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October 14, 2004

Councillor Michael Walker
City of Toronto, Ward 22 – St. Paul's
100 Queen St. W., Suite B26
Toronto, Ontario
M5H 2N2

and;

Councillor Joe Mihevc
City of Toronto, Ward 21 – St. Paul's
100 Queen St. W., Suite B35
Toronto, Ontario
M5H 2N2

Dear Councillors Walker and Mihevc:

Re: Spadina Road and Kilbarry Road/Burton Road – Various traffic issues related to potential signalization

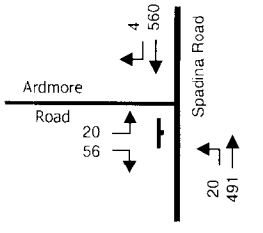
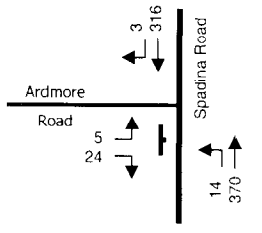
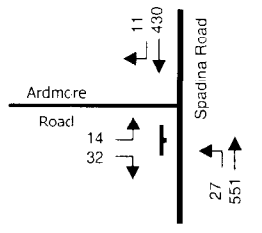
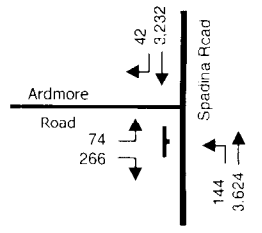
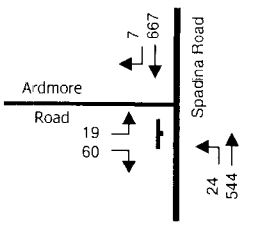
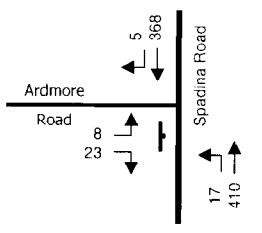
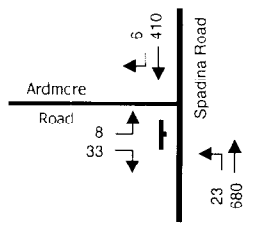
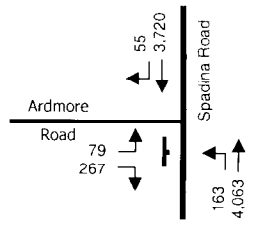
Further to our August 31, 2004 letter that reviewed various traffic issues related to the potential signalization of the above-noted intersection, we have completed our review of the two outstanding traffic issues. The following discussion summarizes the details of our study.

Request to review the feasibility of installing traffic control signals at Spadina Road and Ardmore Road

Spadina Road, in the vicinity of Ardmore Road, is a two-lane, minor arterial roadway with a daily two-way traffic volume of approximately 17,000 vehicles. Ardmore Road intersects the west side of Spadina Road in a "T-type" intersection and is "Stop" controlled. Ardmore Road is a two-way, local roadway, with a daily two-way traffic volume of approximately 1,200 vehicles. A pedestrian crossover (PXO) is located on the south intersection leg.

Collision statistics provided by the Toronto Police Service for a three-year period ending July 31, 2004 disclosed that one collision had occurred at Spadina Road and Ardmore Road. This collision did not involve a pedestrian and was not potentially preventable by the installation of traffic control signals. The collision occurred on Saturday, June 8, 2002 at 4:12 p.m. A southbound motorist stopped at the PXO and the vehicle behind him was not able to stop in time, resulting in a rear-end collision.

In 2000 we conducted comprehensive traffic studies at the intersection of Spadina Road and Ardmore Road. Based on the eight-hour vehicular and pedestrian traffic counts conducted at this intersection, and the collision history, the technical warrants for the installation of traffic control signals were not met. In October of 2004 we conducted updated traffic counts at the intersection of Spadina Road and Ardmore Road. A traffic volume comparison has been provided in the figure on the next page.

February 2, 2000 Turning Movement Count	 <p>A.M. Peak Hour</p>	 <p>Off-Peak Hour</p>	 <p>P.M. Peak Hour</p>	 <p>Eight-hour Total</p>	
	October 4, 2004 Turning Movement Count	 <p>A.M. Peak Hour</p>	 <p>Off-Peak Hour</p>	 <p>P.M. Peak Hour</p>	 <p>Eight-hour Total</p>

Based on the historical and recent eight-hour vehicular and pedestrian traffic counts conducted at this intersection, and the collision history, the technical warrants as established by the Ontario Ministry of Transportation for the installation of traffic control signals are satisfied to the following extent:

Warrant	February 2000	October 2004
Warrant 1: Minimum Vehicular Volume	17 percent	17 percent
Warrant 2: Delay to Cross Traffic	44 percent	47 percent
Warrant 3: Collision Hazard	7 percent	0 percent

To meet the technical requirements for the installation of traffic control signals, one of the "Minimum Vehicular Volume" or "Delay to Cross Traffic" warrants must be 100 percent satisfied, or any two of the three warrants must be at least 80 percent satisfied. Based on the above results, the installation of traffic controls signals is still not warranted at this intersection.

A review to assess any deficiencies in the operational and physical suitability of the PXO at this location was carried out. By comparing the operation of the PXO to provincially adopted "environmental standards" we determined whether the PXO is operating under acceptable conditions. The standards and the comparative characteristics at this location are described in the table below.

