Two story 
in one 

BY ADE 

PHOTO
Making a Splash

Two striking indoor pools, by Bing Thom and Hughes Condon Marler, use wood in unexpected ways and provide a Vancouver suburb with new landmarks.

BY ADELE WEDER
PHOTOGRAPHY BY EMA PETER

The Vancouver suburb of Surrey, British Columbia, is a city in high-minded transition. Newly aware of the financial, logistical, and environmental costs of its low-density, car-oriented sprawl, its municipal leaders have recently taken steps to transform the bedroom community into a better-defined and more fully equipped modern city. The harbinger was the construction of Surrey Central City: a shopping, office, and educational complex, designed by Bing Thom Architects (BTA), that created a sense of a downtown within Surrey. Now the city has two new public aquatic centers, each with a program that is the very epitome of urban vitality. Like the public library, the community swimming pool serves as a modern-day church of sorts, a gathering place empowered by North America’s dual obsessions with fitness and fun.

Community indoor swimming pools—natatoriums, in the lingo—present logistical and technical challenges that require architectural ingenuity. First and foremost is height, in order to accommodate the high-divers and water-sliders, as well as to disperse the chlorine-saturated air. And for obvious reasons, the large interior space must have a long, clear span.

Near the city’s southern border, Hughes Condon Marler Architects (HCMA Architecture + Design) has designed an aquatic center with an Olympic-size competition pool, diving platforms, a family-oriented leisure pool with water slide, hot tubs, a sauna, a steam room, and a weight room—all that in an area that until very recently has been sparsely populated agricultural land, but is slated to be developed into a vast residential neighborhood. HCMA has designed seven other aquat-
ic centers in the Vancouver region. But the Grandview Heights commission posed a new kind of challenge. “We had a completely blank slate,” says Darryl Condon, HCMA principal. “We were asked to build the centerpiece of a community that doesn’t exist yet.”

HCMA’s answer to this problem was a roof that reads like a series of giant cresting waves from the outside and a billowing sheet of fabric from the inside. The undulating form, so dramatically evocative, was functionally driven. Designed with the help of structural engineers and timber specialists Fast + Epp, the roof is made of improbable long and thin ribbons of glue laminated wood. These slender elements (comprised of pairs of 4-inch-wide by 10-inch-deep beams tied together) are anchored at either end by post-tensioned concrete buttresses and a row of enormous cantilevered concrete columns at midspan. They perform in tension, much like the cables of a suspension bridge, notes Condon, allowing an area free of vertical supports for the 50-meter-long, 10-lane-wide pool. They also create catenary curves that reach a maximum height of 49 feet to clear the diving platforms, falling to 29 feet at the roof’s lowest points.

At the other end of Surrey, its northeastern corner, the Guildford Aquatic Centre bookends the evolving city. Designed by BTA in partnership with Shape Architecture, the Guildford pool expands an existing recreation center on the site. Like Grandview

credits
ARCHITECT: HCMA Architecture + Design + Darryl Condon, Stuart Rothnie, principals; Melissa Higgs, project architect; Aiden Callison, Alexander Koenyon, Steve DiPietro, Craig Lane, Craig Simms, Nicolas Worth, design team
CONSULTANTS: Fast + Epp (Structural); AME Consulting Group (mechanical); AES Engineering (electrical); RF Binnie (civil); FFS Studio (landscape); Daniel Lyzen & Associates (acoustical)
GENERAL CONTRACTOR: EllisDon
CLIENT: City of Surrey
SIZE: 95,000 square feet
COST: $43 million
COMPLETION DATE: February 2016

SOURCES
GLULAMS: Western Archrib
METAL PANELS: Alucobond, Apolic, Kingspan
CURTAIN WALL: Columbia Glazing Systems
FLOOR AND WALL TILE: Dalhia; Buchtal
DOWNLIGHTS: GE Lighting
ACOUSTICAL CEILINGS: Tectum
1 LOBBY
2 LAP POOL
3 DIVING PLATFORMS
4 HOT TUB
5 LEISURE POOL
6 CHANGING ROOMS