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THE CONTINUING GROWTH OF GEC ARCHITECTURE



PHOTOS COURTESY THE TOWNLINE GROUP OF COMPANIES

The Hudson

by John T.D. Keyes

The 89-year-old Hudson Bay Company department store in downtown Victoria has undergone a \$75-million makeover as a primarily residential property named The Hudson. It is the first of several phases that will constitute the redevelopment of an entire city block. Speaking for the owner-developer, the Townline Group of Companies, Bob Pearce, its vice-president of development, says his team was delighted to “have the opportunity to revitalize the old girl and create a new environment that has people living in the building.”

While there is still retail space at grade, a parking level has been constructed in the old basement, replacing a parkade to the east of the store, and suites and lofts fill the rest of the building. Two new floors have been added on one side of the fourth floor’s roof, to the east of a large courtyard that was created in the centre of the building.

“The three original sides are granite at the base, and above that is terracotta and glass in wood frames. The east side, which had faced the parkade, is architectural concrete and glass,” says Paul Merrick, founding principal of Merrick Architecture Ltd. “The fifth and sixth storeys are horizontal in expression, with architectural concrete and glass in keeping with the east exterior. That fourth side was the largest design challenge: to create an appropriate outlook for residential use in a way that was sympathetic to the character of the vintage building without simply mocking it.”

From a structural perspective, there were three significant challenges: the seismic upgrade, the creation of the courtyard, and constructing the new storeys. Victoria is located in a high seismic zone and the building is very heavy, which results in high seismic loads. “In a new building, with a concrete seismic system, one of the benefits is flexibility,” says Leon Plett, project manager and structural engineer for Read Jones Christoffersen Ltd. “With an old building with terracotta facades, we needed to keep deflections low during an earthquake.” This was achieved by installing two new concrete service cores, each approximately 25 feet square, in opposite quadrants of the building. “They extend from the foundations to the roof, with walls two feet thick, anchored down into bedrock,” says Plett. “The heavily reinforced core walls were placed with shotcrete rather than conventional forms to speed construction and ease working around the existing structure.”

Because the City had prohibited erecting the new storeys on the west side, the addition was designated for the east side, which, Plett explains, “was built in the 1950s and not designed for additional floors. The columns and slabs were adequate, but we had to upgrade the parkade foundations.”

Another design innovation is a Dynamic Buffer Zone (DBZ) – a space between the exterior building wall and the

residential unit walls. Plett’s colleague John Dam, a project engineer in the company’s building science division, worked extensively on this feature. “Putting a space of two to four inches lets the mechanical engineers send in exterior air that has been tempered by a heat pump. This low-volume, low-velocity dry air will pick up any moisture that has entered the cavity and draw it back out, thus protecting the interior components of the building.”

According to Cassidy Taylor, a mechanical engineer at AME Consulting Group Ltd., the DBZ went through “many iterations. It started off being interconnected on a vertical plane, drawing air at the bottom and relieving it at the top. It was deemed too onerous to do this, so we ended up treating each DBZ zone independently. There are now 81, defined by the building’s outer columns, which coincide with the front face of each suite.” Another of Taylor’s responsibilities was the geothermal system. “We’re using it as much as possible for heating and cooling, and we have heat rejection coils on the discharge from the parkade exhaust, which will get rid of excess heat that the field can’t absorb. And we have a 100 per cent backup boiler for any short-changes. Water-to-air heat pumps are doing heat reclamation. We were trying to make this a very efficient building.”

Those same columns and window bays that helped define the DBZ’s final configuration also played a role in the interior design esthetic of David Nicolay, principal at Evoke International Design. “We wanted to retain as much original character as possible. You’re dealing with window bays that set the rhythm of the units, the high ceilings, from 10 to 14 feet or more, and the exposed columns, which we kept rough and raw. Our agenda was to touch as lightly as possible.” The units feel loft-like, maximizing the light from the large windows, the restored, original, yellow-cedar frames of which pivot on a vertical axis. “The kitchens are long and linear, with concealed appliances and stripped-down details. Floor treatments throughout are light or dark wide-plank oak, matching the millwork of the kitchen.”

Converting the former store to a residential complex required a complete retrofit of the electrical system. “We worked with BC Hydro to get increased capacity for the site,” says Steve Nemetz, senior principal at Nemetz (S/A) & Associates Ltd. “We had to create sub-distribution points,



LOCATION
1701 Douglas Street
Victoria, B.C.

OWNER/DEVELOPER
Townline Group of Companies

ARCHITECT
Merrick Architecture-Borowski
Sakamoto Fligg Limited

STRUCTURAL CONSULTANT
Read Jones Christoffersen Ltd.

MECHANICAL CONSULTANT
AME Consulting Group Ltd.

ELECTRICAL CONSULTANT
Nemetz (S/A) & Associates Ltd.

LANDSCAPE ARCHITECT
Perry & Associates

INTERIOR DESIGN
Evoke International Design

TOTAL SIZE
160,000 square feet

TOTAL COST
\$75 million

so we split the building up electrically into four segments. You gain efficiencies in services. The trick was finding riser space without conflicting with other services.” Finishing touches, no less complex, pertained to lighting that would be used by residents or seen by passersby. “Lighting the interior courtyard without glaring into the inside units was tricky. Highlighting the outside walls was probably the most creative part of the process. You’re highlighting the facade and the stone finishes without glaring into the units using focused beams or LED lights, which offer long life and low glare.”

In the end, says Merrick Architecture’s principal Graham Fligg, the Hudson achieves a sort of symmetry. “The city was founded as a Hudson Bay fort, so it’s important that the building be recognized. It was like a palace on the edge of the city, and will now inject life into that part of Victoria. The entire site redevelopment is an example of how sensitive adaptive reuse can be complemented by contemporary additions in welcome juxtaposition. It was designed as a thesis that the new can complement the old, and vice versa.” ■