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Award

ARCHITECTURE | DESIGN | CONSTRUCTION

**NSDA
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**Raising
The Bar**



LOCATION
5015 Spectrum Way, Mississauga, Ontario

OWNER/DEVELOPER
Skymark Square Lands Inc. / HOOPP Realty Inc.

PROJECT MANAGER
BPI Consultants Corp.

ARCHITECT
Sweeny & Co. Architects Inc.

CONSTRUCTION MANAGER
Eastern Construction Company Limited

STRUCTURAL CONSULTANT
Stephenson Engineering Ltd.

MECHANICAL CONSULTANT
The Mitchell Partnership Inc.

ELECTRICAL/SECURITY CONSULTANT
Mulvey & Banani International Inc.

LANDSCAPE ARCHITECT
NAK Design Strategies

LEED CONSULTANT
Green Reason

ACOUSTIC CONSULTANT
HGC Engineering

TOTAL SIZE
1.3-million square feet

TOTAL COST
Undisclosed

Spectrum Square Office Building

by ROBIN BRUNET



RENDERINGS COURTESY SWEENEY & CO. ARCHITECTS INC.

Spectrum Square Office Building

Lisa Lafave, senior portfolio manager for the Healthcare of Ontario Pension Plan (HOOPP), calls HOOPP Realty Inc.'s 1.3-million-square-foot Spectrum Square office complex “our attempt to create an urban feel in a suburban site.”

Her description is based on the presumption that people enjoy working in cities because of food options, transit access and after-hours social opportunities – and the master planned Spectrum Square delivers exactly these amenities.

Boasting a distinctive metal panel and stone curtain wall, Spectrum's 130,000-square-foot, six-storey office building is the first of what could ultimately be seven facilities built to LEED Gold specifications. It's nestled beside a six-building “restaurant campus” including a central square that will accommodate community and music events.

With above-grade parking concentrated in the middle of the property and eye-catching walkways and bike paths, Spectrum's ambiance is casual European rather than corporate North American. Completing HOOPP's objectives for the project is the fact that it is located conveniently beside Mississauga's bus rapid transit corridor, which is scheduled to commence operations sometime next year.

Although only the first phase of Spectrum is complete, HOOPP has already turned the standard office park formula on its ear by making provisions to orient all of its buildings street-side – thus eliminating long and wasteful lawns – making it very pedestrian and street friendly. Spectrum was also designed with sustainability in mind, and in this regard it takes many cues from an earlier HOOPP project, Aerocentre V, an award-winning building also located in Mississauga.

John Gillanders, principal of Sweeny & Co. Architects Inc., explains, “Many of the

elements we developed for Aerocentre V were carried over to this project, all of them employee-friendly. Spectrum's amenities include 11-foot ceilings – no drop ceilings – floor-to-ceiling windows, collaborative workspaces and raised-floor HVAC for constant fresh air and individually controlled temperature vents.”

The restaurant campus was also inspired by Aerocentre V as Lafave explains: “We came up with the idea because a lot of the leasing resistance at Aerocentre V came from not having this particular amenity. It took considerable effort to persuade the City of Mississauga to buy into our stand-alone design for the site, rather than have it tucked away in the ground floor of the building. Standalone was imperative in order to make the campus a destination for after-hours social events.”

When asked what gave HOOPP the impetus to pursue such high standards of development, Lafave replies, “About five years ago we decided we would pursue LEED Gold for all the buildings we developed: it falls in line with our culture as a leading pension plan provider.

“Additionally, LEED Gold means buildings last longer and depreciate less. And achieving the designation isn't the nightmare some people make it out to be. The key is working with the right team.”

HOOPP and the architects began work on Spectrum in 2011 by determining ways to minimize parking without inconveniencing employees. As for the office building itself, the decision to eschew dropped ceilings not only imparted a feeling of grandeur, it allowed for indirect lighting that is esthetically pleasing and more energy efficient than conventional options.

The floor-to-ceiling glazing was outfitted with automated blinds, automated light shelves (which pivot to either bring

light inside or block it) and exterior sunshades. "As with so many other elements of the project, the shades serve a dual purpose," says Gillanders. "On the south and west sides of the building they are oriented horizontally, and on the opposite sides they run vertically in a striking architectural pattern. It's beautiful to look at and very functional." Translucent panels on the curtain wall similarly provide visual appeal while blocking heat gain within the building.

David Bradbeer, principal of BPI Consultants Corp. (another Aerocentre V alumni) describes the working relationship between the core team as "truly productive, with each of us knowing the other well enough to communicate in an efficient and collaborative manner." Instead of challenges that usually arise from the design of ambitious LEED Gold projects, Spectrum's challenges were confined to a single factor. "We had two really bad winters that created all sorts of drainage, compaction and other soil issues," he says.

Jim Broomfield, director, operations for Eastern Construction Company Limited, elaborates: "The first winter of 2013/14 was especially troublesome because the sub-zero temperatures wreaked havoc with our formwork."

Caissons to support building column footings had to be drilled and new site



services such as storm sewers installed, and the freezing conditions impacted the progress of this subsurface work. "However, we subsequently tweaked the schedule to make up for lost days," says Broomfield. "Vertical formwork to the second floor was done between December and March of 2014, and from that point on construction continued without any problems."

Broomfield adds that the elimination of dropped ceilings and creation of an open perimeter simplified the construction process somewhat. "As for under-floor air distribution, that's more of a co-ordination issue than a construction complication," he says.

As of June of 2015 the new office building was already 40 per cent leased, and a second 255,000-square-foot building has been designed and is ready to be constructed pending favourable market conditions. "We're hoping to obtain building permits this summer," says Bradbeer.

For her part, Lafave is excited about the prospect of fully developing the 30-acre site. "By using the same key professionals to develop the rest of Spectrum Square, we will keep improving upon what already has been created," she says. "We're very proud of the complex; it shows how vibrant an office park can be." **A**