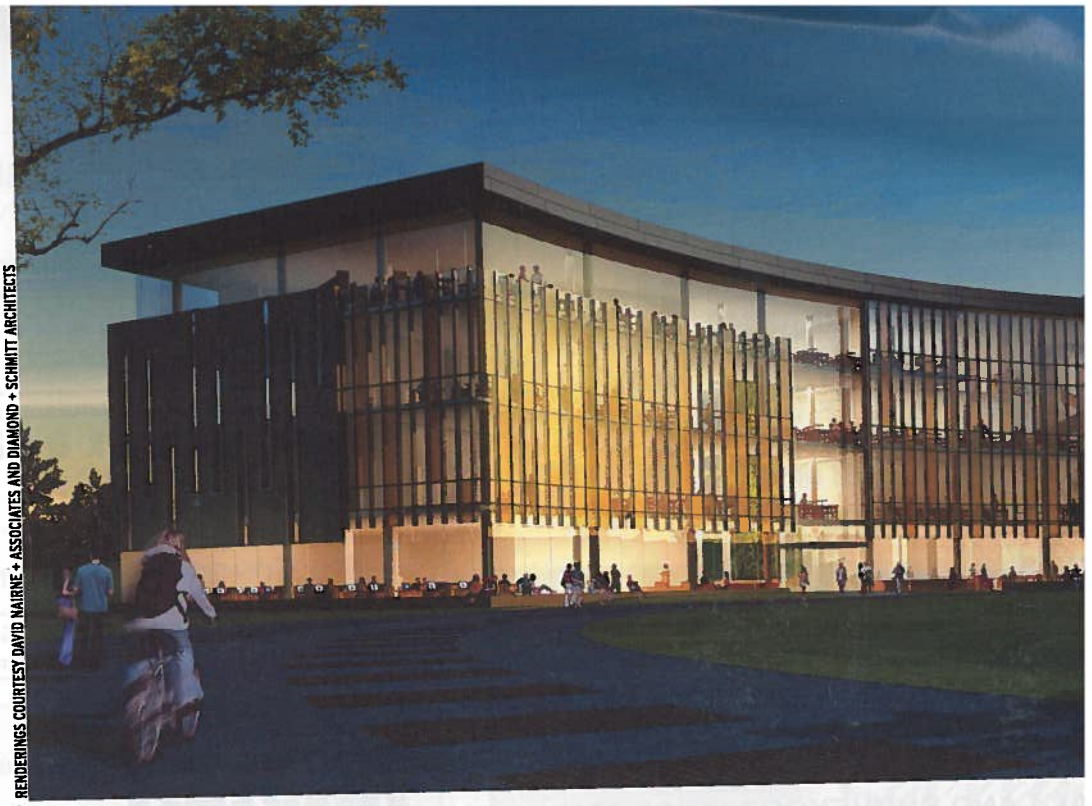

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House of Learning – Thompson Rivers

by Stacey McLachlan

Not much grows in the semi-arid landscape of Kamloops, B.C., but Thompson Rivers University has managed to thrive. The school's newest development, the House of Learning, is a bustling multi-use building that provides the university community with a new library, a learning commons and space for Aboriginal programs and services. At 77,000 square feet, the four-storey development is designed to "create a space where formal and informal interaction between community members will form the basis of a positive educational experience," explains David McIntyre of architectural firm David Nairne & Associates Ltd.

The House of Learning fulfills this tall order in both form and function. The sprawling facility is centred by a soaring central atrium, while materials create a palette for uniting the spaces. The north facade is a transparent arc that embraces the adjacent University Common, connecting the building visually with the campus; the south facade consists of solid vertical brick elements alternating with strips of glazing. "Glass was integral to the creation of an open and transparent facility, while brick is common to all major TRU facilities and is representative of the surrounding terrain," says McIntyre. Both facades incorporate weaving patterns, as does the wood interior elevator core wall, and the reed pattern in the interior glass guard ceramic frit. "Interior Salish art features intricate weave patterning, particularly using Tule reeds, in basketry and other objects," explains architect Jarle Lovlin of Diamond + Schmitt Architects Inc. The building is also peppered with the work of First Nations artists, featured in atrium murals and the handsome carved wood assembly hall doors.

