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sarah.moore@ajax.ca or 905-619-2529 ext. 3347

1. Call to Order

1.1. Election of the Chair and Vice-Chair

2. Disclosure of Conflict of Interest

3. Approval of Minutes

3.1 March 26, 2015.....Page 3

4. Presentation/Discussion Items

4.1. TAC Bike Month Event (E. Leung **6:10 – 6:30 p.m.**).....Page 7

4.2. Trail Etiquette Temporary Signage (E. Leung **6:30– 6:50 p.m.**)

4.3. Traffic Calming Warrant Update (H. Ng **6:50 – 7:10 p.m.**)

4.3.1 DRAFT Updated Traffic Calming Warrant.....Page 8

4.3.2 2007 Traffic Warrant.....[external link](#)

4.4. Highway 401 Environmental Assessment (H. Ng **7:10 – 7:30 p.m.**).....Page 37

5. Correspondence

6. Update from Council

7. Standing Items

7.1 Work Plan.....Page 62

7.2 Pan Am 2015 Local Host Committee Update (S. Moore)

7.3 Durham Transit Advisory Committee Update (K. Antram)

8. New Business

9. Adjournment

Next Meeting Date: Thursday, May 21, 2015 at 6:00 p.m., River Plate Room, Town Hall



DRAFT MINUTES
Transportation Advisory Committee
March 26, 2015
River Plate Room, Town Hall
Meeting No. 1

Alternative formats available upon request by contacting:
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Committee Members: Councillor Marilyn Crawford
Zoilo Amoranto
Caryn Antram
Jessica Black
Mary Cunningham
Keith Haines
Wayne Hingston
Lynn Trauzzi

Staff: Hubert Ng, Senior Transportation Planner
Elysia Leung, Transportation Demand Management Coordinator
Sarah Moore, Committee Coordinator

Regrets: Stu Logan

1. Call to Order

Acting-Chair Moore called the meeting to order at 6:10 p.m.

2. Disclosure of Conflict of Interest

None

3. Presentation/Discussion

3.1 Welcome/Roundtable Introductions

Acting-Chair Moore congratulated Members on their Committee appointment and welcomed them to the Town. E. Leung, Transportation Demand Management Coordinator led the Committee in roundtable introductions.

3.2 Committee Work Plan - Brainstorming (see Item 6.1)

E. Leung charged the Committee with breaking into small groups in order to brainstorm issues related to parking, cycling transit, driving, walking and other. Such content was noted to help frame the Committee Work Plan.

The Committee regrouped and discussed priority concerns in the designated topic areas. A summary of concerns presented included:

Walking

- E-bike use on sidewalks and trails
- Extended dog leashes/off-leash animals
- Lack of trail etiquette
- Lack of sidewalk/trail connectivity
- Vehicles blocking sidewalks
- Residents not using garages for parking to help alleviate on-street parking

Cycling

- Parking in bike lanes
- Better signage when trail routes split
- Danger and perception of danger associated with cycling on-road (especially on Highway #2)
- Lack of security/safe cycling facilities
- The need for safe cycling connections beyond Ajax

Transit

- Highway #2 bus lanes are confusing
- Bus routes are illogical
- Hours of service are limited
- Challenges with volume of ridership on High School Special routes

Parking

- Parking on both sides of municipal streets
- Lack of options/access to park at green spaces and waterfront, especially during Town events
- Obstructions to drivers; sightlines, etc.

Driving

- Roundabouts; more teaching and awareness is required for both drivers and pedestrians
- Pinch points, where two lanes merge into one
- Bus lanes on Highway #2; signage is confusing – is it enforced under Regional by-law or the Highway Traffic Act?

Other

- From a transportation perspective, is the municipality ready for the Pan/Parapan Am Games?
- Better publication of the Town's integrated transportation plan is required

E. Leung noted that the Committee's feedback will help to determine priority interested for work plan items. The Work Plan was noted to be a fluid and on-going document that will appear as a standing item on each monthly agenda.

3.3 Introduction to the Transportation Advisory Committee

Hubert Ng, Senior Transportation Planner, presented an overview of the Transportation Section, within the Town's Planning & Development Department. He noted the section to be divided into three areas: transportation planning (responsible for site plan application review, policies and strategies), traffic operations (traffic calming warrant, signage, parking

prohibitions, traffic management), and transportation demand management (initiatives to change modes of transportation, way-finding, cycling tools and programming, as well as active and safe routes to schools).

Members posed questions relative to a future Town way-finding initiative as well as potential partnership with Durham Region Police Services relative to the Active and Safe Routes to School program.

3.4 Trailfest & Bike Month

E. Leung informed the Committee that Trailfest will be held on May 31, 2015. She circulated a draft of the event cycling route, noting like as in past years, the event will be comprised of the Mayor's Ride, Tour d'Ajax, and small walking route. The Town is seeking volunteers to assist with the event in roles such as ride sweepers, and E. Leung solicited interest from the Committee in participating in an information booth at the event. H. Ng noted that a Public Information Centre on the Transportation Demand Management Plan will be held following Trailfest and Members were encouraged to attend for support.

May 25 – June 25 was identified as Bike Month. E. Leung shared information relative to potential recognition activities including a give-away at the Ajax GO Station, and social media campaign. She encouraged Members to register any community/neighbourly rides they will be organizing during Bike Month on the Durham Region page of the www.bikemonth.ca website.

3.5 Hunt Street Environmental Assessment

H. Ng provided an overview of the Environmental Assessment currently underway proposed to extend Hunt Street to O'Brien Court and align Finley Avenue with Hunt Street. In the interest of time, this item was deferred and Members were encouraged to attend the Public Information Centre being held in Council Chambers following the Meeting.

3.6 Williamson Drive Bike Lanes

H. Ng reviewed the design philosophy and limitations relative to installation of bike lanes on Williamson Drive. The project is designed to make use of existing right of way within the road width. Members were tasked with reviewing technical aerial plans of Williamson Drive and commenting on the proposed design and infrastructure. Members recorded comments relative to local school proximity, cycle facilities at neighbouring plazas and parks, traffic pinch points and signage needs, especially at trail connections. H. Ng noted that feedback would be taken under advisement and that a project update will be provided to the Committee at a later date.

4. Correspondence

None.

5. Update from Council

Councillor Crawford provided a summary of recent Council activity, including approval of the Capital and Operating Budgets, strategic planning sessions and the Town's receipt of grant funding for Senior's programming. The Town's creation of a [Youth Entrepreneur & Employment Program](#) was noted, as was discussion of Canada Post's future removal of home delivery service in Ajax. Councillor Crawford advised that Rob Ford, Director of Finance had been appointed Interim C.A.O.

6. Standing Items

6.1 Work Plan

This item was covered during discussion of Item 3.3 Committee Work Plan

6.2 Pan Am 2015 Local Host Committee Update

S. Moore shared a summary of recent Local Host Committee activities and information on the need for Pan Am volunteers for the urban domain (Town of Ajax). Those interested were encouraged to sign up at www.panamajax.ca. Information on the March 28, 2015 Community Information Meeting was discussed.

7. New Business

None.

8. Adjournment

Moved By: J. Black
Seconded By: C. Antram

That the March 26, 2015 Meeting of the Transportation Advisory Committee be adjourned.
(8:10 p.m.)

CARRIED

Bike Month Event Committee Assignment

"What began in Toronto as a Bike to Work Day celebration in 1989 has evolved to become one of the largest events of its kind in Canada and is now celebrated across the Greater Toronto and Hamilton Area (GTHA). Bike Month brings together families, artists, commuters and community groups to promote cycling at hundreds of events all month long.

Bike Month 2015 is supported across the GTHA by Smart Commute - a program of Metrolinx, and locally by The City of Toronto, The City of Mississauga, The City of Hamilton, The Region of Peel, York Region, and Durham Region.

As community leaders, would you be interested in leading a bike related activity during bike month? Your mission, should you decide to accept it, is to come up with 2-3 bike month events that you would like to lead along with your colleagues from the Transportation Advisory Committee. Below is a link to The League of American Bicyclists National Bike Month Guide <http://bikeleague.org/content/plan-bike-month-event> . This guide will give you some great ideas of events you could run as part of Ajax's bike month."

Town of Ajax

Traffic Calming Warrant Update Final Report

March 2015

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CIMA
Partners in excellence

Town of Ajax

**Traffic Calming
Warrant Update**
Final Report

March 2015

B000468



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Executive Summary

CIMA was retained by the Town of Ajax to update the Town's Traffic Calming Warrant process, adapting it to better address the increase in public inquiries received by the Town regarding traffic infiltration, volumes, collision frequency and excessive speeds. The updated process is expected to provide a more appropriate, efficient and flexible framework to address traffic calming requests.

The Town of Ajax Traffic Calming Warrant process update included several steps to ensure that the end result would be both consistent with the practices of other municipalities, and adequate to address the Town's particularities. This was accomplished by means of a Best Practices Research conducted with other municipalities in Ontario and across Canada; Public and Stakeholder Consultations, to inform residents and provide an opportunity to submit ideas, comments and concerns, and to gather feedback from Ajax Fire and Emergency Services, Durham Region EMS, and Durham Region Transit Commission regarding the Toolbox of Traffic Calming Measures; and Pilot Testing conducted with previous requests to ensure the adequacy of the updated screening and scoring system.

The basic structure of the warrant process is similar to the previous version, including the following six steps: Request for Traffic Calming; Screening Process; Evaluation; Available Traffic Calming Measures; Council Approval for Capital Budget; and Design, Approval and Implementation. The main modifications to the process are the following:

- + Lists of Eligible Locations:
 - Creation of two separate lists of eligible locations: General List and Priority List;
 - Elimination of a ranking based on scores;
 - Prioritization of projects based on date of request;
- + Screening Process:
 - Inclusion of Block Length as a screening criterion;
 - Removal of traffic volumes and non-local traffic as screening criteria;
 - Increased flexibility to recommend an approach other than traffic calming based on engineering judgement;
 - Prioritization of locations with extremely high operating speeds (Priority List);
- + Scoring Process:
 - Removal of Non-Local Traffic, Emergency Services, Transit and Truck Routes;
 - Inclusion of Percentage of High-End Speeders;
- + Public and Stakeholder Input:
 - Simplified procedure for public and stakeholder input;

The Toolbox of available traffic calming measures was expanded based on available literature and on results from a jurisdictional review conducted by CIMA. In addition to the applicability of each measure to different types of roads, present in the previous version, the new Toolbox also presents

potential benefits and disbenefits as well as general costs in a qualitative format. This should provide Town staff with a comprehensive set of criteria to select the most appropriate measure to address the needs of each specific project.

Finally, the automatic spreadsheet tool was updated to include the changes to the warrant process, and database functionality was added for Town staff's convenience.

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Appendix F: List of Terms and Acronyms

1. Introduction

The Town of Ajax (the Town) receives numerous public inquiries each year regarding traffic, especially traffic calming requests. Since the implementation of the original Traffic Calming Warrant Framework and Process in November 2007 (2007TCW) the Town has experienced a population increase by approximately 39% to 125,000 in 2014. This corresponds with an increase in public inquiries received by the Town regarding traffic infiltration, volumes, collision frequency and excessive speeds. Further, a 2014 Resident Survey by the Environics Research Group indicates that transportation is the most important social issue facing Ajax. Therefore, there is a need to review and update the 2007TCW to provide a more appropriate, efficient and flexible framework to address traffic calming requests.

1.1 Study Background and Objectives

Since the implementation of the Town's traffic calming process in 2007, Town staff has identified some opportunities for improvements to make the process more efficient and fair. Some of these opportunities included:

- + Refine the screening and scoring process to allow the Town to focus its resources on locations experiencing highly undesirable conditions;
- + The previous warrant worked with a scoring and ranking system. This could result in lower-scoring requests being indefinitely ranked at the bottom of the list as newer, higher-scoring requests would take priority over them, therefore never having any traffic calming measures implemented;
- + The previous warrant included two cumbersome phases requiring public support for each individual project. This made the process slow and costly with many projects stalling prior to the implementation stage;
- + The previous warrant did not take into account high end speeders at locations where 85th percentile speeds might not be excessive. Depending on traffic volumes, this may be a considerable safety concern even if the majority of speeds are relatively low;
- + The previous warrant did not account for the possibility of traffic calming not being the best strategy to address a request based on existing conditions; and
- + The update and enhancement of the list of approved measures and devices (Toolbox of Traffic Calming Measures) available for use in the Town. This involves the provision of a general evaluation framework for each measure in terms of benefits, disbenefits and costs.

The objectives of the warrant update were to address the opportunities for improvements listed above, and to incorporate other modifications that reflect current industry practices. In order to accomplish this, the study included the following major tasks:

- + Review and assessment of existing warrant;
- + Best Practices research;
- + Proposed warrant updates;

- + Public and stakeholder consultation;
- + Pilot testing of proposed updates; and
- + Final warrant document.

1.2 Report Overview

This report updates the previous Town's traffic calming warrant process from November 2007, incorporating findings from a Best Practices research (summarized in **Appendix A**) conducted with other municipalities in Ontario and across Canada. A literature review was also conducted with the purpose of updating the Toolbox of traffic calming measures.

The warrant methodology consists of six steps, two of which can be considered its core: *screening* and *scoring*. **Section 2** describes the warrant methodology in detail, covering all aspects of the traffic calming process from initial request to final approval and implementation.

