

**St. Clair Avenue West Widening  
Class Environmental Assessment Study**

<b>Date:</b>	October 9, 2009
<b>To:</b>	Public Works and Infrastructure Committee
<b>From:</b>	General Manager, Transportation Services
<b>Wards:</b>	Ward 11 – York South-Weston
<b>Reference Number:</b>	p:\2009\ClusterB\tra\tim\pw09013tim

**SUMMARY**

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A Class Environmental Assessment Study was undertaken to address opportunities for improving the traffic and pedestrian conditions on St. Clair Avenue West between Cobalt Avenue and Mondovi Gate, located in the area between Runnymede Road and Keele Street / Weston Road. The evaluation of a reasonable range of alternative solutions, which included consultation with the public and review agencies, resulted in the following Recommended Design:

- The widening of St. Clair Avenue West on the south side between Cobalt Avenue and approximately 300 metres east thereof, from one to two eastbound travel lanes;
- The implementation of a sidewalk on the south side of St. Clair Avenue West between Cobalt Avenue and approximately 145 metres east thereof to connect with the existing sidewalk and provide pedestrians with a continuous sidewalk on the south side of St. Clair Avenue West.

A Notice of Study Completion must now be issued and the Project File placed in the public record for a 30-day review period in accordance with the requirements of the Municipal Class Environmental Assessment.

## **RECOMMENDATIONS**

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The General Manager, Transportation Services recommends that:

1. Authority be granted to the General Manager of Transportation Services to issue a Notice of Study Completion and to file the Project File for the St. Clair Avenue West Widening Class Environmental Assessment Study in the public record for 30 days in accordance with the requirements of the Municipal Class Environmental Assessment; and
2. Appropriate City officials be authorized and directed to take the necessary action to give effect thereto.

### **Financial Impact**

The estimated cost of the road modifications required to widen St. Clair Avenue West is \$520,000. This work is to be undertaken in 2010 in conjunction with road resurfacing work that has been identified in the Capital Works Program for 2010 which includes St. Clair Avenue West between Gunn's Road and Runnymede Road.

The above project costs and required cash flows are included in the 2010 Capital Budget and 2011- 2019 Capital Plan Submission for Transportation Services. The actual work date is subject to City priorities and coordination of work.

The Deputy City Manager and Chief Financial Officer have reviewed this report and agree with the financial impact information.

### **ISSUE BACKGROUND**

St. Clair Avenue West, between Cobalt Avenue and Mondovi Gate, in the area east of Runnymede Road, operates with one eastbound lane and two westbound lanes. East and west of this section, there are two eastbound lanes. The inconsistency in this section is a result of the industrial railway track that used to run along the south side of St. Clair Avenue West. The railway track also precludes the installation of a sidewalk on the south side of St. Clair Avenue West, between Cobalt Avenue and Mondovi Gate. A sidewalk has been constructed on the east portion of this section. However, there is currently no sidewalk between Cobalt Avenue and approximately 145 metres east thereof.

Most of this railway track was removed several years ago and the portion that has remained is no longer functioning and has been mostly covered with asphalt. The railway tracks are owned by the Toronto Stockyards Land Development Board and they are prepared to consent to the removal of the remaining tracks at the City's expense and will be executing confirmation documentation, prepared by the City's Legal Services Division, in this regard.

Over the last few years, several properties on this section of St. Clair Avenue West have been redeveloped from industrial to residential and retail uses and as a result, there are more pedestrians utilizing this area. The need for the widening of this section of St. Clair Avenue from

three to four lanes was initially identified by staff in conjunction with the development application submitted in 2003 for No. 2211 St. Clair Avenue West (Canadian Tire Part Source).

