



# 407 TRANSITWAY

## FROM EAST OF HIGHWAY 400 TO KENNEDY ROAD

GWP #252-96-00

### Planning & Preliminary Design

Public Information Centre #2 Presentation

June 24<sup>th</sup> and 29<sup>th</sup>, 2010

# Study Purpose & Scope



- Preliminary Design of a high-speed cross-regional transit facility located in a separate right-of-way along the 407 corridor from east of Highway 400 in the City of Vaughan, through the Town of Richmond Hill, to Kennedy Road in the Town of Markham;
- Infrastructure Design for initial Bus Rapid Transit (BRT) service, convertible to Light Rail Transit (LRT) including transit runningways, stations with local car and bus access/egress and an Operations and Maintenance Facility;
- Development of a phased implementation strategy for this first section of the overall 407 Transitway;
- Environmental approval for the project under the Ontario Provincial Transit Projects Assessment Process.

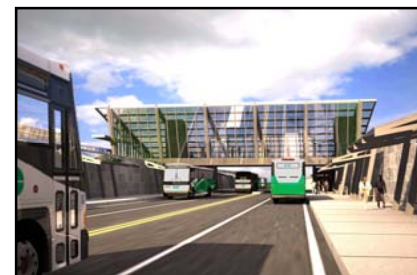
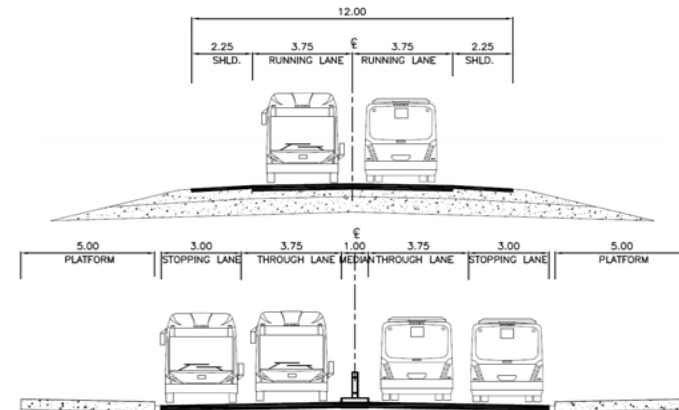
This central section was selected as the priority section of the 150 km long overall corridor from Burlington to Highway 35/115, as it is long enough to be a viable, stand alone section, provides connections with other radial transit services, links regional urban centres, and attracts higher potential ridership and therefore a higher chance for early success.



Extending 23 kilometres through York Region, the study area shown above, lies within the Parkway Belt West Plan limits, a multi-purpose corridor providing rights-of-way for freeways, regional transit, electric power transmission lines, utilities and public open space.

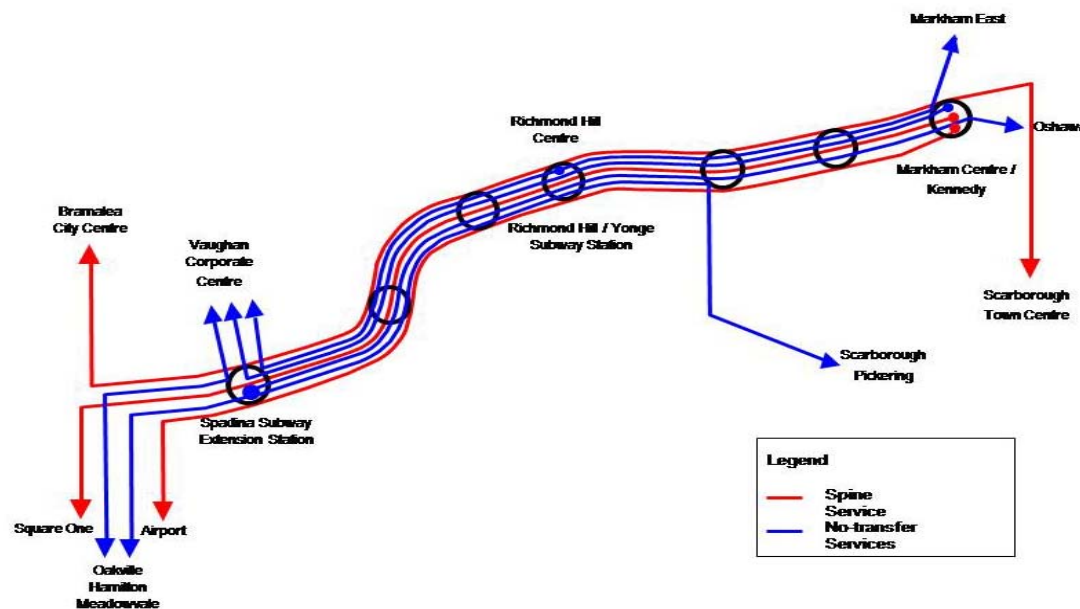
# 407 Transitway Infrastructure Characteristics

- 23 km Transitway between Highway 400 and Kennedy requires a ROW width varying between 15 m (minimum in retained sections) and 45 m (cut or fill sections with slopes).
- Protected ROW provides for either BRT or LRT operation.
- Infrastructure includes runningway and stations (accommodating both BRT & LRT standards), park and ride and transit interface facilities.
- Runningway cross-section:
  - Between Stations – 12 m  
(2 x 3.75m lanes + 2 x 2.25m shoulders)
  - Through Stations – 14 m  
(2 x 3.75m lanes + 2 x 3m stopping lanes + 2 x 3m platforms)
- 16 Overpasses & 14 Underpasses