Though the House of Learning is certainly modern in its construction – the flat-slab concrete frame is reinforced with a glazed curtain wall system and brick veneer – the extensive use of wood and lush First Nations imagery give the development a historical, local connection. "Wood, including the pine beetle logs ceiling of the pithouse-inspired assembly hall (named the Irvine K. Barber British Columbia Centre – pictured right), is representative of the traditions of aboriginal communities surrounding the university," says McIntyre. Steve Craig, of construction management company Vanbots, points to examples: "There is extensive use of timber products, including glulams supporting the glazing wall system, wood

LOCATION
Thompson Riv
Kamloops, B.C

OWNER/DE
Thompson Riv

ARCHITEC
Diamond + Sc
David Nairne &

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slat ceilings, doors, and architectural millwork panelling and cabinetry."

Showcasing the beauty of the landscape was important to the overall design, too. "Plentiful windows allow natural light to flow in, with striking views of the Kamloops landscape," says Nancy Levesque, library director.

In TRU's first pursuit of LEED Gold, the building has many sustainable features. The library's modified bituminous membrane roof is made of a reflective high-albedo surface, while the Irvine K. Barber British Columbia Centre's green roof is built on top of salvaged pine-beetle-killed logs. Ian Boyle, structural consultant for Fast + Epp, stresses the eco-friendly qualities of using this wood: "These logs have very little embodied energy due to local sourcing and a limited amount of processing. It is the first use of pine beetle kill logs in this manner for this size of structure." The building is heated and cooled through radiant slab ceilings, a mechanical heat recovery system, and natural diffusion ventilation. The most unique element, however, is the 40-foot-high living wall in the atrium. "The living wall establishes a calm, peaceful environment while serving as an integral component of the environmental control system," says McIntyre.

The partially subterranean Irvine K. Barber British Columbia Centre – "arguably the centrepiece of the building," says Craig – is perfect for community gathering and public interaction, which is the main purpose of the HOL. Based on the traditional Interior Salish winter home, the 300-seat space is envisioned, according to Levesque, as "a theatre-in-the-round to feature performances of traditional First Nations' culture, as well as theatre and music events, lectures and conferences." The hall is a clear-span structure supported by a circumferential reinforced concrete ring beam. Its beam roof frames a central skylight, reflective of the traditional pit house central opening.

To maintain the traditional look, structural engineer Fast + Epp integrated the mechanical and electrical pipes into the wood roof, framing the exposed logs below. Electrical engineer Paul Chu of Cobalt Engineering says the project was straightforward electrically, mostly employing fluorescent T8 and T5 compact lights. "We used direct and indirect lighting throughout the library, taking care to light the ceiling for a more spacious look to avoid a 'cave effect,'" he explains. The only challenge was the mixed-usage element – this was remedied through the installation of multi-level lighting for flexibility, including built-in desk lights and adjustable theatre lighting bars.

The landscape design was integral to the building's community-centric functionality. "We wanted to create a space that allowed people to linger and interact," says Chris Mramor, landcape architect for Phillips Farevaag Smallenberg. "It's about celebrating culture and community in the design of the site." This was achieved by creating an inviting hardscape featuring broad sitting steps that engage the central campus commons, a water feature with native reed planting, and through mass plantings. Care was taken to preserve a grove of pine trees as a focal point and anchor for the project's landscape. In the courtyard, alternating concrete tiles with indigenous symbols for 'male' and 'female' individuals, create a paving grid that symbolizes the community itself. "This imagery was meant to be at the symbolic core of the project with the surrounding landscape designed to be as natural as possible," explains Mramor.

As with any project, there were challenges to overcome – for example, poor ground conditions had to be remedied with a raft foundation. The decision to develop the design under the Fast Track model, says Craig, put a great amount of pressure on everyone. But the House of Learning has remained on schedule and on budget, set for completion in the spring of 2011, which McIntyre credits to "a cooperative and positive relationship between the client, construction manager and consultant team." ■