

# **Village of Alton**

## Main Street North and Queen Street West Class Environmental Assessment

**Transportation Study Report** 

FINAL

November 13, 2020

Prepared for:







R.V. Anderson Associates Limited 43 Church Street Suite 104 St. Catharines Ontario L2R 7E1 Canada Tel 905 685 5049 Fax 855 833 4022 www.rvanderson.com



November 13, 2020

Town of Caledon 6311 Old Church Road Caledon, Ontario L7C 1J6

Attention: Mr. Ian Todhunter, P.Eng.

Re: Village of Alton, Main Street North and Queen Street West Class Environmental Assessment Transportation Study Report

R.V. Anderson Associated Limited (RVA) submits herein our Transportation Study Report for the Main Street North and Queen Street West Class Environmental Assessment, Village of Alton, Town of Caledon.

The objective of this report is to provide an existing condition review of the study area from a transportation perspective. The findings of the report, which are based on a field investigation undertaken by RVA staff, have assisted in informing the traffic-component of the problem statement for the overall study, as well as providing critical input for the development of improvement options that will be considered for inclusion into the preferred alternative.

Yours truly,

#### **R.V. ANDERSON ASSOCIATES LIMITED**

mey

Adam Mildenberger, B.A., C.E.T. Transportation Planner

Nick Palomba, P.Eng. Vice President

Encls.





## Village of Alton

Main Street North and Queen Street West Class Environmental Assessment

**Transportation Study** 

## Town of Caledon

This document is protected by copyright and was prepared by R.V. Anderson Associates Limited for the account of the Town of Caledon. It shall not be copied without permission. The material in it reflects our best judgment in light of the information available to R.V. Anderson Associates Limited at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. R.V. Anderson Associates Limited accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.



RVA 184339 November 13, 2020

#### Village of Alton Main Street North and Queen Street West Class Environmental Assessment Transportation Study

## TABLE OF CONTENTS

EXECUTIVE SUMMARY 1							
1.0	INTRODUCTION						
	1.1 1.2	0	round tive				
2.0	СОМІ	PLETE	STREETS STRATEGY	1			
3.0	STUDY AREA DESCRIPTION						
	3.1 3.2						
4.0	FIELD	) INVES	TIGATION	5			
5.0	OPPORTUNITIES FOR IMPROVEMENT						
	5.1	Pedestrian Network					
		5.1.1 5.1.2 5.1.3 5.1.4 5.1.5 5.1.6	Utility Pole Encroachments into Sidewalk Grade Differentiation Adjacent to Sidewalk Abrupt Change in Sidewalk Alignment Opportunity to Improve Pedestrian Realm Under-utilized Shoulder Sidewalk Termination	2 3 3 4			
	5.2	Crossi	Crossing Facilities				
		5.2.1 5.2.2 5.2.3 5.2.4	Poor Crosswalk Configuration No Crosswalk Letdown Infrequent Application of Tactile Walking Surface Indicator Overall Lack of Designated Crossing Opportunities	7 7			
	5.3	Bicycle	Bicycle Facilities				
		5.3.1	No Bicycle Facilities	9			
	5.4	Alton I	Villpond Amenities1	10			
		5.4.1 5.4.2	No Active Transportation Facilities at Alton Millpond1 No Pedestrian Access to Alton Millpond1	11			
	5.5	On-St	On-Street Parking11				
		5.5.1	No Designated On-street Parking1	12			
	5.6	Traffic	Calming1	14			

#### 

6.1	Summary of Identif	ied Opportunities fo	or Improvement	15
-----	--------------------	----------------------	----------------	----

- 6.2 Summary of Improvement Options for Evaluation......16
- 6.3 Problem and Opportunity Statement......16

