ATTACHMENT 3

NEW SMARTTRACK/GO RER STATIONS – TECHNICAL & PLANNING UPDATE

1. Introduction

This attachment provides an update to EX29.1 SmartTrack Project Update and Next Steps (see Attachment 1) adopted by City Council on December 5, 2017. Included in this document are updates on the current design for each new SmartTrack and GO RER station in Toronto, preliminary environmental impact and mitigation measures, and a summary of public and stakeholder input. The new SmartTrack/GO RER stations are shown in Figure 1.

Figure 1. Proposed New SmartTrack/GO RER Stations in Toronto

2. Public and Stakeholder Consultation

Public and stakeholder consultation meetings were held in February and March 2018, as outlined in Table 1. Approximately 400 people participated in this round of consultations, which focused on preliminary findings from the environmental studies conducted as part of the Transit Project Assessment Process (TPAP) as well as updated station designs.

Table 1. Consultation Overview (Round 2)

Date	Station Focus	Location
Stakeholder Advisory Group (SAG) Meetings		
February 20, 2018	Finch-Kennedy and Lawrence-Kennedy Stations	Scarborough Civic Centre
February 22, 2018	St. Clair-Old Weston Station	Joseph J. Piccininni Community Centre
February 26, 2018	Bloor-Lansdowne, Spadina-Front, and King-Liberty Stations	Gladstone Hotel
February 28, 2018	All proposed SmartTrack/GO RER Stations in Toronto	St. Andrew's Church
March 1, 2018	Gerrard-Carlaw and East Harbour Stations	Morse Street Junior Public School
Public Information Centre (PIC) Meetings		
March 1, 2018	Bloor-Lansdowne, Spadina-Front, St. Clair-Old Weston, and King-Liberty Stations	Lithuanian House
March 6, 2018	Finch-Kennedy and Lawrence-Kennedy Stations	Scarborough Civic Centre
March 21, 2018	Gerrard-Carlaw and East Harbour Stations*	Queen Alexandra Middle School
Additional Meetings		
March 19, 2018	King-Liberty Station, set up by Councillor Layton**	Liberty Grace Church

* Consultation on the East Harbour SmartTrack Station is being coordinated with consultation on the Unilever Precinct Planning Study and the First Gulf development applications. The March 21, 2018 PIC was held in conjunction with the Unilever Precinct Planning Study PIC, hosted in collaboration with First Gulf.

** The March 19, 2018 town hall also included information on Exhibition GO Station and the Waterfront Transit Reset project.

The TPAP assesses the potential environmental effects of each of the new stations, and proposes mitigation and monitoring measures. The TPAP Notice of Commencement was issued on March 29, 2018 with the City of Toronto and Metrolinx as co-proponents, as directed by City Council in December 2017. The TPAP is required under Ontario Regulation 231/08.

Efforts have also been made to coordinate with other consultations being held on various related local projects, such as Rail Deck Park, St. Clair Transportation Master Plan, and the Unilever Precinct Planning Study.

A summary of key themes from this round of consultation is provided below:

- There was general support for the new stations.
- Concerns were expressed about noise and vibration during station construction and future rail operation. Participants pointed out that strategies to mitigate construction impacts, including noise and vibration, are important.
- There were concerns raised about the potential impacts on surrounding businesses, community services and amenities, and residents during the construction of the new stations.
- Participants requested that communications about construction, including timelines and potential impacts, be prioritized.
- There were concerns about possible air quality impacts if service were to increase before electrification is complete.
- Participants acknowledged that there will be opportunities for new developments and increased density around station locations, and in some areas in particular, there will be transformative change.
- It was requested that new stations integrate with existing and planned multi-use paths to contribute to the overall pedestrian and cycling network.
- Participants raised questions about estimated ridership for some of the stations, and the assumptions used to obtain the ridership figure.
- Participants expressed concerns about increased traffic congestion.
- Participants requested more information on the future SmartTrack fare structure. In particular, they wished to know how much it would cost riders, and how the final fare figure would impact estimated ridership numbers.
- There were concerns raised about tree removal and a desire to see them replaced.

3. Transit-Supportive Land Uses

City Planning continues to explore station area planning needs and opportunities to help ensure that the station areas mature in a way that is supportive of city building objectives and the significant public investments being made in rapid transit improvements. Discussions are underway to identify priority locations for potential precinct planning studies and public realm improvements, as well as transit supportive development and strategic property acquisition. City Planning, CreateTO and Real

Estate Services are working with Metrolinx to develop strategies for joint development, partnerships, and strategic property acquisition to support city-building objectives.

It is important that redevelopment of lands around rapid transit stations address the relationship to the station and reflect uses and densities that are appropriate from a policy perspective, while respecting the local context.

A precinct planning study for the Gerrard-Carlaw SmartTrack Station is being initiated. At its meeting on January 31 2018, City Council directed staff to prepare a draft terms of reference for a Gerrard-Carlaw Station area planning study to achieve transit supportive development in the context of neighbouring low-rise residential and broader City-building objectives. A Q2 2018 report to the Toronto and East York Community Council is being prepared.

It is also important to note that the new provincial Growth Plan for the Greater Golden Horseshoe includes policies on Major Transit Station Areas (MTSAs). In the Toronto context, these are the areas around any existing or planned higher order transit station, along priority transit corridors, or the area around a major bus depot in an urban core. MTSAs generally are defined as the area within an approximate 500-metre radius of a transit station, representing about a 10-minute walk. City Planning is currently developing a Toronto-specific approach to respond to the Growth Plan.

4. Station Design Update and Preliminary Environmental Findings

4.1 St. Clair-Old Weston SmartTrack Station

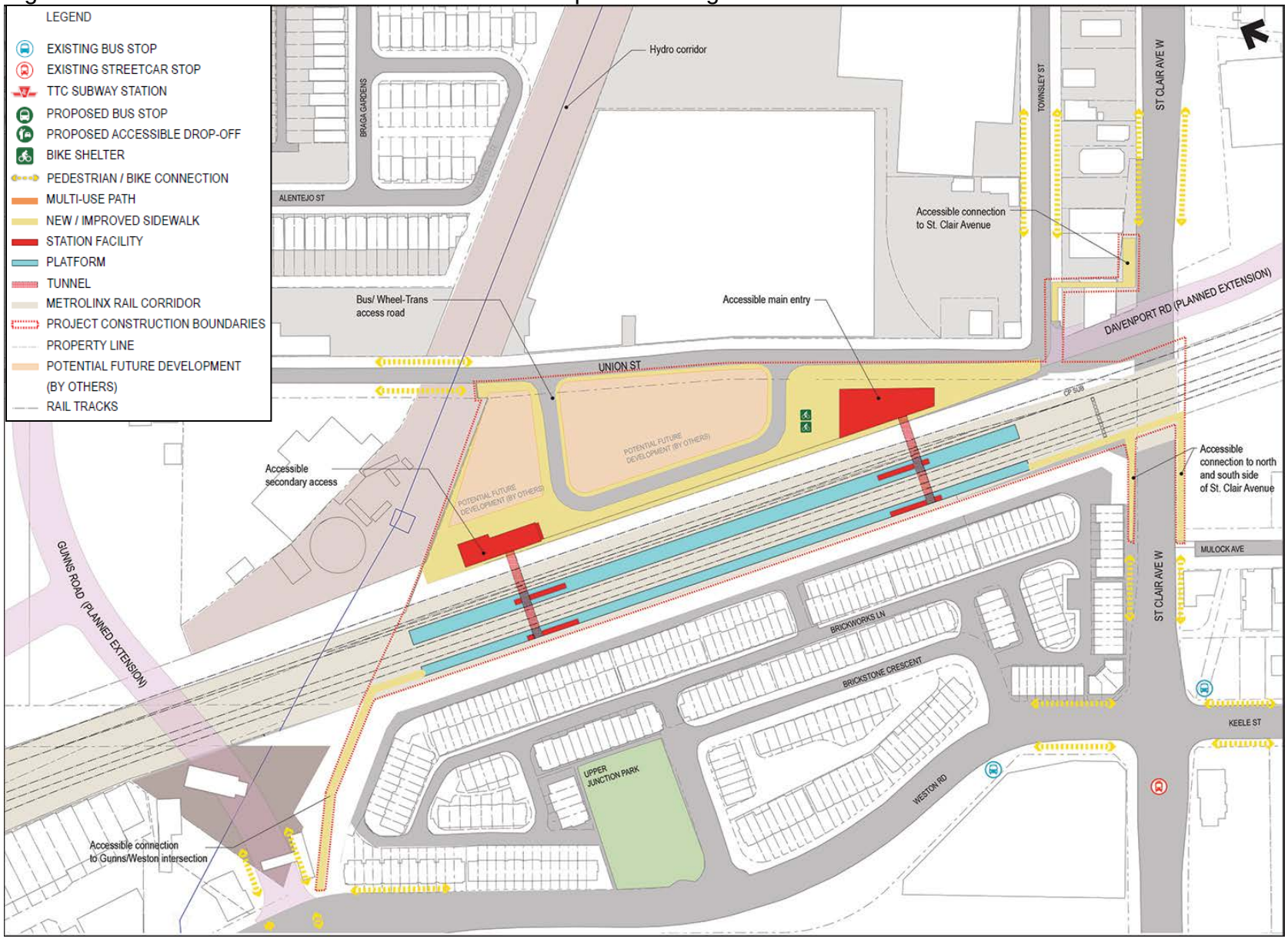
The current design of the St. Clair-Old Weston SmartTrack Station is shown in Figure 2. There have been no significant updates to the design of this station since the previous report to City Council.

