

TORONTO TRANSIT COMMISSION REPORT NO.

MEETING DATE: December 6, 2007

SUBJECT: STREETCARS ON CHERRY STREET AND SUMACH STREET
SERVING THE WEST DON LANDS DEVELOPMENT

RECOMMENDATIONS

It is recommended that the Commission:

1. Approve the conceptual design for streetcars operating in their own right-of-way on the east side of Cherry Street and Sumach Street between the CN Rail corridor and King Street to serve the planned West Don Lands development area as described in this report, noting that:
 - the recommended transit right-of-way and facilities will be constructed as part of the larger project to reconstruct Cherry Street and Sumach Street which is being undertaken and funded by Waterfront Toronto;
 - the development of the preferred design has been a joint initiative between the Waterfront Toronto, the City of Toronto and the TTC which has included an extensive public input process and a significant emphasis on excellence in urban design;
 - this report has been prepared jointly by TTC staff and City of Toronto staff who concur with the recommendations presented here;
 - the recommended design addresses City of Toronto Council's concerns related to reducing the width of the roadway on Cherry Street and including dedicated bicycle facilities in the design;
 - TTC and Waterfront Toronto staff are developing a Delivery Agreement for TTC involvement in the design and construction of the project to ensure that the resulting transit facilities are acceptable to the TTC;
 - road, transit and associated urban realm improvements are planned for design in 2008/2009 and constructed in 2009/2010. Opening day for the transit operation is expected in late 2010;
 - initially the service on the line will operate to and from downtown, and will be co-ordinated with the existing 504 KING service. The design of the new line also

permits future operation to and from the east on King Street, when demand warrants;

2. Request that Toronto City Council:

- a) authorize the Chief General Manager of the TTC, the General Manager of Transportation Services, and the Chief Planner and Executive Director of Planning to issue a Notice of Completion and to file the Environmental Study Report for the West Don Lands Transit Environmental Assessment in the public record for a minimum 30-day period in accordance with the Municipal Class Environmental Assessment;
- b) authorize the installation of traffic control signals at the intersections on Cherry Street at Front Street East and Cherry Street at Mill Street coincident with the reconstruction of and provision of streetcar service on Cherry Street;
- c) authorize the Chief Planner and Executive Director of Planning to bring forward a report on any amendments necessary to Schedule A of By-law No. 346-2003 of the Central Waterfront Secondary Plan (OPA 257), as amended, to provide for the recommended design, and reduction in planned rights-of-way, upon approval of the Environmental Study Report under the Environmental Assessment Act; and,

3. Forward this report to Councillor McConnell, the Toronto and District School Board, Waterfront Toronto, and the Ontario Realty Corporation for information.

FUNDING

No TTC funds are available for this project, or for the acquisition of new LRV cars for the service. The projects are included in the TTC's 2008-2012 Capital Program as "below-the-line" projects which can proceed upon identification of full funding commitments.

BACKGROUND

Waterfront Toronto (formerly the Toronto Waterfront Revitalisation Corporation, TWRC), was formed in 2001 with the mandate and responsibility for developing Toronto's waterfront, including the West Don Lands area. The Corporation, which is jointly owned by the City of Toronto, the Province of Ontario and the Government of Canada, undertakes its work based on strong principles of excellence in environmental sustainability and urban design. Waterfront Toronto is the proponent for all redevelopment activities in the West Don Lands area and the West Don Lands Transit Environmental Assessment Study has been carried out under their auspices. They have funded the study, and plan to implement the recommendations of the study as part of their mandate, including all design and construction costs related to transit facilities required to serve the West Don Lands area.

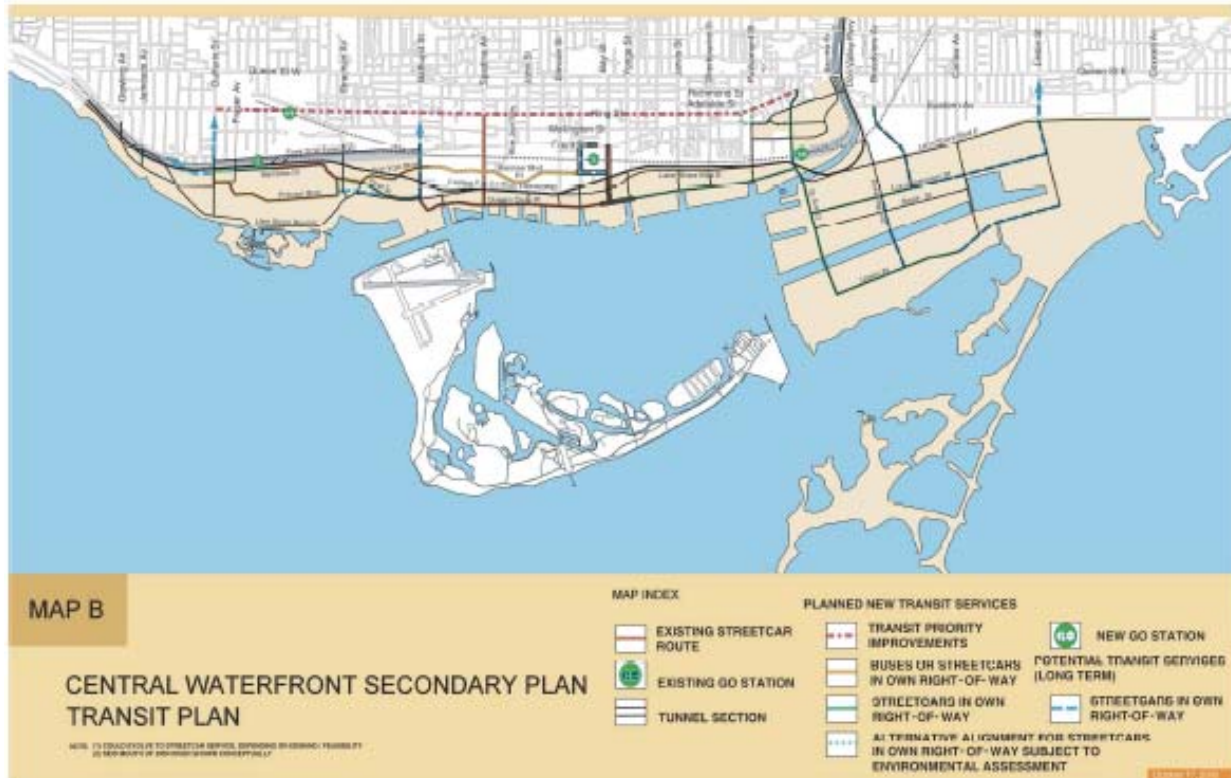
The West Don Lands development area, located generally east of Parliament Street between King Street and the CN Rail corridor west of the Don River which is shown in Exhibit 1, is going through a transformation from derelict brown fields into a higher-density mix of new residential and commercial uses. The West Don Lands precinct is a 32-hectare site within this area that ultimately will have 6500 housing units, 1300 of which will be affordable rental housing and 1 million square feet of office and retail space.