#### LIST OF FIGURES

- Figure 1: Study Area
- Figure 2: Hydro pole encroaching sidewalk
- Figure 3: Poor sidewalk conditions
- Figure 4: Abrupt change in sidewalk alignment
- Figure 5: Pedestrian realm
- Figure 6: Under-utilized shoulder
- Figure 7: Paved shoulder
- Figure 8: Sidewalk termination
- Figure 9: Crosswalk behind stop bar
- Figure 10: No pedestrian let-down
- Figure 11: Tactile Walking Surface Indicator
- Figure 12: Lack of intersection crossing facilities
- Figure 13: No bicycle facilities
- Figure 14: No pedestrian amenities at pondside
- Figure 15: No pedestrian access to pond
- Figure 16: No designated on-street parking
- Figure 17: No designated on-street parking
- Figure 18: Traffic calming on Queen Street West
- Figure 19: Traffic calming on Main Street

## EXECUTIVE SUMMARY

This report is a component of the Schedule C Class Environmental Assessment (EA) for Queen Street West from Mississauga Road to Main Street North, and for Main Street North from Queen Street to Highpoint Sideroad, in the Village of Alton, Town of Caledon.

The objective of this report is to provide an existing condition review of the study area from a transportation perspective. The findings of the report, which are based on a field investigation undertaken by RVA staff, have assisted in informing the traffic-component of the problem statement for the overall study, as well as providing critical input for the development of improvement options that will be considered for inclusion into the preferred alternative.

Based on the findings from the field investigation, the following key findings were identified:

- Utility pole encroachments into the sidewalk;
- Significant grade differentiations adjacent to the sidewalk;
- Abrupt change in sidewalk alignment;
- Opportunity to improve the pedestrian realm;
- Under-utilized shoulder on Main Street North;
- Sidewalk termination on Main Street North;
- Poor crosswalk configuration on Main Street North immediately south of Queen Street (to be upgraded under current construction activities);
- No crosswalk letdowns at crossing on Main Street North immediately south of Queen Street (to be upgraded under current construction activities);
- Infrequent application of tactile walking surface indicators;
- Overall lack of designated crossing opportunities;
- No bicycle facilities;
- No active transportation facilities at Alton Millpond;
- No pedestrian access to Alton Millpond; and
- No designated on-street parking.

Based on the findings of the field investigation, the following potential improvement options are recommended for consideration, and to be evaluated at a later phase of the EA study:

- Relocating hydro poles so they do not encroach into adjacent sidewalks;
- Reducing the grade differentiations adjacent to the sidewalk where possible;
- Re-configuring the abrupt sidewalk alignment change on Queen Street West;
- Improve the pedestrian realm overall through an improved cross-section;

- Extend the sidewalk on the east side of Main Street North to the next intersection;
- Ensuring all designated crossing locations have pedestrian letdowns per AODA;
- Improve the frequency and consistently in application of tactile walking surface indicators;
- Improve the network's overall pedestrian connectivity and accessibility through the introduction of additional crossing facilities;
- Introduce on- and/or off-street bicycle facilities;
- Introduce a viewing area at Alton Millpond, including active transportation amenities;
- Improve pedestrian connectivity to Alton Millpond through a designated mid-block pedestrian crossing on Queen Street West; and
- Provide designated on-street parking facilities, and where required implement onstreet parking restrictions.

#### 1.0 INTRODUCTION

#### 1.1 Background

This report is a component of the Schedule C Class Environmental Assessment (EA) for Queen Street West from Mississauga Road to Main Street North, and for Main Street North from Queen Street to Highpoint Sideroad, in the Village of Alton, Town of Caledon. The purpose of the Class EA is to determine a range of road improvement solutions considering the socio-economic and natural environment factors, with the impacts to the unique cultural heritage character of Alton Village and potential impacts to properties minimized to the greatest possible extent.