The Official Plan designates a 30 metre right-of-way on St. Clair Avenue West between Weston Road/Keele Street and Runnymede Road and a 27 metre right-of-way further west to Jane Street. The existing right-of-way along St. Clair Avenue West varies in width within the study focus area between 20 and 30 metres. The study area is bounded by Jane Street to the west, Woolner Avenue/Terry Drive/Symes Road/Glen Scarlett Road to the north, Weston Road/Keele Street to the east and the CP Railway tracks to the south, as shown in Attachment 1 of this report. The existing right-of-way widths along St. Clair Avenue West within the study focus area is shown in Attachment 2 of this report.

Through development applications, several property conveyances along the north and south sides of St. Clair Avenue West have been secured to achieve the 30 metre right-of-way. Any road widening east of Mondovi Gate has occurred on the south side of the roadway. As such, St. Clair Avenue W., west of Mondovi Gate and east of Cobalt Avenue, seems to lend itself to a widening entirely on the south side of the roadway.

As previously indicated, a development application was submitted to the City for No. 2211 St. Clair Avenue West, a property on the south side of St. Clair Avenue West, opposite Mondovi Gate. The conditions of development approval included conveying to the City, at nominal cost, a 4.94 metre wide strip of land along the full extent of the site abutting the south limit of St. Clair Avenue West and to provide all costs associated with implementing traffic control signals at the intersection of St. Clair Avenue West and Mondovi Gate, accounting for future road widening. The 4.94 metre wide strip of land has since been used to construct a sidewalk on the south side of St. Clair Avenue West and accommodates for future widening of the roadway to include a boulevard. However, there has been no development application for No. 2255 St. Clair Avenue West (Corsetti Meat Packers Ltd.), the property located on the south side of St. Clair Avenue West, just east of Cobalt Avenue.

Through the Capital Works Program, St. Clair Avenue West, between Gunn's Road and Runnymede Road is scheduled to be rehabilitated in 2010. Due to the transformation of this area and the need to rehabilitate the roadway within the near future, there is an opportunity to improve the transportation operating conditions on this section of St. Clair Avenue West.

Based on the above, Transportation Services initiated an Environmental Assessment study to develop and assess the need for transportation improvements and evaluate alternative methods to address these needs.

## **COMMENTS**

### **Study Process**

A Class Environmental Assessment (EA) Study was initiated on St. Clair Avenue West between Cobalt Avenue and Mondovi Gate to develop and assess the need for transportation improvements and evaluate alternative methods to address these needs. The St. Clair Avenue West Widening Class Environmental Assessment Study has been completed in accordance with the requirements for a Schedule 'B' project under the Municipal Class Environmental Assessment (the Class EA). The Class EA process requires that the City confirm the need (i.e. define the problem/opportunity), identify feasible solutions, evaluate the impact of the alternative solutions on the natural, social and economic environments, and select an alternative for construction.

As a requirement of Schedule 'B' projects, if City Council endorses the recommendations of this Study, the Project File will be filed in the public record for a minimum 30-day review period. During this period, members of the public, and any other interested individual, interest group, or government agency, may request that a Part II Order be issued by the Minister of the Environment. If granted, a Part II Order elevates the status of the project from a Class EA Study to an Individual Environmental Assessment. If this occurs, the project cannot proceed until the proponent completes an Individual Environmental Assessment Study and receives approval from the Minister. If a Part II Order is not granted or if no requests or objections are received during the filing period, the project is approved under the Environmental Assessment Act and may proceed.

The Class EA Study was carried out with the assistance of a Technical Advisory Committee comprised of staff from Transportation Services, Technical Services, City Planning, and the Toronto Transit Commission (TTC).

### **Public Consultation**

Public involvement is an integral and ongoing part of the study process for the St. Clair Avenue West Widening Class EA Study. The public consultation requirements of the Class EA were met and surpassed. A Notice of Study Commencement was advertised in the April 10 and April 17, 2009 editions of both the Bloor West Villager and York Guardian newspapers. This notice announced the initiation of the Class EA Study and invited interested stakeholders to participate at a Public Open House (POH) which was held on April 20, 2009 to present the list of alternative solutions and evaluation results, introduce the recommended alternative solution and identify the next steps of the study.

