



INFORMATION REPORT

TO:	Light Rail Transit Sub-Committee
COMMITTEE DATE:	May 2, 2016
SUBJECT/REPORT NO:	Light Rail Transit (LRT) Alignment (PED16121) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Kelly Anderson (905) 546-2424 Ext. 6389 Paul Johnson (905) 546-2424 Ext. 6396
SUBMITTED BY:	Jason Thorne General Manager Planning and Economic Development Department
SIGNATURE:	

Council Direction:

Not applicable.

Information:

The purpose of this Information Report is to provide Council with an update on the Light Rail Transit (LRT) alignment.

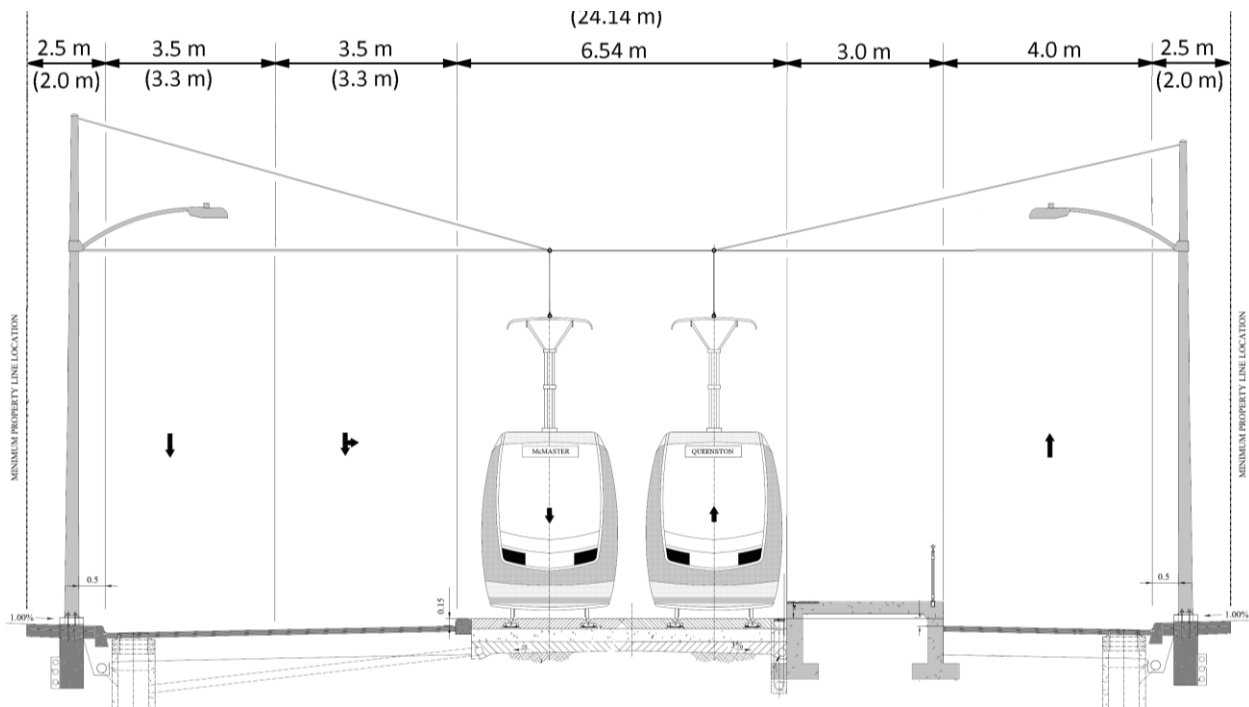
The LRT project team comprised of City of Hamilton and Metrolinx staff has been collaborating for the last several months to develop the alignment of the LRT route. While some important work is still ongoing, the team has reached a point where it can share preliminary LRT alignment details with key stakeholders and the community. More detailed information will be shared as part of Transit Project Assessment Process (TPAP) in September 2016.

The LRT team's overall design philosophy was to implement a rapid, reliable and safe LRT system.

Alignment of LRT on B-line (east-west portion)

LRT on the B-line will run from McMaster University to the Queenston Traffic Circle. It is proposed that the LRT will operate in the centre of the road for most of the route and will be segregated from other traffic with a curbed barrier. This helps ensure a rapid, reliable and safe LRT system. Emergency response vehicles will be able to cross the tracks at any point but regular traffic would only cross the tracks at designated and signalized intersections. As a result, there will be turning restrictions along the route. Vehicles will only be able to turn right in and right out of side streets. Left turns and U-turns will be permitted at signalized intersections.