Section 3 summarizes the results of a pilot study conducted to assess the adequacy of the screening and scoring criteria.

Finally, CIMA has developed an updated version of the automatic spreadsheet used to assist the Town in the screening and scoring process. **Section 4** discusses the updated version of the automatic spreadsheet.

A vital aspect of a successful traffic calming program is public involvement. As such, a Public Information Centre (PIC) held in the Town of Ajax Council Chambers on January 21, 2015. This PIC sought to inform residents as well as provide an opportunity to submit ideas, comments and concerns to the Project Team. Details of this PIC and the materials presented can be found in **Appendix B**.

In order to ensure the continued cooperation between a variety of stakeholders (i.e. Ajax Fire and Emergency Services, Durham Region EMS, and Durham Region Transit Commission), the Town held a meeting in the Simcoe Point room at the Ajax Town Hall on February 13, 2015. This meeting strived to inform the stakeholders with a high-level understanding of the warrant update while providing an opportunity to submit feedback regarding the Toolbox of Traffic Calming Measures. Further information regarding this meeting and the materials presented can be found in **Appendix B**.

While this report does discuss some of the reasoning for changes made to the 2007TCW, it primarily focuses on the end results that encompass the new traffic calming warrant process. Additional details of the warrant update process, particularly discussions between CIMA and Town staff following the Best Practices Research and preceding the Pilot Testing, are provided in **Appendix A**.

A list of acronyms, 'technical' jargon or otherwise ambiguous terms used in this report can be found in **Appendix F**.

2. Methodology

The following sections describe a six-step process for the implementation of traffic calming measures on Town roads, beginning with a request for traffic calming and ending with design, approval and

implementation. **Exhibit 1** contains a flowchart of the entire process (a larger version can be found in **Appendix C**), and the relevant sections of the flowchart are included within each step in the following subsections.

From initial request to final approval, the traffic calming warrant process consists of six steps and has three possible outcomes:

- + The request is denied;
- + The request is added to the General List; or
- + The request is added to the Priority List.

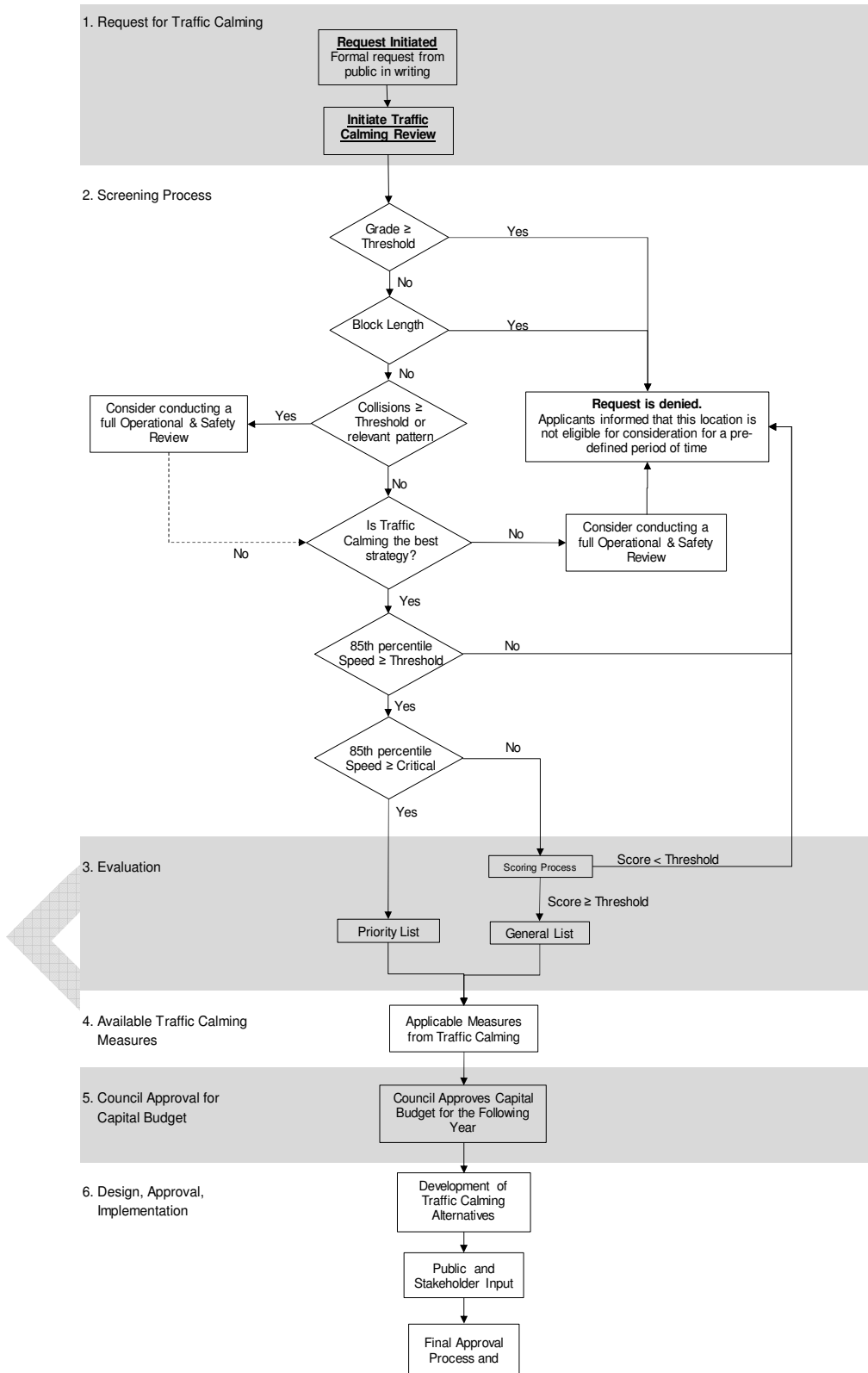
If a request is denied, the applicants and affected residents are notified, and the road is prohibited for traffic calming consideration for a period of three years beginning at the date of their assessment.¹ The General List contains locations that passed the screening process and achieved the **Threshold Score** in the evaluation scoring. The Priority List contains locations that passed the screening process with 85th percentile speeds equal to or greater than the **Critical Speed**.

The selection process for future projects should equally involve locations from the Priority and General Lists in accordance with budgetary requirements. In the event that an odd number of projects is required, selecting an additional location from the Priority List is desirable. The selection should be based on the chronological order of the requests – i.e. older requests should be implemented first. Locations are no longer ranked based on the scores. With the previous systems, locations that met the warrant with lower scores could potentially never be selected for implementation, since newer requests with higher scores would take precedence. The new system ensures that all warranted locations may eventually receive traffic calming measure, while still maintaining some differentiation based on technical criteria with the creation of the priority list.

The following subsections contain details about each of the steps in the traffic calming warrant process.

¹ Every location which received a request for traffic calming, from 2012 onwards, was re-evaluated using the new criteria. The period of ineligibility for those requests which were subsequently denied begins from the date of the Traffic Calming Warrant Update's approval by Council.

Exhibit 1: Town of Ajax Traffic Calming Warrant Process

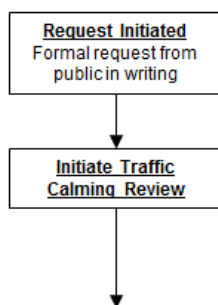


2.1 Step 1: Request for Traffic Calming

Requests for traffic calming typically come from Town residents, business owners, schools or members of Council. Identification of potential locations may also come from ongoing staff reviews. Planning and Development Services staff are responsible for the review of all requests.

Exhibit 2 describes the request process. In the case of a request from the public, a formal request in writing is required. Town staff would then initiate a Traffic Review, described in **Section 2.2**.

Exhibit 2: Step 1: Request for Traffic Calming



2.2 Step 2: Traffic Calming Screening Process

The next step in the process is an initial screening process undertaken by Town staff. The screening process sets requirements that must be met for a location to be eligible to be evaluated using the scoring system. The screening process can be summarized as follows:

- + **Grade:** if the grade of the roadway is equal to or greater than the **maximum threshold of 8%**, then traffic calming is not permitted on the roadway at all. This is consistent with other jurisdictions and is due to the fact that traffic calming devices implemented on steep grades could cause safety concerns.
- + **Block Length:** if the distance between stop-controlled intersections along the requested route (intersections with stop control only on the side street are not considered) is **shorter than 110 m**, traffic calming is not permitted. One of the main goals of traffic calming is to reduce speeds by using physical interventions to influence driver behavior. At locations where, for example, the distance between two adjacent stop-controlled intersections is too short, drivers may not have sufficient space to develop high speeds before having to slow down again for the next stop sign (i.e. a minimum amount of space is required to build up speed to contribute to a problem). This is consistent with other jurisdictions practices.
- + **Collision History:** if the number of qualifying collisions within the past three years is equal to or greater than the maximum threshold, or if a relevant pattern of collisions is identified, the location should be **considered for a full Operations and Safety Review**. The collision history thresholds are the same as in the previous version of the warrant (6 for Local roads; 12 for Collector and Type 'C' Arterial roads), however collisions alone do not directly qualify locations for the scoring process as it was before. Instead, the threshold is used to suggest that consideration be given to conducting a full Operations and Safety Review. Typical numbers of qualifying collisions in past

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request range between 0 and 4, meaning that the collision threshold is expected to be reached on rare occasions. A collision frequency significantly higher than the typical may indicate that the location could present other collision contributing factors. The definitions of *qualifying collisions* and *relevant pattern*, for the purposes of the traffic calming warrant, are the following:

- Qualifying collisions are those that can be potentially corrected by traffic calming, and include collisions with **vulnerable road users** (pedestrians, bicycles) and collisions for which '**exceeding speed limit**' or '**speed too fast for condition**'² is reported in the MVAR.
 - Relevant pattern means a clear pattern of reoccurring collisions where speed is not a factor. These are not restricted to qualifying collisions as defined above, and may include, for example, intersection-related collisions, winter condition related collisions, etc.
- + **Best Strategy:** if, based on existing conditions, **traffic calming is not the best strategy** to address the request, the subject location is not eligible for traffic calming. Examples of existing conditions for which traffic calming may not be the best strategy include:
- Where the location presents a sequence of small-radius curves;
 - Where the location presents visibility restrictions;
 - Where similar locations would typically not receive traffic calming;
 - Where arterial network improvements could reduce cut-through traffic and volumes, potentially solving the concern that originated the request.

Additional conditions may also be considered incompatible with traffic calming measures based on engineering judgement.

- + **Operating Speeds:** if the 85th percentile speed is **equal to or greater than the Critical Speed**, the location is added directly to the Priority List; if the 85th percentile speed falls **between the Critical and the Minimum Threshold speeds**, the location proceeds to the scoring process; if the 85th percentile speed is **less than the Minimum Threshold Speed** the location is not eligible for Traffic Calming. The Minimum Threshold Speed is defined as 10 km/h above the posted speed limit; the Critical Speed varies by road classification, as follows:
- 15 km/h above the posted speed limit for Local roads;
 - 20 km/h above the posted speed limit for Collector roads; and
 - 25 km/h above the posted speed limit for Type 'C' Arterial roads.

Exhibit 3 summarizes the screening criteria and associated thresholds, and **Exhibit 4** graphically represents the screening process.

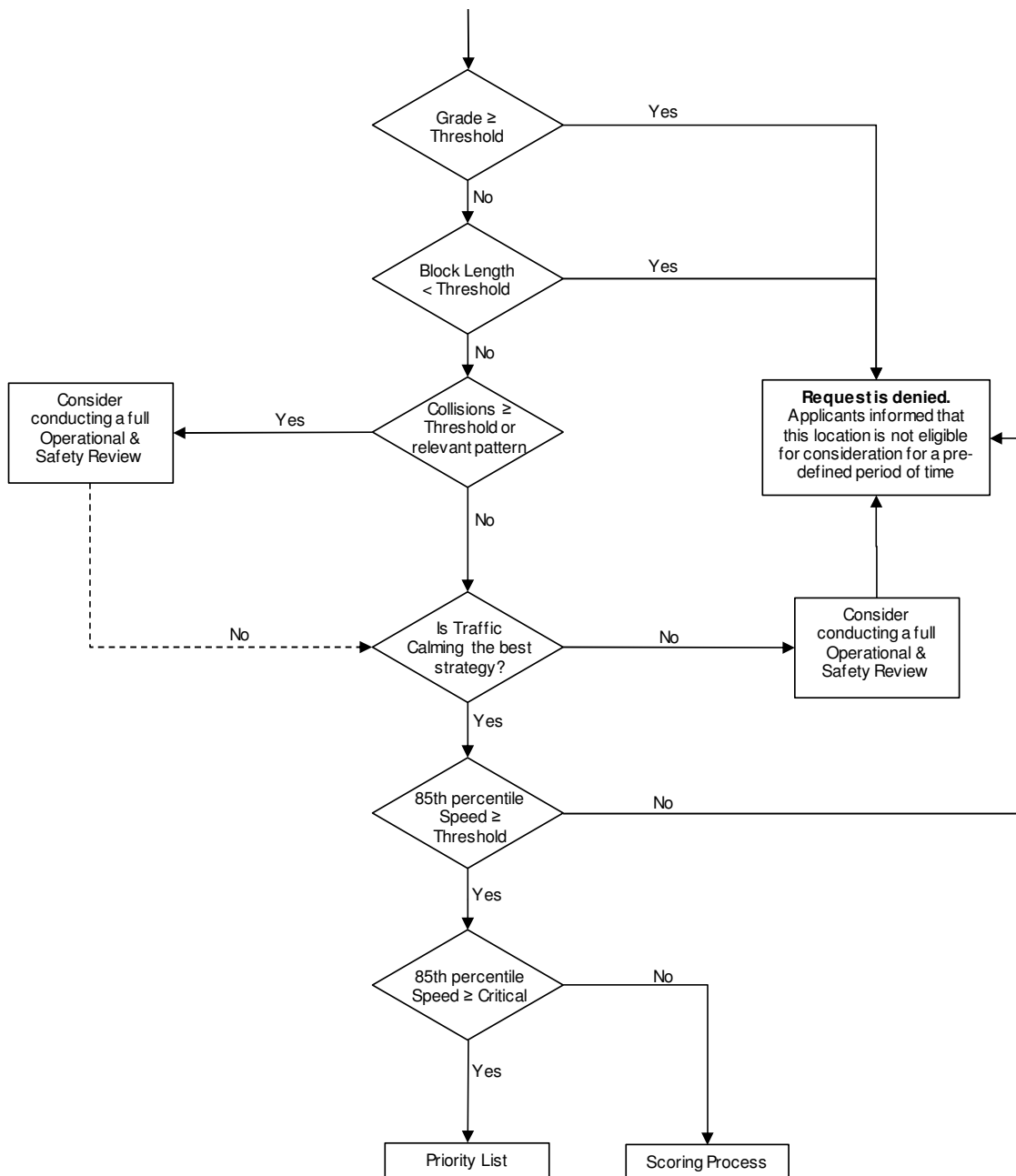
² For collisions where '*speed too fast for condition*' is indicated, the analyst should use their best judgement based on the police officer's description of the collision to determine whether it could have been prevented by traffic calming. This would not be the case if, for example, the condition referred to were exclusively weather related.

