

### **Updated June 2015**

# **Queens Quay Construction Fact Sheet**

#### **REVITALIZATION LOCATIONS**

1.7 kilometres of Toronto's main waterfront street, Queens Quay West, including the north and south side of Queens Quay between Yo-Yo Ma Lane (just west of Lower Spadina Avenue) to just east of Bay Street (at the Westin Hotel).

#### **DESIGN TEAM**

Lead Designer: West 8 + DTAH

Curbside Traffic Management/

Transit Planning: BA Group

Municipal Services/Transportation: ARUP and MMM Group

Electrical/Signal: TSL Consulting & Design Group and DPM Energy

Structural Engineering: Parsons Brinckerhoff Halsall Inc.
Environmental and Geotechnical: Golder Associates/LVM Franz
Urban Forestry: James Urban and Associates
Cost Estimating: AW Hooker Associates Ltd.
Irrigation: Smart Watering Systems

Utility Coordination: DPM

**CONSTRUCTION TEAM** 

Construction Manager: Eastern Construction Company Ltd.

#### **PROJECT DIMENSIONS**

- Granite pedestrian promenade Average 7.2m wide, 1.7km long
- Buffer zone (between promenade and Martin Goodman Trail) 2.4m
- Martin Goodman Trail Average 3.6m wide, 1.7km long
- Number of trees: 240 (north and south side)

# **DESIGN CONSISTENCY:**

Design elements – including the two-tone (Canadian red and grey) granite pavers forming a maple leaf pattern along the promenade, street furniture and material choices – are consistent with other Waterfront Toronto projects. These elements – which can be seen along the Water's Edge Promenade in East Bayfront – have become part of the waterfront's signature look, letting visitors know these are public spaces.

#### **Roadway and Signals:**

The new Queens Quay features two lanes of east-west traffic on the north side of the street with a dedicated Light Rail Transit (LRT) line in the middle. With a greatly improved operational system, including more east-west green time and coordinated signals, the new street functions more efficiently.

The new state-of-the-art signal system installed at each intersection along Queens Quay includes signals with Audible Pedestrian Signals (APS) and separate bicycle/pedestrian heads, and will allow for much more sophisticated transit priority operations along Queens Quay.

## **Martin Goodman Trail:**

The Martin Goodman trail is a 17-kilometre multi-use recreational trail along Toronto's Waterfront. This new section of Martin Goodman Trail (from Bay Street to Yo-Yo Ma Lane) closes a gap in cycling infrastructure. Combined with additional work on Queens Quay to the east and west, there will be a continuous Martin Goodman Trail from Stadium Road to Parliament Street, allowing cyclists to travel safely in an area where there was previously no dedicated cycling lane.

- Bi-directional trail along the south side of Queens Quay
- 3.6-metre-wide asphalt path flanked by an allée of London plane trees
- Green and blue painted lines down the centre
- Painted maple leaf pattern and blue bicycle boxes alert cyclists when they are approaching driveways, intersections and pedestrian crossings
- Dedicated cycling signals

## **Public Promenade:**

The widened pedestrian promenade along the south side of Queens Quay is made of Canadian granite paving stones with split-face edges and a smooth surface, set on a concrete base.

- Approximately 2.3 million paving stones hand-laid on Queens Quay (1,401,500 south side and 965,300 north side)
- The two tone mosaic: smooth Royal Canadian red granite with Maple leaf figures outlined in St. Sebastien granite
- Granite sourced from Quebec

### Trees:

### South side:

- A double row of London plane trees
- 156 trees total
- To help deliver mature trees, a tiered web of rigid boxes called Silva Cells were installed below the promenade and Martin Goodman Trail to enable bio-retention, filtration, storage and recharge of storm water runoff

### North side:

- A diverse variety of species was planted to suit difficult urban planting conditions: Freeman Maple, Sunset Maple, Turkish Hazel, Sunset Honey Locust, Greenspire Linden and Princeton Elm
- 74 trees total

A tree trench was used on the north side sidewalk to ensure a similar or greater soil volume than the City
of Toronto standard

# Lighting:

Signature light poles were designed by West 8+DTAH.

- Western Yellow Cedar tapered glue laminated light pole, cast metal "tree bark" shroud a reference to the trees along Queens Quay
- 56 poles total standing nine metres tall
- Two cast aluminum arms and two signature "Olivio" light features at the top one for the purpose of street lighting and the other to illuminate pedestrian walkways

### Benches:

Signature benches are located along the south-side promenade.

- Custom cast red aluminum brackets with a maple leaf motif
- Ipe wood slats the same wood used on the WaveDecks
- 22 benches total
- 4.3 metres long

# North-side Laybys:

Originally Queens Quay was a four-lane street – two lanes in each direction – but with extensive illegal parking, drop-offs and pick-ups frequently blocking the curb lane, Queens Quay was essentially operating as a two-lane street. The revitalized Queens Quay includes realigned traffic lanes with laybys.

Laybys on the north side of Queens Quay were created for on-street short term loading (including tour buses, taxis, commercial loading and hop-on hop-offs) to serve shops, businesses and charter boat marinas on Queens Quay.

# **TTC Corridor:**

- New platforms are all fully accessible and designed to provide barrier-free access to Toronto's new low-floor streetcars
- A rebuilt right-of-way, including electrical and overhead catenary system
- Noise and vibration from streetcars absorbed by dampers
- Priority signalization for streetcars

## **Subsurface Infrastructure:**

Much of the most complicated work for the revitalization of Queens Quay occurred below grade. Most of the utilities and services located underground were replaced and updated before major work began above ground. Work included:

- Bell: Install/relocate duct banks and new copper and fibre-optic cabling
- Toronto Hydro: Upgrade its service through the construction of new cable chambers and the replacement of aging underground primary cables
- Enbridge: Relocate and upgrade its gas main along Queens Quay
- Sanitary Sewer: Construction of new sewer system replacing aging sewer infrastructure
- Storm Sewer: Construction of new storm sewers to replace legacy/aging systems

# **OTHER PROJECTS ON QUEENS QUAY**

### **Queens Quay West:**

In addition to extending the Martin Goodman Trail from Bay to Yo-Yo Ma Lane, Waterfront Toronto worked with the City of Toronto to extend the trail past Yo-Yo Ma to Stadium Road, connecting with the existing trail at Coronation Park. This work was undertaken by Grascan Construction Ltd.

- Queens Quay was reconfigured with new line painting in this area to create a bi-directional bike lane on the south side of the street
- Lanes are on-street, separated from vehicular traffic by flexi-post barriers

# **East Bayfront Interim Improvements:**

Yonge Street to Lower Jarvis Street: In 2013, Waterfront Toronto extended the Martin Goodman Trail east from Lower Jarvis and built a new, wider concrete sidewalk for pedestrians east to Parliament Street.

Lower Jarvis to Parliament Street: An off-street extension of the Martin Goodman Trail is being completed July 2015 in this section of Queens Quay, separated from the sidewalk by a landscaped median.