Along the corridor there would be trains running on two tracks; one running in each direction in the centre of the road. The LRT will be given priority over other traffic at signalized intersections wherever possible. Generally, LRT stops will be on opposite sides of the intersection. This is known as a far side platform. This type of platform allows the LRT to maintain its speed and reliability. The cross section below illustrates how a typical far side stop will look.



With this proposed alignment the one-way portion of King Street would be converted to two-way traffic to accommodate LRT. The focus will be on moving people via transit and providing local vehicular access to properties.

Each end of the LRT route will have an end-of-line terminal to allow for seamless integration with other transit systems.

There are 13 recommended stop locations along the B-line and they are approximately 600-800 metres apart. This stop distance is similar to the B-line express HSR service which helps keep transit moving at a rapid pace.

The following is a summary of each segment of the B-line:

McMaster University to Highway 403

Starting from the west, the LRT route will begin at Main Street and Cootes Drive with two lanes of traffic in each direction, LRT in the centre and bike lanes. In this area of the route, the right-of-way is wide enough to propose the inclusion of bike lanes which

will connect to existing bike lanes on the bridge over Highway 403 and also connect with the existing multi-use path at Cootes Drive between the university and Dundas.

As mentioned above, there will be a transit terminal connecting HSR, GO Transit (bus) and LRT. Staff is currently working closely with McMaster University to develop these plans.

A new LRT-only bridge will be constructed over Highway 403 to transition the LRT from Main Street West across Highway 403 and onto King Street West.

Highway 403 to Wellington Street

The LRT is proposed to run in the centre of the road with one lane of traffic in each direction changing King Street from one-way to two-way traffic flow. At certain points along this section, one of the lanes would be closed to limit property impact. This would occur only in sections where the properties do not currently have direct access from King Street.

Through the International Village, the right-of-way narrows. From John Street to Wellington Street, one lane of eastbound traffic would maintain access to existing driveways and parking areas on the south side of the street and side-running LRT on the north side of the street. Traffic travelling westbound would be required to divert around the area at either Wellington Street (south) or Victoria Avenue (north). There may be opportunities to enhance the streetscape in this area to create a desirable pedestrian-focused space. For example, the street treatment could be similar to Hess Village or King William Street.

There will be loading, stopping and parking impacts so staff is studying other options to accommodate these needs that may include rear alleys and side street access.

Wellington Street to the Queenston Traffic Circle

There would be one lane of traffic in each direction and LRT running in the centre of the road. An end-of-line terminal will be constructed at the Queenston Traffic Circle to integrate with HSR transit which will become the new focus for transfers in east Hamilton and Stoney Creek.

Alignment of LRT on A-line spur (north)

The project team examined four options for the A-line spur including James Street, Bay Street, Caroline Street and John Street. James Street North is the proposed route as it is the shortest, most direct route to the West Harbour GO Station and potentially the waterfront. There also is better connectivity to the B-line (transit hub at King and James Streets) and this route would serve key destinations along James Street North. LRT on the A-line spur would not be segregated from traffic like it is on the B-line. It would be a shared running system, which means that cars can drive over the tracks and will share the lane with the LRT. It will be similar to how a streetcar operates. There would be very limited parking impacts on James Street. Only a few existing parking spaces would

be removed to accommodate the LRT platforms. The vehicles would have the same look and feel as on the B-line despite the difference in running style. Passengers would have to transfer from the B-line to the A-line.

The scope of the provincial funding includes LRT running from downtown to the new West Harbour GO Station but, if the budget permits, the route will be extended to Guise Street to service the West Harbour as part of waterfront development plans. There are five proposed stop locations along the A-line spur.

Route Map



Ongoing Studies

The project team is continuing to refine the design, work on traffic impact studies and modelling, ridership studies and modelling and streetscape work. This work is expected to be completed in the summer and will be presented as part of the Transit Project Assessment Process (TPAP) in September.

Transit Project Assessment Process (TPAP)

A TPAP Environmental Project Report was filed for this project in 2012 but since the Province funded a slightly modified project the City and Metrolinx are required to file a TPAP Addendum to the original report. This process will begin in September 2016. Public meetings are proposed for September 2016 and January 2017 and the TPAP Addendum Report is expected to be filed in spring 2017.

Next Steps

The project team will begin early engagement and outreach with the community and property owners along the corridor in May. A report to the LRT Subcommittee is forthcoming in August 2016 to share more detailed information before the TPAP Addendum public consultation process begins in September.