Exhibit 3: Criteria and Thresholds

Criteria	Threshold		Notes
	Local Road	Collector / Type 'C' Arterial ³	
Grade		< 8%	If the grade is equal to or greater than 8%, traffic calming is not permitted
Block Length		≥ 110 m	If the distance between stop-controlled intersections along the requested route (disregard stop control only on side streets) is shorter than 110 m, traffic calming is not permitted
Collision History	< 6	< 12 or Relevant pattern identified	If the number of qualifying collisions within the last three years is equal to or higher than the threshold, or if a relevant collision pattern can be identified, an alternative approach (for example, full operational and safety reviews) should be considered
Is traffic calming the best strategy for the location?		Yes	If traffic calming is not the best strategy to address the request, based on existing conditions, an alternative approach (for example, full operational and safety reviews) should be considered
Operating Speeds		≥ Minimum Threshold Speed & < Critical Speed	If the 85th speed is equal to or higher than the Minimum Threshold Speed (10 km/h above the posted speed limit), but lower than the Critical Speed, the location proceeds to the scoring evaluation
Operating Speeds		≥ Critical Speed	If the 85th speed is equal to or higher than the Critical Speed (15, 20 or 25 km/h above the posted speed limit, depending on the road classification), the location is added to the Priority List

³ While arterial roads are not ideal candidates for traffic calming, some of Town of Ajax's *Type 'C' Arterials* effectively function as collectors.

Exhibit 4: Step 2: Screening Process



2.3 Step 3: Evaluation Scoring

Requests that pass the initial screening and that are not directly added to the Priority List are evaluated based on 7 criteria established by the Town of Ajax. Each location evaluated receives a number of points for each of the criteria, as shown in **Exhibit 5** and **Exhibit 6**, and the total number of points (Score) determines whether the location will be added to the General List or the request will

be denied. The minimum thresholds to add a location to the General List, for each road classification, are:

- + 30 points for Local roads;
- + 45 points for Collector roads; and
- + 50 points for Type 'C' Arterial roads.

Therefore, any location that does not obtain its minimum score based on its classification is ineligible for traffic calming.

The minimum scores were determined through pilot testing, further discussed in **Section 3**. Town staff may conduct periodic assessments and adjustments to the scoring system to better represent changing speed or volume patterns.

Exhibit 5: Step 3: Points System for Local Roads

FACTOR	POINT CRITERIA	MAXIMUM POINTS
Collision History	5 points for each qualifying collisions in excess of 3	20
Traffic Speeds	1 point for each km/h above posted speed, and 1 point for each 1% of vehicles over 15 km/h above posted speed	25
Traffic Volumes	1 point for each 50 vehicles above threshold	20
Pedestrian Generators	5 points for each school or park within the study area (other Pedestrian Generators may be defined by Ajax)	n/a
Pedestrian Facilities	5 points if there are no sidewalks in the study area	5
Bicycle Facilities or Routes	5 points if bicycle lanes, sharrows, or routes are present in the study area	5
Adjacent Land Uses (residential)	1 point for each 20% of residential land use	5

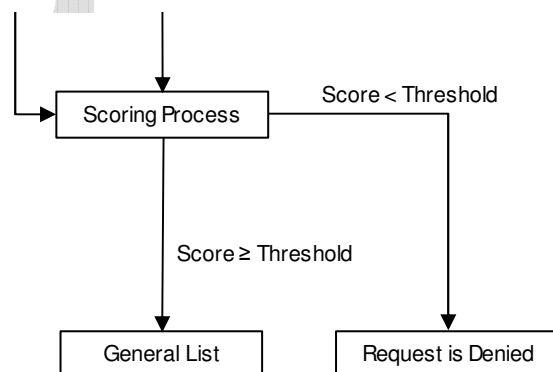
Exhibit 6: Step 3: Points System for Collector and Type 'C' Arterial Roads

FACTOR	POINT CRITERIA	MAXIMUM POINTS
Collision History	5 points for each qualifying collisions in excess of 3	15
Traffic Speeds	1 point for each km/h above posted speed, and 1 point for each 1% of vehicles over 15 km/h above posted speed	25
Traffic Volumes	1 point for each 100 vehicles above threshold	20
Pedestrian Generators	5 points for each school or park within the study area (other Pedestrian Generators may be defined by Ajax)	n/a
Pedestrian Facilities	10 points if there are no sidewalks in the study area 5 points if only on one side	10
Bicycle Facilities or Routes	5 points if bicycle lanes, sharrows, or routes are present in the study area	5
Adjacent Land Uses (residential)	1 point for each 20% of residential land use	5

The traffic volumes used in the warrant are two-way average daily traffic, recorded over a 24-hour period, and their thresholds are:

- + 900 vehicles/day for Local roads;
- + 2,000 vehicles/day for Collector roads; and
- + 5,000 vehicles/day for Type 'C' Arterial roads.

Exhibit 7: Step 3: Evaluation Scoring



2.4 Step 4: Available Traffic Calming Measures

The list of available traffic calming measures (Toolbox) from the previous version of the warrant was reviewed and expanded based on available literature, including the **Canadian Guide to Neighbourhood Traffic Calming** (TAC, 1998), the **Traffic Calming: State of the Practice Report** (ITE/FHWA, 1999), as well as results from a jurisdictional scan conducted by CIMA for previous projects. Further to the inclusion of additional traffic calming measures, the new Toolbox presents potential benefits, potential disbenefits and costs in a qualitative format – the previous version contained only the applicability of each measure to different types of roads.

The Town's Fire Department and the Region of Durham's Transit and Emergency Medical Services (EMS) representatives were invited to provide comments regarding the proposed Toolbox. The Fire Department provided their perceived level of disbenefits for each of the traffic calming measures, and the information was added to the final version of the Toolbox. Transit and EMS did not provide additional comments.

In the new process, Town staff will continue to take the input of Emergency Services into account when developing a traffic calming plan, using careful engineering judgment when selecting a traffic calming measure.

The new Toolbox maintains its use of Vertical Deflection, Horizontal Deflection and Obstruction types of traffic calming measures. Traffic Calming measures added to the updated Toolbox include:

+ Vertical Deflection:

- Rumble Strip;
- Speed Table;
- Textured pavement; and
- Textured crosswalk;

+ Horizontal Deflection:

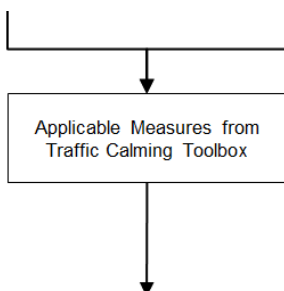
- Chicane, 2-Lane;
- Lateral Shift;
- Neckdown;
- Lane Narrowing; and
- Road Diet.

Signage measures were removed because of their minimal effects on speed reduction. Furthermore, unwarranted signs such as stop signs can create adverse effects such as an increased frequency of rear-end collisions and a decrease in driver compliance. Signage should only be used as a complement to, or warning for, other traffic calming measures.

The new Toolbox of traffic calming measures is included in **Appendix D**.

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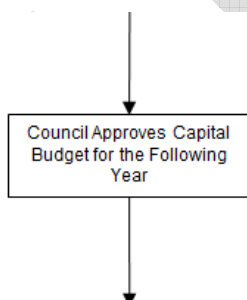
Exhibit 8: Step 4: Available Traffic Calming Measures



2.5 Step 5: Council Approval for Capital Budget

In this step, Town staff would prepare preliminary estimates for the requests at the top of each list (General and Priority) and forward the following year's recommended project(s) to Council for approval, in full awareness of the allotted Traffic Calming budget. If there are no projects in the Priority List in a specific year, projects wholly selected from the General List are forwarded for Council approval.

Exhibit 9: Step 5: Council Approval for Capital Budget



2.6 Step 6: Design, Approval, Implementation

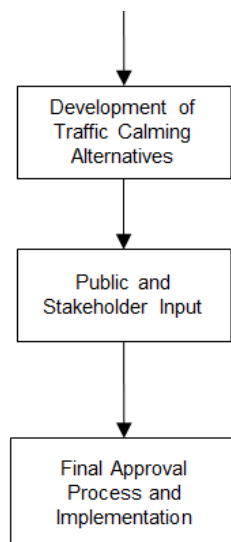
Exhibit 10 shows the final step of design, approval and implementation.

Once Council approves the projects in principle and the budget is established, Town staff ascertains the need for professional consultation. Preliminary designs shall be carefully developed based on the Toolbox of traffic calming measures and with special consideration to impacts on Emergency Services.

The alternatives are then presented through a dual stage public consultation process. Stage one introduces the public to the preliminary design alternatives and provides the public the opportunity to be directly engaged with the Project Team at the critical juncture of the process. The feedback received at this stage will be considered for incorporation into the alternative designs. A second stage will present the public with the final design of the project.

After incorporating the public and stakeholder input into the alternatives, Town staff shall select the most appropriate option and proceed to final design. The plan is then submitted to council for final approval, after which the process of tendering, implementing and evaluating the plan commences.

Exhibit 10: Step 6: Design, Approval, Implementation



3. Pilot Testing

A pilot test was conducted with four locations selected by Town Staff. The four locations were reviewed and the warrant process was followed in order to:

- + Verify or refine the thresholds such as percentage of high-end speeders, Critical Speed and number of points warranting inclusion in the General List; and
- + Confirm the adequacy of the number of points provided in each of the scoring system criteria.

In order to maximize exposure to the warrant process, two of the locations were assessed by CIMA and two were assessed by Town staff. The locations reviewed were:

- + Pearce Drive between Delaney Drive and Coughlen Street (CIMA);
- + Rands Road between Finley Avenue and Westney Road (CIMA);
- + Williamson Drive between Thackery Drive and Salem Road North (Town staff); and
- + Elizabeth Street between Kearney Drive and Old Kingston Road (Town staff).

Previous warrant analyses conducted by the Town at these four locations are summarized in **Exhibit 11**.

Exhibit 11: Locations Assessed in the Pilot Study

Road Section	Class	Posted Speed	85th %ile Speed	Volume	Collisions	Previously Eligible
Rands Road [Finley Ave – Westney Rd]	Local	40	49	2448	2	Yes
Pearce Drive [Delaney Dr – Coughlen St]	Collector	40	47	1501	1	No

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Road Section	Class	Posted Speed	85th %ile Speed	Volume	Collisions	Previously Eligible
Williamson Drive [Thackery Dr – Salem Rd N]	Arterial	40	52	1934	1	No
Elizabeth Street [Kearney Dr – Old Kingston Rd]	Arterial	40	54	7199	0	Yes

Additional analysis was conducted by Town staff to further refine both screening and scoring criteria. This analysis included thirty-six locations. Further details about both pilot tests can be found in **Appendix E**.

4. Traffic Calming Warrant Spreadsheet Tool

As part of this assignment, CIMA updated the existing spreadsheets used by the Town of Ajax in the traffic calming warrant process. The tool consists of an analysis worksheet and a summary report table.

4.1 Traffic Calming Warrant Analysis Worksheet

The Traffic Calming Warrant Analysis Worksheet is designed to aid Town staff in determining if a site is eligible for traffic calming, and in which list (General or Priority) a location should be included. The worksheet is divided into four sections, as shown in **Exhibit 12**.

