



Hamilton

**Hamilton Light Rail Transit (LRT) Project  
Design Update  
LRT Sub-Committee  
June 2, 2023**

# Agenda

## Design Update

- Project Overview
- City Policy Changes
- City Design Themes being Evaluated
- Other Design Considerations



# Project Overview

- 14-km corridor, 17 stops
- 600-800m between stops
- Operations, Maintenance and Storage Facility at Chatham and Frid Street
- Capital funding from Federal (\$1.7B) and Provincial (\$1.7B) governments





# Project Overview – LRT System Key Components



Light Rail Vehicles (LRVs)



Overhead Catenary System (OCS)



Guideway/Tracks



Operations, Maintenance and Storage Facility (OMSF)



Integrated Network



Electrical Substations

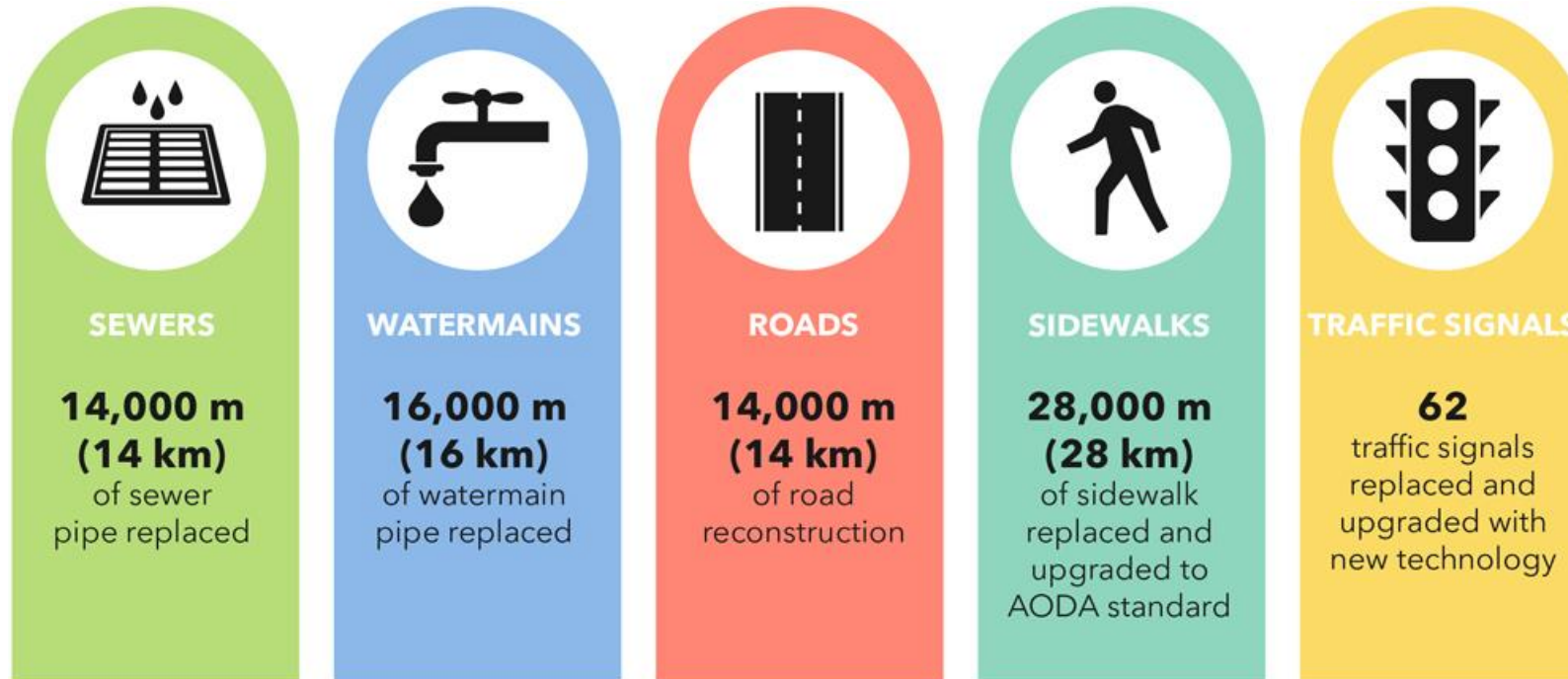


LRT Stops



Streetscape

# Project Overview – Infrastructure Benefits



Note: Information is current as of December 2019 and may be subject to change.