Design Refinements Still Underway

Design is still underway and may be subject to further refinements prior to procurement, including the following:

- This station will require a well-designed, high-quality entrance at St. Clair Avenue West for passengers transferring from streetcars and buses, as well as access

Figure 2. St. Clair-Old Weston SmartTrack Station Updated Design



from the north. Given the location of the platform and the significant grade difference, entrances are set back from St. Clair Avenue West and streetcar stops. The station must find creative ways to establish a clear front door and high visibility onto St. Clair Avenue.
- Station design is being coordinated with the St. Clair Transportation Master Plan (TMP).
- Multi-use connections to the future Lavender Creek cycle path are being explored.
- Efforts are underway to advance a north-west extension of the West Toronto Railpath as part of the station design/TMP work.

Preliminary Environmental Findings

a) Natural Environment

Potential effects:
- Potential temporary/indirect effects to Lavender Creek – erosion and downstream transport of sediment, entry of debris, equipment leaks/spills.
- Minimal effects to wildlife – no critical habitats; common, disturbance tolerant species.
- Potential disturbance/destruction of nests of migratory birds; limited potential for harm to four avian species at risk.
- Removal of ~240 trees of any size.

Mitigation measures:
- Implement an Erosion and Sediment Control (ESC) Plan.
- Schedule construction outside of the overall bird nesting season of April 1 to August 31; where not possible – nest surveys to be completed.
- Adhere to relevant provincial standards for clearing and grubbing, site preparation and tree removal.
- Compensate in accordance with Metrolinx Vegetation Compensation Protocol.
- Meet requirements of the *Endangered Species Act, 2007*.
- Control activity to prevent entry to watercourses of petroleum products, debris, or other potential contaminants/deleterious substances (e.g., conduct activities away from watercourses).
- Complete Arborist Report in detailed design.
- Implement tree protection barriers.

b) Socio-Economic and Land Use

Potential effects:
- Temporary nuisance effects during construction (e.g., air quality, noise and vibration).
- Temporary road/lane closures and access restrictions during construction; delays for traffic, pedestrians and cyclists.

- Temporary use of/access to adjacent lands during construction.
- Temporary visual effects resulting from construction activities (e.g., stockpiling, storage/laydown sites).
- Property requirements.
- Improved multi-modal connectivity and public realm.

Mitigation measures:

- Notify property owners and local residents about construction activities.
- Develop and implement the following plans: Traffic Control and Management Plan, Air Quality Management Plan, Noise and Vibration Control Plan, Vegetation Compensation Protocol.
- Provide alternative access and signage.
- Confirm potential access/easement and property requirements and consult with property owners.
- Visual screening of construction site to extent possible.
- Develop aesthetically pleasing design in conjunction with City and Metrolinx Design Review Panel.
- Crime Prevention Through Environmental Design (CPTED) principles will be applied to minimize areas with reduced visibility.
- Opportunities for public realm improvements will be explored.

c) Archaeology and Cultural Heritage

Potential effects:

- Potential for recovery of archaeological resources based on proximity to Lavender Creek and historic transportation routes.
- The existing bridge noted as having cultural heritage value or interest.

Mitigation measures:

- Conduct Stage 2 Archaeological Assessment (AA) per recommendations of Stage 1 AA prior to construction.
- Opportunities to reflect cultural heritage value/interest will be explored further during design of the new bridge as identified in the St. Clair Transportation Master Plan.

d) Transportation

- In order to reduce potential traffic impacts, it is recommended the station focus on serving transferring passengers from surface transit routes, pedestrians and cyclists.
- Include direct bus connections, multiple pedestrian access points, and connections to cycling facilities.
- Limited traffic impacts are anticipated.

e) Noise and Vibration

Potential effects:

- Nighttime construction sound levels may exceed Federal Transit Administration (FTA) criterion at nearby residences.
- Sound levels during operation are expected to be similar to existing sound levels.
- No anticipated vibration effects.

Mitigation measures:

- A Noise and Vibration Control Plan will be developed prior to construction.
- Complete a detailed noise and vibration assessment once specifics of construction equipment are finalized.
- Construction to be planned to minimize the number of nights where noisy nighttime construction activities may be required.
- Keep construction equipment in good repair.

f) Air Quality

Concentrations of selected contaminants predicted to be below target levels (provincial and federal) at nearby residences.

Potential effects:

- Emissions from engines of construction equipment, dust emissions from stockpiles, loading/unloading activities and transportation of soils during construction.
- Emissions from buses using the station during operation.

Mitigation measures:

- An Air Quality Management Plan will be developed and implemented to address items such as use of dust suppressant measures during construction (e.g., covering dump trucks, minimizing loading/ unloading of soils and washing of construction equipment and vehicles).
- A more detailed assessment of potential air quality impacts will be developed as part of detailed design.

Public and Stakeholder Feedback

The St. Clair-Old Weston SmartTrack Station was considered at stakeholder meetings on February 22 and 28, 2018, and at a public meeting on March 1, 2018. Key messages included:

- There is a desire for the West Toronto Railpath to continue through the community to this station location.
- There is support for upgrading the bridge at St. Clair Avenue West and Keele Street as part of this project.
- Noise and light pollution from the operation of the new station is a concern for this community.

- There is a concern about impacts on nearby residential properties during construction and operations.

4.2 King-Liberty SmartTrack Station

The current design of the King-Liberty SmartTrack Station is shown in Figure 3.

Design Update

The updated station design includes the following:

- One island platform has been replaced by two side platforms to accommodate updated Metrolinx service plans.
- Platforms have shifted north-west due to adjacent development constraints.
- The main station building has been relocated to 99 Sudbury Street from 55 Sudbury Street due to the platform location shift. A pedestrian bridge plaza will span across the rail corridor to Joe Shuster Way, providing access to both platforms and a fare-free north-south connection across the rail corridor. This pedestrian bridge will act as an important new pedestrian link between Liberty Village and the West Queen West neighbourhoods.
- The tunnel proposed on the north side of King Street West adjacent to Atlantic Avenue has been replaced by an accessible pedestrian bridge which will connect to the north platform and the King High Line multi-use path.
- Improved placement and access points to the station in order to maximize connectivity with existing residential and employment uses.

Design Refinements Still Underway

Design is still underway and may be subject to further refinements prior to procurement, including the following:

- Opportunities to extend the West Toronto Railpath east of Abel Street continue to be explored. Two options are being examined – extending the West Toronto Railpath adjacent to the rail corridor, or along Sudbury Street.

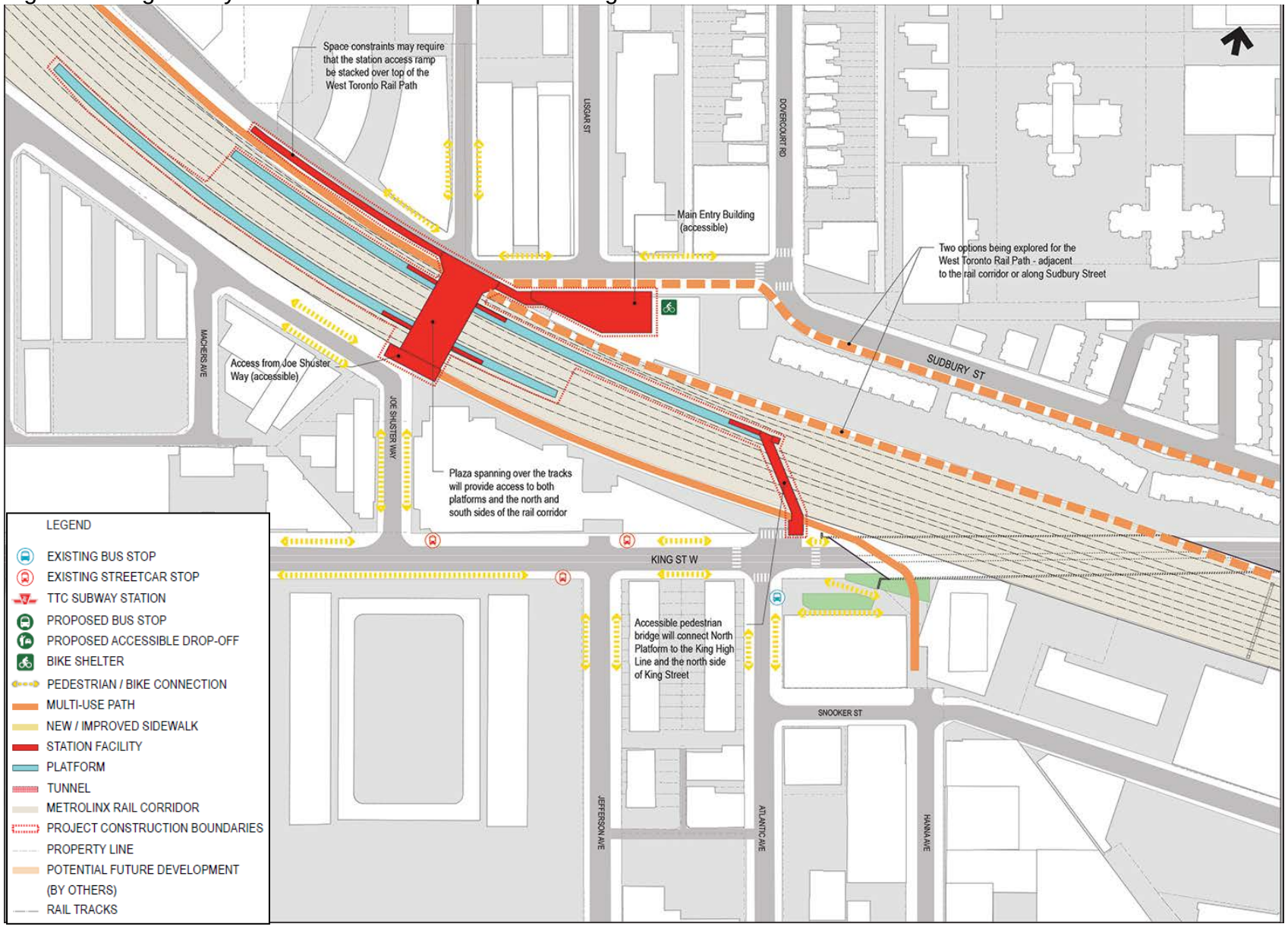
Preliminary Environmental Findings

a) Natural Environment

Potential effects:

- Removal of some trees will be required.
- Potential impacts to bird, bat and reptile species at risk.
- Minimal effects to wildlife – no critical habitats; common, disturbance tolerant species.
- Potential disturbance/destruction of nests of migratory birds.