# Transitway Ridership Characteristics

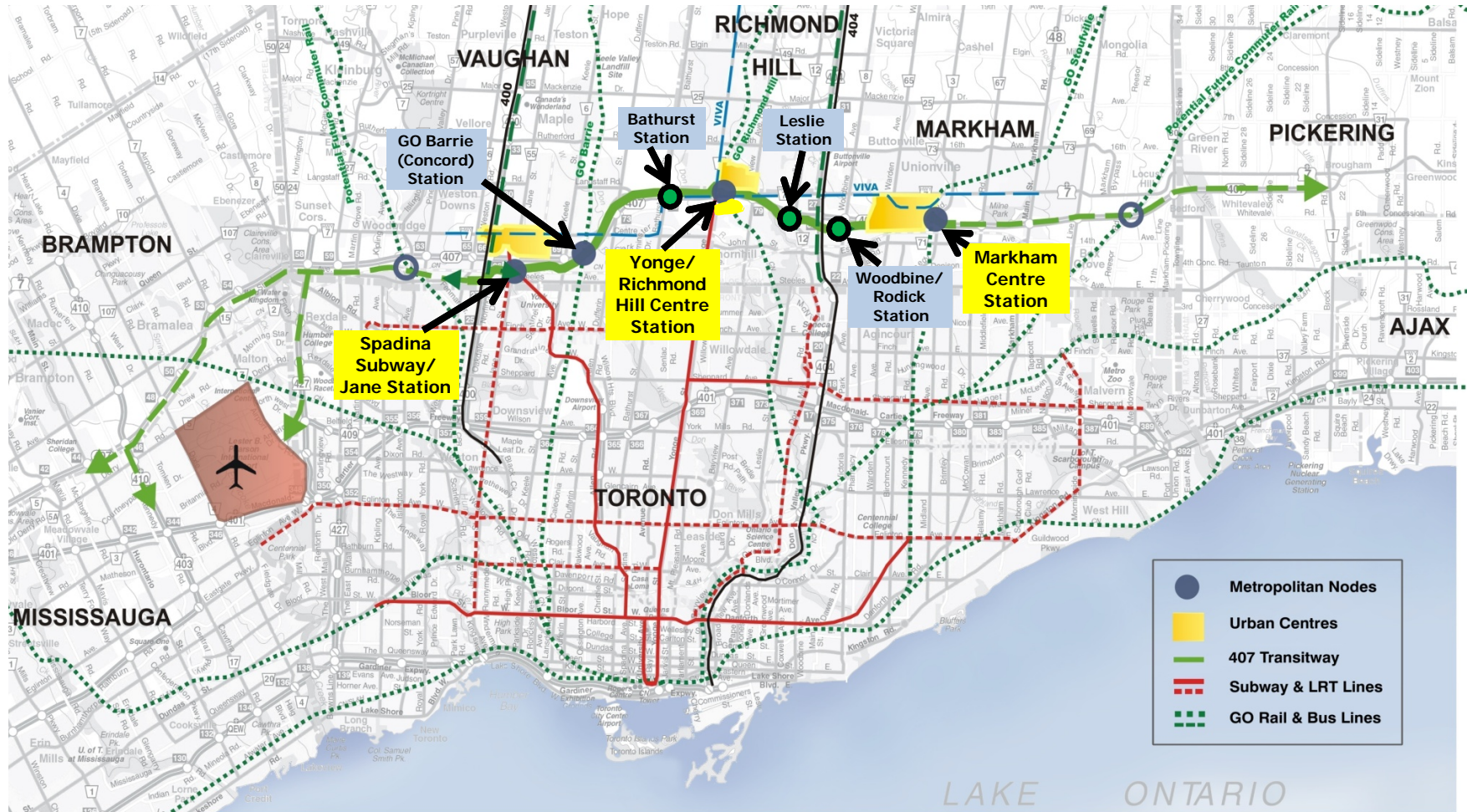
- The Greater Golden Horseshoe Travel Demand Model developed in 2008 for MTO was used.
- The Transitway infrastructure design will allow buses to achieve a speed of **100 km/hr** between stations and an average speed of **65 km/hour including station stop time**
- Transitway Service Characteristics Assumed For Ridership Forecasting:
  - Bus-based technology will be operated initially to provide routing flexibility;
  - Two primary types of service will be offered:
    1. A base spine service – Services that operate exclusively on the Transitway, including some express services
    2. One-seat ride (No-transfer) services – Direct services between major nodes or residential areas and other major employment nodes or intermodal stations. Routes comprised of portions both on and off of the Transitway and include both express and all-stop service along the Transitway (i.e., interlining).



# Role of the Project in the GTA



An east-west, cross-regional, intermediate capacity rapid transit service linking Urban Growth Centres and connecting with the existing and future GTA radial transit network