# City Policy Changes

## Plans and Policies with Direct Impact

Plan or Policy	Implications for LRT
Complete Streets Design Manual (2022)	<ul style="list-style-type: none"> <li>Includes policies and guidelines which direct how streets are designed to facilitate Complete Streets</li> <li>Includes new guidelines for lane widths, curb radii, design speeds, etc.</li> </ul>
Truck Route Master Plan (2022)	<ul style="list-style-type: none"> <li>Removes selected N-S routes crossing King Street</li> <li>Implements max. four axle restriction for most downtown routes, plus King Street East</li> </ul>
Main Street Conversion Project (2022)	<ul style="list-style-type: none"> <li>Council approval to convert Main Street from one-way to two-way operations</li> </ul>
HSR re-Envision Study (on-going)	<ul style="list-style-type: none"> <li>Identifies changes to local transit services including connections to LRT stops</li> </ul>
City-wide Transportation Master Plan (2018)	<ul style="list-style-type: none"> <li>Included updated Cycling Master Plan</li> </ul>
Gore Standard: Hardscape Design Guidelines (2018)	<ul style="list-style-type: none"> <li>Gore Pedestrianization Initiative hardscape detailing</li> </ul>

# City Policy Changes

## Other Plans and Policies

Plan or Policy	Implications for LRT
Hamilton Vision Zero Strategy (2019)	<ul style="list-style-type: none"> <li>Council approved policy to adopt Safe Systems and Vision Zero approach to design</li> </ul>
Urban Forest Strategy (ongoing)	<ul style="list-style-type: none"> <li>Includes actions that will contribute to better forest planning and management and support Hamilton's urban forest strategy</li> </ul>
Hamilton's Climate Action Strategy	<ul style="list-style-type: none"> <li>Community Energy &amp; Emissions Plan – includes actions to increase energy efficiency, use of renewable energy, sustainable transportation and green building practices among others</li> <li>Climate Change Impact Adaptation Plan – includes actions like low impact development to increase community resilience to extreme weather</li> </ul>
Parking Master Plan (2021)	<ul style="list-style-type: none"> <li>Provides direction for public off-street and on-street parking, technology, and curbside management</li> </ul>
Downtown Entertainment Precinct Plan (2021)	<ul style="list-style-type: none"> <li>Land transaction to facilitate redevelopment of major downtown venues including Hamilton Convention Centre and First Ontario Place</li> </ul>
Ontario Traffic Manual (OTM) Book 18	<ul style="list-style-type: none"> <li>Provincial manual that guides design of cycling facilities</li> </ul>
Snow Removal	<ul style="list-style-type: none"> <li>Council has directed to snowplow along the transit corridors</li> </ul>