Through Canada Post, notices were also directly mailed to relevant review agencies and resident stakeholder groups, and were distributed to approximately 3,700 residents and businesses within the study area. A list of the relevant review agencies that were contacted is shown in Attachment 3 of this report. Eleven members of the public signed in at the meeting and one comment sheet was received.

## Environmental Assessment Findings

### (1) Identification of the Problem or Opportunity

Within the study area, which is illustrated in Attachment 1 of this report, St. Clair Avenue West is an east-west major arterial road with approximately 12,000 vehicles in each direction daily and a speed limit of 50 km/h. Between Cobalt Avenue and Mondovi Gate, a distance of approximately 300 metres, St. Clair Avenue West consists of two westbound lanes and one eastbound lane. There is no sidewalk on the south side of St. Clair Avenue West between Cobalt Avenue and approximately 145 metres east thereof.

Generally, stopping is prohibited on the north and south side of St. Clair Avenue West from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m., Monday to Friday. Parking is prohibited on the south side of St. Clair Avenue West at all times. TTC service is provided by the 71 Runnymede bus and runs approximately every 20 minutes, daily. There are traffic control signals at the intersection of St. Clair Avenue West and Mondovi Gate/ Canadian Tire Part Source Driveway and a pedestrian crossover at the intersection of St. Clair Avenue West and Symes Road. The analysis of existing and future conditions on St. Clair Avenue West identified the opportunity to consider transportation improvements, as described in the following points:

- Currently, eastbound motorists and cyclists are required to merge into a single lane, thus impacting road and safety operations in this vicinity. In addition, there is no sidewalk on the south side of St. Clair Avenue West between Cobalt Avenue and approximately 145 metres east thereof; however, there is a sidewalk east and west of this section.
- Several properties on this section of St. Clair Avenue West have been redeveloped from industrial to residential and retail uses. As a result, there are more pedestrians utilizing this area. As such, there is a need to implement a sidewalk to complete a key missing link to accommodate pedestrians and improve the public realm;
- Existing capacity analysis indicates that eastbound traffic is near capacity during the afternoon peak hour. With an additional eastbound lane, the level of service would significantly improve from Level of Service E to B, as shown in Attachment 4 of this report;
- Observations on St. Clair Avenue West in the vicinity of Cobalt Avenue indicated that due to the eastbound lane reduction, there were some eastbound queues observed when an eastbound motorist was waiting to turn left onto Symes Road. However, in many instances, depending on the size of the vehicle, eastbound motorists manoeuvred around the eastbound left-turn vehicle but the space to undertake this manoeuvre is sub-standard (i.e. two vehicles using one lane);

- Toronto Police Service records indicate that for the five-year period ending December 31, 2008, there were a total of 32 collisions on St. Clair Avenue West between Cobalt Avenue and Mondovi Gate. Of these collisions, approximately 44% were eastbound rear-end collisions in the vicinity where St. Clair Avenue West reduces from two lanes to one lane. These results suggest that the potential for eastbound rear-end collisions is high due to the inconsistency of the lane alignment;
- The TTC will be undertaking an Environmental Assessment Study for the streetcar extension on St. Clair Avenue West, west of Gunn's Road to Jane Street. However, the timing for this EA and construction is unknown and therefore it is appropriate to proceed with these road improvements at this time;
- St. Clair Avenue West, between Gunn's Road and Runnymede Road is scheduled to be resurfaced in 2010;
- Due to the transformation of this area and the negative impact the current roadway configuration has on pedestrians, cyclists and eastbound motorists and the need to rehabilitate the roadway within the near future, there is an opportunity to improve the transportation operating and safety conditions on this section of St. Clair Avenue West;

## (2) Identification and Evaluation of Alternative Solutions

To address the opportunity described above, five alternative solutions, including "Do Nothing," were generated and evaluated. As described above, there are differences between the existing right-of-way and the right-of-way designated in the Official Plan along this section of St. Clair Avenue West which was accounted for in the evaluation. A brief description of these alternatives and the results of the evaluation are provided below.

