

Award

**JOHNSTON
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19240-122A AVENUE

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LOCATION
60 Mobile Drive, Toronto, Ontario

OWNER/DEVELOPER
OSSTF/FEESO

ARCHITECT
Moriyama Teshima Architects

CONSTRUCTION MANAGER
Eastern Construction

STRUCTURAL CONSULTANT
Fast + Epp

MECHANICAL/ELECTRICAL/LEED CONSULTANT
Introba

CIVIL CONSULTANT
Matrix Solutions Inc.

INTERIOR DESIGN
Kasian

LANDSCAPE ARCHITECT
Forrec Ltd.

TOTAL SIZE
124,000 square feet

TOTAL COST
\$57 million

OSSTF/FEESO HEADQUARTERS & MULTI-TENANT COMPLEX

by ROBIN BRUNET

Its title may be a mouthful, but the new OSSTF/FEESO (Ontario Secondary School Teachers' Federation) Headquarters & Multi-tenant Complex in North York boasts a design that is elegant in its simplicity. It also contains a host of sustainable materials and energy-efficient elements that have contributed to this project targeting LEED Platinum certification (as well as high-energy performance levels at 67 kWhr/m²/year).

Jim Spray, chief financial officer at OSSTF/FEESO, says, "The new facility is the result of us assessing whether we could perform a major retrofit of our original headquarters that had been built in the 1970s and deciding that the cost did not justify the benefits and would not achieve our goals of efficiency and sustainability.

"We sought expertise in achieving these goals, so we hired architect Paul Dowsett at Sustainable.TO. Paul is a strong advocate for zero carbon construction and the use of mass timber as the structure. Paul's expertise and enthusiasm convinced OSSTF/FEESO to proceed with these environmental principles. In 2019 we retained Moriyama Teshima Architects and they created a very clean, horizontal form that pleased us so much that we didn't make any changes apart from some minor size modifications."

Moriyama Teshima designed a three-storey mass timber building to house the OSSTF/FEESO offices, as well as two floors of leasable tenant space. A central atrium was created as a visual showcase that also served to bring natural light deep into the facility as well as (via a solar chimney) help recirculate fresh air throughout. The architects

also designed shareable spaces on the main floor, including the lobby, café, and main floor terrace, as well as a multipurpose, convertible event area.

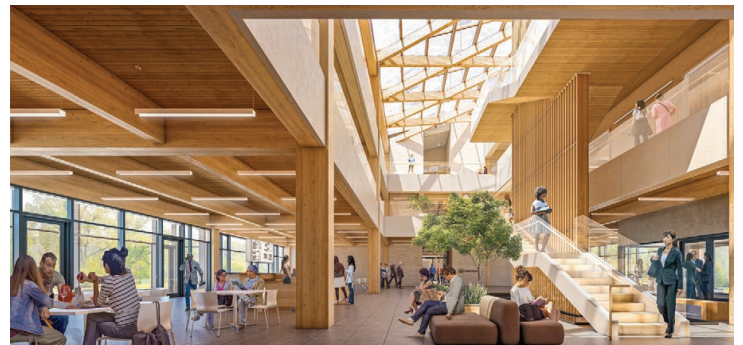
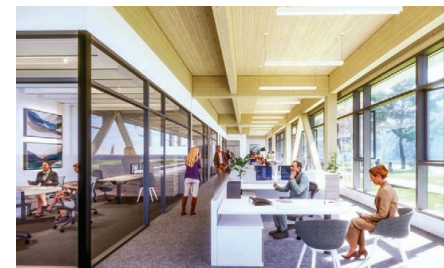
Carol Phillips, partner at Moriyama Teshima, notes that the architecture was driven by the goal to promote health and wellness at every level: natural daylighting was maximized thanks to generous structural bays; both through passive natural convection and building automation systems, fresh air would move through the building; large overhangs would reduce solar heat gain and control glare; and geothermal heating, a rainwater harvesting system for toilet flushing and irrigation, green roof, rooftop solar PV panels, and automated daylight dimming controls further contributed to significant energy savings.

In terms of programming, Phillips says, "We flipped the layout of the old headquarters that had offices on the perimeter and administrative staff in the middle by creating open work spaces all around and offices in the middle with glazing so that they too would receive natural light."

Phillips says of the Cross Laminated Timber floor slabs and Glue Laminated Timber beams and columns, "We sourced mass timber from northern Quebec from a company that uses smaller black spruce dimensional lumber in two-by-four and two-by-six lengths to create the laminates." The atrium is a showcase for the wood, where pillars rise three storeys and branch into an X pattern to reach a canopy that is reminiscent of the forest adjoining the headquarters. "The OSSTF headquarters is

also situated next to a ravine, and the water flow is represented by vertical wood slats on the feature stair leading to a reflective pool underneath," Phillips says.

The old OSSTF headquarters was demolished in 2020 after a long period of obtaining regulatory approval. "The new building was to be located next to



a ravine, so many environmental protocols had to be addressed," says Ryan Desjardins, project manager at Eastern Construction. "One of these items resulted in the creation of a new spillway – basically a series of baffles – that would allow rainwater surface runoff to reach the ravine more gently."

In terms of construction of the new headquarters, Desjardins notes that, "About 37 tractor-trailer deliveries of timber were required for the building, and moisture control for the wood led us to develop a drying system that proved very effective and which we hope to use on future projects." Eastern Construction also built a temporary facility for OSSTF staff across the road from the building site.

As of October, the building shell was complete and interior millwork had begun, with work crews aiming for completion in early 2024. "To me, if a teachers federation can make the commitment to develop a LEED Platinum facility then so can many other organizations," Phillips says. "This was an inspiring project for all involved."

Spray adds, "The lockdowns extended our schedule, but our team of experts, including Eastern Construction, did a fabulous job navigating the COVID-related challenges, and as a result we're substantially on budget and very close to our original schedule. Better still, we've got a product we love. So the effort has been more than worth it." **A**