# City Design Themes being Evaluated

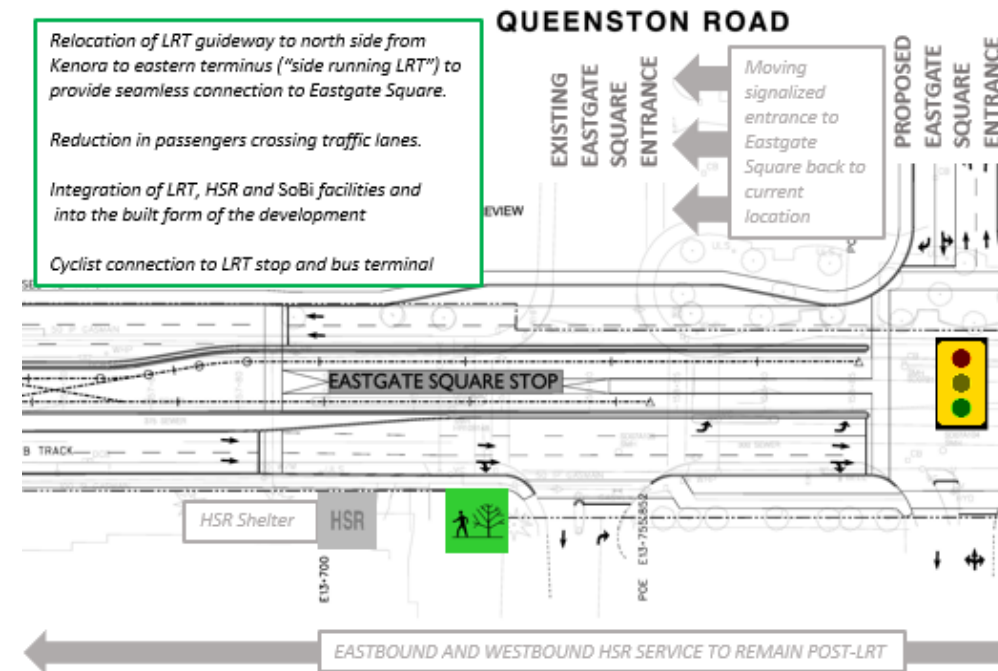
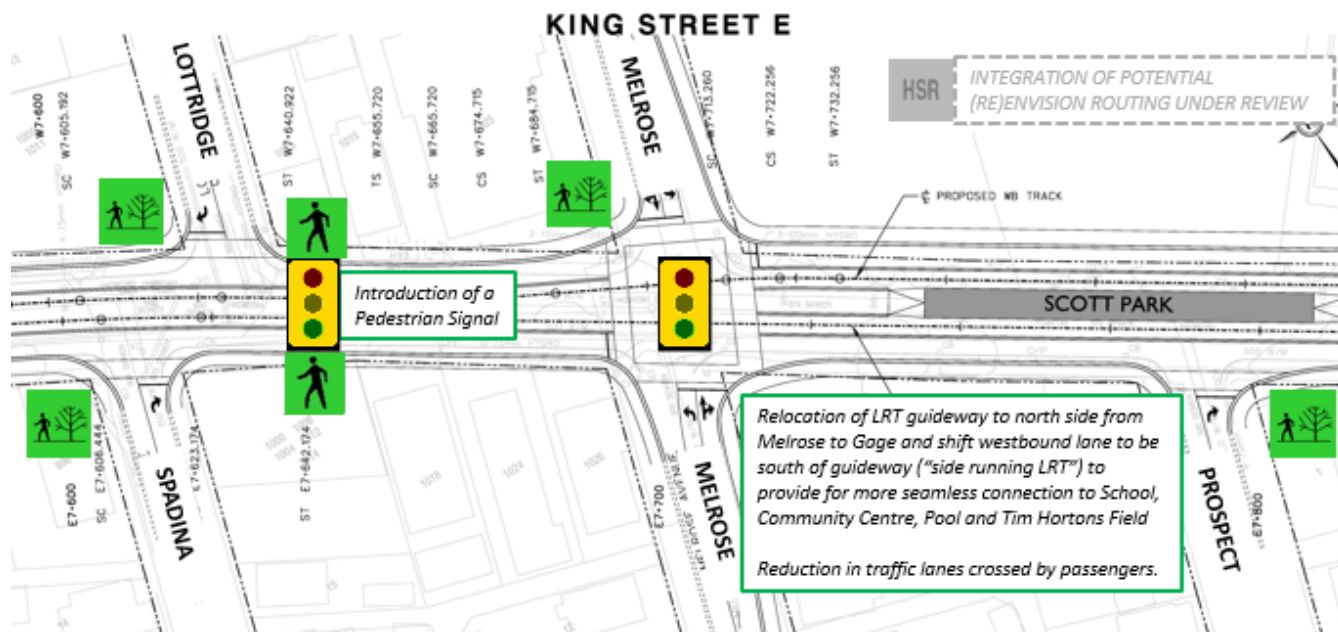
City and Metrolinx are working together to update the concept design based on the following design themes:

- Pedestrian Environment
- Cycling Facilities and Connectivity
- Transit Connectivity
- Streetscape Elements
- Traffic Network
- Infrastructure Opportunities



# City Design Themes being Evaluated

## Pedestrian Environment Sample Concepts



See Sheet 15 of Appendix "A"

