Sir Sandford Fleming College — Sutherland Residence Village

By Angela Altass

Sir Sandford Fleming College's Sutherland Campus in Peterborough, Ontario, is now offering its students the chance to "discover the advantages of living at Fleming" with the construction of its first on-campus residential units.

Nestled on the grounds of the 193-acre campus, the residences opened in time for the fall 2001 term, providing a natural setting that students can call home within a five-minute walk of the main campus building. Sandy Lawrence, director of purchasing with the college, says Sutherland Residence Village provides a comfortable living environment for students while Angela Garnett, village manager, adds that it helps students feel connected to college life when they live on campus. The six four-level buildings can provide accommodation for up to 483 students and Wendy McDonald, director of residence life, says they are full to capacity.

Ted Wilson of Totten Sims Hubicki Associates, who provided site landscape design, building design development, document production and construction phase administration explains some of the interesting features of this $16.9 million project. "Grading surrounds the side and rear elevations on the first level of each building so that the structure appears to emerge from the ground while taking advantage of the thermal shelter that the earth provides," he says. "Split face concrete block was used through common areas to minimize the need for painting and the ongoing maintenance requirements. Carpeting was designed for recycling after use."

The mechanical system includes central hot water heating boilers and a central chiller at each building that distribute through a four-pipe system to a fancoil unit in each suite. A hot water in-slab heating system has been integrated into the office area for the comfort of administrative personnel. It has also been used to provide snow/ice melting on sidewalk areas immediately outside building entries to reduce the need for sanding/salting and the amount of interior cleaning. Wilson notes that the design of the building was based on the requirements of the Model National Energy Code.

"The building envelope has an RSI value of 4.3 for the exterior cavity wall system and 7.04 for the attic type wood frame pitched roof finished with asphalt shingle," he says. "The exterior wall finish is split face concrete block at the ground level with clay brick featured on the upper floors. An arch motif at the ground level elevation addresses the central street through the village, while a gable end detail is used on the main building containing the administration offices and mail rotunda. Windows are triple glazed with a combination of argon and low-emissivity treatment with operating units in all bedrooms and living areas of the suites."

Each suite offers individual private bedrooms with a window, bed, dresser, closet, desk and chair. The suites also have two four-piece washrooms, a kitchen with cupboards, table and chairs, refrigerator, stove and microwave as well as a living room with sofa, chairs and side tables and a dining area. A unit for the resident assistant is located adjacent to the main entry to each building. In addition to access from the building interior common area, a separate exterior entry for the resident assistant allows direct access for students in emergency situations. The resident assistant unit is linked to the security and fire safety systems that communicate with the residence office and the main campus building. Security of residents is enhanced through the use of electronic locks utilizing a combination of proximity and swipecard technology," says Wilson. "Emergency call posts are strategically positioned along paths from the main campus building and at the parking area serving the residence village." Residence community facilities are available on the ground level of the buildings as are barrier-free suites. Recreation facilities include basketball and volleyball courts, barbecue pavilions, a fitness centre and billiards room. Residents also have access to on-site laundry facilities. Electrical systems include full capability in each bedroom for access to the campus network and the Internet, telephone and cable television.

"Interior colours for walls and ceilings in the suites are light to maximize the amount of light reflectance," says Wilson. "A combination of recessed compact fluorescent and surface mounted T8 lamps with diffusion lenses are controlled with direct on/off switches throughout each suite. Common area lighting in stairs, lobbies and recreational areas is designed to minimal lighting densities required by the Model National Energy Code while ensuring security of residents. Control throughout these areas is by means of occupancy sensors. The fire alarm for all buildings is enhanced with a visual cue system that includes a strobe indicator on the front elevation of each building and a central monitoring centre at the resident office. Remote monitoring is also provided from the main campus building."

Wilson emphasizes that a spirit of cooperation focused on providing the best accommodation for students was key to the college building committee and the architect firm throughout the design development and construction document production phases of the project. "This spirit was quickly adopted by the general contractor, The Atlas Corporation, who overcame site dewatering challenges to complete the project in 14 months."

The project completion date for the six residence buildings and one utility building was aggressive and the harsh winter of 2001 slowed the progress, recalls Adam Salehi of the Atlas Corporation. "We managed to fast track the project with the help of subtrades, consultants and the owner to complete the project within schedule," says Salehi. "We also worked closely with the consultants to provide cost savings throughout the project in order to keep the final cost within the owner's budget." Salehi agrees that the project was a "complete success" due to the management team, subtrades, suppliers, consultants and owners working so well together. ■

HIGHLIGHTS

Location
599 Brealey Drive,
Peterborough, Ontario

Owner
Sir Sandford Fleming College of Applied Arts and Technology

Architect
Totten Sims Hubicki Associates

Structural/Mechanical/Electrical Consultants
Totten Sims Hubicki Associates

Landscape Architect
Totten Sims Hubicki Associates

General Contractor
The Atlas Corporation

Total Construction Cost
$16.9 million

Total Area
14,994 M^2