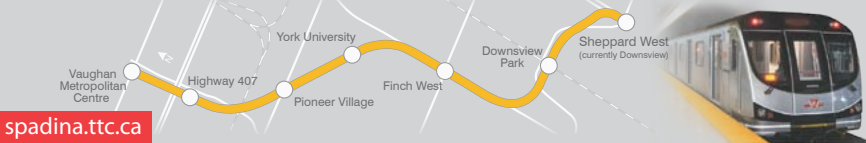




# Toronto-York Spadina Subway Extension



# 2014

## CONSTRUCTION YEAR IN REVIEW

JANUARY 16, 2015



Downsview Park Station west entrance



Completed track installed in new tunnels



SEM Team celebrate tunnel breakthrough

Station construction, special tunnelling and tunnel fit-out work continued on the Toronto-York Spadina Subway Extension (TYSSE) being built by the Toronto Transit Commission (TTC) during 2014. This 8.6-kilometre, six station, extension of the Yonge-University-Spadina Line (Line 1) begins at Downsview Station (to be renamed Sheppard West Station) and ends at Vaughan Metropolitan Centre at Highway 7, in The Regional Municipality of York.

The TYSSSE project ended a busy 2014 with a number of positive outcomes. There was good progress in construction at all of the stations and several subway entrances are rising from the ground. A special section of tunnelling, using Sequential Excavation Method (SEM), was successfully completed early in 2014. And, by the end of the year, more than half of track installation was finished. Read on to learn more about the construction progress!

### Subway Station Construction

Construction at all six stations was well underway in 2014 with several stations having three levels completed: platform (train) level, concourse (passenger circulation) level, and entrance (ground) level.



Downsview Park Station east entrance construction



Finch West Station – Main entrance building columns



Downsview Park Station west escalator– Platform to concourse



Finch West Station – Plastering of masonry wall at platform level

### Downsview Park Station

At Downsview Park Station, both the east and west entrances are clearly visible above ground with cladding, windows and escalators installed in the west entrance.



York University Station

### York University Station

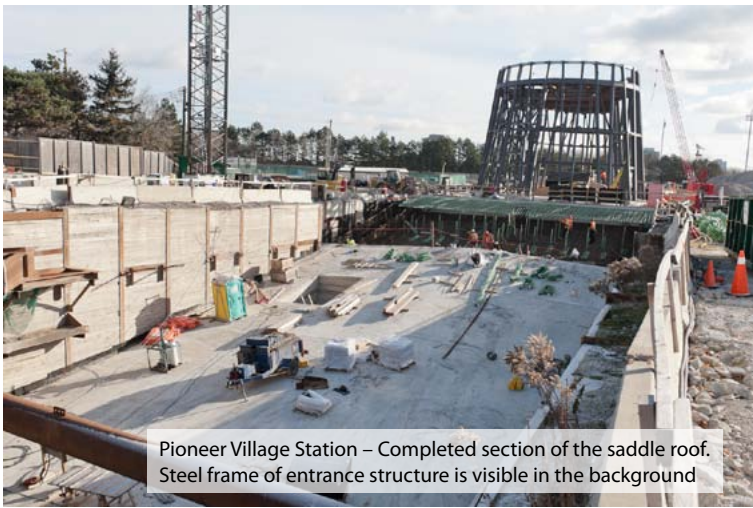
At York University Station, major station box concrete pours began in July 2014 and by December the excavation of the light ‘scoop’ was complete. Work began on the construction of the concourse level floor and walls in the scoop area.



Finch West Station – Bus terminal

### Finch West Station

Construction of the Finch West Station main entrance, located on the northwest corner of Keele Street and Finch Avenue West, continued. Underground station finishing work commenced, and the bus terminal, on the east side of Keele Street, began to take shape. The underground station roof was poured and backfilled.



Pioneer Village Station – Completed section of the saddle roof. Steel frame of entrance structure is visible in the background



VMC Tail Track



Pioneer Village Station Power Substation – Installation of Corten steel and porcelain panels



VMC Pedestrian Tunnel to YRT Bus Terminal

## Pioneer Village Station

Construction of the saddle roof at Pioneer Village Station commenced in 2014. At ground level, the framework for the southeast entrance building was erected in October 2014 and on the north side of Steeles Avenue West, the façade of the substation was close to completion.