Exhibit 12: Traffic Calming Warrant Analysis Worksheet



**Town of Ajax
Planning and Development Services
Traffic Calming Warrant Analysis Worksheet**

Clear Worksheet

Save to Database

Go to Database

1. Location:

Date of Request:

Requested By:

Description of Complaint:

Analyst:

Date of Analysis:

Preliminary Screening

Criteria	Value	Result
Posted Speed (km/h)	<input type="text"/>	<input type="text"/>
Road Type	<input type="text"/>	<input type="text"/>
Grade (%)	<input type="text"/>	<input type="text"/>
Block Length (m)	<input type="text"/>	<input type="text"/>
Collision History	<input type="text"/>	<input type="text"/>
Collision Pattern Identified?	<input type="text"/>	<input type="text"/>
Full Operational/Safety Review?	<input type="text"/>	<input type="text"/>
Is Traffic Calming the Best Strategy?	<input type="text"/>	<input type="text"/>
85th Percentile Speed (km/h)	<input type="text"/>	<input type="text"/>

2.

Scoring Evaluation

Criteria	Value	Points
Collision History	<input type="text"/>	Enter collision data
Traffic Speeds (km/h)	<input type="text"/>	Enter speed data
High End Speeds (%)	<input type="text"/>	
Traffic Volumes (veh/day)	<input type="text"/>	
Pedestrian Generators	<input type="text"/>	
Pedestrian Facilities	<input type="text"/>	
Bicycle Facilities or Routes	<input type="text"/>	
Adjacent Land Uses (residential)	<input type="text"/>	
Total		

3.

4.

Clear Worksheet

Save to Database

Go to Database

When completing the worksheet, all information should be entered in the yellow cells; the white cells are either headers or calculations results. When the user clicks on the yellow cells, a message with instructions about how to enter the information will be displayed. If the information is entered in an incorrect format, an error message will be displayed.

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1. **General Information.** Includes description of the location, dates of request and analysis, and other relevant information. The information
 - **Location:** descriptive information about the site;
 - **Date of request:** date of the original request for the subject location;
 - **Requested By:** the name of the resident, group or business requesting traffic calming;
 - **Description of Complaint:** text field for entry of problem/complaint;
 - **Analyst:** Town of Ajax staff; and
 - **Date of Analysis:** the date of completion of the analysis; also used to determine the new eligibility date for sites that fail to meet the minimum criteria.
2. **Preliminary Screening.** This is the initial criteria that will determine if the site is eligible for traffic calming.
 - **Posted Speed:** enter the posted speed of the study area in km/h;
 - **Road Type:** select the road type from the drop-down menu;
 - **Grade:** enter the grade of the study area as a percentage (do not type '%'; it will be automatically added by Excel);
 - **Block Length:** enter the distance, in metres, between stop-controlled points along the road;
 - **Collision History:** enter the number of qualifying collisions in the past three years (refer to Section 2.2 for details);
 - **Collision Pattern Identified?:** select “Yes” if a collision pattern not involving speeds can be identified (refer to Section 2.2 for details); select “No” otherwise;
 - **Full Operational/Safety Review?:** Select “Yes” if, based on the collision history, a full operational and safety review is a more adequate approach to evaluate the subject location (refer to Section 2.2 for details); select “No” otherwise;
 - **Is Traffic Calming the Best Strategy?:** Select “Yes” if, based on existing conditions, traffic calming is the best strategy to address the request; select “No” otherwise (refer to Section 2.2 for details);
 - **85th Percentile Speed:** enter the 85th percentile speed in km/h; and
3. **Scoring Evaluation.** If the Preliminary Screening section indicates “Proceed to Scoring Evaluation”, enter the required information in the yellow cells under this section (the white cells will retrieve the required information from the Preliminary Screening section).
 - **High End Speeders:** enter the percentage of users driving at speeds of 15 km/h or more over the posted speed limit (do not type '%'; it will be automatically added by Excel);
 - **Traffic Volumes:** enter the two-way average daily traffic (ADT) in vehicles/day;

- **Pedestrian Generators:** enter the number of schools, parks, and other pedestrian generators in the study area;
 - **Pedestrian Facilities:** select whether sidewalks are not present in the study area, present on one side of the street, or present on both sides of the street;
 - **Bicycle Facilities or Routes:** Select “Yes” if the study area has bicycle lanes, sharrows or bicycle routes; select “No” otherwise; and
 - **Adjacent Land Uses (residential):** enter the percentage of residential land uses within the study area (do not type ‘%’; it will be automatically added by Excel).
4. **Macro Buttons.** These buttons are used to save the results from the warrant analysis into the database, to clear the worksheet so a new analysis can begin, and to view the database.
- **Clear Worksheet:** this button will delete all data from the previous analysis from the worksheet so a new analysis can be conducted;
 - **Save to Database:** this button will add the data from a completed analysis to a database contained in the Excel file; and
 - **Go to Database:** this button leads to the database included all locations and their respective analysis results that have been therein previously saved.

4.2 Traffic Calming Warrant Database

The spreadsheet tool includes a database where data from all previous analyses can be saved. The database contents can be manipulated freely, allowing users to sort and filter the data at their convenience. **Because the contents of the database are not protected, it should be handled carefully so information is not lost. It is recommended that backup copies of the spreadsheet be created upon completing analysis for each request.**

The database includes a macro button to return to the warrant worksheet, and the user can show and hide details by clicking on the [1] and [2] buttons in the top left corner of the spreadsheet. Users are also able to add comments manually in column Y, as well as regenerate the warrant worksheet by clicking on the corresponding macro button. A screenshot of the database is shown in **Exhibit 13** highlighting all these options.

Exhibit 13: Traffic Calming Warrant Database

	A	B	C	W	X	Y
		Location	Date of Request	Score	Result	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

5. Conclusion

This report represents the final component of the traffic calming warrant update initiated by the Town of Ajax with the purpose of making the process more efficient and fair. The new warrant addresses local needs identified by Town staff over several years using the previous version of the warrant.

Some of the highlighted improvements include the elimination of a score-based ranking and the creation of two chronological lists, including a General List and a Priority List (for requests experiencing the highest speeds); the consideration for high end speeders, which can represent a safety concern even when overall speeds are within acceptable levels; and the reduction in the number of occasions of public involvement throughout the process, making it faster and less costly.

The new warrant has been evaluated by means of pilot testing to ensure the updated criteria are reasonable considering local characteristics. Since traffic is dynamic and its characteristics may change over time, Town staff may periodically revise the warrant points and thresholds to adapt to eventual changes in traffic patterns, ensuring the process remains fair over time.

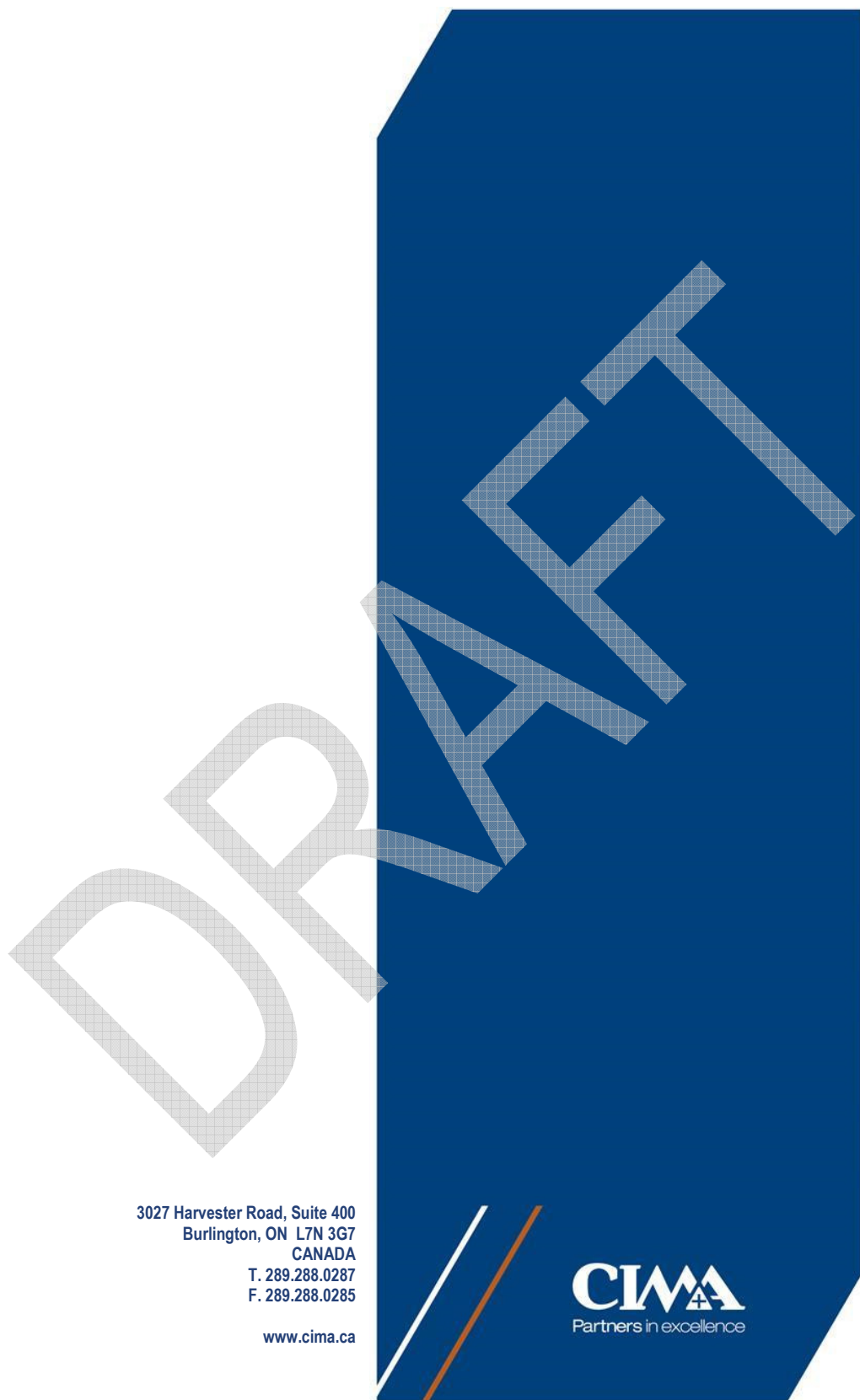
6. Recommendation

The intent of this warrant update was to create a fair and flexible process which allows the Town to focus its resources on highly problematic locations. Despite this, it is possible that the reassessment of the requests from 2012 through 2014 will yield a larger pool of warranted locations than can be accommodated by the current budget. This becomes exceptionally problematic where traffic data, Town staff, and resources are concerned. Standard application in the industry is that traffic data is valid for two years, with three year old data used in rare circumstances where very little development occurred. Thus, if current budgetary concerns require a location to be scheduled outside of the two year validity period, staff would then be obligated to recollect the data, and reassess the location to confirm whether the operational characteristics have changed. Consideration should be given to

increasing the annual Traffic Calming Budget to clear the newly developed Priority and General Lists in as short a time as is possible.

DRAFT

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TOWN OF AJAX REPORT



REPORT TO: Community Affairs and Planning Committee

SUBMITTED BY: Paul Allore, MCIP, RPP
Director of Planning and Development Services

PREPARED BY: Hubert Ng, P.Eng.
Senior Transportation Planner

SUBJECT: Highway 401 from Brock Road to Courtice Road
Class Environmental Assessment and Preliminary Design
Town of Ajax Considerations

WARDS: All

DATE OF MEETING: February 17, 2015

REFERENCE: n/a

RECOMMENDATIONS:

That the report to Community Affairs and Planning Committee entitled "Highway 401 from Brock Road to Courtice Road – Class Environmental Assessment and Preliminary Design – Town of Ajax Considerations" dated February 17, 2015, be received for information.

That the Ministry of Transportation be advised that the Town of Ajax does not support the introduction of an interchange at Highway 401 and Church Street.

REPORT:

The purpose of this report is to provide Council with a project update, including the preferred alternative of the Highway 401 from Brock Road to Courtice Road Class Environmental Assessment and Preliminary Design (401EA), together with the potential opportunities and the impact on the Town of Ajax that were discussed between Ministry of Transportation (MTO) and Town of Ajax staff on January 6, 2015.

Background:

The Ministry of Transportation (MTO) initiated the 401EA in June of 2012. The study area is from Brock Road in the City of Pickering to Salem Road in the Town of Ajax and from Brock Street in the Town of Whitby to Courtice Road in Clarington as illustrated in **Figure 1**. The study will establish a preliminary design to widen Highway 401 from 10 lanes to 12 lanes, from Brock Road to the future West Durham Link, and from 6 lanes to 10 lanes, from the future West Durham Link to Courtice Road.

This study includes the integration of the improvements for Highway 401 from Salem Road to Brock Street and the integration of the Highway 407 West Durham Link to Highway 401, as specified in the Highway 407 East Extension project.