**Do Nothing:** The "Do Nothing" alternative was included as a benchmark for the assessment of the other planning alternatives. As the name suggests, the "Do Nothing" alternative involves leaving the roadway in its current configuration.

**Alternative 1:** This alternative solution involves widening the roadway on the south side within the existing right-of-way.

**Alternative 1A:** This alternative solution involves widening the roadway on the south side within a widened 30 metre right-of-way.

**Alternative 2:** This alternative solution involves widening the roadway on the north side within the existing right-of-way.

**Alternative 2A:** This alternative solution involves widening the roadway on the north side within a widened 30 metre right-of-way.

With the exception of the “Do Nothing” alternative, all of the alternative solutions developed achieve the following common elements:

- An additional eastbound lane to improve the operating conditions on St. Clair Avenue West;
- Eastbound and westbound left-turn lanes at the intersection of St. Clair Avenue West and Mondovi Gate to improve traffic operations;
- Implementation of a sidewalk where no sidewalk currently exists on the south side of St. Clair Avenue West;
- A 3.0 metre centre lane; and
- A 4.0 metre curb lane to accommodate cyclists.

The difference between each alternative is in the physical arrangement of the roadway and boulevard.

Each alternative was analyzed and evaluated in detail utilizing five criteria groups:

- **Transportation:** This criteria considered impacts to traffic conditions and overall safety and service including cyclist, pedestrian, transit and emergency services impacts;
- **Socio-Economic Environment:** This criteria considered residential, business and access impacts, effects on special needs of residents, noise and vibration and urban design / aesthetics;
- **Natural Environment:** This criteria considered impacts to vegetation, wildlife, stormwater and air quality;
- **Cultural:** This criteria considered archaeological and built heritage impacts; and
- **Costs:** This criteria considered construction and maintenance costs.

The full evaluation table is provided in Attachment 5 of this report. Based on the results of the analysis and evaluation, Alternative 1 was identified as the preferred solution. Although the “Do Nothing” alternative has the lowest cost, it does not address the safety and operations concerns. An additional eastbound lane and sidewalk can be achieved within the existing right-of-way (Alternative 1 or 2). There are fewer impacts to the adjacent business (No. 2255 St. Clair Avenue West) and the overall costs are lower than Alternatives 1A or 2A. Alternative 1 has a more positive impact on transportation and natural environment than Alternative 2. Therefore, Alternative 1 provides the maximum benefits for improving the safety and operational conditions for all road users and has the least impact on greenspace. A plan of the existing (Do Nothing) and recommended alternative is shown in Attachment 6 of this report.

## **Recommended Design**

The Recommended Design is Alternative 1, which includes the following elements:

- An additional eastbound lane which establishes a straight alignment with the eastbound lanes east and west of this section; and
- New sidewalk on the south side adjacent to the roadway.

The estimated cost of the recommended alternative (Alternative 1) is \$520,000 and is included in the 2010 Capital Budget and 2011- 2019 Capital Plan Submission for Transportation Services.

## **Property Impacts**

There are no requirements to acquire private property for this project.

## **Public/Agency Concerns**

Generally, residents at the POH held on April 20, 2009 indicated that they support the recommended alternative design. However, no comment sheets were submitted with the exception of the business owners of No. 2255 St. Clair Avenue West (Corsetti Meat Packers Ltd.). The owners were concerned that the potential widening on the south side of St. Clair Avenue West would have a negative impact on their business operations because their delivery trucks could block the proposed sidewalk. Prior to the POH, a total of four meetings were held with the owners of Corsetti Meat Packers. These meetings included staff of Infrastructure Planning, Right-of-Way Management and Economic Development as well as Councillor Nunziata.

