

ARCHITECTURAL MERIT

VICTORIA PARK BUS TERMINAL REPLACEMENT



PROJECT CREDITS

OWNER

Toronto Transit Commission

ARCHITECTS OF RECORD

IBI Group Architects

TTC ECE Design Architects

ENGINEER OF RECORD

Halsall Associates

GENERAL CONTRACTOR

EllisDon Corporation

MATERIAL SUPPLIERS

Advanced Precast

St Marys CBM

ADDITIONAL PARTICIPANTS

- Aniko Meszaros (deceased)
- BASF Canada Inc.
- Brown + Storey Architects Inc.
- Carpenters Local 27
- Harris Rebar
- Ironworkers Local 721
- LIUNA Local 506
- Scott Torrance Landscape Architect

PROJECT FACTS

LOCATION Toronto, Ontario

COMPLETION 2011

BUDGET \$45 million

QUICK PROJECT SUMMARY

The TTC upgraded an aging transit terminal making it environmentally friendly, accessible to all users and in tune with the local community's unique character. Public art is integrated into the bright and airy concrete canopies which shelter passengers and supports a green roof.





The new terminal replaced a rooftop bus bay. It has space for six buses at street level and includes public art, new wall finishes, refurbished floors, better signs and more lighting. Other features of this award-winning project include new bicycle lanes on Victoria Park Avenue, traffic lights to help pedestrians cross the busy street, and bike storage spaces in the terminal.

A 5,000-square-metre green roof covers subway, concourse, and bus canopies. The green roof, at the time the largest in Toronto, diverts and filters rain water, and cools the station in summer. The station is now fully accessible to passengers of all levels of mobility, lessening the need for costly Wheel-Trans service offered by TTC.

The station renovation also provided a community building component. The area residents were encouraged to take part in the development of the design throughout the process. This was done during the Environmental Assessment, as well as the detailed design. Improvements to the lighting, entrance openness of the station, as well as the addition of public art greatly enhanced the overall customer experience of the station.

The station is in a neighbourhood and surrounded by apartment buildings. The green roof looks impressive from above and provides an attractive view for tenants in the surrounding buildings.

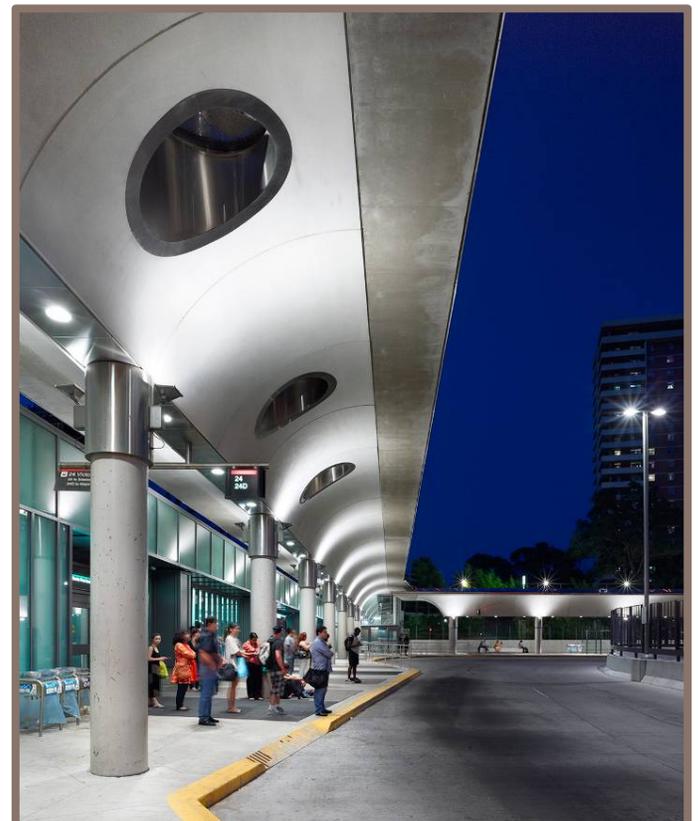
The parking lot was also designed with tree plantings and landscaped areas, and safety was built into it, with clear sightlines all around. Whereas there had been previous issues with vandalism at the station, this is no longer the case. The community has respect for and feels a sense of ownership of the station.

The Victoria Park project encompassed the rehabilitation and upgrading of a major multimodal transit hub used by more than 25,000 people per day. The TTC converted the station from a "cavernous, concrete bunker" (Globe and Mail, 7/24/12) into a light and airy, user-friendly station with a vastly improved public realm. In the process of achieving its three main objectives: improve customer experience; make the station accessible and barrier-free; address and redress structural deterioration, Victoria Park Station was integrated into the neighbourhood through improved connections within

the station itself and to the surrounding community.

The Toronto Urban Design Award jury stated that "the station should be held up as an example of how the TTC should modernize its transit hubs". Among the improvements are an attractive streetscape at the main entrance, added windows to provide more natural light, widened pedestrian pathways, new public art, and more pedestrian connections to the station. Just as importantly, the station maintained original components and used them as the base for the new design elements.

Two major architectural features of the station are the concrete canopies that mark the entrance and the cast-in-place concrete retaining wall in the bus terminal. Public art is integrated into the bright and airy concrete canopies which shelter passengers and supports a green roof. According to the artist, the theme of "Roots" is repeated throughout the station in response to the multicultural demographic of Scarborough putting down roots in the community. Not only is this represented in the filigree panels in the canopy, the Roots



theme is rendered in the cast-in-place concrete retaining wall.

The proposed canopies were originally to be constructed in structural steel. However the team felt that in order to unify all components of the bus terminal, i.e. with the waiting areas, new entrances (Albion and main subway entrance), the taxi stand and retaining walls which were all proposed to be constructed in concrete, it was necessary to construct the canopies in concrete.

Once the decision was made to construct the canopies in concrete it was then possible to shape the canopy form to produce the clean tapered look that presently exists. We seamlessly integrated the precast concrete soffit elements into the canopy form. The same was done with the green roof to design in a seamless transition from green roof to exposed concrete.

To enhance the appearance of the station, we located or aligned the locations of control and construction joints in the concrete paved areas and the retaining wall. The cast-in-place concrete columns for the canopies were used as the locations for the treatment of crack control measures for the concrete elements. Typically, control joint or construction joint will extend from the exposed slab to the center of the column and extend from the center of the column to match the same location on the exposed vertical elements of the retaining wall.

The concrete was specified as architectural concrete Class C-2 with a minimum concrete strength of 32MPa. Supplementary concrete materials (SCMs) were required to be maximized to produce a sustainable concrete material. Maximizing of SCMs was based on the temperature and the finishing requirements for the exposed finished elements of the canopy.

In order to enhance the durability of the concrete elements epoxy coated steel was used in the slabs and retaining wall structures. Cover requirements of 70mm \pm 20mm to rebar was specified keeping with the Toronto Transit Corporation requirements for more durable concrete.

What could have been a standard bus terminal replacement evolved into a multi award-winning urban design and sustainable development community initiative, in part due to the iconic concrete canopies that celebrate the revitalized transit hub.