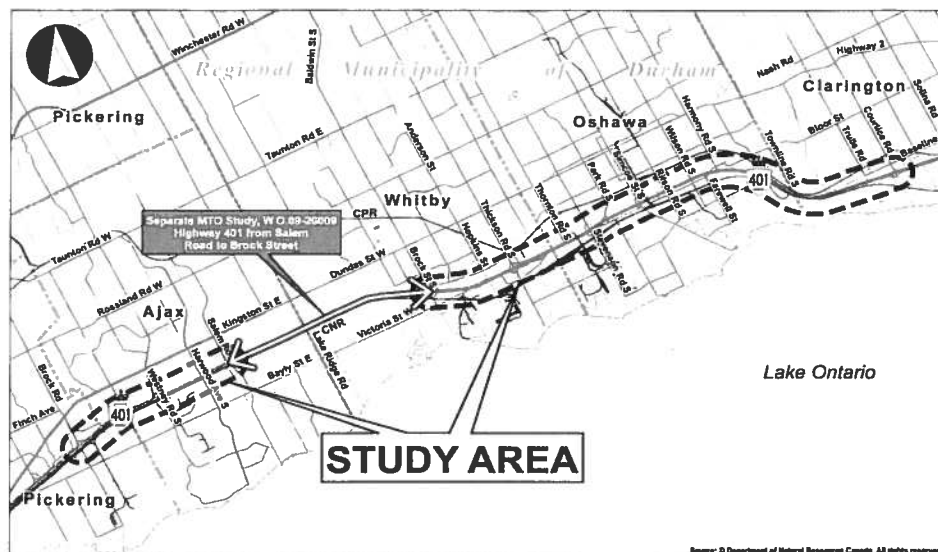


Figure 1: Project Study Area

Schedule

The 401EA was initiated in June of 2012. The Public Information Centre (PIC) #1 was held on March 20 and 21, 2013 in Oshawa and Ajax, respectively. PIC #2 was also held in Oshawa on November 20, 2014 to present the preferred alternative to the widening of Highway 401.

Town staff provided the MTO with a letter dated November 28, 2014 that outlines the concerns and comments of the Town of Ajax. On January 6, 2015, MTO and Town staff held a meeting to discuss the Town's concerns. These concerns are discussed in detail in the *Impacts on the Town of Ajax* section of this report.

MTO has indicated that the 401EA will be filed in early 2015, once comments received by Town of Ajax staff, other local municipalities, agencies and members of the public have been reviewed and adequately addressed. When 401EA obtains EA clearance, MTO staff will be in a position to proceed to detail design. However, no timetable has been set for detail design, the construction of the rehabilitation or any of the expansion work included in the EA. The recommendations are not currently on the Province's 5-year construction plan. Rather, MTO is focused on developing a rehabilitation schedule that will construct any major bridge structures to its ultimate configuration to accommodate the future widening of Highway 401 in the long-term.

Summary of Impacts within Ajax

In general, the preferred alternative is to widen Highway 401 equally about the centerline throughout the entire study area. However, a localized shift of the Highway 401 centreline to the north from the Town of Ajax boundary to just east of Salem Road is required in order to avoid significant impacts to the CN Rail line located south of Highway 401. As a result, it is anticipated that 43 residential, 5 non-residential, 2 church and 11 Town properties will be affected. All property owners that were anticipated to be impacted by the recommended plan received a notification letter from MTO prior to the Public Information Centre indicating that their property was anticipated to be impacted. The letter also encouraged the affected property owners to attend the PIC for more information and to discuss the potential impacts to their property with a project representative.

Residential Properties

During the subsequent detail design phase, representatives from MTO's Property Section will contact affected residents to discuss the impacts to their property and begin negotiations to acquire the required property. Any changes to resident properties will need to conform to the Town of Ajax Zoning By-law. Residents who are directly impacted have the option to sell their homes now to the public or when MTO's property staff begin negotiations to acquire the property during the detail design stage. As a general rule, property owners that are unable to sell their properties at market value for a period of at least 6 months have the option to contact the Ministry and inquire as to whether early purchase of their property may be possible.

Town Properties

MTO staff have indicated that further discussions on the reconfiguration of Town properties such as Cedar Park, stormwater management facilities and Town roads that are impacted by the recommended plan will be undertaken at the detail design stage once the final property requirements are confirmed. The costs associated with this work will be subject to these future discussions and negotiations between the Town and MTO. A commitment to these further discussions will be included in the Transportation Environmental Study Report. The Town has informed MTO that any reconfigured roadways will need to meet the requirements of the Town's Engineering Design Standards and Drawings. The reconfiguration and construction required will be undertaken by MTO.

Preliminary discussion of the reconfiguration of various Town properties have been initiated and details are presented in this report. Further discussions are needed during the detail design stage. The Town will be financially compensated through discussions with MTO at the detail design stage.

Stormwater Management

The preferred alternative indicates which water crossing improvements are required. The Stormwater Management Plan for the 401EA will be circulated to the Town of Ajax for comments when it is complete in the winter or spring of 2015.

Trees

MTO has advised that the tree removal requirements will be confirmed during the detailed design stage, and a commitment for the development of a compensation Landscape Plan during detailed design will be included in the Transportation Environmental Study Report.

Detailed discussions on any impacts include the following:

Notion Road to Church Street

Figure 2 illustrates the preferred alternative of Highway 401 from Notion Road to Church Street. Highway 401 will be widened on the north in this section. MTO staff have been made aware of a proposed partial interchange at Highway 401 and Church Street identified by a City of Pickering development proposal. MTO have confirmed that no such interchange is included as part of this EA. Town staff have advised the MTO that Ajax is not in favour of a highway interchange at Church Street. A copy of the Community Affairs and Planning Committee Report entitled City of Pickering Zoning By-law Amendment Application A 3/14 1802 & 1902 Bayly Street and 2028 Kellino Road dated June 2, 2014 on the Durham Live application in Pickering has already been forwarded to MTO staff.

The potential for a Highway 401 crossing at Notion Road is being considered in a separate Environmental Assessment underway by the City of Pickering and is not included in the 401EA.

The existing Duffins Creek structure will need to be widened to accommodate the preferred alternative. However, a retaining wall approximately 2 m in height is needed just east of Notion Road on the north side of Highway 401, even without the Highway 401 crossing.

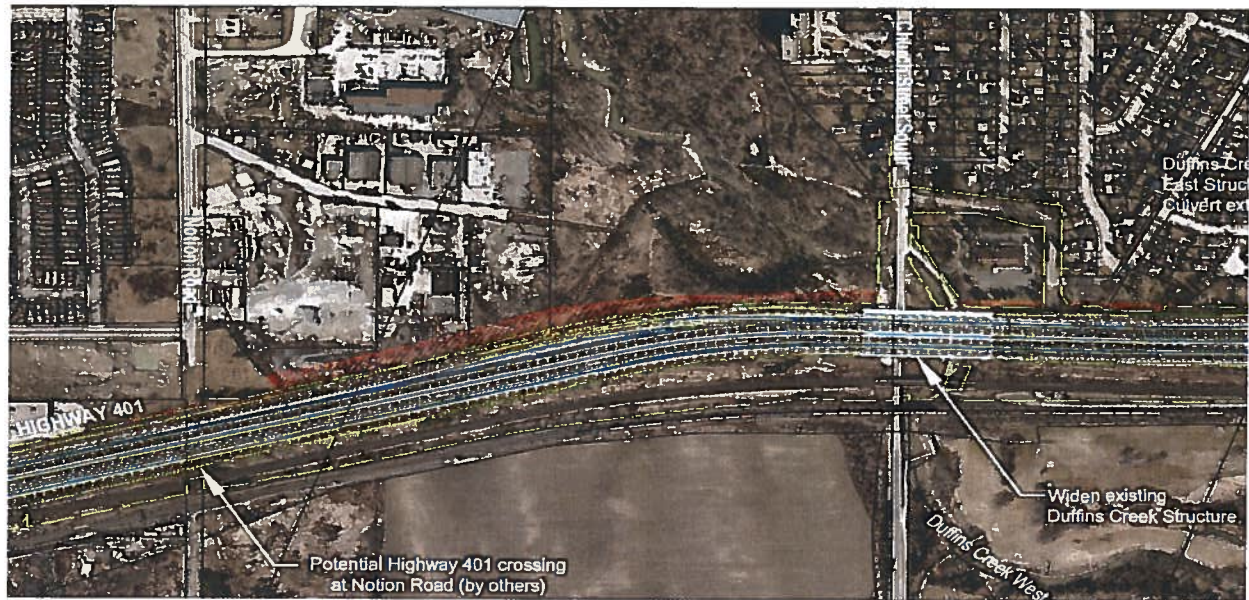


Figure 2: Notion Road to Church Street

Duffins Creek to Westney Road

Figure 3 illustrates Highway 401 from Duffins Creek to Westney Road. The Town is concerned with the widening of Highway 401 to the north in this area, as it has a significant impact to the residential properties on the south side of Jacwin Drive. The rear yards of these properties will be significantly reduced. MTO noted that the detailed design stage will determine whether portions or the entire affected properties will need to be acquired by MTO prior to the widening taking place.

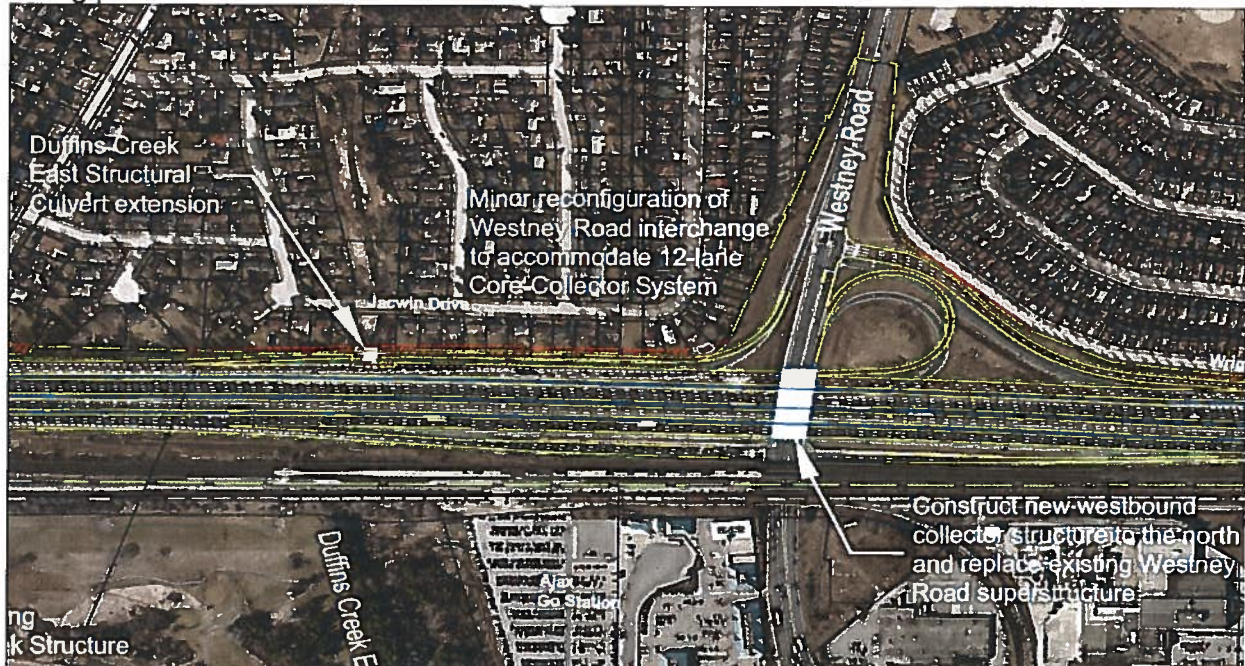


Figure 3: Duffins Creek to Westney Road

The existing Westney Road superstructure will be replaced and a new bridge structure is proposed for the westbound Collector lanes over Westney Road to accommodate the widening as illustrated in **Figure 3**. **Figure 4** presents a preliminary draft plan that illustrates the Highway 401 westbound on an off-ramp that has been shifted to the north at Westney Road. This reconfiguration of the westbound on and off-ramps will require Town owned property from the Wright Crescent right-of-way. As previously noted, the configuration and cross section of Wright Crescent will be determined at the detailed design stage but preliminary cross section drawings will be provided by MTO prior to filing of the 401EA.

Further, the Duffins Creek East culvert will need to be extended as illustrated in **Figure 3**. This culvert currently discharges stormwater directly into Duffins Creek without being treated. A copy of the Town of Ajax Stormwater Retrofit Master Plan has been forwarded to MTO for consideration as it recommends a solution to treat the runoff prior to being discharged into Duffins Creek. This recommendation is currently not in the Town's budget.

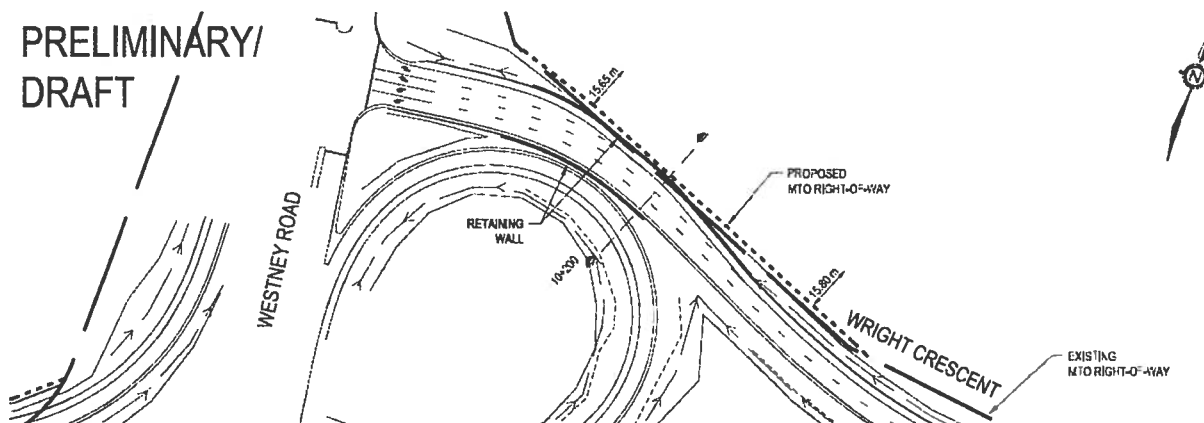


Figure 4: Westney Road

Reading Street to Cedar Park

The preferred alternative will require a portion of the Reading Street right-of-way. The Reading Street configuration and cross section will need to be designed to meet the Town's Engineering Design Criteria and Standard Drawings during the detailed design stage.