#### 1.2 Objective

The objective of this report is to provide an existing condition review of the study area from a transportation perspective. The findings of the report, which are based on a field investigation undertaken by RVA staff, have assisted in informing the traffic component of the problem statement for the overall study, as well as providing critical input for the development of improvement options to be evaluated at a later phase of the EA study:

Key areas of focus include:

- Traffic operations;
- Traffic safety; and
- Active transportation.

#### 2.0 COMPLETE STREETS STRATEGY

According to Complete Streets for Canada,

"Complete Streets are streets that are designed to be safe for everyone: people who walk, bicycle, take transit, or drive, and people of all ages and abilities. A Complete Streets policy ensures that transportation planners and engineers consistently design and operate the entire street network for all road users, not only motorists. Complete Streets offer wide ranging benefits. They are cost effective, sustainable, and safe."<sup>1</sup>

The focus that Complete Streets places on the operation and design of the entire street network for <u>all road users</u> is a critical component of the Complete Street Strategy. RVA has ensured this multi-modal approach, which considers the needs of pedestrians,

<sup>&</sup>lt;sup>1</sup> Complete Streets for Canada. The Centre of Active Transportation. https://www.completestreetsforcanada.ca/what-are-complete-streets/

cyclists, and motorists, has been considered in the traffic-component of the problem statement, and will play a key role in the preferred alternative.

For this report specifically, a Complete Streets approach was considered when:

- Reviewing the existing study area during field investigations;
- Identifying opportunities for improvement based on the findings of the field investigations; and
- Developing potential improvement options that will be considered for inclusion into the preferred alternative.

## 3.0 STUDY AREA DESCRIPTION

The study area consists of Queen Street West from Mississauga Road to Main Street North, and Main Street North from Queen Street to Highpoint Sideroad, in the Village of Alton, Town of Caledon, as shown in **Figure 1**.

#### 3.1 Queen Street West

Queen Street West is an east-west arterial road under the jurisdiction of the Town of Caledon. East of Main Street, Queen Street is under the jurisdiction of the Region of Peel.

Queen Street West has a two-lane rural cross-section (gravel shoulders) from Mississauga Road to approximately 350 metres to the east, at which point it transitions to a two-lane urban cross-section (curb and gutter) to the eastern limit of the study area at Main Street North. It has a posted maximum speed limit of 40 km/h.

There is a s-curve in the road's horizontal alignment at approximately 400 metres east of Mississauga Road, for a travel length of approximately 150 metres. There are no significant vertical changes in road grade that are expected to result in safety or operational concerns.

There is sidewalk on the south side only, from approximately 350 metres east of Mississauga Road to Main Street North. There are no designated pedestrian crossing locations across Queen Street West through the study area.

There are no transit services offered or bicycle facilities provided on Queen Street West in the study area.

Heavy trucks are not permitted on Queen Street West through the study area as per the existing truck restriction signage.

The following intersections exist along Queen Street West in the study area:

• Mississauga Road, t-intersection, stop control for Queen Street West only;

- John Street, t-intersection, stop control for John Street only;
- James Street North, t-intersection, all-way stop;
- Emeline Street, t-intersection, stop control for Emeline Street only;
- Agnes Street, t-intersection, stop control for Agnes Street only;
- Amelia Street, t-intersection, stop control for Amelia Street only;
- Victoria Street, t-intersection, stop control for Victoria Street only; and
- Main Street North, four leg intersection, all-way stop control.

#### 3.2 Main Street North

Main Street North is a north-south collector road under the jurisdiction of the Town of Caledon. South of Queen Street, Main Street is under the jurisdiction of the Region of Peel.

Main Street North has a two-lane rural cross-section (gravel shoulders) from Queen Street West to the northern limit of the study area at Highpoint Side Road. It has a posted maximum speed limit of 40 km/h from Queen Street to approximately 400 metres south of Highpoint Side Road, at which point it transitions to a 60 km/h posted speed limit.

There is a noticeable s-curve in the road's horizontal alignment at approximately 400 metres south of Highpoint Side Road, with a posted advisory speed of 30 km/h through the curve.