The owners were advised that the City can widen the roadway to achieve an additional eastbound lane and construct a sidewalk within its own right-of-way limits. Currently, some of their delivery trucks extend beyond the owner's property and onto the City's right-of-way. Although the owners have not received any warning and/or fines from the City thus far for this activity, they were advised that they are not permitted to do this. The owners were also advised that should the widening be implemented on the south side of the roadway and within the City's right-of-way limits, their vehicles would be blocking the proposed new sidewalk.

The owners of Corsetti Meat Packers Ltd. were also concerned that if a sidewalk is implemented on the south side of St. Clair Avenue West adjacent to their property, pedestrians would not be vigilant of trucks entering and exiting the driveway. City staff advised them that although there may be a high volume of trucks accessing their driveway, drivers need to be aware of pedestrians in the vicinity as with any private driveway in the City. Therefore, it was concluded that no measures are required to mitigate these impacts.



The Technical Advisory Committee, through the EA study and consultation with Legal Services, Economic Development and Councillor Nunziata, have concluded that although Alternative 1 will require Corsetti Meat Packers Ltd. to make modifications to their delivery operations to address these conflicts, the impacts in doing so are feasible and should not force their business to close and/or relocate operations as had been initially suggested by the owners.

Some of the relevant agency groups showed interest in the study and a few expressed potential issues. However, all of these concerns were addressed throughout the study and were incorporated in the evaluation of the alternatives.

## **Next Steps**

Pending approval of this report by City Council, the Project File will be compiled and filed in the public record for a minimum 30-day period. Once EA approval is received, design and construction of the Recommended Design may proceed and, is currently planned to occur in 2010, in conjunction with works already planned in the Capital Works Program.

## **CONTACT**

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## **SIGNATURE**

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Gary Welsh, P.Eng.  
General Manager, Transportation Services

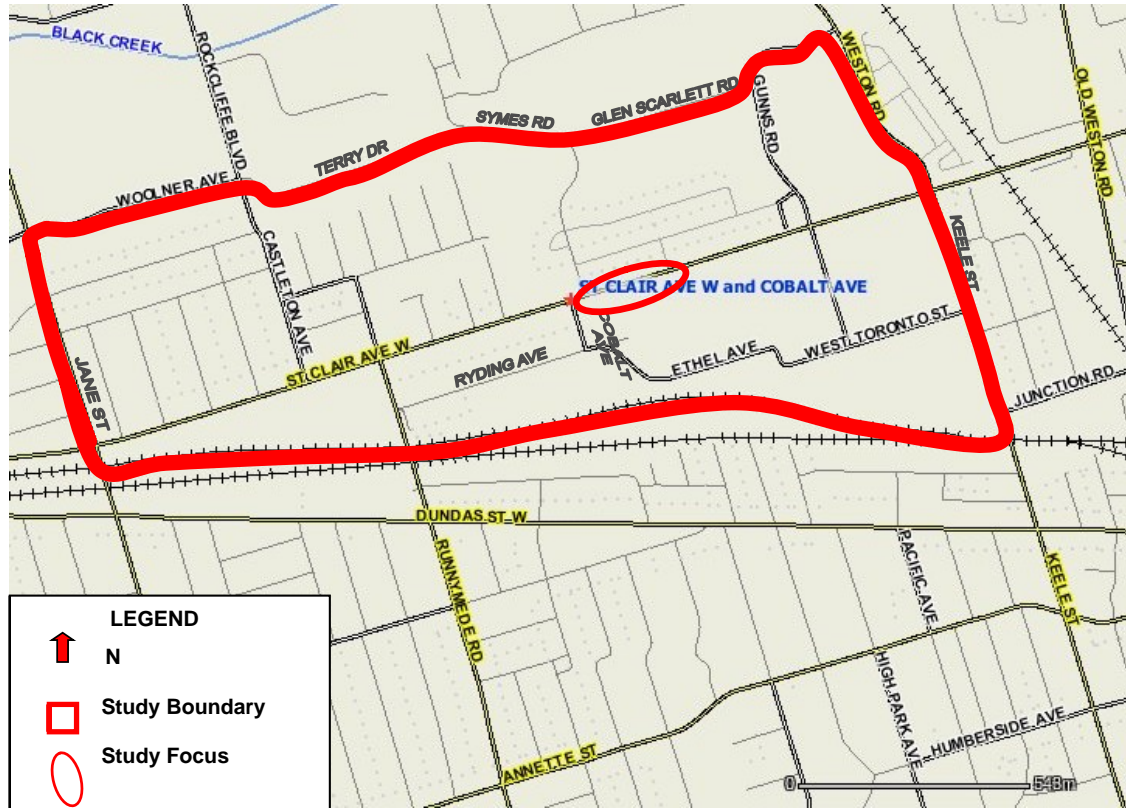
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## **ATTACHMENTS**

