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# Goodman School of Business Expansion – Brock University

by LAURIE JONES

Having already established itself as a first-class program at Brock University, the Goodman School of Business has undergone a major renovation, adding almost 29,000 square feet of new area and extensive renovations to the existing Taro Hall.

"This was a phased project in that we built two new sections onto the existing Taro Hall, then moved people into the new area while the contractor, Cooper Construction, was in the process of doing the renovations in Taro Hall," says Paul Smeltzer, the University's director of capital planning and project management. "It's a pretty complex construction project. We are expecting substantial performance by December 18 but the final move won't happen until late December or early January."

The \$24-million project will serve the 3,600 students well. "Our faculty of business does a lot of co-operative education, so part of the renovation was to facilitate having employers on campus to do interviews. The Goodman School of Business highly encourages networking in the business world, even before the students graduate. We strive

to have the best and brightest students so it's in the employers' best interest to take the time to do that networking."

Smeltzer explains the project created seven new classrooms, five new interview rooms, and renovated eight classrooms. "We also have some unique spaces including a large, two-storey atrium that can accommodate multi-purpose events. Our Bloomberg room is a computer area with 10 workstations where students can do their projects using high-performance computers," he says. "The classrooms are fully equipped with modern AV systems and other equipment to make the teaching and learning consistent with modern pedagogical standards. It's a well-designed functional building with a lot of glass curtain walls. This helps us continue to attract great students because of the spaces we are providing."

The four-storey building at the Goodman School is connected by a bridge system to accommodate movement, particularly in the cold winter months, making it a well contained campus.

"Taro Hall was the home of the School of Business at Brock University, but with the seed money from the

Goodman family, the administration was able to create new student and teaching spaces, and rebrand it all under the Goodman School of Business name," says Chris Hall, partner, +VG Architects. "Taro Hall needed refreshing due to its age and highly rigid design so we peeled away oddly shaped stairwell towers and replaced them with new flexible, contemporary spaces, and maximized natural light. Taro Hall's interiors were updated with new LED lighting, new wiring for IT, new finishes, and a roof to give the 30-year-old building a renewed lease on life."

He explains the University's accessibility standards were incorporated in all the new and renovated classrooms, and new universal washrooms were provided that bring the building up to current expectations by users. "This project was very much a collaborative process because we had the construction managers on board well before the first shovel went into the ground. There was a lot of design input from the trades and the University in terms of problem-solving," Hall says because the school was active during the

phased construction, it was a challenge to maintain all the systems, particularly mechanical and electrical. "There have been a couple of moves along the way, and we tried to schedule the work on classrooms during the summer months, but virtually doing a complete gut of the building and keeping it operational is a real success story."

**LOCATION**  
1812 Sir Isaac Brock Way, St. Catharines, Ontario

**OWNER/DEVELOPER**  
Brock University

**ARCHITECT**  
+VG Architects

**CONSTRUCTION MANAGER**  
Cooper Construction Limited

**STRUCTURAL CONSULTANT**  
Stephenson Engineering

**MECHANICAL/  
ELECTRICAL CONSULTANT**  
Crossey Engineering Ltd.

**LANDSCAPE ARCHITECT**  
MHBC Planning, Urban Design  
& Landscape Architecture

**TOTAL SIZE**  
79,341 square feet (reno and addition)

**TOTAL COST**  
\$24 million



Bruno D'Aloisio, project manager at Cooper Construction Ltd., agrees that the biggest challenge was working in a building that was occupied. "We had a fantastic team that worked very well together to provide the best possible building we could for the University. We used structural steel and concrete on the steel deck with a stone veneer on the outside blending with a curtain wall system. The atrium is the show-piece with the glass walls."

Sobhy Masoud, principal at Stephenson Engineering Ltd. and project structural lead, says the foundation of the new additions had to be carefully allocated and designed so it didn't affect the existing building foundations, including a basement. "The west addition includes a two-storey high atrium, where architecturally exposed structural steel [AESS] was utilized," he explains. "As it is meant to be expressed and visible, not hidden within walls, AESS requires a higher degree of surface finish and precision compared to conventional steel. The main atrium is where students gather for events, and the structure has been exposed to achieve the architectural vision."

Mechanical components to the build included air handlers equipped with features such as enthalpy wheels and CO2

control, and distributed air via fan powered boxes to serve the classrooms and office spaces. "The fan powered boxes were tied into the occupancy sensors throughout the project to identify which rooms were not occupied, and in turn adjusted setpoints and/or stopped fans to reduce energy consumption," says Daniel Hofland, mechanical project manager, Crossey Engineering Ltd. "In the Atrium, we implemented linear slot diffusers and low level return to push the air down along the entirety of the two-storey glazing.

We also implemented in-floor heating to reduce operation costs in the winter and shoulder seasons, as well as to improve occupant comfort."

Sheldon Kwan, senior associate at Crossey Engineering Ltd., says in working with the design team and wiring device manufacturers, they developed a solution that would meet the demands of the high-end computers today. "The wiring system can be easily



reconfigured to meet future needs of the labs. We also installed power and USB outlets in many of the classrooms, open spaces and corridors to help students charge their smartphones, laptops, and tablets."

While the landscaping will be completed later this fall, James Lockhart, senior landscape architect with MHBC Planning, Urban Design & Landscape Architecture, says three custom

concrete planters that double as seating were installed west and south of the atrium. "We specified plants that were salt- and drought-tolerant, low maintenance and have three-season visual interest to complete the landscaping. Our goal was to create accessible plaza-like spaces around the building for students to gather and enjoy that also reflected the original intent of the Campus Master Plan." **A**