There is a noticeable crest in the road's vertical alignment just south of Highpoint Sideroad, with the road's vertical alignment having a generally downward gradient from the noted crest in the southerly direction to Queen Street, consisting of a few intermediary crests in the road.

There is sidewalk on the east side of Main Street North extending north from Queen Street and terminating approximately 50 metres north of Margaret Street. After this point the narrow gravel shoulders of varying width are referred to as a "roadside trail" in the Town's Transportation Master Plan, which is intended to be utilized by pedestrians and cyclists. There is no signage identifying this facility.

There are no designated pedestrian crossing locations across Main Street North through the study area.

There are no transit services offered provided on Main Street North in the study area.

Heavy trucks are not permitted on Main Street North through the study area as per the existing truck restriction signage.

The following intersections exist along Main Street North in the study area:

- Queen Street, four leg intersection, all-way stop control;
- Margaret Street, t-intersection, stop control for Margaret Street only;
- Nicholas Street, t-intersection, stop control for Nicholas Street only;
- Mary Street, t-intersection, stop control for Mary Street only; and
- Highpoint Sideroad, four leg intersection, all-way stop control.



Figure 1: Study Area

## 4.0 FIELD INVESTIGATION

RVA transportation planning and engineering staff undertook a field investigation of the study area corridor in May 2019. The investigation consisted of a site walk of the corridor and included the taking of field notes and site photos. The site walk also permitted staff to closely assess the corridor's existing pedestrian realm from a pedestrian standpoint, which is important in evaluating the need for incorporation of active transportation facilities within the study area as a core objective of the overall study.

The purpose of the investigation was for RVA staff to develop an intimate and current understanding of existing conditions within the study area, and to document identified opportunities for improvement related to transportation. Areas of observation included, but was not limited to:

- Traffic operations;
- Signage;
- Pavement markings;
- Intersection controls;
- On-street parking;
- Streetscape;

- Sidewalk alignment and condition;
- Bicycle facilities;
- Pedestrian activity;
- Pedestrian accessibility; and
- Road user safety.

### 5.0 OPPORTUNITIES FOR IMPROVEMENT

This section presents the key findings from the field investigation, as well as recommended considerations to improve the study area corridor from a transportation perspective.

#### 5.1 Pedestrian Network

Queen Street West has a sidewalk on the south side only, from approximately 350 metres east of Mississauga Road to Main Street North, and on the east side of Main Street North extending north from Queen Street and terminating approximately 50 metres north of Margaret Street.

The following section identifies opportunities to improve the the pedestrian linkages on both Queen Street West and Main Street North.

#### 5.1.1 Utility Pole Encroachments into Sidewalk

Within the village core near the intersection of Queen Street West at Main Street North, there are several instances of wooden hydro poles encroaching into sidewalks on Queen Street West, as shown in **Figure 2**. This encroachment into the pedestrian zone can pose an accessibility concern and generally does not confirm to good urban design principles.

Relocating hydro poles so they do not encroach into adjacent sidewalks will help promote pedestrian usage.



Figure 2: Hydro pole encroaching sidewalk

#### 5.1.2 Grade Differentiation Adjacent to Sidewalk

Due to significant grade differentiation between the sidewalk and adjacent properties along the south side of Queen Street West, it is evident that runoff has resulted in undesirable sidewalk conditions along several sections. As shown in **Figure 3**, mud, natural debris, and fine gravel are observed to be flowing across the sidewalk. Reducing the grade differentiations adjacent to the sidewalk where possible, and improving overall drainage of runoff, is expected to mitigate the issue.



