



LOCATION
8451 Bridgeport Road, Richmond, B.C.

OWNER/DEVELOPER
MYIE Group

ARCHITECT
GBL Architects Inc.

CONSTRUCTION MANAGER
Scott Construction Group

STRUCTURAL CONSULTANT
RJC Engineers

**ELECTRICAL/
MECHANICAL CONSULTANT**
Integral Group

LANDSCAPE ARCHITECT
Considered Design

TOTAL SIZE
215,000 square feet

TOTAL COST
\$96 million

International Trade Centre at Versante

by ROBIN BRUNET

The impending completion of MYIE Group's International Trade Centre at Versante in Richmond, B.C., is a triumph on several counts. For GBL Architects Inc., the \$96-million facility is a prime example on how to maximize the usage and visual appeal of a multi-use, three-tower structure within the confines of a triangular site.

For Scott Construction Group and associated trades, a host of problems that could have proved calamitous were deftly overcome. And for MYIE Group, the Trade Centre is the successful outcome of a site that other companies tried and failed to develop.

Andrew Emmerson, associate principal of GBL Architects, says, "Over the years we worked with a number of clients in trying to develop the site but with limited success. With MYIE Group we established a design concept that finally worked."

Brenda Gilbert, project director for Scott Construction Group, adds, "Michael Ching, the developer at MYIE Group, allowed everyone to do what was needed to get the job done – which was invaluable, because a lot of hurdles had to be surmounted."

The International Trade Centre consists of two office towers, above-grade parking, the 14-storey OPUS Hotel Versante, plus retail and restaurant components, with the main programs linked by a podium rooftop and shared outdoor amenity spaces.

Visually, the facility is a dazzling array of dramatic forms and textures, united by a three-storey wraparound of perforated panels from Vancouver's Ombræ Studios, whose composition provides pedestrians and commuters with a shimmering appearance of waves and contrails.

While past developers regarded the site's geometry as restrictive (for example, the provincial transport ministry-controlled Bridgeport Road at one side of the triangle could not be interrupted by entrances) "the fact that each site frontage was directly adjacent to a public street intrigued

us," says Emmerson. "Developing a successful design was dependent on finding a creative solution to parking and site access, and the breakthrough came when we formulated the idea of creating our own private road – allowing us to develop a multi-functional elongated plaza with curb drops. Instead of incising giant loading bays into the building frontage, we could use the plaza as an open loading area in addition to hotel pick-up, access to a podium level parkade, and a zone for commercial space."

GBL developed the triangular site to be extruded up to create a podium form that fronts directly on to the three adjacent streets. The base is chamfered on two corners to provide a more generous exterior space at the ground level and a more flexible interior floor plate. The three rectangular tower components were lifted onto the podium to provide additional density, with these three forms carved and shaped to maximize building separation and minimize view and daylight impact.

The towers were also designed to be visually distinct from one another: a diamond form for the hotel, an elongated box for the south office tower (cantilevered out over the private road), and a sculpted box form for the north office tower. The podium base is comprised of vertical circulation components visually tied together with horizontal framing elements. An over-height commercial base undercuts the upper podium levels and provides a light transparent edge to the development at grade, allowing the bulk of the podium massing to visually float above.

While the Centre is noteworthy for its diversity of surfaces and textures, Emmerson points out that this was very much the outcome of function: "The diverse mix of building types and massing called for an equally diverse treatment of solar mitigation. All south and west facing facades for the three towers were appropriately screened to help reduce their respective mechanical loads during the summer months.

"The hotel utilizes a punched vertical expression of metal panels on both the south and west facades, allowing for open views, but with reduced window apertures in response to the acoustic impact of traffic along Bridgeport Road. The office towers have a contrasting horizontal application of aluminum louvers that wrap around the two building faces, to help regulate the internal temperatures."

James Munro, project engineer at RJC Engineers, notes that this complex design "provided us with a very challenging, fun project, structurally. The cantilevers and components such as the hotel half-sitting on top of the parkade required many transfer slabs and beams. Plus, the intricate geometry meant that the column layout couldn't be the same from floor to floor. Each task was unique: for example, level 12 of the hotel has a big setback for a patio, so we had to set back the columns, install a transfer slab, and then set the columns back out for the remaining upper level."

But the biggest challenge structurally was ensuring that the property was seismically sound – no mean feat considering it was composed of liquefiable sand. "We pre-loaded the site in 2015, and then we undertook stone column densification with holes drilled every four feet from centre, and then we poured a continuous raft foundation that also provided a plug for the high water table in this region – because the elevator pits were below grade," says Munro, adding that the foundation will also help to evenly distribute weight over the soil as it settles residually.

The Scott Construction team overcame numerous challenges. "When we excavated, we discovered that the soil was contaminated, and its removal added to the schedule," says Gilbert.

A Kinder Morgan fuel line running only a few feet below and alongside the Trade Centre had to be protected with steel plates and affected excavation, hoisting, and other activities; plus, deliveries and activity along Bridgeport Road required Ministry of Transportation approval.



There was also a delay by the curtain wall manufacturer for the delivery of the curtain wall based on original schedule dates. "As it was an overseas manufacturer, we engaged a third party to track the curtain wall manufacturing and shipments from Thailand to the site," says Gilbert. "Then, once again, we had to play catch up with the construction schedule." The glass in the curtain wall system is View Glass, a high-tech 'smart' glass that can be lightened or darkened by room occupants via iPad manipulation to control the amount of natural light in their individual offices.

Challenges notwithstanding, office occupancy is scheduled for the end of February, and the OPUS Hotel Versante will open at the end of this year. It is expected that International Trade Centre at Versante will become the flagship of a new urban hub in this part of Richmond, and Gilbert echoes the sentiments of everyone involved in its development by stating, "I'm very proud of what we've done and where we are now. Completion is only a few months away, and again, the success is largely due to the support of MYIE Group, who have been a true pleasure to work with." **A**