Exhibit 1 West Don Lands Development – Study Area



The City of Toronto approved the Central Waterfront Secondary Plan in 2003, in part, to establish guiding principles for the redevelopment of brown-field sites such as the West Don Lands area. One of the principles established was the need to strongly encourage non-auto based travel in the newly-developing areas and, as shown in Exhibit 2, the plan envisioned a network of streetcars operating in their own rights-of-way throughout the eastern waterfront.

Exhibit 2 Central Waterfront Secondary Plan – Transit Plan



Council reinforced this principle by approving a “transit first” policy for waterfront development whereby surface rapid transit services are to be constructed at the earliest stage of the redevelopment process so that excellent transit services are in place as the first developments are occupied, thereby encouraging non-auto travel patterns from the outset.

In May 2005, City Council approved the West Don Lands Precinct Plan and Environmental Assessment Master Plan which included the provision of exclusive transit rights-of-way on the roadways identified in the Secondary Plan. Concerns were raised, at that time, that the resulting Cherry street roadway was too wide and that the proposed design did not include provisions for bicycle lanes. It was recognised that a formal Environmental Assessment study would be required for the approval of the construction of a transit right-of-way so Council approved the EA Master Plan subject to, among others, the following conditions:

- “the preferred design for Cherry Street . . . being identified as ‘preliminary, subject to further evaluation’ in the context of the upcoming Transit EA Study”; and,
- “the provision of a continuous uninterrupted dedicated bicycle facility on Cherry Street . . . be endorsed in principle, subject to the findings of the Transit EA Study.”

In June 2005 the Commission authorised TTC staff to undertake Environmental Assessment studies for transit projects in the eastern waterfront including a study of transit needs in the West Don area on behalf of Waterfront Toronto. The study has been done in close co-operation with City of Toronto and Waterfront Toronto staff, with a project team made up of representatives of the TTC, City of Toronto Planning, City of Toronto Transportation and Waterfront Toronto guiding the study. A consortium of consultants led by McCormick Rankin Corporation is undertaking Transit Environmental Assessment studies in the eastern waterfront, under the direction of the project team, and URS Canada has taken the lead on the West Don Lands project.

The Environmental Assessment Study for transit services in the West Don Lands area was initiated as an Individual Environmental Assessment. Recently, the Ministry of the Environment approved an amendment to the Municipal Class Environmental Assessment to permit transit projects to be undertaken under the Municipal Class EA process, and TTC staff have elected to formally convert the study to fall under the new Municipal Class EA process for transit projects.

This report provides an overview of the Environmental Assessment study, and describes the key decisions that led to the recommendation for streetcars in their own right-of-way on the east side of Cherry Street/Sumach Street to serve the West Don Lands area.

DISCUSSION

The redevelopment of the City's brownfield waterfront sites and, in particular, the West Don Lands precinct, represents a significant opportunity to attract people and jobs to the City as envisioned in the City's *Official Plan*. The *Official Plan* calls for an intensification of land uses in the city to make best-use of existing infrastructure and to achieve the large environmental and sustainability benefits of a compact urban form. Transit plays a critical role in achieving this objective if it, along with pedestrian and cycling modes of travel, can provide a reasonable alternative to auto travel.

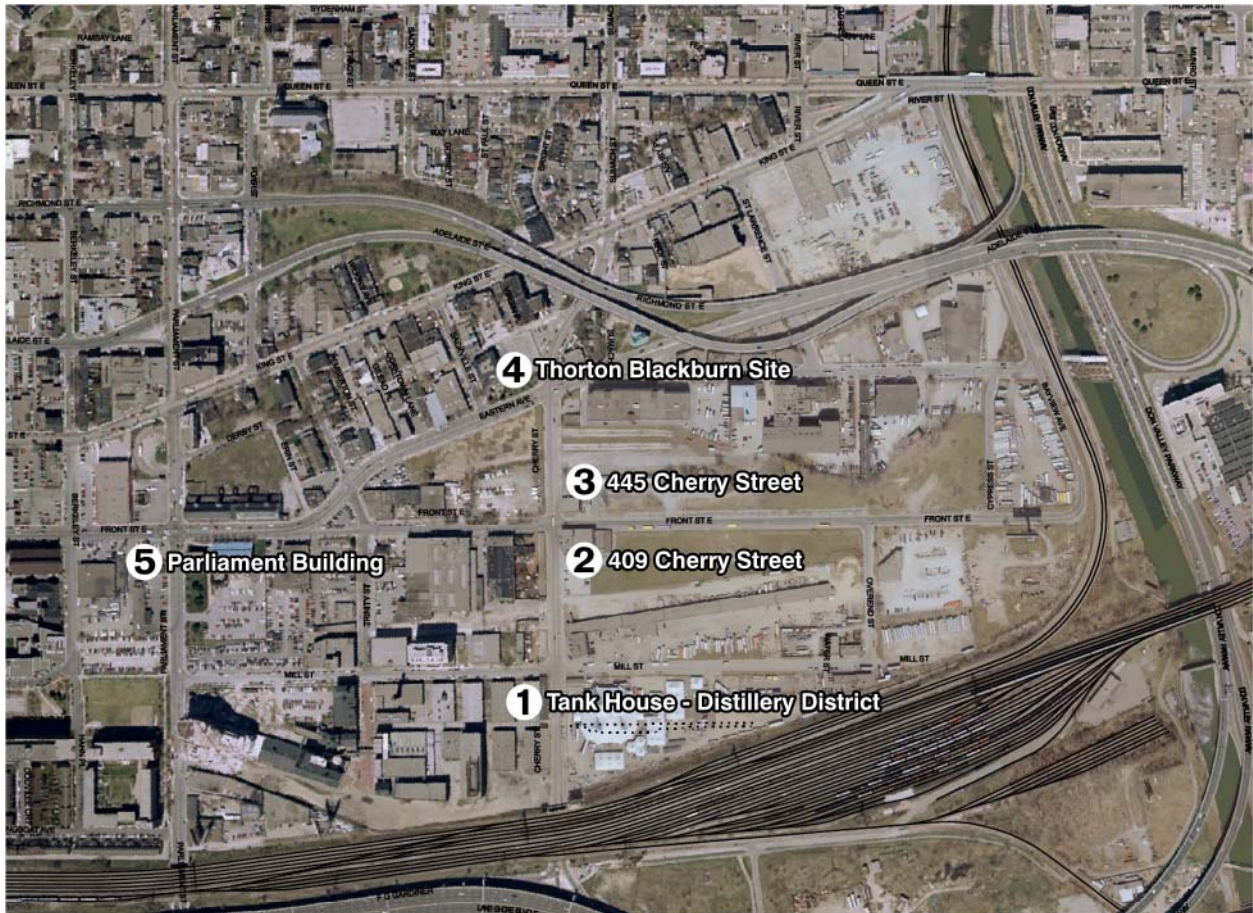
Ridership forecasts, and studies of existing higher-density mixed-use communities in the City, indicate that, if an effective transit system is in place, at peak times, non-auto mode splits of 50% to 60% are achievable. In the West Don Lands area, 40% of all trips are expected to use transit services. This is based on a number of factors including location, proposed land uses, and the planned transit network. The approximate 6500 housing units and 1 million square feet of office and retail space are expected to generate 4 million annual passengers for the TTC each year when the area is fully developed.

