilings with wood finishes are used continuing the theme of exposed finishes while improving the aesthetics of the spaces. Including charging stations for both personal devices and vehicles further encourages an environmentally conscious lifestyle.



#### Planning

During the conceptual stage of the project there were plenty of parties involved in the various stages of the project. Groups involved included the District of West Kelowna including members of the community, the school district including facility planners and the director of education, the District of West Kelowna fire department, Ministry of Education, and Ministry of Environment. The school district made an effort to include the public in the design process through PAC meetings and public open houses to discuss designs and catchment areas. The client found the idea of moving more towards a design to accomodate 21st century learning a more appealing solution to the changing needs in a school. Through the workshops, open houses and PAC meetings came an iterative design process producing a more open concept towards education and designing to provide options for different learning environments.



#### **Main Floor**



#### **Upper Floor**

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- Classrooms 1.
- da Vinci Labs 2.
- Project Spaces 3.
- Resource Room 4.
- Exterior Project Space Below 5.

6. Circulation

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- Support 8.
  - Stage Below

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9. Gymnasium Below



## Exhibition of School Planning and Architecture Project Data

Submitting Firm :	Renaissance-GHM Architects
Project Role	Project Architects
Project Contact	Todd Dust, Architect AIBC, LEED® AP
Title	Associate
Address	303 Queensway Avenue
City, State or Province, Country	Kelowna, British Columbia, Canada
Phone	1 250 762 2503

Joint Partner Firm:	N/A
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Other Firm:	N/A
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Construction Firm:	Sawchuk Developments Co. Ltd
Project Role	General Contractor
Project Contact	Kevin Imthorn
Title	Project Manager
Address	486 Adams Road
City, State or Province, Country	Kelowna, British Columbia, Canada
Phone	1 250 765 3838

## Exhibition of School Planning and Architecture Project Details

Project Name	Mar Jok Elementary School
City	District of West Kelowna
State	British Columbia
District Name	School District 23
Supt/President	Terry Avery
Occupancy Date	August 2014
Grades Housed	К-6
Capacity(Students)	460
Site Size (acres)	6 Acres (24,280.9 sq. m.)
Gross Area (sq. ft.)	44,412 sq. ft. (4,126 sq. m.)
Per Occupant(pupil)	96 sq. ft./Student
gross/net please indicate	Gross
Design and Build?	No
If yes, Total Cost:	
Includes:	
lf no,	
Site Development:	Included
Building Construction:	\$11,020,055.97 CAD
Fixed Equipment:	Included
Other:	
Total:	\$11,020,055.97 CAD













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District of West Kelowna, British Columbia, Canada