



**STAFF REPORT
ACTION REQUIRED**

**St. Clair Avenue West between Westmount Avenue and
McRoberts Avenue – Intersection Configuration at
Dufferin Street**

Date:	July 16, 2007
To:	City Council
From:	General Manager, Transportation Services
Wards:	Ward 17 – Davenport
Reference Number:	cc070093-to

SUMMARY

The purpose of this report is to respond to a number of issues raised by the Etobicoke York Community Council during consideration of the Transportation staff report dated June 12, 2007, respecting the necessary road alteration by-laws associated with the St. Clair Avenue West Transit Project between Westmount Avenue and McRoberts Avenue in the Etobicoke York District.

Etobicoke York Community Council recommended approval of all the alterations outlined in the staff report with the exception of those associated with the near side eastbound transit stop on the south side of St. Clair Avenue, just west of Dufferin Street. The Community Council requested further information on the intersection configuration at this location and at its special meeting of July 12, 2007, recommended among other things, that the intersection of St. Clair Avenue West and Dufferin Street be designed to allow for an eastbound to northbound left-turn and U-turn lane.

As St. Clair Avenue West is a transit route, this matter requires the approval of City Council.

RECOMMENDATIONS

Transportation Services recommends that:

1. **The recommendation of the Etobicoke York Community Council at its special meeting of July 12, 2007, that the intersection of St. Clair Avenue West and Dufferin Street be designed to allow for an eastbound to northbound left turn and U-turn lane not be adopted; and**
2. **The near side eastbound stop configuration on the south side of St. Clair Avenue West at Dufferin Street, as recommended in the Preferred Design Concept identified through the St. Clair Avenue West Transit Improvement Class Environmental Assessment Study process, be approved.**

Financial Impact

All costs associated with the road alterations have been included as part of the St. Clair Avenue West Transit Improvement Project.

ISSUE BACKGROUND

The Etobicoke York Community Council at its meeting of June 26, 2007, amended the transportation staff report dated June 12, 2007, by deleting the reference to the transit platform on the south side of St. Clair Avenue West, west of Dufferin Street and requested that the General Manager, Transportation Services, in consultation with the Toronto Transit Commission (TTC) and City Planning, report directly to the July 16, 2007, City Council meeting on issues regarding the St. Clair Avenue West Transit Improvement Project, specifically related to the intersection of St. Clair Avenue West and Dufferin Street as follows:

- a. How eastbound left turns at Dufferin Street can be accommodated;
- b. The benefits of far side loading, and necessity for it in this location due to the large volumes of commuters at this intersection.
- c. The viability of allowing the TTC platforms at Dufferin Street and St. Clair Avenue West to be the same width as the rest of the platforms on St. Clair Avenue West (2.0m);
- d. The viability of incorporating a mandatory set back in the Avenue Study already underway on St. Clair Avenue West, requiring that the sidewalk be widened as part of New Redevelopment north of St. Clair Avenue West;

- e. Maintaining access north of St. Clair Avenue West as much as possible to local residents and to avoid side street traffic infiltration; and
- f. Given the comprehensive Green Plan Climate Change Document, adopted by the City Executive Committee on June 25, 2007, concerning reducing greenhouse gas output, to report on negative neighbourhood impacts on air quality and pollution.

The Etobicoke York Community Council also directed that a Special Meeting of the Etobicoke York Community Council be held on Thursday, July 12, 2007, at 7:00 p.m. at the York Civic Centre, prior to the July 16, 2007 meeting of City Council, to hear speakers on the proposed configuration of the Dufferin Street/St. Clair Avenue West intersection; and that staff send notice to the affected local community bounded by Westmount Avenue to the east, McRoberts Avenue to the west, Rogers Road to the north and Davenport Road to the south and directed that staff address any concerns arising out of this Special Meeting in a concurrent report to the July 16, 2007 meeting of City Council.