Introduction of Pedestrian Signal at existing school crossing

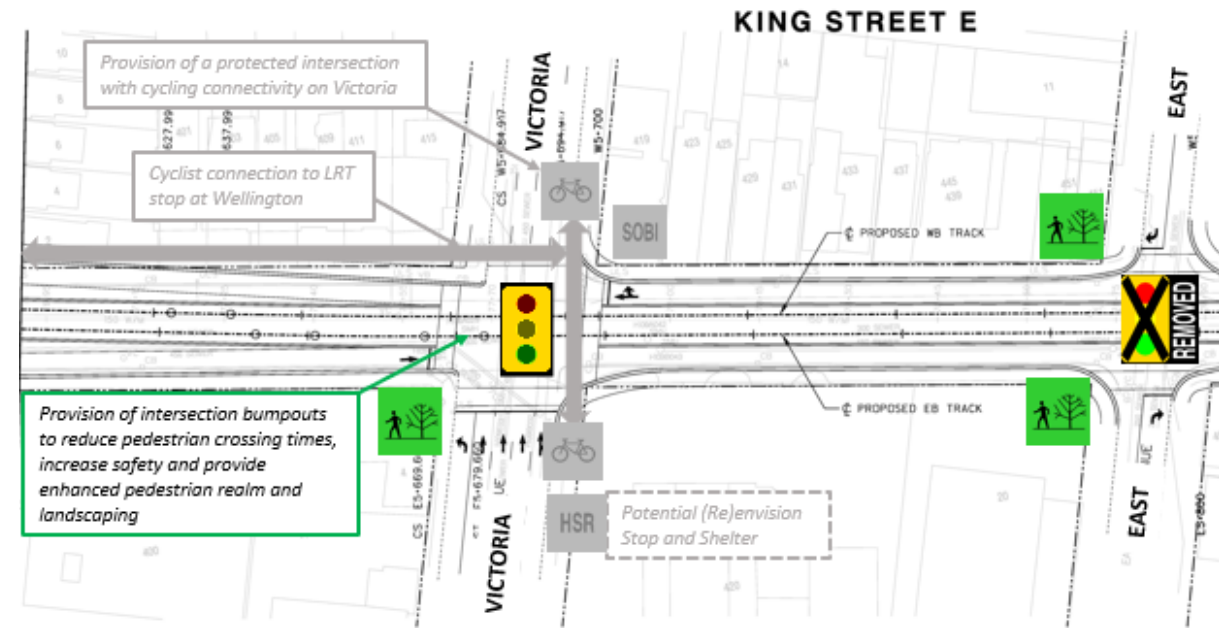
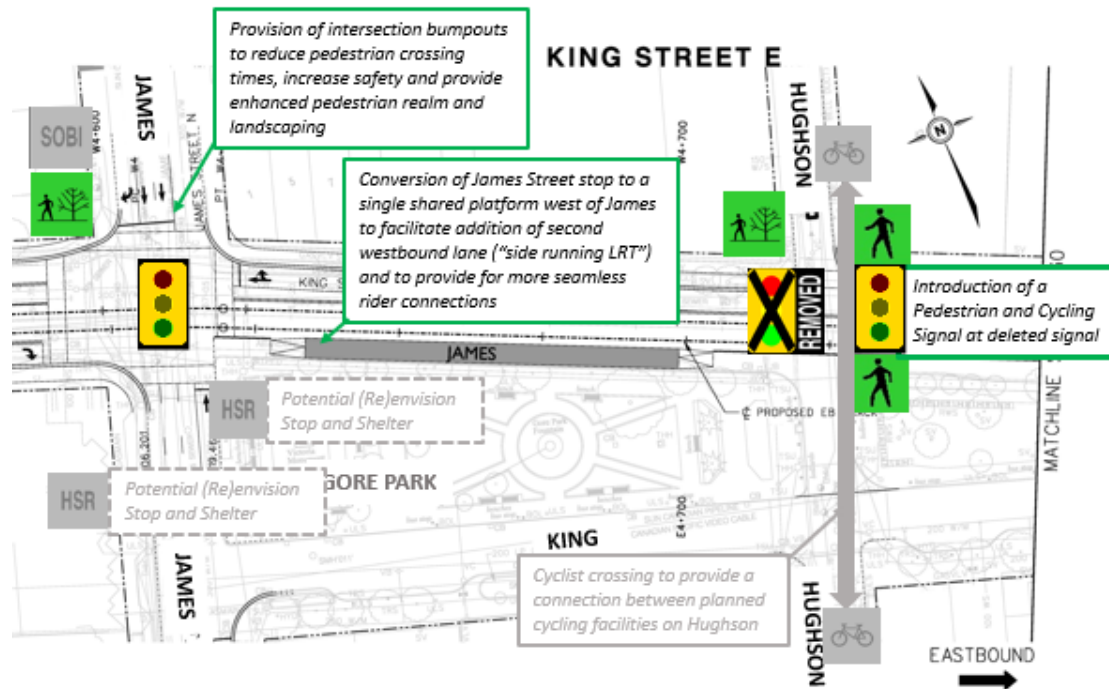
LRT shift to side-running to eliminate pedestrians crossing westbound traffic lane

See Sheet 26 of Appendix "A"

LRT shift to side-running to eliminate pedestrians crossing westbound traffic lanes

# City Design Themes being Evaluated

## Pedestrian Environment Sample Concepts - continued



See Sheet 10 of Appendix "A"