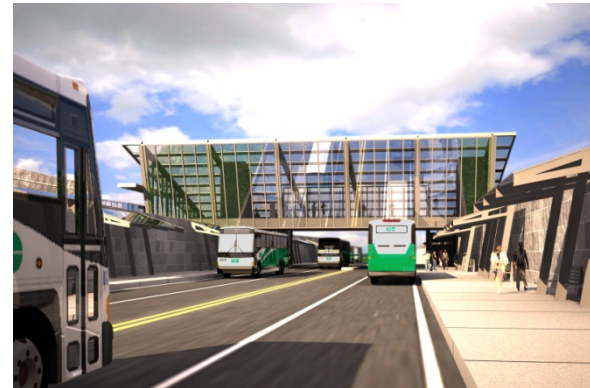
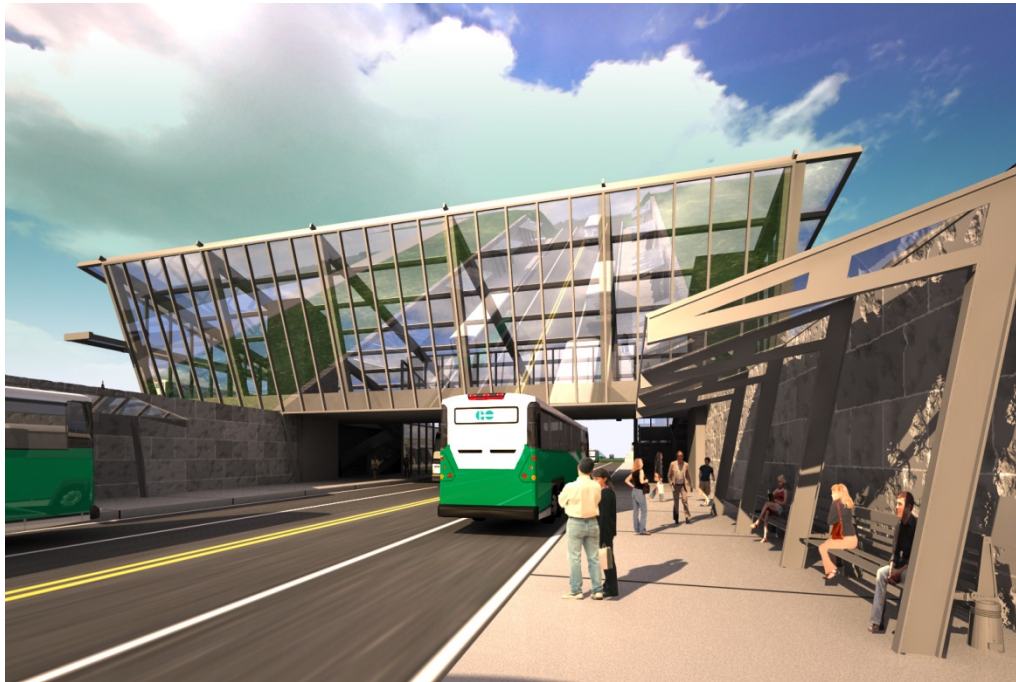


# Purpose of Public Information Centre #2



- The first Public Information Centre (PIC #1) was held in May 2009 to introduce the study and to present the results of the Planning Phase, including the technically preferred station sites and route.
- Since PIC #1, comments from the public were considered and consultation with regulatory agencies was carried out to develop the preliminary design of the 407 Transitway.
- The purpose of this PIC (PIC #2) is to present and receive input on:
  - the preliminary design of the technically preferred stations and alignment;
  - the predicted environmental impacts and proposed mitigation measures; and,
  - the Transit Project Assessment Process for this project including major milestones, next steps and study schedule.
- Members of the Study Team are available to discuss the project with you. Please feel free to ask questions and fill out a comment sheet.
- You may also visit us at [www.lgl.ca/407Transitway](http://www.lgl.ca/407Transitway), the 407 Transitway Public Website.

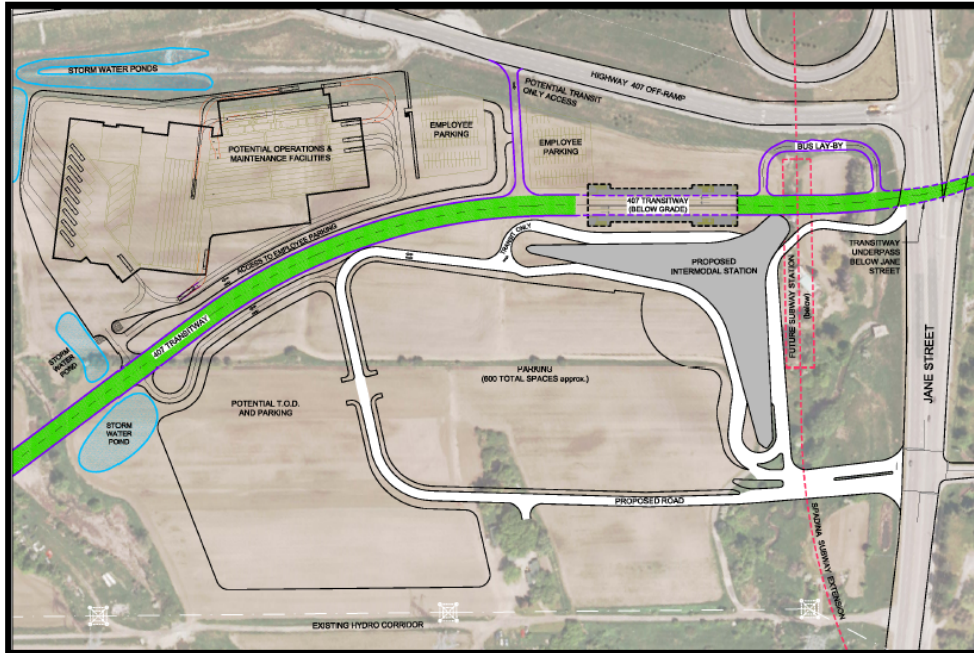
# Station Design Concept



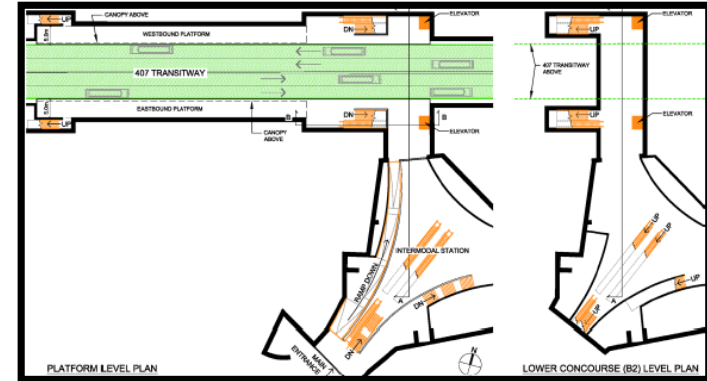
# Spadina Subway/Jane Station - Design Concept



