

2016 WOOD DESIGN AWARDS - WINNER

Institutional Wood Design: Small

Graham McGarva, VIA Architecture, Vancouver, BC

Scott Taylor, VIA Architecture, Vancouver, BC

Queensway Transit Exchange, Kelowna, BC



“The sheer size and unique shape of the glulam beams used here push the limits of possibilities with glulam and mass timber panel construction... impressive.”

- jury comments

High resolution images available. Please e-mail mmclaughlin@wood-works.ca

The Queensway Transit Exchange project, designed for the City of Kelowna and BC Transit, provides a prominent and important landmark as the central transit exchange for the City of Kelowna and surrounding area. An elegant, unique and unifying shape was desired as a ‘placemaking’ opportunity for the city: a shape that would visually and physically provide shelter and community. The shape needed to provide this actual and mental enclosure, and protection from the elements for transit patrons on the existing transit island. The goal was to not only provide a warm and inviting environment for transit patrons, but for the surrounding neighbourhood and the city in general; an exchange that would encourage increased transit usage and be an important characteristic of the downtown’s central core.

BC wood was chosen to help achieve these established project goals based on its structural capabilities, being a locally grown material, being an important BC industry, its sustainable characteristics, and its warm, friendly and natural character.

The canopy’s long curvilinear low-arc shape reflects the rolling hill topography surrounding Kelowna and a gentle wave from adjacent Okanagan Lake. Two major curvilinear glulam beams simply and truthfully create this unique and desired shape in a smooth and continuous manner. The beams curve up from their lowest height of

four metres to their highest point in the centre at 5.6 metres, giving an enclosing and embracing quality to the three centralized waiting areas. Four inline steel ‘Y’ columns symbolic of the orchards characteristic of the Kelowna area lightly and delicately support the two main beams. The cantilevering roof slopes upward from the two low ends of the canopy, providing an open and welcoming shape for approaching patrons.

A system of glue-laminated timbers (GLTs) span over the two main glulam beams and cantilever out past the sides of the beams with a curved shape to provide additional coverage and protection for the transit exchange and patrons. The GLTs easily span and cantilever these distances, keeping the total deck thickness to a minimum, offering a thin and delicate roof profile.

Using the GLT system for the roof structure and as a finish ceiling lowered construction costs, shortened construction time and gave the canopy its warm, natural and aesthetically pleasing character. The structural capabilities of glulam beams and GLTs allowed the 56-metre-long by nine-metre-wide canopy to be supported on only four columns, which promoted a visually and physically open design that promotes public and transit user safety and accessibility for all.