Introduction of Pedestrian Signal at the deleted vehicular signal at Hughson

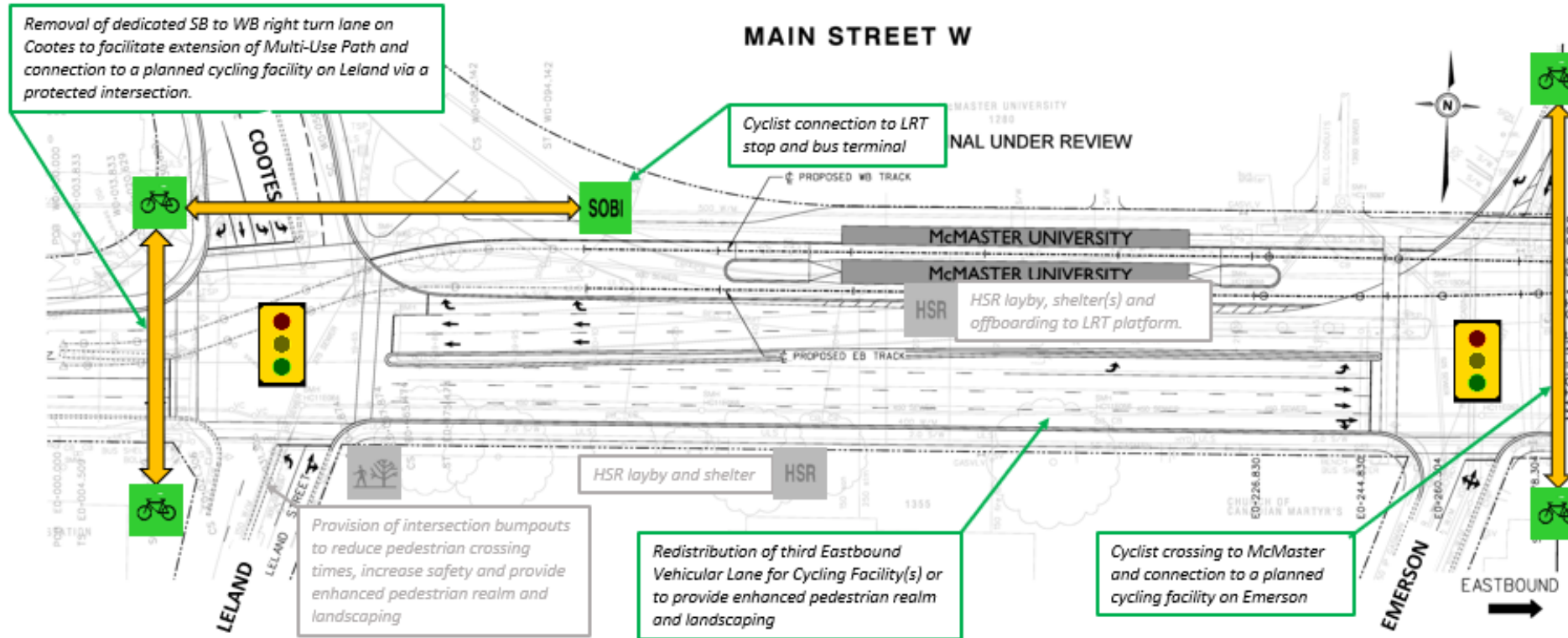
Incorporate bump-outs at James to increase pedestrian safety

See Sheet 12 of Appendix "A"

Introduction of bump-outs and integration of pedestrian, cycling and HSR

# City Design Themes being Evaluated

## Cycling Facilities and Connectivity Sample Concepts



See Sheet 2 of Appendix “A”

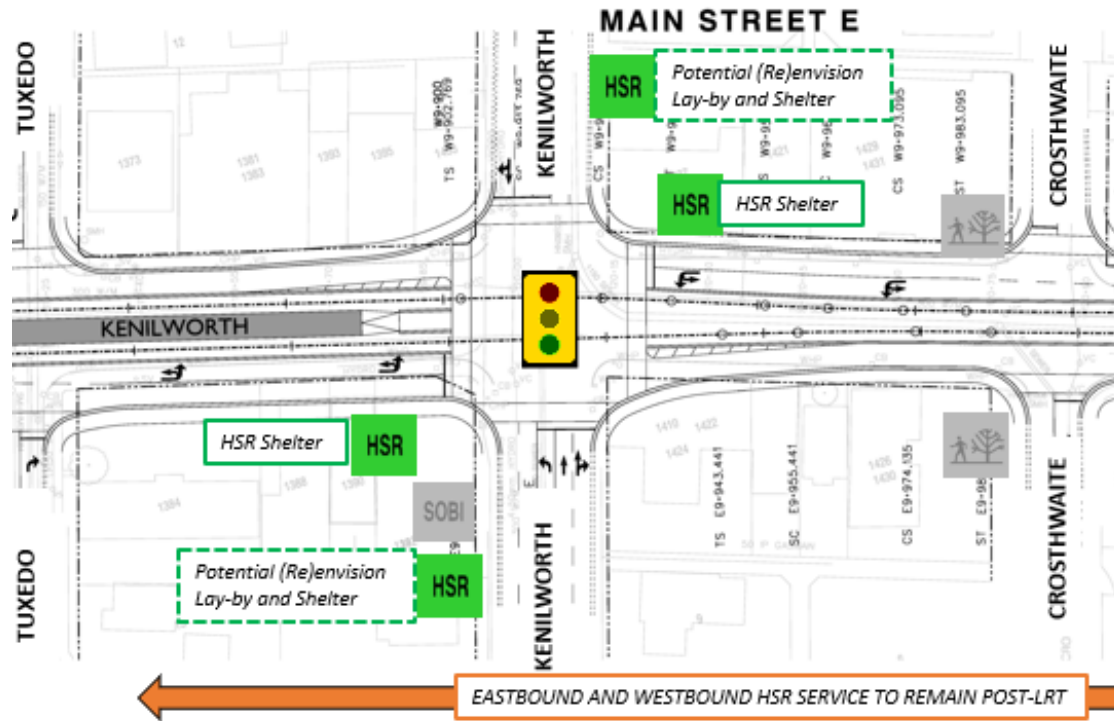
Removal of third eastbound vehicular lane and provision of eastbound and westbound cycling facilities