Figure 3. King-Liberty SmartTrack Station Updated Design



Mitigation measures:

- Implement an Erosion and Sediment Control (ESC) Plan.
- Schedule construction outside of the overall bird nesting season of April 1 to August 31; where not possible – nest surveys to be completed.
- Adhere to relevant provincial standards for clearing and grubbing, site preparation and tree removal.
- Compensate in accordance with Metrolinx Vegetation Compensation Protocol.
- Meet requirements of the *Endangered Species Act, 2007*.
- Complete Arborist Report in detailed design.
- Implement tree protection barriers.

b) Socio-Economic and Land Use

Potential effects:

- Temporary nuisance effects during construction (e.g., air quality, noise and vibration).
- Temporary road/lane closures and access restrictions during construction; delays for traffic, pedestrians and cyclists.
- Temporary use of/access to adjacent lands during construction.
- Temporary visual effects resulting from construction activities (e.g., stockpiling, storage/laydown sites).
- Property requirements.
- Improved multi-modal connectivity and public realm.

Mitigation measures:

- Notify property owners and local residents about construction activities.
- Develop and implement the following plans: Traffic Control and Management Plan, Air Quality Management Plan, Noise and Vibration Control Plan, Vegetation Compensation Protocol.
- Provide alternative access and signage.
- Confirm potential access/easement and property requirements and consult with property owners.
- Visual screening of construction site to extent possible.
- Develop aesthetically pleasing design in conjunction with City and Metrolinx Design Review Panel.
- Crime Prevention Through Environmental Design (CPTED) principles will be applied to minimize areas with reduced visibility.
- Opportunities for public realm improvements will be explored.

c) Archaeology and Cultural Heritage

Potential effects:

- Potential to recover archaeological resources based on proximity to primary water sources (Lake Ontario) and historic transportation routes.

- Properties have been identified as having potential cultural heritage value or interest, including 55 Sudbury Street and 99 Sudbury Street.

Mitigation measures:

- Conduct Stage 2 Archaeological Assessment (AA) per recommendations of Stage 1 AA prior to construction.
- Additional work underway for priorities with cultural heritage value or interest.

d) Transportation

- In order to reduce potential traffic impacts, it is recommended the station focus on serving transferring passengers from surface transit routes, pedestrians and cyclists.
- Include direct bus connections, multiple pedestrian access points, and connections to cycling facilities.
- Limited traffic impacts are anticipated.

e) Noise and Vibration

Potential effects:

- Nighttime construction sound levels may exceed Federal Transit Administration (FTA) criterion at nearby residences.
- Sound levels during operation are expected to be similar to existing sound levels.
- No anticipated vibration effects.

Mitigation measures:

- A Noise and Vibration Control Plan will be developed prior to construction.
- Complete a detailed noise and vibration assessment once specifics of construction equipment are finalized.
- Construction to be planned to minimize the number of nights where noisy nighttime construction activities may be required.
- Keep construction equipment in good repair.

f) Air Quality

Concentrations of selected contaminants predicted to be below target levels (provincial and federal) at nearby residences.

Potential effects:

- Emissions from engines of construction equipment, dust emissions from stockpiles, loading/unloading activities and transportation of soils during construction.
- Emissions from a limited number of cars (informal pick-up/ drop off) during operation.

Mitigation measures:

- An Air Quality Management Plan will be developed and implemented to address items such as use of dust suppressant measures during construction (e.g., covering dump trucks, minimizing loading/ unloading of soils and washing of construction equipment and vehicles).
- A more detailed assessment of potential air quality impacts will be developed as part of detailed design.

Public and Stakeholder Feedback

The King-Liberty SmartTrack Station was considered at stakeholder meetings on February 26 and 28, 2018 and at a public meeting on March 1, 2018. Key messages included:

- Participants feel that the area is already congested, and traffic could increase around the station location. There is a desire for an informal pick-up and drop-off area for commuters.
- Participants noted that the community is a hub for entertainment and employment, and this should continue to be considered as the station is planned. In particular, it was recommended that traffic studies examine high-usage times, such as special events, outside of the typically defined peak times, such as evening or weekend event days.
- There is support for the proposed intermodal bridge/station plaza that would connect the station to the West Toronto Railpath and Liberty Village and West Queen West neighbourhoods.

4.3 East Harbour SmartTrack Station

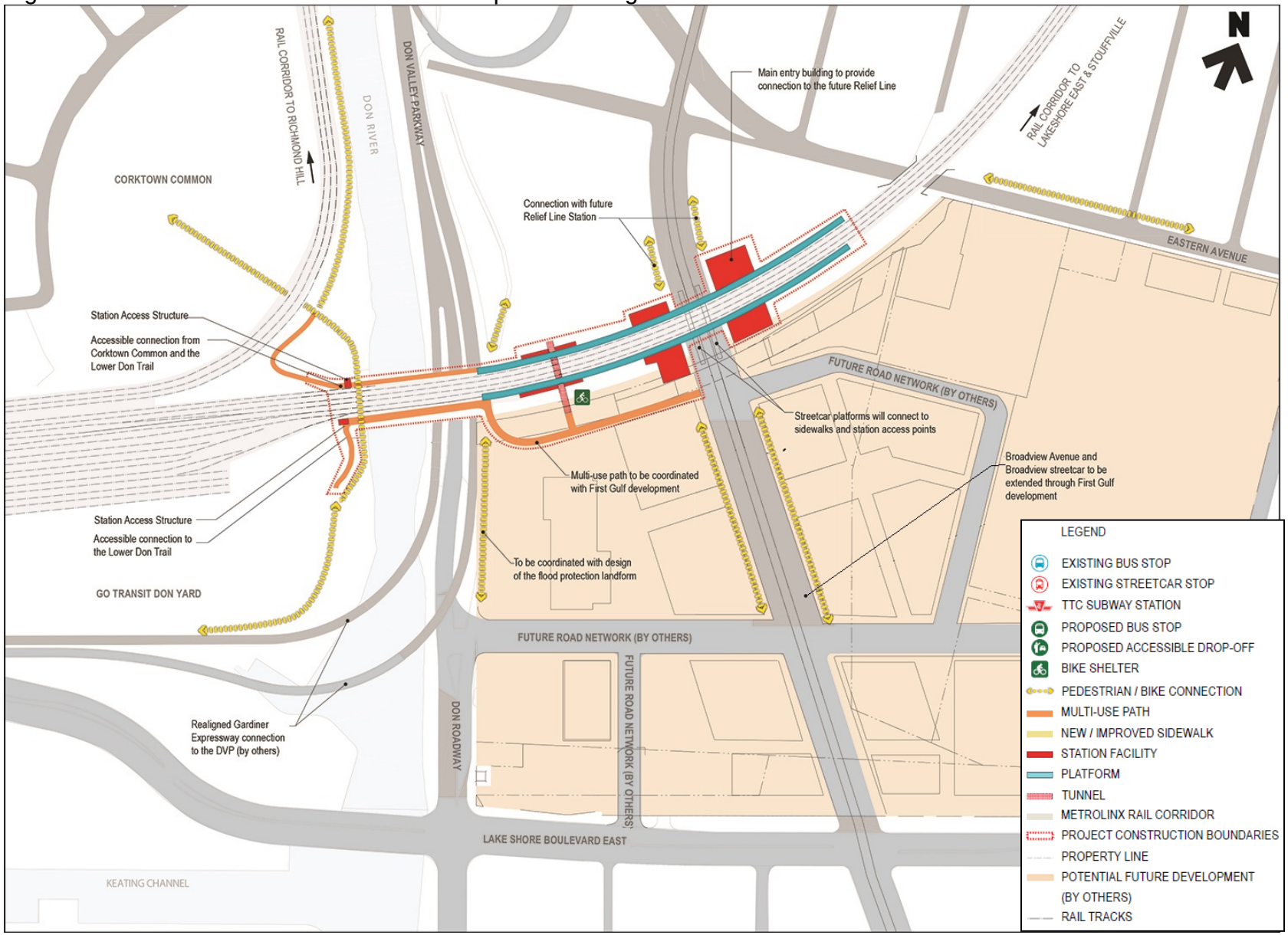
The current design of the East Harbour SmartTrack Station is shown in Figure 4.

Design Update

The updated station design includes the following:

- Side platforms will be staggered and further separated to accommodate updated Metrolinx service plans.
- Platforms no longer span across the Don River. However, the station access buildings still exist on the east side of the Don River, and connect passengers to platforms via accessible multi-use connections. These connections link to the Lower Don Trail and the Corktown Common neighbourhood.

Figure 4. East Harbour SmartTrack Station Updated Design



Design Refinements Still Underway

Design is still underway and may be subject to further refinements prior to procurement including the following:

- Further study is required to determine flood protection requirements and mitigation – discussions are underway with the Toronto Region Conservation Authority (TRCA).
- Planning continues to include strong connections with the planned Relief Line station and Broadview streetcar extension.
- Integration of the station into the broader Unilever Precinct planning process to support the development of this area as a major employment area.

Preliminary Environmental Findings

a) Natural Environment

Potential effects:

- Potential temporary/indirect effects to the Don River – erosion and downstream transport of sediment, entry of debris, equipment leaks/spills.
- Minimal vegetation removal and effects to wildlife.
- Potential disturbance/destruction of nests of migratory birds.
- Limited potential to affect bird and aquatic species at risk.
- Removal of some trees will be required.