Figure 3: Poor sidewalk conditions

#### 5.1.3 Abrupt Change in Sidewalk Alignment

There is an abrupt change in the sidewalk alignment on the south side of Queen Street West approximately 80 metres east of James Street North, as shown in **Figure 4**. East of this location the sidewalk generally has a grassy boulevard separation from the road, which is eliminated at this location and replaced with a narrow asphalt strip which continues west for approximately 150 metres before the grassy boulevard is re-introduced. The abrupt change in alignment is not ideal for pedestrian flow and given the lack of on-street bicycle facilities, could pose a safety concern for recreational cyclists utilizing the sidewalk travelling eastbound on the downward gradient. Re-configuring the alignment change to a more gradual re-alignment is expected to mitigate the issue.



Figure 4: Abrupt change in sidewalk alignment

#### 5.1.4 Opportunity to Improve Pedestrian Realm

Within the village core near the intersection of Queen Street West at Main Street North the sidewalk is elevated noticeably above the roadway, with a narrow asphalt strip separating the two facilities comprised of hydro poles, fire hydrants, and traffic signage poles, as shown in **Figure 5**. This layout generally does not confirm to good urban design principles and also poses a safety concern to pedestrians. There is opportunity to improve the pedestrian realm by cross-section enhancements.



Figure 5: Pedestrian realm

#### 5.1.5 Under-utilized Shoulder

On the east side of Main Street North, north of the bridge, the sidewalk is separated from the pavement by a wide shoulder (gravel and asphalt sections) approximately 4-5 metres wide. As shown in **Figure 6** and **Figure 7**, the shoulder is under-utilized and consists of hydro poles. There are no on-street parking restrictions, and the shoulder is currently utilized as on-street parking where possible. From an urban design and functionality standpoint, there is opportunity to improve the cross-section of Main Street North to provide designated parking facilities.



Figure 6: Under-utilized shoulder



Figure 7: Paved shoulder

#### 5.1.6 Sidewalk Termination

The sidewalk on the east side of Main Street North terminates approximately 50 metres north of Margaret Street, and approximately 100 metres south of Mary Street, as shown in **Figure 8**. Generally, sidewalk terminations should occur at key destination points or at a cross-street, but typically not mid-block as is the case here.



Figure 8: Sidewalk termination

#### 5.2 Crossing Facilities

There is only one designated pedestrian crosswalk in the study area for crossing Main Street North or Queen Street West, which is situated on the south leg of the intersection of Main Street North at Queen Street.

The following section identifies opportunities to improve pedestrian crossing facilities on both Queen Street West and Main Street North.

#### 5.2.1 Poor Crosswalk Configuration

The pedestrian crosswalk on the south leg of the intersection of Main Street North at Queen Street is situated approximately 10 metres upstream of the approach stop bar, as shown in **Figure 9**. This is generally a unique configuration as it to does not provide the same level of pedestrian safety as traditional configurations where the stop bar is situated upstream of the crosswalk. It requires pedestrians cross two directions of free flow traffic in one crossing movement, and potentially cross within a queue of vehicles stopped at the stop bar which can result in visibility issues, reducing pedestrian safety. Since the crosswalk is technically not situated at the intersection, it is generally operating as a midblock crossing. There is opportunity to improve pedestrian safety by re-configuring the crosswalk to be consistent with typical intersection intersections, improving road user expectations, improving visibility during crossing movements, and consequently overall improving pedestrian safety.

It is understood that this intersection is currently being reconstructed by Peel Region, including the elimination of the channelized right-turn lane with the intersection being reconfigured as a traditional four-leg all-way stop controlled intersection; however, this report documents the existing conditions that were observed at the time of the field investigations.



Figure 9: Crosswalk behind stop bar

#### 5.2.2 No Crosswalk Letdown

Furthermore, the crosswalk currently does not meet Accessibility for Ontarians with Disability (AODA) standards as it does not provide a pedestrian let-down, as shown in **Figure 10**. For example, the crosswalk currently does not permit access by wheelchairs due to the barrier curb. Given this is the only designated pedestrian crossing facility in the study area, this significantly restricts the accessibility of the pedestrian network. There is opportunity to improve accessibility by ensuring all designated crossing locations have pedestrian letdowns per AODA.