Extension of existing multi-use path on Cootes to Main, connections to a planned cycling facilities on Leland and Cootes

Connectivity to LRT stop and SoBi

# City Design Themes being Evaluated

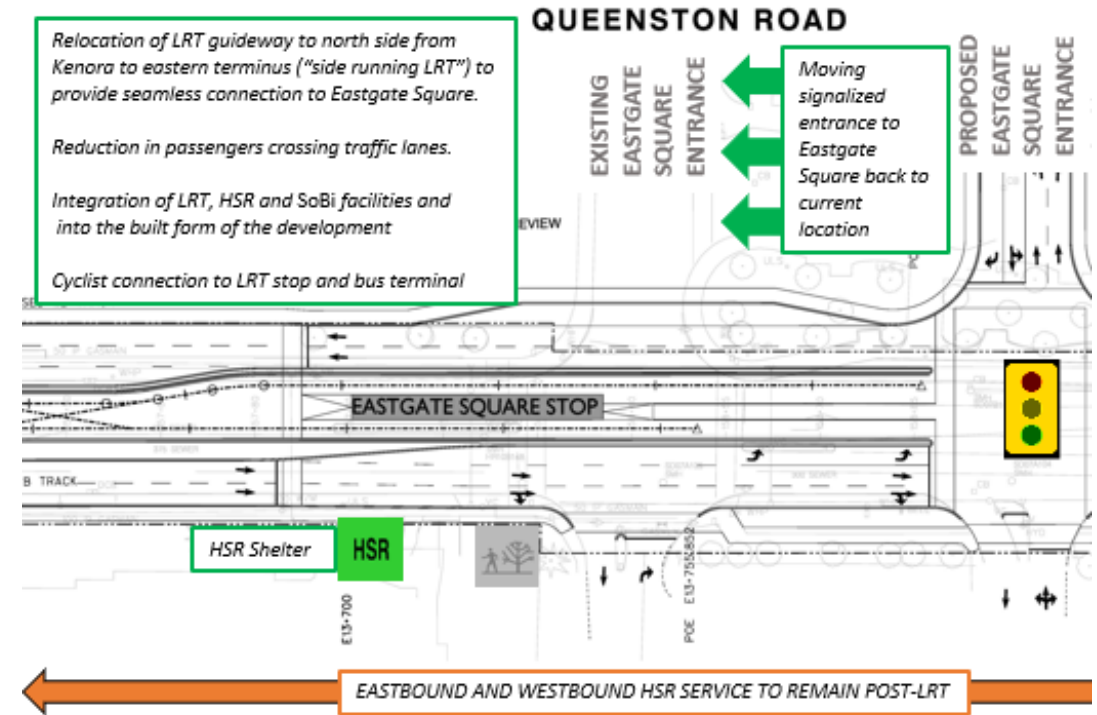
## Transit Connectivity Sample Concepts



See Sheet 19 of Appendix "A"

Provision of shelters and/or laybys and integration of LRT with:

- existing HSR, (Re)envision and BLAST network (T-line) routing



See Sheet 26 of Appendix "A"