The purpose of the West Don Lands Transit Environmental Assessment study has been to determine the transit facilities required to serve the long-term needs of the study area while achieving the TTC's objectives of high-quality, reliable transit services and the City's and Waterfront Toronto's objectives of design and environmental excellence.

Current Conditions

The West Don Lands Precinct area is currently a mostly-vacant brownfield site which has been considered a prime candidate for revitalisation for decades. The Province of Ontario owns the majority of the land in the precinct with additional lands being owned by the City of Toronto. There are also a number of privately-owned parcels. There are a number of historic buildings and structures on the site and some archaeological remnants as illustrated in Exhibit 3.

Exhibit 3 Heritage Resources in the Study Area



Based on the approved West Don Lands Precinct Plan and the EA Master Plan, Waterfront Toronto is proceeding with approvals, design and construction of a number of elements of the plan including:

- construction of the flood protection and the 18 acre Don River Park
- soil and ground water management
- Bayview Avenue realignment and River Street reconstruction

The area north of the West Don Lands precinct, between Eastern Avenue and King Street, is a mix of low- and medium-density residential, offices and commercial development. There are a number of sites in this area with active proposals for redevelopment. The south-west portion of the study area includes the historic Distillery District which incorporates a number of historically-designated buildings. It is being redeveloped privately as a cultural district including mixed-use development and a number of condominium residential projects.

Transit service, currently, is on the periphery of the study area. The frequent 504 KING streetcar provides transit service from the study area both to the downtown area and north to Broadview Station. However, it operates in a mixed-traffic condition which would have a number of offsetting impacts on King Street operations. TTC staff have proposed ways to make the 504 KING service more reliable. Discussions are on-going with respect to how to make the 504 KING service more reliable. North-south bus service is provided to the study area by the 65 PARLIAMENT route and weekday day-time service is provided by the 72 PAPE service operating from the Port Lands area through the southern portion of the study area and west to Union Station.

In addition, the 504 KING service, and other streetcar routes that operate without passenger platforms, are not currently accessible for many people with mobility problems, or passengers who use mobility aids. The Accessibility for Ontarians with Disabilities Act (AODA) requires the TTC to ensure that its services are accessible to people with mobility limitations. The TTC is in the process of purchasing replacement streetcars that will have low floors which will help to address this problem, but passenger platforms are also an important element in making transit services fully accessible. The provision of passenger platforms is requirement, from a TTC perspective, for any newly-constructed streetcar/light rail line.

Purpose of the Project

Current transit services in the area are beyond a convenient walk for most of the large number of travellers expected to and from the new developments planned for the new West Don Lands community. The West Don Lands Precinct Plan established a goal of providing frequent and reliable transit service within a 5-minute walk of most residents of this new community and current services do not meet this objective.

The redevelopment plans are based on the assumption that a high proportion of all travel to and from the community will be made by transit. To achieve this objective, it is essential that a high-quality of transit service be provided. Transit service speed and reliability are important, as is the fundamental requirement for new streetcar facilities to have passenger platforms to provide access for passengers with mobility limitations.

In addition, developments in the West Don Lands are not occurring in isolation. A fundamental principle of the broader planning for the waterfront area is the need to tie future development into the fabric of the city by encouraging linkages between existing and future communities. From a transit perspective this is achieved by providing an integrated network of transit services that link both north-south and east-west into and through the community. Transit services in the West Don Lands need to be integrated with redevelopment plans for the East Bayfront, Lower Don, and Port Lands areas to achieve the overall benefits of the broader integrated planning approach being taken in the waterfront area.

Community Involvement Process

Waterfront Toronto has established a high standard for public and community involvement in its work, and has been successful in engaging both the local community and a wider range of interested community groups and individuals in the planning process for the waterfront. This approach has been incorporated into the planning process for the West Don Lands Transit EA study. A fourteen-member Community Liaison Committee was established for the study which met 12 times during the course of the study to provide input and advice on the conclusions being reached and on mechanisms to achieve effective consultation. In addition to four formal public workshop/information centres conducted during the study, a community design charette was organised by Waterfront Toronto and members of the community to discuss broader urban design options and alternatives for Cherry Street. A drop-in style information centre and a site-walk were also part of the public input process. In an evolutionary way, the feedback provided through the public input process has resulted in conclusions and a refined design concept that addresses the concerns and issues brought forward by the community.

Approach to Assessment

The assessment was undertaken in two stages. The first related to assessing overall needs and the identification of a preferred corridor and vehicle technology. The second stage then looked at alternatives related to the preferred way of designing the road to best accommodate the preferred vehicle type in the chosen corridor.

A significant first step in the needs assessment was the undertaking of detailed travel demand forecasts to better-understand travel needs in the community and, in particular, the need for road capacity through the precinct. A key assumption in the analysis was that a high-quality of transit service will be provided to the area that will be successful in

attracting a high-mode split to transit. The detailed traffic analysis concluded that one through auto lane in each direction on Cherry Street, with turning lanes at intersections, will be adequate to handle the future traffic volumes to, and, within the West Don Lands development. There will be limited capacity for autos to travel on Cherry Street but it was determined that this condition is acceptable and will be of some benefit to the local community itself, as the lack of road capacity has the potential to discourage transient auto traffic.

This conclusion represents a significant refinement of the original requirement for two auto lanes in each direction included in the West Don Lands Precinct Plan and EA Master Plan. It results in benefits for Cherry Street from a community and urban design perspective and provides an opportunity to narrow the right-of-way on Cherry Street compared to what was included in the EA Master Plan. This conclusion has been used as an important input into the second stage of the assessment process related to the preferred design for Cherry Street.

Another key conclusion of the initial needs assessment is that bicycle lanes should be included in the overall road design. This is an important factor in meeting the objective of reducing future auto travel, and it also serves as a key link in the greater network of cycling facilities, which helps to integrate neighbourhoods.