The properties on the south side of Cedar Street will also be affected. The driveways and parking configurations will need to be modified. **Figure 5** illustrates the recommended modifications to these accesses and parking areas at a preliminary design level of detail. The final configuration will be determined during the subsequent detail design stage in consultation with the property owners.



Figure 5: Reading Street to Cedar Park

Cedar Park will also be significantly impacted by the preferred alternative as illustrated in **Figure 6**. The southern portion of Cedar Park is required. This will result in the loss of a baseball diamond located in the southwest section of the park. This preliminary draft option illustrates how the park could potentially be reconfigured to compensate for the impacted parking spaces. This and other options will be explored during the detail design stage by MTO in consultation with Town staff. Due to these property impacts, there may be a need to reprogram the space at Cedar Park. In addition, the Town has a number of planned improvements to the park that were identified in the 2015 Capital Budget and the 2016-2019 Long Range Capital Forecast. The capital sheets for Cedar Park are summarized as follows:

- Cedar Park Baseball Improvements – OPS007
 - Reconstruction of the existing batting cages to accommodate young players.
 - Upgrade existing players benches and bleachers in various locations.
 - Fencing repairs at various locations.
 - Budget of \$40,000 in 2015
- Cedar Park Sports Field Lighting Replacement – OPS016
 - Replace floodlights and cross arms.
 - Replace underground wiring and lighting controls.
 - Replace sportsfields lighting poles.
 - Budget of \$10,000 for design fees in 2015
 - Budget of \$150,000 for construction in 2016
- Cedar Park Parking Lot Resurfacing – OPS023
 - Resurfacing of municipal parking lots, including concrete sidewalk and curb repairs as part of the Town's maintenance program to prolong the life of the pavement structure.
 - Budget of \$150,000 in 2019

Operations staff have been notified of the 401EA and how it affects Cedar Park. Operations staff will consider the impacts of the 401EA prior to undertaking any budgeted Cedar Park improvements.



Figure 6: Cedar Park Reconfiguration Preliminary Draft Option

Tudor Avenue to Harwood Avenue

Figure 7 illustrates a preliminary design option from Tudor Avenue to Harwood Avenue. The preferred alternative will require the southern portion of Tudor Avenue and the adjacent properties. In addition, the Queen Street right-of-way together with the properties fronting onto Queen Street will also be required. In the EA documents, Tudor Avenue is proposed to connect to Windsor Avenue. The southeasterly property of George Street will be required to construct a cul-de-sac at the end of George Street. Town staff have informed MTO that the Town's engineering design standard require a cul-de-sac with a 12m radius as opposed to 10m.

The cul-de-sac on Birch Crescent as well as the most southerly property on Birch Crescent will also need to be acquired by MTO. The cul-de-sac will be shifted north from its current location. Once again, the Town has notified MTO that a 12m radius as well as a secondary access is required for this cul-de-sac relocation.

No changes are required to the Harwood Avenue Structure over Highway 401 as it was already constructed to accommodate the future widening of Highway 401 on the north side.

Further, Town staff have expressed an interest in the Town acquiring surplus MTO property on the northeast quadrant of Harwood Avenue and Highway 401 to facilitate appropriate development opportunities fronting onto Harwood Avenue.

PRELIMINARY/ DRAFT

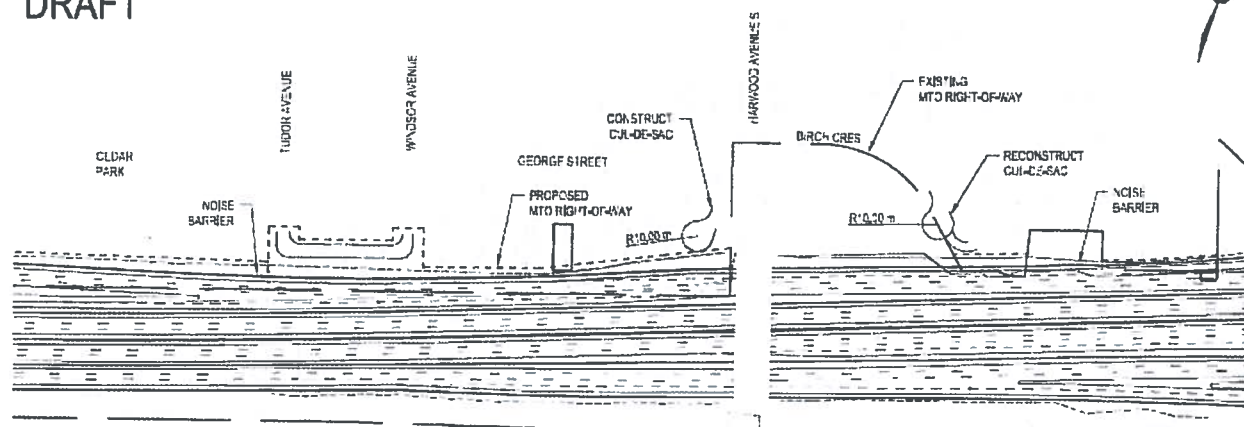


Figure 7: Tudor Avenue to Harwood Avenue

Harwood Avenue to East of Salem Road

Figure 8 illustrates the preferred alternative from Harwood Avenue to the east study limits. The Salem Road bridge structure will be widened on both the north and south sides of Highway 401 to accommodate the widening. The existing Highway 401 westbound on and off-ramps at Salem Road will also need to be shifted to the north as illustrated in the preferred alternative.

The stormwater management pond that is jointly owned by MTO and the Town located in the northwest quadrant of Highway 401 and Salem Road will be affected by the minor reconfiguration of the Salem Road interchange. As previously noted, MTO will send Town staff the stormwater management report, which will quantify how the stormwater management pond is affected, for comments when available.

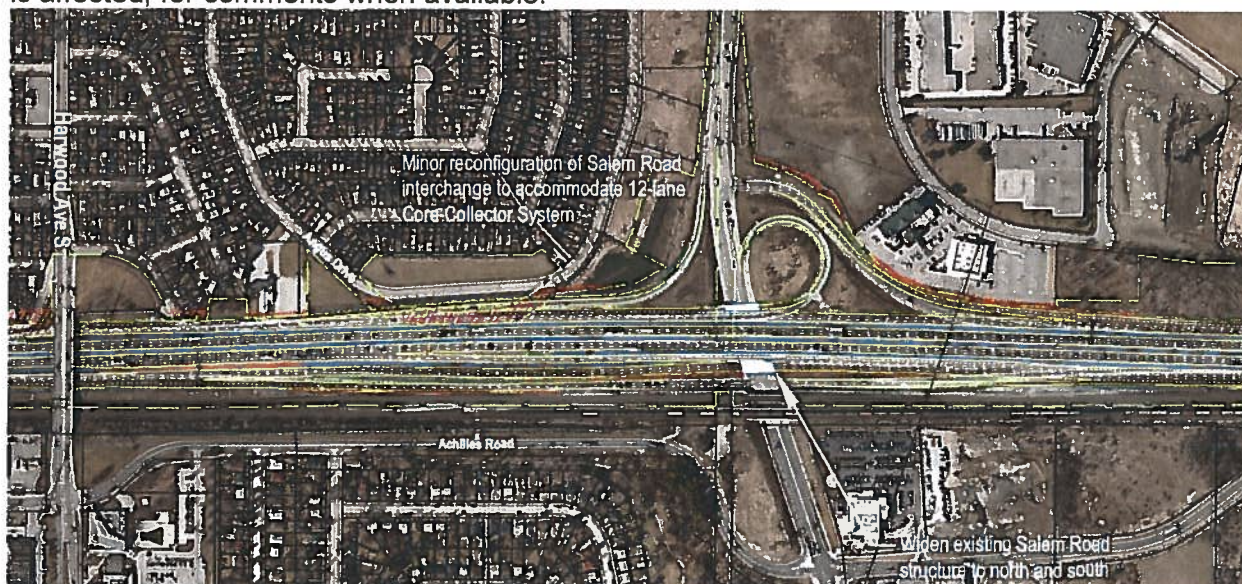


Figure 8: Harwood Avenue to East of Salem Road

It is anticipated that the property that includes the Hilton Garden Inn and the Ajax Convention Centre will be minimally affected by the preferred alternative. A small section of the parking lot is anticipated to be temporarily required during the construction stage as illustrated in Figure 9, and a small portion of the property will be permanently required but without impacting the parking area.

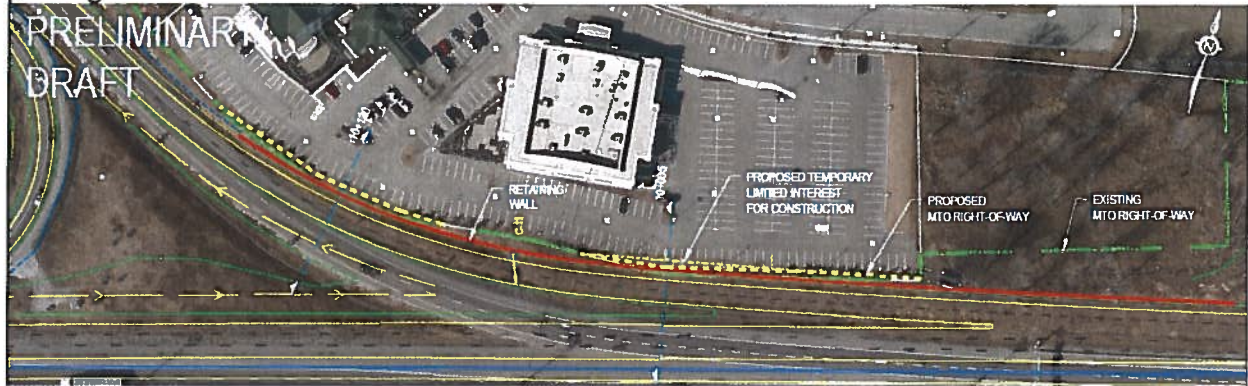


Figure 9: Hilton Property

FINANCIAL IMPLICATIONS:

The costs associated with the impacts to Town properties will be the subject of future discussions between MTO and Town staff during the detail design stage once the final property requirements are confirmed. A commitment to these future discussions will be included within the Transportation Environmental Study Report.

Further, Operations staff have been notified of the 401EA and the impacts of 401EA will be assessed prior to undertaking any Cedar Park improvements.

COMMUNICATION ISSUES:

The following is the primary contact for obtaining additional information:

David Fallows, P.Eng.
Senior Project Engineer
Ministry of Transportation, Central Region
4th Floor, Building D, 1201 Wilson Avenue
Downsview, ON M3M 1J8
david.fallows@ontario.ca
Phone: 416-235-5519

Please refer to the following website for additional information:

Highway 401 Class EA and Preliminary Design (Brock Road to Courtice Road)
<http://www.highway401brocktocourtice.ca/>

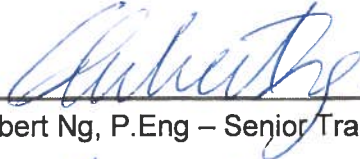
A copy of staff's previous comments to MTO are also provided for reference.

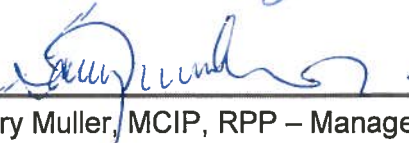
CONCLUSION:

As MTO moves forward with the widening of Highway 401 in the future, Town staff will work closely with the province to ensure that the Town's interests continue to be considered as part of the process.

ATTACHMENTS:

1) Previous Staff Comments on EA


Hubert Ng, P.Eng – Senior Transportation Planner


Gary Muller, MCIP, RPP – Manager of Planning


Paul Allore, MCIP, RPP – Director of Planning and Development Services



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November 28, 2014

David Fallows, P.Eng
Senior Project Engineer
Highway Engineering – Toronto and Durham
Ministry of Transportation, Central Region
Building D, 4th Floor, 1201 Wilson Ave
Downsview, ON M3M 1J8

**Re: Highway 401 from Brock Road to Courtice Road
Class Environmental Assessment and Preliminary Design Study
Public Information Centre #2
Town of Ajax Comments**

Dear Mr. Fallows,

Thank you for facilitating the Public Information Centre #2 (PIC2) on Thursday, November 20th for the Highway 401 from Brock Road to Courtice Road Class Environmental Assessment and Preliminary Design Study (401EA).

Given that the preferred solution of widening the Highway 401, which has only been recently presented at PIC2, has significant impacts to the Town of Ajax, we strongly object to the 401EA document being finalized before the end of 2014. Sufficient time is needed to ensure that Ajax's concerns are satisfactorily addressed and Council needs to be briefed concerning the impacts to Ajax residents.