It is understood that this intersection is currently being reconstructed by Peel Region with AODA-compliant crosswalks; however, this report documents the existing conditions that were observed at the time of the field investigations.



Figure 10: No pedestrian let-down

#### 5.2.3 Infrequent Application of Tactile Walking Surface Indicator

The sidewalk on Main Street North is situated on the south side of the road and intersects several cross-street intersections. Although technically not designed with sidewalk letdowns, the use of mountable curb does reduce the transit from sidewalk to roadway surface.

As shown in **Figure 11**, the sidewalk approaching the east side of Agnes Street is equipped with a tactile walking surface indicator. These indicators are used to alert people with visual impairments of potential hazards, such as moving vehicular traffic, as they are detectable underfoot when walking and provide a high tonal contrast with the surrounding surface. It is expected the indicator was installed during previous sidewalk replacement work. The application of tactile plates should be used consistently at all

crossing locations along with curb depression treatments that adhere to the AODA requirements.



Figure 11: Tactile Walking Surface Indicator

#### 5.2.4 Overall Lack of Designated Crossing Opportunities

Overall, the study area has limited designated pedestrian crossing facilities. Specifically, the all-way stop controlled intersection of Main Street North at Queen Street does not have any crosswalks, as shown in **Figure 12**, except for the unique midblock crosswalk configuration immediately south of the intersection on Main Street North. The Region is Peel is currently rebuilding this intersection along with improvements along Main Street South and Queen Street East, which will improve the network's overall pedestrian connectivity and accessibility through the introduction of additional crossing facilities.



Figure 12: Lack of intersection crossing facilities

#### 5.3 Bicycle Facilities

The following section identifies opportunities to improve cyclists' experience on both Queen Street West and Main Street North.

#### 5.3.1 No Bicycle Facilities

The study area currently has no bicycle facilities. Although cyclists are required to utilize the existing general-purpose travel lanes, there are no traffic control measures (i.e. signage and/or pavement markings) indicating to road users that the roadway is a shared facility, as shown in the Queen Street cross-section in **Figure 13**.

Given the desired recreational, community, and visitor-friendly character of the Village, there is expected to be demand for cycling as a mode of local transportation, especially during weekends and the summer season. Consequently, there is opportunity to accommodate this demand and improve overall road user safety by the introduction of on- and/or off-street bicycle facilities. This could include signage, pavement markings, and bike racks at strategic locations (i.e. Alton Millpond and/or Village core).



Figure 13: No bicycle facilities

#### 5.4 Alton Millpond Amenities

It has been previously identified that the Alton Millpond would benefit from the introduction of a viewing area that could accommodate pedestrians and cyclists. The following section identifies opportunities to improve the Alton Millpond area from an active transportation standpoint.

#### 5.4.1 No Active Transportation Facilities at Alton Millpond

As shown in **Figure 14**, the grassy boulevard on the south side of Alton Millpond, on the north side of Queen Street West, does not have any active transportation facilities, such as a viewing area. The pond acts as an active transportation attractor, especially during the summer season, in which the pond can provide a meeting area and key destination for residents and/or visitors to the village. A viewing area could also include active transportation amenities, such as benches and/or bike racks, further improving the pedestrian and cyclist experience and enhancing the pond's role as a desirable destination in the village.