Preferred Corridor – Cherry Street and Sumach Street from Keating Channel to King Street

The Project team assessed four corridor options to serve the West Don Lands area as illustrated in Exhibit 4:

- Cherry Street and Sumach Street from the CN Rail corridor to King Street
- Cherry Street from the CN Rail corridor north to Front Street, west to Parliament Street and north to King Street
- Parliament Street from Queens Quay East north to King Street
- a combination of services both on Cherry Street and Parliament Street

The options were evaluated based on a formal screening process and a comprehensive set of evaluation criteria to determine the preferred alternative. The option of providing service on Parliament Street alone was screened out as it does not provide adequate coverage in the new West Don Lands area – most residents would be beyond a 5-minute walk of transit services. Options involving both Parliament Street and Cherry Street were identified as being less cost-effective from a transit perspective than the option of providing service on Cherry Street alone with respect to serving the West Don Lands area specifically. The option of providing service on Cherry Street and Sumach Street to King Street is preferred over the Cherry Street/Front Street option because of the additional transit operational delays in negotiating an additional traffic signal at the Front/Eastern intersection.

Exhibit 4 Corridor Options



Preferred Technology: Streetcars in a dedicated right-of-way

The project team began by considering a wide range of possible transit technologies. It was determined that the anticipated travel demand in the corridor does not warrant the expense of fully grade-separated facilities and these options were screened from further consideration. A number of bus propulsion technologies were identified including bus technologies that would eliminate local emissions such as electric or fuel-cell technology buses. The assessment was done based on the best future technology. For example, it was assumed for this comparison that buses, in future, will have zero local emissions (assuming fuel cell or electric propulsion).

The Project Team assessed four technology options to serve the West Don Lands area:

- conventional bus service on existing roads (do nothing alternative)
- bus service in a dedicated surface right-of-way
- conventional streetcar service on existing roads
- streetcar service in a dedicated right-of-way

Conventional buses in mixed-traffic were screened out as not providing a high enough quality of transit service (reliability, speed, comfort) to achieve the fundamental objective of competing effectively with the automobile and attracting a high-mode split to transit services. Bus services in a dedicated right-of-way, while potentially providing adequate capacity, speed and reliability of service within the community, cannot be integrated well with the existing east-west downtown transit network, which is primarily streetcars, and are not preferred for this reason.

The project team, with extensive community input through the community design charrette, developed a range of possible approaches to providing degrees of transit priority with streetcars in various combinations of transit right-of-way and combined-traffic-lane operations. It was determined, however, that streetcars require a dedicated right-of-way for transit service to operate effectively due to the requirements for transit passenger platforms, and the operational implications of mixing streetcar and traffic operations.

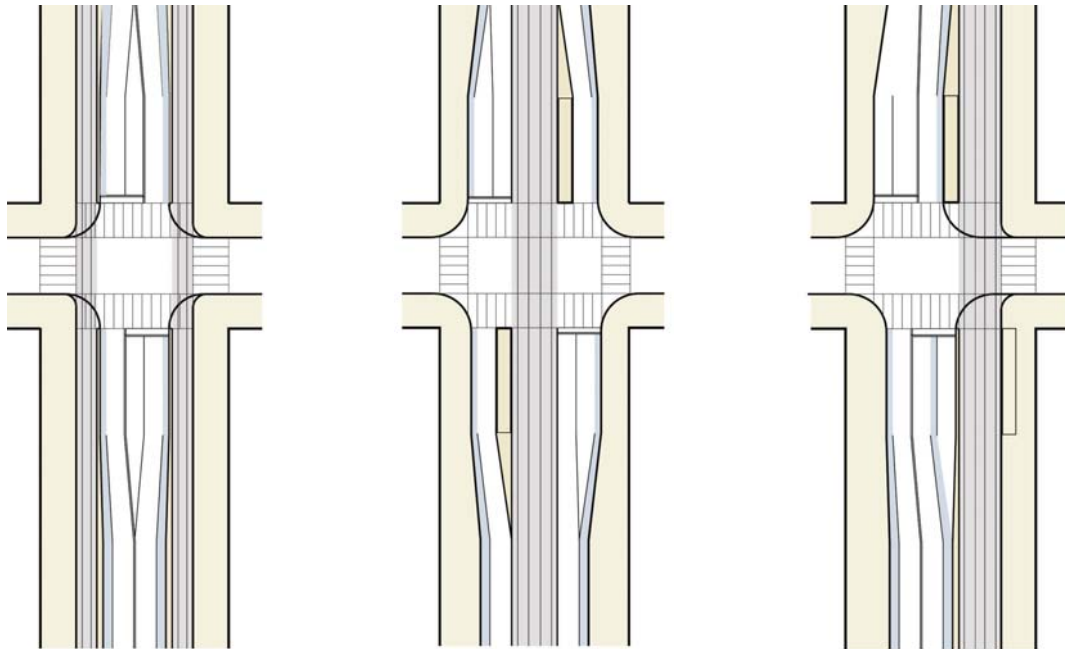
Recommended Design Alternative – Transit Right-of-Way on the East Side of Cherry Street and Sumach Street

The project team evaluated eight alternative designs for the operation of streetcars on Cherry Street and Sumach Street which were:

- mixed-traffic
- transit in outside lane – dedicated at mid-block only
- dedicated transit east side
- dedicated transit west side
- dedicated transit in median with one traffic lane per direction
- transit mall
- dedicated transit in median with two traffic lanes per direction (from EA Master Plan)
- dedicated transit in outside Lanes

Through a screening process to evaluate the alternatives with respect to transit, traffic, pedestrian and urban design objectives, the long list of design alternatives was screened down to three alternatives, all of which have transit in a dedicated right-of-way but with the right-of-way in different locations in the roadway cross-section. All of the options include bicycle lanes in the design. The three options are illustrated in Exhibit 5 and discussed below:

Exhibit 5 Short-listed Design Concepts for Dedicated Transit Lanes



Transit in Outside Lanes

Transit in Median

Transit on East Side

Alternative 1 – Dedicated Transit in the Outside Lanes

Streetcars operating in the outside lanes provide an opportunity to integrate transit into the pedestrian realm and provide for good flexibility for locating transit stops. However, this alternative limits access to a number of existing properties on both sides of Sumach Street north of Eastern Avenue, and limits the opportunity to provide for access to future developments on both sides of Cherry Street south of Eastern Avenue. In addition, there is no opportunity to provide for on-street parking with this alternative, and drop-off/pickup activities would be difficult to accommodate and potentially create safety issues. The benefits of this option, in terms of the public realm, do not outweigh the negative impact on property access and on-street parking.