Due to the Municipal Election process undertaken this fall, Council did not meet in October and November of 2014. The earliest opportunity to update Council and for you to receive their comments and recommendations is in the evening of January 19th or the afternoon of January 22nd, 2015.

We request you appear before Council and make a presentation followed with a questions and answers period on this project on one of the dates mentioned above.

The following comments are being provided by staff, however, we reserve the right to add further comments upon briefing Council in January 2015.

Impact on Residential Properties:

- Has the MTO contacted all of the affected property owners informing them of the current preferred solution?
- What is the MTO's timeline and phasing plan to acquire the proposed residential properties?
- Will the MTO only acquire residential properties in its entirety or will only the relevant portions of the properties be acquired?

- All residential private properties affected by the proposed limit change shall conform to the Town of Ajax Zoning By-law 95-2003 (<http://www.ajax.ca/en/doingbusinessinajax/zoning.asp>) as well as the Town's Engineering Design Criteria and Standard Drawings (<http://www.ajax.ca/en/doingbusinessinajax/EngineeringDesignCriteriaandStandardDrawings.asp>).

Impact on Town Property:

- The Town has recently put in significant efforts in improving the facilities at Cedar Park. The preferred plan indicates that MTO will require the southern portion of Cedar Park. Please provide clarification on how the MTO will reconfigure Cedar Park to maintain its current facilities and function and what mitigation measures would be provided to the Town for the loss of this parkland.
- Any proposed modifications to the Town of Ajax roads must conform to the Town's Engineering Design Criteria and Standard Drawings that can be accessed in the following location:
<http://www.ajax.ca/en/doingbusinessinajax/EngineeringDesignCriteriaandStandardDrawings.asp>
- The proposed minor reconfiguration of the Highway 401 Westbound Off-Ramp at Westney Road is in close proximity to Wright Crescent. Please provide clarification on how the MTO proposes to keep the off-ramp segregated from Wright Crescent and if any retaining walls or noise abatement measures are anticipated and if it will result in any reconfigurations to Wright Crescent. Also, if other areas require the relocation of noise abatement walls, then the affected property owners should be identified.
- It is difficult to comprehend the location of retaining walls in the preferred plan. Please provide clarified information.
- The proposed plan requires MTO property acquisition from a number of Town properties to facilitate the widening of Highway 401. Please provide any further information that the MTO may have developed at this stage including any proposed cross sections and proposed configurations for the affected roadways. The Town would like to ensure that a minimum pavement width of 8.5m, a minimum R.O.W of 18.5 and that any existing sidewalks be maintained. The affected roadways include the following:
 - Wright Crescent, 18.5m R.O.W.
 - Reading Street, 18.5m R.O.W.
 - Laneways on the south side of Cedar Crescent, 7.0m Laneway and 2.75x6.0 parking spaces
 - Tudor Avenue, 20.0m R.O.W.
 - Windsor Avenue, 20.0m R.O.W.
 - Queen Street, 20.0m R.O.W.
 - Birch Crescent, 20.0m R.O.W. and bulb turnaround; and
 - Angus Drive, 20.0m R.O.W.
- The proposed minor reconfiguration of the Highway 401 Westbound Off-Ramp at Salem Road is in close proximity to the Hilton and Convention Centre sites and may require property acquisition. Please provide clarification on how the MTO proposes to keep the off-ramp segregated from the property and how MTO will ensure that the existing parking supply of the site is maintained.
- How does the MTO propose to remove/obtain the two most southerly residential properties between Tudor Avenue and Windsor Avenue to extend a window street

between the two avenues? The proposed right-of-way shall conform to our minimum standard (AS-201) for a 15m R.O.W. with an 8.5m pavement width.

- If the proposal removes the Queen Street right-of-way then George Street will require a permanent cul-de-sac bulb as per our Town Standard AS-218, located at the east limit of George Street.

Stormwater Management:

- How does the MTO propose to manage stormwater runoff? Water quality control and treatment should be provided for all areas discharging into watercourses through Ajax. Water quantity control should be provided in all areas where specified by TRCA, including Millers Creek, Carruthers Creek and Lynde Creek.
- Have impacts to the floodplains for all watercourse crossings been explored with hydraulic modelling? The existing TRCA HEC RAS models should be updated with all pertinent grading and crossing changes proposed.

Impact on Trees:

- How is the screening of trees and vegetation impacted? The Town will require the replacement of all trees removed. The replacement will be dependent on the caliper of the trees removed.

Moving forward, we request a meeting with MTO and Town Staff to address the above comments prior to your appearance before Council on January 19th or 22nd of 2015. We strongly oppose to finalizing the 401EA document prior to addressing Ajax's concerns.

Please respond with your comments to the requests outlined above by: December 15, 2015.

Should you require any clarification on the above matters, please contact Hubert Ng, Senior Transportation Planner at: hubert.ng@ajax.ca / 905-619-2529 ext. 3209.

Sincerely,



Paul Allore, M.C.I.P., R.P.P.
Director of Planning & Development Services
Town of Ajax
905-619-2529, ext. 3220
paul.allore@ajax.ca

cc: Mayor, Council of the Town of Ajax
Brian Skinner, CAO (Ajax)
Dave Meredith, Director of Operations and Environmental Services (Ajax)
Gary Muller, Manager of Planning (Ajax)
Carol Coleman, Manager of Engineering – Capital Projects (Ajax)
Kevin Tryon, Manager of Engineering – Development Approvals (Ajax)
Hubert Ng, Senior Transportation Planner (Ajax)
Peter Verok, Regional Director (MTO)
Jason White, Manager of Engineering (MTO)
Bob Stevenson, Head of Planning (MTO)
Mike Sit, Head of Toronto and Durham (MTO)



Highway 401 from Brock Road to Courtice Road

Class Environmental Assessment & Preliminary Design Study

HIGHWAY 401 FROM BROCK ROAD TO COURTICE ROAD

Class Environmental Assessment and Preliminary Design Study

Town of Ajax Community Affairs and Planning Committee

February 17, 2015



Highway 401 from Brock Road to Courtice Road

Class Environmental Assessment & Preliminary Design Study

Agenda

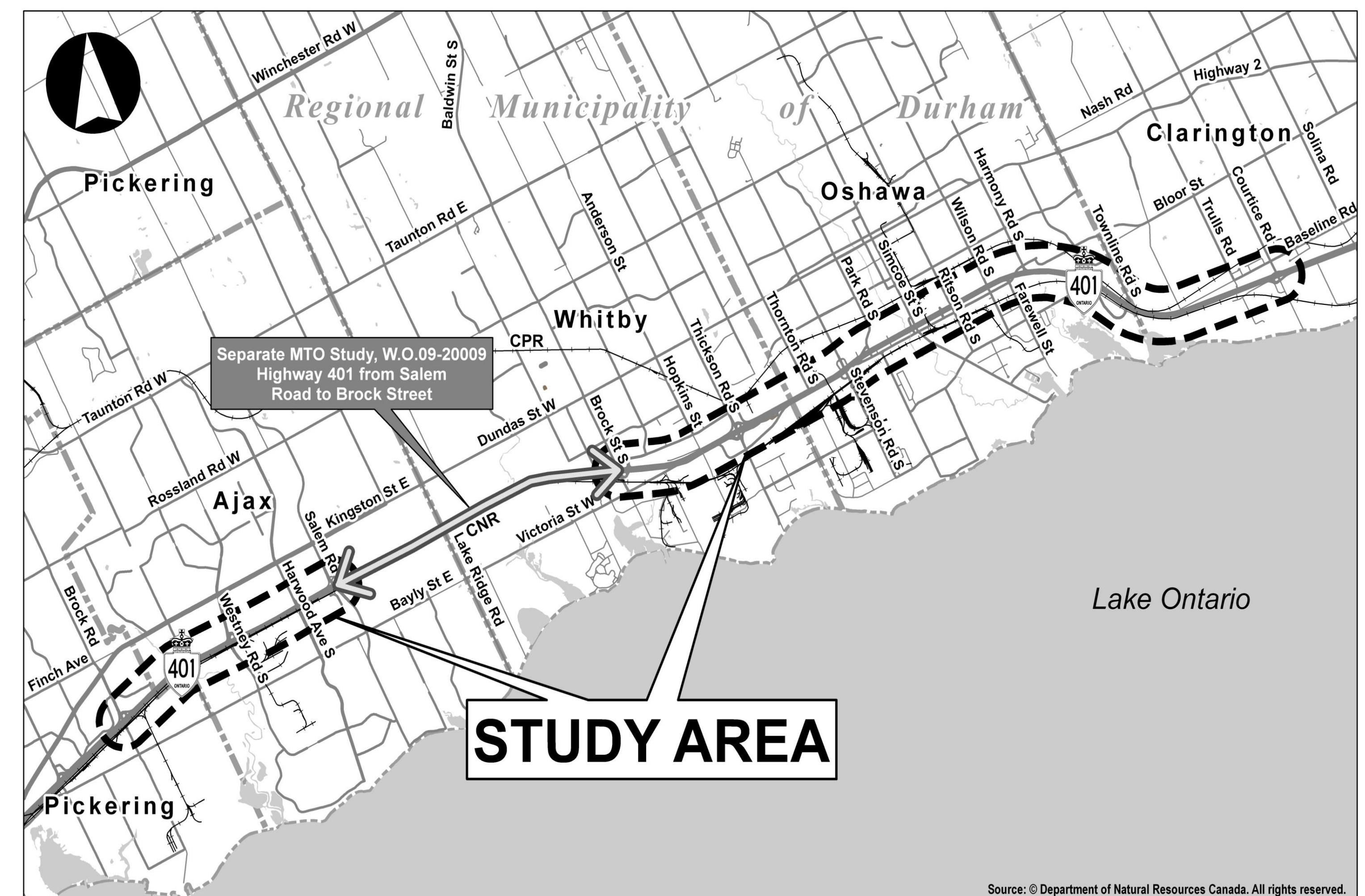
- General Project Overview and Schedule
- Overview of the Recommended Plan
- Recommended Plan and Impacts through Town of Ajax
- Other Issues
 - Construction Sequencing
 - Property Acquisition
- Next Steps

Highway 401 from Brock Road to Courtice Road

Class Environmental Assessment & Preliminary Design Study

Project Overview

- The primary focus of this study is to confirm the **rehabilitation needs** of the corridor.
- In parallel, the study team has confirmed the **long-term capacity and operational needs** so that rehabilitation investments are made with knowledge of the long-term vision for the corridor.
- Study Schedule
 - **Study commencement** – June 2012
 - **PIC #1** – March 2013 (existing conditions, need and justification, mainline and interchange alternatives).
 - **PIC #2** – November 21, 2014 (recommended plan, potential mitigation strategies).
 - **Filing of Transportation Environmental Study Report (TESR)** – Spring 2015





Highway 401 from Brock Road to Courtice Road

Class Environmental Assessment & Preliminary Design Study

Overview of Recommended Plan

➤ Highway 401 Mainline

- Brock Road to future West Durham Link – **Widen from 10 to 12 Lanes** (extend core-collector system).
- West Durham Link to Courtice Road – **Widen from 6 to 10 Lanes** (no core-collector system).
- Widening about centreline generally preferred along entire corridor:
 - Widening to north preferred from west of Church Street to Harwood Avenue (through Westney Road interchange) to avoid significant impacts to existing rail corridor.

➤ Interchanges

- Generally minor interchange improvements which maintain the existing configuration recommended at most locations to accommodate widening of Highway 401, including:
 - Brock Road, Westney Road, Salem Road, Thickson Road and Stevenson Road
- Major re-configurations of Simcoe Street/Ritson Road and Harmony Road interchanges recommended.
- Interchanges at Lake Ridge Road, Brock Street and Courtice Road were previously reviewed as part of separate studies, and the approved interchange configurations at these locations have been incorporated into the plan.

➤ Structures

- Rehabilitation and/or widening is recommended for the majority of structures along the corridor;
- Replacement of some structures, and construction of 3 new bridges in Oshawa will also be required to accommodate the ultimate Highway 401 configuration.