Mitigation measures:

- No in-water work or work below the high-water mark.
- Implement an Erosion and Sediment Control (ESC) Plan.
- Schedule construction outside of the overall bird nesting season of April 1 to August 31; where not possible – nest surveys to be completed.
- Adhere to relevant provincial standards for clearing and grubbing, site preparation and tree removal.
- Compensate in accordance with Metrolinx Vegetation Compensation Protocol.
- Meet requirements of *Endangered Species Act, 2007*.
- Control activity to prevent entry to watercourses of petroleum products, debris, or other potential contaminants/deleterious substances (e.g., conduct activities away from watercourses).
- Complete Arborist Report in detailed design.
- Implement tree protection barriers.

b) Socio-economic and Land Use

Potential effects:

- Improved multi-modal connectivity and public realm.
- Temporary road/lane closures and access restrictions during construction; delays for traffic, pedestrians and cyclists.

- Temporary use of/access to adjacent lands during construction.
- Temporary visual effects resulting from construction activities (e.g., stockpiling, storage/laydown sites).
- Property requirements.
- Temporary nuisance effects during construction (e.g., air quality, noise and vibration).

Mitigation measures:

- Provide alternative access and signage.
- Notify property owners and local residents about construction activities.
- Confirm potential access/easement and property requirements and consult with property owners.
- Develop and implement the following plans: Construction Traffic Control and Management Plan, Air Quality Management Plan, Noise and Vibration Control Plan, Vegetation Compensation Protocol.
- Visual screening of construction site to extent possible.
- Develop aesthetically pleasing design in conjunction with City and Metrolinx Design Review Panel.
- Crime Prevention Through Environmental Design (CPTED) principles will be applied to minimize areas with reduced visibility.

c) Archaeology and Cultural Heritage

Potential Effects:

- Potential for recovery of pre-contact and contact period archaeological resources based on the proximity to the Don River, Lake Ontario and historic transportation routes.
- No properties in the study area with identified cultural heritage value or interest.

Mitigation measures:

- Conduct Stage 2 Archaeological Assessment (AA) per recommendations of Stage 1 AA prior to construction.

d) Transportation

A Transportation Brief is currently under review by the City and Metrolinx. Preliminary findings indicate that:

- No full Transportation and Traffic Impact Assessment is required.
- Fewer than 100 peak-hour, peak-direction auto trips (this is generally the City of Toronto threshold for determining whether a full assessment is required).

e) Noise and Vibration

Potential effects:

- Presence of station is not expected to affect sound levels (assessment is underway).

- No anticipated operations vibration effects.

Mitigation measures:
- A Noise and Vibration Control Plan will be developed prior to construction.
- A more detailed assessment of potential noise and vibration impacts will be developed as part of detailed design.
- Construction to be planned to minimize the number of nights where noisy nighttime construction activities may be required.
- Keep construction equipment in good repair.

f) Air Quality

Concentrations of selected contaminants predicted to be below target levels (provincial and federal) at nearby residences.

Potential effects:
- Emissions from engines of construction equipment, dust emissions from stockpiles, loading/unloading activities and transportation of soils during construction.

Mitigation measures:
- An Air Quality Management Plan will be developed and implemented to address items such as use of dust suppressant measures during construction (e.g., covering dump trucks, minimizing loading/ unloading of soils and washing of construction equipment and vehicles).
- A more detailed assessment of potential air quality impacts will be developed as part of detailed design.

Public and Stakeholder Feedback

The East Harbour SmartTrack Station was considered at stakeholder meetings on February 28, 2018 and March 1, 2018, and at a public meeting on March 21, 2018. Key messages included:
- Participants raised a concern around noise and potential negative impacts on quality of life for residents arising from frequent trains running through the community.

4.4 Gerrard-Carlaw SmartTrack Station

The current design of Gerrard-Carlaw SmartTrack Station is shown in Figure 5.

Design Update

The updated station design includes the following:
- Island platform will be removed to accommodate updated Metrolinx service plans.

- The main station access is at Gerrard Street East and Carlaw Avenue.
- Provisions for passenger pick-up and drop-off will be relocated from on-site loop road to layby facilities on Carlaw Avenue and/or Gerrard Street.
- TTC bus bays will be maintained along Carlaw Avenue instead of on-site loop road.

Design Refinements Still Underway

Design is still underway and may be subject to further refinements prior to procurement, including the following:

- The station continues to be planned as an interchange station with the proposed Relief Line station, including shared entrances and direct connections.
- Exploring improvements to the pedestrian and cycling network associated with the station to make it easier to cross the rail corridor, including an improved bridge/ tunnel at Pape Avenue.
- Optimization of connections with the planned Relief Line station, other transit lines and the broader station area.

Preliminary Environmental Findings

a) Natural Environment

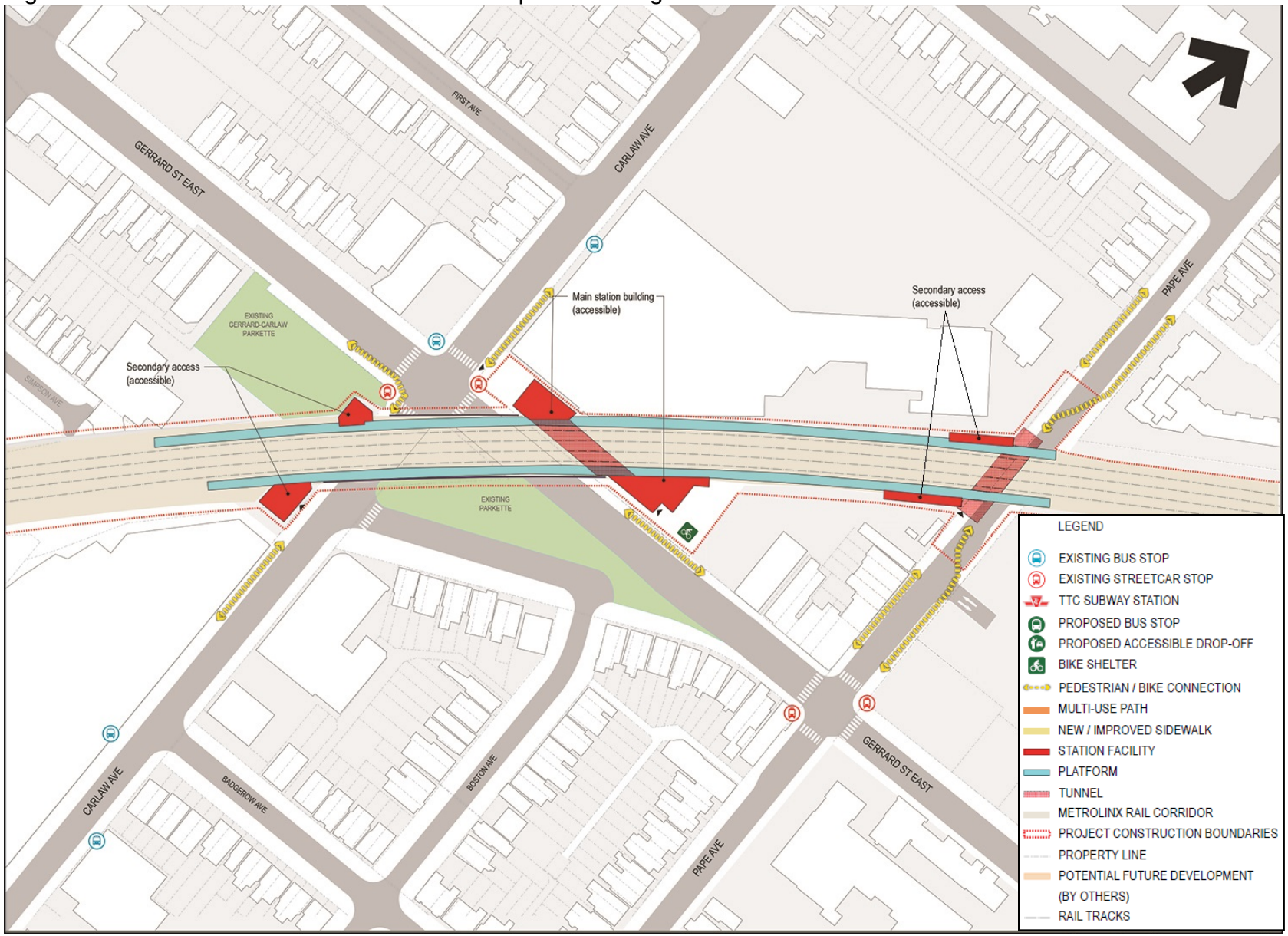
Potential effects:

- Removal of some vegetation/trees.
- Potential impacts to 3 bird and 1 insect Species at Risk.
- Minimal effects to wildlife- no critical habitats; common, disturbance tolerant species.
- Potential disturbance/destruction of nests of migratory birds.

Mitigation measures:

- Implement an Erosion and Sediment Control (ESC) Plan.
- Schedule construction outside of the overall bird nesting season of April 1 to August 31; where not possible – nest surveys to be completed.
- Adhere to relevant provincial standards for clearing and grubbing, site preparation and tree removal.

Figure 5. Gerrard-Carlaw SmartTrack Station Updated Design



- Compensate in accordance with Metrolinx Vegetation Compensation Protocol.
- Meet requirements of *Endangered Species Act, 2007*.
- Complete Arborist Report in detailed design.
- Implement tree protection barriers.

b) Socio-Economic and Land Use

Potential effects:

- Improved multi-modal connectivity and public realm.
- Temporary road/lane closures and access restrictions during construction; delays for traffic, pedestrians and cyclists.
- Temporary use of/access to adjacent lands during construction.
- Temporary visual effects resulting from construction activities (e.g., stockpiling, storage/laydown sites).
- Property requirements.
- Temporary nuisance effects during construction (e.g., air quality, noise and vibration).