Alternative 2 – Dedicated Transit in the Centre Median

This option is good from a transit and traffic operations perspective. It is a typical arrangement in Toronto and autos, pedestrians and transit operators are familiar with the arrangement. It requires, however, that transit stops be fixed from the outset and has limited flexibility to change operating arrangements over time. In addition, from a passenger perspective, the provision of waiting areas in the middle of the roadway is less desirable than integrating the transit stop into the sidewalk area, as is possible with the

other options. This design adds to the real and perceived width of the street and creates a sense of isolation for transit passengers because of the separation from the sidewalks and adjacent land uses by through traffic and bicycles. Also, the design would require two separate treed medians (on either side of the streetcar right-of-way) to effectively enhance the public realm and to be successful, such treed medians would require greater right-of-way width and a high degree of resources for ongoing maintenance. The provision of transit in the median results in the perception of a wide transportation corridor and there are limited opportunities for innovative urban design treatments.

Alternative 3 – Dedicated Transit on the East Side

This alternative represents a compromise that provides some of the benefits of each of the alternatives described above. It provides opportunities for urban design treatments that can reduce the scale of the roadway and improve the public realm. A key factor is that the distance for pedestrians crossing general traffic is reduced. The passenger loading and unloading areas are also less impacted by the sense of isolation associated with the middle of the road option. Northbound passengers, in particular, benefit from having the waiting area integrated with the sidewalk, and pedestrians on the sidewalk have a greater buffer from traffic. The design also requires a single median to separate general traffic from the transit right-of-way. This provides the opportunity for a median width that is generous enough to support the healthy growth of trees and to separate the street into corridors that create a comfortable public realm.

Many of the benefits of this design also address concerns which have been identified during the public consultation process. This option was, in fact, the second choice during a public design charette exercise that was conducted by the community in conjunction with the study. The first choice was a transit mall design (i.e., general automobile traffic would be eliminated from a section of Cherry Street), which does not support many of the City's policies and objectives for a balanced public street design.

The alternative addresses the significant operational concerns related to dedicated transit in the outside lanes (alternative 1) with respect to pick up/drop-off and can accommodate a limited amount of on-street parking. Operationally it can be designed to provide acceptable transit, traffic and pedestrian operations. There are a number of existing properties that have their access restricted or eliminated as a result of this option but these access issues can be mitigated in various ways as described below. This alternative is recommended because, on balance, the benefits of improving the public realm and innovative design treatments outweigh the difficulties related to operations and property access.

Table 1 summarises the selection of dedicated transit on the east side of Cherry Street and Sumach Street as the preferred design.

Table 1 Selection of the Preferred Design

	Transit in outside lanes	Transit in centre median	Transit on east side
Pedestrian/transit passenger environment	<ul style="list-style-type: none"> • Integrates transit and public realm • Transit stops integrated with sidewalks 	<ul style="list-style-type: none"> • Stops in middle of road • Perception of wide road 	<ul style="list-style-type: none"> • Integrates transit and public realm • Transit stops integrated with east-side sidewalks
Urban design opportunities	<ul style="list-style-type: none"> • Opportunities for some innovative public realm treatments 	<ul style="list-style-type: none"> • Some opportunity for streetscape improvement with increased width 	<ul style="list-style-type: none"> • Streetscaping possible between transit and road with little additional width
Socio-economic impacts	<ul style="list-style-type: none"> • Limits access to existing driveways on both sides • No street parking possible 	<ul style="list-style-type: none"> • Negligible affect on existing access • Street parking possible with additional width 	<ul style="list-style-type: none"> • Limits access to existing driveways on east side • Street parking possible
Transportation system	<ul style="list-style-type: none"> • Poor or pickup/drop off • Possible to modify road and transit operations without reconstruction 	<ul style="list-style-type: none"> • Preferred for transit and traffic operations • Typical arrangement driver/pedestrian familiarity • Limited flexibility 	<ul style="list-style-type: none"> • Acceptable transit road and pedestrian operations • Possible to modify road and transit operations without reconstruction
Summary			Recommended

Description of the Recommended Design

The recommended design concept is illustrated in Exhibits 6 to 8 and described below.