At its special meeting of July 12, 2007, the Etobicoke York Community Council requested the General Manager, Transportation Services, to submit a report to the July 16, 2007 meeting of City Council on:

- 1. The comments and views expressed by the public at the Special Meeting of the Etobicoke York Community Council on July 12, 2007, on the proposed configuration of the intersection of St. Clair Avenue West and Dufferin Street; and
- 2. The feasibility and need for railings or barriers along the sidewalk to enhance pedestrian safety.

The Etobicoke York Community Council also recommended that the intersection of St. Clair Avenue West and Dufferin Street be designed to allow for an eastbound to northbound left turn and U-turn lane.

This matter was also discussed by the Toronto Pedestrian Committee at its meeting of July 10, 2007. The Toronto Pedestrian Committee recommends that City Council continue to support the preferred design concept identified through the St. Clair Avenue West Transit Improvement Class Environmental Assessment study process for the Dufferin Street/ St. Clair Avenue intersection to minimize sidewalk cuts.

COMMENTS

Transportation staff, in consultation with the TTC and City Planning, have investigated the concerns raised by the Etobicoke York Community Council. Detailed comments are noted in Appendices A through F attached. A summary of these findings is noted below:

- a) Eastbound left turns at St. Clair Avenue West and Dufferin Street can be accommodated by implementing a 2.4m far side streetcar platform configuration on the south side of St. Clair Avenue West, east of Dufferin Street, but such a configuration would result in the reduction of additional sidewalk space when compared to the recommended configuration.
- b) Farside stops are best overall from a transit perspective at very busy stops with a high volume transit service on the cross-street. This configuration is desirable but not essential.
- c) Platform widths of 2.4m have been proposed at Lansdowne Avenue, Dufferin Street, Oakwood Avenue, Bathurst Street and Avenue Road. Reducing the platform width to 2.0m at Dufferin Street is not recommended.
- d) Setback requirements along St. Clair Avenue West in the vicinity of Dufferin Street are being proposed as part of the Avenue Study for St. Clair Avenue West between Keele Street and Glenholme Avenue. Staff will continue to seek opportunities to improve pedestrian amenity and widen sidewalks as redevelopment occurs in this area.
- e) The Preferred Design Concept identified through the St Clair Avenue West Transit Improvement Class EA Study addresses a number of operational deficiencies along the St. Clair Avenue West corridor and provides improved left turn access which will help mitigate infiltration. A monitoring program will be implemented to identify and evaluate changes in traffic patterns and address any problems that might arise.
- f) The St. Clair Avenue West Transit Improvement Project will serve to improve transit service, increase transit ridership and reduce automobile dependency. It will also improve the pedestrian realm along the corridor. The configuration of the St. Clair Avenue/Dufferin Street intersection will have little, if any, measurable impact on the environmental benefits of the overall project.

The comments and views expressed by the public on the proposed configuration of the intersection of St. Clair Avenue West and Dufferin Street and the feasibility and need for railings or barriers along the sidewalk to enhance pedestrian safety, as requested by the Etobicoke York Community Council are summarized in Appendices G and H respectively.

CONCLUSION

Both intersection configurations are operationally feasible but both involve reductions to the sidewalks in the vicinity of St. Clair Avenue West and Dufferin Street.

The near side eastbound stop configuration on the south side of St Clair Avenue West at Dufferin Street, as recommended in the EA, the staff report of June 12, 2007, and as endorsed by the Toronto Pedestrian Committee report, preserves more sidewalk, but prohibits eastbound to northbound left turns. Should City Council support this configuration, the design shown on sketch No. EY07-151 and recommended in the June 12, 2007, staff report should be approved.

Should City Council support the recommendation of the Etobicoke York Community Council to design the intersection to allow for an eastbound to northbound left turn and U-turn lane, City Council should approve a far side stop configuration as shown on Sketch No. EY07-161.

Staff of City Planning and the TTC have been consulted and have contributed to the preparation of this report and concur with its contents.

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SIGNATURE

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ATTACHMENTS

Appendices: "A" to "H"
Sketch: No. EY07-151
Sketch: No. EY07-161

Appendix “A”

Accommodation of left turns at Dufferin Street

EXISTING CONDITIONS

The existing streetcar platforms on St. Clair Avenue West are in a near side configuration. Sidewalks on both sides range in width from 4.2m to 4.6m. Eastbound to northbound and westbound to southbound left turns are prohibited during the peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.), Monday to Friday. Left turns from the streetcar tracks are allowed at other times. On the basis of recent counts, there is little demand for left turns at this location (approximately 45 vehicles per hour in each direction during non-peak hours.)