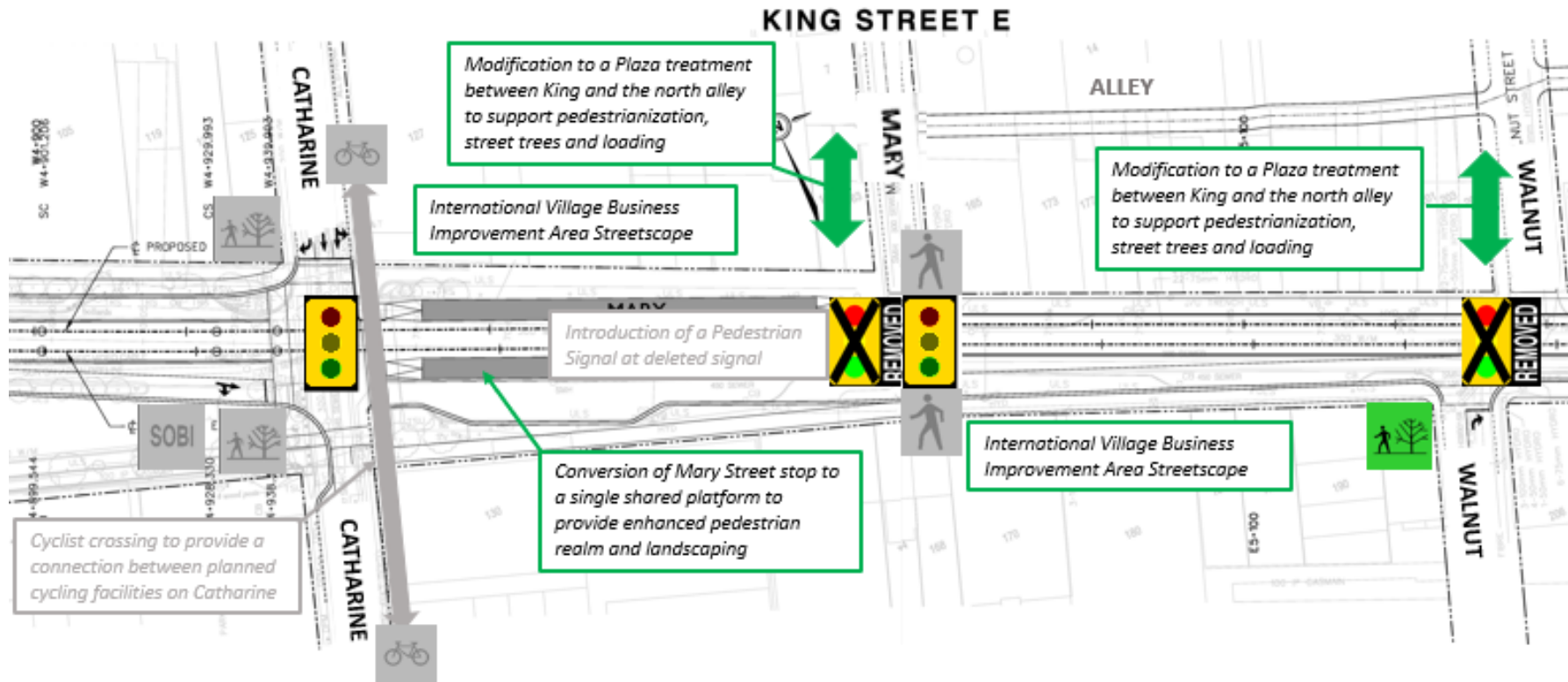
Integration of LRT and provision of shelters and/or laybys:

- existing HSR, (Re)envision and BLAST network (S-line) routing
- potential site redevelopment



# City Design Themes being Evaluated

## Streetscape Opportunities Sample Concepts



See Sheet 10 and 11 of Appendix "A"