Exhibit 6 Recommended Design

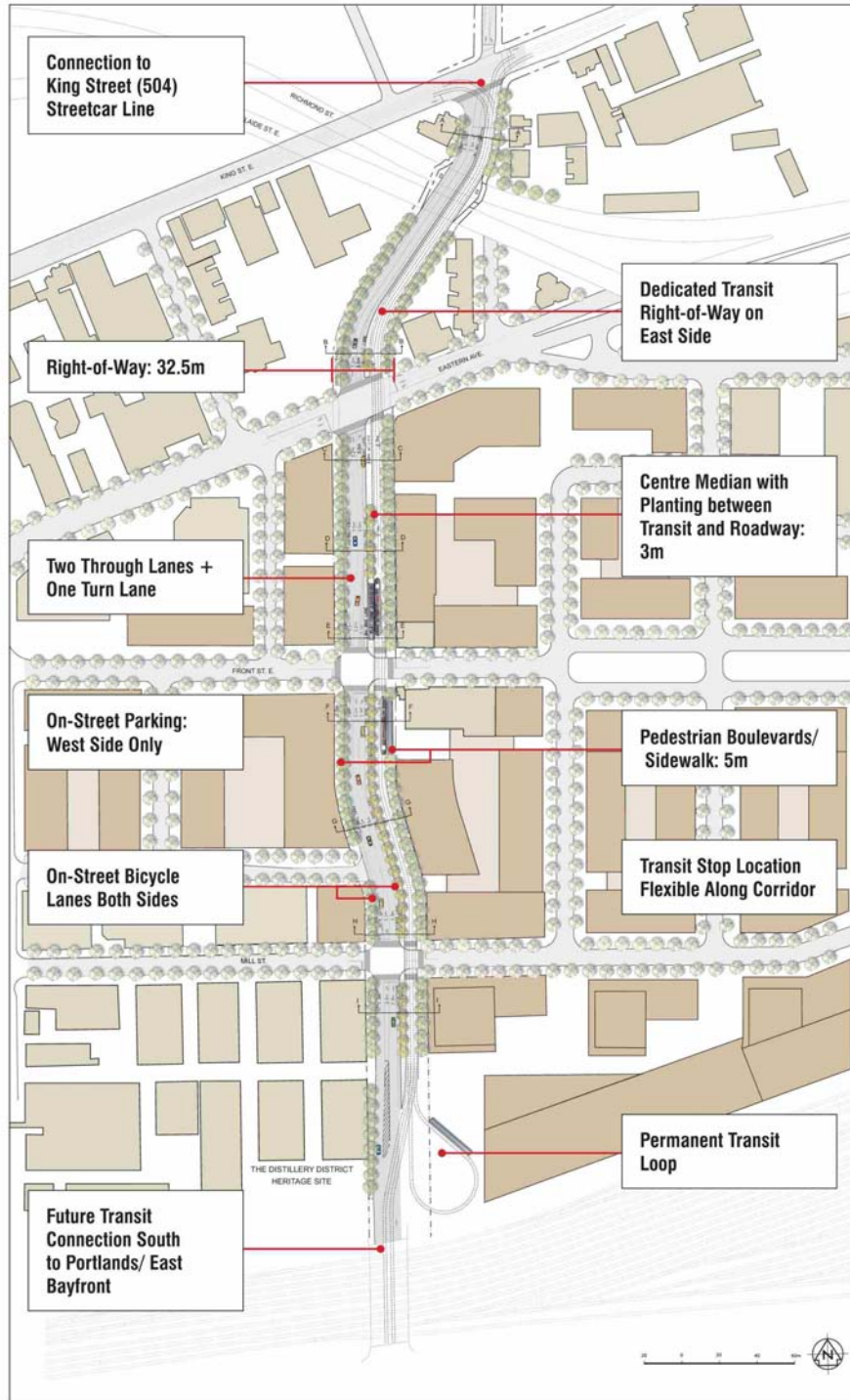


Exhibit 7 Recommended Design Concept



View North of Front Street Intersection from Above



Looking Northeast from the West Side of Cherry Street

Exhibit 8 Recommended Design Concept



Looking Northwest from the East Side of Cherry Street



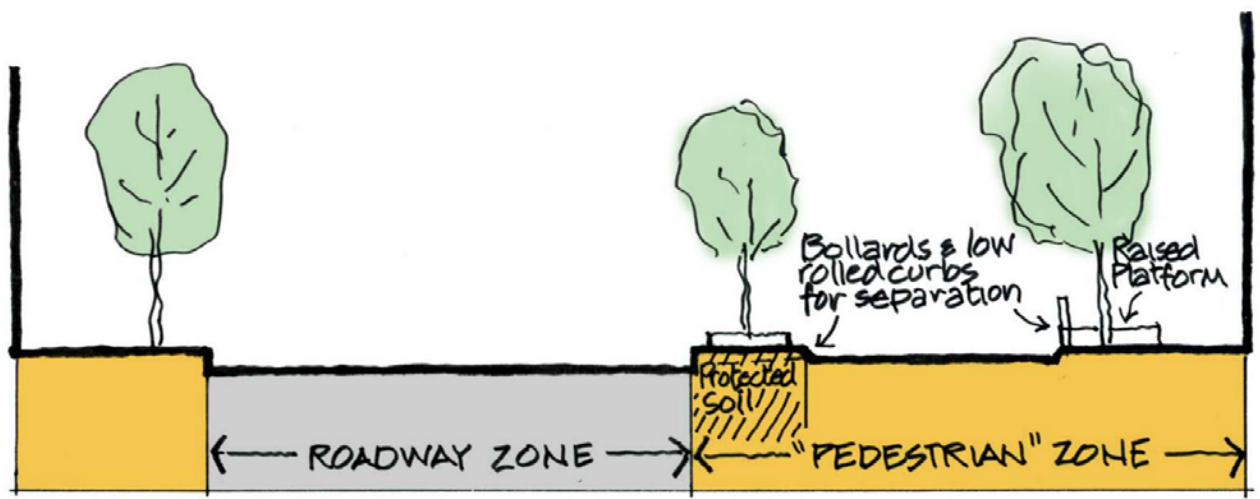
Looking Northwest from the East Side of Cherry Street

One of the key considerations in selecting transit on the east side was the potential to visually associate the transit right-of-way with the adjacent east-side boulevard. A fundamental element of the urban design approach in the study has been to consider the street as an urban place, not simply a corridor for movement. This embodies the principles of:

- designing for spatial comfort and human scale
- making a place not a thoroughfare
- orienting to the pedestrian
- protecting heritage buildings and resources

The preferred design provides an opportunity to visually expand the non-auto portion of the street, as illustrated in Exhibit 9.

Exhibit 9 Roadway Zone Versus Pedestrian Zone



Between the CN Rail corridor and Eastern Avenue, the Cherry Street right-of-way will be composed of:

- | | |
|---------------------------------------|---------------|
| • two sidewalk/boulevards at 5 m each | 10.0 m |
| • a roadway | 12.8 m |
| • a raised, planted median | 3.0 m |
| • a dedicated transit right of way | <u>6.7 m</u> |
| TOTAL RIGHT OF WAY | 32.5 m |

This standard right-of-way cannot be maintained north of Eastern Avenue where the Richmond Street and Adelaide Street ramps require that the right-of-way be narrower beneath the overhead structures. On Sumach Street between Eastern Avenue and King Street the raised median will be reduced to 1 metre, and the roadway to 9.8 metre (on-street parking is not provided). Also in this block, the boulevard space is variable, reflecting constraints of existing properties. Each component of the right-of-way is described below.

Roadway and Traffic Signals

The recommended design provides for one traffic lane and one bicycle lane per direction. At each intersection one auxiliary turn lane is provided and on street parking is provided at mid-block locations along the west side of the street. As illustrated in Exhibit 10, this can be accommodated within a uniform 12.8 metre roadway width from Eastern Avenue to Mill Street.

The east-side transit option requires that all vehicle turning movements across the transit right-of-way be signal-controlled, so the installation of traffic control signals at the intersections on Cherry Street at Front Street East and Cherry Street at Mill Street is required. To maintain a 12.8 metre roadway cross-section, only one turn lane can be accommodated at each intersection so the following turn prohibitions will be required:

- southbound left-turns from Sumach Street to eastbound Eastern Avenue
- southbound left-turns from Cherry Street to eastbound Front Street
- northbound right-turns from Cherry Street to eastbound Mill Street

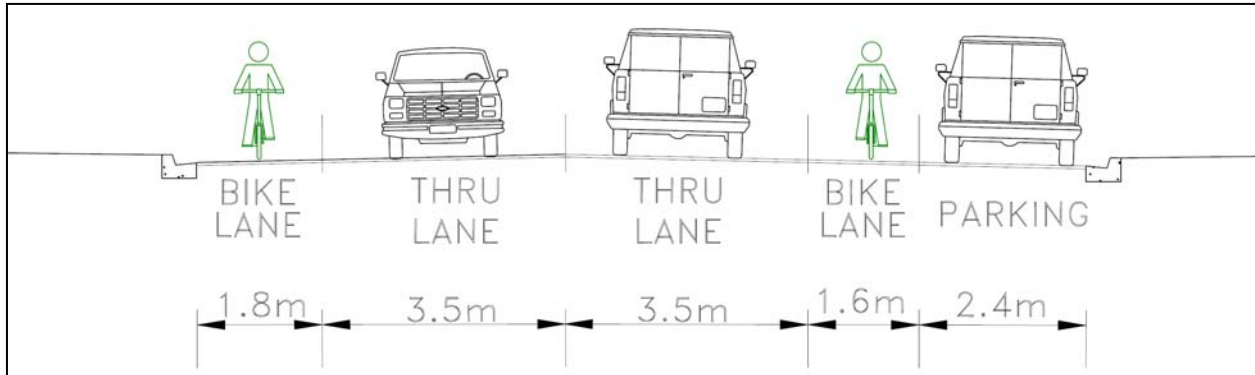
These turn prohibitions and the related signal control plan may be refined during the detailed design and West Don Lands development stage. However, changes in operational strategies will preserve a 12.8 metre road width at all intersections.