RECOMMENDED CONFIGURATION

The recommended configuration presented in the staff report of June 12, 2007, as shown on Sketch No. EY07-151, attached, is essentially a nearside/farside combination. In the westbound direction, a far side stop is provided on the west side of the intersection and a storage lane for westbound to southbound turns and U-turns is provided on the east side of the intersection.

In the eastbound direction, a near side stop is provided on the west side of the intersection. A storage lane for turning movements cannot be provided within the limited cross section without reducing the width of the south sidewalk to an unworkable extent. Under this configuration, eastbound to northbound left turns and u-turns will be prohibited. In the event that eastbound motorists are destined north on Dufferin Street, they would proceed easterly on St. Clair to Northcliffe Boulevard, make a U-turn at the signal, and return to Dufferin Street to make a right turn northerly.

This configuration forms part of the Preferred Design Concept identified through the St. Clair Avenue West Transit Improvement Class Environmental Assessment Study process adopted by City Council at its meeting of September 28, 29, 30 and October 1, 2004.

ALTERNATE CONFIGURATION

An eastbound to northbound left turn and U-turn lane, as recommended by the Etobicoke York Community Council, could be accommodated by implementing a far side configuration as shown on Sketch No. EY07-161, attached.

Under this configuration, left turns would be allowed at all times in both directions. However, assuming the platform widths remain at 2.4 m (this aspect is discussed further in Appendix “C”), there will be additional losses to sidewalk area, given a slight shift in the track alignment to the north and the need for a taper on the east side of the intersection.

ANALYSIS

The existing sidewalk widths and corresponding reductions to sidewalk widths and areas associated with the two intersection configurations are summarized on Tables A1 and A2.

TABLE A1

IMPACT OF INTERSECTION CONFIGURATION ON SIDEWALK WIDTHS AT ST. CLAIR AVENUE WEST AND DUFFERIN STREET

Location	Existing Condition 1.5 m platforms, near side configuration	EA Recommended Design 2.4 m platforms, farside westbound and near side eastbound			Alternate Design 2.4 m platforms, farside configuration		
	Existing width of sidewalk	Resulting width of sidewalk	Reduction from existing		Resulting width of sidewalk	Reduction from existing	
	m	m	m	%	m	m	%
a) Northwest corner of St Clair and Dufferin	4.6	3.6	1.0	22	3.4	1.2	26
b) Southwest corner of St Clair and Dufferin	4.2	3.0	1.2	29	3.2	1.0	24
c) Northeast corner of St Clair and Dufferin	4.6	3.2	1.4	30	3.2	1.4	30
d) Southeast corner of St Clair and Dufferin	4.4	3.4	1.0	23	3.2	1.2	27

TABLE A2**IMPACT OF INTERSECTION CONFIGURATION ON SIDEWALK AREAS AT ST. CLAIR AVENUE WEST AND DUFFERIN STREET**

Location	Existing Condition 1.5 m platforms, near side configuration	EA Recommended Design 2.4 m platforms, farside westbound and near side eastbound			Alternate Design 2.4 m platforms, farside configuration		
	Existing area of sidewalk	Resulting area of sidewalk	Reduction from existing		Resulting area of sidewalk	Reduction from existing	
	m ²	m ²	m ²	%	m ²	m ²	%
a) North side, Dufferin to St. Clair Gardens	328.5	285.0	43.5	13	233.9	94.6	29
b) South side, Dufferin to Via Italia	259.4	222.4	37.0	14	222.4	37.0	14
c) North side, Dufferin to Westmount	255.3	206.4	48.9	19	205.1	50.2	20
d) South side, Dufferin to Westmount	336.2	315.6	20.6	6	255.1	81.1	24

The impact on street trees is shown on Table A3.