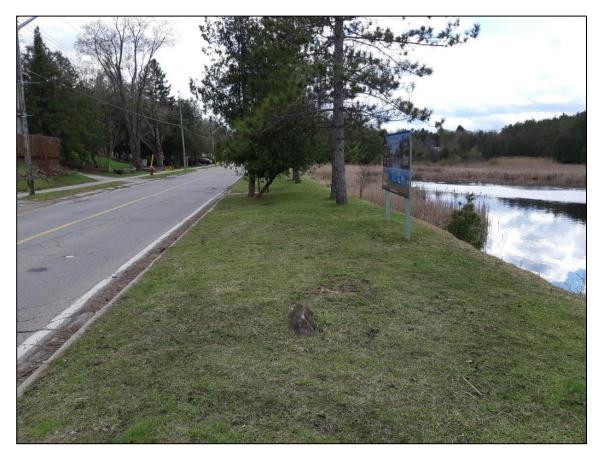


Figure 14: No pedestrian amenities at pondside

#### 5.4.2 No Pedestrian Access to Alton Millpond

Furthermore, there is currently no pedestrian access to the pond. As shown in **Figure 15**, the available public right-of-way is too limited to provide a sidewalk connection, and with no sidewalks on the north side of Queen Street West, there is no existing sidewalk network to accommodate a connection. It is expected pedestrians are currently crossing Queen Street West from the sidewalk on the south side and viewing the pond from the grassy boulevard. There is opportunity to improve pedestrian connectivity to the pond; a potential option would be the introduction of a designated mid-block pedestrian crossing on Queen Street West.



Figure 15: No pedestrian access to pond

#### 5.5 On-Street Parking

The Village includes several commercial and historic establishments near the intersection of Queen Street and Main Street North. These establishments generate a parking demand, which was observed in May during the p.m. peak hour. It is expected the peak parking demand will noticeably increase during the summer months, and especially during weekends when volumes of visitors to the village are likely to

dramatically increase. The following section identifies opportunities to improve the onstreet parking capacity in the village.

An Alton Village Streetscaping Parking Study was completed for Main Street South and Queen Street East, dated April 2018, which provides recommended initiatives to be considered to address the projected parking shortfall based on the proposed streetscape plan. Furthermore, the Six Villages Community Improvement Plan, dated January 2016, provides recommended considerations for Alton Village with respect to parking management.

Both studies, as well as other previously completed relevant studies, will be reviewed as RVA works to develop improvement options that will be considered for inclusion into the preferred alternative.

#### 5.5.1 No Designated On-street Parking

As shown in **Figure 16** and **Figure 17**, on-street parking is currently occurring roadside near the Village core. This is likely a result of the existing commercial establishments and no on-street parking restrictions. Public parking is also permitted on-street on the local roads in the community, and access to a public parking lot does exist on the south side of Queen Street West approximately 40 metres west of Main Street North.

The current arrangement has parked vehicles encroaching into the travel lanes. Although this is generally not a serious concern on local roads, this is not a desirable situation on an arterial road from an operational and safety standpoint. There is opportunity to improve the public parking arrangement in the Village through the provision of designated on-street parking facilities, and/or the implementation of on-street parking restrictions where required with more demand diverted to local streets and/or the public lot. Under a current construction contract, the Region of Peel is incorporating additional parking facilities on Main Street South to add additional parking capacity. Village of Alton, Main Street North and Queen Street West Class Environmental Assessment Page 13 Transportation Study



Figure 16: No designated on-street parking



Figure 17: No designated on-street parking

### 5.6 Traffic Calming

The alignment of Queen Street West is generally on a tangent with minimal slope on the profile. A tangent, approximately 800 metres in length, is located between the s-curve to the west and the all-way stop controlled intersection at Main Street North to the east, both of which have speed-reducing effects. As shown in **Figure 18**, this tangent section already has the following traffic calming measures:

- A reduced posted maximum speed limit of 40 km/h;
- On-street parking in the Village core; and
- "SLOW" pavement marking messaging.



Figure 18: Traffic calming on Queen Street West

The alignment of Main Street North is generally on a tangent with rolling hills. A tangent, approximately 1 kilometre in length, is located between the s-curve to the north and the all-way stop controlled intersection at Queen Street West to the south, both of which have speed-reducing effects. As shown in **Figure 19**, this section of straight tangent road already has the following traffic calming measures:

- A reduced posted maximum speed limit of 40 km/h;
- Radar speed signs; and
- "SLOW" pavement marking messaging.