Pedestrian Zone and Boulevard Space

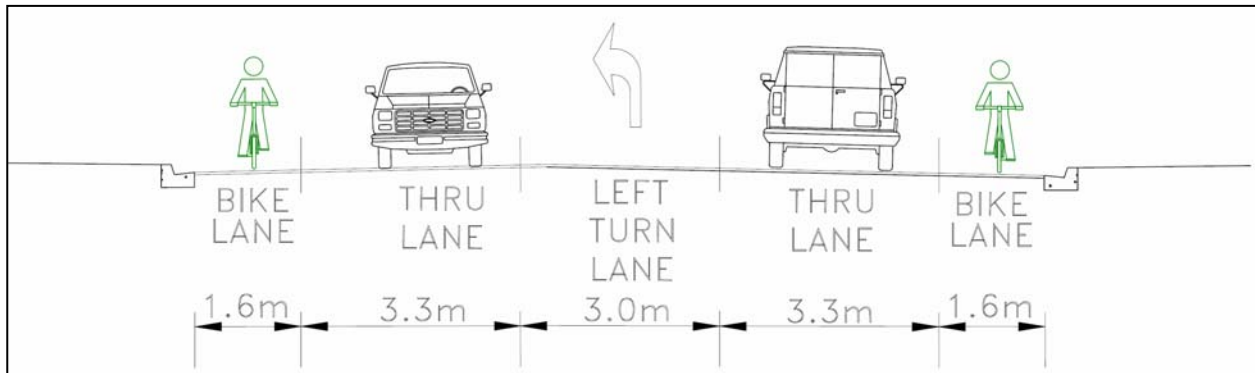
The transit-on-the-east-side option offers the potential to visually expand the “non-auto” street area through the use of consistent colour/texture treatments for both the pedestrian area and the transit right-of-way. Generous boulevard space, and a continuous median, provides considerable space for street trees and additional plantings to reduce the “scale” of the street. Bollards, curbs and trees will be used to delineate the transitway from the sidewalk. A 3 metre wide landscaped median will separate the transit right-of-way from the roadway. The median will serve as the platform for the transit stop at Front Street and, other than at transit stops, the median will be constructed with a continuous trench along with an irrigation and drainage system to allow for the planting, and long-term survival, of trees.

Exhibit 10: Alternate Configurations for 12.8 Metre Roadway

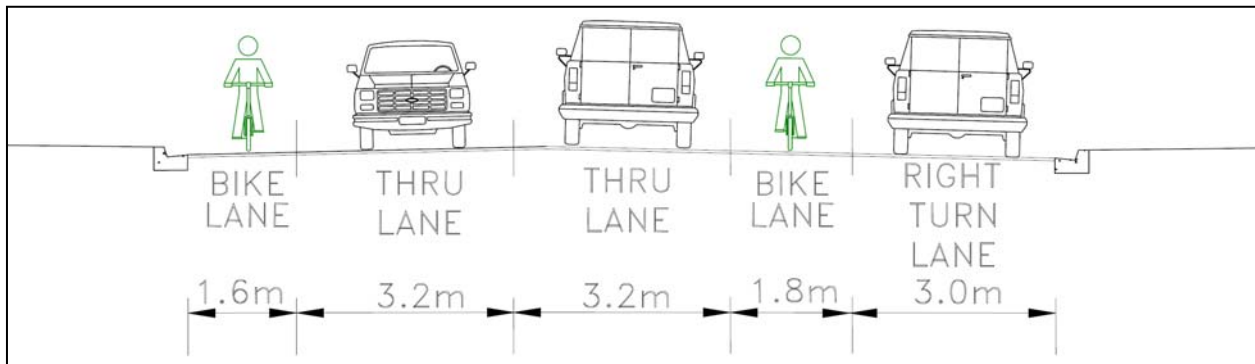
Parking One Side



Left-Turn Lane at Intersection



Right-Turn Lane at Intersection



Transit Right-of-Way

The transit right-of-way will generally be 6.7 metres wide with overhead traction power suspended from guy wires attached to poles on either side of the right-of-way (i.e. one pole in the landscaped median and one pole in the boulevard). This configuration is preferred by Toronto Fire as the clear 6.7 metres provide an additional driveable surface in the event of an emergency. The poles can be stand-alone or used in combination with street lights. At King Street tracks will be constructed to allow for streetcars to travel both from the east and the west to southbound Sumach Street.

South End Transit Loop

A permanent streetcar loop will be constructed on the east side of Cherry Street immediately north of the CN tracks to allow for service to be turned to and from the north. It is expected that Cherry Street service will eventually be extended to the south in conjunction with the re-development of the Lower Don area, ultimately to connect with future streetcar service on Queens Quay East through the East Bayfront area and into the Port Lands, as called for in the Central Waterfront Secondary Plan. The design for the loop will protect for two possible options for an extension of future services to the south as illustrated in Exhibits 11 and 12. One option would use the existing bridge with streetcars operating in the centre of the roadway, and the second option would require the construction of a new tunnel under the CN rail corridor to accommodate streetcars on the east side of the existing bridge structure.