Mitigation measures:

- Provide alternative access and signage.
- Notify property owners and local residents about construction activities.
- Confirm potential access/easement and property requirements and consult with property owners.
- Visual screening of construction site to extent possible.
- Develop aesthetically pleasing design following CPTED and Design Excellence principles.
- Opportunities for public realm improvements will be explored.
- Develop and implement the following plans: Construction, Traffic Control and Management Plan, Air Quality Management Plan, Noise and Vibration Control Plan, Vegetation Compensation Protocol.

c) Archaeology and Cultural Heritage

Potential effects:

- Potential to recover archaeological resources.
- Carlaw Avenue and Gerrard Street Subways noted as having cultural heritage value or interest.

Mitigation measures:

- Conduct Stage 2 Archaeological Assessment (AA) per recommendations of Stage 1 AA prior to construction.
- Additional work underway for properties with cultural heritage value or interest that may be impacted.

d) Transportation
   - Station access is focused on transit riders, pedestrians and cyclists:
     - Direct streetcar and bus connections, multiple pedestrian access points, and connection to existing and future cycling facilities.
   - Limited traffic impacts are anticipated.

e) Noise and Vibration

Potential effects:
- Nighttime construction sound levels may exceed Federal Transit Administration (FTA) criterion at nearby residences.
- Presence of station is not expected to affect sound levels (assessment is underway).

Mitigation measures:
- A Noise and Vibration Control Plan will be developed prior to construction.
- A more detailed assessment of potential noise and vibration impacts will be developed as part of detailed design.
- Construction to be planned to minimize the number of nights where noisy nighttime construction activities may be required.
- Keep construction equipment in good repair.

f) Air Quality

Concentrations of selected contaminants predicted to be below target levels (provincial and federal) at nearby residences.

Potential effects:
- Emissions from engines of construction equipment, dust emissions from stockpiles, loading/unloading activities and transportation of soils during construction.
- Emissions from buses during operation.

Mitigation measures:
- An Air Quality Management Plan will be developed and implemented to address items such as use of dust suppressant measures during construction (e.g., covering dump trucks, minimizing loading/ unloading of soils and washing of construction equipment and vehicles).
- A more detailed assessment of potential air quality impacts will be developed as part of detailed design.

Public and Stakeholder Feedback

The Gerrard-Carlaw SmartTrack Station was considered at stakeholder meetings on February 28, 2018 and March 1, 2018, and at a public meeting on March 21, 2018. Key messages included:

- Participants noted that this station, along with the future Relief Line station, would lead to transformative change in the community.
- There was a concern over potential for increased traffic and informal pick-ups and drop-offs on residential streets.
- Participants raised concerns about noise impacts stemming from increased train service. It was raised that a noise wall be constructed, and the methodology of determining noise impacts and the requirement of a noise wall be re-examined.
- Construction disruptions such as noise and flood lighting were a concern.

4.5 Lawrence-Kennedy SmartTrack Station

The current design of Lawrence-Kennedy SmartTrack Station is shown in Figure 6.

Design Update

The updated station design includes the following:

- Island platforms will be replaced by side platforms to maintain Line 3 (SRT) operation until Line 2 extension is complete.
- Platforms have shifted north.
- A secondary entrance is added to the northern end of platforms.

Design Refinements Still Underway

Design is still underway and may be subject to further refinements prior to procurement, including the following:

- Bus connections will be provided at the top of the Lawrence Avenue East overpass, with weather protected passenger waiting areas and vertical connections to platforms.
- Main station entrance will be located on east side of rail corridor.
- Further optimization of direct access from the Lawrence Avenue overpass, allowances for continued operation of Line 3 until the opening of the Scarborough Subway Extension, and connections to areas of potential future development north of Lawrence Avenue.

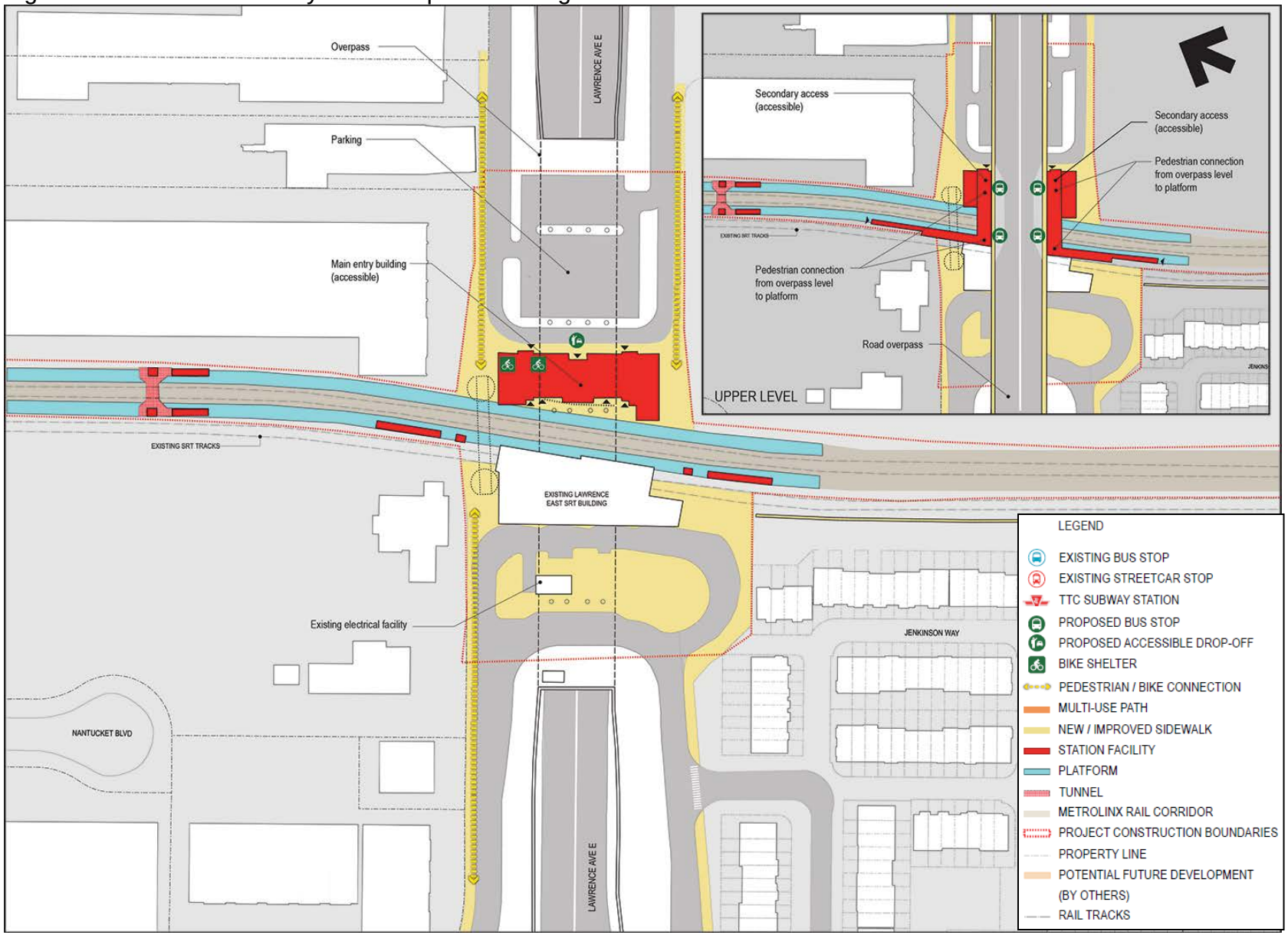
Preliminary Environmental Findings

a) Natural Environment

Potential effects:

- Potential temporary/indirect effects to Southwest Highland Creek – erosion and downstream transport of sediment, entry of debris, equipment leaks/spills.
- Minimal vegetation removal and effects to wildlife – no critical habitats; common, disturbance tolerant species.
- Potential disturbance/destruction of nests of migratory birds; limited potential for harm to avian species at risk.
- Removal of some trees of any size.

Figure 6. Lawrence-Kennedy Station Updated Design



Mitigation measures:

- Implement an Erosion and Sediment Control (ESC) Plan.
- Schedule construction outside of the overall bird nesting season of April 1 to August 31; where not possible – nest surveys to be completed.
- Adhere to relevant provincial standards for clearing and grubbing, site preparation and tree removal.
- Compensate in accordance with Metrolinx Vegetation Compensation Protocol.
- Meet requirements of *Endangered Species Act, 2007*.
- Control activity to prevent entry to watercourses of petroleum products, debris, or other potential contaminants/deleterious substances (e.g., conduct activities away from watercourses).
- Complete Arborist Report in detailed design.
- Implement tree protection barriers

b) Socio-Economic and Land Use

Potential effects:

- Improved multi-modal connectivity and public realm.
- Temporary road/lane closures and access restrictions during construction; delays for traffic, pedestrians and cyclists.
- Temporary use of/access to adjacent lands during construction.
- Temporary visual effects resulting from construction activities (e.g., stockpiling, storage/laydown sites).
- Property requirements.
  Temporary nuisance effects during construction (e.g., air quality, noise and vibration).

Mitigation measures:

- Provide alternative access and signage. Notify property owners and local residents about construction activities.
- Confirm potential access/easement and property requirements and consult with property owners.
- Develop and implement the following plans: Construction, Traffic Control and Management Plan, Air Quality Management Plan, Noise and Vibration Control Plan, Vegetation Compensation Protocol.
- Visual screening of construction site to extent possible.
- Develop aesthetically pleasing design in conjunction with City and Metrolinx Design Review Panel.
  Crime Prevention Through Environmental Design (CPTED) principles will be applied to minimize areas with reduced visibility.

c) Archaeology and Cultural Heritage

Potential effects:

- Potential for recovery of pre-contact and contact period archaeological resources based on the proximity to Highland Creek and historic transportation routes.
- No properties in the study area with identified cultural heritage value or interest.