1. Study Area
2. Existing Right-of-Way
3. List of Relevant Review Agencies
4. Level of Service at St. Clair Avenue West / Mondovi Gate
5. Evaluation Table
6. Existing Configuration and Recommended Design

## Attachment 1

### Study Area



### Existing Right-of-Way



## **Attachment 3**

### **List of Relevant Review Agencies**

- Ministry of Agriculture, Food & Rural Affairs
- Ministry of Citizenship, Culture, Tourism & Recreation
- Ministry of Culture
- Ministry of Education
- Ministry of the Environment
- Environment Canada, Great Lakes & Corporate Affairs
- Ministry of Municipal Affairs and Housing
- Ministry of Natural Resources
- Toronto & Region Conservation Authority
- Ministry of Transportation
- Indian & Northern Affairs Canada
- Ontario Secretariat for Aboriginal Affairs
- Mississauga's of the New Credit First Nation
- Bell Canada
- CN Rail
- CP Rail
- Enbridge Gas Distribution Inc.
- Enbridge Pipeline Inc.
- Go Transit
- Hydro One Networks Inc. Network Services
- Rogers Cable Systems
- Sarnia Products Pipe Line
- Sun-Canadian Pipe Line Company Limited
- Toronto Hydro
- Trans-Northern Pipe Line
- Toronto Transit Commission
- Toronto District School Board
- Toronto Catholic District School Board
- Conseil Scolaire de district
- Toronto Police Services
- Toronto Fire Services
- Toronto Emergency Medical Services
- Toronto Pedestrian Committee
- Toronto Cycling Committee

## Attachment 4

### Level of Service at St. Clair Avenue West / Mondovi Gate

Approach	Level of Service			
	AM Peak Hour		PM Peak Hour	
	Existing	Recommended	Existing	Recommended
Eastbound	C	B	E	B
Westbound	A	A	A	A

**Existing:** One eastbound lane, two westbound lanes, and shared eastbound and westbound left-turn lanes

**Recommended:** Two eastbound lanes, two westbound lanes, and exclusive eastbound and westbound left-turn lanes

**“Level of Service” (LOS)** is a measure based on the average delay experienced at a signalized intersection. It is categorized from “A” Very Good (free-flow conditions) to “F” Very Poor (stop-and-go conditions).