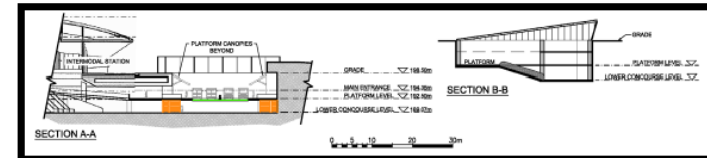
**SITE PLAN**



**PEDESTRIAN CONNECTION TO PLATFORM**



**CROSS-SECTION A-A**

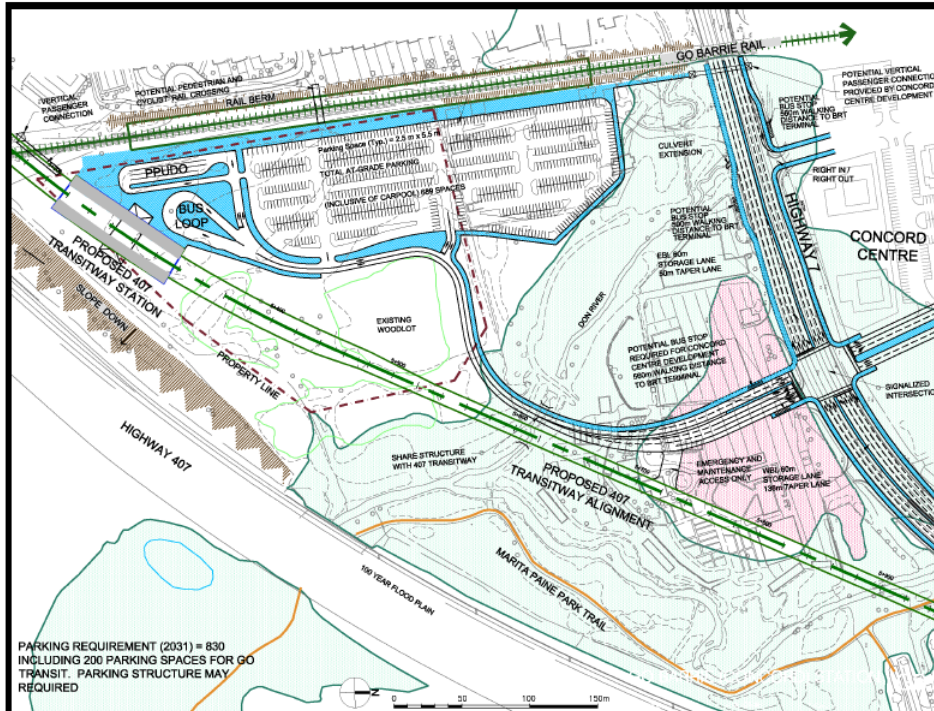




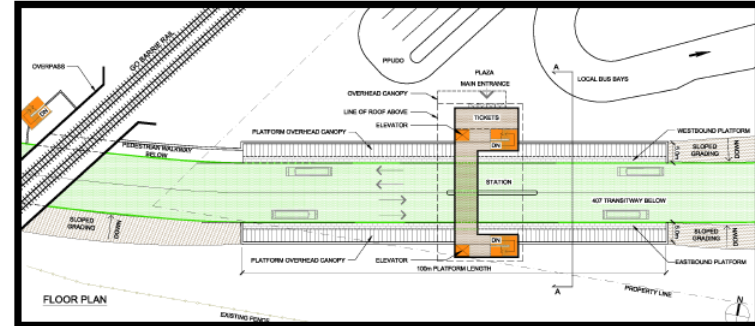
# GO Barrie (Concord) Station - Design Concept