TABLE A3**IMPACT OF INTERSECTION CONFIGURATION ON STREET TREES AT ST. CLAIR AVENUE WEST AND DUFFERIN STREET**

Location	Existing Condition 1.5 m platforms, near side configuration	EA Recommended Design 2.4 m platforms, farside westbound and near side eastbound	Alternate Design 2.4 m platforms, farside configuration
	No. of street trees	Trees to be removed	Trees to be removed
a) North side, Dufferin to St. Clair Gardens	9	2	2
b) South side, Dufferin to Via Italia	8	1	1
c) North side, Dufferin to Westmount	5	3	3
d) South side, Dufferin to Westmount	7	2	6

From an operational point of view, staff of the Transportation Division and TTC have indicated that both alternatives are workable. However, City Council has previously directed that the preservation of the current sidewalk width on St. Clair Avenue West is made a key guiding principle during the detailed design and that staff investigate further possibilities to minimize and eliminate cuts to sidewalks and to add sidewalk space where possible (Clause No. 1, Recommendation No. VI) Policy and Finance Committee Report No. 7 adopted by City Council at its meeting of September 28, 29 and October 1, 2004). In light of this directive, staff have been advancing the nearside/farside combination recommended in the staff report of June 12, 2007, as shown on Sketch No. EY07-151.

Appendix “B”

The benefits of far side loading, and necessity for it in this location due to the large volumes of commuters at this intersection

The TTC has indicated that, generally speaking, farside stops coupled with transit priority signals are the most efficient from a transit perspective at very busy stops with a high volume transit service on the cross-street. This has been a guiding principle in the review and establishment of the preferred stop locations on St. Clair Avenue West at Dufferin Street.

Along the entire streetcar line, far side stop configurations have been recommended at most stops, with the exception of Tweedsmuir Avenue, Oakwood Avenue (both stops are on the east side of the intersection), Dufferin Street (both stops are on the west side of the intersection), and Earls court Avenue. Combination nearside/farside stops have been recommended at these four locations due to a need to balance local conditions and operating needs.

Appendix “C”

The viability of allowing the TTC platforms at Dufferin Street and St. Clair Avenue West to be the same width as the rest of the platforms on St. Clair Avenue West (2.0m)

In recent years, TTC has been installing wider platforms wherever possible to better serve transit users' current and future needs; for example, the platforms on Spadina Avenue are 2.4m wide and the recently installed platforms on The Queensway at Windermere Avenue are 2.6m wide.

On the St Clair line, 2.4m wide platforms have been proposed at the busiest stops: Lansdowne Avenue, Dufferin Street, Oakwood Avenue, Bathurst Street and Avenue Road. The remaining platforms have been designed to a 2.0m width.

TTC has indicated that the St. Clair Avenue West stops at Dufferin Street are the busiest on-street stops on the route, essentially twice as busy as the Avenue Road stops. The eastbound stop at Dufferin Street is used by 2,240 passengers on a typical weekday while the eastbound Avenue Road stop is used by 1,040 passengers. Similarly, in the westbound direction, the Dufferin Street stop is used by 2,280 passengers while the Avenue Road stop is used by 1,050 passengers. Based on estimates provided by staff, there could be 40 to 50 transit users boarding and leaving the streetcar at Dufferin Street during a typical cycle. TTC have advised that a 2.4m wide platform can safely accommodate this demand, as well as expected future demands, and any reduction in platform width could cause operational and safety problems, placing transit patrons on the sidewalk, or at worst, on the road.

Accordingly, it is the recommendation of staff that the platforms at Dufferin Street be constructed to a width of 2.4 metres.

The Environmental Assessment study also identified growth in streetcar ridership on St. Clair Avenue West, from not only the local area but from growth in transit ridership across the City. Consideration was given in the EA study to provide platforms at an appropriate width to accommodate these emerging needs.

Appendix “D”

The viability of incorporating a mandatory set back in the Avenue Study already underway of St. Clair Avenue West, requiring that the sidewalk be widened as part of New Redevelopment north of St. Clair Avenue West

Draft avenue studies have been submitted for the various avenue study areas along St. Clair Avenue West which include Keele Street to Glenholme Avenue (Etobicoke York District) and Bathurst Street to Glenholme Avenue (Toronto East York District). These draft studies are currently being reviewed by staff and have yet to be finalized.