Figure 19: Traffic calming on Main Street

The aforementioned traffic calming measures already implemented along Queen Street West and Main Street are considered appropriate from a traffic operations and road safety perspective. Based on continued consultation with key stakeholders, RVA will evaluate the potential for additional enhancements to traffic calming within the study area.

## 6.0 SUMMARY OF IDENTIFIED OPPORTUNITIES FOR IMPROVEMENT AND OPTIONS FOR EVALUATION

#### 6.1 Summary of Identified Opportunities for Improvement

Based on the findings from the field investigation, the following key findings were identified:

- Utility pole encroachments into the sidewalk;
- Significant grade differentiations adjacent to the sidewalk;
- Abrupt change in sidewalk alignment;
- Opportunity to improve the pedestrian realm;
- Under-utilized shoulder on Main Street;
- Sidewalk termination on Main Street;

- Infrequent application of tactile walking surface indicators;
- Overall lack of designated crossing opportunities;
- No bicycle facilities;
- No active transportation facilities at Alton Millpond;
- No pedestrian access to Alton Millpond; and
- No designated on-street parking.

### 6.2 Summary of Improvement Options for Evaluation

Based on the findings of the field investigation, the following potential improvement options are recommended for consideration, and to be evaluated at a later phase of the EA study:

- Relocating hydro poles so they do not encroach into adjacent sidewalks;
- Reducing the grade differentiations adjacent to the sidewalk where possible;
- Re-configuring the abrupt sidewalk alignment change on Queen Street West;
- Improve the pedestrian realm overall through an improved cross-section;
- Extend the sidewalk on the east side of Main Street North to the next intersection;
- Re-configuring the crosswalk on Main Street south of Queen Street West to a typical intersection crosswalk design. This is already being implemented by the Region of Peel;
- Ensuring all designated crossing locations have pedestrian ramping per AODA;
- Improve the frequency and consistently in application of tactile walking surface indicators;
- Improve the network's overall pedestrian connectivity and accessibility through the introduction of additional crossing facilities;
- Introduce on- and/or off-street bicycle facilities;
- Introduce a viewing area at Alton Mill Point, including active transportation amenities;
- Improve pedestrian connectivity to Alton Millpond through a designated midblock pedestrian crossing on Queen Street West; and
- Provide designated on-street parking facilities, and where required implement onstreet parking restrictions.

#### 6.3 **Problem and Opportunity Statement**

The findings of this report have assisted to identify the problem and develop opportunities for improvement:

There is opportunity to implement a Complete Streets approach to improve the character of the road through enhancements to traffic operations and safety for all road users.

Proposed improvement options should consider enhanced active transportation facilities and road crossings for pedestrians and cyclist, designated on-street parking, surface treatments, pavement markings and signage.

There is opportunity to improve the study area's roadway geometrics to enhance overall traffic operations and safety, as well as provide a more connected and accessible active transportation network. Existing issues with sidewalk alignment, condition and grade differential within the boulevard will be addressed in the proposed improvement options, including adherence to AODA requirements. Existing lane widths will also be assessed in order to identify feasible opportunities for improved active transportation facilities (i.e. improvements to the pedestrian realm and bicycle accessibility).

There is opportunity to improve existing active transportation facilities, and introduce new facilities where feasible, to ensure the village provides a level of connectivity and accessibility that is consistent with a Complete Streets approach. At a minimum, proposed improvement options should consider enhancements to the pedestrian realm, including sidewalk alignment and condition improvements, enhanced crossing facilities, and the introduction of pedestrian amenities particularly at the Alton Millpond.

There is also opportunity to improve bicycle accessibility by considering the introduction of on and/or off-street facilities, supporting pavement markings and/or signage, as well as potential bicycle parking facilities at key locations (i.e. Alton Millpond).