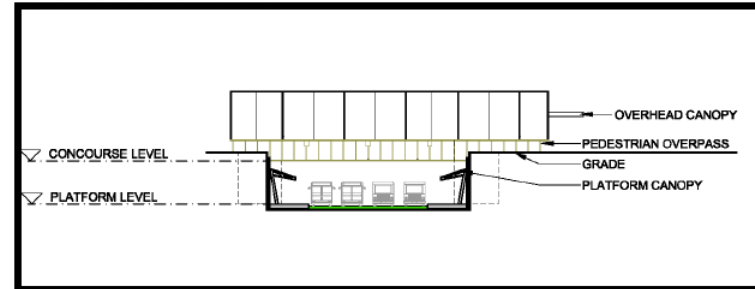
**SITE PLAN**



**PEDESTRIAN CONNECTION TO PLATFORM**



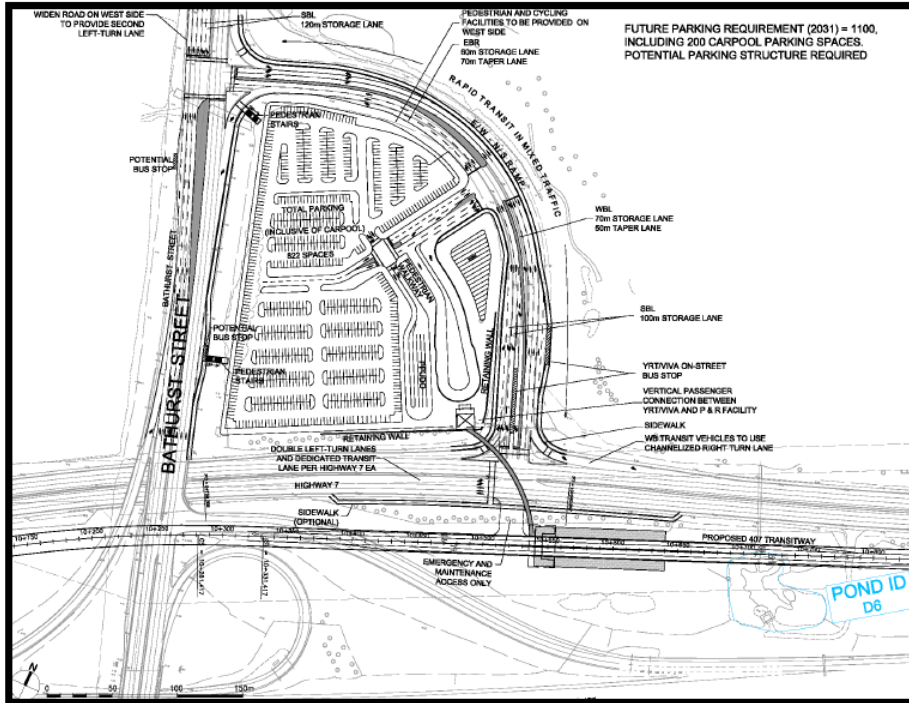
**CROSS-SECTION A-A**



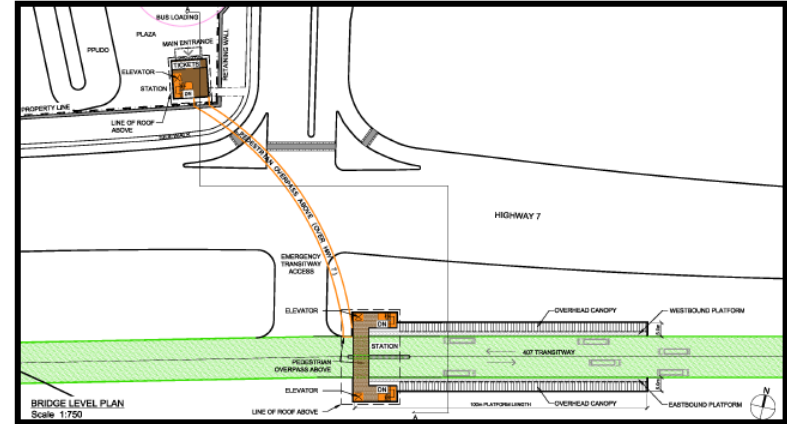
# Bathurst Station - Design Concept



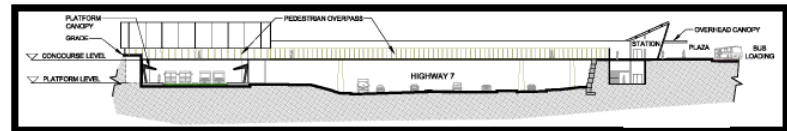