Both draft studies have recommended building setbacks to provide for widened sidewalks along St. Clair Avenue West and at various intersections and side streets. However this has been approached differently in each of the studies.

Once the studies have been finalized, staff will likely develop a consolidated approach for both study area segments which will specify building set backs along St Clair Avenue West. However, what the setback requirement will be and how it will be applied cannot be determined until the studies have been finalized.

As development proceeds, staff will continue to seek out and proactively pursue opportunities to widen sidewalks along the St Clair corridor, including the intersection of St. Clair Avenue West and Dufferin Street.

Appendix “E”

Maintaining access north of St. Clair Avenue West as much as possible to local residents and to avoid side street traffic infiltration

During the St. Clair Avenue West Transit Improvement Class Environmental Assessment study process, area residents, community associations and other stakeholders identified concerns about possible traffic infiltration into adjacent neighbourhoods as a result of changes to traffic capacity along St. Clair Avenue West. The related issue of safety impacts on the side streets was also raised as a concern if traffic volumes were to increase.

The project team continually revised the design concept for the exclusive streetcar lanes to ensure that there would be enough capacity to accommodate all existing traffic volumes along St. Clair Avenue West and the designs developed and advanced have an objective of improving traffic flow and mitigating some of the worst current “bottleneck” intersections. The results of microsimulation modelling show improved transit services can be achieved with minimal impact on estimated traffic flows on side-streets.

One area of improvement is the provision of increased left turns from St. Clair Avenue West in several locations. Presently, left turn movements are prohibited at Dufferin Street (eastbound and westbound, 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., Monday to Friday), Oakwood Avenue (westbound, 7:00 a.m. to 7:00 p.m., Monday to Friday), Bathurst Street (westbound, at all times), and Avenue Road (eastbound and westbound, 7:00 a.m. to 9:30 a.m. and 3:30 p.m. to 6:00 p.m., Monday to Friday). The current design provides for exclusive left-turn lanes, westbound at Dufferin Street, eastbound at Oakwood Avenue, eastbound and westbound at Bathurst Street, and eastbound and westbound at Avenue Road, that would be available 24 hours a day, seven days a week. These left turn/U-turn lanes would facilitate more efficient traffic movements at intersections and address demand.

Of course, some changes to local traffic patterns due to changes in left-turn access will occur and this has been analysed in detail. Some local side streets would experience less traffic than they do today, while others would experience more. However, none would experience significant changes in traffic and traffic operational recommendations (eg. turn and entry restrictions) are being developed to implement measures to mitigate the negative effects of any traffic changes. In addition, a monitoring program will be implemented to identify and evaluate changes in traffic patterns and address any problems that might arise.

With respect to schools in the area, the project team consulted with Toronto District School Board and Toronto District Catholic School Board to ensure their understanding of the design concept and to invite them to participate in any future consultation.

Appendix “F”

Given the comprehensive Green Plan Climate Change Document, adopted by the City Executive Committee on June 25, 2007, concerning reducing greenhouse gas output, to report on negative neighbourhood impacts on air quality and pollution

The report dated June 12, 2007, entitled “Climate Change, Clean Air and Sustainable Energy Action: Moving from Framework to Action”, which was considered by the City Executive Committee on June 25, 2007, recommends a number of overarching initiatives to reduce greenhouse gas and smog emissions. In the transportation sector, there is a broad array of recommendations relating to a sustainable transportation system and the preparation of a Sustainable Transportation Implementation Strategy consistent with the Official Plan, Bike Plan, Transit City Plan, the TTC Ridership Growth Strategy and the Walking Strategy to achieve the greenhouse gas and smog emission reduction targets.

The St. Clair Avenue West Transit Improvement Project, and other similar transit initiatives, is a key and necessary element of a strategy to achieve these objectives. It will serve to improve transit service, increase transit ridership and reduce automobile dependency. It will also improve the pedestrian realm along the corridor. The configuration of the St. Clair Avenue West/Dufferin Street intersection will have little, if any, measurable impact on the environmental benefits of the overall project.