Mitigation measures:

- Conduct Stage 2 Archaeological Assessment (AA) per recommendations of Stage 1 AA prior to construction.

d) Transportation

A Transportation Brief is currently under review by the City and Metrolinx. Preliminary findings indicate that:

- No full Transportation and Traffic Impact Assessment is required.
- While there may be slightly greater than 100 A.M. peak-hour, peak-direction auto trips (this is generally the City of Toronto threshold for determining whether a full assessment is required), it is anticipated that the reduction in commuter parking by 50% will encourage alternative modes of transportation to access the station.

e) Noise and Vibration

Potential effects:

- Nighttime construction sound levels may exceed Federal Transit Administration (FTA) criterion at nearby residences.
- Presence of station is not expected to affect sound levels (assessment is underway).
- No anticipated vibration effects.

Mitigation measures:

- A Noise and Vibration Control Plan will be developed prior to construction.
- A more detailed assessment of potential noise and vibration impacts will be developed as part of detailed design.
- Construction to be planned to minimize the number of nights where noisy nighttime construction activities may be required.
- Keep construction equipment in good repair.

f) Air Quality

Concentrations of selected contaminants predicted to be below target levels (provincial and federal) at nearby residences.

Potential effects:

- Emissions from engines of construction equipment, dust emissions from stockpiles, loading/unloading activities and transportation of soils during construction.
- Emissions from passenger vehicles using parking lot and buses during operation.

Mitigation measures:

- An Air Quality Management Plan will be developed and implemented to address items such as use of dust suppressant measures during construction (e.g., covering dump trucks, minimizing loading/ unloading of soils and washing of construction equipment and vehicles).
- Provide signage to discourage idling in parking area.
- A more detailed assessment of potential air quality impacts will be developed as part of detailed design.

Public and Stakeholder Feedback

The Lawrence-Kennedy SmartTrack Station was considered at a stakeholder meeting on February 20 and 28, 2018 and at a public meeting on March 6, 2018. Key messages heard included:

- There is a strong desire for both commuter parking and passenger pick-up and drop-off areas at this station.
- Noise was a concern for this station, and it was suggested that the persistence and reoccurrence of noise throughout the day be further studied.

4.6 Finch-Kennedy SmartTrack Station

The current design of Finch-Kennedy SmartTrack Station is shown in Figure 7. There have been no significant updates to the design of this station since the previous report to City Council.

Design Refinements Still Underway

Design is still underway and may be subject to further refinements prior to procurement including the following:

- Identification of future access roads from the northern station entrance, which will serve informal passenger pick-up and drop-offs, provide access to TTC Wheel-Trans service, and help to frame potential future development areas.
- Further consideration of integration of a road-under-rail grade separation as part of Regional Express Rail
- As directed by City Council in December 2017 (EX29.1), Transportation Planning, Real Estate Services and CreateTO have begun preliminary work on identifying future development opportunities, including integrated commuter parking, around the planned Finch-Kennedy station area.

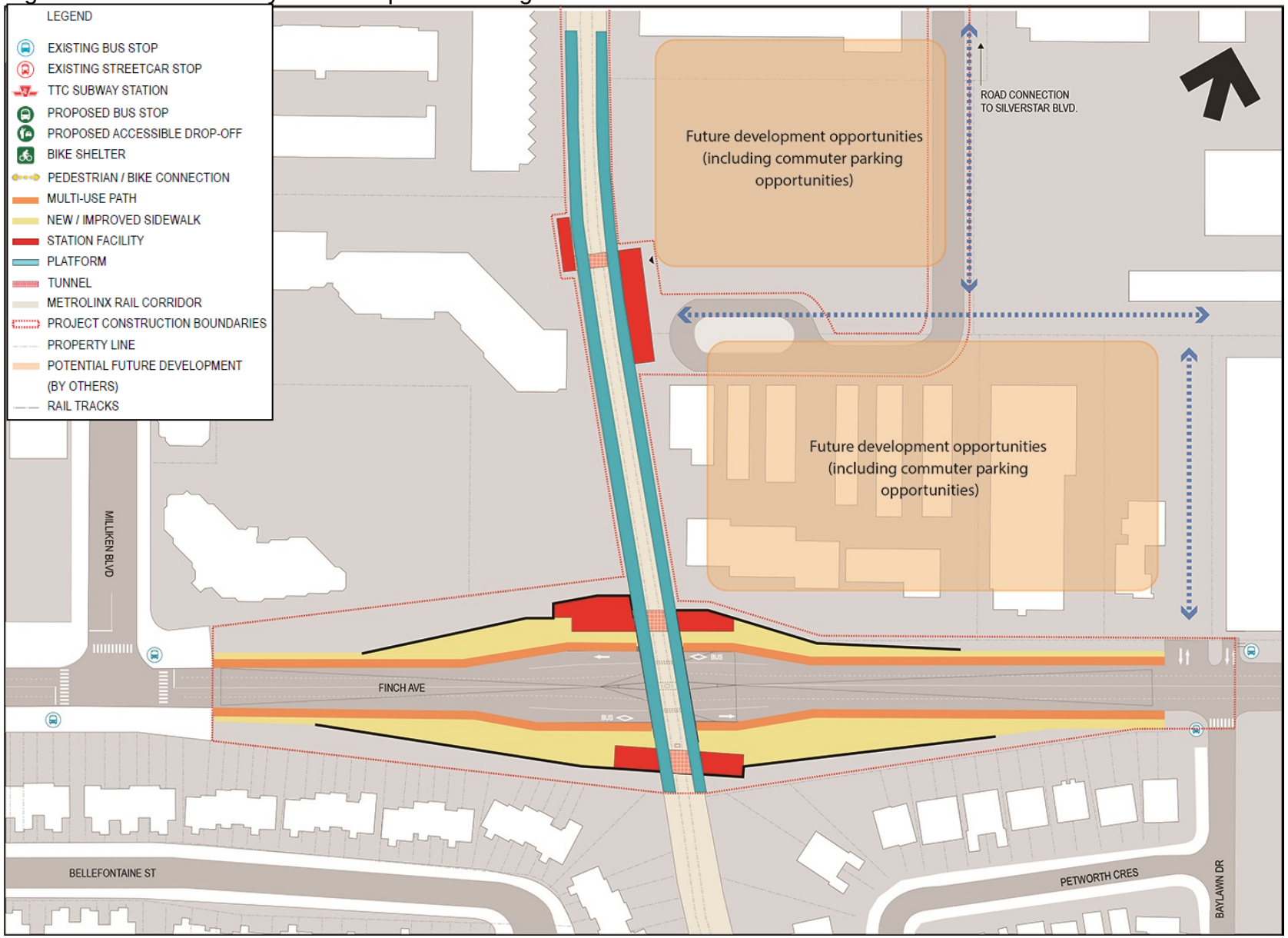
Preliminary Environmental Findings

a) Natural Environment

Potential effects:

- Potential temporary, indirect effects to Markham Branch of Highland Creek erosion and downstream transport of sediment, entry of debris, equipment leaks/spills.

Figure 7. Finch-Kennedy Station Updated Design



- Minimal vegetation removal and effects to wildlife – no critical habitations; common, disturbance tolerant species.
- Potential disturbance/destruction of nests of migratory birds; limited potential for harm to bird specifies at risk.
- Removal of some trees will be required.

Mitigation measures:

- Implement an Erosion and Sediment Control (ESC) Plan.
- Schedule construction outside of the overall bird nesting season of April 1 to - August 31; where not possible – nest surveys to be completed. Adhere to relevant provincial standards for clearing and grubbing, site preparation and tree removal.
- Compensate in accordance with Metrolinx Vegetation Compensation Protocol.
- Meet requirements of *Endangered Species Act, 2007*.
- Control activity to prevent entry to watercourses of petroleum products, debris, or other potential contaminants/deleterious substances (e.g., conduct activities away from watercourses).
- Complete Arborist Report in detailed design.
- Implement tree protection barriers.

b) Socio-Economic and Land Use

Potential effects:

- Improved multi-modal connectivity and public realm.
- Temporary road/lane closures and access restrictions during construction; delays for traffic, pedestrians and cyclists.
- Temporary use of/access to adjacent lands during construction.
- Temporary visual effects resulting from construction activities (e.g., stockpiling, storage/laydown sites).
- Property requirements.
- Temporary nuisance effects during construction (e.g., air quality, noise and vibration).

Mitigation measures:

- Provide alternative access and signage.
- Notify property owners and local residents about construction activities.
- Confirm potential access/easement and property requirements and consult with property owners.
- Develop and implement the following plans: Construction Traffic Control and Management Plan, Air Quality Management Plan, Noise and Vibration Control Plan, Vegetation Compensation Protocol.
- Visual screening of construction site to extent possible.
- Develop aesthetically pleasing design in conjunction with City and Metrolinx Design Review Panel.

- Crime Prevention Through Environmental Design (CPTED) principles will be applied to minimize areas with reduced visibility.

c) Archaeology and Cultural Heritage

Potential effects:

- Potential for recovery of pre-contact and contact period archaeological resources based on the proximity to Highland Creek and historic transportation routes.
- No properties in the study area with identified cultural heritage value or interest

Mitigation measures:

- Conduct Stage 2 Archaeological Assessment (AA) per recommendations of Stage 1 AA prior to construction.

d) Transportation

A Transportation Brief is currently under review by the City and Metrolinx. Preliminary findings indicate:

- No full Transportation and Traffic Impact Assessment is required.
- Fewer than 100 peak-hour, peak-direction auto trips (this is generally the City of Toronto threshold for determining whether a full assessment is required).
- No delays from train crossings owing to rail-road grade separation incorporated in station design.

e) Noise and Vibration

Potential effects:

- Nighttime construction sound levels may exceed Federal Transit Administration (FTA) criterion for at nearby residences.
- Presence of station is not expected to affect sound levels (assessment is underway).
- Some commercial structures to the north of Finch Avenue East may experience vibration during construction.
- Vibration levels are expected to decrease during operation for all assessed receptors.

