



Building Renovation

by **ROBIN BRUNET**

hen the City of Hamilton decided to renovate 50 Main Street, a building constructed in mid-1950s (opened to the public in 1958), it wasn't only to preserve the simple elegance of this venerable downtown facility: it was to transform it back into its original function as a courthouse.

Specifically, it would provide appropriate long-term accommodations for the Provincial Offences Administration, including four courtrooms, Ontario Municipal Board, and the City of Hamilton's Legal Services, Risk Management & Internal Audit Divisions. "Because the structure was sturdy and in near mint condition and contained 112,000 square feet of space, it was the preferred option and best return on investment to the alternative two options of building new or designbuild/lease-back scenarios," says Rom D'Angelo, the City's director of energy, fleet & facilities management division.

Given the numerous requirements of the diverse stakeholders, the City retained Invizij Architects to consult extensively with them, implement design priorities, and act as project co-ordinators; meanwhile, associate +VG Architects focused on preserving the heritage features of the building, which, although not given heritage designation but a building of heritage interest, falls into the category of midcentury modernism and was deemed valuable to civic planners.

When the renovation was announced in 2016, Paul Sapounzi, managing partner with +VG Architects, noted that the building "is of historic value in the modernist style, similar to [Hamilton] city hall with regard to architecture. There's a real movement

to our cultural appreciation of modernism, the 'heroic' design period of the mid-20th century."

He added that the facility, which replaced the Wentworth county courthouse built in the late 19th century, was constructed during an architectural period when "a lot of building technology we use today was established." As for heritage details, he said the main courthouse panelling and attractive ceiling details were just a few elements that "are becoming increasingly appreciated in general in Canada."

Essentially, a courtroom on the main level would be renovated, as would three of four court rooms on the second level (the fourth would be preserved for future use as required). This in itself led to other design requirements, including new security access for the judges and prisoners, in the form of exterior entry ports, elevators, and corridors.

Early on in the planning, the scope of the project was modified to accommodate a district energy hub for the Hamilton Community Energy (HCE Energy) a subsidiary company of Hamilton Utilities Corporation (HUC). "The original plan was to have the HCE run pipes to our building from their main distribution facility, but we were so far east in the downtown region that this would have been cost prohibitive," says D'Angelo. "It became clear that if HCE established a satellite hub in our building, it would not only solve our energy needs, but allow them to fulfill their goal to serve new customers in this part of the city."

The renovation began in 2016 with the demolition of various interior areas, as well as the gutting and replacing of the mechanical and electrical

systems. All told, the project would require the retrofit of the existing heating/cooling plant; the upgrading of the existing ORs, chiller, and cooling tower, utilizing designs developed by energy retrofit specialist HH Angus & Associates Limited; and the provision of a modern emergency power unit consisting of a roof-mounted generator.

While the architects and Eastern Construction Company were focused on renovating the first and second floors to accommodate the government services, demolition of floors three, four, and five to base building core and shell standards was undertaken for future tenants. "At a total budget of \$37 million [all in] we were getting a lot of bang for our buck, with the upper three levels giving us about 60,000 square feet of leasable space," says D'Angelo.

Despite the substantial scope of work. D'Angelo set a target to occupy the renovated facility as of August 2018. "The architects were working through the drawings as we performed demolition and asbestos abatement," says Mike Adams, project manager for Eastern Construction. "There were the usual surprises when we opened up the walls, but thankfully nothing too surprising."

Another plus for the project was that facade work was not extensive. "But we did replace the entire roof, which gave us the advantage of working in watertight conditions from beginning to end, while workers at other sites in the city were being drenched in rain," says Adams.

With as many as 80 people working in these relatively comfortable conditions, the protection of heritage elements such as the marble floors and walls at ground level was undertaken, while items such

as five different types of light fixtures and architectural ceiling grids in the courtrooms were carefully dismantled and sent away for restoration.

With regards to the district energy hub, Adams says, "The plant portion of the project was actually tendered first, and we awarded it to Superior Boiler Works & Welding and Cahill Electric. What this resulted in was two groups of mechanical and electrical trades working at the same time on two different projects under the same roof, the other group being exp Services and HH Angus - however, unlike the case in many projects, the co-operation between these two groups was very good."

Emanuele Caputi, senior manager, energy division at HH Angus & Associates Limited Consulting Engineers, says, "In addition to this being a district hub, the plant would also supply heating and cooling to the renovated courthouse. It was fortunate that all the trades worked together well, because the addition of the plant made this a fairly tight site: for example, the plant's capacity would be 1,000 tons for the chilled water and an enormous capacity for the heating component, whereas previously the facility contained just one chiller and two boilers." HH Angus was also tasked with creating an entirely new electrical system and panels.

As of May, the former courthouse at 50 Main Street was still under construction, with all the finishes in the lower two floors in place and landscaping underway. "Even though the project required extensive consultation with numerous stakeholders, each of whom had their own design and operational requirements, our architects and builders did an incredible job of keeping the renovation on track and on budget," says D'Angelo. "It's great to see a Hamilton icon being returned to its original function, with enough capacity to accommodate the future needs of our city." A

LOCATION

102 Wellington Square, Hamilton, Ontario

OWNER/DEVELOPER

City of Hamilton

ARCHITECTS

Invizij Architects Inc. / +VG Architects

CONSTRUCTION MANAGER Eastern Construction Company Limited

STRUCTURAL/MECHANICAL/ **ELECTRICAL CONSULTANT**

exp Services Inc. **ENERGY RETROFIT CONSULTANT**

HH Angus & Associates Limited Consulting Engineers

SECURITY CONSULTANT Lobo Consulting Services Inc.

TOTAL SIZE

112,000 square feet

TOTAL COST \$37 million