Appendix “G”

Comments and views expressed by the public on the proposed configuration of the intersection of St. Clair Avenue West and Dufferin Street at the Special Meeting of the Etobicoke York Community Council on Thursday, July 12, 2007

The Special Meeting of the Etobicoke York Community Council that was held at the York Civic Centre on Thursday, July 12, 2007, was attended by about 30 members of the general public. Also in attendance were staff of City Planning, TTC and Transportation.

Approximately 16 individuals made deputations. There were roughly five deputations in favour of the nearside/farside configuration recommended in the staff report, and 11 in favour of an eastbound far side configuration that would provide for an eastbound to northbound left turn. Six written submissions were also received at the special meeting; four in support of the near side eastbound configuration and two in support of an eastbound to northbound left turn.

The main comments provided and reasons given for supporting the staff recommendation included the following:

- *Left turns are already prohibited, demand is low and the left turn is not needed*
- *2.4m wide platform is necessary*
- *Sidewalk space should not be given up for vehicular space*
- *No further sidewalk cuts should be supported*
- *No more vehicle lanes should be provided*
- *Desire to see local transit improved and sidewalks preserved*

The main comments provided and reasons given for supporting the left turn provision included the following:

- *Inadequate sidewalk widths and corner radii are already substandard;*
- *Do not require 2.4m platforms; 2.0m is adequate*
- *Prohibited eastbound left turn is a problem and will increase traffic*
- *U-Turns at Northcliffe will cause safety concerns, especially for children and commercial vehicles; far side is in the best interest of area school children as U-Turns will not be required at Northcliffe*
- *Not enough on-street parking is provided and access to Parking Authority Lot on Dufferin north of St. Clair will be hindered.*
- *Long platforms will not be utilized*
- *There is no difference in sidewalk cuts*
- *Sidewalk space can be maintained by restricting street furniture, using smaller diameter poles and relocating traffic signal control boxes off the sidewalk.*
- *Those visiting the area from outside of the City will have difficulty reaching their local destinations*
- *Left turn is necessary for goods movement; prohibition will be a hindrance to business.*

Appendix “H”

Feasibility and need for railings or barriers along the sidewalk to enhance pedestrian safety

The installation of railings and barriers along City sidewalks is not undertaken on a City wide basis to enhance pedestrian safety. There have, however, been specific installations entertained over the years where there are grade differences between the sidewalk and adjacent roadway or unique site conditions (eg. school yard or playground entrances, very narrow widths or site constraints).

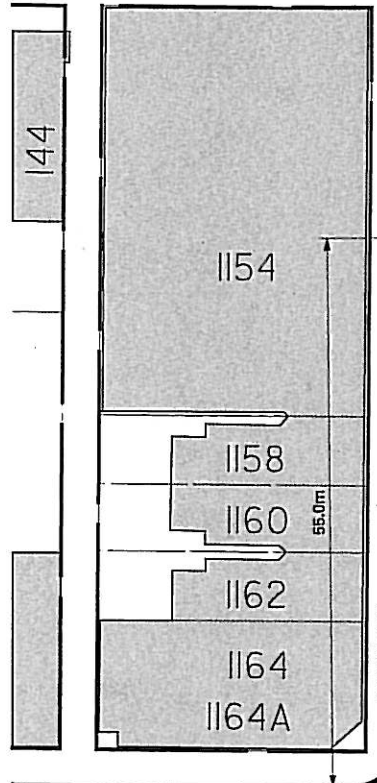
It should be noted that most pedestrian railings per se are not robust enough to provide an element of protection from vehicles; the primary purpose of the railing is to channelize pedestrians along the sidewalk. The installation often is accompanied by a number of negative impacts including a reduction in effective sidewalk width, hindrance of summer and winter maintenance activities and prevention of parking and loading activities.

Pedestrian railings are not currently being considered as an integral part of the St. Clair Avenue West project. Should the need or demands arise for a railing in a particular area during the course of construction or following the completion of same, installation will be considered on a site specific basis.