International Village Business Improvement Area Streetscape

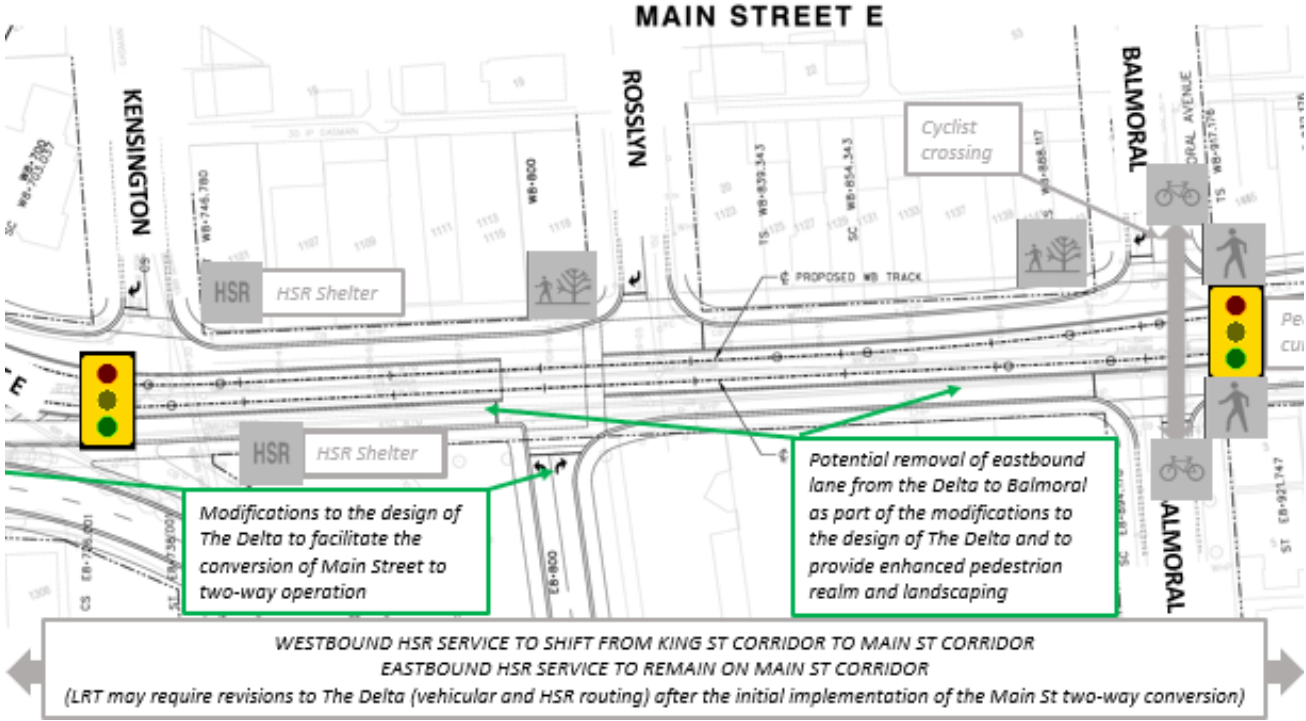
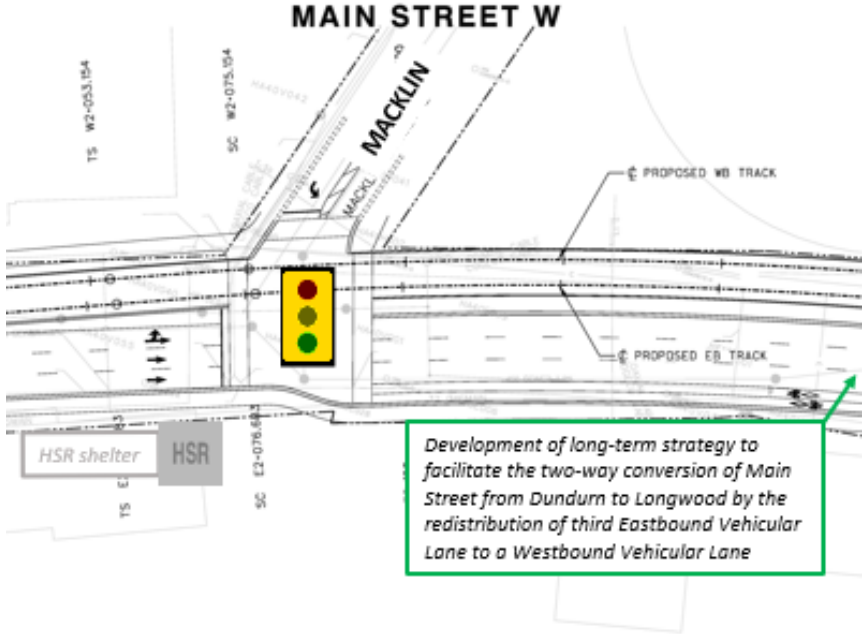
Modifications to road segments between King Street and the north alley to support pedestrianization, greening and loading

Conversion of Mary Street stop to a single shared platform to increase pedestrianization of area and streetscape opportunities.



# City Design Themes being Evaluated

## Traffic Network Sample Concepts



See Sheets 5 and 17 of Appendix “A”

Addition of a westbound lane within the limits of the LRT project on Main Street

Development of strategy to facilitate the two-way conversion of Main Street from Dundurn to Longwood

Modifications to the design of The Delta and LRT corridor to facilitate the conversion of Main Street to two-way operation through the Delta

# Other Design Considerations

- Other design considerations are currently being investigated with Metrolinx. This includes addressing Emergency Services and Accessibility requirements, consideration of Public Art and Digital Infrastructure requirements, and coordinating the LRT design with adjacent developments.



Hamilton

THANK YOU