**“Capacity”** is defined as the maximum volume of traffic able to pass through the intersection during one hour.

## Attachment 5

### Evaluation Table

	Criteria	Indicator	Measure	Alternatives				
				Do Nothing	Widen on South Side with Existing ROW (1)	Widen on South Side with 30 m ROW (1A)	Widen on North Side with Existing ROW (2)	Widen on North Side with 30 m ROW (2A)
Transportation Decision Relevant Factors	Traffic Conditions	Intersection Operations at St. Clair Ave. W. / Mondovi Gate	Level of Service (LOS) on the eastbound approach	"E"	"B"	"B"	"B"	"B"
		Alignment through St. Clair Avenue West	Straight road alignment	Poor alignment on south side	Straight alignment on north and south side	Straight alignment on north and south side	Alignment not straight on north and south side	Alignment not straight on north and south side
			Straight sidewalk alignment	No accommodation	Alignment not straight on south side	Straight alignment on south side	Alignment not straight on south side	Straight alignment on south side
	Overall Safety and Service	Safety – traffic operations, other road users (potential collisions)	Ability to improve safety (Qualitative)	Potential for increased number of eastbound rear-end collisions	Conditions are significantly improved and potential for collisions is reduced	Conditions are significantly improved and potential for collisions is reduced	Conditions are improved and potential for collisions is reduced but not to the same extent as Alt. 1 and 1A due to the alignment of the roadway	Conditions are improved and potential for collisions is reduced but not to the same extent as Alt. 1 and 1A due to the alignment of the roadway
	Cyclist Impacts	Route flexibility / connectivity for bikeway facilities	Ability to accommodate cyclists	No accommodation	Wider curb lane	Wider curb lane	Wider curb lane	Wider curb lane
	Pedestrian Impacts	Route preference / directness	Ability to provide additional pedestrian infrastructure	No sidewalk on south side	No boulevard on south side	Boulevard provided on south side and north side boulevard maintained	No boulevard on south side and width of north boulevard reduced by 2.4 metres	Width on north side boulevard reduced by 2.4 metres
	Transit Impacts	Transit Service	Potential delays (Qualitative)	Potential delay due to vehicle queues caused by lane reduction	No impact	No impact	No impact	No impact
Socio-Economic Environment Decision Relevant Factors	Emergency Services Impacts	Disruption to existing service (fire, ambulance, police)	Amount of impeded travel time	Potential delay due to vehicle queues caused by lane reduction	No impact	No impact	No impact	No impact
	Commercial Impacts	Property impacts	Area, ha	No impact	No impact	Impact on adjacent property	No impact	Impact on adjacent property
	Residential Impacts	Property impacts	Area, ha	No impact	No impact	No impact	No impact	No impact
	Access Impacts	Commercial / residential impacts	Ability to access adjacent commercial / residential properties	Potential delay due to vehicle queues caused by lane reduction	No impact	No impact	No impact	No impact
	Effects of Special Needs of Residents, Services	Residential and waste services	Route directness	No impact	No impact	No impact	No impact	No impact
	Business Impacts	Potential to impact business operations	Ability to continue to operate business	Largest delivery truck for Corsetti Meat Packers Ltd. extends into City's right-of-way	Largest delivery truck for Corsetti Meat Packers Ltd. would extend into new sidewalk	Largest delivery truck for Corsetti Meat Packers Ltd. would extend into new sidewalk and boulevard	Largest delivery truck for Corsetti Meat Packers Ltd. would extend into City's right-of-way	Largest delivery truck for Corsetti Meat Packers Ltd. would extend into new sidewalk and boulevard
	Noise and Vibration Impacts	Potential for increased levels at residential space	Qualitative	No impact	No impact	No impact	No impact	No impact
	Urban Design / Aesthetics	Potential to improve urban and public realm	Qualitative	No opportunity to improve	Some opportunity to improve (less boulevard space than Alternatives 1A and 2A)	Maximum opportunity to improve (most amount of boulevard space)	Minimal opportunity to improve (least amount of boulevard space)	Some opportunity to improve (second most amount of boulevard space)