Standard	Comment	Standard Met/ Not Met
Speed – Vehicle operating speed less than 60 km/h	Posted speed limit on Spadina Road is 40 km/h	Met
Width – Not more than four lanes wide on a two-way street, or more than three lanes wide on a one-way street	Spadina Road operates with one lane of traffic in each direction	Met
Volume – Traffic volume less than 35,000 vehicles per day (total of both directions)	Spadina Road carries approximately 17,000 vehicles per day in both directions	Met

Turns – No significant volume of turning movements which interfere with PXO	Volume of traffic turning across the PXO is minor (approximately 430 over 8 hours) and does not interfere with PXO operations	Met
Visibility – No visibility problems exist for either pedestrians or motorists	None	Met
Loading – No loading zones in the immediate vicinity	There is a near-side TTC stop in the southbound direction, but passing is not permitted in this area	Met
Driveways – No driveways or entrances nearby	There are some residential driveways nearby, but volumes are minor	Met
Spacing – Not less than 200 metres to another pedestrian crossover or traffic control signal (TCS)	Old Forest Hill Road (TCS) – 440 metres Kilbarry Road/Burton Road (PXO) – 270 metres	Met

Based on the above results, the location of the PXO is suitable and there are no negative environmental impacts for pedestrians using the PXO.

Request to review how pedestrians use the PXO at Spadina Road and Kilbarry Road/Burton Road with respect to vehicle pedestrian conflicts as well as how disabled citizens use the PXO

A pedestrian crossover observance study was undertaken at this intersection in September of 2004. During the busiest eight-hour period of pedestrian activity on a typical weekday, 180 pedestrians were recorded crossing Spadina Road within the painted crosswalk. Additionally, one pedestrian was recorded crossing Spadina Road outside the painted crosswalk.

The breakdown of pedestrian crossings by type within the crosswalk is as follows:

Time Period	Pedestrian type					Total
	Assisted Children	Unassisted Children	Youths and Adults	Senior Citizens	Handi-capped	
7:30 a.m. to 9:30 a.m.	20	0	43	0	0	63
10:00 a.m. to 11:00 a.m.	1	0	5	0	0	6
12:00 p.m. to 1:30 p.m.	9	0	40	0	0	49
2:15 p.m. to 3:45 p.m.	11	0	24	1	0	36
4:00 p.m. to 6:00 p.m.	10	0	16	0	0	26
Total	51	0	128	1	0	180

Of the 180 pedestrians recorded crossing within the crosswalk, 89 percent of them used the overhead flashing beacons and 11 percent of them did not. Additionally, pedestrian crossings occurred 9 percent of the time with no vehicles present, 89 percent of the time with vehicles present that stopped and 2 percent of the time with vehicles present that did not stop. As noted, there was one senior pedestrian and no disabled pedestrians recorded crossing at the PXO, so it is not possible to assess how they are using the PXO or if they are being put at risk. The signage, pavement markings and overhead flashing beacons at the PXO have been installed in accordance with provincially established guidelines.

Collision statistics provided by the Toronto Police Service for the three-year period ending July 31, 2004 disclosed that 11 collisions had occurred at this intersection. Of these 11 collisions, four were potentially preventable by the installation of traffic control signals and none involved a pedestrian.

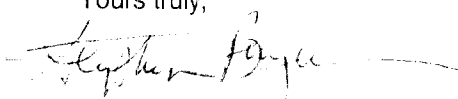
A review to assess any deficiencies in the operational and physical suitability of the PXO at this location was also carried out. The standards and the comparative characteristics at this location are described in the table below.

Standard	Comment	Standard Met/ Not Met
Speed – Vehicle operating speed less than 60 km/h	Posted speed limit on Spadina Road is 40 km/h	Met
Width – Not more than four lanes wide on a two-way street, or more than three lanes wide on a one-way street	Spadina Road operates with one lane of traffic in each direction	Met
Volume – Traffic volume less than 35,000 vehicles per day (total of both directions)	Spadina Road carries approximately 17,000 vehicles per day in both directions	Met
Turns – No significant volume of turning movements which interfere with PXO	Volume of traffic turning across the PXO is moderate (approximately 790 over 8 hours) and does not interfere with PXO operations	Met
Visibility – No visibility problems exist for either pedestrians or motorists	None	Met
Loading – No loading zones in the immediate vicinity	There are near-side TTC stops in the north-south directions, but passing is not permitted in this area	Met
Driveways – No driveways or entrances nearby	There are some residential driveways nearby, but volumes are minor	Met
Spacing – Not less than 200 metres to another pedestrian crossover or traffic control signal (TCS)	Ardmore Avenue (PXO) – 270 metres Lonsdale Road (TCS) – 450 metres	Met

Based on the study results, the PXO on Spadina Road at Kilbarry Road/Burton Road is operating with a satisfactory safety record and there are no negative environmental impacts for pedestrians using the PXO. However, the installation of traffic control signals, which are warranted under existing conditions, will increase the level of safety for pedestrians crossing at this intersection.

If you have any questions regarding this investigation, please contact Dan Clement, Transportation Technologist, at (416) 338-5454.

Yours truly,



Stephen Benjamin
 Manager, Traffic Operations
 South District, West Area

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