Mitigation measures:

- A Noise and Vibration Control Plan will be developed prior to construction.
- A more detailed assessment of potential noise and vibration impacts will be developed as part of detailed design.
- Construction to be planned to minimize the number of nights where noisy nighttime construction activities may be required.
- Keep construction equipment in good repair.

f) Air Quality

Concentrations of selected contaminants are estimated to be below provincial and federal air quality thresholds at nearby residences.

Potential effects:

- Emissions from passenger vehicles using the access road and buses using bus lanes during operation.
- Emissions from engines of construction equipment, dust emissions from stockpiles, loading/unloading activities and transportation of soils during construction.

Mitigation measures:

- An Air Quality Management Plan will be developed and implemented to address items such as use of dust suppressant measures during construction (e.g., covering dump trucks, minimizing loading/unloading of soils and washing of construction equipment and vehicles).
- Provide signage to discourage idling in access road area.
- A more detailed assessment of potential air quality impacts will be developed as part of detailed design.

Public and Stakeholder Feedback

The Finch-Kennedy SmartTrack Station was considered at a stakeholder meeting on February 20 and 28, 2018 and at a public meeting on March 6, 2018. Key messages heard included:

- There is a strong desire for both commuter parking and passenger pick-up and drop-off areas at this station.
- Noise was a concern for this station, and it was suggested that the persistence and reoccurrence of noise throughout the day be further studied.
- There is a desire for pedestrian barriers and crossing points along the Stouffville corridor near this station, especially as service becomes more frequent.

4.7 Bloor-Lansdowne GO/RER Station

The current design of Bloor-Lansdowne GO RER Station is shown in Figure 8.

Design Update

The updated station design includes the following:

- The station building on Dora Avenue has been shifted from the north side to the south side of the street.

Design Refinements Still Underway

Design is still underway and may be subject to further refinements prior to procurement including the following:

- Discussions are underway to determine whether a new rail bridge may be required.
- Multi-use path connection to future West Toronto Railpath extension and the Earlscourt Park are included as part of the environmental assessment process for the station.
- Further consideration of opportunities to provide accessible, weather-protected, pedestrian connection to Lansdowne Subway Station and on the potential solutions to finance the investment needed to make this connection as outlined in the City's Official Plan.
- Further consideration of opportunities for making strong connections to Bloor Street and all provisions required to improve the network of pedestrian/cycling pathways along the GO corridor that were initiated through the Davenport Diamond Grade Separation project as part of the Transit Project Assessment Process or addenda for the Bloor-Lansdowne GO Regional Express Rail station.

Preliminary Environmental Findings

a) Natural Environment

Potential effects:

- Removal of some trees will be required, primarily in Earlscourt Park.
- Potential impacts to bird, bat and reptile species at risk.
- Minimal effects to wildlife – no critical habitats; common, disturbance tolerant species.
- Potential disturbance/destruction of nests of migratory birds

Mitigation measures:

- Implement an Erosion and Sediment Control (ESC) Plan.
- Schedule construction outside of the overall bird nesting season of April 1 to - August 31; where not possible – nest surveys to be completed.
- Adhere to relevant provincial standards for clearing and grubbing, site preparation and tree removal.
- Compensate in accordance with Metrolinx Vegetation Compensation Protocol.
- Meet requirements of *Endangered Species Act, 2007*.
- Complete Arborist Report in detailed design.
- Implement tree protection barriers

b) Socio-Economic and Land Use

Potential effects:

- Temporary nuisance effects during construction (e.g., air quality, noise and vibration).

- Temporary road/lane closures and access restrictions during construction; delays for traffic, pedestrians and cyclists.
- Temporary use of/access to adjacent lands during construction.
- Temporary visual effects resulting from construction activities (e.g., stockpiling, storage/laydown sites).
- Property requirements.
- Improved multi-modal connectivity and public realm.

Mitigation measures:

- Notify property owners and local residents about construction activities. Develop and implement the following plans: Construction Traffic Control and Management Plan, Air Quality Management Plan, Noise and Vibration Control Plan, Vegetation Compensation Protocol.
- Provide alternative access and signage.
- Confirm potential access/easement and property requirements and consult with property owners. Visual screening of construction site to extent possible.

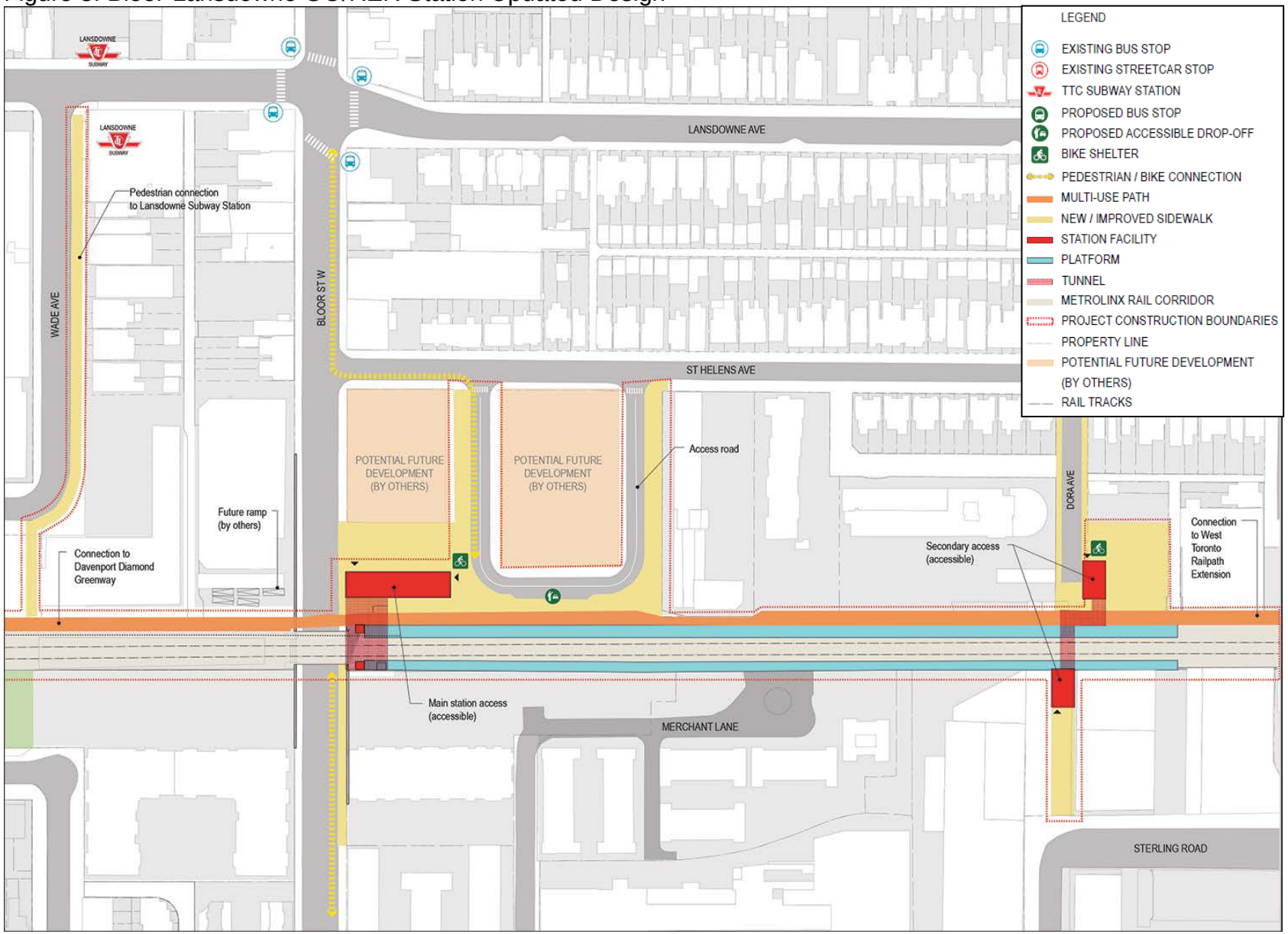
- Develop aesthetically pleasing design in conjunction with City and Metrolinx Design Review Panel.
- Crime Prevention Through Environmental Design (CPTED) principles will be applied to minimize areas with reduced visibility.
- Opportunities for public realm improvements will be explored.

c) Archaeology and Cultural Heritage

Potential effects:

- Potential for recovery of pre-contact and contact period archaeological resources based on the proximity to Highland Creek and historic transportation routes.
- One property has been identified as having potential cultural heritage value and interest:
    - 226 St. Helens Avenue.

Figure 8. Bloor-Lansdowne GO/RER Station Updated Design



Mitigation measures:

- A Cultural Heritage Evaluation Report will be conducted for 226 St. Helens Avenue.
- Conduct Stage 2 Archaeological Assessment (AA) per recommendations of Stage 1 AA prior to construction

d) Transportation

- In order to reduce potential traffic impacts, recommended focus for the station is to serve transferring passengers form surface transit routes, pedestrians and cyclists.
  - Thoughtful connections between the new GO Station and the existing transportation facilities (e.g., Lansdowne TTC subway station) are recommended, along with complementary wayfinding signage.
  - Cycling/pedestrian connections will be needed between the station and:
    - Bloor Street
    - Bike lanes on Davenport Road, Dundas Street West and College Street
    - West Toronto Railpath extension
    - Greenway north of Bloor Street
    - Earlscourt Park

e) Noise and Vibration

Potential effects:

- Nighttime construction sound levels may exceed Federal Transit Administration (FTA) criterion for at nearby residences.
- Sound levels during operation are expected to be similar to existing sound levels.
- No anticipated vibration effects.

Mitigation measures:

- A Noise and Vibration Control Plan will be developed prior to construction.
- Complete a detailed noise and vibration assessment once specifics of construction equipment are finalized.
- Construction to be planned to minimize the number of nights where noisy nighttime construction activities may be required.
- Keep construction equipment in good repair.

f) Air Quality

Concentrations of selected contaminants are estimated to be below provincial and federal air quality thresholds at nearby residences.