## Attachment 5 (continued)

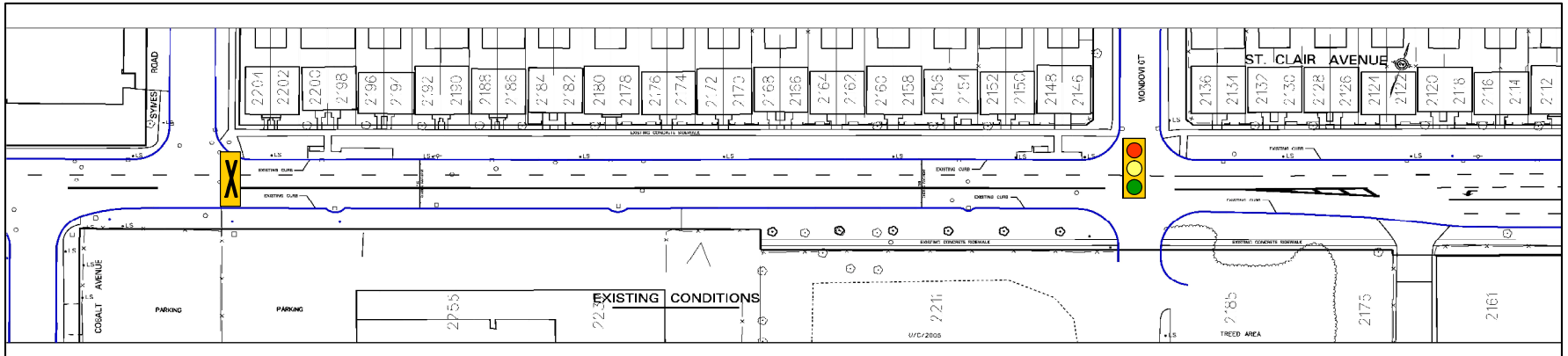
### Evaluation Table

	Criteria	Indicator	Measure	Alternatives				
				Do Nothing	Widen on South Side with Existing ROW (1)	Widen on South Side with 30 m ROW (1A)	Widen on North Side with Existing ROW (2)	Widen on North Side with 30 m ROW (2A)
Natural Environment Decision Relevant Factors	Vegetation	Impacts to trees	Degree of Impact	No impact	Potential removal of two young trees	No impact	Potential removal of two young trees	No impact
		Impact to other vegetation i.e. green space	Degree of impact on boulevard space	No impact on existing boulevard	No impact on existing boulevard	No impact on existing boulevard	Removal of 2.4 metres width of existing boulevard	Removal of 2.4 metres width of existing boulevard
	Wildlife	Impact to wildlife habitat	Degree of Impact	No impact	No impact	No impact	No impact	No impact
	Stormwater	Change in paved area	Significant paved area change	No impact	No impact	No impact	No impact	No impact
	Air Quality	Impacts to air quality	Qualitative	Additional exhaust fumes released due to potential eastbound vehicle queues	Improved air quality	Improved air quality	Improved air quality	Improved air quality
Cultural Decision Relevant Factors	Archaeological Resources	Impact to archaeological sites	Qualitative	No impact	No impact	No impact	No impact	No impact
	Built Heritage Features	Impacts to built heritage form (No built heritage features)	Qualitative	No impact	No impact	No impact	No impact	No impact
Engineering and Economic Decision Relevant Factors	Engineering	Construction feasibility and staging	Qualitative	No impact	Construction feasible as work would be undertaken within right-of-way limits	Construction not feasible at this time due to unavailable property	Construction feasible as work would be undertaken within right-of-way limits	Construction not feasible at this time due to unavailable property
	Maintenance	Impact to annual maintenance activities	Qualitative	No impact	No impact	No impact	No impact	No impact
	Cost	Preliminary construction cost for built infrastructure (utility relocations, capital)	Qualitative	No cost	\$520,000	\$490,000	\$525,000	\$495,000
		Property Acquisition	Qualitative	No property required	No property required	Requires approximately 725 m <sup>2</sup> of private property	No property required	Requires approximately 725m <sup>2</sup> of private property

## Attachment 6

### Existing Configuration and Recommended Design

#### Existing



#### Recommended