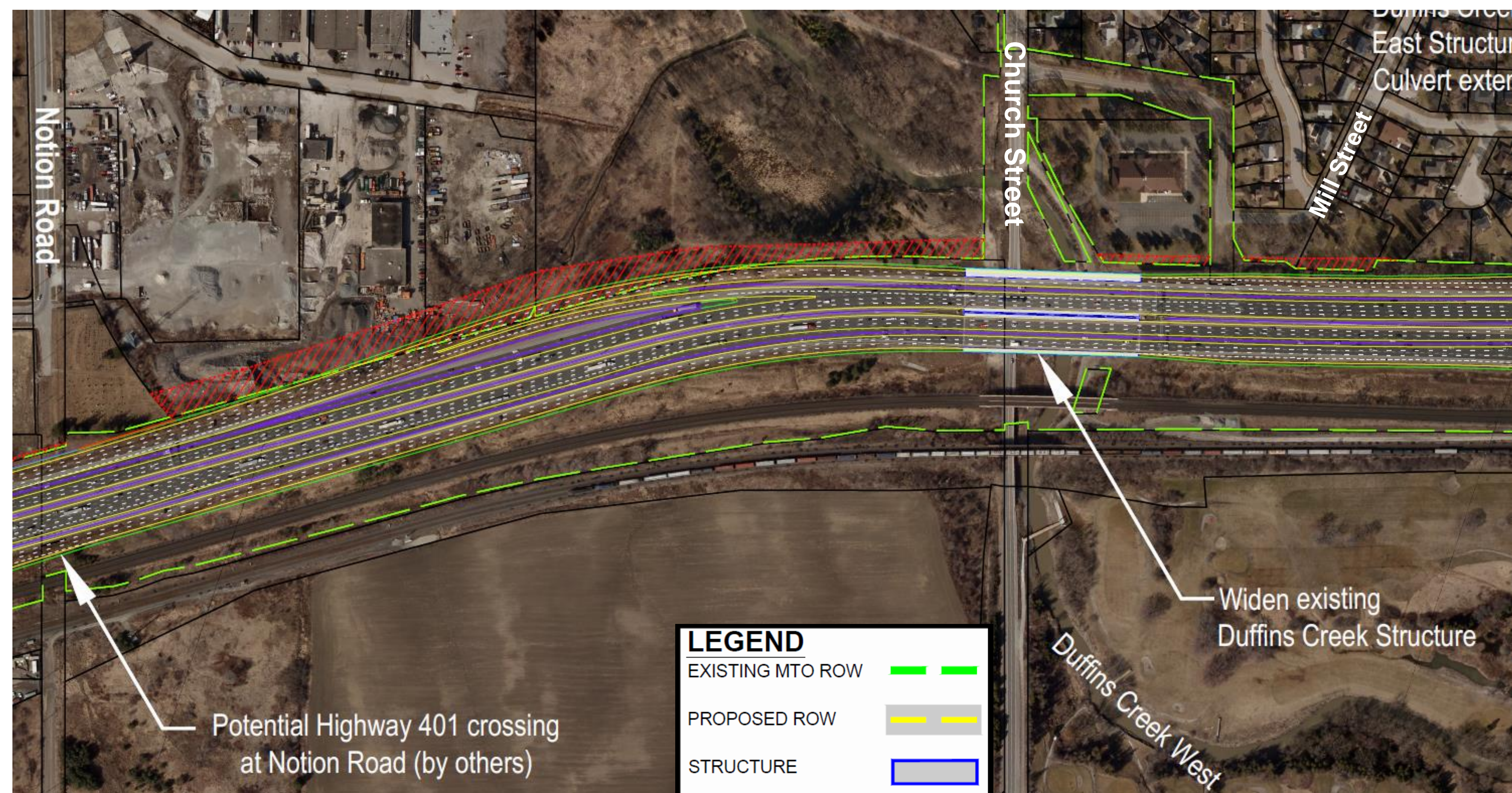
Highway 401 from Brock Road to Courtice Road

Class Environmental Assessment & Preliminary Design Study

Recommended Plan through Town of Ajax Notion Road to East of Church Street (Mill Street)

- Recommended plan for this section includes:
 - Widening Highway 401 to 12-Lanes about centreline;
 - Widening of existing Duffins Creek Structure (deck only);
 - Impacts to 2 commercial/industrial lots and Duffins Creek woodlot on north side of Highway 401;
- Minor property impacts to church and 1 residential property east of Church Street.

Notion Road to East of Church Street – Recommended Plan



Highway 401 from Brock Road to Courtice Road

Class Environmental Assessment & Preliminary Design Study

Recommended Plan through Town of Ajax Mill Street to East of Westney Road

- Recommended plan for this section includes:
 - Widening Highway 401 to 12-Lanes to the north through Westney Road interchange;
 - Partial reconfiguration of westbound on and off-ramps at Westney Road interchange;
 - Rehabilitation of existing Westney Road structure with new structure provided for westbound Collector lanes over Westney Road.
- Property impacts on the north side of Highway 401 between Mill Street and Westney Road (approx. 22 residential properties impacted);
- Local impacts to Wright Crescent right-of-way.

Mill Street to East of Westney Road – Recommended Plan





Highway 401 from Brock Road to Courtice Road

Class Environmental Assessment & Preliminary Design Study

Recommended Plan through Town of Ajax East of Westney Road to East of Harwood Avenue

- Recommended plan for this section includes:
 - Widening Highway 401 about existing centreline;
 - No impacts to Harwood Avenue (existing structure can accommodate 12-lane Core-Collector System)
 - Local impacts to Reading Street right-of-way and apartment building laneways/parking on south side of Cedar Street;
 - Closure of Queen Street with new laneway connecting Tudor Avenue to east end of George Street (approx. 17 residential properties impacted);
 - Reconstruction of existing cul-de-sac on Birch Crescent to the north (2 residential property impacts).

East of Westney Road to East of Harwood Avenue – Recommended Plan



Highway 401 from Brock Road to Courtice Road

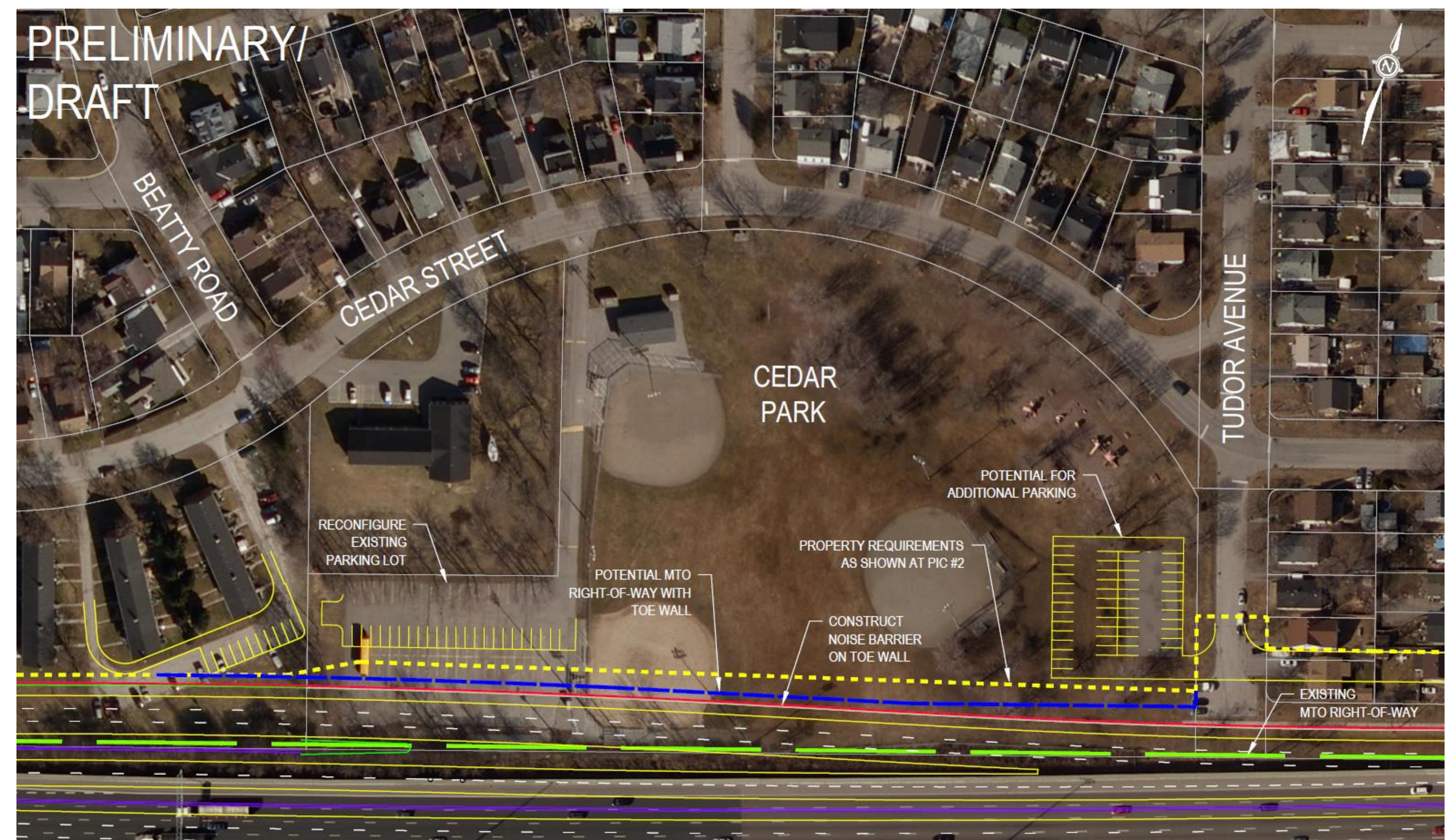
Class Environmental Assessment & Preliminary Design Study

Recommended Plan through Town of Ajax Cedar Park

➤ Impacts to Cedar Park:

- Impacts / loss to approximately half of the parking spaces at the park and southwest baseball diamond;
- A potential concept for reconfiguration of the park has been developed.
- Further discussions on the reconfiguration of the park will be undertaken at the detail design stage once final property requirements are confirmed.

Potential Reconfiguration of Cedar Park





Highway 401 from Brock Road to Courtice Road

Class Environmental Assessment & Preliminary Design Study

Recommended Plan through Town of Ajax East of Harwood Avenue to East of Salem Road

- The recommended plan for this section includes:
 - Widening Highway 401 to 12-Lanes about centreline;
 - Widening the existing Salem Road structure to the north and south to accommodate widening;
 - Minor reconstruction of westbound on and off-ramps at Salem Road interchange.
- Minimal property impacts anticipated to Hilton Garden Inn and Ajax Convention Centre property
 - Anticipate temporary impact to existing parking during construction of the recommended plan.
- Minor property impacts anticipated to Ajax Baptist Church and Angus Drive right-of-way.

Harwood Avenue to Salem Road– Recommended Plan



Construction Sequencing

- The ultimate Highway 401 improvements are not currently included in MTO's 5-year capital plan.
- Contract sequencing for implementing the recommended widening/rehabilitation requirements along the corridor will be determined at a later date subject to the following:
 - Extent of rehabilitation requirements
 - Availability of funding
 - Other provincial priorities
- It is anticipated that some smaller components may be constructed in advance of the main rehabilitation or widening contracts (e.g. individual structural rehabilitations or replacements, new ramps, etc.).
- A construction staging strategy for implementation of the ultimate plan will be confirmed during detail design.



Highway 401 from Brock Road to Courtice Road

Class Environmental Assessment & Preliminary Design Study

Property Impacts and Acquisition Process

- All property owners anticipated to be impacted received a notification letter prior to PIC #2 indicating that their property was anticipated to be impacted, and encouraging them to attend the PIC or contact a Project Team representative for more information;
- In general, property impacts that have been identified at this stage are subject to further refinement during the subsequent detail design phase;
- Once final property requirements are confirmed, representatives from MTO's Property Section will contact affected property owners to discuss the impacts and begin negotiations to acquire the required property.



Highway 401 from Brock Road to Courtice Road

Class Environmental Assessment & Preliminary Design Study

Next Steps

The following activities will be undertaken following this meeting:

- Review and address any further comments arising from this meeting and raised at PIC #2;
- Prepare and file the Transportation Environmental Study Report - including notices and newspaper advertisements;
- Seek Environmental Assessment clearance;
- Proceed to detail design and prepare the construction contracts.

Meeting Date	Objective / Project	Task	Lead	Timeline	Status
03/26/2015	<ul style="list-style-type: none"> Hunt Street EA – PIC Williamson Dr Bike Lanes 	<ul style="list-style-type: none"> Introduction to TAC Attend and discuss Hunt St EA PIC Review and comment on the proposed bike lanes on Williamson Drive 	Hubert Ng TDM Coordinator		
04/16/2015	<ul style="list-style-type: none"> Highway 401 EA Transportation Demand Management Plan AT Facilities and Trails Implementation Update 	<ul style="list-style-type: none"> Review and comment on the listed projects 	Hubert Ng TDM Coordinator		
05/21/2015	<ul style="list-style-type: none"> Traffic Calming Warrant Update Traffic Calming – Emperor Street 	<ul style="list-style-type: none"> Review and comment on the listed projects 	Hubert Ng Robert Salewytch		
06/18/2015	<ul style="list-style-type: none"> Lake Driveway and Rotary Park Improvement Plan Active Safe Routes to School 	<ul style="list-style-type: none"> Discuss the key transportation issues that pertain to Lake Driveway and Rotary Park and what improvements are feasible? Comment on 	Hubert Ng TDM Coordinator Robert Salewytch		
09/17/2015	<ul style="list-style-type: none"> Region of Durham Transportation Master Plan Update 	<ul style="list-style-type: none"> Comment on the Region's multi-modal transportation policy and infrastructure needs. 	Hubert Ng TDM Coordinator		
10/22/2015	<ul style="list-style-type: none"> Traffic Calming – Clements Road Pilot Project Traffic Operations and Parking Road Watch 	<ul style="list-style-type: none"> Provide an update on the findings of the Clements Road Pilot Project Provide information and to receive feedback on the issues related to traffic operations and parking within the Town 	Hubert Ng Robert Salewytch		
11/19/2015	<ul style="list-style-type: none"> Future Bicycle and Pedestrian Master Plan Update Wayfinding Strategy on AT Facilities 	<ul style="list-style-type: none"> Discuss the key issues these projects should consider. 	Hubert Ng TDM Coordinator		
12/17/2015	<ul style="list-style-type: none"> Highway 407 East Extension 	<ul style="list-style-type: none"> Provide an update on the construction of the 407 East Extension 	Hubert Ng TDM Coordinator		