**SITE PLAN**



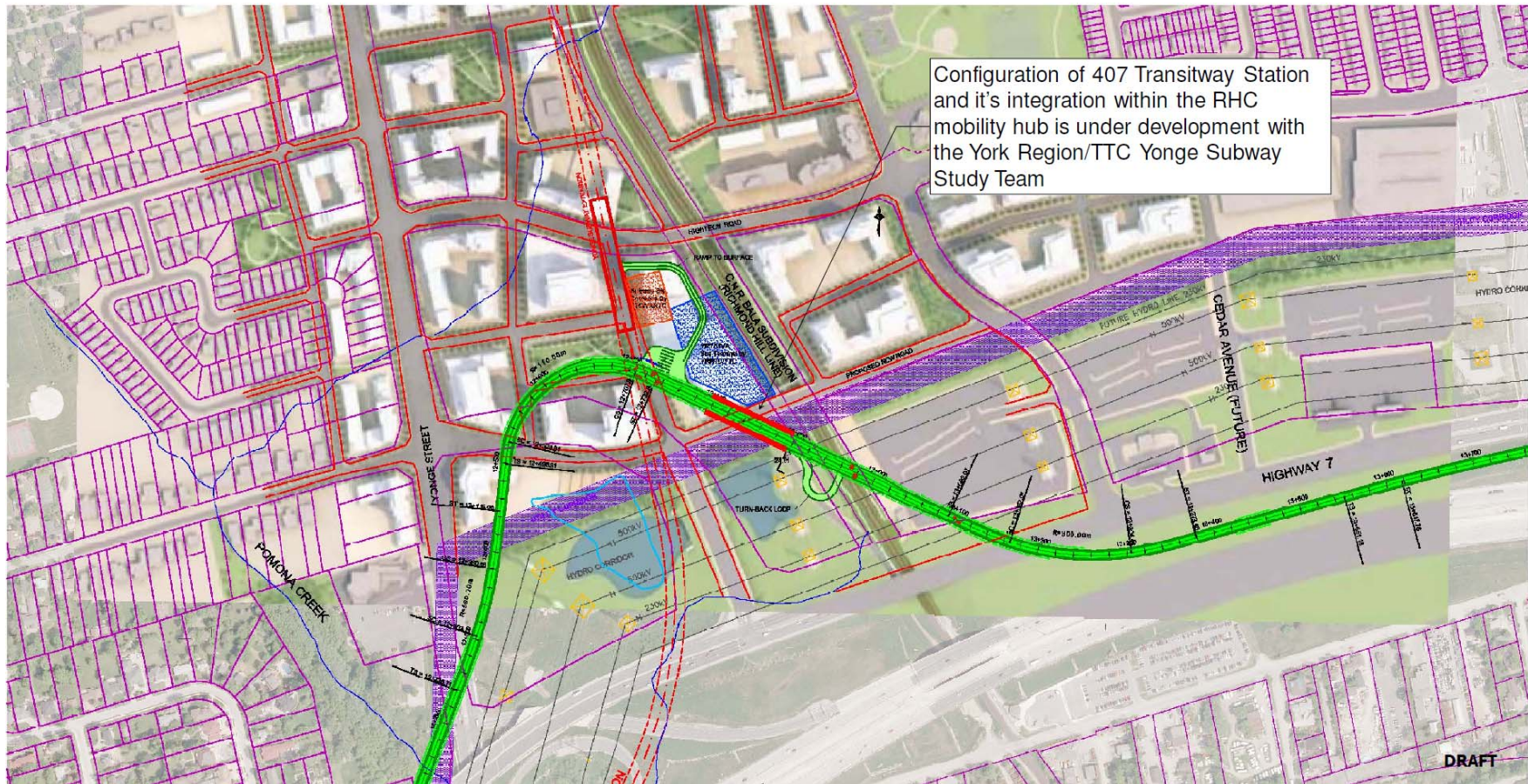
**PEDESTRIAN CONNECTION TO PLATFORM**



**CROSS-SECTION A-A**



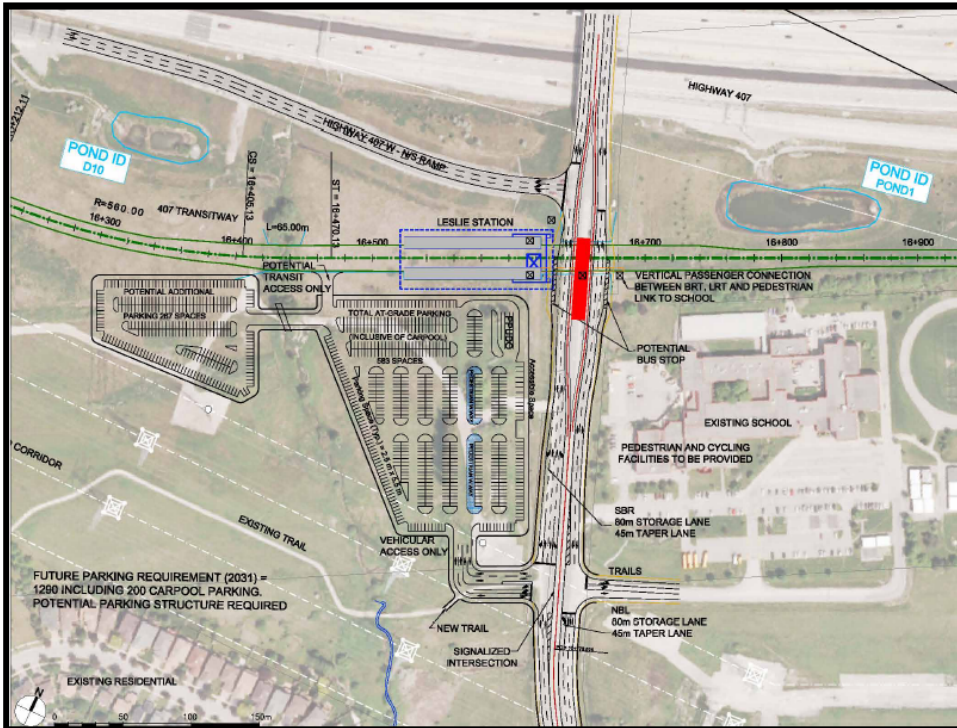
# Yonge /Richmond Hill Centre Station - Design Concept