WESTMOUNT AVE

WESTMOUNT AVE



AVENUE WEST

PROPOSED CURB

EXISTING CURB

EXISTING TTC ISLAND (TO BE REMOVED)

1.4m

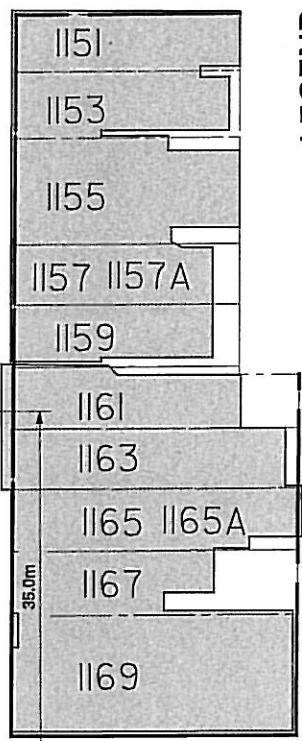
PROPOSED TTC RIGHT OF WAY

PROJECT LIMITS

EXISTING CURB

1.0m

PROPOSED CONC. WALK

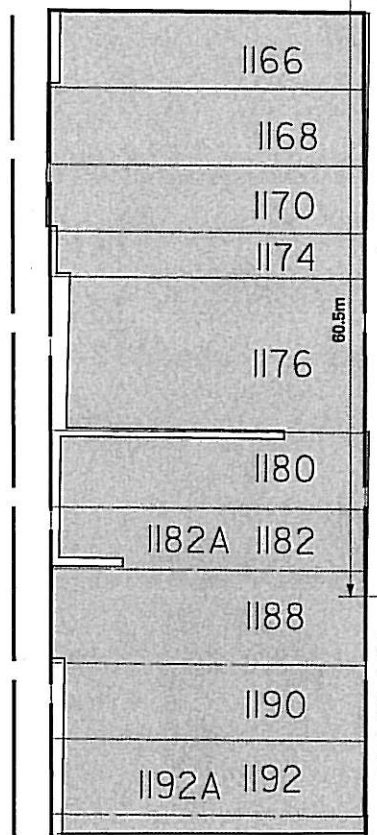


LEGEND

PROPOSED CURB MODIFICATION

DUFFERIN

STREET



ST. CLAIR

PROPOSED CURB

1.0m

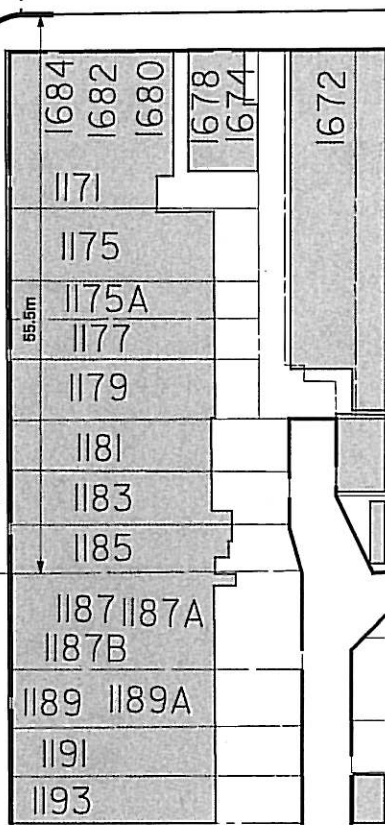
PROPOSED TTC ISLAND (TO BE REMOVED)

PROPOSED TTC RIGHT OF WAY

1.2m

EXISTING TTC ISLAND (TO BE REMOVED)