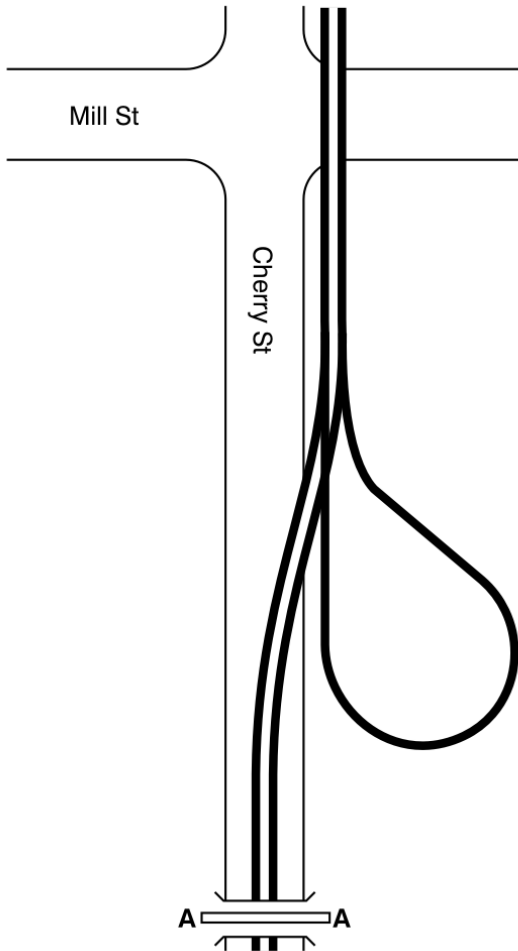
Waterfront Toronto is undertaking a Municipal Class EA Master Plan for the Lower Don area and they have agreed to specifically include the resolution of this issue in the scope of work for that study.

Property Requirements and Access Issues

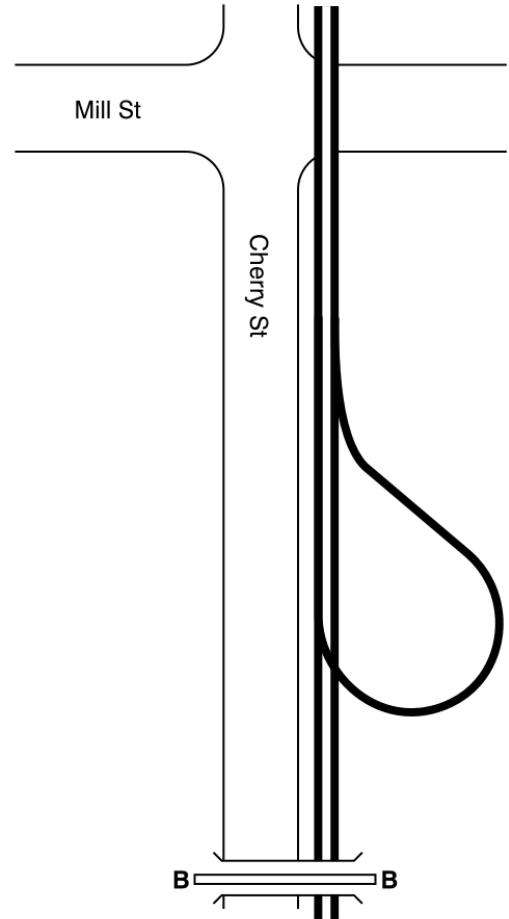
The recommended option requires that property be acquired from the Toronto District School Board and affects the access to a number of privately owned properties.

The recommended option requires that Cherry Street be widened from the current 20 metre right-of-way to approximately 33 metre. While this is less than the amount originally included in the West Don Lands EA Master Plan, land needs to be acquired for the proposed road right-of-way. All of the land requirements south of Eastern Avenue are from property owned by Ontario Realty Corporation who is aware of the requirement through their involvement with Waterfront Toronto. North of Eastern Avenue the recommended option requires that a strip of land be acquired from the Toronto District School Board property on the north-western corner of Eastern Avenue and Sumach Street. The land required is from the school yard and parking area at the back of the Inglenook Alternative School on Sackville Avenue.

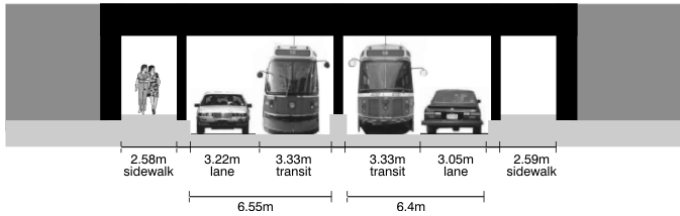
**Exhibit 11
South End - Option 1
Centre of the Road**



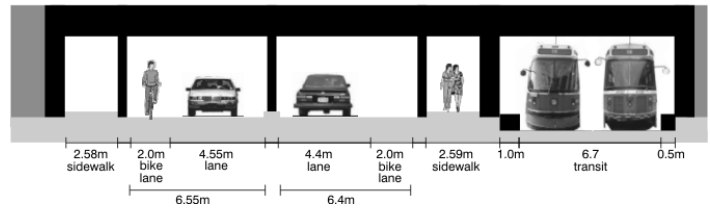
**Exhibit 12
South End - Option 2
East Side with New Tunnel**



Cross Section A-A



Cross Section B-B



A triangular piece of land is required on the east side of the school property which is approximately 9 metres wide at Eastern Avenue narrowing to the north to approximately 2.4 metres at the north property line of the school. TTC and City staff have met with the Toronto District Scholl Board and they are aware of this property requirement.

There are six private property owners on the east side of Cherry Street and Sumach Street who will have access to their property restricted as a result of the implementation of the recommended alternative. Staff have attempted to contact these property owners in a number of ways during the study process and more recently through hand-delivered notifications. To date, staff have been successful in contacting three of the six property owners individually about the proposed plan, and will continue to work to contact the remaining owners. There are opportunities to physically reconstruct access locations in some cases, which will be required as part of the project, however in other cases some form of direct compensation to individual property owners may be required as part of the project.

Next Steps in the Approval Process

Following approval of this report by City Council, the West Don Lands Transit Environmental Study Report will be filed on the public record for a minimum 30-day period in accordance with the Municipal Class Environmental Assessment process. Once EA approval is received, design and construction of the recommended design can proceed.

Waterfront Toronto is initiating the design phase of the project in conjunction with the overall design for Cherry Street and has indicated that this work will incorporate a public consultation and input process. Where possible, efforts will continue to be made to further reduce the planned Cherry Street right-of-way width through the detailed design process, although reductions if achievable are likely to be nominal at this point. TTC and Waterfront Toronto staff are developing a Delivery Agreement for TTC staff involvement in the design and construction project to ensure that the resulting transit facilities are acceptable to the TTC.

JUSTIFICATION

Providing improved transit service into the West Don Lands development area on a “transit first” basis, where a high quality of transit service is provided in conjunction with the first development to take place, will provide a strong encouragement for the community to become highly transit-oriented. The recommended option of providing streetcars in a dedicated right-of-way on the east side of Cherry Street and Sumach Street provides excellent coverage and access to high quality transit services for the West Don Lands and surrounding areas. It also provides an opportunity to create a unique pedestrian and public realm for Cherry Street and Sumach Street, consistent with the City and Waterfront Toronto’s objectives for urban design excellence in the West Don Lands area.