Potential effects:

- Emissions from engines of construction equipment, dust emissions from stockpiles, loading/unloading activities and transportation of soils during construction.

Mitigation measures:

- An Air Quality Management Plan will be developed and implemented to address items such as use of dust suppressant measures during construction (e.g., covering dump trucks, minimizing loading/unloading of soils and washing of construction equipment and vehicles).
- A more detailed assessment of potential air quality impacts will be developed as part of detailed design.

g) Earlscourt Park

As part of the Barrie Corridor TPAP Addendum, improvements are included to extend a multi-use path south along the rail corridor to connect with the West Toronto Railpath and north to connect with Earlscourt Park.

The environmental assessment will cover:

- Extension of the multi-use path from Bloor Street West to Dundas Street West.
- Connection to St. Helens Avenue/Dundas Street West.
- A ramp connection to the future West Toronto Rail Path Extension Bridge.

Public and Stakeholder Feedback

The Bloor-Lansdowne GO/RER Station was considered at a stakeholder meeting on February 26 and 28, 2018 and at a public meeting on March 1, 2018. Key messages heard included:

- There is concern that expanded service could be introduced even if electrification is delayed. Frequent service using diesel trains is not desirable to residents.
- Bell ringing, vibration and train operation noise are a consistent concern in this area, as it is a residential neighbourhood.
- Participants appreciated the connection to the West Toronto Rail Path.
- There is a need to further understand how passenger pick-up and drop-off areas will be designed and operated in this residential area.
- There is concern about construction impacts, especially with regard to noise and air quality.

4.8 Spadina-Front GO/RER Station

The current design of the Spadina-Front GO RER Station is shown in Figure 9.

Design Update

The updated station design includes the following:

- Station entrance will be oriented to both Front Street and Spadina Avenue.
- West access to station platform will be removed due to technical constraints of Puente De Luz Bridge.

Design Refinements Still Underway

Design is still underway and may be subject to further refinements prior to procurement including the following:

- Further consideration to address Rail Deck Park decking structure.
- Further consideration of tunnel access from the Well.

Preliminary Environmental Findings

a) Natural Environment

Potential effects:

- Minimal effects to wildlife – no critical habitations; common, disturbance tolerant species.
- Potential disturbance/destruction of nests of migratory birds; limited potential for harm to 4 avian species at risk.
- Removal of numerous trees, mostly smaller trees within the rail corridor.

Mitigation measures:

- Implement an Erosion and Sediment Control (ESC) Plan.
- Schedule construction outside of the overall bird nesting season of April 1 to - August 31; where not possible – nest surveys to be completed.
- Adhere to relevant provincial standards for clearing and grubbing, site preparation and tree removal.
- Compensate in accordance with Metrolinx Vegetation Compensation Protocol.
- Meet requirements of *Endangered Species Act, 2007*.
- Complete Arborist Report in detailed design.
- Implement tree protection barriers.

b) Socio-Economic and Land Use

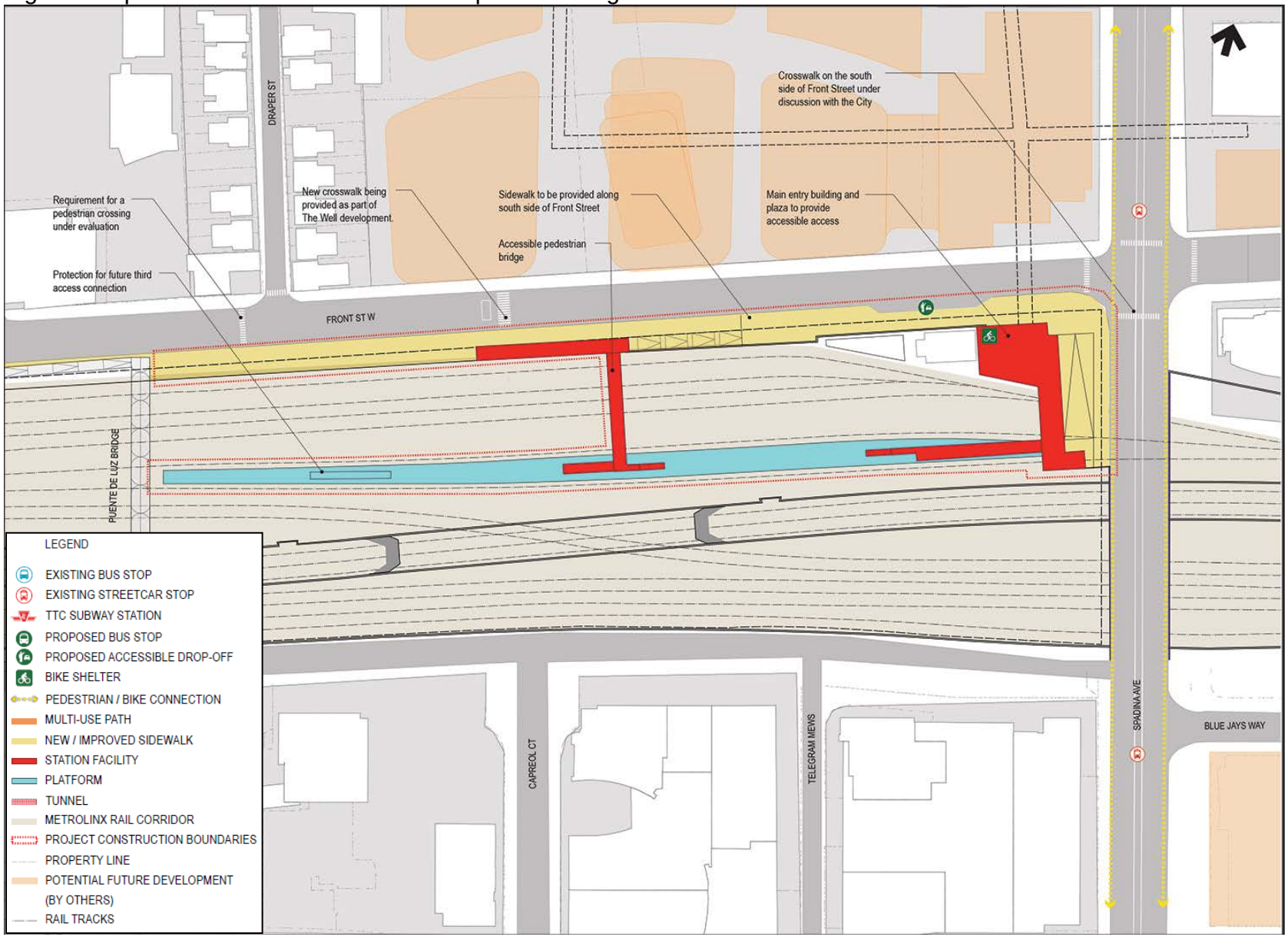
Potential effects:

- Temporary nuisance effects during construction (e.g., air quality, noise and vibration).
- Temporary road/lane closures and access restrictions during construction; delays for traffic, pedestrians and cyclists.
- Temporary use of/access to adjacent lands during construction.
- Temporary visual effects resulting from construction activities (e.g., stockpiling, storage/laydown sites).
- Limited property requirements (area under public ownership).
- Improved multi-modal connectivity and public realm.

Mitigation measures:

- Develop and implement the following plans: Construction Traffic Control and Management Plan, Air Quality Management Plan, Noise and Vibration Control Plan, Vegetation Compensation Protocol.

Figure 9. Spadina-Front GO/RER Station Updated Design



- Notify property owners and local residents about construction activities.
- Provide alternative access and signage.
- Confirm potential access/easement and property requirements and consult with property owners. Visual screening of construction site to extent possible.
- Develop aesthetically pleasing design in conjunction with City and Metrolinx Design Review Panel.
- Crime Prevention Through Environmental Design (CPTED) principles will be applied to minimize areas with reduced visibility.
- Opportunities for public realm improvements will be explored.

c) Archaeology and Cultural Heritage

Potential effects:

- Potential for recovery of pre-contact and contact period archaeological resources based on the proximity to Highland Creek and historic transportation routes.
- No properties in the study area with identified cultural heritage value or interest.

Mitigation measures:

- Conduct Stage 2 Archaeological Assessment (AA) per recommendations of Stage 1 AA prior to construction.

d) Transportation

- Station access is focused on transit riders, pedestrians and cyclists.
    - Direct streetcar connections, multiple pedestrian access points, and connections to cycling facilities.
- Limited traffic impacts are anticipated.

e) Noise and Vibration

Potential effects:

- Nighttime construction sound levels may exceed Federal Transit Administration (FTA) criterion for at nearby residences.
- Presence of station is not expected to affect sound levels (assessment is underway).
- No anticipated vibration effects.

Mitigation measures:

- A Noise and Vibration Control Plan will be developed prior to construction.
- Complete a detailed noise and vibration assessment once specifics of construction equipment are finalized.
- Construction to be planned to minimize the number of nights where noisy nighttime construction activities may be required.
- Keep construction equipment in good repair.

f) Air Quality

Concentrations of selected contaminants are estimated to be below provincial and federal air quality thresholds at nearby residences.

Potential effects:

- Emissions from engines of construction equipment, dust emissions from stockpiles, loading/unloading activities and transportation of soils during construction.
- Emissions from passenger vehicles using the access road and buses using bus lanes during operation.

Mitigation measures:

- An Air Quality Management Plan will be developed and implemented to address items such as use of dust suppressant measures during construction (e.g., covering dump trucks, minimizing loading/unloading of soils and washing of construction equipment and vehicles).
- A more detailed assessment of potential air quality impacts will be developed as part of detailed design.

Public and Stakeholder Feedback

The Spadina-Front GO/RER Station was considered at a stakeholder meeting on February 26 and 28, 2018 and at a public meeting on March 1, 2018. Key messages included:

- There is concern about traffic issues around the new station, as it is located in an already busy area by the Gardiner Expressway.
- There is concern about the ability for pedestrians to exit and navigate the busy streets around the station if the Rail Deck Park is not completed.