EXISTING CURB



ST. CLAIR AVENUE WEST
WESTMOUNT AVENUE - 85m WEST OF DUFFERIN STREET
PROPOSED CURB MODIFICATIONS



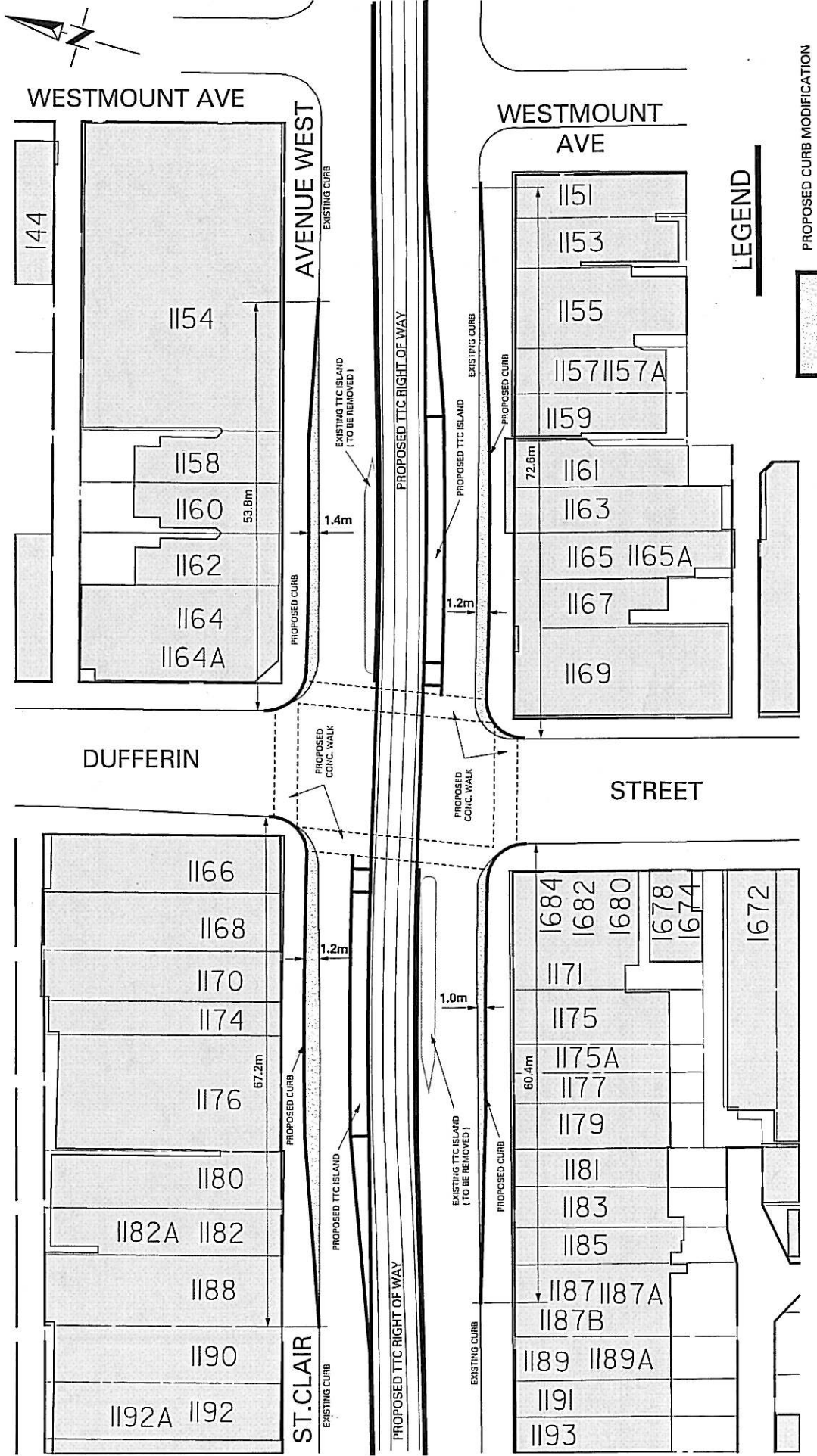
DWG. NO. EY07-151

P.D.M.

JUNE 2007

TRANSPORTATION SERVICES

ETOBICOKE YORK DISTRICT



ST. CLAIR AVENUE WEST
WESTMOUNT AVENUE - 85m WEST OF DUFFERIN STREET
PROPOSED CURB MODIFICATIONS (ALTERNATE DESIGN)