Highway 407 Station entrance

## Highway 407 Station

Construction of the GO Bus Terminal at Highway 407 Station continued in 2014. At the end of the year, the western arm of the bus terminal was starting to take shape, and the station entranceway appeared above ground including the oval skylight opening which will allow sunlight into the station.



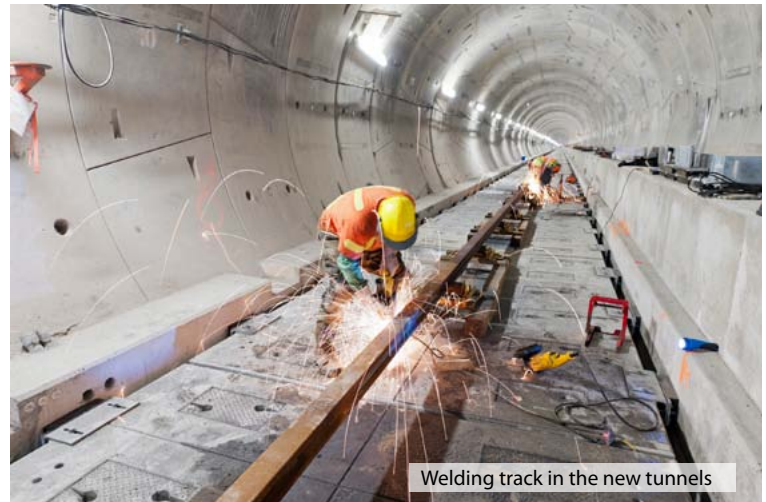
VMC Power Substation

## Vaughan Metropolitan Centre Station

At the last stop on the extension, concrete work continued at Vaughan Metropolitan Centre Station (VMC). A substantial portion of the station north of Highway 7 was backfilled, while the structure for the tail track (where trains can be stored) and pedestrian tunnel to the YRT bus terminal were completed. The finishing work on the power substation located south of Highway 7 was also completed.



SEM Tunnelling Breakthrough



Welding track in the new tunnels



SEM southbound tunnel with invert and walkways completed



Track installation at Pioneer Village Station Crossover

## SEM Tunnelling

Construction was completed on a special triple-track tunnel structure, which will allow for the turning or storage of trains, using the Sequential Excavation Method (SEM) of tunnelling. The triple-track is located north of Finch West Station, beneath the Finch Hydro Corridor. SEM was implemented to avoid disturbance of the overhead hydro lines and other major utilities (located just below the surface).

The final breakthrough of the pocket track (middle tunnel) took place on January 22, 2014 and marked the completion of a very

complex section of tunnelling. The completed tunnels were fitted out with invert and walkways by year-end and are ready for track installation.

## Track Installation

By the end of 2014 over 60 per cent of track was installed in the new tunnels. Trackwork was finished from Downsview to Finch West stations. Special trackwork began at the crossovers south of Finch West and Pioneer Village stations and track installation was underway in the northern section of tunnels from Finch West Station to Pioneer Village Station.

## What's Ahead for 2015?

As 2014 wrapped up, the project geared up for another year of heavy construction at all stations. Underground, electrical and mechanical outfitting, installation of escalators and elevators and station interior finishing will advance. Track installation will continue on the remaining portion of the tunnels. You will see more evidence that a subway is coming your way as station structures appear above ground in 2015.

Check back to the website [spadina.ttc.ca](http://spadina.ttc.ca) to learn more about construction progress and to view new photos posted under the Photo Gallery tab.

Watch three videos about tunnelling by following this link: <http://www.ttc.ca/Spadina/Tunnelling/Videos.jsp> and stay tuned as more videos are coming soon!

The Toronto-York Spadina Subway Extension project is jointly funded by the Government of Canada, the Province of Ontario, the City of Toronto and The Regional Municipality of York.

