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## **School will soon be in session at SFU's newest building**

This article was originally published on the Vancouver Regional Construction Association's website.

On Site with Olivia had the unique chance, through long-time member Bird Construction, to take a look at behind the scenes of one of Surrey's growing areas, Surrey's City Centre.

Things have been moving quickly with Bird Construction's staff at the Simon Fraser University (SFU) Sustainable Energy and Environmental Engineering Program (SE3P) building at the heart of Surrey's City Centre, two blocks down from SFU's current Surrey Campus.

This new \$116-million-dollar eclectic cube will soon be home to Western Canada's first accredited undergraduate energy engineering program, and is one of a number of new, eye-catching, buildings erected in the revitalized Surrey City Centre neighbourhood.

The 16,000-square-metre LEED-gold-designed concrete structure will soon provide capacity for 320 undergrads, 190 graduate students and several hundred teaching staff. This impressive project is slated to open in November. SFU's SE3P building represents the university's first major step in expanding beyond its Surrey campus. The partnership between the university and the city has been underway for the last 20 years, and the expanded campus is envisioned to be an integrated academic precinct within the city centre.

Funded in part by federal and provincial government investment and contingent on an expedited schedule, Surrey is committed to supporting an accelerated construction schedule and sees the building as a key player in the city centre revitalization and expansion program.

The design concept was developed around SFU's continuing efforts to reduce consumption and waste, provide lower energy and emissions and therefore, the building program and envelope have been distinctly organized around a grand atrium populated with live trees and specialized lighting lamps at varying levels of the campus' main hall to allow the students and staff to keep sustainable practices front of mind.

The building's distinctive façade design is composed of undulating, over-vibrated, pre-cast panels. This overall composition mirrors the abstract version of a circuit board relating to the technological subject matter mechatronics (mechanics meets electronics) that will be taught within the building. These unique shapes are external at first glance as the white frame of the building, but can be found as common design in the 400-seat lecture hall which will be open and of welcome use to the Surrey community come late fall.

The unique exterior panel cladding, combined with just the right movement timing of extensive scaffolding, and the dedicated cooperation of Bird Construction and all the trades on this project allowed for some of the construction to be done inside the envelope, without a roof in freezing weather for some time, to accommodate the project's intense schedule, thereby adhering to government funding deadlines.

The smooth drywall surfacing, architectural curves and round lines within the structure, suggest much time and consideration was taken by both the architect Revery Architecture (formerly Bing Thom Architects) as well as the general contractors, trades and manufacturers and suppliers on the collaboration of bringing living and natural elements of sustainability to the foreground of the academic environment.

Not shy to the world of ICI, (institutional, commercial, and industrial) building- Bird Construction is well underway with many unique and necessary projects to expand the Lower Mainland.

Both Surrey and the Langley are expected to see high population growth over the next three to five years, and as such will require more schools, more hospital space, and more business spaces to make way for this

growth scale. Congratulations to long-time VRCA Construction members LMS Reinforcing Steel Group, Division 15 Mechanical Ltd, Centura Building Systems (2013) Ltd, Glastech Glazing Constructors Ltd., Metro Roofing & Sheet Metal Ltd., Canem Systems and all that worked on this unique project. Those trades and affiliates also include: Wison, Graestone Ready Mix Inc., Surespan Structures, Whitemud Iron Works Group Inc., Lam Metal Contracting Ltd., Danamac Concrete Systems, Ducharme , Alliance Scientific. More specifically, contract manager Colliers Project Leaders; code and certified professionals, LMDG Building Code Consultants Ltd.; structural and security, WSP Canada Inc.; mechanical, AME Consulting Group Ltd.; electrical, AES Engineering; envelope, Morrison Hershfield Ltd.; landscape, PWL Partnership Landscape Architects; civil, Aplin & Martin Consultants Ltd.; environmental, Thurber Engineering Ltd.; acoustic, BKL Consultants Ltd.; wind, Gradient Wind Engineering Inc.; survey, Target Land Surveying Ltd.; traffic, Bunt & Associates; IT/audio visual, Aspyr Engineering; hardware, IL Hardware Consulting; commissioning authority, Integral Group; arborist, Abor-Tech Consulting Ltd.; laboratory equipment, Research Facilities Design; surveyor, James Bush & Associates; and elevator, Gunn Consultants.

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