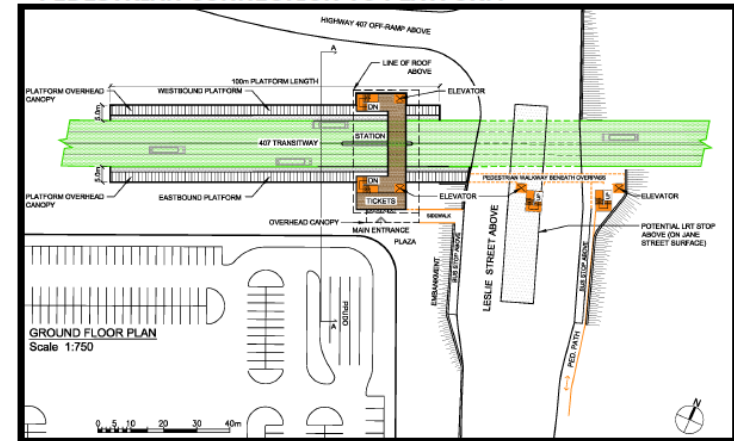
# Leslie Station



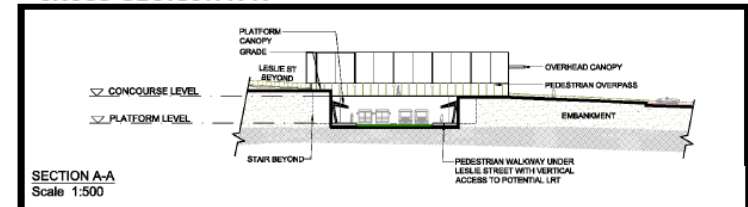
**SITE PLAN**



**PEDESTRIAN CONNECTION TO PLATFORM**



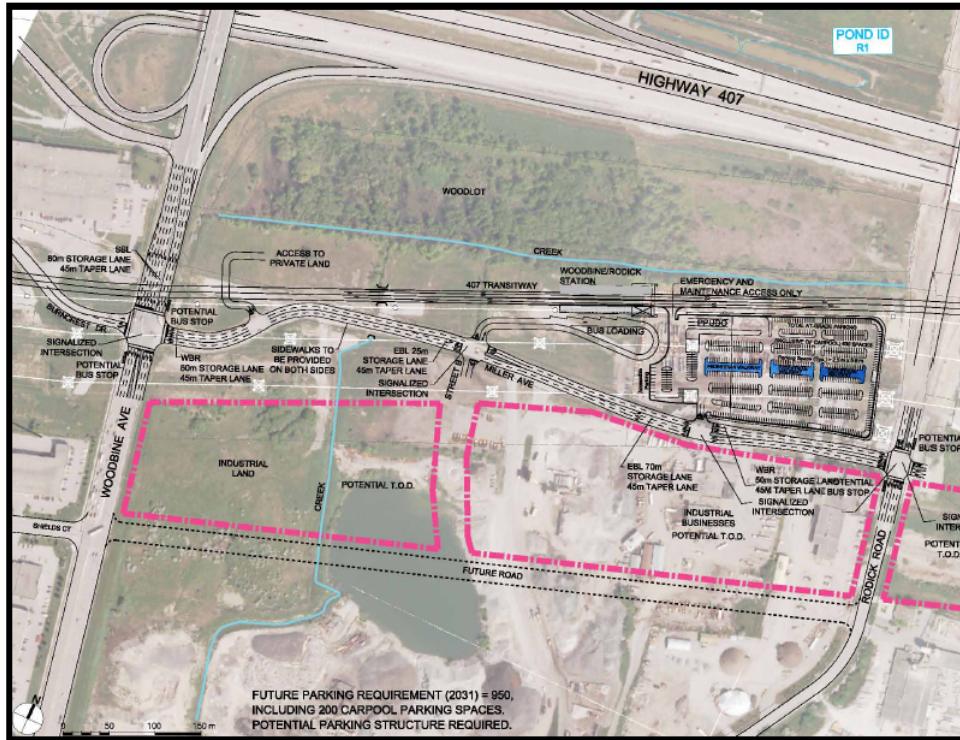
**CROSS-SECTION A-A**



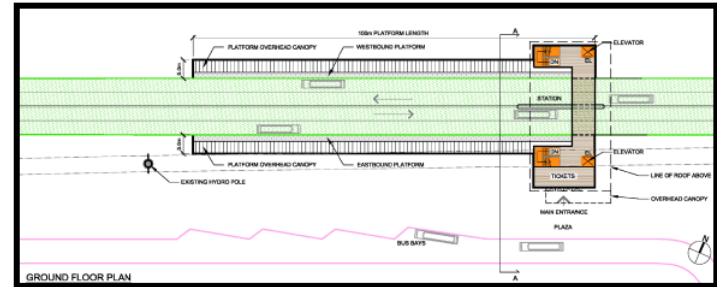
# Woodbine/Rodick Station



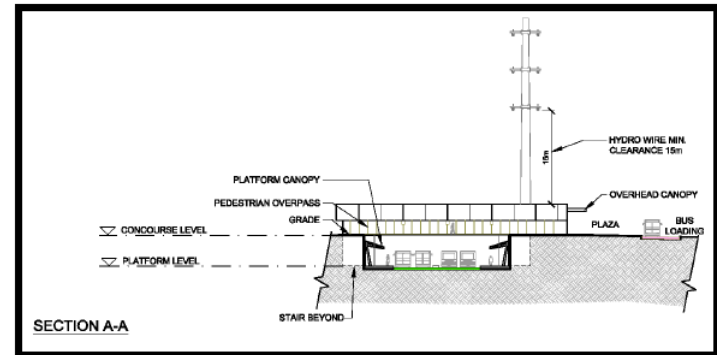
**SITE PLAN**



**PEDESTRIAN CONNECTION TO PLATFORM**



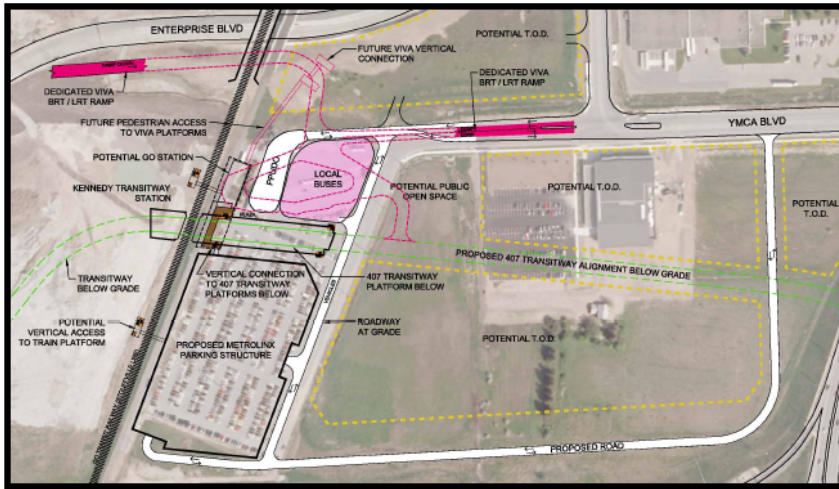
**CROSS-SECTION A-A**



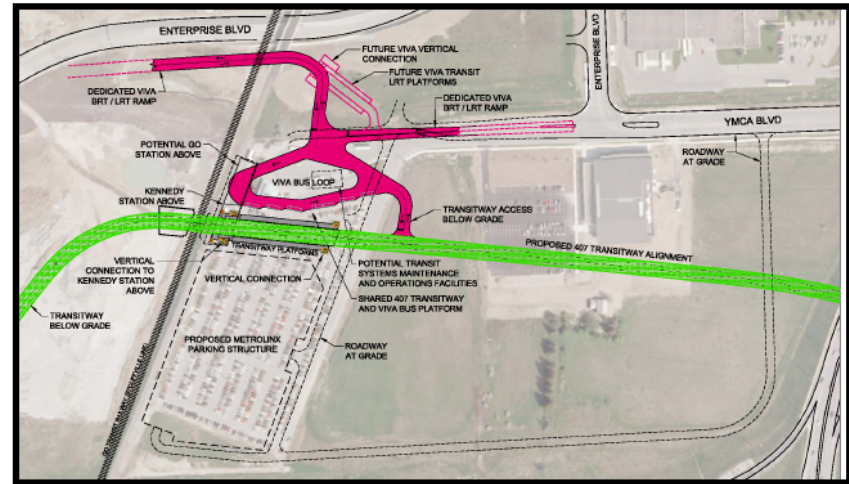
# Markham Centre Station



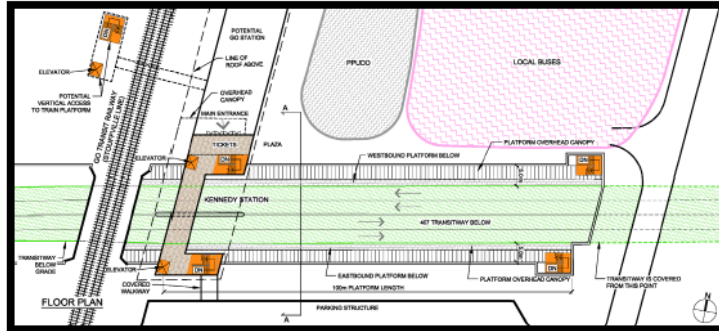
**SITE PLAN – AT GRADE**



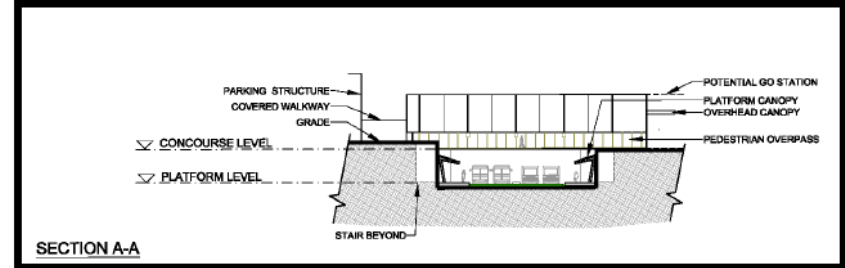
**SITE PLAN – BELOW GRADE**



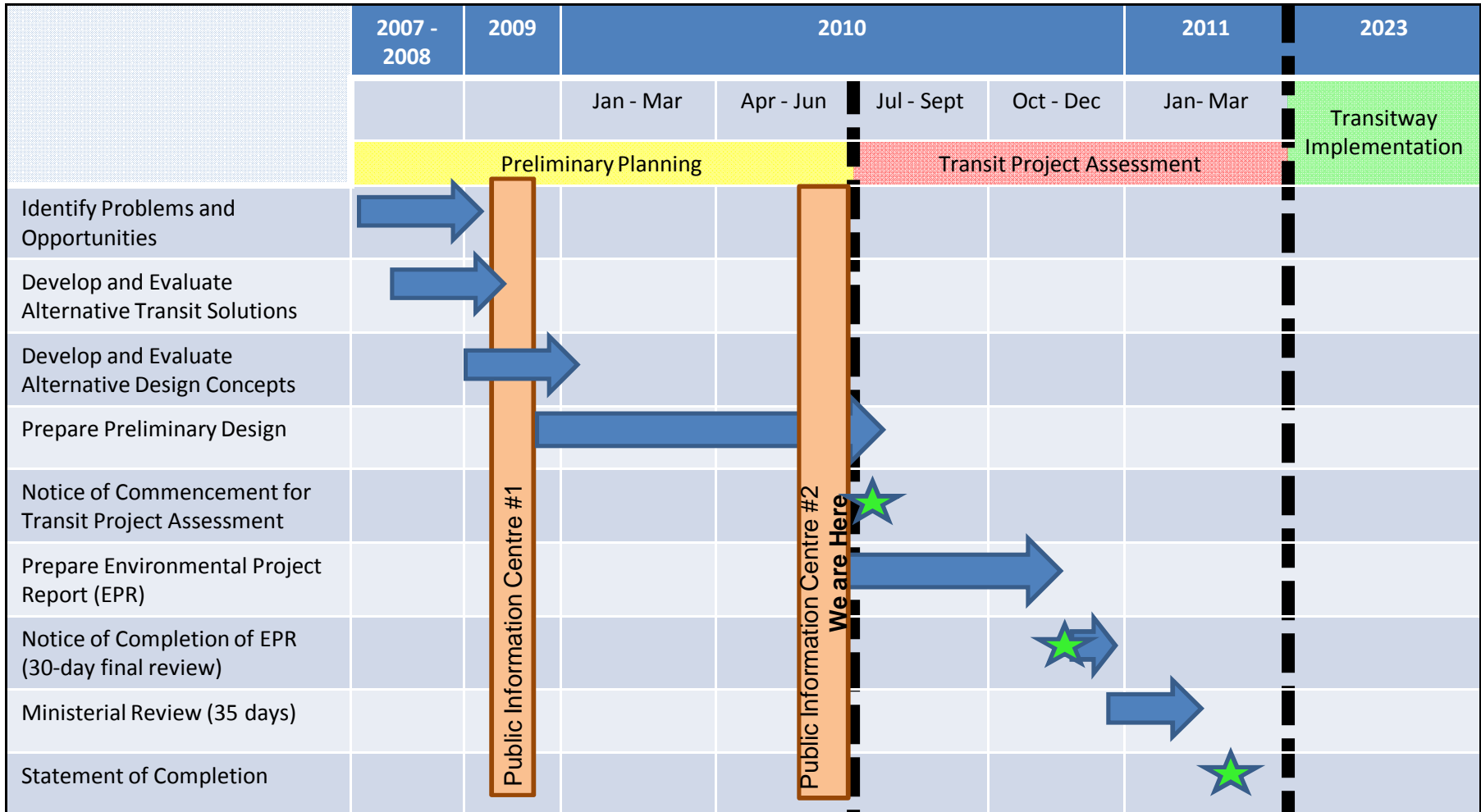
**PEDESTRIAN CONNECTION TO PLATFORM**



**CROSS-SECTION A-A**



# Study Schedule



# Commitments to Future Work



- Consult with the public, property owners and stakeholder agencies (including emergency service providers) during the design of the 407 Transitway.

- Secure necessary permits and approvals for the implementation of the 407 Transitway including a determination under the *Canadian Environmental Assessment Act*.



- Conduct further research and analysis to manage construction issues such as:
  - noise;
  - air emissions;
  - traffic, transit and pedestrian management strategies;
  - construction methods; utility and municipal services relocation;
  - emergency response plans; vegetation restoration, edge management and streetscape plans;
  - etc.

